

# London Writings 1850–1855

Monograph

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## Gottfried Semper LONDON WRITINGS 1850–1855

Edited by Michael Gnehm, Sonja Hildebrand, Dieter Weidmann This open-access publication is also available as a printed book at bookstores or at https://verlag.gta.arch.ethz.ch.

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#### **GENERAL INTRODUCTION**

#### **Selection and Presentation of the Texts**

The writings by Gottfried Semper that are gathered together here were written during his almost five-year period of exile in London. Semper's involvement in the May Uprising of 1849 in Dresden had put an abrupt end to his successful career in the capital of the Kingdom of Saxony, where he had been teaching as Professor of Architecture at the Academy of Fine Arts since 1834 and had built up an international reputation as the architect of major buildings such as the Dresden Court Theatre. Following an interlude in Paris, the 'capital of culture', Semper arrived in London, the 'capital of the Empire', in the autumn of 1850 and established a new livelihood for himself there in conditions of considerable hardship. But London also turned out to provide extremely fertile ground for his work as a writer. In the metropolis, which was about to become the venue for the first World's Fair in 1851, Semper placed the industrial arts – considered in a global perspective - at the centre of his reflections on architectural theory and history. In the writings and lecture manuscripts that he produced during the London years, Semper laid the essential foundations for his major work on architectural theory, Der Stil in den technischen und tektonischen Künsten, oder Praktische Aesthetik (Style in the Technical and Tectonic Arts; or, Practical Aesthetics; 1860–63), which was written in Zurich and published in two volumes. Beginning with his first public lecture delivered in May 1853, he introduced a revolutionary approach to British academic art history which was just getting acquainted with the more traditional, chronology-based, German art history as presented by Gottfried Kinkel - another political refugee - in a lecture series at University College, London, that had started only one month earlier.<sup>1</sup> Semper himself viewed the significance of his period in London as highly seminal. From Zurich, where he was appointed to the Chair of Architecture at the newly founded Swiss Federal Polytechnic (today ETH) in 1855, he wrote to the publisher Eduard Vieweg in Brunswick 'that my stay in London was extremely important for the further development of my ideas'.<sup>2</sup>

The present edition contains a selection of the minor writings that Semper produced in London. They are related on the one hand to his teaching work some of which was only planned, while some was actually carried out. On the other hand, they are concerned with his critical engagement with the development of the arts and of culture as a whole. The selection of texts is based on two criteria: the extent to which they refer to the conditions in which Semper was living and working in London; and the extent to which they had an influence on his British milieu. The minor writings selected are divided into six groups. The first group covers several drafts of an advertisement intended to promote Semper's project of setting up a private school of architecture, as well as a published version of it. The programme for the school can be regarded as representing a link between the educational reforms he had introduced at the Dresden Academy of Fine Arts and his proposals for the structure of the curriculum at the Department of Practical Art in London (reorganized as the Department of Science and Art in March 1853). The second group is concerned with Semper's reflections on and responses to the most important historical event during his period in London - the Great Exhibition of the Works of Industry of All Nations in 1851. This group comprises printed advertisements, published essays on the exhibition and the building housing it, notes on the exhibits, drafts for an essay in letter form on culture and philosophy, draft programmes for a cultural history exhibition, and a note referring to the latter. The third group consists of two published essays through which Semper became involved in the British debate on architectural polychromy that flared up again in the early 1850s – not least in connection with the coloured painting of the structure of the Crystal Palace. The fourth group features reports on arts and crafts objects, a planned curriculum and annual reports on the course of his teaching work, all of which Semper wrote on behalf of the Department. The fifth group combines the extant drafts of the lectures that Semper gave in the Department in 1853 and 1854. Finally, the sixth group contains texts by other authors related to text groups one, two and four, as well as book lists compiled by Semper and call slips for books that he filled in at the British Museum Library – documents that provide revealing insights into his reading.

The framework chosen for this edition made it necessary to exclude a number of texts that were written, completed or begun by Semper during his London years. These exclusions are partly due to the length of the texts concerned and partly because they were either published in Germany or not at all, and consequently did not have any reception in the British Isles, or at most only sporadically. These texts firstly consist of three longer booklets along with the accompanying substantial manuscripts: Die vier Elemente der Baukunst (The Four Elements of Architecture; 1851), Wissenschaft, Industrie und Kunst (Science, Industry, and Art; 1852) and Ueber die bleiernen Schleudergeschosse der Alten (On the Leaden Slingshot Bullets of the Ancients; 1859)<sup>3</sup> – a work that was mostly written in London but was not completed and published until Semper's period in Zurich. Secondly, the excluded texts involve the approximately 250-page manuscript of the so-called metals catalogue, written in 1852 (a fair copy of which was edited in 2007),<sup>4</sup> and manuscripts that belong to Semper's 'Vergleichende Baulehre' (Comparative Architecture), begun in Paris in 1849 and continued in London but never completed.<sup>5</sup> The third group of excluded texts consists of writings on archaeology - some of which remained unpublished, while some appeared in Deutsches Kunstblatt - that do not have any clear relevance to debates in England, and a polemical text on Parisian architecture that was also intended for a German audience.

The present edition makes accessible for the first time all of the manuscripts in the text groups Private School of Architecture, The Great Exhibition, Department of Practical Art and Supplementary Texts - with the exception of the short manuscript of the 'Note on a Cultural-Philosophical Collection', published before with the letter in which it was inserted, and the manuscript of the concluding part of 'Observations on Some of the Specimens of Metal Work', separately edited before in posthumous German translation in Kleine Schriften (Minor Writings), which Semper's sons Manfred and Hans published in 1884. Some of the manuscripts in the Lectures group were edited in posthumous German translation in Kleine Schriften and by Harry Francis Mallgrave in the original English versions between 1983 and 1986.<sup>6</sup> However, Semper's sons muddled the arrangement of them in Kleine Schriften in three ways. Firstly, they distributed them - interspersed with other texts - across two sections of the book instead of uniting them in their chronological order. Secondly, in two cases they combined two different manuscripts each to produce hypothetical texts - even erroneously using the manuscripts of two different lectures for the oftenmentioned 'Entwurf eines Systemes der vergleichenden Stillehre' (Outline for a System of Comparative Style-Theory).7 Thirdly, they distorted two other manuscripts by splitting them or shortening them. Mallgrave's edition fully corrected this third type of disorder.<sup>8</sup> However, he only partly eliminated the first and second, since he did not edit the manuscripts of all of Semper's identifiable lectures and did not recognize that the manuscripts compiled to form the 'Outline for a System of Comparative Style-Theory' belong to two different lectures.9 The present edition uses all of the extant manuscripts to reconstruct Semper's first series of lectures in London, and also – as far as possible – the second series. It publishes the manuscripts that contain the most complete versions of the lectures in chronological order – with individual previously undiscovered pages also being added for this purpose – and supplements them in the Critical Apparatus with the most important manuscript variants. Most of the printed texts included in this edition have been available since 2014 as reprints in Semper's *Gesammelte Schriften* edited by Henrik Karge.<sup>10</sup> However, the Critical Apparatus in the present edition also provides these with the associated manuscripts if they have been preserved. Moreover, the Apparatus offers an overview of all the known direct textual witnesses, bibliographical references, contextualizing and explanatory comments and information about editorial emendations. It also collates – in the case of the manuscripts – the most important authorial changes made.

This edition forms part of the research project on 'Architecture and the Globalization of Knowledge in the 19th Century: Gottfried Semper and the Discipline of Architectural History' funded by the Swiss National Science Foundation (SNSF) – a collaboration between the Institute for the History and Theory of Art and Architecture (ISA) at the Università della Svizzera italiana (Sonja Hildebrand) and the Institute for the History and Theory of Architecture (gta) at ETH Zurich (Philip Ursprung). In addition to the present volume, the research project has led to two doctoral dissertations,<sup>11</sup> a series of essays and an anthology of essays centred on the disciplinary context of Semper's London years.<sup>12</sup> The London writings, which are made accessible here for the first time in a critical edition, exemplify the way in which Semper interacted with the global context provided by London, the ways in which he responded to contemporary debates in England, what he absorbed from them and the ways in which he articulated himself in the English-speaking environment.

#### Writing in Exile

Semper arrived in London after an extended period of exile in Paris – the city where he had studied architecture in Franz Christian Gau's studio from late 1826 to the autumn of 1827 and from summer 1829 to summer 1830. In Paris, he made efforts to regain his footing following the events that had turned his life upside down. In 1834, the Hamburg-born architect, who had grown up in nearby Altona (which belonged to Denmark at the time), had dismissed 'white' classicism in the pamphlet *Vorläufige Bemerkungen über bemalte Architectur und Plastik*  bei den Alten (Preliminary Observations on Painted Architecture and Sculpture of the Ancients).<sup>13</sup> In the same year, at the age of just under thirty-one, he had been appointed Professor of Architecture and head of the School of Architecture at the Academy of Fine Arts in Dresden. His Dresden Synagogue of 1840 and the buildings near the Dresden Zwinger - the Court Theatre of 1841 and the Gemäldegalerie (Picture Gallery), begun in 1847 - consolidated his international reputation. The May Uprising of 1849 in Dresden caused a decisive break.<sup>14</sup> As the leader of the city militia's company of sharpshooters, he directed the construction of a barricade not far from his home on Waisenhausstrasse and commanded the forces occupying it, and he was probably also responsible for reinforcement of the main barricades, such as the one on Postplatz at the entrance to Wilsdruffer Gasse. The suppression of the uprising by Prussian and Saxon troops on 9 May caused him to flee the same day; a warrant for his arrest for high treason was issued on 16 May. Leaving his wife, Bertha, and their six children behind, Semper travelled south to Zwickau and Würzburg and then via Frankfurt am Main, Heidelberg and Karlsruhe to Strasbourg. He left Strasbourg for Paris on 6 June, arriving there on 8 June - and had already formed a plan to emigrate to North America a few days after he fled.<sup>15</sup>

Semper found accommodation with friends from his Dresden days - three decorative painters and theatre decorators who had been involved in work on the Court Theatre: for a short time with Edouard Desplechin in Paris, then with Jules Dieterle in nearby Sèvres, and in Paris again from December 1849 with Charles Séchan. He spent the long fifteen months in Paris not only in efforts to explore other options in Europe and establish contacts in North America but also primarily working on the book project he had agreed on with Eduard Vieweg between 1843 and 1844, from which Der Stil (Style) later developed. The book first began to take shape in Paris, and it was there that it was first given the title 'Vergleichende Baulehre' (Comparative Architecture) - inspired by Georges Cuvier's comparative anatomy.<sup>16</sup> After receiving an advance from Vieweg, Semper sent him an initial section consisting of around 400 manuscript pages on the early history of non-European architecture in May 1850. From his base in Paris, Semper was able in 1849 to have his delayed book about the Dresden Court Theatre put into print<sup>17</sup> and to publish essays in the Leipzig journal Zeitschrift für praktische Baukunst.<sup>18</sup> In the summer of 1850, he drafted his first text on ceramics - an essay written in French on porcelain painting, which was prompted by his contacts with the porcelain manufactory in Sèvres, where Dieterle had become the chief artist.<sup>19</sup>

Frustrated by the failures of his many attempts to establish a new livelihood in Europe, Semper decided in the summer of 1850 to accept the offer of an office partnership made to him by a Bremen architect who had moved to New York,

Karl Gildemeister (who was later the architect of the Crystal Palace at the 1853 World's Fair in New York), and to emigrate overseas. While he was in Le Havre waiting to depart for New York, a letter from the archaeologist Emil Braun reached him on 18 September 1850 - one day before the ship was due to sail. Braun had been secretary of the Prussian Instituto di corrispondenza archeologica in Rome since the mid-1830s (during his Grand Tour, Semper had earlier become a corresponding member of the institute). Braun was acquainted with Prince Albert and ran a galvanoplastic institute in Rome where he produced electrocast copies of ancient sculptures, some of which were included in the royal collection. He also acted as an art agent for Bernhard von Lindenau, a government minister in Saxony up to 1843, with whom Semper also had dealings. Braun had heard from the London architect Edward Falkener that Semper was intending to emigrate. Braun's letter to Semper - offering nothing more than a vague if flattering prospect of an artistic field of activity 'that promises to be no less glorious than the one you have left' - persuaded Semper to stay in Europe. While a crate with his books was already on its way to New York - it was not returned to him until the autumn of 1852 (the books contained in it are recorded in a customs list; 210–17) – he returned to Paris. After a missed meeting with Braun in Paris, and on receiving clarification from Braun that the matter concerned a project for a national cemetery near London that he was involved in, Semper travelled to the British capital to meet him.<sup>20</sup>

Semper arrived in London on the evening of 28 September 1850 and spent the night in the German and Commercial Hotel on Leicester Square. He was visited the next day by Braun, accompanied by the sanitary reformer Edwin Chadwick, commissioner of the General Board of Health and initiator of the cemetery project, and Eduard vom Hof, a German lawyer practising in London. The Board of Health, which had been founded in 1848, was intending to purchase the Abbey Wood estate, some 10 miles south-east of London between Woolwich and Erith, as a site for the cemetery. Semper immediately started sketching numerous designs for the cemetery (pl. 7). He moved into a flat on University Street, near the British Museum, at the beginning of October (as a subtenant of Thomas Watts, a carpenter), and was able to use a desk in Falkener's architectural office on Gracechurch Street in the City of London.<sup>21</sup> Political and legal disputes delayed the project, and Semper's contribution was reduced to the design of a Reception House - a chapel-like building in which the coffins were to be placed before burial and the mourners were to be received. The design, which he submitted in the summer of 1851 and for which he was paid £40, was rejected, as was that of fellow competitor Edward Cresy, superintending inspector to the Board. Shortly afterwards, the Abbey Wood cemetery project was cancelled.

#### Private School of Architecture

Even before this, his precarious financial situation had prompted Semper to resume a project to set up a private school of architecture. In the autumn of 1849, he had already been thinking about such a project in New York in collaboration with his former student Wilhelm Heine, who had emigrated there in the summer of 1849. In London, he drafted numerous newspaper advertisements in which he recommended himself with varying degrees of emphasis as a drawing teacher or as a consulting architect and announced the founding of a private school, complete with a boarding house, in which architectural training would be combined with engineering studies (4-15; pl. 1). He presented the idea to Braun for the first time in December 1850. Braun recommended that it should be done in collaboration with a London partner and suggested George Scharf or Edward Falkener. Both older and more recent contacts of Semper's supported him in the plan. Translations into English were provided by Karoline Heusinger, a Saxon (and a friend of Semper's wife) who was living in London, and by Mary Scarlett Campbell, the daughter of the family in which Heusinger was working as a lady-companion. Rudolph Schramm, a refugee from Berlin, edited the most detailed draft that Semper made and also brought in his friend Lothar Bucher, who placed an announcement of the project in the Berlin National-Zeitung (207-8) - he had become the paper's London correspondent after fleeing Berlin. Through Julius Faucher, correspondent of the Kölnische Zeitung, contact was established with the Basel architect Leonhard Friedrich. Through Friedrich in turn, a version of the advertisement reached Richard Wagner - Semper's friend while in Dresden, who was also a refugee from the revolution – in Zurich, and it was published in the Eidgenössische Zeitung there with a supportive text from Wagner (13, 208–9). However, Semper's project for setting up a school of architecture did not progress beyond this initial advertising campaign.

#### The Great Exhibition

Semper's social life in London was only partly influenced by the German exile community. Thanks to an invitation from Schramm to attend a refugee meeting organized by Arnold Ruge at the Cranbourne Hotel in early March 1851, he had the opportunity to meet some of the notable exiles – including Bucher and Gottfried Kinkel. The politically agitating Kinkel became Semper's colleague at the Zurich Polytechnic in 1866.<sup>22</sup> But Semper's political involvement was limited. He did attend the meeting in the same hotel at the end of July 1851 at which Kinkel and August Willich founded the German Emigration Club, and he was elected a month later to the board of the reorganized refugee committee alongside Bucher and Oskar Reichenbach.<sup>23</sup> However, Bucher and Semper declared their resignation in a jointly written letter to Kinkel the very next day, specify-

ing that they would now devote themselves 'privately to the common cause'.<sup>24</sup> The committee was dissolved in 1852. In July 1853, Semper applied and was admitted to the 'German Society of Benevolence and Concord', which had been established in 1817. Remarkably, there is no known evidence of a meeting between Semper and Karl Marx. Marx was an opponent of most of the refugees with whom Semper had dealings and did not attend any of the above meetings, but he noted Semper's election to Kinkel's refugee committee.<sup>25</sup> Both Marx and Semper frequented the British Museum Library and, surprisingly, they had the same doctor, Jonas Freund.

More important was another initiative by Schramm at the end of March 1851. He initiated the first publication of a text by Semper in England, the essay 'Die grosse Ausstellung' (The Great Exhibition), which was published in May in the German supplement of The Illustrated London News (20-6). In the essay, Semper set out publicly for the first time the view that, in relation to ornamental treatment, Europe had been 'defeated by our Oriental competitors' in the field of the applied arts, which was threatening to become corrupted by 'machinery'. By this time, Semper already had first-hand access to the Crystal Palace. The collaboration he had hoped for with Joseph Paxton, the architect of the exhibition building whom Semper had met at Chadwick's at the end of November 1850, had not materialized – the commission for the decoration of the Crystal Palace for which Semper had applied had already gone to Owen Jones. Instead, however, Henry Cole – a member of the executive committee of the Great Exhibition, whose acquaintance Semper had also made through Chadwick in early December – gave him the opportunity to design some of the national sections in the Exhibition. Semper arranged the Canadian section (pl. 8), the sections for the Cape of Good Hope and Nova Scotia that were grouped around it, and the sections for Sweden with Norway and for Denmark.<sup>26</sup> He probably also contributed to the adjacent sections for Egypt and Turkey. Financially, the work at the Crystal Palace was not particularly lucrative. Thus, Semper was still trying to acquire work three weeks after the exhibition opened. He had an advertisement, written by the Hamburg architect Franz Georg Stammann, placed in the Hamburger Nachrichten (209-10) and also had a French advertisement, dated 1 April 1851, printed (18). He remained on friendly terms with the commissioner of the Canadian section, Henry Houghton, who lived in London as a warehouseman; in the late summer, he received a commission from Houghton for a drawing complete with frame, remunerated at £30.

Shortly before the essay published in *The Illustrated London News* and the many varied and fragmentary preliminary stages for it, Semper wrote drafts that can be assigned to the essay on Paxton's Crystal Palace that was published in *The Edinburgh Review* in the autumn of 1851 (18–20). Edward Aubrey Moriarty,

the translator of Charles Dickens's works into German and of Franz Kugler's *Geschichte Friedrichs des Grossen* into English, among other works, had translated Semper's essay (probably with Cole as an intermediary) and inserted it in his (Moriarty's) review of the last edition of the *Official Catalogue of the Great Exhibition*. In the essay, Semper gives the Crystal Palace double-edged praise as a work that the architect had brought into an 'entire unison with nature'. The building shows 'the original type of the most primitive form of architecture unwittingly realised' – adapted to the required purpose but unsuitable for progressive architecture. A 'complete revolution', Semper concludes, 'must take place in English manners before the glass roof can find adoption in private dwellings or religious edifices'.

From May to October 1851, Semper repeatedly browsed through the Crystal Palace; hurried but highly interesting notes that he took provide evidence for the routes he followed through the building (31-9; pl. 2). Most of them list exhibits from North America and Russia - contrasting the new mechanized world (represented, for example, by locomotives and McCormick's reaper) and oversophisticated applied arts. Textiles fare better, such as an embroidered blanket from Azerbaijan. There are surprising items such as shoes, artificial teeth, Palmer's prosthetic legs and Day & Newell's unpickable lock (the latter two like the reaper - also proved interesting for Sigfried Giedion decades later). Semper took notes on raw materials and clocks and repeatedly lingered in front of American daguerreotypes. The notes provide a panorama of the interests that flowed into Science, Industry, and Art, the pamphlet published in 1852 in which he intervened in debates on design reform.<sup>27</sup> Although it was probably Henry Cole who was behind the 'private request' he mentions as his motive for writing the pamphlet, the text was to become influential mainly in Germany during the second half of the nineteenth century.

The Great Exhibition led Semper to reflect on museology. In a fragmentary epistolary essay on cultural philosophy, addressed to Lothar Bucher (27–31), he discusses the museum as a location in which 'world ideas' condense. The Great Exhibition, which expressed the 'unconsciously born idea of a genuine cultural-historical collection', provided the elements from which the 'museum of the future' and a corresponding form of architecture would be able to crystallize on the basis of a comparative methodology. These ideas are reflected in Bucher's *Kultur-historische Skizzen aus der Industrieausstellung aller Völker* (Cultural-Historical Sketches from the Industrial Exhibition of All Nations; 1851). Between October 1851 and January 1852, Semper wrote a new introduction and a 'Prospectus' for his 'Comparative Architecture', which was published as an appendix in some copies of *Science, Industry, and Art.* As another planned supplement to the pamphlet, he also compiled a schematic list for a collection arranged according to his four

basic architectural elements (40-2), along with an associated note (43) that was to be inserted at the appropriate place in the pamphlet. Both of these remained unpublished.

By including the decorative arts in an overarching cultural-historical context, Semper was revising the reforming efforts made by the German 'Prototype Movement', as seen from the 1820s onwards particularly in Peter Beuth and Karl Friedrich Schinkel's Vorbilder für Fabrikanten und Handwerker (Models for Manufacturers and Craftsmen).<sup>28</sup> Semper had already made notes on four 'Questions for Industrial Collectors' in 1834 in this connection.<sup>29</sup> For one of these questions - 'How can we renew and make artistic use of what was once customary'? - he sought to provide a practical answer in the form of an exhibition planned for February 1852 in the empty Crystal Palace by an 'Association of Artists of Various Nations' that he had initiated, with 'designs, drawings and models from the field of industrial art, including architecture'. He promoted the exhibition in an advertisement published at the end of December 1851 (43-4). Slightly later on, he had an opportunity to answer another of his applied art questions from 1834 - 'How did the most important historical forms arise out of their incunabula'? Around the middle of April 1852, Cole engaged Semper to write 'a kind of illustrated catalogue raisonné on the whole field of metals technology', as Semper explained to Eduard Vieweg.<sup>30</sup> It was to serve as 'an illustrated catalogue for a projected collection of metalworks', he added to Antonio Panizzi, then keeper of the Department of Printed Books at the Library of the British Museum<sup>31</sup> – where Semper was spending a great deal of time, as evidenced by the call slips that have survived for the period from March to December 1852 (217-25; pl. 12). He sent the manuscript for the catalogue to Cole in mid-August. It was entitled 'Practical Art in Metals and hard Materials; its Technology, History and Styles' and earned him £180. In it, he set out his square diagram for a 'complete and universal Collection', based in turn on his four basic elements of architecture.

#### Polychromy in Architecture

Shortly after arriving in London, Semper resumed his writing work and established contacts with London institutions. In October 1850, he received an admission card for the ordinary meetings of the Royal Institute of British Architects (RIBA). He had been acquainted with Thomas Leverton Donaldson, one of the founders and secretaries of RIBA, since his first visit to London in late 1838. Probably as early as the second half of October 1850, Semper started drafting the pamphlet *The Four Elements of Architecture*, the German-language manuscript of which he sent to Vieweg on 19 January 1851.<sup>32</sup> The occasion for this was an invitation by Falkener to contribute to his journal *The Museum of Classical*  Antiquities. Semper was planning to provide an outline of his 'Comparative Architecture' (and the subtitle of the pamphlet is in fact marked A Contribution to Comparative Architecture). However, the text expanded to such an extent that Semper decided to provide Falkener with a version of the sections on architectural polychromy (pl.  $_3$ )<sup>33</sup> – probably prompted by lectures given by Owen Jones and Matthew Digby Wyatt at RIBA in December 1850, and a topic that was focused on in the first issue of Falkener's journal, which appeared in January 1851 with texts on polychromy by Jacques Ignace Hittorff and Falkener himself. Semper's essay was published in the July issue (48–61). In it, he denied that Greek culture had an autochthonous origin by arguing that 'the Greeks borrowed from Barbarians'. He also for the first time publicly stated his revolutionary opinion that walls 'decorated with painting and other ornaments' had developed as a 'substitution' for older 'tapestry' – an opinion prepared for graphically with his lithographs for Die Anwendung der Farben in der Architectur und Plastik (The Use of Colour in Architecture and Sculpture) of 1836 (pl. 9). The essay made part of The Four Elements of Architecture available in English as a first publication - the German pamphlet did not appear until the autumn of 1851. Three years later, Semper published another adaptation of it in English, in Jones's Apology for the Colouring of the Greek Court in the Crystal Palace (61-73). In it, he again emphasized that architectural 'decorations [were] borrowed from the weaver's art'. In the spring of 1852, Semper offered Falkener another manuscript on an archaeological topic for publication: an essay written in French on the Erechtheum, in which - in remarks directed against Friedrich Thiersch - he attributes inscriptions found on the Acropolis not to that temple but rather to the Propylaea.<sup>34</sup> Despite repeated requests from Falkener, Semper dropped this publication project and did not arrange for a translation into English.

#### Department of Practical Art

Semper's first direct contact with the Department of Practical Art, founded in February 1852 – the central administration of the Government Schools of Design, reformed by Henry Cole – came about through the metals catalogue mentioned above. Cole apparently commissioned him to prepare the catalogue in connection with the Museum of Manufactures, which opened provisionally in Marlborough House in Westminster, the home of the Department, in mid-May. Semper's work on the metals catalogue was one in a series of efforts he made to obtain a position as professor in Cole's Department. In the end, these efforts were crowned with success. His appointment was definitively decided on 8 September 1852, and the certificate of appointment was issued shortly afterwards, on 11 September (226–7; pl. 6). On 27 September, Semper acknowledged receipt of a prospectus drawn up by Cole for the special class on the 'Principles and Practice of Ornamental Art' in the field of metalwork which he had been appointed to teach. While he would continue to be the contact person for ceramics, furniture was made part of his immediate expertise (228). Shortly afterwards, his teaching area was expanded to include architecture. The focus on ornament is expressed in the certificate for art-instruction which he designed for the Department of Science and Art (pl. 10). Thus Semper became – alongside Ralph Nicholson Wornum - one of the first permanently employed art historians in British academic life with his special focus on the applied arts and architecture. Before, art history was taught primarily in connection with museums, as in the case of Charles Eastlake (editor of the first volume of Franz Kugler's Handbuch der Geschichte der Malerei in English) who was offered a post as the first professor of fine arts at London University (today's University College) in the 1830s, but declined in favour of his museum work.<sup>35</sup> Gottfried Kinkel's appointments as lecturer in art history in Great Britain, starting in 1853, were always temporary positions.<sup>36</sup> Semper's annual salary of £150 – not exorbitant, but supplemented by a share of teaching fees - nevertheless allowed him to move into a new flat near Hyde Park, at Gloucester Terrace, and to bring his family to join him.

The first semester at the Department of Practical Art, which began offering courses in the autumn of 1852, was marked by a royal commission to design the carriage for the Duke of Wellington's funeral procession, which passed from St James's Park to St Paul's Cathedral on 18 November.<sup>37</sup> Semper was responsible for the design and execution of the wooden structure and the richly decorated cast bronze panels that encased the ponderous funeral car. He was also involved in the overall design; however, Richard Redgrave, the Department's art superintendent, claimed sole authorship. While Semper's contribution was critically noted in London, it was celebrated in Germany as early as 1854 as 'Wellington's hearse by Professor Semper', representing one of the 'not insignificant victories of German taste over English'.<sup>38</sup> In the 'First Report' on his teaching work (88-91), dating from early 1854, Semper mentions the funeral carriage as an example of his teaching method, in which he aimed to have students become involved in practical work from the outset and to design the educational work in the form of a studio. He elaborated on this further in a 'Plan of Instruction for the Metal and Furniture Classes' (85-8), the draft of which, dated 1 February 1853, he submitted to the Department, supplemented with the idea of a transdisciplinary approach that would encompass technology of art, physics, mineralogy, chemistry and metallurgy.

Before he started work on the Wellington carriage, Semper carried out tasks in connection with the Department's Museum of Manufactures, which opened definitively at the beginning of September 1852 and was soon renamed the Museum of Ornamental Art. His 'Report on the Private Collection of Arms at Windsor Castle' (76-80), dated 20 September, was commissioned to investigate the possibility of obtaining loans or copies for the museum. In his expert report on arms, Semper was returning to the branch of the decorative arts whose 'practical' side he had already emphasized in his review of the Great Exhibition: in it, he argued, 'the striving for refinement and embellishment by art of the forms offered by the purpose of the object and the material used is shown in a modest way, and for that very reason satisfies the genuine sense of beauty' (23). The report is also of particular interest because Semper's English draft with Cole's corrections has been preserved (pl. 4). Semper's expertise was also in demand in other fields. On 11 October 1852, he recommended that Cole should make purchases from an offer submitted to him of 'Berlin Productions of Plastical Art' (80-2); Redgrave approved the purchase of cast iron jewellery from the offer. For the museum catalogue, Semper wrote introductory 'Observations on Some of the Specimens of Metal Work' (82-5), the first version of which was published in the catalogue of February 1853 and expanded in a new edition in May with an addition on newly acquired articles. Semper's interest in polychrome oriental ornamentation and vessel design found its way into this work. As in the case of the Berlin cast iron jewellery, most of the metal artefacts commented on by Semper can be found in today's Victoria and Albert Museum.

Between the end of 1852 and January 1853, during his first teaching-free period, Semper drafted a number of texts aimed at a German readership, including archaeological essays. Through the assistance of the painter and antiquarian Johann Karl Bähr, Semper's friend and former colleague at the Dresden Academy of Fine Arts, these were published in the Berlin Deutsches Kunstblatt in the spring and autumn of 1855. One of them was an essay on 'Die Restauration des Tuskischen Tempels' (The Restoration of the Tuscan Temple), a critique of Thiersch's interpretation of Vitruvius.<sup>39</sup> Another was a multi-part essay on 'Die neben den Propyläen aufgefundenen Inschrifttafeln' (The Inscription Panels Found next to the Propylaea), a new version of Semper's 1852 essay in French on the Erechtheum, now published as 'Briefe aus der Schweiz' (Letters from Switzerland).<sup>40</sup> Semper used a research trip to the porcelain manufactory in Sèvres in January 1853, commissioned by Cole, to write an essay on 'Die neuesten pariser Bauten' (The Latest Buildings in Paris), which was published the following month in Karl Gutzkow's journal Unterhaltungen am häuslichen Herd.<sup>41</sup> Gutzkow had for a short time been a dramatic advisor at the Dresden Court Theatre, until the 1849 revolution.

During preparations for his public lectures at the Department of Science and Art, the first of which Semper delivered in May 1853, he attended a RIBA meeting in early February 1853 at which a paper by the Scottish interior decorator and art theorist David Ramsay Hay on 'Proportions and Curves of the Parthenon of Athens' was presented. The optical corrections that were discussed inspired Semper to test the relationship between mathematical regularity and aesthetic perception using the plum-stone-shaped leaden slingshot bullets of the Greeks.<sup>42</sup> The preface to the first version of the paper is dated 20 December 1853. Before its publication in 1859, Semper had a summary of it, concerned particularly with the trigonometric part, published in the Leipzig *Annalen der Physik und Chemie* in September 1854. As stated there in the introduction, he regarded the study as 'a contribution to the comparative theory of forms'.<sup>43</sup> At the same time he was afraid that it might be plagiarized by the Prussian military. In contrast, however, Semper's work on the paper was already being remarked upon in Germany in early 1854 with an assumption that it had been written 'under official commission from the English government'.<sup>44</sup>

#### Lectures

On 20 May 1853, Semper gave his first public lecture in London at Marlborough House to a distinguished audience - the inaugural lecture, 'On the Relations of the Different Branches of Industrial Art to Each Other and to Architecture' (104–17). Cole considered it 'thoughtful & suggestive'.<sup>45</sup> The text of the lecture is found in the first of two manuscripts that researchers have previously mistaken for interchangeable variants of the lecture with which Semper opened the autumn term in 1853.<sup>46</sup> Two partial drafts were considered to be the only traces of the wording of the inaugural lecture (97–103).<sup>47</sup> In both of these fragments, Semper starts by quoting the first of the propositions by Owen Jones that the Department had decided to use as the basis for its teaching work – namely that the decorative arts originated in architecture and should accompany it appropriately (pl. 5). In the definitive version of the lecture, Semper omitted both the quotation and his reservation that it was correct only 'if taken in its true meaning'. This was probably to avoid any appearance of presumptuousness in his divergent opinion - namely 'that architecture is based upon principles and laws, which were known and practised in ornamental art'. It was only after a lengthy introduction concerning the need to regain the lost 'consciousness of the intimate connections, which exist between the different branches of knowledge and skill', that he now took a position on this. The 'history of Architecture', he nevertheless states unequivocally thereafter, 'begins with the history of practical art'. As an example, he presents for the first time in public his comparison of the Egyptian situla and the Greek hydria - two vessels in which basic elements of the corresponding forms of architecture are prefigured. The lecture combines two key modern disciplines in an exemplary way: dynamics and ethnology. Semper presents the much-cited formula that he used to illustrate his 'Doctrine

of Style': a mathematical functional equation that covers an infinite number of factors that stand for the dynamical function, the multifarious variability of artistic form-finding. Functionality is not necessarily achieved here through 'science and calculation', as is proved by the 'ornamental art' of New Zealand with its 'Sort of architecture', which consists of 'nothing but richly sculptured and painted hedges and hedgepoles', and 'the Axes of the North-American Nativs'. Even in the case of the perfectly formed 'Greec Sling bullets', it remains questionable whether they are not also 'the Result of an instinctiv feeling'. The inaugural lecture ends with a forward look at five future lectures, which correspond precisely to the programme in which Semper's lectures for the autumn semester were announced (96-7).

In the course of the autumn semester, the number of Semper's public lectures expanded from five to seven. The first, which included an introduction and two sections on 'The ancient practice of wall coating' and on 'Tubular construction', was spread across two lectures. In the opening lecture, the 'General Remarks on the Different Styles in Art' (118-26), he recapitulates his inaugural lecture, making cuts and additions. He varies the mathematical formula of his 'Doctrine of Style' and falls back on his four basic architectural elements - the hearth or fireplace, the roof, the enclosure and the substructure or terrace – with the areas of practical art assigned to them: ceramics and metalwork, carpentry, the 'Craft of matmakers and hanging-manufactures' and masonry. However, he designates - as in the inaugural lecture - 'the art or ... industry of coating ... in the widest sense', including textiles, as the first class of the artistic treatment of raw materials. The reversal in the importance assigned to ceramics and textile art that was then to follow by the time of *Style* is anticipated here. As the example of Assyrian wall coverings with 'glazed bricks' shows (Semper had discovered them in the Louvre in Paris in 1850), ceramics had provided a substitute for 'the variegated original draperies'. Conversely, Assyrian reliefs in the British Museum indicated that they were 'copies in Stone of woven or embroidered tapestries'. This first autumn lecture concludes with the 'principle of Coating' - the first time that Semper uses the term, which is then translated into German in *Style* as 'Prinzip der Bekleidung' (usually translated as 'principle of dressing').<sup>48</sup>

The second lecture combines 'The ancient practice of wall coating' and 'Tubular construction' into one lecture (127–35). Inspired by the Great Exhibition, Semper supplements the discussion of the four basic elements of architecture with ethnological classifications of contemporary products, including those of Trinidad – with the example of the model of a Caribbean hut, which he discusses publicly here for the first time. He equates Chinese architecture with this preliminary architectural form, as he regards it, and shocks the audience by noting that at the time when Assyria and Egypt had already developed into

high cultures, the Greeks were still at the level of 'the American Indians, or the New-Zealandas' of his time. The lecture concludes with examples of metals technology in the areas of furniture, weapons and doors.

Semper expanded the third planned lecture, on ceramics, into three lectures (135-60).49 Here he describes pottery as being 'perhaps' the 'most important of all the different branches of industry for the general history of art and for artistical science'. He includes objects made of various materials in the category of ceramics; they belonged to this field because the decisive 'traditional laws of generation and ornamentation ... have been settled by potters'. As evidence of this, he again refers to the situla and hydria, with the argument accentuated by the idea of national characteristics that allow these to be read as exemplifying the 'national Genius of the Aegyptians' and the 'lucid nature of the monteneer inhabitants of Greece', respectively. He uses the second ceramics lecture to draw a distinction between two 'principles of ornamentation': one in which ornamentation symbolized the 'dynamical function' of the object associated with its construction, and another in which it represented the cultural context in the form of historicized images. In the third lecture on ceramics, he recalls the 'mortifiing truth' of an 'unquestioned superiority of half barbarous nations' in the field of the applied arts and then goes on to discuss ceramic materials, techniques and the characteristics of handmade and mechanically reproduced objects.

In the following lecture, 'On Timber Construction' (161–9; pl. 11), he discusses roof constructions and coverings among the Chinese, Egyptians, Greeks and Indians, addresses Moorish, Norman and Gothic architecture and summarizes Caucasian and Etruscan architecture as well as the vernacular architecture of Tyrol, Switzerland, Sweden and Norway. The lecture illustrates engineering science with sketches for classifying construction systems ranging from flat roofs to suspension bridges and mentions the latest English iron bridges and their traditional counterparts in South America and Tibet.

There are no surviving drafts of the subsequent planned lecture on stereotomy (masonry). The series concludes with the lecture on 'The Combined Action' of the different branches of the applied arts in architecture (169–77). Here Semper explains the 'different Styles of architecture' in relation to anthropological and political implications. Observations on 'Domestic life' lead him from the 'mouveable tent ... of the Nomad tribes' to farmhouses 'in the old saxon countries', Scandinavian stave churches and the settlement architecture of the 'descendants of the German races' with their 'Strongholds and blockhouses'. As formative types, he contrasts the 'fortified camp', which multiplied into the form of towering pyramids in Assyrian architecture, with the core of the Egyptian temple, which was expanded through the constant addition of new layers. These represent contrasting manifestations of a 'Military despotism' based on conquest and feudalism and of a 'national Monarchy' supported by an aristocratic priesthood.

With the exception of the drafts of three lectures, little more is known about the programme of lectures Semper gave in the autumn of 1854 beyond what he noted about his teaching activities in the 'Second Report' (91-3): he held 'two courses of five public lectures on the different styles of ancient architecture'. The two extant versions of the lecture 'On Architectural Symbols' (177–89) probably mark the beginning of these. He starts with the creative potential of architecture, which is 'a pure inventiv art' or 'an art of invention'. The function of nature as a model, he argues, lies solely in an analogous 'dependency on natural laws and conditions', implying that 'the history or nature of mankind' can be narrated through architecture in exactly the same way that fossilized 'shells' and 'Coraltrees' provide information about their former organic inhabitants. There is an explicit distinction here showing that 'the history of architecture does not begin at the same point with the history of housebuilding and Engineering'. He places the Caribbean hut in the latter category, while the former is marked by a sequence of those kinds of 'social revolution' with which 'the prevalence of a new principle' is associated - successive rearrangements of the combination of the four basic architectural elements, or rather the four engineering-like basic elements - and the way in which they are shaped by the applied arts, which have always affected the 'symbolical language' of architecture. He illustrates in detail the symbolization of the complex forces that are at work in architecture using the Doric cyma, in passages in which he makes use of Karl Bötticher's Tektonik der Hellenen (Tectonics of the Hellenes; 1844–52) without mentioning the work. Semper probably first started reading Bötticher's book in December 1852 - as indicated by the preserved call slip from the British Museum Library (pl. 12), the notes he made on the book partly in English and the absence of earlier remarks about it.50

In the second lecture of 1854, 'On the Relation of Architectural Systems with the General Cultural Conditions' (189–201), Semper further discusses the way in which 'architectural monuments are ... the artistical expressions of ... social political and religious institutions': from the 'patriarchal form of society' to the 'free confederation between tribes of the same origine and race'. The latter form – although it is 'the most natural and the most reasonable' – is repeatedly overthrown by absolutism and oligarchy, as seen in the cases of Assyria and Egypt. Lengthy remarks on China follow, where he argues that the traditional 'terrible revolution of nature' (flooding) corresponds to social revolutions in China to the extent that no fundamental changes occur. Chinese architecture has thus preserved an isolated juxtaposition of 'the constructiv parts and the details ... in the most primitiv and material sense'. After a brief discussion of Babylon, the manuscript breaks off with a forward look at Egyptian architecture. This preview is continued in the short fragment of the following lecture, 'Explanation of the Expression of Spatial Arrangements in Architecture' (201–3), with an outline, illustrated with sketches, of the way in which Egyptian temple types served as models for Greek and Roman architecture.

#### The Will to Architecture

The ultimate success of Semper's period in London was clouded by the scarcity of commissions for him as a building architect. He complained that his practical work was limited to 'furniture stuff'.<sup>51</sup> Following the abortive adventure of the Abbey Wood cemetery project, he drew up plans for several buildings that were not implemented. In 1851, he designed a London washhouse and public baths, and later that year he was commissioned to design an extension to The Grange in Hampshire, the country seat of William Bingham Baring Ashburton, who then preferred a design by Charles Robert Cockerell. These were followed, during the period when Semper was a professor at the Department of Practical Art (later Department of Science and Art), in mid-October 1852 by a design for a telegraph kiosk for the Electric Telegraph Company, a design for a London building for emigrants in 1853 and – in a competition setting – for a pottery school in Stoke-on-Trent. During these years, the only design commission that was implemented was for the iron frame and roof of a manufactory building for the Royal Arsenal in Woolwich, arranged through the military engineer Thomas Bernard Collinson; the work was carried out to a limited extent up to mid-1854.52 New tasks arose for the Crystal Palace when it was rebuilt in the South London suburb of Sydenham up to 1854. Semper was commissioned by Joseph Paxton to design one of the commercial exhibition spaces there, the Mixed Fabrics Court.<sup>53</sup> In contrast, his proposal for a Pompeian theatre in the transept of the Palace did not progress beyond the initial design stage.

From mid-March to early June 1855, Semper stayed in Paris on behalf of the Department to help set up the British section at the second World's Fair. Dissatisfied with the tasks assigned to him there, he complained in a letter to his wife, 'The English architects have snatched everything away from me.'<sup>54</sup> While he was in Paris, Semper started on a design for the competition for the Théâtre de la Monnaie in Brussels, which had burned down, but he apparently did not submit it.<sup>55</sup> The final phase of Semper's period of exile in London was marked by a highly promising commission from Prince Albert: in mid-February 1855, through Cole, he commissioned Semper to design a kind of cultural forum in South Kensington – on the site of today's Royal Albert Hall – that would house the various museum sections of the Department of Science and Art in combination with a concert hall, shops and flats. Semper's design for a gigantic reinterpretation of the Crystal Palace was ready in mid-June. It delighted Prince Albert, but the Board of Trade declined to pursue it for reasons of cost.

By this time, however, Semper's life had already taken a new turn, thanks in part to Richard Wagner's mediation. Wagner had written to him in August 1854 that there was a prospect of a position in Zurich that would make Semper 'the supreme authority on building matters for the whole of Switzerland'.<sup>56</sup> The position in question was that of director and first professor in the Department of Architecture at the Swiss Federal Polytechnic, which was founded in 1854 and started offering courses in the autumn of 1855. After negotiations in Zurich, Semper agreed to the offer in principle on 16 November 1854. Arguments in favour of Zurich were a tenured position, a German-speaking environment and the prospect – albeit still vague – of being able to design the new building for the Polytechnic. After the appointment had been made definitive in February 1855, Semper travelled from Paris to Zurich again in March, where he took the opportunity to find a suitable rented flat for the summer. In the meantime, his family moved to Paris for a few weeks. On returning to London at the beginning of June, Semper stayed for the last three weeks of his London exile with the German engineer and industrialist Carl Wilhelm Siemens, a friend of his, in Kensington Crescent. Semper left London on 26 or 27 June 1855 and arrived in Zurich, after a stopover in Paris, on 12 July. It was not until 1863, on 8 May, that the warrant for his arrest was withdrawn by the authorities in Saxony.<sup>57</sup>

<sup>&</sup>lt;sup>1</sup> On Kinkel's 1853 lectures at University College, see Haskell 1988, 214–16; Ashton 1996; Hönes 2019; Hönes 2021. For Semper's approach compared to contemporaneous German art history, see Karge 2013. For Semper's bourgeois-democratic context among German refugees in London, see Ashton 1986, 139–87 (Semper mentioned on 54, 163–4, 176, 182, 208); Weidmann 2014. For a broader assessment of the refugee situation in mid-nineteenthcentury Great Britain, see Freitag 2003.

<sup>2</sup> Semper to Eduard Vieweg, Zurich, 25 July 1855 (Vieweg Archives, V3:1.1.3.32); cf. draft letter (gta, 20-K-1855-07-25[S]).

<sup>3</sup> The translation of this title adopts part of Semper's own wording in his London lectures where he speaks of 'ancient Greec Sling bullets', with 'Sling bullets' replacing the deleted word 'Projectiles'.

<sup>4 &#</sup>x27;Practical Art in Metals and hard Materials; its Technology, History and Styles' [1852] (NAL, 86.FF.64); Semper 2007a.

5 All of Semper's manuscripts for 'Comparative Architecture' ed. in Luttmann 2008, 249–609. Individual chapters ed. in Herrmann 1981, 180–216 (selected Engl. trans. in Herrmann 1984, 189–218).

6 For details of these two editions, see the textual record of the individual lectures.

7 Semper 1884, 344–50, translates a compilation of MS 117 and MS 118; Semper 1884, 259–91, compiles MS 122 and MS 124 to form the source text of the translation for 'Entwurf eines Systemes der vergleichenden Stillehre'.

8 The major part of MS 129 is translated in Semper 1884, 383–94, the concluding part in Semper 1884, 90–4. In Mallgrave's edition, both parts are combined in their original sequence; see Semper 1986a. MS 144<sup>1</sup> is translated in Semper 1884, 351–68, without the last two pages; MS 144<sup>2</sup> is omitted altogether. Mallgrave has edited both manuscript parts in their entirety; see Semper 1986b.

9 The same applies to the five lectures translated into French by Jacques Soulillou (Semper 2007b, 157–222), based on Mallgrave's English edition and complemented at places by Manfred and Hans Semper's German translation.

10 Semper 2014.

11 Chestnova 2017a, revised as Chestnova 2022; Leoni 2019.

12 Gnehm/Hildebrand 2021.

13 The title of this pamphlet as translated by William Richard Hamilton in his translation of Franz Kugler's *Ueber die Polychromie der griechischen Architektur und Sculptur und ibre Grenzen* (Kugler 1835), which was published in the *Transactions of the Institute of British Architects of London* (Kugler 1836).

14 On Semper's participation in the May Uprising of 1849 in Dresden, see Heirler 1980; Herrmann 1984, 9–12 (trans. of Herrmann 1978, 10–13); Laudel 1995, 46–9; Mallgrave 1996, 165–71; Laudel 2000; Hildebrand 2020, 77–88.

15 For Semper's life and work during his exile in Paris, see Herrmann 1984, 12–29 (trans. of Herrmann 1978, 14–31); Mallgrave 1996, 171–81; Laudel 2003, 269–73; Kalinowski/Thibault 2018; Hildebrand 2020, 88–103.

16 On Semper's 'Comparative Architecture' as related to Cuvier, see Hauser 1985; Herrmann 1990, 77–8; Laudel 1991, 43–5; Eck 1994, 228–34; Mallgrave 1996, 156–9; Gnehm 2004, 29–34, 43–6, 54; Hvattum 2004a, 123–32; Luttmann 2007, 221, 227–33; Luttmann 2008, 5–10, 119–21.

17 Semper 1849a.

18 Semper 1849b-i; Semper 1850a-c. In September 1849, Semper offered his services as a French correspondent to the journal's editor, the architect Johann Andreas Romberg; see Semper to Romberg, Paris, 7 September 1849 (gta, 20-K-1849-09-07[S]).

Semper, '[Observations sur l'exécution de la peinture sur porcelaine]' (June 1850) (gta, 20-Ms-47); German trans. in Semper 1884, 58–75. The essay is addressed to 'Ma fille', i.e. Semper's eldest daughter, Elisabeth.

20 For Semper's life and work during his exile in London, see Herrmann 1976; Lankheit 1976; Reising 1976; Vogt 1976; Mallgrave 1983a; Herrmann 1984, 29–83 (trans. of Herrmann 1978, 32–93); Mallgrave 1996, 176, 182–227; Hildebrand 2003; Laudel 2003, 273–97; Payne 2012, 25–64; Leoni 2014; Weidmann 2014; Charitonidou 2020; Hildebrand 2020, 103–31.

21 In a draft letter of 13 October 1850 (erroneously dated 12 October), addressed to his brother Johann Carl, Semper wrote, 'I have an office in the City with the architect Falkener 61, Grace church Street. and am living in University street 27. with Mr. Watts' (pl. 7; gta, 20-K-1850-10-13[S]). For the identification of the carpenter Thomas Watts as Semper's landlord, see London Directory 1842, 421; London Directory 1851, 1052.

22 On Kinkel's relation to Semper, see Beyrodt 1979, 350–3; Ashton 1986, 163–4; Haskell 1988, 215.

23 On Kinkel's Emigration Club, see Ashton 1986, 87, 141, 164; Lattek 2006, 99–109; for Semper's membership in the Emigration Club as noted by the Saxon Secret Police, see Gross 1980, 152. 24 Lothar Bucher and Gottfried Semper to Gottfried Kinkel (copy by Conrad Kinkel), London, 30 August 1851 (ULB Bonn, Kinkel bequest, S 2675 [27 S.8]).

25 Karl Marx to Friedrich Engels, London, 31 August 1851, ed. in Marx/Engels 1984, 195–8, here 195–6; cf. Quitzsch 1981, 23.

26 For a reconstruction of Semper's Canadian Court, see Leoni 2021.

27 On Semper's *Science, Industry, and Art*, see Ettlinger 1964; Diephouse 1978; Mallgrave 1996, 205–8; Arburg 2008, 313–21; Hildebrand 2020, 116–19.

28 On the differences between Gottfried Semper's thoughts on design reform and the German *Vorbilderbewegung*, see Mundt 1971; Mundt 1976.

29 Semper, 'Fragen für Industrie Sammler' (gta, 20-Ms-37, fol. 7v), cit. in Herrmann 1981, 83.

30 Semper to Eduard Vieweg, London, 20 May 1852 (ed. in Herrmann 1976, 236–7). For Semper's metals catalogue, see Herrmann 1984, 60–4 (trans. of Herrmann 1978, 66–70); Mallgrave 1996, 210–12; Hvattum 1999; Nicka 2007; Nicka/Pokorny-Nagel 2007; Squicciarino 2009, 315–25; Chestnova 2017b; Chestnova 2018. None of these studies takes into account, or identifies correctly, the different hands to be found in the metals catalogue. The version of 1852 (NAL, 86.FF.64) was written in large parts by Charles Alfred Somerset (commissioned by Semper to write a fair copy of now lost drafts), to a lesser extent by Semper himself; a few pages are by Charles Comyns. Comments in the margins are by Somerset, Semper, Cole and John Charles Robinson (who became curator of the Museum of Ornamental Art in 1853). The copy that Semper presented to today's Österreichisches Museum für angewandte Kunst (MAK) in 1867 (ed. in Semper 2007a) was written at his request to Robinson by the latter's clerk Comyns between the autumn of 1855 and the summer of 1866.

31 Semper to Antonio Panizzi, London, 22 May 1852 (gta, 20-K-1852-05-22[S]).

32 On Semper's *Four Elements of Architecture*, see Laudel 1991, 58–64; Mallgrave 1996, 177–89; Gnehm 2004, 27–34, 57–69; Hildebrand 2020, 105–8.

This first version (gta, 20-Ms-79), written by Semper in French and entitled 'On Tap-

estry & the origin of Polychronic Decoration' ('Polychronic': *Polychromic*), is not identical with the one that Falkener used for translation; its fair copy (gta, 20-Ms-80) ed. in Semper 2020, III-33.

34 '[Aucun reste d'antiquité]' [1852] (gta, 20-Ms-99); German trans. in Semper 1884, 109-21.

35 Robertson 1978, 48-9; Kauffmann 1993, 9-10.

36 Ashton 1986, 162-3; Hönes 2021.

37 On Wellington's funeral car, see most recently Hvattum 2021.

38 Atlantis 1854, 30.

39 Semper 1855a.

40 Semper 1855b. On Semper's 'Letters from Switzerland', see Herrmann 1981, 106; Karge 2014, 19, 23–4.

41 Semper 1853.

42 Semper 1859. On Semper's work on ancient slingshot bullets, see Herrmann 1981, 116–17; Herrmann 1984, 73–4 (trans. of Herrmann 1978, 80–1); Mallgrave 1996, 222–5; Hildebrand 2015; Papapetros 2016; Hildebrand 2021.

- 43 Semper 1854, 297.
- 44 Atlantis 1854, 32.

45 Cole Diary (20 May 1853).

46 Herrmann 1981, 109–10 (on MS 122, MS 123 and MS 124); Mallgrave 1983b, 23.

47 Herrmann 1981, 108-9 (on MS 117, MS 118 and MS 119); Mallgrave 1983b, 23 n. 5.

48 On Semper's 'Prinzip der Bekleidung', see Quitzsch 1981, 86–105; Laudel 1991, 101–16; Squicciarino 1994, 103–31; Mallgrave 1996, 290–302; Rykwert 1998; Gnehm 2004, 102–17; Laudel 2007; Arburg 2008, 286–97; Gnehm 2015; Gnehm 2017a. For a contextualization of Semper's principle within modern and contemporary architecture, see most recently Moravánszky 2018. 49 On the position of ceramics in Semper, see Mallgrave 1996, 279–84; Squicciarino 2009, 331–47; Karge 2014, 35–6. On ceramics in Semper's London period, see Poerschke 2016, 61–9; Chestnova 2021.

50 An excerpt from Semper's notes on Bötticher's *Tectonics of the Hellenes* was first published as an editorial note to the posthumous German translation of this lecture (Semper 1884, 300 n. \*); all of Semper's notes on Bötticher (gta, 20-Ms-150) ed. in Gnehm 2004, 202-3, 206-21. For Semper's dispute with Bötticher, see Herrmann 1984, 139-52 (trans. of Herrmann 1981, 26-40); Laudel 1991, 117-24, 129-30; Oechslin 1994, 52-69; Mallgrave 1996, 219-22; Poerschke 2016, 69-72, 83-8.

51 Semper to Carolyne Sayn-Wittgenstein, Zurich, 8 December 1857 (gta, 20-K-1857-12-08[S]). For Semper's designs for the applied arts during his London exile, see Mundt 1976; Orelli-Messerli 2010, 163–293.

52 On Semper's contribution to the Woolwich Royal Arsenal, see Guillery 2012, 164–7, and, most recently, Fraser 2021.

53 On Owen Jones's Greek Court and the context of Semper's Mixed Fabrics Court at Sydenham, see most recently Nichols 2021.

54 Semper to Bertha Semper, Paris, 8 April 1855 (gta, 20-K-1855-04-08[S]).

55 However, the Saxon Secret Police noted that Semper had travelled to Brussels in March 1855 to submit plans for the theatre; see Gross 1980, 152.

56 For Semper's move to Zurich, see Herrmann 1984, 78–83 (trans. of Herrmann 1978, 87–93); Mallgrave 1996, 225–7; Weidmann 2010, 1:318–42; Hildebrand 2020, 126–31.

57 Johann Heinrich August Behr (Ministry of Justice) to Semper, Dresden, 8 May 1863 (gta, 20-K-1863-05-08:2).

#### EDITORIAL PRINCIPLES

Any edition of Semper's writings is confronted with his notoriously difficult prose. Nikolaus Pevsner, who like Semper decades before him also found refuge as an exile in England, stumbled over Semper's 'literary style which can be terrible'.1 Semper's penchant for convoluted sentences is reflected in his manuscripts. They show the architect in the very process of thinking, as it were. In his search for a sentence that will cover all the various aspects of an idea as succinctly as possible, he deletes parts, replaces them, deletes them and adds to them again, until finally sentences emerge whose syntax is not always beyond all doubt. Palimpsest-like layers of revisions are characteristic of the Germanlanguage manuscripts edited here, and also particularly of the drafts that Semper wrote in English (pls. 5, 11). As Harry Francis Mallgrave put it in the preface to one of the selected London lectures edited by him, one is confronted in these with Semper's 'awkward, sometimes failing, knowledge of English'.<sup>2</sup> Werner Szambien - although he proceeded from a German-language text by Semper had a similar experience in translating what he mistook for one of Semper's London lectures into French: the text, he commented, was far from the 'French, stimulating and sparkling style' which the London lectures recalled according to Hans and Manfred Semper.<sup>3</sup>

Semper only acquired a more thorough grasp of English during the course of his exile, and it was in French that he initially corresponded with Edwin Chadwick, Edward Falkener and Henry Cole, among others.<sup>4</sup> Although he never really felt at home in English, he did still manage to put complex thoughts down on paper in a way that made them comprehensible. What his English sounded like and what the effect of his Germanizing syntax was when he was delivering his lectures in English is an open question. Some spelling mistakes can perhaps be explained by Semper's pronunciation – for example, when he uses 'curse'

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instead of *course*. When he writes 'Jokes' instead of *yokes*, the J merely indicates the letter's phonetic value as in the German word *Joch*. Some of the slips are obviously due to French words that he was anglicizing – sometimes in a highly associative way. It remains questionable whether Semper delivered the lectures in the same state in which they have survived in the manuscripts. They usually have so many deletions and interpolations that he would scarcely have been able to read from them fluently. However, his lectures in German were also characterized by a halting manner of delivery. Johann Rudolf Rahn, the 'father of Swiss art history', reported from his student days with Semper in Zurich that it sometimes happened 'that he just left us without the end of a sentence altogether. "Confound it, I can't finish the cursed sentence, you do it yourselves", he would growl to himself like an infuriated lion'.<sup>5</sup>

The edition offers a critical reading text with as little editorial intervention as possible, so that the texts are made available in the state in which they were published or written at the time. On the one hand, this preserves the form in which they circulated, and on the other – in the case of the manuscripts – Semper's peculiar diction is preserved directly. This counteracts the risk of falsifying the bent of Semper's thoughts, of corrupting his style, and robbing his words and expressions of their spirit and their immediacy.

The Apparatus refers to the critical reading text by page and line number. Individual passages that are commented on in the Explanatory Notes, Editorial Emendations, Alterations in the Manuscript and Variants are referred to by using a lemma corresponding to the reading in the critical text and set in bold sans-serif type, followed by the lemma sign ]. Where a longer passage serves as a lemma, it is shortened by using a tilde or wavy dash ~ to indicate the omitted word or words. One or several wavy dashes in the comment following the lemma bracket stand for the lemma word or words that remain unchanged in an explanation, an alteration or a variant commented on.

#### Textual Record

The textual record lists all the known direct textual witnesses of the edited text, as well as previous editions of it – all arranged in chronological order, starting with the oldest witness. The copy-text on which the critical reading text is based is indicated by italics. The textual record contains information on the extent of the printed texts and manuscripts and on their provenance. In the case of the manuscripts, the writer's hand and the writing material, if it is not solely black ink, are indicated. All of the edited manuscripts belong to the holdings of the gta Archives at ETH Zurich, with three exceptions: the 'Outline of a Cultural-Historical Exhibition' and 'Note on a Cultural-Philosophical Collection' are

enclosed with or inserted in letters to Eduard Vieweg that are archived at the Technical University in Brunswick. The 'British Museum Library Call Slips' are held at the Saxon State and University Library (SLUB) in Dresden. The sigla and foliations of the manuscripts in the gta Archives follow the order made by Wolfgang Herrmann in the 1970s; the sigla correspond to his manuscript numbering.<sup>6</sup> Where different manuscript units are archived as one unit under one number, continuous foliation is assumed, but the manuscript units are distinguished from each other with sigla extended by the editors – for example, as MS 148<sup>1</sup>, fol. 5r–v, and MS 148<sup>2</sup>, fols. 1r–4v. They are also rearranged chronologically. In two cases, the various manuscript parts archived under one number are not assumed to be continuously foliated, due to their random order. In the case of Semper's 'Notes on Exhibits', the folios within a manuscript unit are counted, and this unit is designated by a number preceding the foliation number (e.g. as MS 96, <sup>2</sup>fols. 1r-2v). The 'British Museum Library Call Slips' are not numbered at all. Succinct bibliographies list the principal literature on each of the edited texts.

#### Variants

When a text was published in Semper's lifetime, the printed version is used as the copy-text for the critical reading text. For the manuscripts, the latest stage of revision, taking into account all changes made by Semper, is reproduced as the critical reading text; manuscripts written in other hands are treated in the same way. The texts are edited in their original languages, whether German, French or English, as appropriate. This means that all texts are reproduced in the language in which they were printed at the time or – in the case of the manuscripts – the language in which Semper wrote them or into which he translated them or had them translated. Print variants are listed in the Apparatus in relation to individual readings of the critical text. Manuscript variants – including drafts that served as the basis for translations at the time – are usually edited integrally in the Apparatus; in exceptional cases, they are treated as variant readings for individual passages of a printed version. For print or manuscript variants that are listed in relation to individual passages, parts that are missing in textual witnesses are indicated using *om*. (omitted).

#### Pagination and Folio Sequence

In the case of the printed texts that are edited, the original pagination or, if it is missing, the folio sequence is included as marginalia. In the case of the manuscripts, Semper's – often irregular – pagination and the folio sequence are included as marginalia, with the folio number indicating whether the text is on

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the recto or verso of a sheet. Manuscript pagination in someone else's hand, such as that of Wolfgang Herrmann dating from the 1970s, is not recorded. In the critical reading text itself, a new folio, i.e. a new sheet, is signalled by a vertical bar | and a new page by a broken bar |.

# Grammar and Syntax

Grammatical and syntactical errors are not corrected in the critical reading text, and the often Germanizing syntax of Semper's English is not commented on in most cases. If the gender of an article or an adjective is incorrect in Germanlanguage manuscripts, and if the conjugation of auxiliary verbs is incorrect in German- and English-language manuscripts due to Semper's deletions and failure to adapt the text accordingly, the source of error is elucidated in the deletions documented in the Alterations in the Manuscript.

# Orthography

In the critical reading text, the orthography is generally adopted as it appears in the contemporary printed or manuscript version – in contrast to Harry Francis Mallgrave's selected edition of Semper's London lectures, with its mostly silently 'corrected numerous misspellings'.<sup>7</sup> Our editorial decision is based on a number of considerations. In Semper's autographs, it is not possible to identify a predominant practice of any sort on which corrections could be based. Adaptations to then-contemporary practices or modern usage would lead to a standardized text that would not correspond to the tentative character of Semper's formulations. A critical apparatus that recorded these adaptations would be inflated to an impractical size. On the other hand, general rules for silent correction would not only be impossible to justify consistently but would also mean that the peculiarities of Semper's English, shaped as it is by German and French, would disappear without a direct trace. In the critical reading text, chimerical spellings such as 'Goathares' instead of *goat hair* or 'rang' instead of *rank* are thus left as they are. These cases are commented on in the Apparatus.

The simultaneous use of British spellings and what from today's point of view would be regarded as American spellings in the manuscripts is retained in the critical reading text – as in the case of 'colour' and 'color', for example. The question of whether supposedly archaizing or obsolete orthography should be adapted to the practice of the time or to today's practices cannot be answered, since archaizing or obsolete aspects of Semper's writing in English are in most cases scarcely due to the use of outdated dictionaries, but rather to his orthographic inexperience – as in the case of 'allways' (which he usually uses) and 'always' (which also occurs in his manuscripts) – or to his own anglicization of German or French words. The German letter Eszett (ß) and the long s (f) are not distinguished from ss and s, respectively, in the critical reading text and Apparatus.

In the case of texts printed at the time, misprints are, in a few exceptional cases, corrected in the critical reading text and listed in the Editorial Emendations – for example, when misspellings can be traced back to incorrect deciphering of the handwritten long s (f) and its confusion with f by the typesetter. Examples: 'follten' (from *follten*), 'Erfahrungswissenschasten' (with the last 's' read as f instead of f), 'fcheint' (from *fcheint*). Turned letters (e.g.  $\vartheta$  instead of e) are corrected, with the correction noted in the Editorial Emendations. Unusual or incorrect name spellings are corrected in the Explanatory Notes in a few extreme cases such as 'Blagmann' instead of *Klagmann*, 'Letaroulz' instead of *Letarouilly* or 'Ebner' instead of *Hefner*; name variants are otherwise listed in the Index.

# Missing Words or Parts of Words

Parts of words and letters that are missing in the manuscripts – as in the case of 'Seurity' and 'Architure' – are not added in the critical reading text, as they can be easily deduced, but are corrected in the Explanatory Notes. In one case, in which 'trea-' immediately before a page break is not followed by 'ting' on the next page, it is augmented in the critical reading text to 'treating'; this intervention is documented in the Editorial Emendations. If there are blanks in texts printed at the time – because the typesetting was faulty or because Semper left spaces in the manuscripts for the subsequent addition of numbers or names – they are retained in the critical reading text. In the first case, the missing passage is corrected in the Apparatus with reference to parallel passages in manuscripts that include the presumed addition; in the second case, the passage missing in both print and corresponding manuscript is given in the Explanatory Notes. If words have been preserved only in fragments due to tearing or rubbing off, they are supplemented in the critical reading text and documented in the Editorial Emendations.

# Capitalization

Semper's use of capitalization in English is inconsistent throughout, and it is not possible to systematize it on the basis of any predominant practice. The critical reading text also refrains from any attempt at standardization based on contemporary or modern practices. For example, Semper writes 'But Nature never fails in the Choice of its forms', where both of the capitalized words are attributable to the capitalization of German nouns and can hardly represent personification – since elsewhere he also writes of 'the laws which nature itselfs observes in the creation of its various forms' and of the human 'choice of forms' or 'Choice of forms'. Similarly, 'eastern', for example, is not corrected when *Eastern* is meant in the sense of *Oriental*, but in this case it is commented on in the Apparatus – it occurs both in texts printed at the time, such as those on polychromy, as 'eastern sky' and 'eastern climate' and also in Semper's lecture manuscripts as 'eastern countries'. Conversely, however, he also uses 'Eastern division' when describing a palace layout and 'oriental art' elsewhere.

#### Word Division and Hyphenation

Semper's spelling of compound words in English is inconsistent throughout. Without any distinction, he uses the same compound written as a closed compound, as an open compound made up of two separate words or as a hyphenated compound. The critical reading text does not attempt any standardization here; there is also no standardization in the texts printed at that time and edited here, where for example the attributive 'terra-cotta' is distinguished from the noun 'terra cotta', but would be treated identically in today's spelling. If a compound word is associated with a line-end hyphenation, the hyphenation is retained in the critical reading text and the line-end hyphenation is noted in the Editorial Emendations. In both the German- and English-language manuscripts, Semper sometimes separates a word at the end of a line without a hyphen. If the word cannot be unambiguously interpreted as written together, the separation is retained in the critical reading text and the line-end separation is documented in the Editorial Emendations by displaying the line break with a thin vertical bar, as in the case of 'an | other', which may appear in Semper within a line as both 'another' and 'an other'. Where a word, retained as divided due to a line-end word division without hyphen, would be completely misleading, it is written together in the critical reading text, and the adjustment is documented in the Editorial Emendations. Where two consecutive words appear as one word due to contraction, they are given without change in the critical reading text, as in the case of 'gehorheich' (gehorche ich; I obey) or 'fothe' (for the) accompanied by loss of letters in these two cases - and commented on in the Apparatus.

#### Punctuation

The punctuation is adopted unchanged from the copy-text into the critical reading text. Semper's frequent practice of ending sentences with a semicolon is therefore retained. Missing full stops or commas are not added in the critical reading text and are only commented on in exceptional cases. Missing closing brackets are neither supplied nor commented on. In some cases, missing or incorrect punctuation is explained by Semper's deletions or insertions documented in the Apparatus in the Alterations in the Manuscript. Where missing punctuation leads to complete ambiguity, it is corrected in the Explanatory Notes, with the location at which it is missing indicated by a caret  $\wedge$  in the lemma. Where a word associated with a punctuation mark in the reading of the critical text is to be found without punctuation in a variant reading, the corresponding lemma is followed after the bracket by a tilde and a caret ~^, signalling that the only variant consists of a missing punctuation mark. Quotation marks are always reproduced in the form they have in the copy-text and thus partly diverge from the editorial text, in which single inverted commas are used. An exception is made to this in the case of the opening running quotation marks that were used for long citations in texts printed at that time. These quotation marks have been removed because the type area in the critical reading text is different and does not allow them to be placed within the quotation in a precisely corresponding way. The sequence of punctuation and quotation mark is taken unchanged from the copy-text, while in the editorial text the punctuation is placed inside the closing inverted comma only if the quotation consists of a complete sentence. Dashes are always rendered as an en dash with a space before and after, even if an em dash was used in the texts printed at that time.

# Umlauts, Diacritical Marks and Dots on I and J

Missing umlauts and missing or incorrect diacritical marks are not corrected in the critical reading text but are annotated in the Explanatory Notes. Missing dots on i and j are silently added.

# Underlining and Other Marking

Text that is underlined in the manuscripts is silently italicized in the critical reading text. Single, double and wavy underlining are generally not distinguished in the critical reading text. In the Alterations in the Manuscript, underlining is not typographically emphasized but is documented descriptively as *underl*. (underlined). The use of different-colour ink and of pencil is noted in the Apparatus. The use of Latin script instead of German cursive script (*Kurrent*) or – in printed texts – Gothic type (*Fraktur*) is not taken into account. Semper generally wrote his German-language manuscripts in *Kurrent* and the English- and French-language manuscripts in Latin script. In the German-language manuscripts, he often used Latin script for names or foreign words. In the English- and French-language manuscripts, however, many letters also appear in *Kurrent*; Semper did not distinguish clearly between the use of the two scripts.

Italics in the texts printed at that time, which were used for example in titles or to emphasize a word or denote its foreign origin, are adopted without change, even if italics with quotation marks or only quotation marks alone were used at the same time to indicate foreign words. Spaced-out text and words printed in bold in the running text are silently reproduced in italics in the critical reading text. Small capitals are silently given in capitals and lower-case letters. When manuscript text is written on sheets with pre-printed text, the latter is rendered in bold, as in the case of the 'British Museum Library Call Slips' or in printed letterheads. Footnote signs such as those in the sequence of asterisk \*, dagger ‡, double dagger ‡ and section sign § in the two texts on polychromy in their original printed form could not be retained in the critical reading text due to the differences of the type area and are silently replaced with consecutive footnote numbering.

#### Abbreviations

Abbreviations in German- and French-language manuscripts are resolved in the Explanatory Notes.

#### Blank Lines

Blank lines before subheadings are taken over from the copy-text. Several consecutive blank lines are reduced to a single blank line in the critical reading text, and their approximate extent is indicated in the Editorial Emendations relative to the page size.

#### Headings

In most cases, titles that are set in bold sans-serif font are those of the editors. Sometimes they are the English translation of Semper's German or French titles, and occasionally they are taken from passages in the text. In the case of the Lectures, the titles are adapted from Semper's printed 'Prospectuses' and from a manuscript subheading or, if that was not possible, translated into English from the German titles given to them by Manfred and Hans Semper in their edition of *Kleine Schriften* of 1884. The editors' titles are followed by the original headings, where available. The critical reading text does not establish a typographical hierarchy among the original headings and subheadings. They are always kept in the same font size as the running text and are specially marked only when they appear in the copy-text in capital letters or emphasized with underlining.

#### Uncertain Readings

Uncertain readings are documented in the Explanatory Notes.

#### Alterations in the Manuscript

Semper's additions – interpolations, insertions, overwriting and substitutions – are incorporated into the critical reading text without further marking; they are described with reference to the corresponding lemma word in the Apparatus under Alterations in the Manuscript. Insertion marks in the manuscripts are generally not identified but are documented if they are absent. Semper usually wrote his manuscripts in two columns, using the second column for corrections. Generally, it is not noted whether the edited text is in the left or right manuscript column. In the case of interlinear additions, regardless of whether they are above or below the line, they are described using *interl*. (interlined). Additions before or after the line, or in the left or right column, are described using *inserted*. Contemporary changes to Semper's manuscripts – additions or deletions – by other hands are not incorporated into the edited manuscript; they are noted under Alterations in the Manuscript.

Semper's deletions are documented in the Alterations in the Manuscript, marked as del. (deleted). Deletions within a line are documented using before del. or *after del.*, with reference to the preceding or following word used as a lemma. When the deleted text has been replaced with an interlinear addition, it is documented with reference to the replacement serving as a lemma, using above del. and below del. Deletions of additions before or after the line, or in the left or right column, are documented using after inserted and del. or before inserted and del., with reference to the lemma word taken from the end of the line or beginning of the line to which the addition is attached. When deletions have been replaced by an addition before or after the line, or in the left or right column, they are documented as *repl. del.*, with reference to the replacing addition taken as a lemma. The abbreviation repl. del. is also used when the deleted word that is to be replaced appears in a larger deleted context that is not given in all its details. In the case of Semper's manuscript of the printed 'Report on the Private Collection of Arms at Windsor Castle', which was revised by Cole and is edited in the Apparatus, the words replaced in Cole's hand are documented as repl. by Cole's insertion, followed by Cole's substituting words. Overwriting is documented with reference to the word which replaces the overwritten word and which is taken as a lemma, using over.

In exceptional cases, words that were inadvertently left as deleted by Semper after multiple revisions are restored in the critical reading text and documented in the Apparatus. Similarly, words that were inadvertently not deleted are, as an exception, omitted from the critical reading text and documented in the Apparatus as *undel*. (undeleted, i.e. not deleted). The same also applies to word duplications. Where these occur in connection with page and line breaks (as happens in the case of catchwords, but not only), the word is included once in the critical reading text, and the duplication is documented in the Editorial Emendations. When word duplications occur in connection with Semper's changes, the choice made for the critical reading text is documented in the Alterations in the Manuscript. Words in the manuscripts that Semper used as references to join up separate passages, such as 'Siehe oben' (see above), 'Folgende Seite' (following page) and on two occasions 'Here', are not incorporated into the critical reading text but are noted in the Apparatus.

Multi-layered revisions made by Semper are generally documented yet remain limited to relevant cases. In these instances the text that – after the lemma set in bold sans-serif type – documents the penultimate stage of the changes is followed by another lemma in semi-bold sans-serif referring to that stage, and that is then followed by the preceding stage of text. If another level of changes is documented, it is indicated within round brackets.

#### Explanatory Notes

The notes provide explanations which contextualize the text and furnish individual commentaries. In addition to the cases mentioned above, they provide bibliographical references and identify direct and - where possible - indirect citations. They provide annotations concerning relevant persons, artefacts, buildings and other particular issues. Artefacts are, whenever possible, identified with their present location, supplemented by terms for objects or geographical names that are common today. If the meaning or gist of Semper's words is opaque or ambiguous, the reader is assisted with disambiguation in an annotation. Misspelled words are, in relevant cases, identified with italicized corrections following the corresponding lemma. Literature references cited by Semper or used - to identify artefacts, for example - by the editors are usually detailed in the commentary only to the extent needed to locate them in the Bibliography. Names of ancient authors and titles of their works cited by Semper in abbreviated form are resolved using the standard practice to refer to them by the author's name, title, book and paragraph or line division. Other references cited by Semper are listed in the Bibliography with full bibliographical details.

#### Notes on Variants

In print and manuscript variants edited in the Apparatus, the Explanatory Notes, Editorial Emendations and Alterations in the Manuscript are assembled into one block. Editorial corrections of words are placed in inverted commas.

1 Pevsner 1972, 253. On Pevsner's misreading of a particular passage from Semper's Zurich lecture *Über die formelle Gesetzmässigkeit des Schmuckes und dessen Bedeutung als Kunstsymbol* (1856), with which he illustrates Semper's style, see Gnehm 2004, 16–17.

2 Semper 1986a, 33.

3 Szambien 1987, 153 n. 1; cf. Semper 1884, XI. Szambien translated Semper's partial adaptation of his inaugural London lecture in a manuscript written in 1856 at the earliest. This manuscript (gta, 20-Ms-179) – a fair copy by a copyist – belongs to Semper's 'Kunstformenlehre' (Theory of Art Forms), the immediate predecessor of *Der Stil* (Style). Wolfgang Herrmann, who attributed it to a distinct project which he called 'Theorie des Formell-Schönen' (Theory of Formal Beauty), edited it in Herrmann 1981, 217–37 (Engl. trans. in Herrmann 1984, 219–44; the text translated by Szambien on 235–7 and 241–4, respectively).

4 For Semper's 'broken' English, see Weidmann 2021.

5 Rahn 1920, 2. Rahn attended Semper's course on the 'History of Architecture' in the winter term of 1862–63; see Gnehm 2012, 392–4.

6 Herrmann 1981.

7 Semper 1983, 8 n. \*; cf. Semper 1986b, 43.

# LONDON WRITINGS

M. Gotfried Somper, late Director of the School of Architecture, and Professor of the Time Ats at Dresden :- also Architect of the Royal Theatre at mesden, is desirous of giving lessons in Architectural Growing and the principles of construction, to pupils who intend to practice Achi techure professionally : - He is also desirous of giving aid to Noblemen or Gentlemen who may either desire to study Architecture and the principles of construction as a branch of the Fine Arts, or wish to obtain such an insight into them as to enable them to judge of their application for the improvement of real property. [-1852 ?]

Pl. 1: Draft of advertisement for lessons in architecture and drawing, 1851 (gta, 20-DOK-undat.:51)

# **PRIVATE SCHOOL OF ARCHITECTURE**

# Lessons and Recommendation as Architect

#### **First Version**

*fol. 1r* Professor G. Semper, vormals Director der Bauschule an der Akademie der bildenden Künste zu Dresden und Architect des dortigen Theaters, des Museum, der Synagoge und anderer öffentlicher und Privatgebäude beabsichtigt in den verschiedenen Fächern seiner Kunst Unterricht zu ertheilen; und zwar hauptsächlich in Folgendem:

> 1) Linearzeichnen, und Entwerfen von Bauplänen, verbunden mit praktischem Unterricht in der Geschichte der Baukunst.

2) Constructionslehre.

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3) Zeichnen und Erfinden von Verzierungen, architectonischen Details, Möbels, Vasen Mustern aller Art.

4) Beschreibende Geometrie und Perspective.

5) Uebungen im Ausführen malerisch-architectonischer Skizzen in Bleistift und in Wasserfarben, besonders nützlich als Vorbereitung für Reisende. ¦

6) Unterricht im Zeichnen von Ornamenten, Köpfen und Figuren nach der Antike oder nach Gypsen. –

7) Wenn es gewünscht wird, können Uebungen in der Französischen und Deutschen Sprache mit diesem Unterricht verbunden seyn.

Es wäre zugleich sein Wunsch, ein Atelier für junge Architecten zu gründen, und die nöthige Ausstattung desselben an Lehrmitteln zu besorgen, wenn er für dieses Unternehmen die nöthige Theilnahme fände.

Schliesslich empfiehlt er sich als Baumeister und Dekorateur. Er würde sich, behufs der Ausführung mit einem mit hiesigen Verhältnissen vollständig vertrauten Englischen Techniker in Verbindung setzen und hauptsächlich zuerst den artistischen Theil der Leitung übernehmen, aber zugleich | für den Erfolg die möglichste Sicherheit gewähren.

> 27. University Street. near Gower Street. London.

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fol. IV

fol. 2r

# Second Version

Professor Gottfried Semper, (late Director of the School of Architure, of the Academy of Arts, and Architect of the Theatre, the Museum and other public and private Buildings at Dresden,) proposes to give Private Lectures on the following subjects, and hopes to meet with encouragement.

I) Perspective explained in the most comprehensible and briefest way, combined with Exercises in the finishing of pictorial-architectural sketches in pencil or water-color; particularly useful for Tourists.

II Ancient and modern history of the plastic Arts; particularly in their connexion with Architecture. These Lectures will be illustraded with drawings, engravings and well finished sketches in chalk. If desired the study of German and French can be combined.

Professor Semper likewise intends to establish an Atélier for beginners in Architecture and to furnish it with all the necessary means of study, should his undertaking meet with sufficient patronage.

Relying upon the experience of 14 years, during which he was Director of one of the first Schools of Architecture in Germany and Proprietor of a Private-Atelier, from which several distinguished Architects have come, he will direct this Institution in the most comformable way, and unite the theoretical Instruction with progressive practical exercises.

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This Institution will comprehend chiefly:

1) Drawing of lines and Civil-Construction, together with teaching the knowledge of the different styles in Architecture and the history of it.

2) The doctrine of Construction.

3) Building of Roads, Bridges and Channels, together with the necessary teaching of rational and applicative Mechanism.

4) Describing Geometry and its application to Perspective, Doctrine of shading, Lithography, etc.

5) Exercises in Drawing and Composition of Ornaments, architectural details, furniture, vases and patterns of all kind.

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6) Drawing of Ornaments, Vessels and Figures from Antiques and from Plaster-Casts.

He proposes to give also private Lessons in the above mentioned branches of his Art.

Lastly he introduces himself as Architect and Decorator; branches, which in harmoniously built works were always trusted to One Hand, and the separation of which has become pernicious to Architecture. fol. 1r

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Security would be given for any Work entrusted to him, and further Information may be had at:

> 27. University Street, Gower Street.

# **Third Version**

I.

fol. 1r

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Le sousigné, ancien directeur de l'ecole d'architecture et membre du conseil directeur de l'academie des beaux arts à Dresde en Saxe, architecte du théatre, du musée de la Synagogue et de beaucoup d'autres édificies publiques et privés dans la capitale citée et ailleurs en Allemagne, se recommande au public Anglais comme architecte constructeur et décorateur, branches qui dans toutes les belles époques de l'art ont été confiées à une seule main et dont la séparation a eue des suites funestes pour son developpement organique et harmonieux.

Seurity will be given for any work entrusted to him.

Il est prêt aussi à repondre à des simples consultations par ¦ rapport à toutes les questions d'architecture et de decoration exterieure ou intérieure.

Il pense en même temps de fonder une école d'architecture à l'instar de celle qu'il a dirigée à Dresde, et d'ou sont sortis la plupart des architectes et constructeurs actuellement employés en Saxe.

Son système d'instruction sera principalement fondé sur les exercices journaliers et continus pratiqués dans son atélier par les élèves.

Ces exercices ambrasseront toutes les parties de l'architecture, y compris la decoration et l'art de l'ingénieur. | Ils seront autant que possible appliqués à la pratique réelle.

On aura soin d'y joindre un cycle d'instruction théorique complet, renfermé <sup>25</sup> dans des cours, dont le programme sera donné.

Il prendra sur lui la surveillance principale des exercices, ainsi qu'une partie des cours scientifiques tandis que pour les sciences de l'ingénieur, pour le devis etc, l'assistance d'hommes savans et expérimentés Anglais a été promise et assurée.

Il prendra des élèves en pension entiere ou partielle.

fol. IV

fol. 2r

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Il propose dernièrement de donner des leçons privées dans les differentes branches de son art, principalement dans ce qui suit:

r) Perspective expliquée le plus comprehensiblement et brièvement dans peu de leçons et combinée avec des exercices de dessins d'architecture pittoresque en crayon, au lavis et en couleurs; particulierement utile pour des personnes, qui veulent se preparer au voyage dans les pays classiques. (particularly useful for tourists).

2) Histoire ancienne et moderne des arts, principalement dans leur connection avec l'architecture; illustrée par des dessins des ouvrages gravés., et des esquisses improviseés à la craie blanche.

3) Exercices etc comme au programme N° 3. À la fin: Des renseignemens plus detaillés seront donnés par (suivent les noms.)

# **Fourth Version**

I.

Le sousigné, ancien directeur de l'école d'architecture et membre du conseil directoir de l'academie des beaux arts à Dresde, architecte du théatre, du musée de la synagogue et de beaucoup d'autres edifices publics et privés de la capitale citée et ailleurs, se recommande au public Anglais comme architecte constructeur et décorateur, branches qui dans toutes les belles époques de l'art ont été confiées à une seule main et dont la séparation au eue des suites défavorables pour son développement organique et harmonieux.

Il est prêt aussi à repondre à des simples consultations par rapport à toutes les questions d'architecture et de décoration extérieure ou intérieure.

Des informations seront données ¦ par: suivent des noms et adresses.

> Professor G. Semper 27. University Street. near Gower Street.

le. 2 Janvier 1852

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fol. 1r

# School of Architecture and Engineering

#### **First Version**

II.

fol. 1r

Professor Semper, Architect,

late Director of *l'Ecole d'architecture*, and Member of *l'Académie des Beaux Arts*, at Dresden, and architect of the Theatre, the Museum, the Synagogue, and many other public and private buildings of his native Country –

is desirous of establishing in the approaching Summer a School of architecture on the model of that which he directed during *fourteen jears* at Dresden, and from which have issued the principal architects and constructors now employed in Saxony –

His System of instruction will embrace every branch of Architecture, comprising the science of Engineering, and the principles of Decoration –

The School will be furnished with a great variety of original drawings and sketches, both practical and artistic; the standard works on architecture, of this Country and the Continent, and casts in plaster of ancient and modern ornaments models of construction &c, &c -

Reference may be made to -

# Second Version

27. University Street. Dienstag. 24 Febr 1851.

#### Verehrter Freund

Ich danke Ihnen für die Raschheit mit der Sie Ihre Mittel in Bewegung setzen um mir zu helfen. So werden sie doppelt wirksam seyn.

Meine Ideen über das zu errichtende Institut müssen sich nach dem Umfange der Theilnahme modificiren, welche die ersten, desshalb etwas allgemein zu haltenden, Aufforderungen an das Publikum bei letzterem finden werden. –

Aber setzen wir einmal voraus, was ich leider bezweifle, dass sich genügende Theilnahme zeigte; dann hätte ich folgenden Plan:

Die Anstalt müsste dem gemeinschaftlichen Studium für Architecten und Ingenieurs gewidmet seyn, denn nur so liesse sich der ganze Vortheil derselben 5

für Deutsche Studirende ans Licht stellen. Der Unterricht wäre vorzugsweise an Uebungen zu knüpfen damit mit dem Können zugleich das Wissen erlangt werde.

Bei diesen Uebungen, die möglichst ununterbrochen den Tag über zu halten wären, müsste mehr auf die enge Verwandschaft, als auf die Verschiedenheiten der beiden genannten Fächer zu sehen und nach diesem Prinzip müssten jene gemischt vorzunehmen seyn, so dass z. B. ein Schüler mit einem Hausprojecte sich beschäftigte während sein Nachbar eine Brücke entwärfe etc.

Doch ist dahin zu sehen dass diese Uebungen in steter Relation zu demjenigen stehen, was gerade Gegenstand des theoretischen Unterrichts ist, und gewissermassen die praktischen Erläuterungen und Repetitionen desselben bilden. Zu den Vorträgen würde ich die Früh- und Abendstunden bestimmen, damit die Zeit des Zeichnens möglichst wenig unterbrochen werde. ¦

Es bedürfte der Mitwirkung von Hülfslehrern und ich würde es mir angelegen seyn lassen, tüchtige Fachmänner für mein Vorhaben zu interessiren. Besonders nothwendig wäre es, einen theoretisch und praktisch gebildeten Englischen Ingenieur dafür zu gewinnen. Ich kenne deren zwei, die mir wenigstens Rath und Auskunft ertheilen könnten.

Die Anstalt wäre zugleich für externe Schüler und für Pensionairs einzu richten. Sie wäre in zwei Klassen zu theilen. Die erste, als *Bauschule* wäre die Vorbereitung für die zweite *das Atelier*, wo unter meinen Augen und unmittelbar neben meinem Arbeitskabinette für die Ausführung gearbeitet wird. So hielt ich es in Dresden, wo es mir freilich nicht an Arbeit fehlte. Die Besten unter den Schülern hatten spätere Anwartschaft auf Honorar für ihren Beistand.
 Solche die sich dem Ingenieurfache widmen, würden in ein gleiches Verhältniss

zu meinem Collegen treten.

Programm des Unterrichts.

A. Uebungen.

a. Bauschule.

- 30 I) Projectionszeichnen, Schattenkonstruction, die ersten Combinationen und Elemente der schönen Baukunst.
  - 2) Constructionszeichnen in Stein, Holz, Eisen.

3) Copiren Arch. Vorbilder und erste Versuche im Entwerfen von Bauplänen im Civil- und Ingenieurfache.

4) Ornamentzeichnen nach Vorlageblättern und Gypsmodellen. Verbunden mit Uebungen in dem farbigen Ornament. |

5) Perspective und freies Handzeichnen, Ausführen malerisch-architectonischer Gegenstände nach Vorlageblättern und später nach eigener Erfindung, oder nach ausgeführten Werken. Verschiedene Behandlungsweisen in Bleistift, Tusche oder Farben.

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6) Ausführung grösserer Projecte.

NB. Vierwöchentlich einmal wird Conkurrenz gehalten in welcher alle Schüler die dazu hinreichend vorgerückt sind, eine gestellte Aufgabe wetteifernd zu lösen haben. Zuerst als Skizze; Dann ausgeführt.

b. Atelier.

Die Uebungen des Ateliers sind mehr praktischer Art und sollen sich an die unmittelbare Ausführung knüpfen. Doch finden auch für die Eleven des Ateliers mehrmals jährlich Conkurrenzarbeiten Statt.

Hervorzuheben ist auch noch das fortgesetzte Ueben im freien Handzeichnen nach der Antike (im Brittischen Museum) oder nach Gypsen. Vielleicht auch nach lebenden Modellen.

Ferner werden Modellirübungen gehalten in Thon Gyps und Holz. *B.* Vorträge.

I) Vergleichende Baukunde, verbunden mit der Geschichte der Baukunst. (Alle Gebäudearten werden einzeln behandelt, sowohl geschichtlich wie technisch durchgeführt und nach den Verwandschaften gruppirt. Die allgemeine Kunstgeschichte als eng verbunden mit der Geschichte der Baukunst, wird daran geknüpft. Dieser Vortrag ¦ zieht sich durch mehrere Semester.

2) Constructionslehre und Lehre von den Materialien.

3) Mechanik in zwei Semestern. 1) rationelle und 2) angewandte M.

4) Wege- Brücken- und Canalbau.

5) Beschreibende Geometrie mit ihren Anwendungen auf Perspective, Steinschnitt und Zimmermannskunst.

6) Physik in besonderer Beziehung auf Baukunst, Wasserbau. etc.

7) Chemie desgleichen.

NB. Für weniger vorbereitete Schüler ist besonderer Unterricht in den mathematischen Doctrinen zu ertheilen, der aber besonders bezahlt werden muss.

Es ist nicht rathsam, ein strenges Eintrittsexamen vorzunehmen, da die Uebungen möglichst frühe beginnen müssen und dem ausgesprochenen Grundsatze nach, die Hauptsache des Unterrichts bilden.

Für die nöthigen Lehrmittel an Vorlageblättern Büchern, Modellen u. s. w. ist Sorge zu tragen.

Um die mit dem Besuche einer ähnlichen Anstalt in London verknüpften Vortheile für Deutsche ans Licht zu stellen darf nur hervorgehoben werden:

I) Die Ueberlegenheit der Engländer in allem was die Praxis und die Construction betrifft und worauf hinzuweisen, stets meine Sorge seyn wird. (Ich würde Exkursionen mit meinen Schülern unternehmen).

2) Die Gelegenheit zur Kenntniss der Englischen Sprache und der Einfluss den das praktische Englische Treiben auf junge Techniker üben muss.

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3) Der Reichthum der hiesigen National-Kunstsammlung.

4) Die Menge der schönen Gothischen Bauwerke und die Zweckmässigkeit so vieler grossartiger gemeinnütziger Anstalten.

5) Meine langjährigen Reisen und Erfahrungen als Director einer der ersten
 Bauakademieen Deutschlands und praktischer Baumeister, wodurch ich in den
 Stand gesetzt bin, meine Schüler sowohl in allen kontinentalen Bauverhältnissen zu belehren als auch sie mit der eigenthümlich sachsisch-Englischen Bauweise bekannt zu machen.

6) Die Nachbarschaft der an Monumenten so reichen Provinzen Frankreichs und Belgiens. etc etc.

Schwerlich dürfte sich eine Anstalt in solchem Maassstabe anlegen lassen können. Es wäre daher wünschenswerth, wenn sich vorerst nur eine Anzahl vorgerückterer junger Männer meldeten mit denen ich in mehr intimerem Umgange

- stehen und ein Atelier gründen könnte. Die Vorträge würden dann noch mehr in den Hintergrund treten können. Sie liessen sich durch gelegentliche Belehrung während der Arbeiten ersetzen. Den Vortrag über vergleichende Baukunde würde ich jedoch unter allen ¦ Umständen halten; dessgleichen über Construction, beschreibende Geometrie, und Wege- und Brückenbau. –
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Das Weitere mündlich. Ich betrachte das Aufgeschriebene nur als einen Anknüpfungspunkt um Ihre Ansichten zu hören.

Wenn Sie Zeit haben, so komme ich morgen Mittwoch Abend 7 Uhr zu Ihnen. Sind Sie verhindert so schicken Sie mir zwei Worte.

Ganz der Ihrige GSemper.

P. S. Fälls sich Leute meldeten, würde ich erst zu Johannis anfangen können. Es wäre bis dahin noch Manches einzurichten und ausserdem ist meine ganze Bibliothek und meine Sammlung von Zeichnungen in New-York. Ich lasse die Kisten dort, bis ich bestimmt weiss ob ich hier bleibe. fol. 50

II

# **Third Version**

fol. 11

Der Unterzeichnete, während vierzehn Jahren Director der Bauschule an der Akademie der bildenden Künste zu Dresden und praktischer Architect, gegenwärtig in London als Baumeister und Ingenieur etablirt hat die Absicht, eine Anzahl junger Architecten und Techniker, die sich hier theoretisch und praktisch ausbilden wollen, unter günstigen Bedingungen und selbst unter Aussichten auf späteres Verdienst in sein Atelier und zugleich in Kost und Logis aufzunehmen. Er wird persönlich die Leitung der architectonischen Uebungen und einen Theil der wissenschaftlichen Vorträge übernehmen über die ein besonderes Programm ausgestellt wird, während er für das Ingenieurfach sich einen geschickten und erfahrenen Englischen Ingemieur beigesellt hat.

Der praktische Sinn der Engländer zeigt sich von seiner glänzendsten Seite in ihren grossartigen der öffent. ¦ Wohlfarth gewidmeten Anlagen und in der Weise wie dieselben durchgeführt werden, so dass sie hierin die Meister aller Nationen sind. –

Selbst ihre bürgerlichen Einrichtungen besonders ihre Landhäuser, fordern in ästhetischer und technischer Beziehung zu genauerem Studium auf, da sie eine reiche Ausbeute von Motiven und Comforts mit grosser Oekonomie der Mittel und ächt germanischer Ursprünglichkeit verbinden, so dass sie gewiss mit Unrecht bisher bei uns gegen andere uns fremdere Einflüsse fast unberücksichtigt geblieben sind.

Ausserdem bildet London durch seine Sammlungen und wissenschaftlichen Institute einen Hauptort für das Studium unserer Kunst, in der der Sinn für das Schöne sich am Zweckmässigen bewähren soll; und in der Mitte zwischen dem an Werken der schönen Baukunst so reichen Frankreich und Belgien und den über England zerstreuten berühmten Werken | der Ingenieurkunst ladet es zu schnell ausführbaren Exkursionen ein, welche der Unterzeichnete in regelmässigen Zwischenräumen mit seinen Schülern vorzunehmen beabsichtigt.

Wer von meinen jungen Landsleuten durch seine Theilnahme mein Unternehmen zu unterstützen geneigt ist, erfährt nähere Auskunft unter folgenden Adressen:

> Mr. G. Semper 27. University Street London. Herrn W. Semper, Apotheker, Grosse Bäckerstrasse Hamburg. Frau Professor Semper 3. Waisenhausgasse Dresden.

> > Gottfried Semper. 35

London d. 26 Fbr. 1851.

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# **Fourth Version**

Deutsches Atelier für Architekten und Ingenieurs in London.

Der Unterzeichnete, während 14 Jahren Direktor der Bauschule an der Akademie der bildenden Künste zu Dresden und praktischer Architekt, gegenwärtig in London als Baumeister und Ingenieur etablirt, hat die Absicht, eine Anzahl junger Architekten und Techniker, die sich hier theoretisch und praktisch ausbilden wollen, unter sehr günstigen Bedingungen in sein Atelier und zugleich in Kost und Logis aufzunehmen. Er wird persönlich die Leitung der architektonischen Uebungen und einen Theil der wissenschaftlichen Vorträge übernehmen, über die ein besonderes Programm ausgestellt wird, während ¦ er für das Ingenieurfach sich einen geschickten und erfahrenen Ingenieur beigesellt hat. – Der praktische Sinn der Engländer zeigt sich von seiner glänzendsten Seite in ihren grossartigen, der öffentlichen Wohlfahrt gewidmeten Anlagen, und in der Weise, wie sie dieselben technisch durchführen, so dass sie hierin die Meister aller Nationen sind. Selbst ihre bürgerlichen Einrichtungen, besonders ihre Landhäuser, fordern in technischer und auch in künstlerischer Beziehung zu

- Landhäuser, fordern in technischer und auch in künstlerischer Beziehung zu genauerem Studium auf, da sie eine reiche Ausbeute an Motiven und Comforts mit grosser Einfachheit der Mittel und ächt germanischer Ursprünglichkeit verbinden, so dass dieselben gewiss mit Unrecht bisher gegen andere, uns weit fremdere Einflüsse fast unberücksichtigt geblieben sind.
- Ausserdem bildet London durch seine Sammlungen und wissenschaftlichen Institute einen Hauptort für das Studium unserer Kunst, in der das Schöne sich am Zweckmässigen bewähren soll; und in der Mitte zwischen dem Reichthum Belgiens und Frankreichs an Monumenten der schönen Baukunst und den über England zerstreuten berühmten Werken des Ingenieurs gelegen, ladet es zu schnell ausführbaren Exkursionen ein, welche der Unterzeichnete in regelmässigen Zwischenräumen mit seinen Schülern vorzunehmen beabsichtigt.

Wer von meinen jungen Kunstgenossen durch seine Theilnahme mein Unternehmen zu unterstützen geneigt ist, erfährt Näheres unter folgender Adresse:

"Professor Semper. 27. University Street - London."

Gottfried Semper.

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# Lessons in Architecture and Drawing

# **First Version**

fol. rr
 M. Gotfried Semper, late Director of the School of Architecture, and Professor of the Fine Arts at Dresden: – also Architect of the Royal Theatre at Dresden, is desirous of giving lessons in Architectural Drawing and the principles of construction, to pupils who intend to practice Architecture professionally: – He is also desirous of giving aid to Noblemen or Gentlemen who may either desire to study Architecture and the principles of construction as a branch of the Fine Arts, or wish to obtain such an insight into them as to enable them to judge of their application for the improvement of real property.

# Second Version

fol. Ir

#### III.

Professor Semper, Architect,

late Director of *l'Académie des Beaux Arts*, and Director of *l'Ecole d'Architecture*, at Dresden, and architect of the Theatre, the Museum, the Synagogue, and many other public and private buildings in his native land – having established himself in this country as architect, and Decorator, is desirous of filling up his time in giving private instruction in the various branches of his art.

Besides the higher sciences connected with architecture, he is ready to give instruction in Perspective, Drawing, and Colouring: in the various departments of Decoration, and in the forms and composition of ornament.

His System of Instruction will be found especially useful to Tourists, and others desirous of acquiring a rapid facility of sketching, in a few lessons, whether in pencil or crayon-drawing.

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# Third Version

Professor Gottfried Semper, late Director of the School of Architecture at the Academy of Arts, and Architect of the Theatre at Dresden, proposes to give instruction in all the branches of his Art. Namely in the designing of plans, in the construction, drawing and Composition of ornements, furniture, vases, patterns etc. — in perspective, and in finishing landscape and architectural sketches in pencil or water-color. — He also undertakes to give lectures on the history of Art and to illustrate them with drawings and engravings. ]

27,	Universi	ty Street.	fol. IV
	Gow	er Street.	

# **Fourth Version**

III.

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Professor Semper, ancien directeur de l'ecole d'architecture, membre de l'accademie et architecte à Dresde donne des leçons privées dans les différentes branches de son art, principalement dans ce qui suit:

r) Perspective expliquée le plus comprehensiblement et brièvement dans ses
 principes et ses procedés pratiques dans peu de leçons; combinée avec des exercices de dessins d'architecture pittoresque au crayon à l'ancre et en couleurs. particulièrement utile comme étude preparatoire pour des touristes (particularly useful for tourists.

2) – Histoire ancienne et moderne des arts, principalement dans leur connection avec l'architecture, illustrée par des dessins, des ouvrages gravés et des esquisses improvisées à la craie ¦ blanche

3) Exercices dans le dessin et la composition des décorations des ornamens, des meubles outils, vases etc au crayon, à l'ancre et en couleurs après des originaux, des plâtres et la nature. Ces études peuvent, si l'on le demande, être combinées avec un cours complet et illustratif d'histoire du décor dans lequel les differens caractères des styles seront demontrés et exercés.

Des informations ultérieures seront données par etc.

1. 3 Mars 1851.

#### 1'...

fol. IV

27. Univ. Street

fol. 1r

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Over. PATENT TOUGHENED IRON RAILWAY WHEEL. E D D Y'S

Pl. 2: Notes on exhibits, 1851 (gta, 20-Ms-96)

# THE GREAT EXHIBITION

#### Announcement

Paris, le 1<sup>er</sup> avril 1851.

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#### AVIS.

Monsieur Semper, architecte, ancien professeur de l'Académie des Beaux-Arts à Dresde, actuellement établi à Londres, a été chargé, par la Commission exécutive de l'Exposition universelle de Londres, de l'arrangement des produits industriels et artistiques du département des Colonies anglo-américaines. Il a obtenu la même mission des commissaires de la Suède et du Danemarck, et il informe MM. les Exposants français, qu'ils peuvent s'adresser à lui pour le même objet.

Ses relations journalières avec les autorités qui dirigent l'Exposition, ainsi que ses rapports de chaque instant, comme architecte, avec les entrepreneurs et les ouvriers qui exécutent les travaux intérieurs de l'édifice, en feront un intermédiaire utile aux personnes qui s'adresseront à lui pour les renseignements et les informations à donner, et pour tous les travaux et les dispositions intérieures dans les places accordées à chaque Exposant, ainsi que pour la disposition générale des produits et des objets d'arts. Il pourrait même au besoin se charger d'en faciliter la vente.

Il informe encore MM. les Exposants, qu'il est en correspondance avec plusieurs des principaux organes de la publicité en France, en Angleterre, en Allemagne et aux États-Unis de l'Amérique du Nord; qu'il parle et écrit les langues de ces pays, ainsi que l'italien, le grec moderne et les langues anciennes.

M. Semper se chargera pour MM. les Exposants de tous les dessins à fournir pour les divers publications illustrées.

Adresser les lettres affranchies à M. Semper, architecte, à l'édifice de l'Exposition universelle, département du Canada, à Londres.

#### A Foreign Architect's Views of the Building

576 When the busy din around us threatens to overwhelm our senses, how gladly do we seek composure by allowing our eyes to rest on those trees, which the building still encircles with its net-work, and the axe has spared! How charming! as stimulated by the busy scene around them, they seem hastening to strip off the

fol. 1r

last cinctures that confine their blossoms, and with their fan-like forms fill out the lofty canopy of the transept, blending their verdant foliage with the bars of its airy lattice-work. What a contrast between the noisy scene below, and the majestic silence with which nature completes her works. The whole picture breathes all the youthful yet antique life and freshness of a Pompeian fresco. It does honour to the architect who has so successfully brought his work into such entire unison with nature; and, considering the character and conditions of the problem to be solved, it is hardly possible to conceive a different, not to say a better, solution – the best criterion of a happy conception. Perhaps none other than a horticultural artist could have succeeded in devising so fitting a cradle for a project whilst yet in embryo. The first suggestions of fancy are ever shapeless and gigantic; they shrink into form, and condense as they become matured, in this inverting the laws of organic development.

The simple problem was to portion off such a space from the open air, as should include a world of bazaars, and protect them from the influences of the weather; all else was vague and undecided. As yet no statistics existed to determine the relative exhibiting requirements of the several States. The building must, therefore, possess a certain degree of elastic expansibility; and consequently no limiting configuration, such as that of the circle or the square, was admissible. Instead of any compact relation among the interior members, it must offer capabilities of easy partition and be fashioned in the spirit of a huge encampment.

For the fulfilment of such a task, the artist, who had already provided for the similar requirements of his exotic plants, possessed some facilities. Structures of the latter class identify themselves in a measure with living nature; their walls and roofs invisible to the eye, and the more slender and impalpable their parts, the more suited to their purpose.

Little was needed to render this class of structure adapted to the present purpose. Here, too, no architectural embellishment must compromise the internal requirements, and consequently all conventional rules and decorations must be laid aside. Much light is needed, but sunshine injurious; a *velum* must, therefore, shroud the glassy *hypæthros*; or rather, it was necessary, in an | artistic point of view, that the latter should fall with a graceful swell within the roof; and had the glass been stronger this would have been feasible. In that case the slender columns would have become the bearers of the primitive *velum*, which would have completely harmonised with the suspended draperies and figured carpets, that hang perpendicularly between the columns and fill up the intercolumnar spaces; and thus, in our age of most complex knowledge, we should have seen in this marvellous building the original type of the most primitive form of archi-

tecture unwittingly realised. Out of the canvass stretched on poles, the Egyp-

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tian flat roof grew; and the original perpendicular partition, the suspended carpet, is the prototype of all the rich panellings, paintings, or other plastic decorations, in wood, stone, or metal, which in after times supplied the place of the original woven fabrics. The numerous trophies and ornaments suspended from the columns and girders, point to the original motives in the decoration of all columns and beams. The *velum* now wanting might be in future supplied by stained glass, and in the ornamentation of the draperies, machinery can be brought to bear with less detriment to refined taste, than has been unhappily the case in other branches of the decorative art. Who does not feel that iron arabesques and ornaments produce a feeling of disgust? and is it not perhaps a sign of a revival of better taste, that architecture ventures to exhibit the simple effects produceable by those materials, the ornamentation of which is susceptible of extension by mechanical means, and thus leaves the field open to future improvement? This primitive simplicity of the work seems to constitute its architectural importance. On the other hand, a complete revolution must take place in English manners before the glass roof can find adoption in private dwellings or religious edifices. It would lead to the introduction of courts and the Italian Palazzo style, as has long since taken place in Russia.

In conclusion, a word as to the transept, which now merely serves as a covering for trees; and the necessity for which is not sufficiently obvious from any reference to the internal economy of the building. Here must be the seat of the Areopagus that awards the prizes, the only stable point in the midst of a building elsewere subject to indefinite expansion. As to the exterior it is needless, for the reasons already assigned, to make much comment. To buildings of this character it has hitherto been found impossible to give such a configuration as can be taken in at a glance, and therefore satisfy the requirements of a strictly æsthetic feeling.

# The Great Exhibition

Die grosse Ausstellung. Die Völker von europäischer und nicht europäischer Bildung.

Selbst denen, welche die allmälige Enthüllung der das Ausstellungsgebäude füllende Gegenstände zu verfolgen Gelegenheit hatten, wird es schwerlich bereits gelungen sein, die Fülle des Gebotenen so weit zu beherrschen, als erforderlich ist, um ein allgemeines Urtheil über das noch ziemlich lückenhafte

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Ganze oder gar eine in das Einzelne gehende Critik damit zu rechtfertigen. Aber Eine Evidenz tritt bereits so deutlich hervor, dass es schon jetzt erlaubt ist, sie hervorzuheben, ehe sie von einer gewissen, dem ganzen neueren Aufschwunge abholden Partei in ihrer Weise ausgebeutet wird.

<sup>5</sup> Wie sich von selbst versteht, wird in diesem grossen, nun eingeleiteten Wettkampfe die erste Palme den Werken der Urkünstlerin Natur, "der Gottheit lebendigem Kleide" verbleiben. Schon sollten die Rohprodukte in beschränkter Auffassung des Programmes einer *Industrieausstellung*, nach Einigen von letzterer ausgeschlossen bleiben; aber durch die Einsicht der kgl. Commission wurden sie in umfassendstem Masse mit in dasselbe gezogen. Auch hierin hat diese hohe Behörde, der wir für die vortreffliche Leitung und Vollendung des Ihr anvertrauten grossen Werkes unsere Bewunderung und unseren Dank aufrichtig zollen, ihr tieferes Eingehen in die Bedeutung desselben kundgegeben.

Der Preis der Natur ist in den die Bögen des Transept füllenden Laubkronen <sup>15</sup> der Ulmen wunderbar glücklich symbolisirt, und wie auch künftig dieser Theil des Baues sich anders entwickeln mag, so dass er mehr geeignet ist, den Heerd aller Beziehungen des grossen (künftigen) Weltmarktes würdig zu behausen, so muss dieser symbolische Stamm durch alle folgenden Zeiten und wo immer der Gedanke ein neues Lager aufschlägt, vertreten bleiben.

Die zweite Palme, auch dieses zeigt sich schon jetzt als unzweifelhaft, gebührt der Wissenschaft in ihrer Anwendung auf das Nützliche. Sie feiert, Dank dem Architecten, der den Gedanken dazu niederlegte, Dank den erfinderischen Meistern der Technik und der Verwaltung, die ihn in so kurzer Frist zur Thatsache gestalteten, die den mächtigen, so luftigen und doch so festen Bau mit neuen von der Wissenschaft gebotenen Mitteln und unglaublich geringem Auf-

neuen von der Wissenschaft gebotenen Mitteln und unglaublich geringem Aufwande an Stoff und Arbeitskräften herrlich vollendeten, einen schönen Triumph.

Unter seinem Zeltdache füllt eine Welt von Werkzeugen, Maschinen, Apparaten und Modellen die Räume aller Nationen von europäischer Bildung, und zeugt entweder ganz neue sinnreiche Anwendungen der Theorie und der Erfahrungswissenschaften, oder bietet durch Weiterbildung des bereits Erworbenen und ausgezeichnete Vollendung der Arbeit ein reiches Feld des Prüfens und Nachdenkens.

Lang gereihet stehen sie da, gleich einer schlagfertigen Phalanx bei der Musterung, bald in bewegungsloser fast unheimlicher Ruhe, bald geräuschvoll ihre Kräfte und ihre Gewandtheit wie zum Spiele übend. Sie bieten mit ihren Hebeln und Rädern, von denen wir ahnen, dass sie die Welt erobern und umgestalten müssen, ein unenthülltes ernstes Geheimniss der Zukunft. Verwegen wäre es, über das letzte allgemeine Resultat ihres Wirkens in Beziehung auf sociale Entwicklung der menschlichen Gesellschaft Vermuthungen zu wagen. Bis jetzt gaben sie kaum mehr als ihr nächstes Wirken zu erkennen und ihre

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Leistungen, deren Grösse, Vollendung und Wohlfeilheit kein menschliches Zusammenwirken, keiner Hände Fleiss und Geschicklichkeit erreicht, treten überall entgegen, wohin der Blick sich wendet. Kaum Eine von den verschiedenen Categorien des Kunstfleisses der Menschen ist frei von ihrem Einflusse geblieben.

Wenn bei ihnen, wie sich gebührt, nur ihre Bestimmung und der Stoff aus dem sie gebildet sind, und dessen zweckmässigste Gestaltung und Stärke die Wissenschaft verbunden mit der Erfahrung feststellte, formengebend auftreten, so beschämen sie gerade dadurch in ihrer unbefangenen gleichsam naturwüchsigen Zierlichkeit oft die neben ihnen aufgehäuften Producte der europäischen sogenannten Kunstindustrie oder industriellen Kunst. Sie gibt meistentheils ein unstätes und prinzipienloses Ringen nach stets neuen Mustern und Formen kund, aber bleibt in ihrer rastlosen Beweglichkeit doch in dem falschen Zirkel älterer Weisen gebannt, die desshalb ihr stetes Anrecht auf Bewunderung behaupten, weil sie der sprechende Ausdruck von Zeiten sind, die mit sich und der sie beherrschenden Idee mehr fertig waren, als es die unsrige . Aber es sind noch die besseren Erscheinungen unserer neuesten europäischen Kunstindustrie, wo dieses treue Eingehen in alte Weisen sich zeigt, während in den meisten Fällen sich ein Durcheinander von allseits her entlehnten, mit grundsetzloser Willkür zusammengewürfelten Motiven sich für Originalität ausgibt, und mitten in dieser praktischen Zeit, den durch den Zweck und den Stoff der Gegenstände gebotenen Formen bei ihrer ornamentalen Ausstattung Nichtachtung und Trotz bietet.

Wem dies als Uebertreibung klingt, der betrachte z. B. die viel bewunderten Meisterwerke unserer neuesten Tischlerkunst genauer, an denen das Schnitzwerk überall die Formen umwuchert. Schon dass sie halb zerbrochen ausgepackt wurden, zeugt gegen sie. Zarte Lilien- und Rosenbouquets in hohler Arbeit aus Holz geschnitzt, füllen die Ecken zwischen den Füssen der Tische und Stühle und treten in leichtem Gestängel über die Ränder der Lehnen hervor, an denen man sich die Hände zerreisst, an denen die Kleider beim Niedersetzen hängen bleiben, oder die bei rascher Bewegung von letzteren mitgenommen werden. Die Geschicklichkeit des Künstlers zeigte sich in der äussersten Verachtung der Gesetze, welche ihn bei seinen Werken durch dessen Bestimmung und durch den zu behandelnden Stoff leiten sollten.

Dieselbe Styllosigkeit zeigt sich in anderen Zweigen unserer Kunstindustrie; Fussteppiche z.B. mit eingewirkten bis zur Täuschung treu nachgeahmten Goldrahmen, Kartuschen und dicken Fruchtschnuren, so dass es gefährlich scheint, auf ihnen gehen und sich gesellig bewegen zu müssen; Porzellanvasen, deren Formen nicht für die hohe Hitze des Porzellanofens berechnet waren, die daher schief und verschrumpft daraus hervorgingen, oder, wenn unsere 40

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spitzfindige Technik alle Schwierigkeiten glücklich dabei überwand, das Verdienst haben, nicht zu scheinen, was sie sind; Glasgemälde, die die Schranken der Technik, die ihnen vorgeschrieben sind, weit überschreiten und vieles dergleichen.

Nur solche Erzeugnisse unseres Kunstfleisses machen hierin eine ehrenvolle Ausnahme, bei denen der Ernst ihres Gebrauches jede unnütze Zuthat ausschliesst und die schon halb und halb in das Gebiet der Maschine hinübergreifen. Dahin gehören z. B. unsere Schiffe, unsere Wagen und Pferdegeschirre, zum Theil unsere musikalischen Instrumente und hauptsächlich unsere Waffen.

- An ihnen zeigt sich das Streben nach Veredlung und Ausschmückung der durch den Zweck und den Stoff gebotenen Formen durch die Kunst auf eine bescheidene und eben desshalb den echten Sinn für Schönheit befriedigende Weise. Vorzüglich gilt dies von unseren Waffen, namentlich den Schusswaffen, bei denen die eingelegte Arbeit, das Niello und das Schnitzwerk sich entsprechend
- den Formen anschliesst, deren Zweckmässigkeit bis zu einem Grade sich ausspricht, dass sich der Kunstsinn schon dadurch befriedigt fühlt. Noch kann an ihnen die Kunst manchen Schritt weiter gehen, ehe sie ihre Grenzen überschreitet, wie sie es früher bei uns that und wie es noch jetzt den Punjabvölkern gelingt, die unseren Kanonen von neuestem Zuschnitt schon einigen Reich-
- thum und eine grössere Eleganz der Formen zu geben wussten. Es ist möglich, dass von den genannten und anderen, ähnlichen Schrecken unterworfenen Industriezweigen ein besseres Element der neueren industriellen Kunst ausgehen kann, das sich nach zwei Richtungen hin geltend macht, indem es das leere Stangenwerk der Techniker bereichert und der masslosen Willkür, von der oben die Rede war, Zügel anlegt.

Einstweilen wird das Maschinenwesen, indem es jede verlangte Schwierigkeit in der Verarbeitung der Stoffe spielend überwindet und seine hundert Briareusarme zu wohlfeilster Vervielfältigung jeglicher Caprice des Geschmackes willfährig leiht, jenem unklaren Walten scheinbar dienen, aber als sein geheimer Todfeind es dadurch um so sicherer und schneller in seiner Nichtigkeit blosstellen und sein Ende herbeiführen.

Es wird sich zur Evidenz herausstellen, dass wir in vielen, fast in allen Fächern der industriellen Kunst nicht bloss von denjenigen Völkern von nicht europäischer Civilisation besiegt worden sind, denen wir schon immer in dieser Beziehung manches einräumten und abborgten, von Persern, Indiern, Arabern und Türken, sondern auch von den als geschmacklos bei uns verschrienen Chinesen und selbst von den Indianern Nordamerika's.

Damit diese Behauptung nicht paradox erscheine, muss daran erinnert werden, dass der Begriff des Schönen überhaupt, und insbesondere in Beziehung auf Kunsterzeugnisse ein sehr complicirter ist.

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Man kann die Künste in technische, ästhetische und phonetische eintheilen und die Schönheit eines Werkes kann, je wie dasselbe mehr in die eine oder in die andere Categorie hinüber neigt, eine mehr technische sein, das heisst eine solche, welche in geschickter Wahl eines oder mehrerer Stoffe und in deren wohlverstandener Benutzung zu einem bestimmten Zwecke begründet ist; oder eine mehr ästhetische, wenn sie direct auf sinnliches Behagen durch Wohlgeruch, Wohlgeschmack, liebliche Zusammenstellung von Formen und Farben, oder durch Rhytmik und Euphonik hinwirkt; oder drittens eine phonetische, wenn das Werk durch tiefere Bedeutung zu uns spricht und die Schönheit geistig empfunden wird. Zu dem höchsten künstlerisch Schönen erhebt sich dasjenige Werk, in welchem sich alle drei Vorzüge vereinigen.

In den bildenden Künsten kann dieses höchste Ziel nur durch die Malerei und Sculptur, und mit beider Hülfe erst durch die Architectur erreicht werden. Denjenigen Völkern, deren Industrieproducte oben mit den unserigen verglichen wurden, ist der Weg zu dieser höchsten künstlerischen Entwicklung vorerst verschlossen, wogegen wir uns einer phonetischen bildenden Kunst erfreuen, deren Sprache nicht von dem Volke verstanden wird und die, von oben herab, meistens verwirrend auf den natürlichen Schönheitssinn des letzteren einwirkt, anstatt ihn zu veredeln und zu erheben.

Sie ist nicht, wie sie es sein sollte, die natürliche Blüthe der volksthümlichen Gewerbsthätigkeit, sondern eine fremde, künstlich gezogene Pflanze. Es mag zum Theil daher rühren, dass unsere industrielle Kunst heutzutage ihre Richtung verlor und wie ein steuerloses Schiff umherschwankt. Ob sie, frei von diesen Einflüssen und sich selbst überlassen eine bestimmte, und zwar eine gute Richtung gewinnen würde, das bleibt dahin gestellt. Leider wurzelt der Ungeschmack tief in unserem Volke! Während die naiven Flechtwerke und Stickereien der Canadier durch den Styl der in ihnen herrscht, durch reizende Formen und Farben das Auge ergötzen, widern uns ähnliche Gegenstände an, die z. B. in Londons Strassen, als das Product freien Volksgeschmacks, aus Papier und Stroh, in weichen Formen und abscheulichen Farbenzusammenstellungen uns feil geboten werden.

Doch die Industrie der wilden und halbbarbarischen Völker hält stärkere Proben aus als die genannte ist. Man vergleiche nur die Teppiche des Orients, die persischen, indischen, algierischen und türkischen Fussdecken mit den Prunkstücken dieses wichtigen Industriezweiges aus den berühmten Werkstätten Europas. Dort, welche dunkle Fülle, Ruhe und Harmonie in den Farben, welcher Reichthum und doch welche Einfachheit und Zierlichkeit in den Mustern, welcher Styl in dem Ganzen, und hier, wie ist letzterer gänzlich verkannt, wie fehlt dem Ganzen Ruhe und Würde, wie ist der Inhalt der historiirten Sujets auf ihnen nichtssagend! Man werfe den Blick auf gewisse grasgrüne und rosagefärbte Glas- und Porzellan-Vasen und gehe dann nach China, um einzu30

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gestehen, dass die Chinesen das Richtige trafen, weil sie ihren Porzellan-Vasen Formen, Farben und Verzierungen gaben, die für ihre Bestimmung, sowie für die schwierige Porzellantechnik passend sind, dass sie den Porzellanstyl erfanden und dass die unbewusste richtige Schätzung dieses Umstandes (nicht etwa blosse Caprice), die Beliebtheit dieser chinesischen Formen bei uns nicht sinken lässt.

Vor Allen gebührt den Erzeugnissen des Kunstfleisses der Indier der Preis. Nichts kommt der Schönheit ihrer golddurchwirkten Stoffe gleich. Ihre Elfenbeinkästchen, von einfachster aber eleganter Form, mit vielfarbigen Mosaikmustern, gleichen alt-italienischer Arbeit. Kunstvoller noch sind ihre duftenden Sandelholzkästchen; ihre zierlichen Marmortische mit eingelegten Arabesken, ihre harmonisch bunten Lackirarbeiten bilden einen interessanten Gegensatz mit Demjenigen, was in diesen Gattungen ehemals berühmte Fabrikländer uns jetzt auftischen. Man vergleiche nur selbst. In vielen anderen Dingen, und besonders in ihren reich geschmückten Waffen sind sie unübertroffen.

Auch in den Schmuck- und Silberarbeiten müssen wir, was den Styl betrifft, einräumen, von unseren orientalischen Concurrenten besiegt zu sein.

Dabei ist es interessant zu beobachten, wie diese Völker sofort in Ungeschmack verfallen, wenn sie sich von unserer europäischen Kunst influenziren lassen, wie es dann auf einmal mit ihrer ganzen Fassung und Haltung aus ist. Soll es uns denn noch überraschen, dass es unserem Volke an Geschmack fehlt, das Jahrhunderte lang ähnlichen, ihm gänzlich fremden Einflüssen ausgesetzt war?

Der Ernst des Stoffes gebietet strengste Unparteilichkeit; gerne sei unserer europäischen Superiorität in der Auffassung der Natur und den Geheimnissen 25 ihres Wirkens durch Wechsel von Licht, Schatten und Farbe, in der plastischen Fülle und Freiheit der Formen, in dem Sinnreichen, in der Beherrschung jeglichen Stoffes bis zum Uebermuthe noch einmal anerkannt, aber nur selten vereinigt sich bei uns hohe Künsilergabe mit gewerblicher Praxis; unsere Architecten sind mehr Gelehrte als Künstler, sind froh, wenn sie Leute finden die Etwas aus ihren dürftigen Angaben machen; kurz Werke, denen der handelnde Gedanke oder die denkende Hand das Siegel der Echtheit aufdrückte, die Styl, architektonische Schönheit und sinnvolle höhere Bedeutung in sich vereinigen, sind äusserst selten und werden von der Menge von den unechten Modestücken nicht unterschieden. 35

Je mehr solche Werke sprechen, das heisst die Lösung und der hohe Ausdruck einer durch Ort, specielle, oft zufällige Raumverhältnisse, Eigenheiten des Bestellers &c. modificirten Aufgabe sind, desto mehr müssen sie bluten, wenn sie aus ihrem Zusammenhange gerissen werden und unter wildfremder Umgebung in ungewohntem Lichte stehen.

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Dass die meisten plastischen Kunstwerke der Exhibition, die in dem langen Mittelgange sich balgen, den Rücken zeigen und sonstige Grimassen gegen einander machen, nicht mehr Zeter schreien und aus tausend Wunden bluten, sondern sich ziemlich behaglich zu fühlen scheinen, ist gerade der grosse Vorwurf, der ihnen zu machen ist.

Ein echtes Werk von höherer phonetischer Bedeutung wird auf diesem Terrrain in grossem Nachtheile stehen, und zwar nach beiden Seiten hin, einerseits gegen die naiven, rein technisch architectonischen Producte des Orientes, andererseits gegen die (kolossalen Cabinetsstücke und sonstigen) Einfälle unserer hohen Kunst.

So stehen die Sachen! Sollen wir nun wünschen, dass ein Interregnum eintretender Barbarei tabula rasa mache, damit aus frischem Keime ein neues Gewächs volksthümlicher Kunst sich dem umgewühlten Boden entwinde, oder kann Erkenntniss der Uebelstände und Fortschritt des Wissens und Könnens den angehäuften Stoff, das Erbtheil aller Länder und aller früheren ganz oder halb erstorbenen Zustände der Gesellschaft, zu neuer Einheit und Harmonie bewältigen, kann in einer grossen Völkermetamorphose die Kunst aus dem jetzigen sedimentären Zustande zu krystallklarer Selbstständigkeit zusammenschiessen? Gewiss sie kann es.

Auch die Kunst der Griechen war auf vielen Trümmern älterer, einheimischer und fremder, ihrer Wurzeln beraubter Motive erwachsen, gleich wie ihre Mythologie auf dem nicht mehr erstandenen Systeme einer uralten philosophischen Symbolik emporblühte, die ihrerseits wieder auf erstorbene fremde und einheimische Ueberlieferungen und Sagen geimpft gewesen war. Auffallende, zuweilen willkürliche und durch die Gesetze der Architectonik ungerechtfertigte Verbindungen und Verzwitterungen der verschiedenen vorgefundenen Bauelemente mussten vorhergehen, ehe die Schöpfung des griechischen Tempels vollendet ward, ehe das dorisch-ägyptische Element mit dem Jonisch-Asiatischen, der Gegensatz des aristokratischen Priestergottes und des dynastischen Hausgottes sich bei ihnen in der höheren Idee versöhnte, und das Volk, als Priester und Dynast, in seiner Gottheit sich selbst verherrlichte.

Die Versöhnung ähnlicher Gegensätze in einer noch höheren Einheit muss auch bei uns das Ziel einer neuen Kunst werden, einer noch geistigeren und reicheren, als die Hellenische war.

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## Letters on the Great Exhibition

#### Outline

Plan des Aufsatzes. Briefliche Form.

1) Veranlassung zu der Absendung des Briefes. Aufgefordert den Inhalt gesprächlicher Mittheilungen zu Papier zu bringen, gehorheich diesem Winke es seinem Ermessen überlassend, ob etc etc etc etc.

2). Schwierigkeit der Wahl eines Planes zu sytematischer Musterung der Gegenstande der Ausstellung. Wäre die Aufgabe damit gelöst, wenn ein solcher Plan für jeden Gegenstand eine bestimmte Rubrik enthielte und er Uebersichtlichkeit und Ordnung hinreichend gestattete, um nichts auszulassen und jedes leicht zu klassifiziren nachzuweisen und aufzufinden so hätte sie keine Schwie-

rigkeit. Aber ein guter Plan soll nicht bloss klassificiren, und trennen sondern auch vielmehr vergleichen und verbinden, nicht bloss das Stoffliche und die äussere Ordnung berücksichtigen, sondern mehr noch den geistigen Zusammenhang der Dinge im Auge behalten; mehr Schlüssel als Riegel seyn Er soll gewissermassen aus der Formeln konstruirt seyn, die das Gesetz der organischen Verbindung aller dieser heterogenen Gegenstände enthalten. Ein Plan der in dieser Beziehung geistiger und organischer gebildet ist, hat den Vorzug vor einem anderen, der ihn an Vielseitigkeit und Vollständigkeit übertrifft. –

Der Plan soll kein Schubkasten seyn, nach dem die Gegenstande die ohnediess schon geordnet sind, sich nur im Kopfe des Einzelnen ordnen sondern vielmehr der Schlüssel der sie offnet und den Weg der Vergleichung erleichtert. Kanon. ¦

Beispiele der ersten bloss äusserlichen Schubkastenordnung *r<sup>tes</sup> Beispiel.* 

Gang durch das Exhibitionbuilding, Mittelallee Ostende bis Westende, dann zurück durch die Seitengänge und s. weiter.

2<sup>tes</sup> Beispiel Vom Mittelschiff ausgehend aber immer die betreffenden Seitenräume mitnehmend je nach den Stationen der Völker. z. B. vom Westende anfangend erst aussen die Statue des Maroketti dann England Canada und die Colonien dann Orient etc etc.

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3<sup>tes</sup> Beispiel schon besser und dem Weltgedanken sich annähernd von den Rohproducten anfangend, diese vergleichend dann zu den Werkzeugen u. Maschinen übergehend und vergleichend endlich zu den Producten und vergleichend. Hat den Fehler mit der Materie anzufangen anstatt mit dem Bedürffol. 1r

nisse wozu die Materie und das Werkzeug die Mittel darbieten. Beispiel der Unzulänglichkeit dieses Systemes, Topf. irdener, Bronzevase Porzelanvase. Der geschichtliche Zusammenhang ist nicht ausgeschlossen aber doch auch nicht nothwendig gefolgert aus diesem Systeme.

Alle drei Wege sind höchst umfassend, man ist sicher nichts auszulassen. Abschweifung über das unbewusste Walten des Mikrokosmus in der Weltgeschichte. D. Gottlichkeit d. menschlichen thuns bekundet sich darin am meisten dass die Weltgedanken gewissermassen als Nothwendigkeiten durchbrechen wenn die Zeit dazu reif ist, frei und unabhängig von den Erfindungen der Einzelnen deren Genie bloss den Ausdruck des in der Welt reif gewordenen Gedankens fand.

Christenthum, Gothischer Bau, Pulver, Nonius Differenzialrechnung, Teleskop. Dampfmaschine. Es lag in der Luft.

Nichts kann den Gang der Menschenidee hemmen, was sich ihr in den Weg stellt, wird umgestossen oder von ihr umwuchert und dient indirect zu reicherer Gestaltung des Gedankens, der sonst zu schematisch nackt und abstrakt und unserem Sinne unschmackhaft erschienen wäre. Der Gedanke gewinnt im Ueberwinden Stärke und Form; historische Haltung und Farbe. |

Mögen diese Ruinen stehen bleiben so lange sie nichts mehr bedeuten wollen als sie sind, wirkliche Ueberreste von Behausungen verstorbener Weltideen sind und nicht entstellende Zöpfe und dergleichen.

Die Geschichte der menschlichen Wissens und Erkennens giebt merkwürdige Beispiele ähnlicher Ideenwechsel. Jede Wissenschaft beschliesst ihr erstes Stadium damit an nichts zu zweifeln etc.

Dann folgt die Periode des Zweifelns, Scheidens Analysis, Klassification, 25 Critik.

Vergebens treten Männer wie Baco v Verulam und Spinoza auf, die Zeiten sind nicht reif. Ihre Ideen sind Träumereien. Sie tödtet um zu forschen

*Dritte Periode* die des Vergleichens und Combinirens. Erforschen der höheren Idee in der sich die Gegensätze vereinigen, in denen sich die Einzelnwesen bekunden. Gesetze suchend nicht bloss Ordnung erstrebend. Sie forscht um zu beleben und neu zu schaffen, das Gesetz der Erfindung zu lehren.

*t' Beispiel* die Naturwissenschaften, Newton. Leibniz Laplace Cuvier, Humbold. Selbst d. Mechanik fangt an sich organisch zu beleben seitdem. ausser der Attractionskraft der Materie die Repulsionskraft der d. Wärmestoff ähnlich wirkenden Kräfte in Betracht kommen. und sonst als Axiome behandelte darauf als Lehrsatze begründet und bewiesen werden.

Zweites Beispiel die Geschichte der Sammlungen. Architectonische Anordnung der Ueberreste d. Alterthums Rumpelkammern zum Amüsement der Grossen. Dann Trennung in Gallerieen mit strenger Classification letzteres unsere Exhibition als der unbewusst geborene Gedanke der ächten Culturge-

fol. 2r

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schichtlichen Sammlung. Geistreiches Wort Buchers Querdurchschnitt der Culturgeschichte.

Drittes Beispiel die Baukunst. Ging durch die beiden ersten Stadien hindurch. | War schon bei den Griechen zum letzten gelangt. Der Griechische Tempel aus der Vergleichung und Erkenntniss des inneren Gesetzes fruherer Bauten d. Assyrier und Aegypter geschaffen.

Neue Architecturwissenschaft seit dem Wiederaufleben der antiken Studien und Künste. Zuerst unbefangenes und thatenkräftiges Erfassen des Stoffes, ein individuelles unkritisches Anschauen der Antike, daraus hervorgehende eigenthümlige Kunstrichtung vermischt mit Gothisch-Christlichen Elementen.

Dann die Critik und Aesthetik, Regeln, Categorieen, gelehrte Sammlungen auf Papier und auf den Strassen. Schematismus und Materialismus. (siehe Einleitung zu meinem Werke.). Vergleichende Baukunde etc etc etc.

Es fehlt die architectonische Gestaltung der neuen vergleichenden ethnographischen Sammlung die folgen muss sobald dem Gedanken gewissermassen Selbstbewusstseyn erwachsen ist.

Verbindung zwischen beiden Punkten natürlich und nothwendig die vergleichende Baukunde muss die Schaffnerin Ordnerin der vergleichenden Culturgeschichte werden. Die Baugeschichte ist ein Hauptkapitel der Culturgeschichte und je mehr sie ihrer Vollendung näher tritten desto mehr werden bei-

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Sammlungen und Bibliotheken. Letztere die Commentare zu ersteren. Gute Idee des brittischen Museum. Nicht bloss Ordnung soll die vergleichende Baukunde oder Formenkunde bringen sie soll auch zugleich das geistige Band her-

vorheben das die durch den Stoffliche Zeitliche und Oertliche getrennten verwandten Dinge verbindet und eine Gebrauchslehre der Sammlungen geben. Erfindungslehre, Topik. Der Willkür Einhalt thuend Styllosigkeit. Style. Gesetzlichkeit u. Angemessenheit in der Erfindung

## **Draft of First Letter**

Lieber Freund!

de in einander aufgehen.

<sup>30</sup> Ich habe den Inhalt unserer letzten Unterredung und das Ihnen gegebene Versprechen, darüber einen Aufsatz zu schreiben, seitdem stets im Kopfe getragen und war bei meinen fast täglichen Wanderungen durch den Hyde Park-Pallast beschäftigt die Sachen nach meinem bauwissenschaftlich-vergleichenden Sysfol. 2v

fol. 10r

teme im Geiste zu ordnen. Es schien dabei dessen vornehmlicher Werth, nämlich dass es die ideellen Verwandschaften unter dieser bunten Welt von Gegenständen als das Wesentliche hervorhebt und dem Stofflichen und Oertlichen nur eine zweite Bedeutung für die Entwickelung der Unterverzweigungen innerhalb jener von den verschiedenen Grundideen abstammenden Hauptgruppen einräumt, sich zu bewähren.

## **Draft of Second Letter**

2<sup>ter</sup> Brief.

#### P. P.

Was Sie neulich über die Geschichte der Sammlungen erwähnten, über das Durchgehen derselben durch drei Phasen bis zu dem vollständigen vergleichenden Museum der Zukunft, deren Ansatz Sie in dem "Crystallpalaste" sehen, fällt auffallend mit eigenen Ideen darüber zusammen; Ein Plan einer vorerst nur in Gedanken ausführbaren Organisation dieser Sammlung, den ich, wie Sie wissen, schon lange hege, ist darauf begründet und dieser hängt wieder eng zusammen mit ganz verwandten Ideen über vergleichende Baukunde, über welche ich seit Jahren meditire und worüber ein angefangenes Werk bereits in den Händen des Buchhandleres V. ist. –

Es herrscht ein von individuellem Streben unabhängiges Walten des Mikrokosmos, eine Spontaneität in der kollectiven Menschheit durch die sie sich als selbsthandelndes Individuum höherer Ordnung kund giebt. Gewisse Weltgedanken machen sich von selbst Bahn wenn die Zeit dazu reif ist, frei und unabhangig von dem Sinnen und Trachten des Einzelnmenschen, der bloss zuweilen rechtzeitig den Ausdruck dazu fand. Meistens gehen Wahrheiten nicht gleichen Schrittes mit dem gemessen fortwandelnden voüç der Gesellschaft. Dann sind sie keine, sondern Irrthum und Rebellion; Ihr Erfolg nur vorübergehende Zuckungen der noch in dem Schoosse der Zukunft verborgenen Menschenidee.

Dagegen kann nichts ihren Gang aufhalten, wenn sie Leben gewann. Was sich ihr in den Weg stellt, wird aus den Fugen gerissen oder von ihr umwuchert, und dient als Ruine zu reicherer Gestaltung der Zukunft.

In diesem Kampfe mit dem Alten gewinnt die Idee an Stärke, Haltung und Farbe. || Darum ist es nothwendig, dass die Reaction gerade in diesen Ent-

fol. 8r

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fol. 9r

wickelungsperioden der Menschheit am thätigsten wirkt. Ihr Widerstand dient der kreisenden Zeit als Stützpunkt. Nur die Kräfte die nach eigenem vorwitzigen Ermessen bald vorwärts bald rückwärts drängen sind unnütz und schädlich.

Wo wurde der Gothische Spitzbogenstyl erfunden, welche Nation kann sich rühmen, ihn früher als andere geübt zu haben? Er kam an vielen Orten zugleich auf. Es lag in der Luft, so und nicht anders zu bauen, sich zu tragen und zu denken wie damals geschah. Wer erfand das Pulver, die Druckmaschine das Teleskop, den Nonius, die Dampfmaschine? Alle diese Erfindungen haben mehr als einen Autor. Sie tauchten gleichzeitig an mehreren Orten zugleich auf.

Wer erfand die Differenzialrechnung, Newton oder Leibnitz?

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## **Notes on Exhibits**

Wolle, sehr schlecht ausgestellt, feine Qualität. Baumwolle 288. 32. 37. 178.

15 Weisse Rochstofte.

Fülle von eingelegtem Holze Marylandschrank. Flachs Filz. Farmerhemd

20 Chlorkalk Chromgelb Chromgrun Talck, Leim Salpeter Stearin, Alaun schwefelh. Magnesia Vitriol Zinkweiss Epsomsalz etc Getreide Seide Papier Mehl. Holzsorten, Seife Lichter Schnupftabak.

Mineralien Eisenerz, Kupfererz Gold Magnesia

Leder Gusseiserne Buchstaben Leinen Baumwollzeug Kufen und Eisenblech etc

Steinkohle Granit roth. Sandstein Ziegel 3 Sorten Marmor. Mehl von Hecker. *Croton Mills* New York. City *schlecht aufgestellt* 

30 Schinken Gesalzenes Fleisch Oelkuchen Holzsorten eine schöne Sammlung aber gar nicht aufgestellt. Schusterzwecken

Fournirholz mit Cirkularsäge	
Nachzutragen	
Glasmanufactur	
Flintglas von grosser Reinheit Brooklyn Flint Glas Company.	
Schmelztiegel von Wasserblei.	
Blakes fire proof paint.	
<i>n° 62 Hyalotypie</i> , angewendet auf die Lat Magica Langenheim Bettstelle <u>55</u> 2	
Hintere Gallerie von der Ostseite angefangen	
Stühle nichts Besonderes.	
Wachstuch; 135	
424, sehr schöne und leichte Wassereimer	
<i>Orn. Teppich Boston</i> eigenth. Product von grazioser Form, etwas ursprüng- liches.	
Stocks for Mattresses. 253	
Baumwollenbaum Alabama.	
Allen's improved arithmetical Tables.	
Spielzeug South windham Connecticut	
Unterschied zwischen Deutschland u Amerika	
Schneidermuster	
Wachs von Virginia	
Drathproben von J. Washburn & C°	
New Orleans Moos.	
Tapeten	
402 imitation of wood. recht gut	
282. Papier	

<sup>3</sup>fol. 2v

Maroquin

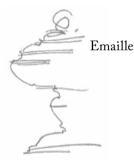
Sensenklingen in allen Formen und Grossen

Werkzeug Hammer und Zangen in Eins gearbeitet von Logan, Vail & C<sup>o</sup> New York,

5 Werkzeuge von Brown & Wells Philadelphia Aexte *Tomohawks*. *Exkursion* beste Form.



Hinter Hof.



10 Amerika

1) Geometrie, Dial of the seasons 2) Ruder  $n^{\circ}$  92. 3) Geräthe. 423.

A. M. Perkins patent Hot Water Apparatus, for warming public and private buildings Drying closets.

Perkins right and left Screw joint

15 Pneumatische Lokomotiven.

Die Mähmaschine mäht 15 Acker den Tag,

India rubber Ueberzug mit blättriger Textur die sich selbst darstellt. Specimen of India rubber Venering. Spielzeug Velocimeter. M<sup>r</sup> *Hobbs*, –

4fol. 1r

<sup>5</sup> fol. 2r	Russia	
	Rechts unten.	
	Hauptallée	
	4 Candelaber Goldbronze	
	1 Louis quinze mit Blumenwerk 2 Chinesische Vasen mit schwerer Rococo- garnitur ubereinandergestellt, auf schwer vergoldetem Unterbau. Die Garnitur dominirt die Vasen. –	5
	2) und 3) Arntikisirend baroker Candelaber mit Brillantfacetten an dem Schaft und gothischem Knopfwerk.	
	4) Russischer Styl 3 brutale Russen in den Ecken undefinirbare Formen ohne Feinheit des Geschmakes. Barbarischer Zopf.	10
	1 Porphyrvase.	
	298. Imperial polishing manufactory Peterhoff near St Petersburg Florentiner Arbeit stachlichter Rand; gute Zeichnung des Mosaik, ¦	
<sup>5</sup> fol. 2v	Porzelanvasen im alten Zarengeschmack Antike Vasen Warwik Wase in gehammertem Kupfer Warschau Malachitgegenstände ohne Charakterunterschied <i>Official</i> Catalogue, pa 296	15
	Porcelan Tisch	20
	Silberzeug, Ein Tannenbaum obenauf Blumenbouquet wie eine grossartige Wucherpflanze	
	2 Style die Französisch Rokoko die Russisch Rokoko.	
	Ein bauchiges Gefäss von vergoldetem Silber	25
	Ausnahme nº 11.	25
	Ein Krug mit n° 10 bezeichnet	
	Dito nº 9. Ein Tannzapfen in Silber	
	24 Russin Sasikoff Moskau und Petersburg.	
	2 Hähne im barbarischen Style.	30
<sup>6</sup> fol. 1r	Malachit	
	Caucasian Sable called shahka Caucasian Daggers.	
	Noori Ogli Oaste Selim Molla District of Nookha	
	Werk in lithochromem Abdruck	
	gute Vorbilder im Russisch Byzantinischen Styl. Damals Byzanz wie jetzt Paris.	35
	Schild mit Griechischer Schilddecke	
	265) Articles of furniture von Fliz und Hasenhaar	
	Stickereien 276. Shirkhonin Torjok.	

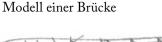
1 Barbarische Decke mit Papagaien oder Straussen Tigern Schlangen. Stickerei grosse Aehnlichkeit mit der der Wilden. Altbyzantinische Anklänge Sophia Papinoff Tiflis ¦

5	W. Kämmerer und Saeftigen Joaillers a St Petersburg Kaiserliche Polirfabrik in St Petersburg	<sup>6</sup> fol. Iv
	2 Tische. 2 Vasen von grünem Porphyr und ähnl. Malachitgegenstände /	
	Gold u Silbererz.	
	Alle Malachitgefässe mit Gold, sehr monoton	
IO	Parkettafeln, einige Glasscheiben, buntes Papier	
	die erste Querstrasse nach Clodion	
	290. Aga-Melik Mahomet. Hadji Ussoof Ogli. auf Gold emaillirte Becher Knöpfe, Fingerhüte etc etc. sehr schön emaillirt	
	Silber im Dutzend Löffel, Messer., Becher, Dosen	
15	Lithographirte Blätter bezeugen, dass die Goldarbeiterkunst einst höher stand.	
-5	Die Anmassungen mochte ich gar nicht erörtern. Germania zu den Füssen ei-	
	nes Helden und rechts dem gedemüthigten Frankreich.	
	Amerika	<sup>7</sup> fol. 1r
	Gallerie nord) 292. Durchsichtige Seife von Taylor. (Schlechtes Gothisches	
20	Fenster von durchsichtiger Seife Spezimen von Unsinn der ausser sich ist	
	Fancy Soaps. von X. Bazin	
	Indian Rubber	
	Russia idem	
	4 weisse Schwäne Zobel Silberfuchs <i>Peltze</i>	
25	Amelung & Sohn Dorpat sind so aufgehangt dass man nichts sehen kann.	
	Zobel und Silberfuchs 3 Pelze 2 Zobelpeltze Gesteppte Decken.	
	Gestickte Decke blauer Grund, weisse Bordüre mit breiten Rothen Rändern	
	und Mäander, Cypressenornamente in den Ecken. Grosse Rosette in d. Mitte,	
30	äusserlich weiss in der Mitte roth mit blauem Bisont von Hadji Aga Baba.	
5-	vom Gouvernt von Shemakha	
	Schaal von weissem Ziegenhaar aus dem Gau Orenburg.	
	Man erkennt das Nachtheilige der directen Leitung des Ganzen von Seiten	
	des Staates, vergl. die Französische Austellung	
35	Glaskasten II.	7fol. 1v
55	Schöne Gänsekiele Riabzewitch St Petersburg	J

Papierfabrik von Caluga. (Aristarkoff)

	Unten Südseite United States	
	Pendeluhr von Chauncey Jerome, Patent twelve month clock's mit einem Pendel das horizontal sich dreht. und bald rechts bald links.	
	Schuhmacher 294. 410. 411. 295, 382, 471	
	2. sehr schöne Landcharte von der ganzen Erde nach Mercators Projection worin die hauptsächlichsten neuen Entdeckungsreiserouten angedeutet sind. Herausgegeben von August Mitchell Philadelph.	5
	Drilliche, Flanelle Baumwollenzeuge von der Amoskeag manufacturing Co Boston. Auch Vattenmuster.	IO
	Die andere Landcharte Vereinigte Staaten von A Das Schuhwerk durch häufige Anwendung des Kautschuk influencirt. Einfluss der Indischen Stickerei auf Luxusschuhwesen	
7fol. 2r	Ueber den Schuhen und Uhren ein Stück Tauwerk bestehend aus 7 Strangen, von gleicher Stärke von denen der mittelste aus gröberem Stoffe zu seyn scheint. glanzt wie Seide Sample of six stranded Man. Ropes manufactured from manilla on their improved machinery	15
	$\begin{bmatrix} I \\ 2 \end{bmatrix}$ Untergallerie. Tapetenproben nichts Interessantes darbietend	20
	1 Boot aus vollem Holze geschnitten Uhren von schlechtem Aeusserem und grober Arbeit, 1 Kinderwagen 1 eisernes Bett von schlechter Zeichnung, 1 Teppich dito. 3 Glasmalereien dito. 3 <sup>te</sup> Untergalerie – Sud. siehe oben ferner. 441. Johnson Flanell von sehr feiner Qualität. 407. feine wollene Decken. Confer Frankreich. England etc. ¦	25
7fol. 2v	Auffallend die Erscheinung von Erleichterungsmitteln des Unterrichts, Schneller hinweg kommen über das Mittel um den Zweck zu erreichen. Deane Dray & Deane Swan Lane London bridge. Charles Howland	30
	King William Street au pont de Londres	
	Silber Medaille <i>4. Untergallerie</i> 1 mächtiges Vergrosserungsglass. 2 prachtvolle Aufsätze von Bronze oder vergoldetem Silber Weinlaub darstel-	35
	2 prachtvolle Aufsätze von Bronze oder vergoldetem Silber Weinlaub darstel- lend 8 Zweige aus einem Korb sich erhebend und rothe Glasgefasse tragend. In der Mitte ein grösseres der zweite dto von weissem Glasse. 459. in or molu	

7fol	2r
· j01.	31





Patent metallic air exhausted coffins luftdichte Metallsärge. Susquehanna Viaduct 3800 Fuss lang und Modell einer Spannung à 180 Fuss 227. feine Miniaturmusterfabrikation dieselbe Berechtigung wie die grossen Muster. 5 Modell einer schwimmenden Kirche Chirurgische Instrumente. (Zapfenzangen) Violinen Notenbuchwender auf Jenny Linds Empfehlung. Blitzableiter mit magnetischen Spitzen τo Seife | 20. Schlosserarbeit 7 fol. 30 Grosse Auswahl von künstlichen Zähnen (419, 9, 350, 518, 558, 33, 47 61, 220. 63. 302) 5<sup>t</sup>) Untergalerie 15 künstliche Beine von B. Frank. Palmer. 376 Chestnut Street. Philadelphia 4 goldene 6 silberne und 1 kupferne Medaillen Lampen Cornelius & C° nicht besser und nicht schlechter als die unsrigen etwas geschmackloser. Modell einer Brücke in Amerikanischem Gitterwerk. 147. 20 New Brunswick Rubber Co. Sattelzeug von Lloid in Albany State of New York. sehr gelobt von einem Sattler. Besonders herauszuheben 2 Sattelzeuge. 41. 7 fol. 4r (138) Kassenschlosser mit veränderlichem Schlüssel, 2 goldene Medaillen. 25 Gekrepptes Pferdehaar Schwanenpelz, Silberfuchs (87, 6<sup>te</sup> Gallerie Bürsten. Uhren Sattel (476) Perücken (133). Hüthe 130 (Castor) 232. besser als irgend wo. 303 Damenhüthe feine Strohhüthe Büchsen, Militärwaffen. Kinderkleider 30

7fol. 4v	<ul> <li>Mittelraum, Daguerotyps.</li> <li>I Rahmen. 2 junge Damen, wahrsch. Schwestern in dem 2<sup>ten</sup> Rahmen. (491)</li> <li>Niagarasturtz. Lords Prayer. Thy will be done on earth. Notre Dame</li> <li>223) Camera Obscura und Daguerotypes I Fuss hoch C. C. Harrison Grösstes</li> <li>Bild ¦ Geschmackvolle und einfache Kleidung</li> <li>Rahmen von <i>Brady</i> New York. Schöner alter Kopf. Vortreffliche Porträts,</li> <li>From life by John A. Whipple Familienstudien weniger künstlerisch aufgefasst.</li> <li>I) J. E. Mayall 5 Rahmen Porträts, (Notre Dame)</li> <li>Niagarafall 2 Stück aussen die beiden Rahmen vom Vaterunser.</li> </ul>	5
	Panoramatische Ansichten von Philadelphia. Talbotyp von Langenheim do von Cincinnati Daguerotyp von Fontayne und Porter. 3 Rahmen von M. M. Lawrence Vew York. Das Bild die 3 Zeiten die Vergangenheit jung lustig schwarz gekleidet, Gegen- wart ernst Zukunft traurig gesenkten Hauptes. Porträt von Webb. u. W. Bryant	15
<sup>8</sup> fol. 11	Hinzu gekommene Sachen Skulptur Olliver Twist ein vor Ermattung hingesunkener Knabe. R. Bell Hughes, Boston. Ashmead & Hurlburt's highly improved Gold Foil. und Chas. Abbey & Son Philad. Vorwiegende Berücksichtigung der Gesundheit und des Eigenthumes, Robin officier de la marine France inventeur serrure avec clef avec panneton changeant.	20
<sup>8</sup> fol. IV	Day & Newell. & Mc. Gregor 298. 20 Arrowsmith   ein anderes System Der Erfinder heisst Jennings Jennigs patent rotary permutation Lock.	5



38

From the London Gallery Buffalo State of New York *Whitehursts Galleries of Premium Daguerotyps* die grösten mir bekannten Portrats Pres. Fillmore, Honbl. A. H. H. Stuart secr. of the interior Honbl. John B. Kerr Charge d'Affaires Bogota, Meade Brothers. New York. |

39

5	Daguerotyps von Brady. vorzüglich ausgezeichnet 6 Porträts 6zollige General Taylor, Calhoun Gen. Cass. Dr. Valentine Mott. R. de Trobriand Asa Whitney, D <sup>r</sup> Selleck. W. v. Dohm John Kane James Perry J. A. Mac Dougal Captn Nones, 6 weibliche Porträts vortrefflich. n° 5 alte Dame und n° 6 Kind	<sup>8</sup> fol. 2r
10	Linke Seite 1) Talbotyp von Langenheim 2) Daguerotyp von Cyncinati von Fontayne et Porter. 3) M. M. Lawrence New York schlecht aufgehangt 3. Rahmen. 4) London Gallery. (Evans proprietor) Buffalo.	
15	<ul> <li>5) from Hoggs American Dagureotype Gallery</li> <li>6) J. H. Whitehurst Gallerie of premium ¦ Daguerotypes, weniger artistisch arrangirt und weniger harmonisch und klar, als Brady's Werke dagegen die grössten Abdrücke</li> <li>6) Meade Brothers New York.</li> <li>7) Sammlung Ausgezeichneter Manner von Virginia.</li> </ul>	<sup>8</sup> fol. 2v

- <sup>20</sup> 6 Sophas und Stühle fur Kranke zum Stellen.
  - 10 Pianos

1 transportabls Bettstelle

Whitmarsh's Patent.

Elfenbeintafeln 41 Fuss lang durch die Holyssäge hervorgebracht. by Julius Pratt of Meriden Conn.

# **Outline of a Cultural-Historical Exhibition**

fol. 12r		Beilage.	
	Plar	n zur Uebersicht einer kulturhistorischen Ausstellung, basirt auf den vier Grundelementen häuslicher Niederlassung:	
		Heerd, Wand, Terrasse, Dach.	
	1	<i>Heerd</i> . Mittelpunkt jeder Niederlassung, materiell und symbolisch. A. <i>– wärmend</i> Heerd, Kamin, Ofen. (Caloricologie)	5
	]	<ul> <li>B. – lichtbringend</li> <li>Spähne, Fackeln, Candelaber, Lampen Lichter (aus Harz, Wachs, Talg &amp;.) Gasflammen.</li> <li>Bei dieser Abtheilung wie bei allen anderen, muss die Fabrikation</li> </ul>	10
	(	<ul> <li>der Gegenstände vom Rohstoffe an, mit allen dazu erforderlichen</li> <li>Werkzeugen und Maschinen vom Einfachsten bis zur letzten Vervollkommung verfolgt werden. (Photologie)</li> <li>C. – Nahrung bereitend (Culinarische Kunst).</li> <li>a. Pflanzenspeisen. Feldbau mit allen seinen Verzweigungen. (Ag-</li> </ul>	15
fol. 120		<ul> <li>a. Finanzenspersen: Feddbad init alten seinen verzweigungen: (Fig ronomie, Oeconomie Horticultur, Mühlenbau) cet cet.</li> <li>b) Fleischspeisen (Viehzucht, Jagd, Fischerei)</li> <li>c. Getränke Milch, Bier, Wein etc. (Technologie ihrer Bereitung)</li> <li>d) Gewürze, Salz, Zucker u. s. w.  </li> <li>e) Luxusgenüsse, (Café, Thee, Toback, Opium Parfums)</li> </ul>	20
	(	<ul> <li>C. Mittelpunkt der Beziehungen für den Hausrath</li> <li>a. Gefässe (Ceramik)</li> <li>α. Urgefäss (Kürbiss Cocusnuss,)</li> </ul>	
		β. Thongefäss, roh, gebrannt, gelasirt, Glas Porcelan; durch alle Sorten gebrannter Erdwaren durchzuführen (vde Anmerkg oben)	25
		<ul> <li>γ. Metallgefässe, Metallurgie, Schmelz- und Treibekunst, Löthen und Schmieden, Emailliren und Ciseliren, Vergol- den, Galvanoplastik. (vde Anmerkung oben bis)</li> <li>δ. Gefässe aus Stein und anderen Stoffen,</li> </ul>	30
	]	D. <i>Ruheplatz</i> Stühle, Tische, Möbel und Geräthe aller Art. (Tischlerkunst, Schnitzerei)	
	]	<ul> <li>E Sitz des Nachdenkens der Mittheilung und Unterhaltung.</li> <li>a Logik.</li> <li>b. Redekunst, Schreibekunst Buchdruckerei.</li> </ul>	35

Poesie

Musik

Tanz

c)

d. e.

fol. 13r

			f. Drama.
5		F.	Sitz der Krankenpflege. (Medecin)
0		G.	Ort der Berathung und des Abschlusses von Verträgen.
			Gesetzgebung, Staatskunst, Handel Rechnenkunst. (Jurisprudenz
			Politik)
		H.	Ort der religiösen Gebräuche.
IO			Ahnenbilder, Bildnerei, (Theologie) Altar.
	II	Die	Wand.
		А.	Der ursprüngliche Raumesabschluss, das Pfahlgeflecht (Gitter, Bal-
			lustraden).
			a Bast- und Binsenmatten, Pflanzenfädengeflecht, Gewebe aus
15			anderen Substanzen. Muster aus farbigen Fäden aus der Textur
			entsprossen. Ornamentik, Färberei, die Teppichwirkerei das Ur-
			motiv der Wandverzierungen und der Malerei. Die Teppich-
			stickerei der Ursprung der Reliefkunst (China, Assyrien)
			b. Nachbildung der Teppichwände in Platten von Holz, Metall,
20			Stein, Erdwaare. Mosaik, Glasmalerei, gebrannte Ziegel, Ta-
			peten. u. s. w.
			NB. Bei diesem wichtigen Abschnitte muss auf die Stylgesetze hin-
			gewiesen werden die aus dem gemeinschaftlichen Ursprunge und der
			Verschiedenheit der Stoffe die in Anwendung kommen bei jeder ein-
25			zelnen Verzweigung des Motives hervorgehen.
		B.	Die Wandbereitung in ihrer Anwendung auf Bekleidung.
			a Pelz, Leder. (Schuhmacherei)
			b) Linnen
			c) Baumwolle.
30			d) Wolle – (Schaafzucht)
			e) Seide
			· etc
			· etc.
			•
35			Schneiderei
			Schuhmacherei
			Spitzen, Litzen, Pasementirarbeit
			Bänder Strumpfwirker etc etc tc ¦

- III. Die Terrasse.
  - A. Erd- und Metallarbeiten
    - a. Schutz des Heerdes gegen Ueberschwemmungen (Wasserbau.)
    - b) Schutz des Heerdes gegen Feinde (Schlosserarbeit Festungsbau, Waffen)

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c) Beschützung und Erleichterung des Zuganges und der Verbindung zwischen den Feuerstellen. (Wege und Brückenbau, Canalbau, Schiffarth. Telegraphie u.s.w.)

d. Gränzbestimmung des Eigenthumes (Geometrie, Geodäsie) NB. Dieser wichtige Theil umfasst eine grosse Menge von theoretischen und praktischen Bethätigungen der Menschen, die sich auf verschiedene Weise innerhalb desselben ordnen lassen.

B. Maurerarbeiten.

Steinkonstruction, Ziegelkonstruction Gewölbe, (Steinschnitt.). Formen der höheren Baukunst die aus diesem Theile der Construction hervorgehen, nebst ihren von den Stoffen und anderen Umständen abhängenden Modificationen.

(s. Anmerkung oben).

- IV. Das Dach.
  - A. Gerüste.
    - a. Holz. technische und bildnerische Entwickelung desselben.
       Formen der höheren Baukunst, die diesem Ursprung angehören.
       Giebel, Saulenordnung. Fenster, Thüren.
    - b. Metall. technische und bildnerische Entwickelung.
  - B. Dachbedeckung.
    - a) Ueberzug, Gewebe, Felle, Filz, Asphalt, Steinplatten Metall (gränzt an die Categorie von der Wand).
    - b) Schuppendach
       Schiefer, Ziegel, Metall (gränzt an die Categorie der Maurerarbeit.).
- V. Zusammenwirken der vier Elemente. Culturphilosophie. Hohe Wissenschaft. Hohe Kunst.

fol. 14r

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fol. 130

#### Note on a Cultural-Philosophical Collection

#### Note.

Es kann diesen Plan, den ich als Zugabe des obigen Schrifchens beizufügen mir erlaube der Vorwurf treffen, dass er zu architectonisch sey und dass Manches sich ihm nur auf ziemlich gezwungene Weise füge. Diess mag der Fall seyn, besonders für einige Rubriken der ersten Hauptabtheilung. Aber es fragt sich, ob ein anderer Plan gefunden werden könne, der in dieser Hinsicht bequemer wäre, der jedem Gegenstände seine *nothwendige* Stelle anwiese, und der zugleich für die Erreichung des Zweckes, den der Verfasser bei *seinem* Entwurfe im Auge hatte, und den er in der vorliegenden Schrift auseinander setzte, dieselben Vortheile böte. Es dürften übrigens die für den bezeichneten Zweck indifferenten Gegenstände bei der für sie mehr oder weniger willkürlich gewählten Rubricirung an Uebersichtlichkeit nichts verlieren.

In Bezug auf die weitere Organisation der Sammlung nach dem gegebenen Plane ist noch zu bemerken, dass jede Abtheilung so instructiv wie möglich in sich gegliedert erscheinen muss. Es ist wünschenswerth die Producte in den Haupträumen zusammenzustellen, wodurch die Vergleichung derselben und das Studium erleichtert wird; In den korrespondirenden Nebenräumen muss dann möglichst nahe die Technologie dieser Gegenstände, vom Rohstoffe an bis zu der letzten Durch- | bildung desselben, mit allen dabei in Anwendung kommenden Mitteln, Geräthen und Maschinen zu finden seyn.

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Schluss der Note.

## **Association of Artists of Various Nations**

Es hat sich in London ein Verein von Künstlern verschiedener Nationen, meist

Franzosen, Engländer und Deutschen, worunter rühmlichst bekannte Namen,

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wie *Blagmann*, *Dieterle*, *Horeau*, *Lienard* u. s. w. gebildet, welche im Monate Februar des künftigen Jahres gemeinsam eine Kunst-Ausstellung zu veranstalten beabsichtigen, in der vorzugsweise Entwürfe, Zeichnungen und Modelle aus dem Gebiete der Kunst-Industrie, incl. der Baukunst, namentlich des dekora-

fol. IV

fol. 2r

tiven Theils derselben, ihren Platz finden sollen. Die Gesellschaft hat zu diesem Behufe bereits die Genehmigung zur Benutzung eines Theiles des Ausstellungs-Gebäudes erlangt, und eine nicht unbedeutende Sammlung von Zeichnungen, Modellen u.s.w. sind schon beisammen. – Es erscheint nun wünschenswerth, dass bei dieser Gelegenheit das deutsche Vaterland in geeigneter, würdiger Weise vertreten werde, und Herr *Semper* richtet an alle diejenigen Genossen, welche dem Bereiche der Kunst-Industrie angehören, die Bitte, sich an diesem Unternehmen reichhaltig zu betheiligen.

Einstweilen, und bis ein bestimmter Fonds vorhanden ist, wird die *portofreie* Anmeldung der etwa einzusendenden Gegenstände, Zeichnungen u.s.w. gewünscht, um die Räumlichkeit und das zu erwartende Material danach bemessen zu können. Diese Anmeldungen erbietet sich Herr Architekt Semper, 27 University-Street, London, in Empfang zu nehmen, und wird derselbe zugleich späterhin für die geschmackvolle und vortheilhafte Aufstellung der eingehenden Kunstgegenstände, der Bildhauerwerke, Gemälde, Zeichnungen, Modelle u.s.w. Sorge tragen. –

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21 munpins et ann Il q & julques this, go 2 m to wano partest ine qui Organio quelque - cia to boote for ing Mulun etc to all. Comme regard pour faire consister and solutice farmet ch intristique d'hagliture tes inthations oper fortachois may ?... à ce knownil. Des Acres Jacept emprepresent water Danaker) afferte at je man que Den espice idies for mentales our les prelles p'avois mais anfiel have mon travail to de And outof a vans don cartene formaire De for conten Mais en y reflich haat je me fino blaigne de cette

Pl. 3: Draft of essay on tapestry and the origin of polychromic decoration, 1851 (gta, 20-Ms-79)

**POLYCHROMY IN ARCHITECTURE** 

## On the Study of Polychromy, and Its Revival

#### XX.

#### ON THE STUDY OF POLYCHROMY, AND ITS REVIVAL.<sup>1</sup>

Since the publication of the celebrated work by Quatremère de Quincy – *Le Jupiter Olympien* – that is to say, scarce forty years ago, the question of the polychromy of ancient monuments has not ceased to occupy the antiquarian and artistic world, without having, as yet, been determined in a satisfactory manner.

That celebrated *savant* gave us, so to say, the abstract theory of polychromy, in founding his argument on the genius and general character of ancient art. For in his time scarcely anything was known or discovered of the existence of those traces of colour in the architecture and sculpture of antiquity with which we are now acquainted. This circumstance, while | it redounds to the greater merit of the artist, detracts greatly from the value of his work, which contains but mere general ideas upon the subject in question.

The effect produced by this work was, therefore, unconvincing; for, independent of the author's having no certain points whereon to ground his theory, the influence of long-continued custom, and of modern masterpieces of art executed in conformity to it, were too deeply enrooted in the public mind to permit ideas to be received which were at once so novel, and so contrary to the tastes of the times. They were disposed to concede but very little, and that under great restrictions. It was therefore only among the younger students of art and antiquity that the revelations which it contained – opening as they did such a wide field for imagination and discovery – found some enthusiastic followers. This controversy commenced at the period of the breaking out of the Greek insurrec-

> <sup>1</sup> Dr. Kugler, in his work, *Ueber die Polychromie der Griechischen Architektur und Sculptur, und ihre Grenzen*, 4to. Berlin 1835, translated by W. R. Hamilton, Esq., and published in the *Trans. Inst. B. Archts.* vol. i. part 1, 1835–6, is of opinion that the general flat surfaces of Grecian monuments retained the natural colour of the marble, and that the ornaments and details were the only portions decorated with colour.

> M. Hittorff, in the paper which we published in the first number of this periodical, considers that the whole surface of these buildings was painted, and believes the more prominent flat surfaces to have been of a bright cream colour.

In the present essay, M. Semper endeavours to show that this tint was of a darker colour, more approaching to red; that, in fact, it exactly resembled the rosy hue of the glowing sunset of an eastern sky. This opinion he supports by an ingenious reasoning, but the reader must judge for himself as to the probability of such a system.

Independent of this assumption, M. Semper maintains that the whole surface was covered over with a transparent varnish, a circumstance which, if established, would in some measure tend to reconcile these several theories, in so far as the general effect of polychromized structures is concerned. – Ed.

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tion from the Turkish yoke – an event which excited such temporary fanaticism in favour of the descendants of ancient Greece. This feeling developed itself in an especial manner in Germany, and particularly among such persons of distinction as patronized the arts; and it was also very generally felt in France and England.

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It was under the influence of these impressions that many young artists proceeded to Sicily and Greece, in order to study those celebrated monuments which had been neglected for so long a period. They published the result of their researches in works which have since been duly appreciated; and the excavations which they effected have furnished the principal museums of Europe with masterpieces of Greek sculpture. They were subsequently enabled to put in practice the result of their studies in many important edifices, executed in the Hellenic style.

Among these travellers, there were several who devoted a particular attention to the subject under consideration. A splendid work appeared by Baron Stackelberg, containing | much important material. M. Bröndsted, in his *Voyages et Récherches en Grèce*, unfolded a complete system of polychromy, of which we shall have occasion to speak hereafter. Le Duc de Luynes published his discoveries at Metapontum, and Il Duca di Serradifalco his researches in Sicily.
But it was the restoration of a small temple at Selinuntum, published by M. Hittorff, which set in dispute the whole archæological world; and a controversy ensued upon all points of the question – without result, it is true, but which served to render us acquainted with all the passages from ancient authors which in any way bear upon the subject, and which interpreted them in all the various manners in which they were capable of being explained.<sup>2</sup>

This controversy was at its height when I returned from my travels in Italy, Sicily, and Greece. I had brought with me a portfolio of coloured drawings and restorations of Greek and Etruscan polychromy.<sup>3</sup> Encouraged by the reception

2 Most of the passages in ancient authors which refer to works of art are so indeterminate and equivocal, that it would sometimes be impossible even for the learning of a Herman to ascertain whether they referred to works of painting, of sculpture, or even of embroidery, or works in which all the arts were equally employed. Such passages were placed in the index as of equivocal or doubtful interpretation, but the precision and clearness of the Greek idiom would not have failed to give a distinct meaning to the different varieties of expression, had they not been considered collectively by the Greeks. It is by the assistance of these passages that we are enabled to form an idea of the general effect of a Greek monument, in which all the branches of art are collectively employed.

3 These drawings were in part the result of researches made in company with the late Jules Goury, a young French architect of great distinction, whose premature death will ever be lamented by the friends of art. After investigating the monuments of Athens, he passed into Egypt, his studies in which country were esteemed by the Egyptian savant, M. Prisse, to be superior to any hitherto executed. From Egypt he repaired to Spain, and had

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which these experienced, and by the interest which the question | excited, I published a short pamphlet,<sup>4</sup> which was intended to serve as introduction to a larger work, on Greek Polychromy, divided into three parts, treating separately of Greek, Etruscan and Roman, and Mediæval.

The first essays on this subject in Germany were not very promising. The different opinions of antiquaries and artists found their zealous followers among the public. Here, one saw a pale and timid style, with *seladon* (Chinese green) and rose-colour, assuming to be the true Greek style; there, appeared a blood-red building, equally arrogating to itself to be *the* style.

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As the Philhellenic enthusiasm changed to Mediæval, Greek polychromy gave way to the coloured decoration of the Byzantine and the Gothic styles. This new direction was, I believe, first produced in Germany by the restoration of the Cathedral of Bamberg by Gärtner. On the occasion of the repairs, ancient mural paintings were discovered, which due care was taken to repair and to restore. Examples and models for imitation in mediæval polychromy were not wanting, especially in Italy; and the attempts to restore this style of decoration were therefore more successful than those in Greek architecture, although they rather sought to imitate the peculiarities and barbarism of the style, than to determine and follow out the great principles which they contained. The study of Greek polychromy was therefore set aside for the introduction of Gothic, which now began to be the mode. The Gothic system of colouring made especial progress in France, owing to the exertions which had been made in that country, for some ten years previously, to re-establish the architecture of the middle ages.

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Several Romanesque and Gothic churches have been restored with the care and research which distinguish French artists; among others, the *Sainte Chapelle*, by M. Duban, <sup>|</sup> deserves especial notice, as the most finished and perfect example of the polychromatic architecture of the early ogieval style of France. All these restorations are much more satisfactory than the attempts at Greek polychromy which had been made at various places on the Continent, the inferiority of which is to be attributed partly to the inexperience of the artists, and partly to the circumstance that, in barbaric monuments – and the works of the middle ages are so to a certain extent – we observe a grandeur of effect, and a collective harmony, obtained by a sacrifice of parts to the greater importance of the whole. But this grandeur and harmony could only be obtained, among the Greeks, by a free admixture of the elements of which the aggregate was composed, which

4 Bemerkungen über die vielfärbige Architectur und Sculptur bei den Alten. Altona 1834.

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just completed the drawings of his magnificent work on the Alhambra, – since published by his coadjutor, Mr. Owen Jones, – when he was carried off by cholera. His portfolio of Grecian drawings contained a most complete collection of the evidences of polychromy in Attica. What has become of this collection?

allowed them a perfect and independent development, within such limits as they could not pass without disturbing the mutual correspondence of the whole. If we could form to ourselves an exact idea of this union of the free and circumscribed relation of the arts which co-operate together to the formation of a Greek monument, we should be better able to distinguish ancient art, which we are now too often in the habit of qualifying as being purely *plastic*.

It is plain that the restoration of edifices of a barbarous style is easy and satisfactory, while Greek art can only be understood in an age and nation, the character of which is distinguished by equally artistic, harmonious, and free perceptions. While on the Continent this question was discussed and agitated in the literary world, and put in practice with more or less success in various buildings, it scarcely excited attention or remark in this country - a circumstance which is the more inexplicable, that the first discoveries relative to the existence of traces of painting were made by Englishmen.<sup>5</sup> Among the | causes which checked the development of Gothic polychromy in England, was the unsuitableness of the usual subjects of church paintings to Protestant places of worship. It was not till after the publication of Gowry and Jones's work on the Alhambra that the people of this country began to direct their attention to the subject, which has excited more and more interest to the present time; and it is now probable that the nation may, with its usual enterprise and determination, pursue the system to its greatest extension, and apply the principle to every new and important edifice.

Much light may doubtless be thrown upon the subject of Greek polychromy

by the investigations of the monuments, the paintings, and the miniatures of the first ages of the Christian era, especially in those countries which were at 25 one time the seats of ancient civilization; and it is with great interest that we look forward to the publication of the Mosque of Santa Sophia, and other edi-30

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fices of like antiquity, which have been promised to us. But what have most assisted in the investigation of ancient polychromy are the discoveries in Assyria, and the better acquaintance with the monuments of Persepolis and of Egypt; which latter now appear more closely connected with the works of other nations, instead of seeming, as formerly, to be but isolated phenomena. The monuments of Athens have also been the object of new and scrupulous research, which has led to the discovery of important principles both in form and colour, the result of which will form another valuable addition to the works of the Dilettanti Society. But the most important publication in reference to this subject

> 5 Among the earliest discoverers was Professor Donaldson; who, in the year 1830, fully proved that the whole surface of the marble temples of Athens was originally coloured. -Trans. R. Inst. B. Archts. i. 85, 86.

will be the work by M. Hittorff, the plates of which were obligingly shown to me by that author.

Monumental polychromy must now, therefore, be considered in a new light. It is no longer the enthusiastic speculation of a few artists or antiquaries, but the historian, the scholar, the antiquary, and the artist, all unite to support its evidence with their authority; and at length it commences to be appreciated | by the public, who are becoming weary of the monotony of naked architecture.

The different opinions upon the spirit and extent of Greek polychromy may be comprehended in two general divisions, which may be subdivided in various others. In the first class may be comprehended those who regard polychromy as a means of art whereby to assist and increase the effect of sculpture and architecture, and to conceal the inferiority of materials, otherwise unsuitable to the character and dignity of the work to which they are applied. Those of the second class acknowledge no priority of importance in sculpture or architecture over painting; they deny the existence of limits between the different manifestations of Greek art, which, in their collectiveness, form but one indissoluble whole. They believe that sculpture was as much employed to increase the effect of painting, as painting was made use of to heighten the effect of sculpture or architecture; and, finally, they show that Greek polychromy is based upon ancient traditions, or rather upon the first elements of architecture, and that it was diligently cultivated by the Greeks, as favourable to the harmonious and free development of Hellenic art.

The first class may be divided into two distinct parties. The first is represented by the learned Dane, M. Bröndsted, who applies polychromy to three different purposes – the concealing or preserving the original material; the heightening the architectural and sculptural effect; and the substitution for sculpture of a cheaper process. The following is the result of his deductions, as published in his *Voyages et Recherches en Grèce*: –

"L'application des couleurs était de trois espèces –

"I. La couleur y était comme couche, et sans aucun effet d'illusion pour soutenir l'architecture proprement dite, c'est-à-dire, pour relever la teinte insignifiante et monotone de la pierre, pour réunir et rapprocher de l'œil ce qui dans l'idée de l'artiste devait se présenter ensemble, mais ce que dans l'exé- | cution la distance séparait; pour faire ressortir toutes les parties correspondantes, et les mettre plus à la portée de l'œil et de l'esprit de l'observateur; en géneral, pour ajouter à l'effet de l'ensemble par l'aspect clair et agréable de ses parties: il ne faut pas oublier non plus l'avantage matériel que l'enduit procurait pour préserver de la décomposition des materiaux souvent poreux et veineux.

"2. La couleur servait pour produire de l'illusion dans certaines parties de la construction, c'est-à-dire pour l'effet des ombres et des jours, du relief et des

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enfoncements sur un plan uni; en un mot, pour faire des veritables tableaux, et par conséquent pour *remplacer la sculpture* dans les ouvrages architectoniques.

"3. L'application s'annonce comme achèvement des parties proprement plastiques," <sup>6</sup> &c.

He afterwards adds, "Toutefois ce même ornement en couleur, pratiqué dans l'intention de faire illusion, n'était jamais qu'une *substitution*."<sup>7</sup>

The second division of the first class is composed of learned professors, and of the directors of the various museums of antiquity in Germany; and is represented by M. Kugler.

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They maintain that the Greeks were induced to adopt the use of colour in their buildings solely from æsthetic principles; and they believe that the application of polychromy to sculpture consisted in little more than the occasional coloured border given to the Grecian tunic.

M. Kugler, in his work on the polychromy of Greek architecture, already cited, concludes that – "if no others, yet certainly the white marble buildings erected in the flourishing time of Greece, – that is, the greater proportion of those of Attica, – exhibited in their principal parts the material of which they were built, in its own proper colour; that painting, | therefore, is only to be referred to the subordinate details."<sup>8</sup> And again: "If we wish to present to ourselves the impression of the most remarkable buildings in the flourishing period of Greece Proper, we must conceive their effect to have been produced by a rich

white marble in its own natural brilliancy; and, when the materials employed were of a baser description, by a coating of stucco, which in its outward appearance did not much differ from that of marble; these were then combined with appropriate ornaments, and made resplendent with gold."<sup>9</sup>

This opinion M. Kugler grounds chiefly upon a passage of Herodotus: -

When the Prytaneia in Siphnos shall be white, When the Agora shall be white, &c.

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"But the Agora and the Prytaneion of the Siphnians (Herodotus continues) were at this time (that is, at the fulfilment of the oracle) built (or cased) with *Parian stone*."<sup>10</sup> Dr. Kugler then goes on to state: "What makes this passage so important for our purpose, is not the insulated information we get from it re-

7 Id. ii. 153.

9 Id. p. 84.

<sup>6</sup> Bröndsted, P. O. Voyages dans la Grèce, fol. Paris 1830. ii. 146.

<sup>8</sup> Hamilton's Kugler, p. 93.

<sup>10</sup> Herod. iii. 57.

specting the white edifices of the Siphnians, but the reason for which they were white."  $^{^{\rm II}}$ 

It is surprising, however, that M. Kugler, who appreciates justly the importance of the passage in Herodotus, and who is jealous that its authenticity be not questioned, has cited only a portion of the passage, in lieu of giving it in all its integrity, by which alone we shall be enabled to judge of its real meaning. Herodotus tells us: – "Those of the Samians who had fomented the war against Polycrates, when the Lacedæmonians were about to abandon them, set sail for Siphnus, for they were in want of money. The affairs of the Siphnians were at that time in a flourishing condition, and they were the richest of all the islanders, having in the island gold and silver mines, so that | from the tenth of the money accruing from thence, a treasure is laid up at Delphi equal to the richest; and they used every year to divide the riches that accrued (from the mines). When, therefore, they established this treasure, they consulted the Oracle whether their present prosperity should continue with them for a long time, but the Pythian answered as follows: –

> Άλλ' ὅταν ἐν Σίφνῷ πρυτανήῖα λευκὰ γένηται λεύκοφρύς τ' ἀγορὴ, τότε δὴ δεῖ φράδμονος ἀνδρὸς φράσσασθαι ξύλινόν τε λόχον κήρυκά τ' ἐρυθρόν.

"When the Prytaneia in Siphnos shall be white, And the Agora white-fronted, then there is need of a prudent man To guard against a *wooden troop* and a *crimson herald*."

The Agora and Prytaneum of the Siphnians were then adorned ( $\eta\sigma\kappa\eta\mu\dot{e}\nu\alpha$ ) with Parian marble. This response they were unable to comprehend, either then at the moment, or when the Samians arrived. For as soon as the Samians reached Siphnus, they sent one of their ships conveying ambassadors to the city. Formerly all ships were painted red. And this it was of which the Pythian forewarned the Siphnians, bidding them beware of a wooden *troop*<sup>12</sup> and a crimson herald. These ambassadors, then, having arrived, requested the Siphnians to lend them ten talents; but when the Siphnians refused the loan, the Samians ravaged their territory. But the Siphnians having heard of it, came out to protect their property, and, having engaged, were beaten, and many of them were cut off from the 5

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<sup>11</sup> Hamilton's *Kugler*, p. 82.

<sup>12</sup> The word is translated *ambush*: but the original seems to compare the oars of a galley

to the naked feet of a compact body of infantry.

city by the Samians, and they afterwards exacted from them a hundred talents." - Cary's *Herod*. iii. 57.

Here we have reference to an oracle, the consequences of which might entail disaster, and which it was therefore their interest to provide against as much as possible.

The oracle, as usual, is involved in obscure antithesis, the coincidence of which appeared impossible. A red herald was | a thing unknown among the Greeks, for white, from its purity, was always selected as the official colour for heralds. A red herald was therefore as absurd a thing as a troop of wooden soldiers. The poetical equilibrium of ancient verse requires that the antithesis of the red herald, – namely, the Agora and the Prytaneum, of a white colour, should be equally absurd in the opinion of the Greeks.

Could the oracle attach the accomplishment of its prediction to circumstances which were common and ordinary? Impossible! No doubt, therefore, that a white Agora or a white Prytaneum was in opposition to the customs of the people at the time of the utterance of the oracle. But the symmetry of oracular verse permits a yet bolder construction: –

Since red is applied to the herald, who, according to custom, should be clothed in white, is it not probable that the white colour, here so mysteriously applied to the Agora and Prytaneum, was opposed to the general custom of painting them red?

Are we to believe that, with the introduction of white marble for the construction of their buildings, such a revolution took place in the feelings of the people that they ceased altogether to paint their edifices in their former colours? or shall we not rather suppose that it was by accident that the Agora and Prytaneum of the Siphnians were of a white colour when the Samian vessels arrived off their coasts? Could the Siphnians have altogether forgotten the ancient oracle, and become perfectly indifferent and incredulous as to what they foretold,

when they deliberately resolved to adorn their edifices with Parian marble? This must have been the case, if they really had the intention to let them remain of the natural colour of the stone. But this want of reverence towards ancient traditions is incompatible with the character of the Greeks; and it is probable that the two facts recorded of the history of the Siphnians were not very far apart.

It will be observed that the historian is speaking of a past time. He relates that the Agora was *then* adorned with white | marble (τοῖσι δὲ Σιφνίοσι ἦν τότε ἡ ἀγορὴ καὶ τὸ πρυτανήῖον Παρίῷ λίθῷ ἡσκημένα). Now Herodotus lived two generations after the event recorded in this history; and as the city of the Siphnians was not destroyed, but simply placed under a forced contribution, it is probable that the edifices were still standing when Herodotus read his history at Olympia; but that they were no longer in the same state, as regards colour, as when the Samians landed.

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Moreover, if so radical a change had taken place in the manner of decorating buildings and in the habits of the people, is it not wonderful that no record should appear of it in history?

We are, therefore, obliged to confess that the Siphnians were surprised by fate when they had just completed their edifices in Parian marble, but before they had had time to colour them; and that in this interim, when the buildings were purely white, the oracle was fulfilled.

This explanation of the legend appears founded on a certain dramatic consequence, other than which is unworthy of the Greek historian. M. Kugler, like the Siphnians, has been deceived by the Pythia, for, not having comprehended her, he deduces a wrong conclusion: "we may thence," says he, "draw a positive inference – that what was constructed in the brilliant period of Greek art, of Parian marble, and, as a necessary consequence also, of any and every white marble, particularly, as at Athens, of Pentelic marble, was allowed to preserve essentially its external white appearance."<sup>13</sup>

> 13 Kugler, p. 82. In Professor Faraday's *Report on the Analysis of the Colours found on the Monuments of Athens*, he states: "Portion of coating taken from the columns of the Theseum' – I am doubtful about this surface. I do not find wax or a mineral colour, unless it be one due to a small portion of iron. *A fragrant gum appears to be present in some pieces, and a combustible substance in all*. Perhaps some vegetable substance has been used." And in answer to the question, whether the ochreous tint and glossy surface visible on the statues of the Fates in the eastern pediment were due to some foreign matter artificially applied to the surface, he replies: – "The particles you sent me seem to come from a prepared surface. Being put into a dilute acid, a portion of adhering matter is dissolved, and the principal portion is left in an untouched and cleaner state. Being then washed and dried, it is found that this consists of carbonate of lime, and a combustible substance which protects the carbonate from the acid." – *Trans. R. Inst. B. Archts.* vol. i. part 2.

Dr. Kugler maintains also that temples and other edifices represented on Greek vases of the best period are always of a white ground, and that the only ornaments introduced are capitals of a yellow colour; but on examining the vases of the British Museum, it will be 30 found that such only of the Basilicata, and those even of a less ancient date, are so painted; and it is questionable whether the white ground was not once covered with a coloured varnish. But in all the more ancient Attic and Etruscan vases the edifices are not white, but either coloured or black, like the figures. In case xxxv. of the "Bronze Room" of the British Museum are several Attic Lekythi of the best period, which have the neck and base 35 black, and the body of the vase white, with red outlines very delicately drawn. Among these there is one which shows the remains of a thick coat of enamel; but in those parts where the colour has fallen off, we perceive the original white ground, with the same delicate outlines. It is evident, therefore, that under those parts where the enamel is still perfect there exist the original lines of the drawing, which served to guide the artist who 40 afterwards applied the enamel. And we may consequently suppose that, in all those vases which present a rude white ground, the lines of the drawing and the subsequent enamel have fallen off.

On the coloured Lekythos referred to, the tomb of Agamemnon is represented, ornamented with white eggs, and with green leaves above the cornice. The yellow ground is destroyed, but we can perceive traces of its having once existed. It is very remarkable that the use of white grounds in attic vases coincides with that of the white marble of the same 5

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The second class of writers and controversialists may be styled the historical party, because they refuse to consider Greek polychromy in Attica as an insulated phenomenon, and explicable by the simple laws of utility and taste. They endeavour to discover the origin of the custom in its various ramifications, not only investigating what the Greeks practised and invented, but endeavouring to ascertain what the Greeks borrowed from Barbarians, receiving their customs in a more elevated sense, and refining and spiritualizing their ideas.

M. Hittorff may be considered as the exponent of this party, and by his restoration of the Temple of Empedocles, and by the works which he has executed at Paris, he has contributed more than any other to render the science of polychromy more generally understood. His system is based principally upon a small temple in Sicily, constructed of ordinary stone, and covered with stucco; but he also refers to the white marble temples of Greece itself. His work, which we are now led to expect, will doubtless contain important documents for the history and theory of polychromy, and will furnish convincing proofs of the truthfulness of his theory.

M. Hittorff admits the greatest extension to polychromy, but he gives to the constructive portions of his buildings, as the columns, architrave, and cornices, a light cream tint, relieved by a dark but richly-decorated ground on the wall behind. Except in this particular, his system is nearly identical with that of Kugler, who supposes that the only plain surfaces of marble temples which received a general tint of colour were the two extremities of the cella.

From a careful examination of ancient monuments, and from a diligent study of ancient authors, I am led to conclude -

I. The custom of painting edifices was general among ancient nations; and it was intimately united, and almost identical, with the use of stucco.

2. The use of stucco, decorated with painting or other ornaments, was but a substitution of a still earlier *motif*, more ancient than the wall itself – tapestry.

3. Every portion of ancient edifices, from the earliest period to the time of the Romans, was covered with stucco or some other material, decorated and coloured, with the exception of the plinth or stylobate, which in the more ancient structures displayed its natural construction.<sup>14</sup>

> country, and that traces of colour different in its material character from what one observes elsewhere, but greatly resembling each other, are found on each. I believe that encaustic painting required a white chalk ground, as a representation of the marble or ivory for which this species of painting was invented. In the "Etruscan Room" there are two remarkable vases, No. 280 of case xii. and an adjoining one. They represent porticoes of fountains, composed of black Doric columns; the metropes and the tympana alone are white.

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14 The influence of these ancient motives on the external character and appearance of their structures must have continued for a long period; and this character was that of

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## 4. The Romans were the first to introduce a visible mural construction in their architecture, both in the exterior and interior of their buildings. This principle was confirmed at the commencement of our æra, and became constant on the substitution of the arch for the wooden ceiling.

5. The employment of marble and other hard stones is more recent than that of sun-dried or burnt bricks, or of common stone.

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6. White marble was employed principally because it answered most perfectly all the requirements of a fine stucco – because it was, so to say, a natural stucco; although, without doubt, it must also have been employed from the excellence of its other qualities, as its hardness, its closeness of grain, its smoothness, – but, above all, its transparency and its whiteness, both of which latter qualities were necessary, even when it was intended to receive a complete covering of polychromy.

7. The more general employment of marble coincides with the introduction of a new application of colouring, which greatly affected the development of painting among the Greeks.<sup>15</sup> The ancient encaustic method which Pliny describes to us<sup>16</sup> was only | capable of being applied with wax on marble, or with a transparent gum on ivory. After this ancient method, opposed to the employment of melted wax, they applied coloured wax in the form of a paste, which they laid on in various colours, in the manner of a mosaic, or enamel work. This they melted afterwards with hot irons, covering the edges with a fillet of a different colour to the parts in contact.

The white marble never remained naked, not even in the parts intended to appear white; but the layer of colour by which they were covered was rendered

> variously-coloured tapestry, of tabulation, or lining with slabs, and of incrustation. It continued to exert its influence, even when decoration in sculpture and painting had reached their last stage of development. The sixth book of Vitruvius is very important, as demonstrating the system of ancient mural decoration as resulting from a particular process in the execution of stucco, which, in like manner, was founded on the traditional system of mural incrustation and of constructive necessity. Compare Wiegmann, *Die Malerei der Alten*.

15 "Ceris pingere, ac picturam inuere quis excogitaverit, non constat. Quidam Aristidis inventum putant, postea consummatum a Praxitele. Sed aliquanto vetustiores encausticæ picturæ exstitere, ut Polygnoti, et Nicanoris, et Arcesilai Pariorum," &c. – Plin. *H. Nat.* xxxv. 39.

16 "Encausto pingendi duo fuisse antiquitus genera constat, cera, et in ebore, cestro, id est, viriculo, donec classes pingi cœpere. Hoc tertium accessit, resolutis igni ceris penicillo utendi, quæ pictura in navibus nec sole, nec sale, ventisque corrumpitur." – Plin. *H. Nat.* XXXV. 41.

The word cestro is supposed to be the instrument, and is considered to signify an iron *stylus*. But *cestrum* is also the name of a botanical plant. The word viriculum does not occur in other Latin authors; and it is therefore uncertain whether Pliny here speaks of an iron instrument for applying the wax, or of some resinous matter therein employed. See Faraday's Analysis, in the *Transactions of the Institute of British Architects*.

more or less transparent, to enable the white colour of the marble to appear through it. In the same manner, coloured and polished marbles, granite, ivory, gold, and other metallic portions of the edifice, were all protected by a coating of transparent colour.<sup>17</sup> Further proof is afforded by Egyptian monuments in granite,<sup>18</sup> and by many passages in ancient authors referring to this practice.

8. It is difficult to advance any general system of Greek polychromy, on account of the variations being probably | greater in this flexible and changing element, than in the more fixed proportions and forms of either architecture or sculpture, even in which materials we find it very difficult to determine the normal proportions, so various do they appear. This becomes apparent, by consideration of the various dispositions of colour which have been observed in different monuments of Greek civilization. But the opposing principles of Dorism and Ionism which exist in all the institutions of Greece, in its politics, in its customs, in its poetry, and in its arts, are strikingly exhibited in the forms of architecture and sculpture. This same difference is observable with respect to ancient music, which in like manner consisted of Doric and the Ionic. Now, we know that the Doric legislators sought to found their civil institutions on the Egyptian system; while those of the Ionians based theirs on the traditions of Asia. Recent researches on the monuments of Assyria and Egypt have shown that the forms of Doric architecture were derived from Egypt,<sup>19</sup> while those of Ionia came from Assyria, or at least from some Asiatic country of common origin.

It may, therefore, be presumed that the different modes of music and of Greek polychromy were derived from the same sources.

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The Doric style in music and in polychromy was Egyptian, as the Ionic was Asiatic. There is more in this than the mere name, for we are fully acquainted

> <sup>17</sup> "Durat et Cyzici delubrum, in quo filum aureum commissuris omnibus politi lapidis subjecit artifex, eboreum Jovem dicaturus intus, coronante eum marmoreo Apolline. *Translucet* ergo pictura tenuissimis capillamentis, lenique afflatu simulacra refovente, præter ingenium artificis, *ipsa materia, quamvis occulta*, in pretio operis intelligitur." – Plin. *H. Nat.* xxxvi. 22. The word *translucet* and the expression *ipsa materia, quamvis occulta*, prove that the gold, equally with the stone, was covered with a varnish. *Lapis politus* does not necessarily signify, as we might at first suppose, the polish given to a hard stone, but that the stone was covered with a coating, whether of stucco or colour, and then polished. Compare the following passages in Vitruvius, among many others: – "Item Halicarnassi potentissimi regis Mausoli domus, cum Proconnesio marmore omnia haberet ornata, parietes habet latere structos, qui ad hoc tempus egregiam præstant firmitatem, ita tectoriis operibus *expoliti*, ut vitri perluciditatem videantur habere." – Vitr. ii. 8. "In his vero supra podia abaci ex atramento sunt subigendi, et poliendi, cuneis silaceis seu miniaceis interpositis.... Ipsi autem politionibus eorum ornatus proprias debent habere decoris rationes," &c. – *Id.* vii. 5.

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19 See ante, p. 87.

with the Egyptian style, and we know also the harmonious music of Asiatic colouring; for Byzantine, Arab, and Gothic painting, as indeed all modern painting, are derived from it. We may observe the two different styles contrasted together on the walls of Pompeii and Herculaneum.

It would perhaps be more easy to arrive at some definite conclusion on the different characteristics of Greek polychromy by help of this hypothesis, than by the feeble traces of colour | which we observe with difficulty, and which give rise to such opposing theories. We find the same difference between the Egyptian and Hellenic polychromy,<sup>20</sup> as between hieroglyphics and illustrative ornament and sculpture.

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9. Greek art did not reach the zenith of its perfection till the Doric influence was penetrated by the Ionic – the material by the spiritual. Those arts which are least dependent on the material, would be the first to emancipate themselves. The Ionic feeling might exert its influence on the Doric style of painting, even though the architectural forms preserved the stamp of their original extraction; and this change would most readily take place in Attica. It is, therefore, to be inferred that Attic polychromy was richer and more Asiatic than that of Sicily, or of those countries where pure Doric influence existed.

10. The following is the result of my researches and observations on polychromy, as applied to architecture: -

*Colour of the Architectural Masses.* – The prevailing colour of the temple burned with all the glowing beauty of the setting sun. The colour may be defined as of a yellow red, very vapoury, resembling that of the finest terra cottas. In fact, the general appearance of the temple would precisely resemble the appearance of a fine day in an eastern climate.

This yellow tint covered all portions of the order – the columns, the architrave, the cornices, and probably the triglyphs<sup>21</sup> and the beams. But all the flat ground members, as the walls – often decorated with paintings and ornaments – the tympana, the lacunaria, and perhaps the metopes, were of a ¦ blue-black.<sup>22</sup> These colours would be laid on pretty thick, so as to obtain a sufficient body: the red would be transparent, but not the blue.

Colours of the Mouldings and Ornaments. - The prevailing colours of the mouldings and ornaments were red, blue, and green; the two former colours

22 This was of a middle tint, rather lighter than the colour of the ornaments. It was 40 composed of black, blue, white, and a slight touch of green.

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<sup>20 &</sup>quot;Pictura quoque non alium exitum fecit, postquam Ægyptiorum audacia tam magnæ artis compendium invenit." – Petronius, *Init*.

<sup>21</sup> I have not been able to determine definitely what were the colours of the tryglyphs or the metopes. In my restoration of the Parthenon I have followed Vitruvius, and the Doric and Etruscan examples of Sicily and Italy, in colouring the triglyphs blue, and the metopes red; but I have reason to believe that the contrary was the fact.

being more perfect, more brilliant, and deeper, than in those parts which served as grounds. The green is very delicate, of a bright moss colour. The details of the ornaments alternate regularly, and are united together by very delicate and projecting fillets of white, black, or gold. In the temples of Athens, I believe them

to have been of gold.<sup>23</sup> Above the tolerably thick ground tint, may be observed thinner and transparent tints, completing the forms and subdivisions. It is difficult to tell the colour of the second tints, but they were probably of the same colour as the first. The enamels of Egypt, surrounded by golden fillets, give an idea of the appearance of the Athenian ornaments when executed in ancient encaustic. The gold with which the whole was lined, as in a spider's web, is concentrated in parts with greater effect and intenseness.

Sculpture partook of the same system of polychromy: the figures of females were almost white; those of men were of a darker tint. The use of gold was also very prevalent in sculpture.

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11. Painting was not the mere filling up of the mouldings, or imitation of sculpture; but more probably the sculpture was rendered accessory to the painting.

Gottfried Semper.

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### **On the Origin of Polychromy in Architecture**

#### ON THE

#### ORIGIN OF POLYCHROMY IN ARCHITECTURE.<sup>1</sup>

From the time of antiquity to our own day men have sought to discover or invent the probable origin of the various systems of architecture. Besides the well known *hut* of Vitruvius, and the no less celebrated *grotto* of the Ichthyophagi or fish-eating races, (the supposed type of the Egyptian temples), the tent of the Nomad, or wandering races, occupies a very important place in our theories of the origin of styles. In the catenary formed by the fall of the drapery of a Mongol tent, has been recognised the type of Chinese and Tartar architecture.

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<sup>23</sup> This bordering we find in Assyrian, Egyptian, and Etruscan paintings, and is either red or black.

I Extracted from an Essay written in 1852, and published in Germany under the title of "The Four Elements of Architecture." By Professor Gottfried Semper.

But no notice has been taken of the much more evident and less doubtful influence, which drapery itself, in its quality of a vertical wall, or partition, has exercised on certain architectural forms. Nevertheless it is the *motif* which I venture to cite, as the one on which ancient art has been principally founded.

It is well known that the nascent taste for the beautiful among those races which are in a state of social infancy, is first exercised in the manufacture of coarse tissues, which serve either as beds or as partitions.

The art of dress is less ancient than that of the manufacture of stuffs, as several examples of people to whom clothing is unknown, and who nevertheless possess an industry, more or less developed, in tissues and embroidery, may satisfy us.

The earliest woven work would seem to be the *fence*, that is, branches of trees interlaced, serving the purpose of enclosure and of partition. The most savage tribes are acquainted with this method of construction. Thus the employment of coarse tissue or woven work (which was a mere fence) as a means of securing privacy from the world outside certainly far preceded the constructed wall of stone, or of any other material; this last only became necessary at a much later period, for requirements which in their nature bear no relation whatever to space and its subdivision. The stone wall was made for greater security, longer duration, and to serve as a support for heaps of various materials and stores; in fine, for purposes foreign to the original idea; viz., that of the separation of space, and it is most important to remark, that wherever the secondary motives did not exist, woven fabrics maintained, almost without exception, especially in southern lands, their ancient office, that of the ostensible separation of space; and even in cases where the construction of solid walls became necessary, these last are but the internal and unseen scaffolding of the true and legitimate | representatives of division, that is to say, of drapery richly varied with ornamental work, interlacings, and colours.

The difference which exists between the ostensible and principal separation, and the constructed separation, is expressed in ancient and modern languages by terms more or less significative.

In the Latin tongue, a distinction is made between paries and murus.

The Germans, in the word *wand* (of the same root with *gewand*, which means texture) recal still more directly the ancient origin and type of a wall.

New inventions soon led to different methods of replacing the primitive drapery, and every art was successively called in to contribute its part to these innovations, which may have been brought about by various reasons; such, for example, as the desire for longer endurance, for the sake of cleanliness, economy, comfort, distinction, coolness, heat, &c.

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One of the most ancient and most general methods of replacing the use of drapery or tapestry is the coat of stucco or of plaster, furnished by the masons who built the walls.

Another very ancient method of replacing the original tapestry is, that of wooden panels, with which the wall was covered internally. That which proves the antiquity of this custom is, that in several ancient languages the expression which is only properly applicable to panels of wood, serves indifferently to signify every kind of flat surface (*table*) in wood, metal, ivory, or any other material.

It is thus we must explain the Greek expression  $\pi i v \alpha \xi$ , (in Latin *tabula*) as a painting on wood, or also on marble, baked clay, &c. Plates of burnt clay, thin but of large circumference, were equally called " $\pi i v \alpha \kappa \epsilon \zeta$ ."

The style of mural painting at Pompeii is only to be understood by the same ancient custom of covering and inlaying the walls which they reproduced in appearance by divisions and painted draperies. See Vitruvius, on this point, in the chapter on Plastering. Wiegmann has erred in attributing the same system of ancient painting to purely technic causes.

The Ceramic art was, in its turn, called on as a means of replacing drapery. It is certain that potter's clay painted, and even glazed, served, at a very remote period, as a covering for walls. It may even be admitted, that the employment of the potter's art on the surface of walls, preceded the manufacture of burnt bricks, and that the invention of burning bricks was the result of the custom cited above.

The mural incrustations in baked clay were the precursors of brick masonry; in the same manner as the Assyrian slabs may be considered to be the forerunners of constructions in hewn stone. We shall return again to this subject.

Among the various methods of replacing the use of drapery, should be also mentioned those furnished by metallurgic processes. Vestiges of metallic coverings on walls have been found on the oldest existing monuments; and the most ancient annals of mankind are filled with recitals of buildings resplendent with gold and silver, bronze and tin respectively.

As an invention of relatively recent date, may be cited lastly, the use of slabs of marble or stone, granite, alabaster, &c., notwithstanding that we find traces of this custom, but as it were already effaced, on the most ancient monuments of the earth. (*See farther on*).

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In all the cases we have named, *the character of the substitute followed* | *that of its original type*, and the painting and sculpture, or rather the two united, on wood, plaster, burnt clay, metal, stone, or ivory, was – and traditionally continued to be – an imitation, more or less faithful, of the embroideries or variegated interlacings which ornamented the antique wall-coverings.

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It may be asserted that the entire system of decoration, with the art of painting and sculpture in relief, up to the period of its highest application, which is that of the tympanums of the pediments in the Greek temples, proceeded from the manufactures of the Assyrian weavers and dyers; or rather from their predecessors in human inventions. In any case, it was the Assyrians – next to the Chinese – who appear to have preserved most faithfully the antique type, even in its application to a different material. We will enter a little more explicitly on this subject.

#### THE ASSYRIANS.

The ancient writers often mention and praise the Assyrian tissues for the art employed in their manufacture; for the splendour and harmony of their colours, and the richness of the fanciful compositions with which they were embroidered. The mystical figures of bucentaurs, lions, dragons, unicorns, and other monsters, which the authors describe, are absolutely identical with those which we see on the bas-reliefs of Nimroud and Khorsabad. But this identity was not in the subjects alone. There is no doubt that the manner of treatment, the *style* of these subjects, was identical with that of the objects embroidered on the tissues, which ancient authors have described.

On examining somewhat attentively the Assyrian sculptures, it is easy to satisfy oneself that the art of the Assyrian sculptor moved within limits traceable from its origin, viz., embroidered work, allowance being made for certain alterations of style, caused by the requirements of a new material.

One perceives in these Assyrian sculptures, the desire on the artist's part of an attention to the truth of Nature, but that he has been hindered in his task, not – as with the Egyptians – by a regular hieroglyphic system and hieratical laws, but rather by the caprices of a method difficult, and indeed foreign to sculpture, the influence of which was still strongly felt. Thus the sculpture of this people kept itself within the bounds of a very low and flat relief, exactly similar to that of some productions of Chinese woven work, seen in the Great Exhibition of 1851, which possessed peculiar interest in the history of Art, inasmuch as they exhibited the transition of the high woof into polychromic basrelief.

The Assyrian figures, without being embalmed mummies like those of Egypt, show, nevertheless, much stiffness and irregularity; they appear as it were imprisoned and confined within an invisible canvas. Their contours are, so to speak, tacked in with threads. One recognises in them an awkwardness and hardness arising from the contest of the artist with a material foreign to the style: whilst the Egyptian bas-reliefs evince an original, canonical, and voluntary stiffness. I am tempted to believe that all those slabs of alabaster from As-

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syria, with their religious, warlike, and domestic scenes, are nothing more than exact copies in stone, after originals in tissues, at that time celebrated and executed by good native artists, who worked on that material only, whilst they employed mere workmen ¦ to transfer the originals on to stone, as well as the material would allow, which explains the difference between the design and execution which these works betray. This same character is also found on the Assyrian paintings.

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It is not to be doubted that the true tapesteries were employed with profusion, side by side with the stereotyped copies: and probably these last were often covered with the orignals, on the occasion of solemn ceremonies, &c., and that they were only exposed during the intervals between the *fetes*, &c. We observe the same thing at this day in the Catholic churches, where this ancient custom, with many others, is strictly preserved. The inscriptions and their application in bands, indicate the same origin. Does it not appear as if the cuneiform characters were invented and designed for execution in needlework? In fine, the simplicity of the system of paving of the rooms, otherwise so richly ornamented, goes to prove that they were originally covered with tapestry. It is only the slabs which form the cills of the doors on which tapestry could not be placed, which indeed form an exception, being ornamented with engraved work, in imitation of tapestry. (*See* Layard.) It is thus that these last became also the types of parquetry work in mosaic.

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Up to the present point, we have only considered what relates to the representations found on the Assyrian slabs. But these, in themselves, give us still more cause for reflection, and singularly justify our assertion of the importance, in an architectural point of view, of the coverings of walls.

The principle of panelling constructed work shows itself here in all its primitive simplicity. We know that almost all the lower portions of walls, within and without, were covered with thin slabs of alabaster or basalt. The same principle under another form, obtained in the upper portions of the walls; here, the walls of unbaked brick were inlaid with glazed bricks; but the plan pursued by the Assyrians in executing this incrustation differs greatly from that which we observe elsewhere, and from what we pursue at the present day.

The Assyrian bricks are only glazed on the external side, and the ornaments and other subjects which were figured on them in the glazing, bear no relation to the construction, so that the ornamental lines cross the joints of the bricks irregularly.

The enamel is very fusible and the bricks but slightly burnt, evidently with the sole intention of fixing the glazing on them, which induces me to conjecture, that the use of glazed pottery preceded and prepared the way for that of baked bricks, and that the art of pottery was already far advanced before the introduc-

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tion of burnt brick-work. Other indications which would take too long to specify here, have proved to me, that the bricks received their coating placed in a horizontal position: First, they were ranged in the order which they would take when in their place, they then traced the design formed on this arrangement of unburnt bricks; next, they covered with these painted bricks – observing still the same order – the interior of the room; and lastly, they placed a fire in the room to fix the varnish which covered the walls.<sup>2</sup>

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It results, from what I have observed, that the decoration of the wall did not depend upon the construction of the same, even when baked and glazed bricks were employed.

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The constructive system – after the manner of mosaic – of decoration in enamelled bricks is a later invention, probably a Roman one. The enamelled Assyrian bricks, should be regarded as a mural incrustation, as a covering absolutely independent of the wall itself, and even of the terra-cotta slab or tile, on which it was directly fixed.

#### THE PERSIANS.

The Assyrian system of panelling the lower portions of their buildings with slabs of alabaster, may be considered as the first step towards construction in hewn stone, and towards the introduction of the "*coupe de pierre*" into the number of architectural and ornamental elements.

It is only in the terraces, and the sub-basements of buildings, in the primitive ages of art, that hewn stone and its construction appeared to the eye. These parts of the buildings were the mason's oldest domain.

The Persian monuments of Murgaub and Istakir, afford us the means of observing the second step which decorative art made towards the principle of construction. They were composed, like their models in Assyria, of unbaked bricks, of which nothing remains, whilst however, the direction of the walls is still indicated by marble pillars, which originally served to strengthen the angles of the walls, and by the jambs of doors and windows and by niches, with which the walls were ornamented.

All these parts were ornamented in the Assyrian manner, and testify to the principles of which we have been speaking. But here we have no longer slabs, but hewn masses of stone of enormous dimensions, frequently monoliths. Nevertheless, in spite of their solidity, they betray their type, in a most remarkable manner, inasmuch as they form a kind of framework hollowed out internally to receive the mass of masonry in unbaked brick, which they were designed to cover and to protect, and which, in the interspaces of the pillars and jambs

2 The same method is to be found in some old buildings in Scotland.

above-named, were covered with slabs of marble, or more probably, with panels of cypress-wood, covered in turn by plates of gold and silver, or it may be also with richly embroidered stuffs.

## THE EGYPTIANS.

The theocratic system of the Egyptians, although its origin extends beyond the 5 horizon of history and even of tradition, is not the less based on the ruins of a social state more ancient still, and much more natural. The founders of this system, have altered the primitive style of architectural decoration in petrifying it; that is to say, in making it a style eminently adapted for stone constructions and monuments.

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But amidst the hieroglyphical symbols may still be recognised the traces of its origin, obscure it is true, but unmistakeable. It has been observed by travellers in Egypt, that Egyptian art bears quite a different character in the sepulchral tombs, to that which is observed on the great temples and palace temples of the kings. It is that in these sepulchral chambers, art could move somewhat more freely than it was permitted to do in those grand monumental edifices, which were raised under the immediate influence of the priesthood.

Now it has been proved that in all the tombs, the ancient method of draping the walls, or rather of decorating them in the style of tapestry, was apparent in its greatest simplicity. It is observable, first in the character of the ornaments themselves, which consist of interlacings and gracefully varied knots, whilst these decorations borrowed from the weaver's art, are almost banished from the temples and are replaced by symbolic figures and ornament. It may be recognised, in the second place, by the fact, that the paintings in the sepulchral tombs are generally enclosed with borders, as if to indicate that they represent suspended tapestry.

Although this primitive type shows itself less positively in the temples, indications are nevertheless not wanting which remind us of it.

The contemporary artists of the French expedition have already observed and their discovery has been since then verified – that the monuments of Egypt, including even those executed in granite, have been covered with a complete coating of colour and varnish, over the entire surface. That indeed might be expected, for the hewn stonework of the Egyptian constructions, in spite of the neatness of its workmanship, is not laid in regular courses, which tends to prove that this irregularity, which contrasts with the symmetrical system of the decor-

ation on it, was hidden beneath a coating which covered the whole mass.

These monuments exhibit then the third transition step towards regular construction in hewn stone.

The construction, though massive and real, is always hidden, and does not enter yet as an ornamental motive in the compositions of the architect.

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It is worthy of observation, that one of the mouldings of Egyptian architecture seems to be explained by the same ancient custom of encrusting brick buildings with stone slabs, which we have remarked on the Assyrian monuments. I allude to the torus moulding which encloses the external walls of edifices. It served to hide the joints of the slabs which covered the internal work.

It is certain that the most ancient monuments in Egypt were constructed in unbaked bricks, which must have been covered with stone slabs in the manner above indicated. The Pyramids afford us very remarkable examples of this system of panelling, which is found still perfect in the sepulchral chambers contained in them, and the traces of which are still visible on the exterior. The same observation applies to the Palace of Osirtesen at Karnak, the walls of which are panelled with slabs of polished red granite, bearing the traces of a transparent coating with which they were covered.

#### THE CHINESE.

China is a country where architecture has remained stationary from its early 15 birth, and, consequently, the elementary motives of it are most distinctly preserved; they are placed side by side, without being conjoined by a general ruling idea. The external surface of the wall is still quite independent of the wall itself, and indeed is most frequently movable. The wall bears its own burden alone, and has only in view the filling up of the intervals between the wooden columns which support the third elementary want, (i. e.) the roof. The wall is only a screen, more or less solidly executed than others, constructed in slight brick work, covered externally with painted stucco decoration or interlaced cane work, and internally with tapestry, or its substitute, painted paper. The internal | divisions are formed by screens of the same description, and by drapery hung from the ceiling. The design of the ornament, painted and carved upon them and throughout the building, is founded on the same principle of interlacings and cane trellis-work, more or less intricate, and hardly to be recognised through the oddities of successive fashions. A polychromy, rich and brilliant, prevails, which has not been considered with that attention which it deserves in its relation with 30 the ancient style of polychromy.

## THE INDIANS.

The monuments of Oriental India, bear the impress of a settled civilisation, at least of the tertiary period. They are comparatively modern in principle and in date; but they furnish us, nevertheless, with very important hints on the history of polychromy.

The frequent use of stucco, which is better made in India than anywhere else, recals the system of the ancients, in covering their fine hewn stonework with a very fine and hard incrustation of stucco.

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The Indian edifices constitute, as it were, but a scaffolding from which to hang the drapery forming divisions of their spaces, as in China, and as formerly in Assyria, Egypt, and Greece.

## THE JEWS AND PHENICIANS.

5 At present we have only mentioned existing examples; but the ancient writings furnish us with other no less important matter. The description of the celebrated Ark of Moses, and of the Tabernacle, taken with that of the Temple of David, contains a complete history of polychromy. This curious recital of Jewish antiquities presents us with a progressive development of that elementary principle of architecture which I term "the Enclosure."

The documents and chronicles of other nations furnish us with parallels to what is contained in the holy writings. The Temple of the Slaves at Mechlenburg, according to the description of Baron von Rumohr, on the faith of ancient chroniclers; was constructed in the Oriental fashion, and richly ornamented with tapestry and gilded wood work.

## THE GREEKS.

We now come to the Greeks. Hellenic art must have partaken of the composite character which is manifested in Hellenism generally, and which is so well expressed in the Grecian mythology.

As the beautiful marble, which forms the cliffs and coasts of Greece, notwithstanding its homogeneous transformation, betrays by veins, by fossils, and other indications, its sedimentary origin, so Hellenism, although it may appear homogeneous, and cast – so to speak – in one single jet, betrays, nevertheless, its secondary origin, and the sediment which constitutes its material groundwork.

It would be important to follow up these vestiges of rudimentary Hellenism, since they might enlighten us on certain phenomena in Hellenic art, which have been up to the present time inexplicable without them.

This applies especially to the polychromy of Greek edifices. Much yet | remains to be done in this department of Art History, which has been generally discussed either by learned men but no artists, or artists with little learning. The vestiges of rudimentary Hellenism of which I speak, wherever visible, present the same features that we meet with in Assyria, Egypt, and China, and even among savage races; but it would appear that the Greeks, prior to treating in their peculiar manner those principles of art which they inherited, had partly forgotten their origin and their material or hieratical meaning. Thus, only, could they have had the mind free, and ready to commence them anew with an artistic

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and poetical feeling.

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Exactly the same thing occurred in their mythology, which is only poetic fiction based on traditions and fables, partly native, partly foreign, the primitive meaning of which was no longer understood by the poets, who formed them into the groundwork of their cosmogony.

The system of Greek polychromy is the richest of all those of antiquity; but it 5 is, apparently, based neither on a principle of construction or material as among the Assyrians, nor on a hierarchical principle as among the Egyptians. The most striking oppositions of principle are found united in it and harmonised, a more artistic and elevated, but less positive conception. Nevertheless, this applies only to the edifices of a period when art was in a state of high development among 10 them, since the ancient Doric system appears to have had much in common with Egyptian art before it was penetrated by Ionian influence, which depended rather on Asiatic traditions.

I am convinced that the style of Doric polychromy was essentially different to that of the Ionic, which was, notwithstanding, of equal antiquity and originality.

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Doric polychromy was based on the Egyptian system, whilst that of Ionia was based on Asiatic models. The first named was lapidary; the colours were detached on a whitish or yellowish ground; there was no gilding, and the use of blue was common, that being the holy colour of the Egyptians (a turquoise blue), the symbolic colour of the priesthood and aristocracy.

The second was more primitive in its nature and recalled more directly the elementary motive of *tapestry* and *embroidery*. The ground was generally of a rather deep colour, blue or red, even in the constructive portions, such as the shafts of columns, architraves, &c., a good deal of gilding and sea-green (prasinum) was used; the favourite colour of the Assyrians, the symbolic colour of absolutism and of democracy. The green is still now the holy colour of the successors of the Assyrians in Asia.

This difference of style, analogically observable in the music of these two races, explains the divergent investigations made on the temples of Sicily, and those of Athens. The monuments of Athens, Doric in their general appearance partook, nevertheless, a good deal of the Ionic character. The Ionic mind had penetrated Doric matter, and colour being the least material was that which the Ionian sentiment most easily mastered.

It would be a difficult but very interesting task to unravel the religious and political signification of certain colours in ancient times. We know that red, blue, turquoise, and sea-green, were the four colours by which the factions of the circus distinguished themselves. These were not capriciously chosen, each faction having adopted that colour, the symbolic and traditional meaning of which agreed with the political principles professed by it. | 40 Traces of the antique system of covering construction with tables of wood, plates of metal, or slabs of stone, representing tapestry-work, may still be perceived in the Grecian monuments, for those parts of them which were destined to be ornamented with historical paintings or painted sculpture, are executed in the Assyrian fashion; as, for example, the tympanums of the pediments, the metopes, the friezes, the parts between the columns, and round the walls of the "cella." It is thus that Grecian monuments show us the fourth path which architecture made towards stone style.

The constructive parts of the building, that is to say, those parts which constituted the entablature of the roof, and its supports, *the columns*, were painted with the colour of the Greek vases, viz., a very transparent and vaporous brownred. The walls, inclusive of the "*antæ*," which formed only projecting parts of the walls, were of a blue, which was broken by black and a little yellow, and not very dark. This colour formed also the ground for most of the sculptures, except the metopes, which I believe had red grounds. The red in the ornamented mouldings was a very bright vermilion, differing from the red of the ground by colour and treatment.

The same is the case for the blue, which, in the ornamented mouldings, is deeper than on the large surfaces, and tinted in different shades. The *oves*, or eggs, for instance, were blue, with a darker blue tint around.

The green is a colour which occurs frequently on the Athenian temples, so on the leaves on the moulding which runs under the frieze of the opisthodome of the temple of Theseus, and between the red and blue leaves of the capitals of the antæ. The same sea-green occurs on the draperies of some sculptured figures.

The enamels of wax were frequently covered with washes of thinner colours. This has not been remarked by our restorers of antique polychromy, but is nevertheless necessary for giving softness to the general effect.

The ornaments, as I have just observed, are placed in pieces and soldered together; the solderings forming fillets slightly elevated from the surface and of another colour. I cannot say whether in gold, black, or even in some parts white. I have, for my own part, adopted the hypothesis that it was gold in the Athenian temples, but not on those of Sicily where a strict Doric character prevailed.

I have not found many traces of colour on the Ionic temple of Minerva Polias, and cannot say if the red, which I found on the columns of the Northern Portico, belonged to the ancient colouring, or was of more recent date. On the plate, in my work, which gives a panel of the temple of Theseus, is seen the design of a row of pearls, with a double range of disks.

I can guarantee the exactitude of my observations, although this extreme richness and smallness of detail in an object destined to be seen from a distance may well astonish us.

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I have traced every mark on the stones themselves: and, moreover, subjects of this kind are not capable of being invented; indeed it would be a great compliment to suppose me capable of inventing these designs, which I consider charming.

In the portion which I have found in the wall with the niche (see my work), these details are not to be seen. I have also discovered traces of colour, very much effaced, on the small choragic Monument of Lysicrates, which I have carefully examined. It appears that on the ornament which surmounts <sup>|</sup>/<sub>1</sub> the roof, there was a variety of blue and red, and that the acanthus leaves were coloured green. The tripod was not placed upon this ornament, but round it, the feet resting on the three volutes which descend from the roof, analogously to the marble tripods which are often met with in various museums of antiquities.

I will not speak of the colours of the Parthenon, which are not so well preserved as those on the Temple of Theseus, but the traces of ornament which decorated that temple are seen by the incisions still remaining. It would appear that the system of ornament there applied was similar to that on the Temple of Theseus.

Some years after my sojourn at Athens, portions of this building have been excavated, with the colours very well preserved; as well as other fragments of architecture which belong to the old Hecatompedon (destroyed by the Persians) covered with painted stucco.

I have not found very decided traces of the colours employed on the Temple of Minerva Polias; the columns appear to have been red, as at the Temple of Theseus. The ceiling of the Temple of the Caryatides had painted frets and orvolos, which I have traced; but the colour was no longer visible. Traces of painted ornaments are to be found also on the Tower of the Winds. I have not been able to get a close view of them.

As regards the sculptures, I have found some regularly encrusted with colour. I have found green (prasinum) on the tunic of one of the seated goddesses, on the frieze of the Temple of Theseus: another figure was clad in a vestment of a deep rose colour. The Caryatides of the Erectheum had blue tunics. We may see that, even on the one in the British Museum.

Mr. Bracebridge has described statues which were excavated in his presence near the Parthenon with flesh tints and painted eyes. The figures of the pediment of the Temple at Egina still retain traces of the colours with which they were decorated. The same observation applies to the metopes of the temple at Selinuntum, now at Palermo. Curious fragments of painted architecture may also be seen at the museums of Syracuse and Girgenti.

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The Romans painted their white marbles, like the Greeks. The three columns of the Jupiter Stator in the Roman Forum are painted red on that portion which has remained a long while buried.

The Trajan Column, which I have examined, retains traces of colour and gilding: the entire column had been once covered with a rather thick coating of colour, in which I recognised green, blue, and yellow; but it is probable that this last was the remains of the gilding.

for annual report in Deney Set in Bo on the Collect of arms / at Catter 1 Her the property In Succes meles les, film The Mges typ gr heir importance fo hermihion , Brancetal ask ) Semper Prof and of metales Mital working in the Department of Practical ash ecially There for u. amurers 19 Sword th. Variety and purp The the different ring in the ask of metal orking, which procepes have been applied in their fulleff Development for arms and neapons. It is unlai that no other branch metalworking, not even the Galdsmiths are not term those act

Pl. 4: Report on the private collection of arms at Windsor Castle, 1852 (gta, 20-Ms-107)

# DEPARTMENT OF PRACTICAL ART

## **Report on the Private Collection of Arms at Windsor Castle**

364 (B.) – Report on the Private Collection of Arms at Windsor Castle, the property of Her Majesty the Queen, prepared, with Her Majesty's gracious permission, by G. Semper, Professor of Metal Working in the Department of Practical Art.

## To the Superintendents of the Department of Practical Art.

The instruments of war and of the chase have always been considered as most suitable ornaments for their noble bearers, and therefore from a very early period they were objects of decorative art, while the uses to which they were put did not permit other decorations than such as conformed rigorously to the principal laws of fitness, convenience, and style.

Their importance in the study of ornamental art in general, and of metal working especially, is therefore evident.

These products of the craft of the armourers and swordsmiths are interesting,

First, for the variety and perfection of the different processes connected with the art of metal working, which processes in their fullest development have been applied on arms and weapons. It is certain that no other branch of metal working, not even that of the goldsmith and jeweller, presents greater variety and perfection of processes than those which we find in this.

Secondly, they are not less important for the study of *style*, in so far as we understand by this term those achievements in works of art, arising from using the means artistically and observing the limits, which are contained in and defined by the task and problem in question; as well as by all the accessories, which modify the solution of it in every case. It has already been mentioned why such objects must necessarily be suitable models for studies of styles.

Thirdly, arms and weapons are interesting for the study of what might be called the history of styles, arising out of that peculiar character by which the artistic productions of different countries and ages are distinguishable from each other.

The history of ornamental art in metals cannot therefore be better illustrated than by a collection of arms and weapons; for we see at once all requisite conditions observed, what has been done, what is the most convenient for style, and what is the most pure and rich for decoration. Thus we may observe a relative elevation of art manifesting itself on arms and weapons, arising out of these very circumstances, when in the centuries of barbarism and decay the practice and science of art was otherwise almost lost.

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The same results appeared when ornamental art attained its highest elevation in the ages of flourishing civilisation. The craft of the armourer has often been the seminary for artistic talents of every description, and high art did not disdain this branch of application.

A relative purity and chastity of taste and style is finally observable on arms in those luxurious periods of art when the principles of style were disregarded, and the arts followed the general direction of the age for novelties and extravagances of all kinds.

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We have happily better opportunities to pursue the study of art on arms and weapons than is afforded by any other branch of ornamental art; since many fine collections of arms are to be found in the different countries of Europe forming so many almost *unexplored* treasuries of ornamental art for artistic investigation.

The largest and most renowned armouries in Europe were in the beginning practical institutions, for they were arsenals. Some others, for instance that of Vienna, formerly at Castle Ambrass, had from its commencement a more antiquarian and historical destination.

Others partake of both of the two qualifications, such as the private collections of sovereigns, princes, and others.

Among the last is the royal collection of arms at Windsor Castle, without doubt one of the most interesting and perhaps the most valuable of all.

Besides the richness of its contents it is highly important for the artistic significance of many of the objects and their rare state of preservation.

But the artistic significance of the Windsor collection, or of any other collection of arms, has not as yet been sufficiently explored.

Some illustrated publications on arms and weapons, as, for instance, the 25 works of Meyrick, of Tubinal on the Madrid armoury, that on the imperial collections of Russia, and Baron von Ebner's work on costumes of the middle ages, contain very useful materials, and their acquisition for the library of the Department of Practical Art is most desirable, as well as the printed catalogues of the most important collections in Europe.

But they scarcely give more than the general forms and characteristics of the weapons, and are not sufficiently detailed for practical instruction.

I therefore beg leave to recommend to the attention of the Superintendents of the Department of Practical Art the following proposals respecting the enrichment of the Museum with some specimens of arms, swords, guns, &c.

It would be difficult to provide the new establishment at once with a sufficient number of selected specimens of arms, proportionate to their importance as means of instruction. But this want of the Museum may be temporarily supplied by loans from the possessors of collections of arms.

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Her Majesty the Queen has already graciously permitted the Department to borrow specimens from the rich collection in Windsor Castle.

The collection is unique for its treasures of Oriental arms, but as it appears to me that Oriental art is at present very well represented in our Museum, I reserve my proposals for other branches of the armourer's art, and mention only three objects of Eastern art, as being very instructive and interesting for the richness and originality of the processes employed in their ornamentation.

1. Burmese sword, No. 9,356, for the beauty and peculiarity of the chased hilt, &c.

2. Sword, which passes for Moorish, but which certainly is Chinese, No. 2,315, for the richness and originality of the processes employed for the decoration of its hilt and scabbard, with ornaments of various metals.

3. The breast-plates, forming part of the armour of Tippo Saib (hanging in the passage, decorated like a tent). It is remarkable as a beautiful specimen of steel-chasing and of pure simplicity of design.

Among the Western arms may be mentioned a strong Gallo-Roman sword of iron, with bronze hilt. It would appear modern and counterfeit, if it had not on the hilt some small silver rosettes, like filigree works, which once were filled up with enamel. The general form of the sword, and this ornament on it, render this specimen remarkable. The rosettes are instructive in the history and practice of the enamellers art. |

The collection of Rénaissance weapons is very considerable, and has perhaps the greatest interest for our modern practice.

Among the swords there are three of the first distinction.

One of them, No. , has been attributed to Benvenuto Cellini without <sup>25</sup> reason. It has some relation in style and execution with the fine shield belonging to the Queen, which is at present in the Museum, and perhaps belonged to the same panoply.

The second, No. 222, is of a somewhat later period, and inlaid with silver. The general form is very elegant, and the ornaments are of the best style.

The third, No. 276, has been executed after the same principle as the second, and shows the third step in the development of the form of the modern sword.

Another sword, probably of James II.'s time, has a hilt formed by serpents, chased in steel, and is of very good design and well executed.

Then comes the Dutch sword of the 17th century, which is decorated with 35 fine chased medallions, with portraits of some heroes of the Dutch history.

This series may be closed for the present by mentioning one very beautiful sword of the time of Louis XVI., which in the catalogue is given as an English work. The hilt is gold, with enamel pictures in cameo on azure ground, which no doubt were done by one of the best masters of the time. I have never seen better enamel pictures.

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This specimen is not only to be recommended for the beauty of its details, but also for its general form and the good taste and careful execution which pervade it.

It gives an evidence of what has been said before, that purity of style is to be found on arms and weapons even when general bad taste in art is dominant.

Among the other Occidental weapons, besides the guns, may be noticed here the beautiful halberd of the time of Henry VIII., a present of the Pope to the King, and of Italian workmanship.

Among the guns are the Oriental guns, not less distinguished by the beauty of the workmanship of the barrels than by the good taste and the richness of their ornamentation; and it is principally for the first quality that they excel our modern guns.

It may be allowable to allude here to the excellent arrangement in the Museum of Practical Geology, where the different processes (among others that of barrel-making) are shown in technological surveys, to the great profit of the students. Would it not be desirable to have similar arrangements for our Museum, with this difference, that the artistic element must predominate above the geological and the metallurgical?

Among the Occidental guns, which are altogether excellent, I remark for the present the famous Lazarino Cominazo guns, distinguished for the style of their barrels, which is, at the same time, decorative and practical. They are manufactured with the nails and the shoes of the Appenine mules.

The gun of Louis XIV., worked by Piraube, is probably the finest gun in the world. The barrel is inlaid with gold flowers, the sight is silver, the head-sight steel, carved in open work. The whole is rich and sober at the same time, and the distribution of the decorated part is perfectly well understood. The execution is also very beautiful. It is a model for ornamental art in its application on guns.

The same case contains other admirable specimens of more modern workmanship. – One Spanish gun of Joachim da Zelaja, and the fine pistols worked by Weiss at Suhl, in Germany. The same master made two guns, which are at the same place. These arms are the finest specimens of Louis XV. style: and for this reason, as well as for their fitness and for the excellent workmanship of the whole, are very interesting.

The same case holds also the renowned Kuchenrenter guns and pistols; they 367 are the best for practical use, and the application of the ornaments on them is graceful.

These are the objects which, among so many other things exacting attention, it may be sufficient to point out for special notice.

I take this opportunity to make two other propositions, relating to the same object.

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I beg leave to recommend – Firstly, that coloured drawings of the most interesting arms and weapons in the Windsor collection and at other armouries in England and elsewhere should be made. Sometimes coloured drawings are more useful than plaster casts for students.

Secondly, that plaster casts be made in such cases where this manner of reproducing the originals, is more useful; as, for instance, for répoussé works and steel carvings; and,

Thirdly, that electrotypes be made of the finest specimens of arms; such, for instance, as those at Dresden. Some electrotypes have already been reproduced of the beautiful shields which are at Dresden.

Gottfried Semper.

London, September 20, 1852.

## Berlin Productions of Plastical Art, Metal Casts, Plaster Casts

fol. 2r 1. b Henry Cole Esquire Superintendent etc etc.

My Dear Sir

M<sup>r</sup> D. Born, Agent for Berlin Productions of Plastical Art, Metal casts, Plaster Casts etc. proposes to the Superintendency of the Department of Practical Art to purchase for the Museum some of his articles, which partly are specified in the bygiven Catalogue.

Among the Objects it contains are two Suits of Gems and Medals, which for I beg leave to call the Attention of the Superintendents.

The first is the Collection of antique Gems, known under the name of the Stosch Collection, which forms the principal part of the Collection of gems in the Museum at Berlin. |

The price of the plastercasts of this Suit of gems, (including the well known Catalogue of it, prepared by Winkelmann in the Year 1769,) ranged together in 20 neat boxes, will be, including the charges of transport etc, about 25 Liv.

Each Cast of a gem is sold separately for 2<sup>1</sup>/<sub>2</sub> Silver groschen or circa 3 pens at Berlin. Hundert pieces together are sold for 6<sup>2</sup>/<sub>3</sub> Dollars or circa one Pound.

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The whole Suit contains 3444 pieces. -

In the bygiven frame are contained some specimens of this Suit. -

2° – The Collection of Cinque-cento Medals and gems, 500 *pieces*, cast after the Originals of Italian and German Masters, who executed them partly in wood and Speckstone, partly in Metal. The Originals are in the Royal Museum and in the Kunstkammer at Berlin, and some other belong to private Collectors.

They originate from the Epoch between 1440 and 1640 and are the works of Pisani Sperandio, Boldu, Valerio, Leo Leone, Albrecht Durer, Heinrich Reitz, Magdeburger, Jamnitzer, and other.

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This Suit is very interesting | for artists and it would be desirable, to have in the Museum some of the finest specimens of this Branch of art, in which the Italian rivalled with the German Masters of the period in question, and were not equalled since.

The whole Suit costs about 10 Liv. (60 Dollars at Berlin) and the single peaces are sold between 3 pens and 5 pens each.

The suit of German Medals separately is bought in London for circa 2 Liv. complete. –

 $M^r$  Born wishes to be informed before the Season of the Winter has advanced farther, the Transport from Berlin beeing afterwards interrupted by the River-ices. –

M<sup>r</sup> Born brought me also the table with Zinc-casts of Mr Eichler's Manufacture, which had been exposed in the Exhibition of 1851. and thinks, that it would be interesting for the Museum of the Department. It will effectually be so, for the comparison with the English and Frensh productions of the same kind.

He leaves it for 18 Shillings.

Then M<sup>r</sup> Born recommands to the Attention of the Superintendents of the Department the cast Iron Ornaments of Devaranne at Berlin. He gives some specimens of these objects; among them The following numbers may be the most interesting for the Museum, as proofs of Skill in Casting Iron.

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The Brooch 2/6. the Bracelet 5/6. – nº 540. – Bracelet and Brooch. Each à 4/6. – nº 126 – Bracelet and Brooch.

6./ – nº 113 – Pendants –

3/.6. - n° 558 - Brooch -

The peculiar nature of the sand into which the metal is poured, seems to be very influential for this fine industry; I therefore beg leave to recommend the proposition, to procure some quantity of this Sand, as specimen for the Museum, and perhaps for experiments, by the mediation of the Agent, M<sup>r</sup> Born. –

The same proposes also for acquisition a Copy of the Shield of Hercules, composed and executed by Schwanthaler in Munich. This Copy is cast and ciselld in Copper or Bronze by the artist and costs 400 florins or circa 40 Livres.

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But I think this summ too large and believe that a Plaster copy or at the most a Electro-type Copy of the Shield will suffice, if altogether the Superintendents should | find this Subject, proposed by Mr. Born for acquisition, for the moment wanting for the Museum.

11 October 1852.

I am Dear Sir Yours feathfully, GSemper.

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## **Observations on Some of the Specimens of Metal Work**

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# OBSERVATIONS ON SOME OF THE SPECIMENS OF METAL WORK. By Professor Semper.

The comparison between the numbers M I and M 20 on the one hand, and number M 2 on the other, is interesting as a study of ornamental colouring. In M I we see how the blue and green enamel grounds stand crudely opposed to each other, without being united by a common parentage. Even the introduction of the ruby into the system is hardly sufficient to render them more harmonious. Even in M 20 we observe some deficiency of harmony, but here it is less violent, the green and blue tints being broken and connected together by the neutral black, which has been interposed between the two tints. These and some similar works of Oriental art stand in direct opposition to the beautiful Tulwar or Sword, M 2, and such objects as M 11 and M 12, which belong to the same system of colouring and ornamentation. Here the various powerful and brilliant colours, although violent, are united by a common hue or tint, which is spread over the whole. Every colour is one shade of a general scale, to which all the others belong, passing from the green through the white to the red, which last, in its special hue, is thus made the dominant colour of the whole system. The ground is formed, not by white, but by a neutral jade colour, which is very pale, but always greenish on the scabbard, where it works in unity with the green leaves and the gold rims to contrast the ruby or rather the Oriental red (sang de bœuf) of the flowers, which last are here dominated by this coalition.

The same alliance between the green leaves and the jade coloured base, as complementary to the red, is more fully exhibited on the lower part of the hilt of the sword, where the ground is of a somewhat darker greenish tint.

fol. 4r 3 b.

On the middle compartment of the hilt, however, the same jade coloured ground takes another hue, and enters into an alliance with the ruby against the green, making thereby the ruby the dominant colour.

Thus we observe on this beautiful specimen of Oriental art, variety and contrast most happily combined with harmony and repose, which result has been obtained, first, by a common key, upon which the whole tone of the system of colours has been tempered, and, secondly, by the system of subordination, which has been carried throughout.

The first quality, harmony, obtained by a common tone of the colours which enter into the system, is one of the great mysteries of beauty which unerringly prevail in nature and such works of men as are simple expressions of natural artistic feelings.

Such works are generally tinged by the natural hues of the materials employed, which hues form the bases and connecting links between the bright colours which enter often into the composition of their ornamentation. This may be seen in the straw and rush carpets of the Oriental, American, and African tribes; in the embroideries upon leather and wood-bark by the Canadian; in the raw-silk and cotton tissues of the Chinese; in the ornaments made with tinged rice; in coloured gutta-percha ornaments; in the terra cotta vases of the Greek, and in the jade vases of the Chinese and Indian.

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Specimens of this kind are extremely interesting for the study of colouring, and are very often at the same time good examples of ornamental art in general. The fine jade vases, M 102 and M 103, belong to this sort of ornamental in-

dustry, and are, with their inlaid stones, nearly related to the enamels in question, which seem to be quasi imitations of the natural materials which enter into the composition of these works.

The attainment of that great object of ornamental art, which consists in the due subordination of the ornamental parts to the chief impression, is not often to be found in works of early periods of art, and seldom prevails in Oriental art, which generally suffers from the absence of this principle; we see on them flowers and ornaments spread over the whole, like net-work. The above-mentioned sword forms, however, a beautiful exception, though the hierarchical principle in it seems to be neutralized by its double application.

Egyptian, and more especially Greek ornaments and implements, combine these two high qualities, and moreover excel the Oriental works in the elegance of their general forms and outlines; it will therefore be extremely useful to have a greater number of antique ornamented works for comparison with the Oriental, mediæval, and modern articles in the Museum.

The modern works in the Museum are chiefly specimens of the facility and skill of the present age in treating materials, but at the same time, some of them

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give evidence of danger to the true progress of art, which may arise from their study. The works of Vechte are worthy of being placed at the side of the works of Michael Angelo and Cellini; and the vases and other works of Sèvres manufacture are beautiful specimens of modern enameling.

The sword, M 55, is very well executed, but the ornamental parts of the hilt are not adapted to the principal object, and in themselves a little clumsy. The hunting knife in the style of the 15th century, manufactured by Marrel Freres, is a fine specimen of execution in metal, but seems to fail in style and character.

The amourer's art is one of those which most require to be sustained by old examples; these nevertheless have been neglected by modern armourers, because their immediate application to modern arms is not so easy, nor has it been so much required, as the imitation of old bracelets or broaches, for the copying of ecclesiastical candelabra.

The newly acquired additions to the Museum, included in the numbers M 123 to M 134, are interesting as illustrating the history of styles, while some of them are fine specimens of ornament.

Among them the cast-iron knocker, M 125, deserves the first notice. It comes, probably, from Nuremberg or Augsburg, or some other town in Middle Germany, and dates from the end of the 15th century.

In Germany the Gothic style lost its simplicity and purity at the beginning of the 15th century, or even before that time; and its early decay was partly owing to the introduction of new processes and modes of execution, both in architecture and other works of practical art.

Among the innovations of this kind which most largely occasioned this change, were those of casting metal and producing the details of architecture and of ornamental art, by casting such as before this period were usually carved or cut in hard materials, or executed in chased, hammered, and forged metal.

Architecture and ornamental forms had obtained, under the influence of the old processes, a certain conventional style, which henceforward contradicted the new means of execution.

Under these circumstances, it would have been a fault instead of a merit if the sharp angular forms of the old style had been preserved by the artists and architects of the 15th century.

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Peter Visscher's monument of St. Sebaldus is a very interesting evidence of this fact. It is indeed, as a Gothic monument, very impure in style, and contrasts strongly in this respect with the design, made by another sculptor of the time, for the same monument, whose working drawings are known to us, having been published by Heidcloff; but it would have been an error if Viet Stop's design had been adapted, suited as it is for wood carving, to be executed in cast-metal instead of that of Peter Visscher, which, although impure as a style, is admirably adapted for metal casting. 10

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The classical (antique) style which was introduced at this time, was a happy solution of the contradiction, and had long before become necessary.

The cast-iron knocker, M 125, is a small, but very interesting specimen of this period of transition. It is one of the earliest pieces of iron casting I know, and has a special interest from being connected with the history of this specialty.

2. The small Gothic key is, in some respects, the companion to the former work, as it shows iron forging combined with the purer forms of the Gothic style.

3. Indian enamel vase. If it is Indian, it is the only example in the Museum of this kind of enameling executed by Indians. All the other Indian enamels are of the nature of Champleve's enamels: the handles look rather Chinese or Japanese; at all events it forms a fine specimen of Oriental art, and evidences the limits within which bright colours may be employed without loss of harmony. The other objects have more interest in the history of styles than as beautiful models in themselves.

G. Semper.

## A Plan of Instruction for the Metal and Furniture Classes

(F.) – A Plan of Instruction for the Metal and Furniture Classes. By Professor Semper.

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## I. – System of Instruction.

Experience seems to prove that institutions for teaching practical art and art in general will be most likely to fulfil the purpose for which they are designed if established in form of ateliers rather than schools.

For this reason I may be allowed to express a wish that such a form of instruction should be adopted for these classes.

It differs in the following essential points from that of schools of design and academies: –

I. In workshops or ateliers there is no classification of the pupils or students, either as to age or as to their various progress in art. Thus, beginners learn quicker and easier by working amongst the more advanced, and by seeing them work.

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2. The different subjects of instruction are not systematically arranged in daily and weekly succession, nor divided into lessons, according to a fixed order of studies, except as regards lectures, and such instruction as | requires preparation, as lighting and firing kilns, &c.; or those which the students participate in, together with other classes and under other instructors, within or out of the Department.

3. The students assist the Professor of the atelier in his practical works; and in this way they are brought into many relations with practical men, and have the best opportunity of getting practical knowledge and experience.

#### II. - Subjects of Instruction.

I. Geometrical principles of design, including perspective and projection of shadows, &c., illustrated with examples which are so chosen as at the same time to be exercises in proportion, the elementary forms of practical art and architecture, and in construction. These exercises must be combined with instruction in the geometric principles of design and in modelling. (See lectures.)

2. The principles of style illustrated by examples which are to be copied by the students. These studies should at the same time be studies of technology and of the history of practical art.

The models are either real objects of practical art, or fac similes of them, in plaster or otherwise, or finally drawings.

The usual mode of copying the models is by drawings, with or without colouring. It may however be desirable, in some circumstances, to have them done by modelling, and opportunities should be provided in the room for modelling in clay and wax. (See 4.)

3. Composition of objects of ornamental art.

That very important part of the instruction in the arts, how to cultivate invention either of objects themselves or of their ornamental details, is now too much neglected; and we daily see clever draughtsmen and modellers who are well acquainted with anatomy and able to represent truly whatever they see before them, yet have but little ability in the art of composition. The students pass the whole of their time in copying and making studies after nature, without trying their powers on productions of their own.

Those copies and those studies would have much more interest for the student, and be rewarded with much greater progress, if done in connexion with some idea which the student had in his mind, or had sketched, and which he requires to work out to completion.

The talent and spirit for composition ought to find encouragement from the beginning of the artistic education.

I therefore make the following proposition for the studies of my classes: -

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### Competitions between the Students.

Competitions between the students of the metal-room to take place regularly every fortnight, on Monday.

The students to spend one day composing sketches for some subject of ornamental art, to be proposed to them by the Professor in written programmes, fixed on the wall on the morning of the day of competition.

Two such programmes will be given at once, - one for beginners, the other for the more advanced students, who will be classified only according to this distinction.

The sketches might be ready in one day; those not delivered on the evening of the same day to be excluded from the competition.

On an early day after these competitions the Professor to give a critical review of the sketches sent in, and afterwards leave to the students themselves to point out, among others, those which merit the preference.

The sketches, with explanatory remarks, will afterwards be presented to the Superintendents of the Department for them to determine the prizes.

Small rewards and official certificates should be delivered to the two most meritorious as prizes.

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Besides these small competitions, there should be twice a year competitions of finished works.

The programmes of these competitions will be given on the first Mondays of the months of April and September, or any two months in the year, and six weeks will be allowed for finishing the works.

The second competition of the year should be the so-called great prize competition. The successful candidates being rewarded by gold, silver, and bronze 25 medals, and by official testimonials. The gold medal might be the highest prize, and only be given if one of the competitors is not only the best among the others, but has highly distinguished himself by his labours. To that medal might be attached, by the Board of Trade, certain contingent advantages to the student in the prosecution of his studies, to be hereafter determined upon. The works 30 rewarded should be the property of the Department.

The other competition, the first in the year, is of the same nature as the former, except that no higher prize than the silver medal could be obtained.

The competitors of the second class will be advanced to the first class, if they succeed in gaining the prizes in the two great competitions, having their own programmes.

Further details as to the competitions and rewards can be given, if this plan is considered a desirable one.

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4. The various Professors of the Department may be thus combined for instructional purposes: –

- (a.) Enamelling different processes of enamelling and enamel painting. By Mr. Simpson and P. Semper.
- (b.) Modelling, moulding, and casting, in plaster. By Messrs. Townsend, Brucciani, and Semper.
- (c.) Chasing and embossing. By

5. Visits to museums, workshops, and manufactories.

The Professor should, at certain intervals, visit with his pupils the public and private collections of practical art and antiquities, and give historical, statistical, and technical explanations of the objects they contain.

6. Lectures.

Public lectures on the relations of the different branches of practical art to each other, and to architecture (including characteristics of style), the history of art, and its technology.

Students lectures in the metal and furniture class. On the geometrical principles of design (including perspective, stereotomy, and other branches of study, illustrated by models, for students of the Department only.

The students might be permitted and required to follow the lectures on physics, mineralogy, chemistry, metallurgy, &c., in the Department of Practical Geology, as well as those which are delivered in Marlborough House.

G. Semper.

# First Report on the Class for Practical Construction, Architecture, and Plastic Decoration

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(d.)

Report of Professor Semper on the Class for Practical Construction, Architecture, and Plastic Decoration.

I have the honour to submit a report of the state and working of the class of metal-working, furniture, and practical composition, since its commencement.

The subject of *practical composition* has only been entrusted to me since the last session, but I have made practical composition in the more extended sense of the expression (as I understand it,) the foundation of my system of exposition since the opening of my class.

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The want of knowledge of composition and of practice, the ignorance of the architectural principles of design, of style, and of beauty generally, the ignorance of the fact, that a high degree of artistical accomplishment is consistent with industrial art, which is absolutely even necessary for it, seem to be the principal causes why our young artists show generally little taste, and even a kind of prejudice against this interesting branch of art; they generally think it is to lower their position and their art, to apply themselves to industrial art and to utility.

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Several students who frequented my class at its beginning were well advanced in the academical principles of drawing and painting, and skilful draughtsmen and modellers, but they partook a little of the prejudice which I have mentioned; but knowing by my former experience, how useless it is merely to preach against this feeling, I waited for an opportunity of introducing them at once into practice, and imparting to them experimentally as it were, the knowledge of the difficulties, means, pleasures, and profits of the practical branches of Art. This opportunity presented itself, when I was entrusted with the execution of the metal works of the funeral car of the late Duke of Wellington. Two modellers, Mr. Whittaker and Mr. Wills, executed in common with myself and after my working-drawings, the models of the ornamental posts of the car, and were afterwards employed in inspecting the operations of moulding and chasing the bronze casts. A third student of Somerset House, was afterwards employed in chasing some parts of the ornaments of the car, which for want of time would not be finished before the funeral took place. One of the students so employed, has, in consequence of his share at this work, since been appointed as modeller in one of the great industrial establishments at Sheffield.

Some other practical works, of less importance of course, have been executed in the class. For instance, besides other pieces of furniture and architectural details, a large sideboard commissioned by Sir James Emerson Tennant, which was destined to be executed in ebony wood by Indian workmen in the Isle of

Ceylon. The two students who were appointed to design this piece of furniture, Mr. Cuthbert and Mr. King have thus had an opportunity of having a short but an effective course of architecture and practical composition, which I believe, will add to their abilities. Several other students have been engaged in copying some of the more interesting pieces of metal work in the Museum, connected with the Department; and two architectural students have made their elemen-35

tary studies in architectural drawing and ornament.

The number of students who were under my charge in the first session of the year was eight: namely -

Messrs. Fallen, from Boston, architect; Austin, painter; Armitage, painter; Whittaker, modeller; Wills, modeller; Cuthbert and King, decorators; and Semper, architect.

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At the exhibition of furniture at the Gore House, which opened last May, I superintended the copying, modelling, and moulding the details of the more important pieces which were exhibited. An interesting collection of drawings and of casts has been the result of this practical course, and several students who knew very little about architectural drawing | and proportion, and about ornament, have learned on this occasion to enter upon such kind of works.

The students who attended at Gore House were Messrs. Armitage, Cuthbert, Halgate, and Brenan, designers; Messrs. Whittaker and Wills, modellers; and Mr. Semper, architect.

Since I have been appointed the Professor of Practical Composition, in addition to the former branches; I have had to follow another system of instruction. Formerly I had to deal with students, who by their antecedent academical knowledge, were rather too much elevated by the idea of preparing for a career of high art; while, in the latter case, I am endeavouring to impart some higher direction and artistical feeling to students who generally are operatives, and devote themselves too exclusively to mere practical instruction. These students only attend for a short time, and I have therefore adopted the system of introducing them "in medias res," and of showing the principles and elements of design and composition, while they struggle with work which, in a more elaborated and systematical course of instruction, ought perhaps to come later. Some of these students had no idea of perspective drawing whatever when they commenced three months ago, but are now able to execute complicated compositions of perspective, which they would not have been able to do in the usual mode of instruction of perspective drawing. I however generally begin with a short explanation of the very first elements of designs, and the simplest notions of geometrical projection, as the preparatory school education of most of my students has been very neglected.

The number of this class of students during the last session has been seventeen.

The students who have received medals for works executed under my superintendence have been Messrs. Whittaker, Armytage, King, and Cuthbert.

The extent to which manufacturers or others have sought the assistance of myself or of my students has been already explained in part; but I must add, that I have had several private commissions besides, those mentioned, which have been executed in presence of my students and partly with their assistance. Some few applications for advice in questions of practical Art have been made to me.

The leading idea, to show the connection existing between practical application and artistical conception, has been the object of my course of lectures on the relations which exist between the different branches of practical art among each other and to architecture.

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I delivered in the month of May one lecture, as an explanation of my system, which, in the course of the second session, I have been endeavouring to develop in a series of lectures.

The acquisition of some books and architectural drawings for the particular use of my class appears very necessary and urgent.

As for instance the work of "Letaroulz on Roman Architecture," which is the best collection of fine specimens of modern architecture for the use in schools of architecture. There is one copy of this work in the library of the Department, but we ought to have *one other for our special use*. I propose also, the purchase of some fine drawings of the best French ornamental and architectural designs, such as those of M. Dieterle. The material treatment of this kind of art by Frenchmen is by far the most distinguished.

My suggestion for the improvement of the studies refers principally to the locality, which, for want of daylight, is wholly unfit for a School of Design. The students ought to be altogether in one room, so as to have the benefit of a system of mutual instruction and emulation, which I have found to be the most efficacious in teaching Art.

Gottfried Semper, Professor.

To the Secretaries of the Department.

Second Report on the Class for Practical Construction, Architecture, and Plastic Decoration

Report of Professor Semper on Class for Practical Construction, Architecture, and Plastic Decoration.

Sir,

The following is a report of the state and general working of the class for Practical Construction, Architecture, and Plastic Decoration during the year ending 31st of December 1854.

1. I have three distinct classes of students under my instruction, each of which requires its special method of instruction, they are -

1st. The day students of my special class.

2nd. Those who attend only in the evenings.

3rd. The masters in training.

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The first-named of these three divisions partly consists of students studying architecture (properly so speaking), and is the only class which enables me to apply that system of instruction which I practised for many years at the Royal Academy at Dresden, combining theory and æsthetics with immediate practice, and making the last the basis of the system.  $\frac{1}{1}$ 

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I then had the opportunity (from the number of works under my hands) of employing the students on the works in course of execution, and making my class a real *atelier* for architects.

The students were very anxious to be employed in this manner, in making copies of plans, carrying out working drawings and details after my sketches, making estimates, and surveying the works under execution, which employment they considered to be and really was a distinction.

Although my practice at present is comparatively but little, it would nevertheless afford an opportunity of pursuing the same system of teaching art here, only I have not found the same readiness and desire on the part of the students for this mode of learning which is the requisite for the successful application of the before-mentioned method.

Most of the students, attending only in the evenings, are employed during the day in some of the different crafts connected with house-building, and demand special instruction immediately applicable to their specialities, which I am endeavouring to give, and to impart to them at the same time the necessary knowledge in geometrical drawing, projection of shadows, and other elementary parts of architectural science.

The mode of instruction to be followed for the masters in training is to me a problem yet to be solved. I have thought it right to endeavour to teach them the general principles of style in architecture, (being the same which prevailed in the whole world of industrial art,) instead of entering too much into specialities. The real sense and structural meaning of the mouldings, and generally of the different decorative forms usual in architecture, as well as in many other branches of practical art, is very little known; to which circumstance may partly be attributed the failure of many modern works in architecture, pottery, furniture, &cc. The explanation of these forms, and the use and application of the same at their proper places, have been one principal object which I had in view in comparing, in a series of class lectures, the different styles of ancient architecture.

2. The number of students who attended the day class during the year 1854, was 13. Two of them have since entered into practice as architects.

The number of the students attending the evening class has been 22, which makes together 35 students for the year 1854, exclusive of the masters in training, who have numbered about 50.

3. The progress of the students is satisfactory.

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4. The day students have carried out several compositions of houses, after their own ideas, or after suggestions given them.

5. Five Department medals and one book have been awarded in the course of the year to the students of this class.

6. Several drawings have been carried out for manufacturers.

7. I have delivered, in the public lecture-room at Marlborough House, two courses of five public lectures on the different styles of ancient architecture, their distinctions and connexions. I further delivered a series of class lectures (one a week) on the mouldings and decorative forms, to the training masters.

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Henry Cole, Esq., C.B.

I have, &c. Gottfried Semper.

Puterner you on Varcaping -its Dom Grifing or a office foring be in filitum has 1 ge minutes in gos doughostice. Al Prole Ping Tie ants che - le by

Pl. 5: Draft of lecture on the relations of the different branches of industrial art, 1853 (gta, 20-Ms-118)

# LECTURES

## **Prospectuses of the Lectures on Art**

Architecture.

May 20th.

On the relations of the different branches of industrial art to each other and to architecture. By Professor Semper.

## ON ARCHITECTURE, PRACTICAL CONSTRUCTION, AND PLASTIC ART GENERALLY.

Five Lectures. By Professor Semper.

On Friday Evenings, 11th, 18th, 25th November, and 2d and 9th December at Nine o'Clock.

LECTURE 1. - Friday Evening, 11th November, 9 p.m.

General remarks on the influence of the primitive forms in industrial works, the materials employed, and upon the development of the different styles in art. I. The ancient practice of wall coating, and its significance in history of architecture and art in general. 2. Tubular construction, well known by the ancients, and forming the fundamental idea of Greek architecture.

LECTURE II. – *Friday Evening*, 18*th November*, 9 p.m. On the Connexion of Ceramic Art with the art of Metal casting. Its influence on architecture and the other arts.

LECTURE III. – *Friday Evening*, 25th November, 9 p.m. On *Timber Construction*, and its influence upon the development of architectural forms. Metal works as belonging to timber construction, in opposition to other modes which belong to the tubular construction, or to ceramic art (art of casting.)

LECTURE IV. – *Friday Evening*, 2*d December*, 9 p.m. <sup>25</sup> On Stereotomy, or stone construction; including the art of cutting forms out of hard masses. Its importance in the history of art. |

## LECTURE V. – Friday Evening, 9th December, 9 p.m.

The combined action of the four preceding branches of industry in architecturc. Assyrian, Egyptian, and Grecian architecture, as examples of three different

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principles of monumental art, being expressions of the political and religious differences between the three nations. Modern parallels to these examples.

Admission for registered Students of the Department, Free. For the Public 2s. 6d. the Course, or 1s. each.

# On the Relations of the Different Branches of Industrial Art to Each Other and to Architecture

## **First Version**

Entwurf zu den Vorlesungen über die Beziehungen der verschiedenen Zweige der industriellen Kunst zu einander und zur Architectur.

Erste Vorlesung.

Introduction.

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The decorative arts arise from and should properly be attendant upon Architecture

Dieser Satz steht an der Spitze der wenigen Grund Regeln, welche das Departement als Norm des Unterrichts aufgestellt hat. Doch jeder, der über diesen Satz nachdachte, wird sich sagen, dass er näherer Durchführung bedarf, um in

- <sup>15</sup> Satz nachdachte, wird sich sagen, dass er näherer Durchführung bedarf, um in der gedrängten Kürze und Allgemeinheit, wie er hingestellt ist, in seiner ganzen Consequenz erkannt und praktisch anwendbar gemacht zu werden, und zweitens auch, um falschen Consequenzen zu denen er führen konnte, vorzubeugen. ||
- die veränderten Verhältnisse genöthigt war anzunehmen. Ich würde die Beziehungen der verschiedenen Zweige der praktischen Kunst zuerst behandeln dann auf ihr Zusammengreifen in der Baukunst, und die Wechselwirkungen zwischen letzterer und jenen kommen und zuletzt die Werke der Baukunst als die Resultate der ersteren behandeln, und sie nach dem vergleichenden Prinzipe
   in Arten, Geschlechter und Familien gruppiren. .

Ich sage dieses nicht ohne Plan und Absicht – obschon es scheinen mag, als gehöre es nicht hieher. Denn es führt mich zu einer ersten wichtigen Bemerkung, die ich bezüglich und zu der Erläuterung des Prinzipes zu machen habe, mit welchem ich meinen Vortrag eröffnete. fol. Ir

Die Baukunst, Architectura, führt den Namen als Urkunst als erste unter den praktischen Künsten und sie ist es in der That in mehrfachen Beziehungen, die ich nicht einzeln durchzuführen brauche. Durch sie erst finden die Einzelnkünste ein äusseres Band und eine Richtung nach einem gemeinsamen Kunsteffecte und an ihr entwickelte sich die eigentliche hohe Kunst, die vorher nicht bestand, die historische Plastik und Malerei. Aber || ist die Baukunst auch in so fern die erste der praktischen Künste, als vor der Entwickelung ihrer Gesetze und artistischen Elemente dieselben Gesetze und artistischen Elemente unbekannt waren und keine Anwendung fanden? Gewiss nicht. Welcher Einfluss ist der ältere und der wichtigere, derjenige, welchen die Baukunst auf die Entwickelung der übrigen Zweige der praktischen Kunst übte, oder umgekehrt derjenige, den die letzteren auf die Entstehung der konventionellen Formen und Gesetze der ersteren hatten? Gewiss der letztere. Entlehnten die übrigen Künste ihre Processe in der Behandlung des Stoffes, ihre Formen und Verzierungen von der Baukunst, oder lassen sich die Formen und Regeln der Baukunst auf diejenigen zurückführen, die lange vorher in den spezielleren Branchen der praktischen Kunst geübt wurden? Sicher das letztere. -

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There was a rich industrial art and Luxury dwelt in simple tents, rude strongholds and camps through many thousend years, before the invention of architectural forms and monumental art. Domestical | industry, the market, trade war and robbery furnished the household of the praearchitectural centuries with articles of luxury, with carpets, hangings rich cloathings vases, tripods. candelabras lamps arms, jewels and trinkets. So it was with the Greec even at the times of the Ionic poets, of Homer and Hesiodus, whose brillant Descriptions of rich arms, tripods vases, tapestries and other articles of hellenic industrial art, are no doubt formed upon things, they had seen before their eyes; They were allowed to exagerate the richness and the beauty of those things by their poetical treatement but they could not be mere inventions of their rich imagination; In this case their art would have been without effect, not being understood by their hearers. We shall have the opportunity to return to these poetical descriptions of old Hellenic practical art, which are highly interesting not only for the | antiquarian, but also for modern practice of art and which have since the time of the Greec till now greatly occupied the greatest talents among the artists. for instance Phidias, by working his famous shield of Minerva in the Parthenon at Athens Leonardo da Vinci who decorated a beautiful shield with his pictures, which is now in the Florentine Gallery, Mihel Angelo. in many of his powerfull compositions. Benvenuto Cellini and those, whose beautiful works are attributed to the same artist whose name got a sort of mythical celebrity and absorbed the names of so many skillful artists of the same period. Under the modern artists who have worked upon the descriptions of Hesiodus and Homerus are to

be mentionned such names as Thorwaldson, Flaxmann Schwanthaler. in Munich, and other artists of high rang, which by this way did more for the propagation of artistical feeling and taste among the industrial branches of art, than by their more celebrated and larger works.

Now what are the descriptions of buildings in the same poets. They prove 5 alltogether that state, which I alluded to before, namely no monumental architecture, ruled by its own organic laws, Luxury combined with the most primitive simplicity and crudenessness of construction, barraks, court Yards, wide Halls, without floors, with fireplaces, without Flues; all ornamental | parts, consisting partly of woven or metallic coatings partly beeing nothing else but moveable furniture, are mere applications, go not out of the intrinsic and organic laws of architecture It may be allowed here to give some instances of such Homeric descriptions of dwellings, which will give for the following some interesting matter for reflexion.

I) The tent of Achilles 15

2) The Pallace of Priamus

3) the Pallace of the King of the Phaeaks

4) The dwelling of Ulissees

- Such was the state of relation between industrial art and architecture in the times of beginning civilisation of the Greec, which by a happy fate we are able 20 to judge of. But not only this, the influence of industrial art upon civilisation
- was still more general. The Greec mythology, is an ingenious and poetical creation, formed and so to speak modelled out of a formless but very plastical Mass of mythic fables, partly indigenous, partly borrowed from other countries, which were no longer understood in their original significations. This creation 25 was the work of the poets, which I alluded to before, which very probably were guided in their compositions by images borrowed from | the myths pictured and represented upon arms, vases, tapestries clothes and utensils, for they often allude to such representations in their descriptions and we also see such an influence in the illustrative character of their reciets. Forms, partly foreign, partly 30 native, by being used as ornament, melt together and are prepared for a new result. -

But I schall try to show in one of the following lectures, how the Greec Architecture developped itself out of these antecedents by the influence of the lawgiving and tempelbuilding race of Doria, in contrast with the poetical Ionians, sacrifising to their Gods on their mountain tops, and having properly speaking no tempels at all.

Many thousand Years before we see the Greec making their first steps of national education, there existed several centerpoints of highly finished civilisation in Asia and Aegypt, and there we see Architecture more emancipated from

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the industrial Arts and following its own laws. Nevertheless we observe on the monuments of these countries undubitable traces | and proofs of what I maintained that the architectural forms and ornaments are alltogether originally borrowed from the different branches of industrial art, and that architecture is based upon principles and laws, which were known and practised in ornamental art, long time before the invention of monumental architecture. It will not yet be in time to penetrate deeper in this question by analysing the different styles of architecture, but You may see at some examples of details, taken from Aegyptian temples of the elder periods, how the pure structure is veiled by ornamental applications executed in stone. This column is a pillar surrounded with cane, which is fastened with strings and | a piece of richly ornamented tapestry. This capital shows flowers of papyrus and Lothus, which evidently are only fastened with strings, in the same manner as it was custom by the Aegyptian ladies to put the same flowers into their hairdresses. –

I thought these introductory remarks necessary to apologize for the plan <sup>15</sup> which I adopted in this essay, which may by the first view appear contradictory to the principle which I alluded to before. I hope that this appearant contradiction will find finally a satisfactory solution.

As I was, some twenty Years ago, a Student at Paris, my usual walk was to the jardin des plantes or the Zoological Garden near the town, and allways I was attracted, like by some magic force, from the sunny Garden into those Rooms, where the fossil Remains of the foregone formations of the earth, together with the sceletons and carcasses of the species of our | present creation stand ordered together in long series for comparation.

As all those antediluvian and postdeluvian organisations are but different developments of the same principles, as Nature for its infinite richness is nevertheless very sparing and simple in its elementary ideas, as we observe the same scaffolding of the sceleton differently modified and developd according to the rang which each individual occupies in the universal creation and to its conditions of existence, the same, so I told to myself, will be the case with the works of my art. 20

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## Second Version

1° Some excuses and introductory remarks, with relation to the difficulties I *1. fol. 1r* must feel etc.

#### The decorative arts arise from and should be attendant upon Architecture.

This principle, if taken in its true meaning, will bee freely subscribed to by every one who has meditated on the relations, which exist between the different manifestations of that inborn instinct, by which we endeavour in the choice of forms and colours. to give expression and beauty to the productions of our hands

Architecture is the working together of all the other branches of art to one great monumental effect and after one directing Idea.

The laws of beauty and style which we aknowledge in practical art and in art generally speaking, have first been fixed and systematically settled by architects.

The History of art seems in some points to contradict this principle, but it may be asserted Nevertheless that these points are the strongest evidences of that intimate connection by which all the branches of art are bound together. ||

A. First we find, that the practical or industrial arts had arrived to a high degree of development many centuries before the invention of architecture as an art.

Luxury dwelt in simple tents, in barracks and rude strongholds, many thousand Years before the invention of architectural forms.

So it was for instance with the Greecs downwards to the time of Homer and Hesiod and even much later. The descriptions which these old poets give of the arms of the Heros, of vases, tripods, draperies, embroideries and other objects of an early Industrual art are doubtless based upon real things. The poets by that liberty which poets take were allowed to exagerate the beauty and richness of these objects, but their art would have had no effect if their Hearers had not been acquainted with things, analogous to those which they described.

Now what are the descriptions of monuments and architectural works which the same poets lay before us?

These descriptions alltogether, prouve that immense luxury was then combined with the most primitive simplicity of construction in buildings, and of Household arrangements.

All the enrichments of the buildings were mere applications consisting of draperies or netallic incrustations, in shields, trophees, Earthen- and Metalvases, Figures, festoons, flowers and other mouveable things, borrowed fron the industrial arts, or from Nature. ||

The same buildings, which were cowered with embossed Gold and Tinplates, had no floors, no fireplaces no flues.

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A parallel might here be drawn if time allowed between the Homeric dwellings and that singular mixture of simplicity and luxury which in our own times prevails in the tents and dwellings of the Orientals nations.

I refer for this to the lively narrative relating to the Household of an Arabian Sheik, of which Mr Layard gives an account in his travels in Mesopotamia.

While the Greeks were in this stage of antearchitectural civilisation, there existed in other parts of the old world some centerpoints of very ancient culture, based upon other principles, which were, if considered under a certain point of view, more favorable for the Development of Architecture as a selfexisting art.

But what see we at the ruins of Niniveh and Thebes? The undoubted proof of what has been asserted before; that the architectural forms of the Aegyptian and Assyrian Monuments are all borrowed from the industrial arts.

The mats, and afterwards the Carpets and Draperies were the earliest materials for deviding spaces, and for making those separations of room, which men found necessary for their protection and comfort. – The same materials were employed for this service long before the invention of brick-walls and the well known Assyrian Alabasterplates are nothing but imitations of the original carpets, plastically executed in stone.

The history of wall Decoration in all its phases begins and is based upon this fundamental || motive of carpet making.

Again if we look at the Aegyptian columns of the earlier periods of Egyptian art, we recognize square pillars, covered with cane, which is fastened with strings and a piece of richly ornamented tapestry round them, so that the square pillar remains visible at the top above the capitel. The last is formed by flowers, of the Papyrus and Lottusplant, thrust into the strings at the neck of the capital, quite in the same manner as the fair Aegyptian Ladies of the time used to fasten the same flowers into the Laces of their Hairdresses.

A great part of the forms used in Architecture thus originate from works of industrial art, and the rules and laws of beauty and style, which we aknowledge, were determined and practicised long before the existence of any *monumental* art.

The works of industrial art give therefore very often *the keys and bases for the understanding of architectural forms and principles*.

*B*. A second point in which the History of art seems not to be consistent with our principle is this, that the periods in which the industrial arts were hierarchically governed by architecture, were not the periods most favorable for the development of high art or of industrial art. –

In These periods the || relation between the two manifestations of art become directly the opposite of what has been described.

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For instance under the influence of the Mediaeval or so called pointed Gothic style the industrial arts became quite dependant upon the forms used in this style, which had taken its principal decorative motives from stone construction. So the reliquaries were small churches, the vases had buttresses and ogival arches amd ogee mouldings, and were covered with pointed roofs.

The arches became the fundamental motives of the surface ornamentation, and the dominant influence of architecture extended itself downwarts even to the bootsmaker and tailor's craft.

Was this a normal and sound state of things, and can we call this direction of taste in practical art a pure one?

It may perhaps appear audacious to deny it.

After the revival of the ancient principles of architecture the architectonic system upheld its influence for some time, at least in some parts of practical art, as for instance in furnitures. But this style was perhaps more accomodating then the former, and great liberty was allowed in appliing it to practical art.

At the end of this period begins the empire of an other principle; we see the industrial arts and especially furniture taking their own way, || guided by a very refined study of that which is fit and comfortable, but unhappily influenced allso by a predilection for Chinese industry, which influence upon the development of that Style which we call Rococo has not yet been sufficiently explained in our histories of art. It then happened that the monuments became pieces of furniture executed in stone, and architects adopted forms, which can be only justified if executed in Porcelaine or wood and applied to mouveable things. – .

Revolutions in architectural styles were thus allways prepared by innovations which had been introduced before in the mode of practicising Industrial art; and architecture will soon loose its dominion over the other arts, if, as at present it isolates from them itself.

Our architecture is devoid of originality and has lost its precedence over the other arts. It only will revive when more attention shall be paid to our present state of Industry by modern architects.

The Impulse to such a happy change will again go out from practical art.

In this light we may recognize the right feeling, which presides over the efforts of our Government for the progress of national education in art, by paying especial attention to the practice of industrial art.

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6. fol. 6r

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# **Third Version**

#### fol. Ir I. Ladies and Gentlemen.

A Foreigner must naturally feel very timid and embarrassed in addressing to You a paper written in English on a Subject, which by itself is difficult, and would be so to him, if he had to treat it in his own linguage.

But knowing the kindness and forbearance toward foreigners, which distinguishes an English Audience, this is neither the only nor the principal reason of his hesitation.

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It becomes an Artist to consider well and hesitate long, before he undertakes to contribute to the Mass of Writings and reflexions on art, which distinguishes the present age.

Indeed we are as rich on writings as we are poor in works of art, namely in such works, which really are our own, and which really and truly are works of Art.

This coincidence is well worthy of reflexion and leads to the supposition of a reciprocal relation betwixt these two phenomena.

They may both depend upon more intimate causes, but it is true at the same time, that we are overpowered by | the mass of learning, that we have lost our own track, and, as we say in German, we do not simetimes see the forest for trees.

The feeling of the difficulties which arise from the accumulation of learning <sup>20</sup> it not new, and it is not alone in that branch of knowledge, which we are treating of, that the same has been felt, and therefore systems and classifications have been instituted for reducing into order the immense amount of learning which is our heritage of so many centuries.

We see also, arising from the same cause the Division of labor systematically instituted by lawgivers of the oldest ages, for instance by the founders of the political and religious institutions of the Egyptians and of the Indians.

But it has happened, that in this way the consciousness of the intimate connections, which exist between the different branches of knowledge and skill, has been lost. |

It is the tendency of modern science to endeavour to find again those connections between the things, and of transforming into an organic system of comparison what was before only an exterior and more or less arbitrary system of coordination and of exterior order.

So even Chimistry for instance, the most experimental of all Sciences, begins now to be much more constructive than it was before, to separate with the Idea of combining, to search for the differences of the things with the Idea of referring them alltogether to some few elements and natural forces.

fol. IV

fol. 2r 2

When I was a Student at Paris I went often to the *Jardin des Plantes*, and I was always attracted, as it were by a magic force, from the sunny garden into those Rooms, where the fossil Remains of the animal tribes of the primaeval World stand in long series ranged together with the sceletons and shells of the present | creation. In this magnificent collection, the work of *Baron Cuvier*, we perceive the types for all the most complicated forms of the animal empire, we see progressing nature, with all its variety and immense richness, most sparing and oeconomical in its fundamental forms and Motives; we see the same sceleton repeating itself continually, but with innumerable varieties, modified by gradual developments of the Individuals and by the conditions of existence which they had to fulfill.

Here we see some parts left out, some other parts only indicated, which are exceedingly developped on other individuals.

If we observe this immense variety and richness of nature notwithstanding its simplicity may we not by Analogy assume, that it will be nearly the same which the creations of our hands, with the works of industrial art? | They are like those of nature, connected together by some few fundamental Ideas, which have their simplest expressions in *types*. But these normal forms have given and give rise to an infinite number of varieties by development and combination according to the exigencies of their specialities, according to the gradual progresses in invention and to so many other influences and circumstances which are the conditions of their embodiment.

Will it not be important to trace out some of those types of the artistical forms, and to follow them in their gradual progress from step to step up to their highest development?

A method, analogous to that which Baron Cuvier followed applied to art, and especially to architecture would at least contribute towards getting a clear insight over its whole province and perhaps also it would form the base of a doctrine of *Style*, and of a Sort of topic or Method, how to invent, which may <sup>|</sup> guide us, to find out the natural way of invention which would be more than could be allowed to the great Naturalist to do for his sublime science. –

If we go through the great number of works on Art, and especially on Architecture in search of such a Guide for Artists, like the Book of Cuvier on the animal Empire and his comparing Osteology, or the Cosmus of Humboldt, which are Guides for Naturalists in so far as these books contain the full development of the Idea of a comparing system of natural History, we find nothing analogous.

Very few authors have made attempts of the kind I allude to, and these few followed the track of some speciality by which they were inconsciously led away from the aim which they had perhaps before their mind.

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The Frenchman Durand in his parallels and other works on Architecture has perhaps | come the nearest to it, but he looses his way under the influence of the proposition which was made to him, namely to set up a sort of "compendium artis" for the students of the Ecole Polytechnique who were by no means artists, as well as under the influence of the general tendency of the time of Napoleon (the Great). He looses himself into tabular-formularies, he puts the things into rows and brings about a Sort of Alliance between them by mechanical ways instead of showing the organic laws by which they are connected together. many important branches of artistical knowledge which we now possess, were undiscovered at that time. It was not ripe for producing such a work, as Durand was endeavouring to execute.

In spite of this his books are remarkable for the comparing idea which they contain.

Some other attempts of more recent date have been made upon the same principle, but | less happily.

In return we are so much richer in specialities, and the amount of materials which increases every day, is almost overpowering.

While the publications of documents and the Engravings of Objects of art and architecture of all Periods are increasing and multiplying in England and in France, the Germans have composed their Aesthetical Science and some of the best books on the history of Art.

But in the same time we observe no proportionate progresses in the practice of art, especially in architecture and in industrial art; which seems to confirm what has been asserted before, that we have not yet arrived at that point, where all these knowledges will increase the power of artistical invention, instead of paralising it as it now seems to do.

Since the time that I first felt this want, I have had the opportunity of giving lectures on Architecture at one of the Academies of fine arts in Germany.

As was natural, these lectures were more or less influenced by similar reflections.

But since then my position has altered and with it the point of view, from which I now consider the same question.

At that time I payd too little attention to the relations between the other branches of practical art and architecture. Now I feel convinced more than I did before of the fact, that the history of Architecture begins with the history of practical art, and that the laws of beauty and style in Architecture have theyr paragons in those which concern Industrial art.

The laws of proportion of Symmetry and harmony, the principles and the traditionnal forms of ornamentation, and even those elements of the Architectural forms, which we kall mouldings were partly invented and | practised long time before the foundation of Architecture as a selfexisting art.

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The Characters of the different architectural styles were clearly expressed in certain characteristic forms of the earliest industrial art, applied on the first necessities of life.

Let us compare for instance these two different forms of ancient vases.

The first is the holy Nile-Pail, or Situla of the Ancient Aegyptians, – the other is that beautiful Greec Vase which is called the Hydria.

Both of them relate to the same use, that of catching running water.

But the first is a drawing Vessel, for getting Water out of a Rivver, and therefore Characteristic for Egypt, the Gift of the Nile.

Two such Vessels were carried by the Egyptian Water-carriers on Jockes, so that one hung before and the other behind. | The haviest part is very properly the bottom, as a precaution to prevent spilling It is formed like a Waterdrop. We feel the fittness of this form for its use, which is the Opposite to that Greek Hydria, which is a Vessel, for catching Water, as it flows from the fountain. Hence the funnel chaped feature of the mouth and the neck, which is rigorously prescribed by the object in view.

On the other hand, the mode in carriing those vessels has led to the Idea of removing the Center of gravity of the Vessels from the bottoms towards the summits. For they were carried on the heads upright when full, lenghtways when empty, as we see on this diagram, traced from a picture which decorates to body of the Vessel.

Any one, attemting to balance a Stick on his finger, will find the | feat much easier, if the heaviest end is uppermost.

This experiment explains the form of the Greec Hydria, which is completed by the Addition of two horizontal handles placed at the level of the point of Gravity.

A third Vertical handle was sometimes added afterwards, not only for the sake of variety and as a mark of distinction between the front and the back of the Vessel, but also with regard to its utility.

How strikingly is symbolised the light spiritual and lucid nature of the mountaineer inhabitants of Greece in this form, opposed to the Pail, which is a true Representative of the National Genius of the Egyptians, and of institutions the first principle of which was stability.

The two nations were certainly well aware and conscious of the high significance | of these forms, in making them national and religious Emblems.

The Nile Pail was the holy Vessel of the Aegyptians and in like manner the Hydria of the Greeks was the sacred Vase, carried by Virgins in their religious processions.

It may be added, that the fundamental features of Aegyptian Architecture seem to be contained in Embryo in the Construction of the Nile-Pail, and in the fol. 6v

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fol. 6r

same proportion we are allowed to recognize in this Hydria the Key to the Doric Order of Greek Architecture. –

Architecture is the combining together of all the branches of industrial art and of art in general in one great general effect, and after one directing Idea. The laws and principles of Style and beauty which we aknowledge in art, have probably been the first systematically fixd by Architects, but practical Art had reached to a | high degree of development long before the invention of architecture; The principles of Aesthetics in Architecture have had their first applications on objects of Industry, and the separation which exists now between the latter and between Architecture and high art is one of the principal causes. of their decai. -

In what I have sayd Allusion has frequently been made to certain laws of beauty which we recognize in Art. It may be asked here, which are those principles, what is beauty, what is style?

This question leads us to a very dangerous matter, which has been treated by <sup>15</sup> Philosophers and Artists of all periods. Many Volumes have been written about it. |

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fol. 7v

I shall not risk to enter into an examination of the different definitions, and senses, which have been attached to these notions, which form the bases of the aesthetical Science. It fortunately happens that the intimate connection which exists between them allows us, to attack the matter, at what end we like, one of these notions, if pursued in its consequences leading to the understanding of the others.

I therefore take leave to point out only one of these notions, that of *Style* in art; I want for the following to explain myself clearly on the sense which I attache to this expression; but the following definition of the notion Style in art is not given with the pretention of being absolute and of general application, it is only an exposition of what *in this paper* is understood by the word Style.

This term is used for the notification of certain achievements in works of art, arising

1°) from using artistically the means and

2°) *from observing the limits*, which are contained in and defined by the task and problem in question, as well as by the Accessories which modify the solution of it in every case.

Every work of art is a *result*, or, using a Mathematical Term, it is a *Function* 35 of an indefite number of quantities or powers, which are the variable coefficients of the embodiment of it.

 $\mathbf{U} = \Phi \mathbf{x}, \mathbf{y}, \mathbf{z}, \mathbf{t}, \mathbf{v}, \mathbf{w}.$ 

As soon as one or some of these coefficients vary, the Result must vary likewise, and must show in its features and general appearance a certain distinct | caracter; – if this is not the case, then it fails for want of Style.

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Now which are these variable coefficients which constitute the general formula of an Artistic work?

Their number is undefined and we shall only point out some of the most important, which will lead to the explanation of a plan for a course of lectures on the different branches of industrial art, to which this paper may be considered as an introduction.

We must distinguish two different kinds of influences, which act upon the embodiment of an artistic work,

The first Class comprises the exigeancies, of the work itself and which are based upon certain laws of nature and of necessity, which are the same at all times and under every circumstance.

The second Class comprises such vehicles, which we may call outward influences acting upon the performance of a work of art.

That part of the Doctrine of Style, which treats of the first class, embraces the elementary Ideas or what the Artist calls the Motives of the things, and the early forms, in which these fundamental Ideas have been cloathed. These early forms are the Types of the Ideas. It is a satisfaction to artistic feeling, when in any work of Art its first Idea, widely as it may depart from its origin, still pervades the whole composition, like a theme in Musik; and it is certain that clearness in the conception of the fundamental Idea by the artist is most important.

The new will thus be engrafted upon the old without being its copy and will be freed from the Influence of mere fashion.

To illustrate this I may be allowed to give an example. Mattings, and afterward carpets, wether woven or embroidered were the primitive divisions of space in dwellings and were the precursors of all decorations of walls, of all Mosaiks, of ¦ all stained Glass, and many other relative branches of Industry, which, be their direction ever so various, can always be traced to a common origin.

It is also appearant that the Ancients from the Assyrians to the Romans, and afterwards the mediaeval nations, in decorating and cloathing their walls, whether by design or not, followed the principles of tapestry. –

Fortunately this historical element of the Doctrine of Style can be carried out in the midst of our modern confused relations.

But this first part of the doctrine of Style contains an other Subdivision, which should teach, how to change old forms, consecrated by necessity and tradition, according to our new means of fabrication.

This part is unhappily more difficult of application for the present time.

An example may also here be in its place.

The Granite & Porphyr Monuments of Aegypt exert an incredible power over every mind. Whence is this Charm? Partly perhaps, because they are the

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neutral Ground, where the hard and resisting material and the pliant hand of man have met.

"So far shalt thou go and no farther" has been the silent linguage of these massive creations for centuries. Their majestic quietness, their sharp, flat, and angular lineaments, the Economy of labor in the treatement of the stern material and their whole appearance are beauties of Style, which to us, who can cut the hardest stone like Chalk are no longer prescribed by necessity.

How shall we now treat Granite? It is difficult to give a satisfactory answer; The first thing to be done is to employ it only where its Durability is demanded, and this should regulate its treatement. Little attention is payd to this at our times.

The second part of the Doctrine of Style comprehends shiefly local and personal Influences. such as the climate and physical constitution of a country, the political and religious institutions of a nation, the Person or the corporation by whom a work is ordered, the place for which it is destined, and the Occasion on which it was produced. Finally also the individual personality of the Artist.

Thus we say: Chinese Style Indian Style, Style of Louis XIV. Style of Raphael, Ecclesiastical Style, Rural Style etc.

If the first practical part of the doctrine of Style is difficult to apply in our times, this part may appear almost out of question, since Speculation, supported by Capital, has taken in its hand the protection of the industrial arts.

Ready made things must naturally exclude a good part of such qualifications of Style, which are depending upon local and personal circumstances and relations.

Every morket ware must be so prepared, as to be as far as possible of *univer-*<sup>25</sup> sal application. It should have no other Attributes, than such as are suggested by its use, its material and the treatement of the latter.

This we find for instance to be the case with Oriental Industry.

The Products of Oriental Industry are most in place in a Bazaar, and their greatest recommandation is that they suit all positions.

The Persian carpets are as appropriate in a Church or in a Mosquée, as in the Boudoir of a Lady. The Ivory boxes of Lahore with their inlaid Mosaik patterns appropriately serve as Censers, Cigar Cases or work boxes, according to the Will of their owners.

But complete in themselves as they are, those Indian works, and so opposed 35 in technical and aesthetical beauty to our European want of Style, we yet miss in them individual Expression, the *high intellectual beauty*, the *soal*.

This expression is always to be in some measure attained even in an object destined for the market;

Tritons, Nereids, Nymphs have meaning in a Fountain, Venus and the Graces 40 upon a Mirror. Trophees and battles upon arms, whether these things be made

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for the market or for a particular destination. It is so easy to find such appropriate Emblems, that it is astonishing, what a want of imagination and of common sense is sometimes apparent in the application of emblematic ornaments in our modern art-manufactures.

For example we see on certain Frensch Clocks two soldiers sitting on a Cornice, playing at cards or dice, or perhaps asleep. What does the Artist mean to express by this? "Let us waste time. Let us kill time" Let us sleep away time"

These are courious inscriptions for a clock, an odd translation of Virgil's "Vivite - Venio! -

Notwithstanding all this, we possess an affluence of knowledge, a perfection of practical appliances, never surpassed, a multitude of artistic images, and a just view of nature, not to be exchanged | for even beautiful semibarbarous conceptions.

What we should learn from nations, who lack European Culture is the art of catching the simple Melodies in form and colour, which appears instinctive in the work of man in his primitive combinations and which we, with our more extended means, find it difficult to seize and retain.

We must therefore study the simplest works of man and the history of their Development as carefully as we should consider the works of nature itself. We saw for instance in the Great Exhibition of 51 that the meritorous effort to imitate nature leads aesily to mistakes, when not guided by Study of Style.

Among the different Vehicles, which act upon the embodiments of the Works of our hands, there is one Group, which being of the most universal application, must be specified here a little more.

These are the following:

First the use of the things.

secondly the material out of which they are done.

thirdly The modes of execution or the Processes, which come in question for their execution.

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What is a machine?

Every manufacture has a certain use and destination; it is really or at least in the Idea a means of satisfying some exigeancy of life. It is a tool, an instrument or at least an arrangement for protection or for action.

Now every tool or contrivance, no matter how simple it may be, is a | Machine.

ing on the one hand, and of exercing on the other certain forces.

A Machine is a body, or a system of bodies, having the destination of receiv-

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<sup>1°</sup> The use of a thing.

This definition is a Lemma taken from the Science of Mechaniks – for we have here to do with *forces*, in their state of Equilibrium or of active mouvement, and we can only arrive at the understanding of the forms of the things, (so far at least as these forms are results of the destinations of the things,) by application to the mechanical Sciences; *to the Statics*, for forms, which are the result of an Equilibrium of Forces, and to *the Dynamical Science*, for things, which are the means for exercing certain active forces upon other things, for instance knifes, weapons, axes and tools of every kind.

We may extend this to natural forms; which we can not understand without the science of Mechaniks, they being altogether necessary results of certain natural powers and forces, partly the same, which constitute the conditions of the Embodiment of a work of industrial art.

But Nature never fails in the Choice of its forms, which unfortunately is not the case with us! The more we advance in civilization and science the more it seems that that instinctiv feeling, which men followed in their first attempts in industrial art, looses its strength, while Science has not yet | attained to the point, of compensating us for this loss.

It very often happens, that we are led back by science and calculation to such forms, which were observed heretofore only by Savages, and semi-Barbarians. So for instance the Axes of the North-American Nativs, which are natural pebbles or imitations of such stones, which are ground by the continual action of water. The so chaped axes were considered the best for their fittness in the last great Exhibition.

These ancient Greec Sling bullets, which have the form of plumkernets executed in lead, would give an other instance for this. The other projectile laying by them, is a Prussian pointed musket-ball, it is a sort of incomplete imitation of the first, but it can be proved by science that the first are much more convenient for their use than their modern copies; It is questionable weither these Projectiles are the Result of an instinctiv feeling of their makers for fittness or if they are proofs of the high state of Mechanical Science with the Greecs. We know at least, that Men like Archimedes and Apollonius have applied their Mathematical knowledge to the Machineries of war for the defense of their country.

These bullets are very interesting for the illustration of the preceeding. If such a leaden bird is fliing in the air, it is surronded by an Envelop of atmospheric air, which before it is condensed and behind it is rarefied. The condensed air | acts in proportion to its density opposite to the mouvement of the Bullet by its resistance, the rarified air behind acts also in proportion to its density against the resisting air before the bullet and is therefore a positive power.

Further we know that the living force or the impetus of such a bullet is increasing with the mass, – therefore, by filling up a part of this *vacuum* or imperfect *vacuum* with mass we will increase the vis viva of the bullet. So does Nature

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in its horror Vacui, by giving to all bodies, which have the destination of fliing or Swimming in resistent mediums. They have alltogether this form, this End being the front and the allongated tale filling up the Vacuum behind. This is the form of all the fishes; and of the birds, when we take the Ground-plans of their

bodies, The same is alloo evident on the falling waterdrops and on the flame, by the same reasons. The proportions of these bodies differ according to their special destinations. They are sharp and allongated if Quikness is the first aim for | a chosen form, they are rather round, like Eggs, if they have the destination of carriing great masses. ||

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We know pretty well the general principles of mouvement, we know the laws of certain natural forces, for | instance that of gravitation, of fricture and others; we know the properties of the fluids and their principles of equilibrium in themselves and with swimming bodies, We have sattled some principles of mouvement in the resisting mediums, and of the action of gasses, – but one power has as yet escaped the investigations of our Dynamists – which is the power *of animal and vegetable Life*. We know only that it acts independently of gravity and often in opposition to it, and that it is a defined force.

It is by this force that Nature produces its most interesting formations – and we must add, that, the more the works of our hands have the appearance of being results of such living forces, which act against gravity and substance, the higher they stand upon the scale of artistical accomplishment.

But on this field we have no other Guides than our own natural feeling assisted by a right study of natural History and of that of art.

If we go through the History of Architecture and compare the different styles, it strikes us, that they are allmost alltogether based upon very sound principles of Statics and of Construction. But there is only one example, of a nation succeeding in giving organic life to its architectural formations and to its industrial productions in general.

This was the case with the Greecs. The Greec temples and monuments in 30 general are not constructed, they have grown, they are not merely ornamented by application of vegetable or organic accessories, like those of the Aegyptians for instance, their forms by themselves are such, as organic life produces, when counteracting and struggling against gravity and Substance.

We can not otherwise explain the incomparable charm of a Greek Column: The Greeks alone attempted and succeeded in making human forms the supporters of the entablatures of their edifices – an attempt which we are right to consider as an aberration of taste, – but it gives an evidence of the fact, that the Greecs were aware and conscious of their aim in animating the architectural parts themselves instead of decorating them with ornamental applications taken from the organic nature, like the Aegyptians did.

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fol. 13r

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12 fol. 12r fol. 12v For this the Greek Architecture and Greek art in General will allways be living, and periodically grow joung again, while all the other styles belong only to History.

I can not leave this interesting matter, without giving another observation of practical application.

Attempts have often been made to explain the Greek forms and to find out a Scheme for them by taking exact measures from the best Greec Monuments and by comparing the Geometrical projections of the forms which were carefully drown up after these measures. But these attempts will never succeed, for, if it is right in Mathematics, to | consider certain surfaces as the results of revolving curves, it is not the same in Natural history and in Art. Very beautiful natural as well as artistical forms may have sections of no proportion and beauty, and beautiful sectional outlines or projections may produce by revolving them very unhappy Surfaces. Nature works not like a turner after working drawings or what they call templates., its forms are alltogether dynamical productions, and it is only by the way of that science, which treats of the mutual actions and reactions of forces, that we may hope to find the keys for some of the simplest material forms.

What is true in Nature, has its application also for artistical forms, if they are animated by organic life, like the works of the Greeks.

The well known history of Phidias Colossal bronze Figure of Athena Promachos which was misunderstood by the Amateurs while standing in the Workshop of the artist, may be quoted here as an illustration of this.

We pass now to the second great Agent, to *the Materials* which we employ for the manufacture of Objects of art.

It lays not in the plan of this lecture, to give a systematical suit to this important question;

It gives rise to a great number of very important practical remarks, which will find best their places by specifiing the different branches of industrial art which I wish to be allowed to do at other occasions. –

The abstract of All the special rules of Style, so far as it depends on the material, is the following:

 ${\rm I}^{\rm o}$  Take that material which is the most adapted for the proposition which You intend to resolve.

2°) Take all possible profits of Your material, but observe the limits which are traced by the Idea which lays in the Object to the Embodiment of which a material whatever will be employed.

 $3^{\circ}$ ) Take the substance not as a mere passiv *medium* but as a *means*, as a second activ power and vehicle for invention. – .

It follows as a consequence out of this, that the question on the meterials can not be separed from the question on the different processes in trea- | ting them.

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The importance of the material in the question of Style is so great, that some of the best Writers on art have considered it the very thing which constitutes for itself alone what we call style in Art.

So for instance Baron Rumohr, one of our best German writers on art, who gives in his Researches on Italian Art the following definition of this notion.

Style is the accomodation of the artist to the intimate demands of the material in which the sculptor really forms his objects, and the painter represents them.

The same reason has also led to that System of Classification, which we generally observe for collections of industrial Arts. |

We generally order, and divide them in different classes after the materials of  $I_5$  which they are made.

This mode of classification appears to be the most natural, and it is certainly that, which offers the greatest facility. With this System of classification it is not easy to mistake the place to which every thing belongs.

It will allways remain the simplest and perhaps the best for collections of works of industry which have a practical destination.

But for an ideal collection of industrial works, or rather for a revue of the Objects of art with regard to the styles to which they belong, it may be perhaps less accomodating. For instance We see here a Metal-Work, there is an other piece of industrial art, made out of the same Metal,

This Indian Coat of Mail has nothing in common with that Indian Vase, except that they are both of the same Material and done by Indians.

Now we see on the other hand this vase of Earthenware related in form and destination to that of Iron although it is made with an other material and not by Indians.

And the Coat of Mail has more relation in style with this coat of wool, than with the Indian Vase.

This example is striking, but there is a multitude of cases, where the three different Systems of arrangement which we use for collections of art, | namely r<sup>o</sup> the historical system 2<sup>o</sup>) the ethnographical System 3<sup>o</sup>) the material System, where these three systems appear less arbitrary, but where they are in reality more injurious, by separing things, the relationship of which is less conspicoous, but not less important and interesting for the question of Style.

These are not mere subtilities, but very practical remarks; Before going farther in the matter I must return to an expression, which I have used already several times in this paper. This is the word type.

Types as we have seen, are primitive forms, prescribed by necessity, but modified after the first materials, which were used for their embodiment.

Now it has happened very often, that Changes were introduced in the material and the manner of execution of these types.

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Then the secondary forms became plastic or pictorial treatements of the types;

The styles, which then resulted out of these secondary treatements were composite styles, which partook on one hand of the *types*, and the conditions of Style, of the old materials employed for the latter, and on the other hand, they partook of the style | which suits the new selected substance and manner of treatement.

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So it happens that the same material for instance Metal, if employed in a later period of development of art for different types, has to follow quite different conditions of Style. Othersides we observe, that materials of quite different qualities, if employed for representing the same types, approach to each other in style, as the representatives of identic fundamental ideas.

So we see for instance, bronze-Doors in their oldest treatement appear as thin bronze plates, with flat surface ornamentations, covering wooden Door wings. –

In their more developd forms they are hollow and penneld like wooden doors, for instance the Pantheon Doors and that of Remus in Rome which latter is quite an imitation of Cabinets makers-work. In this state of development they are ornamented on another principle.

These Bronze doors belong then after the system which I am now endeavouring to develope, to the same class as wooden doors, and have no more relation to bronze vases, than this pennypeace. has.

They are rather somewhat connected with this Coat of Mails by a common Idea, that of *Coating*. But this I hope to be able to explain elsewhere. – |

A system of Classification, based upon principles which I have tried to indicate will include the history of art, but it will place things close together, which are very far from each other, by distance of time and Space; for instance the Merovingian and Byzantine Style with the style of industrial art with the Assyrians and the Greecs of the Heroic age. |

The whole province of practical art may be brought, according to this comparing system, into 4 General Classes, for their relations to certain types which they have in common.

*First class* It comprehends all the things which have their types in the art or in the Industry of Coating.

*Weawing* forms one important branch of this very extensive Class, but it includes a great number of other Methods of covering or protecting things with thin surfaces.

Second Class.

Things which have their paragons in the *Ceramic* art.

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Like Weaving for the first, so forms Pottery only one division of this second class, which includes many other processes having in the Ceramic art their points of contact.

Third Class.

Manufactures which have their types in timberconstruction.

The significance of forms, which have their origines in timberconstruction is well known in the history of architecture.

Fourth Class.

Such as have their types in stone construction and in Stereotomy, or the Art of Cutting forms out of hard masses. –

Many formations are transitional, they find their places between the classes of which they partake.

For instance the Chinese Bamboo treillis, which is an important Element for industrial Art in China.

It holds the Middle between Weaving and timberconstruction and is the type for Some | higher forms in Antik and mediaeval Architecture, as well in the Art of working Metal.

Other formations are mixd, and of a composite Character; This is namely the case with the works of *Architecture*, which are combinations of elements, belonging for their types to the four different Classes, which I mentionned above.

A thorough illustration of the system I have briefly sketched out, is too arduous a task for me. But I shall perhaps be able to offer some usefull contributions towards this object.

This then is the extent of my ambition, and with this view I purpose to give five lectures.

as follows: |

1°) Art applied to the Industry of Coating, including textile Industry.

2°) Art applied to Ceramics in its widest meaning

3°) Art applied to timber-construction and other branches which are related to this industry.

4°) Art applied to Stone construction and other branches of industry approaching to it.

5°) Monumental Art in which the working together of the above mentioned four elements under the presiding Power of Architecture will be chown.

This frame of a course of lectures seems to permit no room for *Metalworking*. The reason for this lies near; Metal is not a primary material. | The types were fixed before the emploiement of metal for their execution.

Nevertheless I shall go particularly into the details of this branch of Industrial art, which is now my speciality. -.

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### **General Remarks on the Different Styles in Art**

fol. 17 I. For some months I had the honour to read in this room a paper which I then considered as the introduction to a series of lectures for which I had prepared the materials and fixed the general outlines. At that time I endeavoured to show the want of a comparing system of Technology, or more properly speaking of Artistical science, a system analogous to that which has been adopted so very successfully by our naturalists for natural history.

If we observe the great Variety and richness of nature notwithstanding its simplicity, we may by analogy assume, that it will be nearly the same with the creations of our hands, with the works of industrial art. 5

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They are like those of nature, connected together by some few fundamental ideas, which have their simplest expressions in some *primitive forms* or *types*. But these normal forms have given and give rise to an infinite number of varieties by || development and combination, according to the exigencies of their specialities, according to the gradual progresses in invention, and to so many other influences and circumstances, which are the conditions of their embodiment.

Will it not be important to trace out some of those types of the artistical forms and to follow them in their gradual progress from step to step up to their highest development?

Such a method would at least contribute towards getting a clear insight over the whole province of practical art, and perhaps also it would form the base of a doctrine of *Style* and of a Sort of Method how to invent, which may guide us, to find out the natural way of composition.

If we go through the great number of works on art, and especially on architecture in search of a guide for Artists, like the book of the celebrated Frensch Naturalist Baron Cuvier on the Animal Empire and his comparing osteology, or the Cosmos of Humboldt, which are Guides for naturalists in so far as these books contain the full development of a comparing system of natural history, we find nothing analogous. ||

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I allways painfully felt this want at my lectures on architecture which I had the opportunity of giving at the Academie of fine Arts at Dresden; and it was natural, that these lectures were more or less influenced by this feeling. Although I never entertained the pretention or the hope of filling up this want; it was then my endeavour to contribute some few materials for the use of a future Cuvier in Artistical science, which materials I have laid down in different pamphlets which were published in Germany under the title of Contributions to a comparing science of architecture. (Beiträge zur vergleichenden Baukunde).

The contents of these pamphlets have suggested the principal material to the present and to the following lectures.

But when I wrote them I payd too little attention to the existing relations between the other branches of practical art and architecture. Now I feel convinced more than I did before of the fact that the history of architecture begins with the history of practical art, and that the laws of beauty and style in Architecture have their paragons in those which concern Industrial Art. The laws of proportion, of || Symmetry, of Harmony, the principles and the traditional forms of ornamentation and even those elements of the architectural forms, which we kall mouldings were partly invented and practised long time before the foundation of Architecture as a selfexisting Art.

The caracters of the different Architectural Styles were clearly expressed in certain characteristic forms of the earliest industrial Art, applied on the first necessities of life. This will be shown in the following at many instances.

So architecture is the last born of the arts, but it is the Combining together of all the branches of Industry and art in one great general effect, and after one directing Idea; The laws and principles of Style and beauty which we aknowledge in art have probably been the first fixd by Architects.

These remarks are made with the intention of apologizing for the order which in the following will be observed by considering the different branches of art and Industry, principally, but not exclusively as || attendant upon Architecture.

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Every work of art is a *result*, or, using a mathematical term, it is a Function of an indefined number of agents or powers, which are the variable coefficients of the Embodiment of it.

 $Y = \Phi(x, z, t, v, w, .).$ 

In this formula, Y stands for the General Result, and x, y, z, t, v, w represent as many different agents, which work to gether in a certain way which way is expressed here by the Greec letter  $\Phi$  or Function

As soon as one or some of these coefficients vary, the result must vary likewise, if x becomes (x+a) the result will be U, quite a different one from that, which we call now Y; but it will in the principle remain identical to the last, being connected with it by a common relation which is expressed by the letter  $\Phi$ .

Likewise, if x, y, z, t cet remain the same but if  $\Phi$  changes, then Y will change in an other manner than before it will be fundamentally different from what it was before the Change took place, although the coefficients x, y, z, t, v. etc have undergone no change. The new principle will only be modified by the different values which we may be induced to attribute to the letters x y z t. cet. ||

It will be said, that an artistical problem is not a mathematical one and that results in fine arts are hardly obtainable by calculation. This is very true, and I am the last to believe that mere reflexion and calculation may at any time succeed in filling the place of talent, and natural taste.

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Also I only wanted this shedula as a crutch for leaning on it in explaining the subject I therefore will kindly be allowed to prosecute my proposition and to give some real attributions and values to those letters.

By the letter  $\Phi$  we may understand the exigencies of the work of industry or art in itself, which are based upon certain laws of nature and of necessity which is the same at all times and under every circumstance.. A drinking cub for instance will be the same in its general feature for all nations and at all times; it will be in principle the same, if executed in wood, in Earthenware in Glass in metal or what- || ever other material it may be. no matter.

The elementary Idea of a work of Art, which is based upon its use and destination; is independent upon fashion upon material and upon temporal and local conditions. The artists call this the motiv of an object of Art. The motives have generally their simplest and purest expression in nature itself, and in the early forms, in which they have been cloathed by men in the beginning of industrial art.

These natural and early industrial forms are called the types of the Ideas. It is a satisfaction to artistical feeling, when in any work of Art its first idea, widely as it may depart from its origin, still pervades the whole composition, like a Theme in Musik, and it is certain, that clearness in the conception of the Motive by the Artist is the first and most important condition to be observed in composition.

The new will be thus engrafted upon the old, || without being its copy and will be freed from the influence of mere fashion.

The knowledge of the types and early forms constitutes therefore one of the principal parts of the doctrine of *style*, which word is used for the *notification of certain achievements in works of art, arising from using artistically the means and from observing the limits, which are contained in and defined by the problem in question, as well as by the accessories which modify the solution of it in every case.* 

The art of catching the simple melodies in form and colour, which appear instinctive in the works of man in his primitive combinations is very difficult to us with our more extended means and knowledges, to seize and retain.

We should therefore study the simplest works of man and the history of their development as carefully as we consider the works of nature itself. Direct Imitation of nature in ornamental || art leading easily to mistakes, when not guided by study of style.

We come now to those coefficients of our result which I signified in the general formule by the letters x, v t w etc.

Those are the different vehicles which act upon the embodiment of our hands, and modify the appearences of the Elementary ideas.

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I must specify them here forthwith a little more. Their number is undefined, but they can be grouped into three distinct classes

1°) Materials and processes.

Among these agents is one group which consists of the materials and the modes of execution, or the processes which come in question for their execution. -

2°) Ethnological influences,

The second Group comprises the local and ethnological influences upon artistical performances, the influences of Clime, religious and political institutions and other national || conditions.

The third Group is that, which includes all the personal influences which give an individual caracter to the works of art. The last can be of a double nature; The personal influences upon the embodiment of works of art can arise from those who are the commenders of the works, or from the artists and the practical performers of the last. -

These three different kinds of influences upon the embodiment of works of art constitute as many different significations of that important artistical notion of style.

Thus we say a work has no style, when the material has been treated in a manner, which is not convenient to the nature of the first.

We say also Aegyptian Style, Arabian Style etc, and here has this word quite an other sense, this part of the doctrine of style is the Subject of history and Ethnology of art.

Lastly we say, Style of Raphael, style of Louis XIV Style of Jesuits; The treatment of this sort || of Style belongs to an other part of history of Art, which can be named Museology.

The first two only of these three significations of Style will form the programm for these lectures.

First the treatement of the materials, with respect to style.

Secondly, in an additional lecture, some general vues on the works of art, and especially of architecture, as expressions of local, circumstances and of the political and religious institutions of nations.

The different manners of treating raw materials and transforming them into productions of industrial art, can be brought, nothwithstanding their manifoldness, into 4 general classes, for their relations to certain || types which they have in common.

1° The first Class comprehends all the things which have their types in the art or in the industry of coating.

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Textile art forms one important branch of this very extensive class, but it includes a great number of other methods of covering and protecting things with thin surfaces. We shall take in the following this word coating in the widest sense.

2<sup>*d*</sup> Class. The second Class

Things which have their paragons in the Ceramic art.

Like textile art for the first, so forms *pottery* only one division of this second class, which includes many other processes, having in the Ceramic Art their points of contact and their types.

Third Class.

Manufactures which have their paragons in timberconstruction.

Here also we must take the word in its widest sense which includes constructions which are executed in || Stone, metal or any other material but after the principle of timberconstruction

The high Significance of architectural forms, which have their origines in 15 timber-construction is well known in the history of Architecture; This is not the case with those, which are the results of textile art.

Fourth Class,

Such as have their types in stone construction and in Stereotomy or the art of cutting forms out of hard masses.

These are the four general classes which permit a great number of transitional formations, which find their places between the Classes of which they partake.

For instance the basket, which is a vase executed in textil work; another instance is the Chinese bamboo treillis, which forms the transition between mattings and timber-construction and is an important element for industrial art and history of Style. It is the type for several higher forms in Antik and mediaeval Architecture.

fol. 13v

This frame seems to permit no room | for Metalworking; the reason for this lies near; Metal is not a primary meterial The types were fixed before the emploiment of metal for their execution. But we shall, to be sure, not forget this important branch of industrial art.

Let us now proceed at once, (for the material is overpowering,) to the specification of that class, which has been mentionned the first, *the art of coating*. It may be doubtfull if it is the first by anciennity, if it is that, in which the earliest attempts of mankind in art were maid, but undoubtedly it has influenced earlier than the others did, the general artistic education, by giving the first motives for monumental decoration. We shall consider it first under this point of view and afterwards give some few observations on its emploiment for dresses and for other domestical implements.

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This branch of industrial art has supplied the first types for || one Element of architecture which is not the least important among the three, which constitute the substance of all architectural performances without exception. and which are the natural protections of the holy Symbol of settlement, civilisation and humanity, namely the *hearth* or the fire place.

But Here I feel obliged to interrupt the course of the matter with the insertion of some short remarks on the constituent parts of architectural constructions.

They are four;

r°) the fireplace as the Center,

2°) The protecting Roof,

3°) The Enclosure.

4°) The Substruction

 $r^{\circ}$  *The Hearth.* The Hearth or the fire place is the first, the moral Element of Architecture, |

Round the hearth the first families assembled; the first elements of human society began near the vivifing and nurrishing flame. Here it was where the first confederations and social settlements were made and where the first religious ceremonies originated. The Altar, this early Symbol of religion was and is still now nothing but a holy fireplace.

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The hearth is the only Element of Architecture, which is selfexisting and has a meaning, without the coexistance of other constructions, without the protection of a Roof, without being included by walls, or elevated on terraces and basements. It therefore constitutes in itself the elementary Idea of a certain important class of edifices, namely those, which we understand under the term of *Monuments*, if we take this term in its more special sense.

The hearth or the Altar, its highest expression, will form for us in the following the Cardinal-Point, whereto all the other things will relate.

Round the fireplace three other elements of | Architecture are grouped, which form, as it were, the protecting negations of the three *Natural Elements* which are ennemies to the flame of the fire place; These defenders of the hearth are the *Roof*, the *Enclosure* and the *substruction* or as we may call it the *terrace*.

The combinations which result from the common employment of these protected and protecting parts of a building are manifold, and differ widely from each other, after the special influences under which they take place. It happened that under certain circumstances some of these constituant parts were more developped, and others only maintained symbolically. I shall have the opportunity to come back to this at an other day.

Every one of the above mentioned constituent parts of a building may justly be considered as the special domain of one of the different four branches of practical art. fol. 15r

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fol. 140

The ceramical and afterwards the metallotechnical arts may be grouped

round the hearth, as the representative and Center of interior life. Engineering and maconry had for its speciality the substrution, and Carpentry the roof with its Appartenences. But what technical branch was especially attached and developpd itself on 5 that part of architectural Construction which I called before the Enclosure? No other than the Craft of matmakers and hanging-manufacturers. This assertion, which perhaps will appear strange, wants justifying. It is a fact, that the first attempts of industrial art, which have been made and which we still observe to be made by human beings, standing on the sill of civilто isation, are tresses and mats. This part of industry is observed to be known even by tribes, which have no Idea of *dressing*; They employ the raw productions of textile art for their protection against the humidity of the ground and for the separation of their propriety from what does not belong to it. As the first raw attempts of this kind may perhaps be considered the *hedges*, 15 or interlaced branches; fixed into the soil. There is even one example in Ethnology, of a nation, with a | pretty well developped ornamental art, which has even a Sort of architecture, but whose architectural monuments are nothing but richly sculptured and painted hedges and hedgepoles. These are the New Seelanders. Their Civilization was stoppd at a very early time of its development; like we see it with the Chinese, only that the last were much more advanced when they became stagnant. The second stepp was to make mattings out of the barches of trees; then they made the first essays in weaving with Gras and fibrous parts of plants and so on. 25 The application of hangings, or of their natural paragons, the skins of animals and the barches of trees, together with hedges, for the separation of space and for the protection against the weather or against ennemies, by far preceeded

fol. 17r 17

And as the interlaces and hangings were the origines of the Separations of space, it was natural, that these productions of industrial art beheld | a great part of its influence upon the outer formation and decoration of the walls, even when the last subsequently were executed in solid masses. The hangings or coatings of the walls remain the true representants of the idea of Spaceseparation, they are the types of the last.

that of walls. executed in stone or in wood.

The hangings are the visible walls; What is behind them has nothing to do with the Idea of *Separation* of Spaces; The thick stone-walls are only necessary with respect to other secundary considerations, as for instance to give strength, Stability, security, etc.

fol. 16r 16

fol. 16v

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Where these secundary considerations had no place, there remained the hangings the only means of separation; and even, when the first became necessary, they formed only the inner scaffold of the true representatives of the walls, namely the variegated hangings and tapestries.

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So it comes that the oldest ornaments in architecture are mostly deriveable from the enterlacs and tress works, which are the natural and gracefull results of the process of twisting and weaving with natural stuffs of different colours.

We have in our German linguage a word which signifies the visible part of the wall, we call this part of the Wall, *die Wand*, a word which has a common root and is nearly the same with *Gewand* which signifies Woven stuff; The constructiv part of the wall has another name, we kall it Mauer. This is very denoting. – .

The significance of the ideal representatives of the separation of space remained the same, even when the traditional mattings and hangings were set aside, and reimplaced by other coverings.

The inventive instinct of mankind has been inexhaustible in producing new means of covering the walls, and very different reasons gave rise to these innovations. At some occasions it was by oeconomy, at others by luxury; Sometimes for coolness for Durability etc.

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Every branch of Industry has been set into contribution for this.

One of the most ancient and most important surrogates was suggested by the maçons, namely the Coating of the walls with Stucco. It gave rise to the development of painting as an independant Art. We shall see hereafter that Wallpainting never denied its origine with the antik Nations down to the Romans of the later periods, and that the Same was the case with the Mediaeval Wall

Decoration.

The Ceramic arts furnished an other reimplacement for the variegated original draperies. These were the glazed bricks This invention was probably owed to the genious of the Assyrians; It is even probable to me, that the desire of giving a glazing to the bricks, which generally were employed in a unbournd state, has conduced to the invention of burning bricks. I had the opportunity to examine accurately the Assyrian glazed and ornemented bricks which Mr Botta has brought from Chorsabad to Paris; I made on them the following observations.

*first* they are very imperfectly burnt, they remain quite unburnt immediately behind the thin Glazing with whith they are covered.

secondly The Glazings on them are of a very fusible and tender kind,

*thirdly* The ornaments which are painted and fixed with a smooth fire, cross the joints of the tiles quite irregularly and the ornamental lines stand in no re-

40 lation whatever with the construction of the wall.

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*fourdly*, The Glazing covers only one side of the bricks only, but the colour dropped at some parts round the Edges of the stone which prouves that the bricks were layd horizontally when they were painted on their outer front with Enamel colours. –

The consequence of these observations is, that the old Assyrian method of <sup>5</sup> employing Glazed tiles has nothing in common with the more modern invention of forming ornaments with bricks of different colours, which last is a sort of Mosaic work. – The constructiv principle was not employed for wall decoration by the Assyrians, excepting on the basements of the buildings

The second Consequence is this that the bricks probably were burnt in their proper position, by a firing made in the room itself after they had been painted *on the Ground* before and than put in an unburnt state at their places. The same process of burning the bricks in their proper positions on the edifice has been observed at some old skotch Edifices.

Another Surrogate for draperies as a decoration of walls is the covering of the <sup>15</sup> walls with wooden pannels;

To these komes an other one, which is the richest and only employed for temples and Royal edifices, the covering of the Walls with Metal plates, sometimes with Goldplates, which were fixed on the wall itself or on the wooden pannels, which I named before.

Finally may be mentionned the slates of Granite, Marble Alabaster, Porphyr. and other hard or precious stones, with which the walls of the Edifices of Assyria, Persia, Egypt and even of Greece were frequently invested.

*fol.* 207 20 Such heterogeneous materials and processes, applied for wall investment and 25 Wall-Decoration have produced naturally as much variations of Style but this variety of new Motives in art has taken place within the bounderies which were given and prescribed by the old traditional type, which was the common origine of all the new inventions;

Painting and plastical Art on Wood Stucco, Terra Cotta Metal and Stone remained dependant upon that style, which is the peculiarity of textile works and needle works.

fol. 20v

Ornamental Art and Architecture itself in its general features, ¦ was, till down to the Romains, subject to the principle of *Coating*. An immense material for comparison lais here before us, a material, which remains quasi *untouched*, for no writer on art in general or on architecture especially has as jet paid due attention to this question. To pursue it here in all its consequences would be a task widely depassing my forces and besides., time would not permit it. –

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# The Ancient Practice of Wall Coating and Tubular Construction

On Friday last; I devided the constructiv elements of Architecture into four, and based the plan of my lectures on this division. An instructiv illustration of this system is to be seen on this sketch, which has been made after a Model of a Caraib cottage, exhibited in the Colonial-Division at the Great Exhibition of 52. we see here all the Elements of construction in their simplest expressions and combinations. Every Element of Construction is speaking for itself alone and has no connection with the others.

This raw and elementary construction notifies no intention whatever from the side of the builder to be an architect or a decorator, with the exception of these mats, which devide the bedroom or inner apartment from that sort of open hall, where the fireplace stands. The regular squares of these mats, made with barks of trees | of different colours, show the first origine of walldecoration and of architectural Ornement. –

There is a nation which is very far advanced in industrial art and in civilisation in general, and was the same many thousand Years before the first germs of culture began to grow in Europe, whose Architecture stands still in the same state of development which You see here on this simple cottage. I mean the Chinese. – The Architecture of the Chinese remains unaltered through the ages. their imperial pallases and temples show in principle no difference from this Caraib Cottage. The Roofs have their own pillars, and have nothing to do

- with the walls which in most cases are mouveable shrines, or hollow-brick constructions made in imitation of shrines. The wall does not touch the Roof, there being a distance between the top of the Wall and the frame-work of the Roof, like we see it here on the Caraib Cottage. The framework of the Roof is visible
- inside They often make both the Roof and the columns, that support it, of precious woods; sometimes enriching them with Ornaments with inlaid ivory, brass, and mother of pearl. The columns have no capitals nor bases and are | without Entasis, they are no columns but simple shafts although they are richly ornanented and varnished with deep colours mostly with purple.
- In every House they have a provision of wooden leaves or sliders, two or three feet broad, and ten or twelfe feet long, which when rooms are wanted, they fasten to the floor. and ceiling and in a few hours form any number of apartment. Some of these sliders are open from the top to within four feet of the flooring and, instead of Glass, the open part is filled with very thin oister shells, sufficiently transparent to admit the light. At other cases the upper part of the folding doors is of lattice work covered with painted gase, which admits light into the room. These doors and pannels are nearly made of wood, and are richly varnished in red blue and other colours.

2 fol. 2r

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Instead of doors they generally take cane mats, which lit up and down occasionally to keep out rain and sunshine. The constructed walls are matted about 3 or 4 feet upwards from the pavement the rest being neatly covered either with wite or crimson or gilt paper,

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We may say that Chinese Arnamental art is too much disdained by us, we may learn many things of the Chinese which are of direct practical application; But the Study of Chinese ornamental art is also very instructiv for the understanding of the state of architecture and ornamental art with the ancient nations, | If we were allowed to see the ancient Babylonian Pallaces as well as the Egyptian and even the Greec monuments in their compleatness, with their Accessories of frameworks, mattings, drapperies and mouveable things, particularly with their polychromical and metallic ornamentations, they would approach under many rapports very much to Chinese architecture and ornamental art. –

We shall now proceed in showing the gradual transition of the principle of <sup>15</sup> wallcovering to a more constructiv style of architecture. which transition we shall pursue on the remaining traces of Assyrian Persian Aegyptian Greec and Romain architecture.

Among these are the Aegyptian monuments without doubt the most ancient; Some of the most important Egyptian temples at Thebes and elsewhere, and many old tumbs in Aegypt, which still exist, have been built thousands of Years before the Assyrian monuments, whose ruins have been lately discovered by Botta and Layard. But the first, notwithstanding their greater antiquity belong to a later state of development, at least with respect to their constructiv elements, and we shall therefore begin with the second.

The Assyrians remained the faithfull conservators of the old principle. Although they knew pretty well Stone Construction, they employed it only as an architectural and decorative principle for the basements of their edifices; We must mention at once, that these basements formed a very important part of the Assyrian Architecture; The Assyrian architecture is before all the others a Terrace-architecture as we shall see it in the last lecture.

But the cooperation of the maçon to produce an artistical ensemble or a monument, stopped here; his art was hidden behind a richly ornamented cover for all those parts of the construction, which form the building itself, and this inside and outside of the Walls.

The old Greec historians, Herodotus, Ctesias, Xenophon, Diodorus of Sicily and others give us descriptions of the outside decorations of the Assyrian bildings. They were entirely coverd with polychrome ornaments, executed in Terra Cotta and Metal, with Frieses, representing battles, chases and processions, analogical to those which we see now represented on the Alabasterslabs at the Brittish Museum.

fol. 3r 3

fol. 2v

Xenophon tells us, that on the days of Ceremonies these beautiful ornaments were hidden ¦ by those renomated Assyrian Tapestries, which are mentionned in the oldest records of mankind and celebrated for their richness, colours, and designs, and Skillfull execution.

These draperies were the true Models for the above mentionned Terra cotta ornaments, on the outer walls, as well as for these Alabaster slabs; which formed a sort of panneling, inside and outside of the buildings, about 5 to 8 feet upwards from the pavement.

The descriptions of Dragons, Lyons, Tigers, Unicornes and other Mystic Animals, which we read in the ancient records remind perfectly the ornaments and Embroideries which we observe on the Dresses of the Gods and Kings on the Assyrian Basreliefs; Even more the whole Ensemble of the last reminds us the ancient Descriptions of Similar objects, as being represented on tapestries.

These sculptures remain within certain limits which seem not to be prescribed by hierarchical laws, which was the case in Egypt, | but by the reaction of a treatment and of a Style of execution, which is not that of Stone sculpture. They are copies in Stone of woven or embroidered tapestries and look like that.

There were at the Chinese Department in the Exhibition of 52 some Tapestries or Embroideries in relief, which in their style reminded perfectly these baseliefs.

Other representations, such like battles, hunting partys etc are comparable to the well known Bayeux Drapery which represents the battles between the Normans and King Harold and was made by King William the firsts Queen at the time of the Conquest.

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Real Draperies and rich floor Carpets were combined with the sculptured and painted tapestries to a general splendid and harmonious effect.

Very often the walls were covered with pannels of precious wood, with which at the same time the ceilings were made. This we know from notices given by Xenophon in his Cyropaedia.

The columns which were the supporters of the ceilings were likewise of Wood, ornamented with latticework of Cane and covered with Gold and Silverplates.

The pannelating of the Walls with Stone slabs was the first step to stone construction, –

The second step towards the last as an ornamental Element is visible on the Ruins of Persepolis and Pasargadae in Persia. These Ruins are better known only since the beautiful publication on Persia, made by Mrs Coste and Flandin, by order of the Frensh Government.

As for the terraces of the old Persian Castles we see the principle of Stone Construction highly developd, they are executed in immense blocks, of black marble, very regularly and at some instances evidently with the view of employing the joints of the stones as ornamental lines. fol. 4r

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fol. 30

Here also the maçons-cooperation as an decorator stopps; but we see a remarkable progress towards the Emancipation of the Material at the main buildings themselves. The Columns, which were of Wood and covered at times with Metal with the Assyrians, are now, with the Persians, allready executed in Stone, but they behold the entire Character of Wooden-Pillars, by their | slender proportions and details taken from wood Construction. This we shall see in the Chapter on wood Construction. But this is not the only proof of the Progress towards an other Style of Construction.

The sculptures on the remaining parts of the walls at Persepolis and Pasargadae are in general style but little different from those in Assyria, but Stone is already employed not only as a cover, but as a constructiv part.

The principal parts of the Walls, with the exception of the staircases, the Window- and Door-frames, and the Corners of the walls, were still only built of unburnt bricks; These parts of the Walls are gone, and the former only remain.

They are Stones of immense Size, a few of them forming the Corner of a wall. but they are hollowed out, so that they form some thing like a solid shell for reception and the protection of the Earthen wall, which last was covered with precious wood and Metalplates, as we know by the history of Alexander, who destroied this Royal Pallace by fire. |

We come now to Egypt, with its immense stone monuments. The manner how the Egyptians constructed their edifices is a proof, that stone construction had not yet arrived to that point where it is a selfexisting part of ornamental Architecture. The Egyptian monuments are as it were, cut out of an artificial roc; The Stones, which were set together very carefully it is true, but without consideration for linear effects of the joints, and very irregularly, first formed a very raw idea of the outer and inner features of the building, which was given only afterwards to the walls with the cisel. After the general forms of the building having been finished by the Maçon it came under the hands of the Sculptor and lastly the whole was painted over by the painter.

This only with Respect to the Buildings themselves, while on the Terraces we observe The stone construction in its own right and standing for itself like in Assyria and Persia.

On some of the oldest edifices as for instance on the Pyramids, inside and outside, and on the oldest part of the Tempel at Carnak in upper Egypt, (Theben) the pure old principle of Wall coating appears still in its purest application.

The Piramids, even those constructed of Sandstone or Limestone, were once covered with highly polished and ornamented Granit | And what is a very remarkable circumstance, these Granite slabs themselves appear to have been covered with a transparent coating of Varnish Colours.

There is a moulding in Aegyptian Architecture, which may find its explanation in the construction of platework or pannelled work It is a moulding, which

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our carpenters employ for hiding the joints of the boards on the Corners; I mean the Torus round the walls, the principal moulding of Egyptian Architecture.

The sculptured and painted decorations of the Egyptian monuments greatly deviate from their origine; They are not more sculptured Embroideries, they are Lapidar-inscriptions, hollowed out of the Wall and filled up with colour; They are a sort of Champlevé Enameling in a large architectural scale and style.

But this is not the case with the pictures on the walls of the Tumbs. Walldecoration remained here true to its old principle. Most of the representations are given here like as being draperies fixed on the walls, and their frames show very beautiful patterns, executed in a | pure ornamental, and not hieroglyphical style; The motives of these patterns are alltogether taken from textile ornamentation, they are interlaces, squares, Meanders etc.

*Lastly* The ceilings of the Aegyptian tempels represent the idea of a lofty canopy, suspended between the columns of the Hypostilium.

I shall trie to show at an other occasion, how the principle of Aegyptian architecture notwithstanding its massivity, has taken its Analoga from provisional wooden constructions and tents, like we have seen it to be the case with the Tempel of Salomon.

The fourth path was made by the Greecs.

The Greeks were not much more advanced in Civilisation than the American Indians, or the New-Zealandas are now, while Assyria and Egypt were allready the seats of highly developd forms of society. It then was but natural, that the former overkame the types for their institutions and for their art partly from abroad, and at a period, when the last were not more ligible in their proper and direct significance. The Greecs remained faithfull to many of these traditional types, but they took them up in a pure artistical sense.

We first observe on the Greec monuments an organic connection between the single elements of construction, which on the Assyrian monuments and even those of Egypt, have no connection together and work each for itself on its place; | The Greecs even by doing so, were not allways consistent in their principles, depassed in some cases the justifiable bounderies, in favour of some higher idea which they proposed to carry out, as is shall show at an instance here after.

Secondly there is that difference between Greec and barbarian architecture, that the ornamental parts of the last are *applications*, or at least represented like such, they are fastened round the kernet of construction which is still visible. while the construction and the ornaments of the first are one and indivisible from each other. The Greec ornaments are emanations of the constructiv forms and in the same time they are Symbols of the dynamical functions of the parts to which they belong. – fol. 7r

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They have no other meaning than to explain the constructiv forms by analogical notions, taken from nature itself or from other branches of art, while the ornaments on the barbarian monuments find generally their | explanations in some historical, local, or religious notions, which have nothing in common with the part of the building, whereon they are applied. –

The accuracy and beauty of Greec Stoneconstruction has never been reached since, but their edifices are sculptured and not constructed in Stone. Also they did not show the stone, except on the terraces, which supported the edifices; Ewery where else the stoneconstruction was covered with a thin coating of stucco which last was painted and ornamented after the ancient principle. This was even the case for their white marble monuments, which last material was adopted principally for the reason of being indispensable for the application of a new process of Wallpainting invented by the Greecs and unknown to the Egyptans and the Assyrians.  $-\frac{1}{2}$ 

We come now to the Romans, which are the inventors of real stone construction. or at least which made this principle of building the dominant in the whole civilised old world. The art of constructing vaults was not unknown to Assyrians and to the Egyptians, and even the Greecs were acquainted with it, as we shall see at the Chapter on Stone construction, but neither of these nations adopted this form as an element of architecture. The Romans, or the Etruskans, their ancestors by doing this, were the inventors of architecture as an selfexisting art, which may exist for itself without the assistance of the other branches of art..

It would be interesting if it was permitted by time, to pursue the history of Wallcoating farther through the mediaeval ages, where it bekame again the dominant principle of architecture, and the starting point of a new development of art in general.

I may now be allowed to give some additional notices about some specialities of industrial art, which derive from or are connected with the principle of Coating.

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On the early style of Metalconstruction and of Metaldecoration.

It is highly probable that Metal was first employed for ornament only, and in form of Metal sheeds.

Goldleaves found in large quantities on the Indians on the discovery of America by Columbus and Cortez.

Such Ornaments in Gold- Silver and Tinleaves of a very early caracter are to be seen at the Brittish Museum. They are stamped and pierced with ornaments

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and figures. So the process of driving bending stamping and engraving metalshieds may appear the earliest which came in practice.

A Second step was the art of making metalthreads and filigran work, belonging to the same Cathegory of processes.

We find Wires and spiralformed ornements in the old Etruscan as well as German and Celtic Tombs; alse brass- and Gold-bracelets, and Collars in the same style. [

A third invention was that of Chains, first employed as ornaments, afterwards for defensive arms. The Type of the Oriental Style of defensive arms. adopted in the time of the Crusades by the western nations. –

Metal threads were also employed at an very early period for woven staffs and Embroideries.

The Pallaces of the Kings of Babylone says Philostratus were ornamented with carpets in Gold and Silverweavings instead of pictures.

Hence the Gold and Silver-embroideries the types of decoration for larger flat metalsurface Instances the Walldecorations of the temple of Jerusalem, The Brass plates in the Christian Churches. –

The arts of nielling and enameling are inventions which derive from the same origine. Enamelling is a sort of Niello with vitreous substances. An other

Style of Enamelling that which derives from Jewelry and imitation of precious stones. (Emaux à Cabochon and Cloisonnés In the whole 7 different Styles of Enameling. |

Oriental art never changed its general Character; as far as our knowledge reaches in pursuing it; – oriental art is the absolute expression and the result of

the more instinctive feelings and aptitude of mankind for the Embellishments of human wants; this explains the fact, that after the fall of the Roman Empire, the oriental Style or at least a style nearly approximating thereto, reappeared with all its elementary motives, even among nations, where oriental influences could not prevail.

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The works of industrial art of the first centuries of the Christian Era appear in immediate conjunction with the productions of the earliest antiquity.

To this sort of style belong the gold ornaments discovered in the Tomb of Childeric near Tournay and the imperial Ornaments of Charlemagne, now at Vienna.

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# Furnitures and implements for domestic life

The taste for rich and splendid furniture and implements preceeded by far the want of fixed settlements.

Wooden furnitures entirely covered with metal plates, belong to the earliest forms of this branch of industry.

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Parts of Assyrian Specimens of this kind are at the Brittish Museum. The Same Style prevailed among the Etruscans and the Greecs of earlier times

The Egyptians seem not to have followed the same style of Metalplating. The A. furnitures bear the thin caracter of wrought or cast Metal.

The Assyrian Warcharriots were evidently executed in the former style those of Egyptians were made of Cast metal.

The same principle of construction prevailed in the early mediaeval ages in Western Europe. Such was the Chair of Charlemagne |

The Imperor Othon of Germany opened the Grave of Charlemagne at Aix la Chapelle In the Year 1000. He Was found sitting on a Wooden Chair covered with Goldplates and with Precious stones, in the same Style in which are executed the Imperial ornaments at Vienna.

In the Life of Charlemagne written by his secertery Eginhard, is constained a list of | the valuable things, which constituted the inheritance of the Imperor, which is of great interest for the state of metalworking at that time.

Among others there are mentionned 3 driven tables, in Gold and Silver with inlaid work, representing the Map of Constantinopel and of Rome and other compositions.

The Chairs of the Archbishops in Some churches in Italy and Germany executed in Marble are executed after these wooden metalcovered types.

## Application of Metal for defensiv arms.

The application of Metal plates for defensiv arms is of very early date.

The oriental Style of defensiv arms, the coat of mail, was not adopted by the Greeks and Romans.

The Greec and Roman shields, helmets and Armures show a perfect application of the principle of strenghtening thin Metal plates by corrugations and curvatures, an important moment for the  $\frac{1}{1}$  history of construction.

The Greec cuirasses were modelled after and well adapted to the formation of the parts, which they were intended to secure, Interesting instances of metal applied to armury in Homers Songs, Ilias 18, 478.

The Shield of Achilles; consisting of 5 plates of different metal laid one over the other. Iron, Bronze, tin, Gold and Silver; Id has been the favorite problem for Sculptors to reproduce the form of this Chield with alle the rich ornaments and Emblems, which describes Homerus on the praecited song. There were screw Zones, Surrounding a Center representing Haeven. the Shield of Diomedes other Shields described by Greec poets. Very good Specimens of Greec armuries at the Brittish Museum.

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fol. 10v

fol. 10r

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fol. 11r

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It is more than probable that the hollow Metal construction or tubular construction has first been principially settled by Greec armurers. The same was the Case in the  $15^{th}$  Century after the invention of the firearms.

5 It was natural that the same important principle of construction was employed hereafter to other constructions, and namely for building

We have several examples to show that | it was practically carried out with the Romans, For instance the roof of the Pantheon which formerly consisted of tubular bronze spars, riveted together – The whole Vault of the Edifice was covered with brassplates, which have been taken in time of Sixte V by the Architecte Borromini for the large Baldachin in St Peters.

*The antik Bronze* doors give a second example of tubular construction, The history of the Brass doors is a very interesting part of general history of art. The Doors have allways been propositions for the best artists and occasions for elevating

The older forms of Brass doors were nothing else than a coat of metal nailed on wood, Such were the Silver Doors of St Peters, stripped of their valuable coat by the Saracens in the Jear 846: The silver was of the weight of 975 fb.

This styles appeared in the same nudity in the Byzantine doors at St Peter et Paolo ¦ at Rome, which dissapeared with the destruction of that ancient Basilica by fire some 20 Years ago. –

But elder doors, in Germany made by Saxon founders at Hildesheim belong rather to the advanced Roman Style with pannels in imitation of wooden framework. in which last Style all the celebrated brass doors of the Cinque Cento are

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executed.

## **Classification of Vessels**

The most important of all the different branches of industry for the general *i*. *fol. ir* history of art and for artistical science is perhaps the potters industry, of which I shall try to give some notions in the following; – The word pottery comes from the Latin word potum, which word indicates nor the form nor the material, but the use of the object It is the latin name for a drinking cup.

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Another name for the same branch of industry has been adopted from the Greek linguage, which name is less usual in English but which we shall be obliged to employ frequently to day because it gives us a more general notion of the whole empire of the branch of industry in question.

The Greec name for pottery is Keramos; It signifies nor the nature of the material, nor the use of the vessel, but the horn of an animal, which was the original form of the drinking vases, a form which has been maintained partly traditionally partly by imitation till now for the same or for analogical applications.

But the signification of the word was afterwards extended to the whole domain of the potters craft, from the unburnt brick to the finest Etruscan or Greek vase and even to the terra cotta sculptures. Thus we may be justified by taking this expression in a still wider sense and comprehending with it the whole empire of those industrial productions, which by their prototypes or by the processes of execution are related to and attendant upon pottery.

The vases of Gold, of Ivory, of Crystal and other hard stones, of Glass, amber or wood do not belong to the potters art by their materials, but they belong to it by certain natural and traditional laws of generation and ornamentation which first have been settled by potters. It is the same case with the Sculptures executed in Metal or in hard materials, they belong to ceramic art by their historical origine as well as by the fact, that all these objects of art first must be executed plastically in clay before they can be cast in metal or cut in stone. The prescriptions of the ceramic material, the clay, and of the tools belonging to its treatement are lawgiving in statuary, so that under a certain point of view we may be | right to place all these categories of human art under the same general division.

The productions of Ceramic art stood in a very high consideration with all the nations at all times, they have to us nearly the same interest as monumental art itself. which has been greatly influenced by the first, partly directly by application of parts *materially* belonging to pottery partly *indirectly* by adopting principles and prescriptions of beauty, proportion and ornamentation, which first were settled and applied on potters works.

The first and most general application of pottery was doubtless allways and everywhere that, which has for its object the domestical utilities; but it soon acquired a higher destination by being employed for religious and funeral services.

By this they became objects of high art and symbols and we owe to this circumstance the conservation of an immense quantity of beautiful vases, while very little of the domestical poteries have come to us. The burnt clay, even the softest and least temperd by fire, is the most durable material, much mor durable than even stone and metal, which was perhaps one of the reasons, why this material was so generally employed for funeral urns. The Terra Cotta vases, which

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come from the excavations of tombs are for history  $\frac{1}{1}$  of mankind, what are the fossil remains of plants and animals for history of nature.

They are the most ancient and the most speaking documents for history of civilization. Show me what sort of potteries a nation has produced and I shall tell You what nation it was. – I had at an other occasion the opportunity of parallelising these two different forms of ancient vases, which both had a high religious significance. The first is the holy Nile-Pail, or Situlus of the ancient Aegyptians. – The other is that beautiful Greec vase, which is calld the Hydria.

Both of them relate to the same destination, that of catching running water. But the first is a drawing Vessel, for getting Water out of the Nile, and therefore Characteristic for Egypt, the Gift of the Nile. Two such Vessels were carried by the Egyptian Water-carriers on Jokes, so that one hung before, and the other behind. as we see them on wallpictures in the Egyptian Speos or tombs.

The heaviest part is very properly the lowest, as a precaution to prevent spilling. It is formed like a Waterdrop. We feel the fittness of this form | for its use, which is the opposite to that Greek Hydria, which is a Vessel for catching Water as it flows from a fountain.

Hence the funnel chaped feature of the mouth and the neck, which is rigorously prescribed by the object in view

On the other hand, the mode of carriing those vessels has led to the Idea of removing the Centers of Gravity of the Vessels towards the summits. For they were carried on the heads upright when full, lengthways when emty, as we see on this diagramm, traced from a picture, which decorates the body of the Vessel.

Any one, attemting to balance a stick on his finger, will find the feat much easier, if the heaviest end is uppermost.

This experiment explains the form of the Greec Hydria, which is compleated by the addition of two handles, placed at the level of the center of Gravity.

A third handle was added, for a second person which assisted the Watercarriing Greec woman by lifting the full Vase on the head, and down.

How strikingly is symbolised the light spiritual and lucid nature of the monteneer inhabitants of Greece in this form, opposed to the Nile Pail, which is a true representative of the national Genius of the Aegyptians, and of institutions the first principle of which was stability.

The two nations were certainly well aware and conscious of  $\frac{1}{1}$  these forms, in making them national and religious Emblems.

The Nilepail was the holy Vessel of the Egyptians and in like manner the Hydria of the Greeks was the sacred Vase, carried by Virgins in their religious processions, and perhaps the type for an architectural form, which is characteristic in Doric architecture, while the fundamental features of Aegyptian Architecture seems to be contained in Embryo in the construction of the Nile-pail;

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We possede some excellent works on Ceramical art, Among which is the most important the work of Brogniard, *traité des arts ceramiques*, which is a necessary manual for every practical man in this branch of art. The history of pottery by Marriat is an other excellent guide. –

But the object has been treated in these books more from the scientifical and 5 historical point of view rather than artistically. The | only essay in the last sense has been made by a French artist and manufacturer of potteries, Mr Ziegler, whose book Etudes Ceramiques is very interesting and usefull, although it is full of errors and paradoxes.

He gives a Sheme of the fundamental forms which occur in Ceramical art, which I reproduced here, as being usefull, allthough it gives no suggestions about the relations which exist among the forms and the real or symbolical uses and the manners of execution of the last.

He derives all the forms of the vases from two generating forms,

I the straight line and the cube

2) The curved line and the Sphere.

From the first derive three primitive forms,

- I) the Cylinder
- 2) the Conoid
- 3) the Clavoid.  $\int \frac{1}{2}$

fol. 4v

fol. 4r

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He gives as a rule of proportion for vases, which partake of these forms at least three times the half diameter and at the most three times the full diameter.

From the second, namely from the Spere, derive thre other fundamental forms in pottery,

1) the Spheroid,

2) the Ovoid,

3) the Ogivoid.

The Sphere is for him an unartistical form, because it has no *sense*, that is to say it appears the same in every sense it may be taken; It is a neutral form without any proper significance, when not assisted by other forms.

The Spheroid in the contrary has already a sens, which distinguishes its elevation from its extent in the horizontal sens.

It is the same with the Ellipsoid; but both of these forms offre little expedients in the beautiful ceramic compositions.

These forms may be corrected by contrasts of straight lines. and square frames.

The Ogivoide is for the Sphere what the Conoid is for the Cylinder, and a form as important in ceramic art as in architecture;

The Ovoid is to the Sphère, what the Clavoid is to the Cylinder; this is the 40 inversed cone, and the first is the inversed egg.

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This form is the most usual in Ceramics; In the Brittish Museum are several old Hetruscan imitations of real Austrich Eggs in white clay or marble and painted, which belong to the oldest period of Etrucsan art. –

The beautifull Panathenean Vases and their numberless imitations in old and modern times belong to the Ovoidal form.

The body of an Ovoidal vase must have the proportions of an Egg, but among hundred eggs there is one which is beautifuller than the others are, and among hundred persons there is *one* more capable then the others to feel and to distinguish this difference.

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Hereafter he comes to the mixt forms, which are the following,

I. Such as derive from the Cylinder and the Sphere with the curvatures directed inside:

D I) The Canopian form

15 D 2) The Napiform

D. 3) The turbiniform

E The Phoceenform

E The Lacrimiform

E The Piriform |

<sup>20</sup> The last three are the inverse of the first three;

These forms are the most usual in Egypt. The Phocean form was the representative of upper Egypt, while the Nile pale was that of the lower Country which was called Canopus. The first form we know already as that of the Nile pale.

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The Canopian vases were employed as conservatories for momies of holy animals with covers, representing Animals heads. or heads of Deities.

The varieties of these two forms, which Ziegler calls napiforms and turbiniforms are but varieties of the first.

The Phocean form derives its name from the Phoceans which adopted this form from the Egyptians. The last adopted this form for many of their architectural parts. Some Columns have the outlines of these Vases. –

6 Other mixted forms derive from the *Cylinder* and the *sphere* and have the curvatures directed outside

1) the Corolle which curvature begins at the first third of its hight from the top,

2) the Corolle which curvature begins at the Second theird of the hight, | the *Campanula*, with a double curvature. –

Varieties of these three forms are the so calld tiges or *stalks*, allso in the number of three and distinguable by the same qualities.

<sup>40</sup> They have their analogies in the most beautiful forms of nature, in the flowers, and are very important types for ceramical as well as architectural forms.

6. fol. 6r

fol. 5v

Another Class of mixd forms are the Crateroids and discoids used for plates and sacrificial vases.

Most of the Assyrian Metalvases, of which we shall speak hereafter are belonging to these forms. They generally are decorated only inside and the laws of proportion of their elevations given by Ziegler are unfounded, because they are not calculated to be seen from the side.

The different primitiv or mixt forms, when they concur to one Ensemble, the result is a composite work, to which belong the most pompeous productions of Ceramic art and of Architecture. Nevertheless these Composite works are subjected to one or the other fundamental form which is the base of the composition.

This diagramm gives the three prncipal parts which constitute a vase mixt and those of a Composite Vase and their denominations –

But we shall now leave Mr Zieglers Theory and. consider the Ceramic forms from an other point of view – by taking these forms and their ornamentations as the results, *first* of their real or supposed uses and applications.

2°) of the Materials and the processes which come in question for their execution.

#### first Consideration.

Three distinct intentions preside for every preparation of vessels – which devide themselves into primitive or mixd forms according as one or more of those intentions are fulfilled by preparing them.

The first intention is that of holding a containing a fluid or a collectiv mass of substances.

The second intention is that of *dipping up* or *bailing*. We seek an Utensil capable of *catching* fluids.

The third intention is that of *emtiing*.

Nature offers us many forms, which are the clear Expressions of one or the other of the foregoing three conceptions: for example the Gourd or pumpkin and the Egg, both of which are in the strictest sense conservative vessels; The horn offers us a natural bailing vessel, and when perforated at the point, it serves as a funnel or filling Vessel;

These natural forms were early comprehended and applied; man however in his early state of civilisation was guided by an instinctive Impulse, which scarcely needed these models, to direct his Choice of forms according to the laws of nature.

The Works of Ceramic art acquire no artistic Signification until the three primary intentions or at least two of them unite in the formation of a Vessel.

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Strictly considered there is not a single Vessel, that does not contain all the three motives here specified, but in most instances one is predominant over the other two, or if two are evident, the third nearly dissapears. -.

Besides these fundamental motives, which operate on the construction of Vessels others also claim our notice, which may be considered as accessory; these are the following.

1° The stand of a Vessell

2°) The Handles.

3°) The Cover.

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By connecting these accessories with the Ground forms, the latter become more animated and raise | themselves to objects of art.

Still these accessory Components cannot properly be regarded as marks of distinction in the Classification of Vessels.

According to the foregoing the Vases and Wessels may be grouped in the following classes.

rst Class. Reservoirs, Holding or containing vessels,

The spheroidal shape with sectional outlines approaching to the circular form is the Original.

The antique Dolia are nearly pure expressions of the type for this class. The Assyrian Earthenware vessels belong mostly to this sort of forms. – . The Spanish Tinajas, which are of extraordinary size, and the Mexican Koupchines are other examples of Reservoirs

The dolia have small apertures, no necks, and no stands or feet, they are round or pointed on the lower end and want a support to stand upright. – .

Deriving forms from the Dolium are

r<sup>o</sup>) The *Amphorae*, which are dolia with high proportions wide apertures, and handles but without feet; They are allready combined formations, having a short funnelshaped neck.

2°) The *Urns* which are flat at the lower end, have in their simpler combinations no necks, and no handles.

Such are the Canopian uns of the Egyptian | and the Ash Unrs of the Greecs. There is one large Greec beautiful Bronce urn of the simplest kind in the Elgin saloon of the Brittish Museum.

Some Glass urns discovered in England are also to be seen at the Brittish Museum.

The Urns with feet, handles and necks are productions of the high Classic age, most of the beautiful Terra Cotta Vases belong to this kind of pottery.

8. fol. 8r

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A third class of reservoirs are the *Crateres*, which originally were vessels for mixing wine with water. The Mouth has the widest Diameter of the Whole. They are with and without handles.

These vessels, as well as the Dolia require stands which were originally of Wood, but later, as art advanced made of metal. They were chiefly of the well known tripod form; But there is a wooden stand for an Egyptian Crater which has six feet.

The stand was often the dominant part of the whole, then it was called a Tripod

At other cases the tripod was very low and a sort of ring standing upon three <sup>10</sup> feet. Beautiful Specimens of this kind of Craters are at the Brittish Museum.

These forms particularly the Craters with high feet, were most frequently used as vessels of state |

The celebrated Vase in the Villa Medicis and that in the Villa Albani, belong to this Class. The same form was adopted for small sized vases executed in precious stones and glass. for instance the Barberini Vase of Glass and the Vase of St Denis, formed of a single onyx.

The Arabian Basins belong to this Class of which there is one beautiful Specimen in the Brittish Museum.

4°) The *Tanks, tazzas* or Basins are opposite to the amphore, The last is the extreme limit in length of the Dolium, the tazza appears when the Dolium becomes very shallow.

There also three principal forms of subdivision appear

*Basins* convex underneath, requiring stands to rest. The whole Assyrian Metal vessels belong to this Class. They were *Emblems*, that is to say they were the inner part of an other Vessel of an other less precious material as we shall see afterwards.

A rare Vessel of this kind the Gold Patera found at Rennes, which is now in the Paris library and the celebrated Sardonyx Cup, six inches in Diameter preserved at Naples. The inside is coverd with a flat Goldplate rihly ornamented with repoussework, which can be separated from the body of the cup; This is what the ancients called an Emblem in the first sense of the word.

When they are flat underneeth, they are called *patenae* or *paterae*. which form was used at sacrifices. | the Roman Catholic Church adopted this form also; The Holy *Graal* at Genova, is a Bazin of green Glass;

When the Tazzas are very flet and of great diameter, they are called Dishes and plates. –

When they have high stands the take the Character of Cups. They were very popular in the middleages and after the Renaissance, and only applied to secular purposes,

fol. 8v

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The Cups of Benvenuto Cellini are the most celebrated under these vessels. Another kind of Reservoirs are the *Labra* or *Tubs*. generally of a subverted conical form and large in size, a form which has got a religious significance in Christianity as a Symbol of Baptism.

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The second Division Vessels for drawing and intercepting fluids..

These Vessels are divided into two distinct classes.

The first are the *pails* or *Buckets*.

The second are the *funnels*.

The Bucket of the Egyptians, the holy Situlus we know it already, but the same had also a religious significance with the Assyrians which gave to their holy Buckets | very richly ornamented forms.

Christian ornamented well Buckets are at Milan and in Pavia. in several Churches.

- The ladles, Scoops and Spoons, other applications of the same type, have given rise to beautiful productions of industry in antiquity as well as in the middleages. They also numbered among the holy vessels and we have at the Brittish Museum beautiful examples of such instruments which are as many proofs of the artistic feeling of the ancients.
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In the Works Le Moyen Age et la Renaissance, which is in the Library, are contained some Mediaeval spoons which are as well as the first, very instructiv for the study of Style.

As the type for the class of the intercepting vessels may be considered the funnel. but we have scarcely one example of a pure funnel treated in an artistical sense and ornamented.

This form only acquires its true signification in Connection with the Reservoir, to fill which it is so especially adapted. From this combination arises the Antique Hydria, the holy Vessel of the Greeks.

The third Division contains the Filling or pouring Vessels.

10. fol. 10r

fol. gv

In this series are comprised all such Vessels, which take their Special Character from the act of emtying or pouring out fluids, in a certain measure and a given direction.

For this purpose they require a particular construction and as it were particular organic features, distinguishing them from others.

They seem to have their natural prototypes in the horns and the shells, which two natural forms are frequently employed for symbols in ornamenting vessels of this kind.

As simply emtiing Vessels the well known Saucer may serve as a familiar Example, which has frequently been treated artistically in the mediaeval times.

But this form, like the others, becomes of more importance for Art, when in connection with other forms.

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An especially important combi- | nation of this kind are the Lamps, which have at all times had a highly religious and symbolical meaning and are of great importance in private Life.

Ancient and modern ceramic art is exceedingly rich in combinations of spouded vessels, but none of them has reached the importance and development required by the porteable Hydria with the *Spoud*.

By this addition the Greec National Vessel the Hydria acquired its full development.

What it lost by this connection in doric Magnitude it gained on the other hand in physionomical Expression and Ionic Elegance.

The Austere form, conditioned by the Potters wheel received thro' the irregularities, impressed by the single hand, without tools, freedom and life.

The form in this case does not deny its Prototype, the potters wheel, but is emancipated from it.

It was the use of this Vessel in sacrifices that gave it an especial Sanctity. From this Vessel the fluid was poured into the patera, and from the latter the Libation was performed.

For this reason these two Vessels are found in tombs | almost invariably together. The Christian era also adopted these Vessels among its sacred Utensils as Recipiens for the Wine in the administration of the Sacrament.

The Egyptians had hydrias with very projecting spouds, mentionned by the ancient writers and to be seen in a small modell in the Brittish Museum among a collection of toys for children which were found in a tomb.

The Arabian Bures used for the ceremony of Hand-washing belong to this kind of Vessels, which were also the Predilection of the Renaissance artists. They produced beautiful bures in Mayolica Enamel and precious metals, main-taining the ancient prototype, but modifiing it by judiciously taking profit of the new technical means of execution, which they invented.

Other pouring Vessels are the Cans, Evers, Bottles, fieldflasks and other which it would be impossible to specify here, but which tell all their own history of development.

The same is the case with the immense number of drinking Vessels with the Ancient and modern nations. The Geek Author Athenaeus gives us the name of more than hundred sorts of such vessels, and still there are many | others contained in other books.

We encounter nearly the same variety and incertainty with the Drinking Vessels of the Middleages.

As exceptional and capricious forms are prevailing among them it would be very difficult to range them into certain classes; What has been sayd with reference to vessels in general, holds also good for this particular branch of Ceram-

fol. 111 11.

fol. 10v

fol. 11v

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ical art; The drinking Vessels in their Ensemble form reductions or repetitions after a smaler Scale of the different vessels which we have bespoken before, with the Exception of some peculiarities depending from their esspecial uses.

Among them however is one sort, which by its religious veneration in Christian time has been the Object of great distinction by art and ornamentation. This is the *Chalice*, a semi-ovoidal drinking Cup, without handles, standing on a high foot. It seems to be the same, which the Greeks and Etruscans took for solemnel libations on their festivals.

I shall now give some few remarks about the laws of ornamentation of ves-12 sels. το

Every vase or ustensil whatever it may be, is, like a building, a whole which is composed out of parts, which have each to fullfill their own function while cooperating with the others to a general aim and effect.

Not only the whole of the thing, but each part of it also, must speack out, its function by its appearance and the choice of the ornaments must be made with the intention to increase by their application the caracteristic quality and function of every part and of the whole.

Like it is necessary for a monument to show its immouveability, the same a mouveable thing must show its mouveability.

Therefore the stands of the Ancient mouveable things are so often ornamented with feet of animals or sometimes are pure imitations of feet. This is a constant type which can not lose of its value by repetitions. There is in the Brittish Museum one Example of a Tripod standing upon Lyons feet, which are sup-

ported | by turtles, which appear to progress Stowly and insensibely. This is a 25 refined reinforcement of the idea, which has been imitated or repeated by Peter Fisher, whose Sebaldus monument, which represents a bier, is standing upon snails.

The handles are other Symbols for the same function or fundamental idea; Therefore handles are not only excusable but also in many cases vanted for Vases, which by their size and Weight would impossibly be mouveable by hands -

A composite Vessel, has

I) a body.

2) a Stand

3) a neck with Lips or spouds.

4) a cover.

5) handles.

The body is containing and the ornamentation must show this function. it must avake the Idea of *Embracing* if a body is rifled, which is a natural ornamentation the rifles must go from down upwarts.

fol. 12v

fol. 12r

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fol. 13r 13.

fol. 130

In other cases, f.e. at this Aeg. Situlus, the stripes must go dounwarts, for the stripes represent here the direction of the force of gravity, which was formgiving for the vessel itself. It is a sort of bagg, executed in Clay or bronze.

In other cases the body forms a neutral Ground; then it may be ornamented by a representation the signification of which has nothing in common with the structive function of the body; Such are most of the Etruskan Vase pictures. But they are fixed on the Body with Rubans, to show that they are Attributions and belonged not to the Vase itself.

The Stand has two functions which meet in the center; which is the fulcrum of the two powers, which are activ in the stand.

This fulcrum must be expressed by some strong neck or ring or offset and it seems to be statically wanted to have it nearer to the beginning of the body than to the Abacus or the tablet at the bottom of the stand.

The Elastic lines of the vegetable nature are very speaking for the two activ <sup>15</sup> parts of the foot, but they must be directed in opposite Senses, the holding or containing part of the *stand*, which last may be considered as a sort of Vase with foot, including an other one without foot, works upwarts and so the ornamental lines employed for this part must strenghthen this feeling. The lower part should be less developd in size, but stronger in appearance – its organization goes downwarts. Nearly the same is to be observed for the Neck and the Aperture.

The neck has also a double function, It is a funnel; but a funnel which in most of the cases, is narrowest in the middle and wider on the two ends. – a hyperboloid formed funnel.

## **On Vessel Parts**

*fol. Ir I. a* On Friday last I had commenced to explain some of the principles of ornamen- 25 tation as applied on ceramic Art;

I mentionned, the constituting parts of a composite Vessel to be the following:

r°) the body. 2°) the stand. 3) the Neck 4 the spoud. 5°) The Handles. 6) the Cover. – .

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Every one of these parts has its own signification and function. Their forms and ornaments are principally attending upon their material or symbolical uses; I say principally for they are much influenced also by the materials which come in question for their fabrication, but upon this I shall call Your attention hereafter, while I am now only | speaking of principles of proportion form and ornamentation which are independent upon the materials, so that the following finds its application for Earthenware as well as for Metalworks or others.

I must begin my specification with a general introductory remark on two different principles of ornamentation in industrial art and in art in general.

The first one of the principles which I allude to, we may call it the *constructiv* or perhaps better the *dynamical* principle; The last name is better, for the construction of a work is dependent upon the material out of which it is made, while its dynamical function remains the same for all materials.

Every part of a work as well as the Ensemble of it, must tell what dynamical function it has to fullfill, not only by its form but also by its ornaments. When the last have no other significations but that, to be symbols, taken from nature or borrowed from other arts, | with the sole intention to awake in our minds in a agreable manner a clear conception of the dynamical function of a whole or a part of a work of art, then they are ornaments and Symbols in the first sense of the word.

The beautiful Greec ornaments are mostly Symbols of this kind.

The second sort of ornaments are those which, while agreably variating the elementary form of a work or part of a work, by means of outlines and colours, are representing thinks, actions and circumstances, which are not immediately connected with the dynamical or structiv idea of a thing. Such are for instance the beautiful pictures on the Greec vases, representing Heroic battles and objects relating to the destinations of the Vases.

The more advanced the artistic feeling of a nation is, the more we observe on its productions of industrial art a strong distinction between the two principles of ornamentation while the same are confounded and pass gradually over one into the other with other nations of less artistical and perhaps more poetical and religious tendency.

Such for instance is the Egyptian art; the monumental art in Egypt shows no ornament properly speaking; every decoration is a religious or a political or a topographical Symbol, every colour employed is the same; The Egyptian | Style of composition is a writing the Egyptian Style of Colouring is not a musik with colours like it was allways in oriental art, it is a prosody. –

Greec art, as I sayd before, was based upon an other principle a more artistic and a less symbolic one. The Greecs reserved their beautiful Symbols of the second kind only for the Enrichment of those parts of a work of Industrial art,

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2. a fol. 1v

3.a fol. 2r

4 a fol. 2v

including architecture, which form a neutral territory between others, which are more activ and structiv parts of it. This rule, which we may adopt without hesitation from them, is one of the most important in ornamental art.

Instances.

The Altar, to which the whole temple with all its structiv parts relates, the first object of high art. The tympanon of the pediments the triglyphs, the Frieses, etc. |

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fol. 3r 5. a

The body of a Vase is another such a neutral Ground on which the higher conceptions of art may find their applications.

The body of a Vase has the function to contain a fluid in a state of hydrostatic Equilibrium. There is a dynamic action and reaction from the Center to the surface and from there back to the Center; but this action neutralises itself, it goes not over to other parts of the whole; It is independant upon that of gravity, which the body has in common with the other parts of the vace and wants a support. The impression produced by a well Shaped body of a Vase must be that of repose and selfexistance which impression is so perfectly symbolized in the Eggs, the pumkins and othe natural vessels. Some of the last are rifled with a direction of the Channels from downwards, to upwards or Covered with Network, ¦ like the Melons are;

fol. 3v 6. a

Both natural structures are very speaking dynamical symbols or ornaments, and may under circumstances be employed very successfully; but the most perfect and most symbolical natural form of this kind is the Egg with its perfectly smooth surface. In most of the cases it will be convenient to adopt this natural symbol of a plain concentric surface; the neutral Ground for applications of painted or sculptured ornaments of the higher kind, which I may be allowed to call in the following phonetical ornaments.

This name has been introduced in England for this sort of ornaments by Mr. Fergusson who employed it in his work on Architecture. The Idea of applying these Phonetic ornaments must be symbolized by bands or frames, with the aid of which the representations are supposed to be fixed on the body. This we see generally observed on the Greec vases and those of Etruria.

fol. 4r 7. a

We come now to another part of the Vase to the Stand ...

The stand has two functions the one part working upwards as the recipient of the body, the lower part working downwart, as supporting and counteracting against the weight of the whole.

These two activ forces meet together and find a common fulcrum towards the middle between the body of the Vase and the Abacus which is the representativ of the Ground.

This fulcrum or point d'appui is generally ornamented in a horizontal direction; very speaking symbols for it are such ornaments which remind us lacework or stripps; it is a band round the stand to strengthen it. But we may consider this fulcrum of the two forces which are activ in the stand also as a neutral Ground and make it a convenient place for application of Phonetical ornaments, or at least. such which have nothing to do with the structiv idea; for instance inlaid stones, Enamels etc.

The upper part of the stand is working upwards and holding. |

The elastic insinuating forms of vegetable nature, principally the Chalices of flowers, with their stalks have been frequently and successfully adopted as dynamical Symbols for this part of the stand.

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The lower part of the stand is counteracting and supporting. The articulations of this part must be bolder than on the first, and going in the direction of Gravity; It must show a vegetable or animal life and not appear like a dead supporting mass only. In the same time it should remember the mouveability of the supported thing. The Ripps and Stripes of this part must naturally go from upwards downwards. – This part of the stand gives under certain circumstances room and opportunity for the application of non dynamic and phonetic ornaments as stones, Enamels pictures and sculptures, while this | is seldom the case with the upper part of the stand. But we must in such cases have the working

9. a fol. 5r

8. a fol. 4v

the rips of this structure are neutral parts for ornaments of the phonetic kind. Most of the modern and many of the Oriental and even Romain vases fail with respect to this, while on Greec Vases we may exhibit scarcely one instance of contravention.

sceleton of the support well pronounced by dynamical ornamentation; between



As to the proportions of the stands to the body and the other parts it will be difficult to give rules of general application. But I may say that the stand must be or a important part of the whole or a very subordinated one. The middle between these two parties will seldom Do well. But this only holds good to a certain limit, for when The stand bekomes the doninant part and the body of the vase the secundary one, then the whole goes over into the kingdom of implement and furniture; it becomes a tripod or a Candelabrum and is not more a Vase. |

As the stand is virtually the strongest part of the whole and should appear so, we must employ in ornamenting it darker colours than for the body When metal and other materials are employed for the Ensemble of a Vase, we must make the 10. a fol. 50

Stand of Metal. When metals of different colours are employed we take the darkest in colour for the stand.

#### 3°) The Neck and the Spout.

There is a near relation between the stand and that opper part of the Vase which is formed by the neck and the Aperture.

Here also two powers are working in an opposed sense. The Neck is the funnel for entering the liquid and for pouring it. It is a double funnel; It must be able to receive the liquid one side and to give it out other side. Two functions are joined in one, but the two functions are no negations one of the other, like on the stand, they | go gradually over in another and alternate in their services. The Greecs were well avare of this difference which they proved by the manner of ornamentation they adopted for the necks.

The height of the neck increases generally in the inversed proportion of the aperture of the vase at the root of the neck. A body with a large opening, an urn for instance has a short neck, a bottle in the contrary must have a high neck.

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The fulcrum which we had at the Stand is not wanted on the neck. But for this we see an ornament, which works upwarts and downwarts and which we kan take in the two senses.

The juncture between the neck and the body is often indicated by a horizontally ornamented band or zone, or pictured or sculptured; It embraces the body on a part, where the sectional curve of the last becomes more inclined to the horizontal line. The part between this band and the neck properly speaking is kalld by the French the collet. In Greec it is the Hypotrachelion. The Hypotrachelium is not properly speaking a part of the neck, it has its own principle of ornamentation with descending. channels.

As there is a report between the stand and the Neck, in opposition to the body which is self existing and has no pendant, we do well to employ similar colouring etc for the neck as for the stand, which we see on the Greec Vases.

The spouts are a very important and interesting part of the wase. Nothing what caracterises them more individually and gives them more the appearance of an organic creature than this addition of the hand of the potter to the production of his wheel.

fol. 6r 11. a

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The Variety of the forms of the Spouts is without limitation; there exist some laws of fittness and some relations between the spouds necks and handles and between those parts together and the body which it is much easier to feel than to explain.

The lips are the only parts where the interior of a composite Vase appears in 12. a fol. 6v 5 connection with the Exterior. This gives the Occasion to beautiful transitions, which find their prototypes and symbols in those beautiful varieties of forms and colours which are exhibited by nature in the various shells.

The handles. το

> The handles are to the spouds what the neck is to the Stand; One is the pendant of the other. The position of the spoud with reference to the Vertical Axis of the whole and to the point of Gravity, prescribes in a certain degree the position of the handle. Proved by instances.

The Symbol of Ornamentation of the handls is that of branches, ears fingers, 15 Serpants. and hands, (barbarians) Clasps, masks. |

In a great many of cases, the handles were without symbols and their forns the simple consequences of fittness and construction.

Three Sorts of handles the horizontal handle, (for basins, animal parts, serpants. cubs, plates and other flat vases,) Serpants. vertical handles for Urns, and Vases plants. with narrow openings. twisted strings, bands with pail handles for pails. sometimes Meander ornaments and others double, a of kind.

# Influence of the Materials and Their Treatments upon the Development of Ceramic Types and Style

Influence of the materials and their treatements upon the development of Ceramic types and style.

1). fol. 1r

We are infinitely more advanced in the practical sciences and the knowledge of utilising the materials than it was the case with any other nation at any age; but if we look at the products of ancient pottery as well as other branches of art, if

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13 a fol. 7r

we see the unquestioned superiority of half barbarous nations, exspecially of India with her gergeous products of industry we must feel convinced, that we with our science have done but little.

The same mortifing truth meets us, when we compare our productions with those of our own ancestors. In spite of all our progress in the invention of new processes, we are still inferior to them in the beauty and significance and even in the convenience of forms and ornaments.

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Our best things are more or less exact recollections, others show a praiseworthy Endeavour to borrow immediately from nature, but how seldom are we successfull in these attempts.

One and not the least of the dangers of our modern artistical position is the superfluity of means or rather the want of power to employ | artistically. Our industry wearies herself in vain to become misstress of her new inventions, while the great founders of art in times gone by received *their* materials prepared as they were by use during centuries and carried out a popular motive to its higher significance by treating it artistically.

Gradual progress in art and Science went hand in hand with the full mastery of what they had already gained and a full knowledge of its value. Bernhard Palissy spent half his life in seeking for an Enamel for his Earthenwares, which he at last succeeded in finding; Thus long experience taught him how to use what he found. *We* receive our new processes and new colours ready made from the Chemists and naturalists; before we had time to master the old and before we were seeking. for news.

We have many books on the applications of science on art, but we are wanting of a manual, which teaches the principles of beauty and style as applied to the new inventions of science and manufacture.

These remarks are particularly applicable to the present state of ceramic art which it remains to us considering to day from the technological point of view.

The proper materials for the Ceramic works are the plastic masses; We call plasticity, the quality of a | material to take under the hand of the workman all forms, which he whishes to produce. The common clay is a very plastic material and that, which since the earliest periods was found to be the most convenient for plastical purposes and for pottery especially.

The qualities of this material and the processes and manipulations necessary for its treatement, had therefore a great part in the development of the first forms and types which are accepted in Ceramic art; Its influence reaches even boyond this, as I had already the opportunity to mention. to You.

Although the treatement of this material appears very simple, nevertheless the plainest piece of pottery passes through a great number of processes before its completion.

fol. 2r

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fol. IV

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I shall only mention here the most important of these processes, chiefly respecting their importance for the artistical question.

1°) The first process is the mixture of the pasts. presupposing the knowledge of the nature of the materials.

2°) The Faconage, which includes a great many of special processes, all relating to the formation of the object in its general feature.

3°) The covering and glazing.

4°) The burning and all preparatory and accessory manipulations | connected fol. 2v ⊿) with this important part of the potters industry.

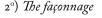
All of these processes should be known practically as well as theoretically by artists, who undertake to make paterns and designs for manufacturers of potteries, which unhappily is not always the case.

Both, practical knowledge and artistical skill and feeling are not more so frequently combined in one person as it was the case at Palissy's and Cellini's and even at Böttcher's time.

## I<sup>o</sup> On the materials

I shall not be permitted for want of time to give here a consistent specification of the different pasts and plastic materials of old and modern pottery, and shall therefore be confined to speak about the influences of the proprieties | of the materials only at occasions, which will present themselves in the following. -For | every speciality of pasts necessitates its own treatment and style. The antique urns and Etruscan Vases for instance, consisting of a very soft and slightly tempered past, are not fit for being executed in our modern China or Fayence pasts nor in metal; The Portland Vase, which is of Glass and cut with the Steel Wheel and cisel, is not to be imitated in Stoneware,

This is a very selfunderstanding principle, it is only to be wondered, how 5). fol. 3r seldom it has been followed by our manufacturers till at present.



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The tool, which is the most ancient and still now the most frequently used in pottery is the horizontal potters wheel. It is that, which is the most important for the development of the forms; It is among all the Engines that which leaves to the hand of the artisan all its power and artistical liberty; the most spirited

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fol. 20

among all the mashines, which ought to be adopted as the Symbol and Sign of Industrial art.

But for this reason also it ought to be manipulated everwhere by intelligent hands and not as it often happens by an other machine, which knows only to turn after templets or what he has been drilled for himself. |||

We find potters wheels represented in the Tombs of Beni hassan and Thebes, from the 19<sup>th</sup> Century before Christ. So the Greeks, in attributing this invention to one of their contrymen, Thales, who lived only 1200 Years before Christ, were certainly wrong, but at least they knew to take from it the best possible advantages. It is sayd that one of their great philosophers glorified himself of being the inventor of an improved wheel.

It is stated that most of the beautiful Greec vases have been entirely finished on the potters wheel without being finished in the dry state on the lath, as it is believed by some antiquarians. for by their perfect accuracy they have the appearance of being finished that way.

The Romans had an other kind of pottery; made of the so calld terre sigillata which required an other mode of treatment. These Roman potteries are executed with the greatest care and knowledge of nearly all the means, which we actually employ in the most perfect fabrications.

The use of the wheel is constant in all the round pieces; the outlines, mouldings, bands and rifles are very regularly executed and generally with the assistance of the lath. and the baselief ornements on them are executed by three different means,  $r^{0}$ ) by moulding  $2^{0}$ ) by the roulette, a small wheel, like a spur, with the ornaments in hollow on it. 3) à *la barbotine*. application of a very liquid paste with a brosh, a sort of transition between painting and baselief. –

It is a curious fact, that the beautiful Etruscan Vases are made free hand, without the aid of the potters wheels, which explains the liberty and richness of the Hetruscan outlines, as compared with the others. The Style of Hetrurian Vases find their explanation partly in this circumstance.

The Celts and Britons new the wheel and employd it frequently; Not so the Germans, who made their vases without wheels by the process calld Colombin; here it is not the piece of pottery which turns, but the potter who turns round the pot. Sometimes they employd for smaler pieces turning dishes like those of our Sculptors. The large Jarres of France, the Tinacas of Spane the Camucis of Bresilia and other vases of enormous size, are all made free hand.

fol. 5v 9.

The *lath* or horizontal wheel is much more employed in our times, than it was with our masters in pottery. It is a rather dangerous instrument and has | but little contributed to the progress of art; To the same cathegory belongs the treatment of the wedd clay by the way of templets, cutt out of Metall or wood, which process is calld in Frensh the *Calibrage*. By employing this instrument, we may give to the forms more sharpness in the mouldings and obtain some other ad-

fol. 5r 8)

fol. 4v

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vantages, which are impossible otherwise to obtain. It will be good to remember this for such cases, where the templets come in application. The forms then to be given to the paterns must show that sharpness in moulding and the undercutts, which are the domain of this mode of execution.

2° Process, the Moulding. 5

> Moulding is one of those processes which by their negative influences are important elements for that what we understand under Style. I mean the imperfection of this process, is its power, The modeller must know and submit to these imperfections and remember, that a moulded piece of pottery can not, and must not appear like a piece which is turned on the wheel or on the lath. Moulded pieces ought to be not circular but oval or angular in their horizontal sections. A form of Circular Section is spoild by the slightest irregularity and ofset in the outlines, which are altogether impossible to evoid in the process of moulding.

These ofsets and regular irregularities which the moulded objects have and which are inevitable may be used as ornaments, or they may be hidden by mouldings, by projecting parts and by reliefs. The Henry II Vases which I shall mention hereafter, are beautiful instances of moulded potteries.

The Moulded works have generally the destination of being multiplied frequently, whence the symbols and ornaments for the decoration of the moulded works must show a sort of Market type and be of more general application.

It is a fact, that the moulded potteries, when exposed to fire, do more *shrink*, than turned potteries doe.

This circumstance is to be well observed by those who are modelling large Vases or other forms, intended to be executed in Terra Cotta or China; Evaded forms large smoth surfaces, circular sections undercutts, and high projecting parts and ornaments, all these things are of no use for large sized and moulded Terra Cotta forms. -

The last must be defectiv in proportion, if they shall look proportionate when burnt and finished.

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It is impossible to pay too great attention to the first model of a work which is intended to be reproduced a great many of times.

But the truth of this seems not generally to be accepted among our manufacturers, who pay very little for the models.

### The process of Casting Coulage.

The absorbing propriety of a mould in plaster reduces a liquid past of clay which 35 has been versed into it, quickly in a State of dryness, sufficient to retain its form; in the same time the mould does not retain the dried past, so that it may easily be taken out after a few moments when arrived to a certain state of Dryness.

On this is based a certain process of execution in pottery which is partly employd for large pieces of earthenware, as columns, Water-pipes, Vases, partly for very thin theacups, the so calld Eggshells,.

This process was unknown to the Ancients. It has newly been executed at Sèvres with great successes.

fol. 7r 11).

There is a number of other processes of Façonage, usual in pottery, which are calld the finishing processes, not less important for the practical study of Style as the former.

#### Potteries painting.

The painters art as applied on pottery has its own rights and its own restrictions or limits, which, it is certain, the ancients and owr ancestors knew better than we do. I shall not venture to enter deeper here in this difficult matter, which requires alone two or three lectures for itself: Nevertheless I can not pass without giving some general remarks, additional to some principles which I had the opportunity to mention occasionally.

It is evident that the painters art has depassed some of the limits which are prescribed by natural laws, in pottery as well as in Eameling. – The Progress of Chemistry has less advanced real art as first was expected; But this is not the fault of Chemistry, but owr own. The wide boundaries of our modern technical means are still too narrow for us, we depass these by employing colours and treatements of colouring, which even our advanced science and practice can not make standing in strong fire. The success of the China-manufacture of Sèvres in the Great Exhibition was partly owed to the strict observation | of the stylistic limits of China painting and of Enameling; as well as to the moderated style of the representations, which are no copies of pictures having another destination, but which are composed for the purpose. My Friend, Mr Dieterle, who is the arts superintendant at Sèvres, has introduced only since a few Years this new and happy principle, which will soon be followed and perhaps depassed by others.

Among the finishing processes counts also the Garniture of a piece of Ceramic art, which consists in the application of outerworks, which properly do not belong to the piece; as handles, stands, spouds covers etc, which generally, with us, are made of the same material with the body of the vase, but which it very often happens to be borrowed from other branches of industrial art;

This style of mounting potteries is one which deserves the greatest attention; and more, than our manufacturers now pay to it, for it reconduces us to the old types and is therefore much less dangerous than many other means of decorating pottery ware.

fol. 8r 13)

fol. 70 12)

The mounting of precious potteries glasses or Stonewases with metal feet and Metal handles, spouds etc, has been practiced frequently in antiquity, and adopted by the Greeks after the conquest of Asia by Alexander of Macedonia; 15

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It was dominant also in the Mediaeval times and is very successfully practiced with the Chinese still now. The principles of ornamentation which I gave at the beginnig are applicable for such kinds of additional parts.

The process of guilding, silvering and platinizing also is to be mentionned among this series of operations, which belong to the façonage.

The guilding is a very convenient ornament for the parts which form the extremities of the vases, as such, which in their types or origines are not belonging to the real vase, and which may be supposed to be of Metal. It is also applicable for the junctures frameworks and bands, by which the Emblematic decorations | are supposed to be fixed on the bodies of the vases. The dangerous instrument which unhappily is too often employd is here the Burnisher. The Gold, after having been applied in very fine powders, obtained by chemical dissolutions or by mechanical processes, with the aid of a brosh on the glazing of the Vase, shows a very agreable natural luster after the firing, which it would be impossible to obtain by artifices; but our manufacturers do not like this, and polish the whole with a burnisher; This was not the taste of the Greecs if they knew guilding of Earthenwares at all. But they probably followed an other system even for their Gold and Silver Vessels. The Oriental Guilding is likewise only a luster. At least, when the polisher must be employed, it will be advisable to follow the principle of the Venitian Painters for the distribution of light and shadow in their pictures, leaving the general Mass quiet, reserving for the brillancies only a small part of the tablet. The metallic luster has very happily been imitated or rather supplanted by a beautiful yellow glazing by the Arabian Potters of Spain and Sicily, | and afterwards, in their imitation by the Faenca potters. They knew very well the art of guilding, and they were no economists, but

they disliked Guilding in pottery.

The mat guilding has been reintroduced in the China potteries of Sèvres by my Friend Mr. Dieterle.

<sup>30</sup> These are the most important processes of those which belong to the façonage we should now speak of the remaining two important processes in Potters art, the glazing and the burning, which are like the others, lawgiving for the styles of potteriesworks.

The glazing followes sometimes immediately after the driing of the piece, before the firing, sometimes it is applied between two firings, one before, and the other after the glazing.

There are three different manners of glazing, the *Vernish*, The *Enamel*, and the *covver* 

The first is a plombiferous transparent coating, which is very fusible, applied on common potteries and on fine fayences. fol. 8v

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fol. 9v 15.

The *Enamel* is a vitrifiable glazing, opaque and | generally stanniferous. The discovery of the opaque Enamel was made probably first by the Arabian potters of Spain and Sicily in the tenth or eleventh Century. There was a Manufacture of opaque Enameld potteries at the Island of Majorka, which has given the name to this kind of potteries. – Luca dalla Robbia was the first who applied this kind of Enameling on his beautiful Terracotta's but he was preceded by the Pesaro potters, who employd a white cover or as it is calld an Engobe which was laid as a lining overthe dry past, forming a white ground for a transparent glazing.

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The opaque Enamel was also known to the Persian potters at an early time as 10 well as in China and Japan.

But the discovery reached its highest degree of development in the 16<sup>th</sup> Century between 1540 and 1560 under the protection of the Duc of Urbino at Faenza, Pesaro Gubbio and Tlorence. This Enamelig process is only applicable to a special sort of paste, a composition of clay and sand with a little marl, of a soft texture;

fol. 107 16.

The style of the Faenza potteries, which we justly admire is a result of both, of the material and its opaque cover;

The façonnage of these wares is rapidly and rawly executed with the assistance of the Wheel, and by moulding. The Enamel is thick and wants a strong firing, These circumstances, and principally the thick cover, are not favorable for the application of plastic ornaments, but most convenient for painting; It was for this reason principally, that this sort of pottery became at last the exclusive domain of pitterresque ornamentation. this we must remember and follow the same principle only where it is equally prescribed by the materials which come in consideration and not for instance for stoneware or China.

The Frensch celebrated Palissy works are an other kind of Fayence, related to the first by the opacity of the Enamel, but treated in another way. The paste also is very different from the Italian ware and more like pipeware. The Style of this Class of potteries is somewhat extravagant and the apposite of the system followed by the Italians.

Much more interesting for us are the fine potteries known under the name of Henry II potteries.

They belong not precisely to the opaque enameled potteries for they are simply glazed with an vitrious glazing, and should therefore find their places elsewhere; but in style and in the paste they belong to the same group. | with the Italian and Palissy ware.

These potteries are beautifull instances of an artistic exploitation of the means offered by the process of *moulding*. The paste is a very beautifull Fayence fine,

fol. 10v

without any trace of lime in it, and stands in the strongest fire; The piece first was made entirely smooth and without ornament, out of this past with the aid of moulding; This first layer was coverd with a cover or Engobe, not very thick, of the same paste, on which the ornaments, the masks and the Varnishes were

- applied. . The Engobe is ornemented in a very convenient and constructive 5 style; by impressions made and incrustations of Arabesks executed with differently coloured pasts. The whole pervades an Oriental feeling and conception, which appears also in this particular style of coating the Vase like a Wall with a coating of Stucco.
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Mr. Brogniard gives in his work a very good description of this interesting 17). fol. 11r pottery of which only some 40 pieces are existing. now.

A third glazing process is that which technically is calld the Cover; la couverte. It is a vitrifiable and earthy substance, which smelts only at a very high temperature equal to that which is wanted for paste. It is employed for the potteries of hard paste, and principally for the hard China. and it consists of feldspath and quarz, sometimes with sometimes without gypse, but allways without lead or tin.

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This glazing and cover, sspecial to the China potteries together with the Caoline paste, which is very short and less plastic than other pasts influences very much the Style of China pottery in general forms in sculptured and in painted ornaments.

The beautifull white translucide nature of the China paste and its hardness are the first characteristic qualities of China ware; these qualities are agreable for the senses in themselfes and they are in the same time favorable for the ap-25 plication of different ornaments and principally of coloured ornaments on their surfaces. But on the other hand these applications have to meet with very great practical difficulties which the China-painter must be acquainted with; The heigh Temperatures which are wanted for the burning of the paste and for the glazing necessitates a great many of precautions for the application of forms, 30 which shrink, and of colours, which will not stand. The China style is therefore a very complicated and confused style, one which it is very difficult to | difine. - .

The China pottery style like the others, has its *historical* types, independently from the consideration of the material and the services of the objects; These 35 types are the Chinese wares. We will in our taste in China pottery be allways more or less followers of the Chinese; and I am excusing this direction for this special kind of industry, more than for any other. But the better will be that of following our own way and of taking for guides the nature of the materials, the idea of that which is to be represented, and the traditions of our own European 18. fol. 11V

19. fol. 12r

Pottery works, which, well applied, will allways afford good precedents, for instance this beautifull Chinawase, a piece which shows a good model of how to apply traditional forms to new materials and new processes. – |

The English soft China is not so difficult, to be treated, artistically as well as that renomated old Sèvres Vases, which are made with a sort of artificial paste, nearly as hard but much more fusible than the hard China; and therefore the field for the application of beautifull contrasts of tints and of pictures.

*fol. 13r* 20. Some other important potteries have no glazing at all and belong to none of the above mentionned classes or Kethegories; among which are the Stonewares of great artistical interest. They are impermeable in themselves and have no glazing or only a plumbiferouz glazing obtained by the so called process of smearing.

The Flamish and Germans were the promotors of this beautiful branch of pottery, in the artistical as well as in the practical sense. It was the pottery of luxe in the  $r6^{th}$  Century in the northern countries. – .

They are rich and beautiful in forms and show generally their natural gray ground, enriched by a quiet and severe system of colouring, which speaks well out, that it had to sustain a strong fire. -.

We make pretty good Stonewares, but they are not equal in beauty of Style and even in beauty of materials to those ancient | German *Canns*, or Cannettes.

I ought to mention here also the old Etruscan and Roman potteries, which have no glazing but only a Lustre, which we have not yet arrived to imitate nor even to know of what it is composed.

Assyrische Vasen Bleche Embleme. – . Grosser Reichthum an (Aegypter wahrscheinlich Erfinder der Kunst, zu giessen.)

Die Griechen zu Homers Zeiten kannten nur getriebene Vasen. Die Archaischen Statuen aus Metall meistens kolossal in Bronze. –

Es ist merkwürdig dass der Geschmack an getriebener Arbeit und an kolossalen Sculpturen wieder aufkam zur Zeit der grossen Blüthe Griechenlands.

fol. 13v

fol. 12v

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## **On Timber Construction, and Its Influence upon** the Development of Architectural Forms

the mechanical qualities of which are known.

The Chinese adopted the same anomaly for their less inclined roofs, not, as has been advanced by some writers on Architecture, in imitation of the tents of their ancestors, but rather in imitation of the old Wooden edifices of the first dynasties, which as we know from the Chinese records were piously imitated in their state of decai by the succeeding imperors; or perhaps also for a hydrodynamical reason.

Roofs curved in the other sense, were usual in Egypt at least at the time of the Greec dynasty, as we know by remains of houses and by representations on Mosaics and others.

as being a very influential decorativ element of the first and of architecture in general.

Two kinds of coverings are to be distinguished, the covering in form of scales, and the coating or the covering in form of a continual skin. The last has only been used with the ancients for flat roofs. It is much more usual now, but it is less recommendable than the first for utility and durability, and also for the question of beauty; it gives little opportunity for ornamental development. | In return, the other scalelike mode of covering is more constructiv and most appro-

The tyle construction of the Hellenic buildings is one instance of the Genius which let the Greecs in their artistic exploitations of the simplest and most natural forms of construction.

The first ornamented tyles were made in burnt clay or terra cotta in imitation of the wooden shingles; last they were executed in Marble and ornamented outside and inside with beautifully sculptured ornaments and with colours. Sometimes they were made of bronze and guilt; guilt stone tiles and terra cotta Tiles were also usual for temples and other public and even private buildings.

They are most artfully constructed and have a layer of flat plates, which at some instances were visible inside and beautifully ornamented; (see the drawing)

The same form occurs still now in India. -.

The covering of the roofs is a question which I may mention occasionally here

priate for ornamental purposes.

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fol. IV

fol. 1r

Over this were layd the tiles, one supporting the other and covering mutually their joints; and finally over the so protected joints was layd another row of Channelformed tyles, going from the board of the Roof to its ridge. The last ridge was finally protected with another highly ornamented layer of horizontal Saddletyles. The whole forms a kind of in clined wall, supported by a prominence in the large stones, which form the upper corniche; and the Channelformed | tyles have their own supports, in form of palmets, at other instances the boards of the roofs are formed. by richly ornamented Watercourses, with gutters in form of lyonheads or masks.

The Gothic style of covering is much simpler but not less ornamental. The German Churches, for instance the Cathedral of Wienna are beautiful examples of ornamented roofs with tyles, glazed in different colours, and disposed in a constructiv and drapery-like manner. This mode of roof ornamenting seems to be of oriental origine, the Orientals being the new inventors of the glazed tyles.

Some beautiful tyle Roofs, executed in imitation of the Saracenesk roofs in Spain and Sicily, are at Palermo. for instance that of the Gate of the Town, near the Royal Pallace.

The mode of ornamented tyles has been happily reintroduced by our modern English Architects. But one of the most meritorous promoters of this good ornamental principle is M<sup>r</sup> Minton at Staffortshire.

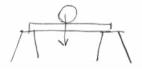
The Chinese are very fond of decorating their roofs in this manner; Their tyle construction is very nearly that of the Ancients.

This for the general forms of the roofs as consequences of their destinations; I shell now have to consider the constructiv part of the question. –

The materials which may be employed in constructions, whatever they may <sup>25</sup> be, resist in three different manners.

 $I^{o}$ ) The force is directed perpendicularly upon the length of the piece, and tends to break it transversally

(Resistance by Rigidity.)



2°) They resist a force directed in the sense of the length of the piece of con-30 struction, and tending to *crush* it.

(Resistence to compression)



fol. 2r

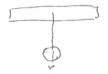
fol. 2v

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3°) they resist a force directed in the sense of the length tending to dilate it. (Resistence to Extension.)



Every timber construction is composed of parts, which are affected in one or the other of these three different manners; and at many cases one part is affected by a combined action of two of the three directions of forces.

The modes of combining materials with the view of counteracting these actions and of forming a solid and durable system of resistance to them, may | be generally classified as follows.

fol. 3r

I Class.

10 The rigid principle is prevailing

three subdivisions

1°) the rigid system without any accessory system.

Examples. The Egyptian Roofs, Layers of stoneplates, which afford a multiplication of supports and explain the disposition of the Egyptian Groundplans. (See diagramm).

The Assyrian mode of protecting some parts of their edifices described by Diodorus of Sicily and explaining the narrow position of the walls. Diodor calls the Rooms which were protected by horizontal stone layers pipes, (syringes) for their allongated forms, adding that they were highly ornamented

We may consider the narrow Assyrian halls, discovered by Layard and Botta, as such pipes or Syringes.

Adoption of the same, or nearly the same principle for the Construction of the ceilings with the Greecs. The roof construction was not visible inside in the Greec temples, although formgiving for the Exterior. Greec Architecture was, as we shall see in the next lecture of a very compount caracter.

The rigid system has newly most suscessfully been adopted for bridges.

r<sup>o</sup>) the American bridges, ¦ consisting of a treilliswork forming a rigid system supported by pillars. *Example*. the bridge over the James Rivver at Richmont in Virginia. (Diagramm).

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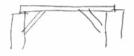
The tubular System, a rigid tube invented and successfully employed in England (Victoria bridge).

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b) the Rigid system with an accessory system of compression.

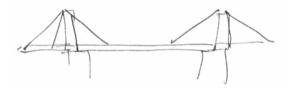


Indian roofs or ceilings, with weider distances between the pillars, than was usual in Egypt; Generally adopted for Roofs and Ceilings in the Middle Ages *in England*.

The style of inner Roof decoration which is very frequently found in England, based upon this principle is seldom at the continent;

The best instances of English Roofs of the middle Ages are collected by Raphael and Arthur Brandon in the book intitled the Open timber Roof of the middle Ages cet. London 1849.

c) the rigid system with an accessory system of extension



An instance of this construction is the Roman mode of covering the large theaters with Velas suspended on stringes with the aid of high Mates, towering above the highest corniches of the Walls, (Engraving.)

New adaptation of this | Construction for covering large circular rooms, like the Hippodromes at Paris, executed by Mr Hittorf. – .

II. Class.

The principle of compression is prevailing.

This Class has three subdivisions

1°) Compression without any accessory system.



The ancient tombs of the Etruscans, the Gates in the Cyclopean walls, the ceilings in the pyramids. instances of this construction of Celtic Origine in France and England. The first application of the principle which has led to the art of waulding.

The Periclean Odeon at Athens was covered with a roof, made with the mates of the Persian vessels taken in the naval Victory at Salamis, executed ac-

fol. 4r

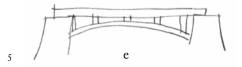
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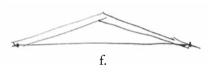
cording to this system; the Spars acted together in one button or central piece, and were supported by a range of columns surrounding the inner Wall of the building.

2°) the compression system, with another accessory system of compression.



Examples of this in Gothic architecture and more frequently in modern times for bridges.

3°) System of compression with an accessory System of extension.



This is the most important for architecture and housebuilding by its having been the types for the sacred edifices.

It seldom is employed purely but in combination with an other system, which will follow on its turn.

III. Class.

<sup>15</sup> The principle of Extension is prevailing.

It has also three Subdivisions.

1°) The principle of Extension without any accessory system.



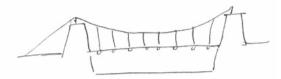
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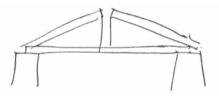
The natural Suspension bridges in Southamerica formed by wayfaring trees and plants; Suspension-Bridges in China and Tybet; The Vela of the ancients, being the types for flat ceiling decoration; The names of the single parts of the Greec temple ceilings are all borrowed from textile art, even those mighty stone beams, which we still admire on the Parthenon; and all the parts, so named, were ornamented consequently with textile ornaments. The painted ceilings at Pompea have alltogether their motives in the Vela, which they represent. This is an important remark for decorators; which will find a leader for their compositions of ceilings if they remember the Original Motive of the art of decorating flat ceilings. fol. 4v

2° System. The Extension with another accessory system of Extension.



A Modern invention, applied for bridges first and best by English Ingeneers; – but still imperfect and subjected to frightfull accidents; the same also as for the artistical question.

3°) Extension with an accessory system of compression.



fol. 5r

This combination contains the full development of the | *Roof* properly speaking, as an Element of outer architecture; in combination with the  $3^d$  division of the Second Class, namely the compression with an accessory system of extension.

This form is not only a decorativ one for outer architecture, it has also been at all periods and by most nations employed artistically inside;

It was introduced with the ancients, when first they undertook covering the courtyards, which formed the usual mainparts of their public edifices. Such covered courts were calld, at later times, Basilicas, which name shows that it was a construction borrowed from abroad. The inside visible roofs were only employd for rooms, which in their original Idea are supposed to be courts, all the other parts were covered with ceilings independently from the roof construction. The first example of a Greec building with an inside visible roof is the above mentionned Odeon of Pericles.

The Latin Basilicas likewise were first uncovered, then they became to be covered with large roofs, in the same style which we still see on some of the ancient Christian Basilicas at Rome, Florence and elsewhere in Italy and Sicily. Here are some instances of such ornamented roofs taken from Sicilian, Florentine and Veronese basilicas.

Some of the richly already bespoken ornamented roofs in the English Gothic style are other more recent instances of the same kind; Exemples Westminster hall, Hampton court, Windsor. an many others. They take their Ornaments from the complicated and artful construction itself, while the German and Frensh Gothic Roofs are very simple in construction, but much richer in sculptured and pictured ornamental details.

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fol. 6r

The ornamenting principle | of northern woodconstruction is differing from that, which was usual in Italy by the ample application of sculptured ornaments. In the northern countries, it appears the art of cutting and Sculpturing the timbers was very old; Even Tacitus in his Germania seems to indicate that the ancient Germans sculptured their wooden huts. The Gallic woodconstructions were admired by Caesar. Here are some instances of very old wood-constructions with sculptured ornaments taken from Norvegian Churches, (9th or 10th Century) - .

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In these northern countries the art of the carpenter was extending itself far beyond the roof, the carpenter was and is at some places still now the architect of the house; his art is dominant; The Gothic architecture inherited of this northern style of ornamenting the wood constructions.

We must make a distinction between two different modes of constructing wooden houses. The one is the horizontal Construction, pieces of timber disposed horizontally one over the other and joined ad their ends in a durable manner. These blockhouses are standing | on stone Substructions, which generally are used for stables, and surrounded by a Gallery supported with sculptured columns; The Galleries are beautifully ornamented in a very simple manner, by cutting the boards into a regular form, which by repetition make a very harmonious Ensemble.

The Roofs are very projecting and the brackets and supports of the beams ornamented; Such were the old Colchian houses and probably those of the Etruscans, such are still now the houses of the Tyrolians and Switzer peasants; It is the usual construction also in Sueden and Norvegia.

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Here is a collection of Switzer Edifices of this kind. Here is an other Example of a Tyrolian house.

The second Class of wood buildings is that with frameworks and the interstices filld up with maconry. This kind of Woodarchitectare is most general in northern Germany, beautiful exemples of such buildings are collected by Mr Bötticher in Berlin, which we should have in our library.

To the same belong these | drawings, from buildings actually existing in Normandy. - You furtherly see in this collection here the details of ornamental timber construction, systematically arranged.

I must come back here to the ancients, which also had their highly developed timber architecture; we see this on the wall pictures at Pompea which most probably were imitations of wood and metal constructions. This diagramm shows one of the slender supporters of the phantastic constructions represented on the Walls of the Greco Roman buildings.

Even the Egyptians notwithstanding their massif Stone buildings had a great predilection for Wood and Metal Construction and the same is the case 40

fol. 6v

with the Assyrians, Their ceilings and tablatures of Cedar wood, are mentionned by Xenophon and other Greec authors.

We know also by the Greec and Roman authors, that the Naval architecture of the ancients was a very ornamental one. We have very interesting and detaild descriptions of some of them. A very remarkable application of ornamental timber construction were the Rogi or funeral piles, which are represented on some Roman medals. The funeral piles were also objects of ornamental art with the Greecs at least at the time of Alexander the Macedonian and his successors.

I have the Idea that the Lycian monuments, two of which are now in the Brittish Museum, and which are made in imitation of timber construction, are nothing | but the stone Copies of the original funeral piles of those to the memory of which the first were erected. -.

The similarity of these monuments, with the representations of funeral piles on Roman medals is indeed very striking;

It would now be here the place of giving some details about joiners art, or timber construction in application to doors, windows, furnitures and other mouveable or immouveable parts of a household. But the time is nearly past, and I am obliged to be short. The art of the joiners consist therein, to make a solid system out of thin boards or wooden plates, and under circumstances, to execute a leining or cover of a wall or of a part of a wall with pannels made of boards; the art of joining boards and of employing | and disposing the frameworks and pannels, which result from the process of joining, in an artistical and ornamental manner.

The joiner's art is therefore connected with the art of wall coating and has some of its principles in common with textile art for instance that of surface decoration. Marquetry, a sort of Niello and Mosaico in different woods, Aegyptian and Greec Marquetries, Venitian Marquetry. Louis XV. Wood inlaid with Brass. Louis XIV. – .

#### Application of Metal for Roofconstruction.

If we look at these diagramms, we observe some parts, which are affected in a manner, which seems to require them to be of stone and metal rather than of Wood.

for instance | for b, *the rigid system*, with an Accessory system of compression. we may wish, for the sake of solidity, those braces of the beam made out of Stone or Bronze or cast Iron. –

At c, in turn, we feel it necessary, to have the suspension strings here made out of wrought metal chains or twisted wires. – .

*ad d* we feel this construction having more application for stones or Cast-Metal than for wood.

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fol. 7v

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this is also the case with the following system. but the System f, may best be executed entirely of metal, the compression system in Cast the extension system in wrought Metal. etc. -.

<sup>5</sup> This leads to the idea of employing for each part of the roof that material, which seemd  $\frac{1}{2}$  the most proper for the mode how it is affected by forces. --.

The proper application of this simple principle is one of the most difficult questions in construction and in ornamental art;

<sup>10</sup> It is evident, that a new Material adopted for a service which was formerly done by an other one, requires many alterations in the forms and dimensions of the whole;

On the other side we are bount to observe some traditional types, if we will be artistically understood by our contemporaries. and these types are borrowed from timber-construction.

There is an other difficulty in the artistical exploitation of the new inventions in Metal roof construction.

Metal chains or wrought

## The Combined Action of the Four Preceding Branches of Industry in Architecture

I shall terminate to day this course of lectures with some remarks on the different Styles of architecture, which last we take as the result of the combining and working together of the different branches of industrial art.

The earliest and highest symbol of civilisation and human culture is the fireplace; it is also the first and most important element and as it were the soul of every architectural work. Round it are grouped, as the protecting Negations of the three natural elements, ennemies to the flame, the three other Elements of architecture, the Roof, the Wall and the terrace.

The number of possibilities how these four constituant parts can be combined in an edifice, is indefined, or at least very great; they are different according to the differences between the races and nations, to their natural genius, to their political and religious tendency and development, and chiefly to the clime and nature of the countries in which they live. fol. 1r

fol. 8v

fol. IV

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Under certain circumstances it happens that one or some of these constituant parts are more developd than the others, which last take on their turn the first place in other combinations.

It wants no proof, that, where man lives in isolated groups or families, where the fireplace wants protection only against thee Injuries of the clime, where the right of property in the beginning of the national development was not existing or not easily attaked, where the form of society has grown out of a federation of single corporations families and tribes, that, I say, under circumstances similar to these | The roof must have been obtaining a very significant part in the architectural combinations, showing itself in form of a mouveable tent, or in form of a roof first covering an excavation in the Ground, and afterwards raising itself over the Ground on a basement.

The first, the mouveable tent, was and is at present the home of the Nomad tribes of herdsmen and huntsmen, the last is the original form of the houses of backwoodsmen and agricultural sattlers.

Domestic life is developping itself in these hutts, in opposition to the life in free nature full of pains and struggles. They become little worlds for themselves excluding all what does not belong to the family, with the only exception of the friendly daylight, passing through holes, left in the walls. The family and the beests take equal part of the protecting roof. They are single standing and form irregular groups in the natural scenery, mostly along the inviting banks of some rivver or brook.

In those countries of Germany, which are inhabited by a mixt population of partly German, partly Wendish Origine for instance in the Duchies of Mecklemburg and Holstein, it is easy to recognise the | desendance of every place; All the German villages and towns are built in form of rows along a rivver and without walls; the slavonic sattlements in the contrary are distinguishable by concentric forms, or square or round the Marketplaces of regular disposition in their center and by fortifications. -

It is evident, that the original types and simplest expressions of this style of 30 architecture, had to undergo with the centeries many alterations and additions according to the influences of increasing civilisation and the introduction of foreign customs; but still it maintains its principle in the countries inhabited by the descendants of the German races; The best mode of showing the differences between this principle of architecture in contrast to those, which we shall consider hereafter is to watch at the laws, how the edifices grow and develop themselfes to more artfull and complicated combinations.

I shall follow this way here and next, for the other styles which we shall make acquantance with.

The first and simplest Roof house is consisting of one Room of an allongated 40 rightangular form, like this diagramm shows, which gives a farmers house one

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of those which are general in the old saxon countries, in Westphalia, Friesland, Holstein and Schleswig, here I have a whole collection of similar buildings. The farmers houses of the Anglo Saxons in England were certainly the same. The fireplace is a low brickconstruction standing in the center without Chimney or flue, and the turfsmoke is going its way freely round the beams and rafters of the roof, coated like the walls with a brillant black coating of sutt, and ornamented

with fine bakons, hams and saussages.

Before the fireplace is the thrashing floor, along it are the stables for horses, and opposite those for oxen and cows. The part of the building behind the fireplace has only at later periods been divided by glazed walls. into partitions for living rooms and bedrooms, with large Alcoves.

There is no articulation in this form, and the mode of passing from this to another more complicated form of a Saxon house is only *twofold*; the first is to juxtapose one roof to the other and to form a free and generally unsymmetrical group of roofs.

Each mainpart of the building shows itself distinctly outside by having its own roof; it tells its own tale.

The same principle is observed also for more monumental edifices like Churches, showing a very pitturesque variety of roofs and being a conglomeration of parts, each of which has its own Selfexistance.

Most of the German and Scandinavian Churches built before the introduction of the pointed style, show this most happy and pitturesque arrangement and are much more congenious to our habits than the Gothic basilicas are, notwithstanding the ornaments of the last being borrowed from our northern flora, which was not the case in the same degree with the first.

(Dahl's Churches.).

The second mode of increasing a Saxon house is the Story construction. The first step to this is the elevation of the Stone basement, and the utilising of the suchwise gained room for the stables and cellars. Such are the Switzerhouses which I have shown in the last lecture.

This mode of construction is very | convenient for Strongholds and blockhouses, such as become necessary, when the sattlers are exposed to attacks from the part of natifs which they dislodged, or in consequence of quarrels and feuds between each other, at times when the property began to be disputed and to be the prise of the Strongest.

This is the origine of the northern towers and strongholds, a high Stone basement with a wooden house on its top. generally standing on a naturally fortified place, as for instance on the top of a rock or in a marsh. The tower is the Center of an agglomeration of other roofs, each forming a single building for itself but so combined as to form together a irregular advanced fortification round the dungeon.

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The most important of these surrounding buildings is the so called pallace, (the Pfalz in German) a large hall with an open staircase being the meeting room of the guests and having, at the Grondfloor an other large room for the reception of the followers and servants of the knights. The Chapel was originally in the lower part of the Dungeon. Where it is a distinct building, it is of a later date than the other parts of the castle.

On the foot of the hill is an other circle or row of edifices | the stables and barns and the houses of the clients Vassals and serfs. -

Such was the feodal Castle; very different it is true from the old Saxon Allodial dwellings, but allways caracterised by being an irregular conglomeration of rooms, each one protected by its own pointed and gabled roof, and taking the day-light from windows left in the outer wall and by the absence of that principle which we shall call in the following the court-style.

I should now give the description of a Northern dwelling such as it developd itself out of its original type in the towns, where the Story principle becomes naturally more important by the scarcity of room, which obliges to built one house over the other.

The English Town dwellings are alltogether of the same caracter and proparly speaking only the repetion of one room in three or four stories, with the necessary staircase.

The interior arrangements of the town-dwellings in the North of Germany are much more variated | and different according to the trade or profession of the inhabitants and of more individuality. The old Merchant houses at Hamburg for instance are aranged like the Roman houses with a covered Atrium and a skylight in the center, supported by a triple or quadruple range of columns, forming a gallery for each story and with a fine staircase on the side.

In the Southern countries of Germany and in Saxony, where the stone construction is prevailing, the domestic Architecture are more mingled with Italian motifs and perhaps influenced by Roman Reminiscences. The same is the case in France,

But I must conclude here this chapter in passing to an other most important principle of architecture.

This other principle of architecture, fundamentally opposed to the first, originated in the southern and more favorised countries by clime and fertility, but which wanted to be conquered from nature by a cooperating activity and great national enterprises.

Such lands are Egypt and Mesopotamia, wonce the seats of the earliest civilisation and inhabited by an immense population, the richest countries in the world, but now for want of the principle of centralisation of labor reconquerd by nature, and nearly what they were, first, before the foundation of the Egyp-

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tian and Assyrian political systems, brooks and deserts, inhabited by nomad Arabian and other tribes.

These countries were the native countries of strong political and religious institutions and of absolutism, the sole form of society under which such combined action of forces, which was necessary for overcoming the difficulties

which nature here opposes against its exploitment. –

This explains a great part of the particularities of the Styles of Egyptian and Assyrian Architecture.

Both are, what I called before, Court styles, but very different from each other except in the community of this principle |

The prosperity of the fertil plains of Mesopotamia after having been gained from nature by a stupendous system of canalisation and of ennbankment, soon became the object of cupidity of the neighbouring tribes, against which a system of defense was necessary to be adopted,

The constructions and arrangements thus necessitated for the security of the settlements, must have been of influence upon the Style of architecture of the oldest Assyrians.

while they were successfull against their Ennemies, these influences could not alter the fundamental character of the architectural forms, which were allways allowed to develop themselves out of their natural origines.

But it was an other thing, when, as it soon happened, the same countries became the pray of conquering people of other races and of quite different political institutions.

Now an other principle grew up in the *fortified camp*, and was combined with the first.

The conquerors were sons of the desert or mountaneers, and in | their former state the inhabitants of roofed huts, similar to those described before. They built their regular camps out of hutts, and thus combined the, northern roof architecture to a new architectural Ensemble for which the first exigeancies were strength, regularity easy articulation, subordination rank and order.

The roof, as an remembrance of the earlier state of the conquering nation before the conquest, maintains its right only symbolically for the holy Edifices, while the other two elements, the terrace and the Wall, are generally prevailing.

Not the Same with the Egyptians; That difference, which prevails between a nativ and originally national Monarchy, based upon a rich and powerfull Aristocracy or priesthood one side and a System of government, which is based upon Conquest, feodality Servitude, and Military despotism, otherside the same difference shows itself in the architectural styles of the two nations.

The prosperity and political power of a nativ dynast grows by and by, his house grows with his house-hold, partly by additional buildings, partly by a more organic development from inside of the house. 7. fol. 7r

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The Wealth and power of the Satrap and feodary on the other hand is a gift and donation accorded to him by his gracefull master and suddenly overcome; His house is since the beginning ready made for the position he abruptly obtained and a repetition of the Court or Pallace of his master in a smaler scale; Enlargements are only possible by the way of an outerly combination of two units of the same kind.

In the first instance is the Great a development and accomplishment of the Small; in the second instance the Small is only a copy and a crippled imitation of the Great.

The military principle in architecture is not very favorable for the arts; but 10 nevertheless it is of great importance for the history of the last.

It sometimes became to be gradually overpowered after having had the time of implanting some of its better elements into the conquered soil; This for instance was the case in *Assyria*; but not in *China*, which last has been arrested by a sudden torpidity, while the military principle was in its vigour.

The Chinese Architecture, is, with the exception of this Caraib Hutt, the most elementary of all. The fireplace in its higher qualification as Altar, is allmost wanting in it and in consequence there is no center of relations between the parts.

The Tartar Camp is the type of the Chinese Pallace. It remained unaltered the same, not having been fructified with the addition of older national or of foreign architectural Motivs.

But I must leave the Chinese here and hasten to return to Egypt and Assyria, whose architectural styles have more interest for us. – .

The Egyptian Style is the only which, without being essentially disturbed by conquest or by other political revolutions, entirely grew on the nativ Ground. –

No foreigners, but a cast of inborn priests were the foundators of the Aegyptian form of Society and in consequence of Egyptian Architecture.

They judiciously observed and studied the natural and popular forms, and skillfully exploited them artistically. –

The Elementary motiv of the Egyptian temple is the Sacred Cage, the Sekos, or tabernacle, with the holy Bird or Serpant, the representative of the God of the Nomos or Village.

In the antearchitectural times the same Sacred Cage stood freely and only surrounded with a simple Wall-enclosure on the embankement of the Nile. before it stood an Altar. This Altar was the starting point and the End of the Procession of the Sacred cage, to which procession the Pilgrims of the neighbouring districts assembled. |

But the fame of the Sanctuary was increasing and now the old Enclosure prooved to be not more sufficiently large to contain the greater assembly. An

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additional Court or Enclosure is wanted for the meetings and the preparatory ceremonies of the holy procession. -

And while increasing by addition of new parts, some essential alterations are going on inside of the edifice.

Once, the court was covered partly with drapperies, only for the occasions at 5 holy days; now this Ceiling made of temporary drapperies becomes a solid one executed in wood. or stone. And parts of the suchwise created tempelroom, were cutt of by walls, forming partitions for the temple treasure, for documents and other sacred stores.

The more a Sanctuary grows in reputation, the more additional courts and το enclosures are wanted, the walls of the last are increasing in proportion, so that the interior wall is wholy covered by the exterior. And inside the Metamorphosis continues alike, the different parts of the building becoming gradually more and more developd and articulated.

The first or the most interior court, which was once open but afterwards 15 covered, in which stands the Secos and the Altar, is getting in its turn a Sanctuary, only accessible to the priests, this is the so calld Neos, the real temple. and the next enclosure, before the Neos, becomes to be covered, but it being much larger than the first, this operation of covering horizontally was not possible without supports or Columns.

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This Court was called the Pronaos, and was the Assembly Room of the Priesthood, consisting of the descendants of the families of the nomos or district, which the first erected the Sanctuary.

The remaining thirth Court, after some time having been followed by an additional fourth one, had an similar inside development. but a more articulated 25 one than the first three.

1°). The walls are first provisionally than solidly provided with galleries for the protection of the pious assembly against the sunshine.

2°) a Portico of higher proportions is formed traversing the whole Court Yard from the | door of the Pronaos to the oppisite door leading out of the building. 30 This portico was only covered with draperies first, and even later, as for instance at this tempel of Luxor. These columns for instance, in the large courtyard at Carnac, never had the destination of being supporters of a ceiling. They only were the pillars of a large and enormously high Canope for the protection of the Images carried on the shoulders of the priests in their religious Processions, 35

Some times the protecting Canope as well as the surrounding Galleries of the court, were executed in solid construction, by leaving the rest of the court Yard open; or, at other instances by covering the whole Yard, with or without a higher passage through the axe. So the principle of a covered court Yard gave rise to a great variety of combinations in Architecture, which have been typicalfol. 9v

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fol. gr

fol. 10r IO ly fixd | which were good for all periods of architecture; and whose knowledge it seems to be quite necessary for the understanding of the Aegyptian art, as well as for that of the later styles. - .

> I shall not speak to day about the Egyptian architectural details and mention only that singular arrangement of the intrances, known under the name of Pylone. It was at first only single and has been only duplicated at later times. Each of them forms, like a lock of a bracelet the End and the beginnig of the Enclosure.

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They are imitations of the form of the invisible Sekos or Tabernakel, and intended to be seen from far by the pilgrims and to be a tablet for inscriptions.

*This for Egypt.* Now let us see what became architecture in the | planes of Assyria, a land similar under many reports to Egypt.

The starting point for architecture was probably the same or very similar at the two countries; but Assyria was allways the pray of foreigne Conquerors, which adopted part of the habitudes of the old inhabitants, without giving entirely up their own customs; and one period of Conquest was, after intervalls of only a few centuries, regularly followed by another; events of regular repetion like natural phenomena. The commercial and colonial relations of this country made it the meeting point of foreigners; in opposition to Egypt, which was nearly closed to foreigners.

In Egypt, the Embryo and fundamental form of the Architecture was, as we have been showing, the Pilgrims-Chappel, here in Assyria it starts from an other principle the fundamental form is the encampment. | a combination of the Court principle and the terrace. but The Gabled roof remains the holy Symbol of the divinity and reserved only for temples. – .

The terrace principle was the dominant in Assyria.

After what we know by Herodote and Diodoros the Pyramids of the Assyrians were nothing but Gigantic substructions of Small temples on their tops; similar to the Ionic Greec roofed tempelcellas.

But This pyramidal Terrace, with the Tempel on its top was only the last degree of still a wider system of terraces and Yards, forming the Ensemble of an Assyrian Pallace. and which was backed by the Pyramid or the family tomb of the dynasty.

The whole was standing on an immense Oblong of stone construction secured | by projecting towers, and other fortificatory details.

Inside was the first peribolus, a sort of camp with tents for the tributary hosts, guards and soldiers; On an other higher terrace then was following an other story of buildings, like the first secured by fortifications and ornamented with staircases sculptures and Enameld brick pictures. Inside was the Gymnasium and the School for the Aristocratic jouth under the instruction of their fathers.

fol. 10v

fol. 11r

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fol. 11v

Thirdly came an other fortified terrace with large intrance Gates, after which this whole part of the building had its name the high port, the seat of the government with the hypostyle hall for public judgements and states ceromonies.

Last came a fourth partition acqual to the first but still higher for the kings lodgings and the Serail | and over all these parts governed the Belus Pyramid with its golden tempel at the top.

The whole finally was connected with beautiful gardens, the so calld paradises, large enougf for hunting with pavillons bathhouses, fountains caskades, grotts and other Enrichments.

### **On Architectural Symbols**

# **First Version**

<sup>10</sup> Architecture is a pure inventiv art, for it has no ready made prototypes in nature for its forms, they are free productions of human imagination and intellect.

It would therefore, with respect to this, appear to be the freest among the different arts of design, if it was not entirely depending on the laws of nature in general and the mechanical laws of matter especially; for whatever object of architectural art we may consider, its first and original conception will have rosen from the necessity of providing for some material want, especially that of protection and shelter against injuries of clime and elements, or of other hostile powers; and as we can obtain protection of this kind only by solid combinations of matters, which nature procures, we necessarily are constrained for those constructions to the strict observance of the statical and mechanical principles

This material dependency on natural laws and conditions which remain the same everiwhere and at all times gives to the works of architecture a certain caracter of necessity and in a certain degree makes them appear to be | natural works, but such which nature creates through the medium of reasoning and freely acting beings. The works of architecture tell the history or nature of mankind, as truly as the shells and the Coraltrees give account of the low organisations, which once inhabited them. |

The study of these works and of the history of architecture gives us evidences of the following very striking facts, relativ to the development of this art.

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own principle. It was the most perfect in its first period. at least for the purity of expression of the principle which it represented,  $2^{\circ}$ ) most of them died a suddenly and violent death through a great social revolution and the prevalence of a new principle.

 $3^{\circ}$ ) The only Greec architecture seems to make an exception whose fullest development falls not at the beginning of its existence – but this only in consequence of the final solution of the problem of reconciliating two principles which for a long time stood in opposition to each other and separed the two principal tribes of the Hellenic race. The Dorians and the Ionians. But for every one of the two Styles the Doric style and the Ionic style each considered for itself the same, what has been said at n° 1, is true, each of them had its own individual perfection at the commencement of its existence.

 $4^{\circ}$ ) The Greec architecture is also the only one which makes an exception to what has been said at n° 2; it had its resurrections | and will never die in its principles for the reason because they are based upon nature because they are of general and absolute truth, and speak to us in a language which is comprehensible by itself in every age and at every place, that of nature alone.

I shall trie in the curse of my lectures, to give the evidences of these assertions.

As for the first of them it must be remembered, that the history of architecture does not begin at the same point with the history of house-building and Engeneering. We see nations in a state of high political and practical perfection who have no history of architecture at all.

This Caraib cottage is an instance of housebuilding which in its Ensemble as well as in its parts, answers well the purpose for which it has been constructed, and even the laws of Statics and proportion.

But each member of it works only accidentally it has not been modelled on purpose for the function it performs. The columns are trees and nothing else. The wall partitions are matts hung up between the trees.

The whole has nothing | in common with Architecture as an art and can only occupy our attention as a most elementary sheme for Roofconstruction combined with matting as the elementary sheme of vertical partitions. – .

It would appear that the next step towards architecture as an art would be the modelling and cutting natural and formless materials into regular forms, such as are prescribed by the statical and other material conditions, which each part of the whole has to perform, and their combination to a structure.

But we find no example of a Style of construction resting on this point of development, except in our days of merely practical and commercial tendency.

Of old people had probably less practical but sertainly more poetical qualifications.

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They could not help giving a sort of plastical life to the blocs of marble or granite in preparing and modeling them into cylinders and prismatic beams for the use of their temples and other architectural works.

They made them tell their history, the reasons for their existence, the direction and power of their action, the part which they were destined to take in the whole work, and how their relations would be to each other, they made them tell also for what destination the whole construction was made.

These tales were made in a language consisting of caracteristic forms, partly painted partly sculptured and then painted, performed on the surfaces of the naked shematical parts of the construction; and this symbolical language was found already almost perfectly prepared for this purpose by the other branches of industry, which, it must be known, had reached to a high degree of technical and even artistical perfection long before the building of monuments was thought of.

So this language was allready prepared for general understanding, so much the more, as most of the symbols employed were taken or | derived from analogies in nature and selfunderstanding for every man who has some feeling for natural forms and their dynamical significations

But there are others and some of them are very important as relating to the general feature and disposition of the monument, which are not taken from nature directly, but from reminiscencies out of the first stages of society and social establishment, or from old traditional types of construction or finally from productions of industries which in the antearchitectural times were connected with house building and house-furniture.

A third class of Symbols employed refers only to the special destination of the building, to the god of the temple or the foundator. of it.

The Greecs generally employed those symbols in a manner which wanted no special key, namely so, that they had at the same time a statical and a mystical signification | for instance, they ornamented the moulding, whose statical function was symbolised generally by a wreath of leaves, with lorrel-leaves for Apollon, with wine leaves for Bacchus, with Mirth leaves for Venus. - the statical signification of the symbol remained unaltered by the special signification which was given to it.

It was not the same with the Egyptians and the Assyrians - wherefore their Symbolisme was only valeable for the duration of the social principles then prevailing – .

I shall now give a few examples of symbols used in architecture to show their meaning, their power of expression and their application.

I shall do this only here with the view of explaining the content of the foregoing, referring for a more orderly explanation of the forms, which are used | in the different styles of architecture to the comming lectures -

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fol. 5r

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We shall begin with examples of traditional Symbols reminding old constructions, because they had the greatest influence on the general formation of the monuments.

#### 1°) The fireplace,.

It is the first Embryo of social settlement. Round the fireplace the first family groups assembled here it was where the first federations were made and the first religious rites were performed. The fireplace is the holy center and focus, to which, through all periods of the development of society, the different parts and divisions of an establishment relate. It is still now the center of our domestical life and in its higher significance as *altar*, that of our religious establishments. It is the symbol of civilisation and religion and an altarformed object, will be symbolised as a sacred one. By elevating a building or an object on a altar-formed pedestal or basement it signifies to be sacred. Basement of a temple. |

#### fol. 5v 10 The gabled roof –

The Roof with gables is the universal Symbol for divinity and the attribute of sanctuaries, and divine dwellings. It at later times only became also the ornament of royal and imperial pallaces, when the royal or imperial persons assumed for themselves divine honours.

The only part in the Egyptian temple which is gabled is the small sekos or sanctuary which contains the holy representativ of the God; while the other parts of the building being only the outer works of the temple for the service of the priests and the worshippers as we shall see hereafter, were covered with flatt roofs.

The same is the case in Assyria where the gabled sanctuary was standing in a diminutive form on the top of the highest terrace of the Assyrian palace. –

It was after the analogy of the gabled ark of the covenant that the great temple of Salomon had a roof of the same form.

The holy Caaba or grave of Mahomet, is gabled – It is the only temple of the Islams the Mosquees being no temples but only houses for praying and preaching.

The Gable is also the Symbol of divinity in the Greec temple, but here it appears in its fullest development, not more hidden by outworks like in Egypt, nor as a small crowning ornament on the top of an immense terracework like in Assyria; it governs its Environs, and forms the principal element of Greec architectural ordinance. –

It was in the earlier times of Greecian history defended by law to employ gabled roofs for private houses, and this ornament was only applied to other public buildings, in the supposition that they were sacred to some Divinity. It was the same with the Romans.

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The Gabled roof retains part of its significance in mediaeval architecture although also employed for private buildings. – .

Some of the most important constructiv symbols in Greec architecture are taken from the most elementary composition of a wooden gabled roof.

The Greecs considered these elementary constructions as quasi natural objects and treated them in a symbolical Manner like they did with the plants and animal forms.

Another very important symbol, which takes a great part in Greecian ornament, has derived from the elementary mode of making partitions and ceilings with the aid of sails and carpets. Not only the walls and partitions but also the ceilings and suspended rafters on which the last rested, were symbolized with ornaments, reminding textile works. |

Which mode of symbolising the Idea of suspension is as significant and selfunderstanding as if it was taken from nature itself. In fact, it would be difficult to find any natural symbol for this idea of the same general application and value. and every other ornament on these places would have less meaning or none at all.

Symbols taken from textile art were also frequently employed for signifing a tye, an attache of one part to another, as a symbol showing that the attached part is only an attribution and not a structural part. finally they were on their places for ornamenting the soils and floors. –

#### On natural symbols.

Most of the symbols, which the Greecs so frequently and so successfully employed for the decoration of the constructiv parts of their buildings, and which were the organs, expressing the functions of the first, have derived from analogical forms in nature.

What principles did they observe in the choice and the application of such symbols?

r°) They did not transfer the Copy of the naturel object which gave the analogy to the idea which was to be represented in all its accidental details, they left out all what was not necessary for its explanation.

 $2^{\circ}$ ) they altered the originals in those particularities which could disturb the clearness of the meaning of the Symbol, and put parts of an organisme together which were sufficient for the expression of the Idea, finding it useless and disturbing to take the whole. Instance foot of a chair, but an foot sense upright and mouveable. Vase of Dieterle. not clear easing. Coping round. (Coffemill)

So for instance did they alter the natural colours of the objects in covering them with conventional colours, except in cases where the colour of the thing itself was the analogy which they searched for. -

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fol. 6v

13 fol. 7r

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since in every other case the natural colouring of the object would have permitted a double explication of its meaning.

3°) They made abstraction of the material of the originals as well as of that of the building which, it must be well understood, was entirely covered with colour. | for this abstraction they were permitted to make the images of tender leaves the symbols of a conflict between two mechanical forces, and even to establish a scale for the intensity of the action of a part of construction, by the degree of curvature which the elastic line of the leave band received by the hand of the sculptor and painter. -

One of the most important symbols in architecture is the Cyma, (Kuµa, то Kυματιον) which includes the ideas of ending receiving and that of a conflict between two forces.

Take (fig I) the sheme of an upright standing leave of any sectional form taken from nature. The leave may have a strong board and a rib. in the axis. take a row of such shemes and fix or bind it with a band on the board of a free laing or uncovered part of the structure, | then this will be a Symbol for the ideas: upright standing, free finishing, A piece which has been symbolised in such manner will not otherwise be employed than as an upright standing and unburdened one.

Exemple an antique Coronation of the roof of a Doric tempel.

when we lay now a slight burden on such a row of leaves, for instance a tablet (abacus), then the bottoms of the leaves will incline a little forward (fig  $_3$ ) (a) is the real, (b) the plastical formation of the leaves shown in section. (see 4 and 5) -

When more burdened, the leaves will still more bend an incline to their 25 roots. and so on.

Sometimes two leaves were supposed standing one before the other and forming a double row; this supposition did not alter the mode of the formation of the elastic curves which resulted from their being burdened.

fol. 8v 16.

You will understand how it was possible to establish through this simple symbol an ideal but in the same time a very accurate scale of the proportion to which a part of the construction was supposed to be burdened or to which the same was enabled, by its resisting force to oppose a burden. - It gives also the means of altering and tuning for any intended musical mode the real forces and the material proportions of the naked structural parts.

The moulding, which resulted out of the plastical ebauche of this symbol is called the Doric Cyma and although it is perhaps the most speaking among all the symbols expressing similar functions, it has not been adopted in later styles

The leaves were allways represented on this moulding as well as on every other moulding of ancient architecture in general. or painted or sculptured and

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fol. 8r 15.

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then painted with conventional colours, (red blue divided with golden threads, the interstices green.) |

The curves were performed by hand after the feeling of the architect, no mechanical way of construction of the elastic Curves observable on Greec monuments is admissible.

Let us return to our burdened leaveband and see what followes, when still more burdened.

At a certain moment of increased burdening the leaves will break in the middle or at least they will take a sharp folding and the forehanging part will cover that below which is curved outward in a certain elastic line of great resisting power. This will happen so much earlier, the more the supposed leaves are burly and ripped, like the leaves of waterplants. In this state they perform that sectional form which we see on the Doric Capitals and other mouldings of the same form occurring on the Doric as well as other ancient edificies. They are or were formerly alltogether <sup>1</sup>/<sub>1</sub> ornamented with that sort of ornament, which we very unartistically call egg and tong, whose first sheme is formed after the ana-

logy of waterleaves, returning their broken points against the roots and forming a convex sectional curve. The Greec name for this moulding is Echinos, it symbolises a very powerfull conflict between too forces which resist each other.

It has undergone many variations in Greec and Roman times as well as in the different periods of modern architecture; most of the later modifications are made without consideration of the origine and the intended expression of the symbol.

Another variation of the same symbol. signifing a conflict, is the so called <sup>25</sup> Cyma reversa or ogee; in Greec Lesbian Cyma. It is again a double row of waterleaves of an other kind, whose broken parts form a sectional composite curve half concave and half convex, with the convex part below. The moulding which results from the plastical ebauche | of this symbol was very usual with the Ionian architects; It is much less expressiv than the two other related symbols. The leaves did never fail on mouldings of this kind as well as on the others, and where they are wanting we may be certain that they were once painted on it and have disapeared.

This at least is certainly true for Greec buildings of all periods.

Where the same curve occurs upside down, a form which we call the cyma recta, there of curse it is the plastical ebauche of an other Symbol of a quite different meaning. but, as my intention was only to day, to illustrate by some examples the mode of symbolising architectural parts, which I did, I shall not go farther and spare for the following lectures the explanation of the parts of Greec Architecture in their Ensemble and separately. 17 fol. gr

19 fol. 10r

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# **Second Version**

fol. 1r

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Architecture is an art of invention that is to say, it has not, like the other arts of design, the immediate imitation of nature for its object.

Works of architecture have no prototypes in nature, they are entirely the results of imagination experience, and combining science.

This is evident not only for the general dispositions of architectural works, for their *Structural* forms in general, but also for what we use to call the *ornamental parts* of architecture, that is to say for those symbolical investments of the bare structure, with the aid of which we give higher significance, artistical expression and beauty to the last;

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Architecture would therefore, with respect to this, appear to be the freest among the different arts of design if it was not entirely depending on the material laws of nature. Whatever object of architecture we may consider. (or of industrial art in general,) its first conception will have rosen from the necessity of providing for some material want, | especially that of protection and shelter against the injuries of clime elements and weather, or also against other hostile powers, and as we can obtain protection of this kind only by combinations of solid matters which nature procures, we necessarely are constrained for those constructions to the strict observance of the statical and mechanical principles, that is to say to the laws which nature itselfs observes in the creation of its various forms.

This dependency on natural laws and conditions gives to the works of architecture a certain caracter of necessity and makes them appear like natural works, but such natural works, which God created through the medium of reasoning and free acting beings.

The history of architecture forms therefore a very important part of the history of mankind. The monuments of former ages give us an account of the state of civilization and of the caracter of bygone generations, like the fossil shells and the corall-trees give us an account of the low organisations, which once inhabited | them. – .

fol. 2r 3a

But in turn we can not entirely understand those remnants of architectural works without the knowledge of the history of human culture in general, and of the history of the nations, who created these works, especially. –

The general history of culture of mankind gives us evidences of the following important fact: namely that the history of architecture does not begin at the same point with the history of housebuilding and Engineering.

We see nations, in a high state of practical and political development, who have no history of architecture, whose architectural works are bare structures, occasionally enriched by furnitures, draperies, and other implements, which do

fol. 1v 2a

not belong to the structural works themselves, but are mere applications, borrowed from the other industrial arts, like pottery, textile art, metalworking furnituremaking etc. - This is nearly the case for instance in China, and with the Arabian tribes, who live luxuriously in simple tents.

This Caraib cottage is an instance of housebuilding which in its Ensemble as 5 well as in its details answers the purpose, for which it has been constructed and the laws of statics and proportion are pretty well observed in its construction. There is even an element of ornamentation visible in the mattings, made of differently coloured natural stuffs, which they employed for their partitions. But each member of this Ensemble works only accidentally, it has not been modelled on purpose for the function it performs. The columns are trees of the bambu plant and nothing else. The wall partitions are matts hung up between these trees. The whole has nothing in common with architecture as an art and can only occupy our attention as a most elementary sheme for Roofconstruction, combined with matting as the elementary sheme for vertical partitions. 15

The first step towords architecture as a real art would appear to be the modelling and cutting natural and formless materials into regular forms, such as are prescribed by statical | and other material conditions, which each part of the whole has to perform, and their combination to a well calculated structure.

But we find no exemple of a style of construction resting on this point of development, except in our own days of merely practical mechanical and commercial tendency.

Of old people had probably less practical but certainly more poetical qualifications. 25

They could not help giving a sort of plastical life to the blocs of wood or stone, in preparing and modelling them into prismatic beams or cylinders in order to make them fit for the construction of their temples and other architectural works.

They made them tell their history, the reason for their existence, the direction and power of their action, the role and part which | they were destined to take in the whole work, and how their relations would be to each other; They made them tell also by whom and for what destination the whole construction was made.

These tales were made in a language consisting in certain caracteristic types, 35 performed on the surfaces of the nacked shematical forms of the building. and this symbolical language was found already almost entirely prepared for this purpose by the other branches of industry, which, it must be known, had reached to a high degree of practical and even of artistical perfection long before the building of monuments was thought of. 40

fol. 2v

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6a \_fol. 3v

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So this language was already prepared for general understanding, so much the more as most of the Symbols employed were taken or derived from analogies in nature and self understanding for every one who has some feeling | for nature and the dynamical signification of natural forms.

But among these symbols or types, are others, and some of them are very important as relating to the general features of the monuments, which are by no means self understanding, being not taken from nature directly, but reminiscencies of old traditional elements of construction, or of processes, which in the antemonumental times were connected with housebuilding and housefurniture.

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A third class of symbols finally refers to the special destination of the building or the God of the temple and the religion of the foundators. This last class of symbolical language was not intended to be of general understanding, and composed of mystical types, comprehensible only for those who were initiated into the secrets of religion. -

We observe the predominance of the two last mentionned classes of symbols on the monuments of the ancient barbarian nations, as the Assyrians and Egyptians, while the Greecs generally employed such symbols in architecture which wanted no espacial key, or at least, when their symbols had a mystical sense, they were at the same time the expressions of some statical or mechanical function of the part of the construction, on which they were applied.

For instance, they took for the moulding, whose statical function, as a band or a tie, was often symbolised by a wreath of leaves, different kinds of leaves, according to the different destinations of the building, to which the moulding belonged. The lorrel leaves belonged to Apollon, wine leaves to Bacchus, Mirthleaves to Venus, etc. – The caracters of the leaves were different, but the general statical significations of the symbols remained unaltered;

It was not the same with the Assyrians and the Egyptians, whose monuments do not speak to us in a linguage which, like that of the Greek monuments, is comprehensible by itselfs in every age, and at every place, namely the linguage of nature itself. -.

I shall now proceed in giving some few instances of symbols used in architecture, and in showing their meaning, their power of expression and their application; I shall do this here only with the view of explaining the foregoing assertions, and refer for a more complete and systematical explanation of the symbolical forms in architecture to the comming lectures.

#### On Structural Symbols.

Most of the Symbols, which the Greecs employed for the decoration of the constructiv parts of their monuments have derived from analogical forms in nature.

fol. 4v

8a

fol. 5r 9a

7a

fol. 4r

One of the most important symbols in Greec and most of the later styles, *τοα fol. 5v* which more or less derived from the Greec, is the so called Cyma, (Κύμα, Κυμάτιον)

Take a row of upright standing leaves of any sectional form; these leaves may have strong projecting boards and ribbs in the axes.

bind the row of leaves with a band on the board of a free laiing or uncovered part of structure, then this row or crown of leaves will be a Symbol of the Ideas, upright standing and free finishing.

A piece, which has been symbolised in such a manner, will not otherwise be on its place, than as an upright standing and unburdened part of the structure.

Examples are some coronations of the pediments of Doric temples.

When we now lay a slight burden on such a row of leaves, for instance a tablet (abacus) then the bottoms of the leaves will incline a litte forward. (fig 3). a is the real sheme,

b is the plastical interpretation or reddition of the sheme in stone shown in section.

When more burdened, the leaves will still more bend and incline to their roots or to the band by which they are supposed to be fastened on the structural part.

You will understand how we are enabled through the aid of this simple symbol, to establish an ideal but a very speaking and accurate scale of the proportion, to which a part of the construction is supposed to be burdened or to which the same is enabled by its resisting power, to oppose a given burden. The variation of the elastic lines formed by the bending leaves is infinite and as mannifold is the expression which we are enabled to give to the part on which the ornement is applied, with respect to its statical function.

By this way we shall have the means of tuning our material proportions of the structural parts, for any intended musical or rather architectonical mode whatever.

Sometimes two rows of leaves are supposed standing on before the other and forming a double order. | This supposition does not alter the mode of the formation of the Elastic curves which result of the conflict between vital force and gravity. These curved leaves are representatives and symbols of a conflict between two powers and applicable in architecture, where such conflicts take place.

The moulding which results out of the plastical ebauche of this symbol is called the Doric Cyma. Although it is perhaps the most speaking of all the symbols expressing similar functions, it has not been adopted by later styles.

The leaves are the real shemes for the idea, the moulding is only the plastical ebauche of the former, which never failed to be represented on the moulding, or

12a fol. 6v

11a fol. 6r

13a fol. 7r

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painted, or sculptured and then painted. This is true for every moulding of ancient architecture; Nacked mouldings without their accomplishments pepresented on them, were scarcely known with the ancients. |

The curves were performed free hand; without the assistance of compasses or other mechanical means.

Let us return now to our burdened leaveband and see what followes, when we burden it still more.

At a certain moment of increased burdening the leave will take a sharp folding in the center part, and the upper part will fall down and cover that below it, which according to the form of the leave, is curved outward in a certain elastic line of great resisting power.

This will happen so much the earlier the more the supposed leaves are burly and ripped like the leaves of waterplants. In this state they perform the sectional form of the Doric Echinos, which every where was ornamented with that sort of ornament, which we commonly | call Egg and tong ornanent, whose first sheme is formed as has been shown, after the Analogy of waterleaves turning their burdened points against the band or tye by which they are fastened and forming a convex sectional curve. The moulding which is the plastical ebauche of the echinos ornament is used, where a powerfull conflict between two vertical forces which resist normally each other, is to be expressed.

An other variation of the same Symbol signifing a conflict is the so called *Cyma reversa* or ogee, in Greec Lesbian Cyma. –

It is like the Echinos, a double row of waterleaves, whose broken upper parts form a composite sectional curve, half concave and half convex with the concave part below.

fol. 8v 16a

fol. 9r 17a

The moulding which results from the plastical ebauche of this Symbol was very usual with the Ionian Greecs. The ornamental leaves on this moulding did never fail, as is the case with the former, and where they now are wanting we may be satisfied that they formerly were painted on it and have disapeared with the time.

This at least is true for Greec buildings of all periods.

Where the same curve occurs upside down, a form which we call the Cyma recta,) there of curse it is the plastical Ebauche of an other Symbol of a quite different meaning and destination. But I shall spare the explanation of this and other symbols for the following, | adding only here some general remarks on the principles which the Greecs observed in the choice and application of their structural symbols.

r°) They did not transfer the copy of the natural object which suggested the analogy to the Idea which was to be represented in all its accidental details they left out all what was not necessary for its explanation.

fol. 70 14a

fol. 8r

15a

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 $2^{\circ}$ ) They altered the originals in those particulars which could disturb the simple meaning of the symbol, and put parts of an organism together which were sufficient for the expression of the Idea, leaving out the other parts and finding it useless and prejudicial to represent the whole thing. Instance the head and foot of an animal as a stand of a mouveable object.

For the same reason did they alter the natural colours of the objects, except in cases., where the colour of the thing itself was thee point of comparison and the analogy which they searched for. – since in every other case the natural colour of the object would have troubled the mere statical sense of the Symbol.

 $3^{\circ}$ ) they made abstraction of the materials of which the originals of the analogies consisted, as well as of that of the building itselfs which, it is most important to know, in Greec architecture was entirely covered with conventional colours. –

By this double abstraction they were permitted to make the images of tender | leaves the symbols of a conflict between two mechanical forces, and to establish a scale of the intensity of action between havy stones by the degree of their curvature. -

We shall now consider some symbols of the traditional kind, which had the greatest influence on the general formation of monuments.

<sup>20</sup> I<sup>o</sup> *The fireplace*. see other paper.

# On the Relation of Architectural Systems with the General Cultural Conditions

We shall not be able to understand the individual characters of the different *r*. systems of architecture, without having first gained some notice about the social, political and religious conditions of the nations or the ages, to whom the sayd architectural styles were proper.

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For architectural monuments are in reality but the artistical expressions of the same social political and religious institutions; both, the forms of society as well as those of art, are necessary results of some absolute principle or original idea, which is older than both. |

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Still less will we be able to conceive any distinct idea about specialities of a certain style of architecture, for instance of what we commonly call the ordinances and mouldings of a style, without having at least some general notions

fol. 11

fol. IV

18a fol. 9v

about the whole Ensemble of the monuments, to which refer these details, and of the principle of which they are the expressions.

But were are unhappily yet in a very great uncertainty just about the most essential of these general notions, not for those styles only, of whom very few remains and historical evidences are existing, but also for Greec and Roman architecture, and that of the middle ages. We do not even precisely know our own present conditions.

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However this may be, I shall feel obliged to start from some such general notions in endeavouring to explain to You the different forms of architecture. |

I give them in the hope that in every case they will give some hold to the immense material which lays before us, even if it should happen that I was mistaken in some of them.

I considered in my last lecture the fireplace as the Embryo of social forms in general and the Symbol of settlement and united volition.

The first social form aggregating itselfs round this focus of humanity is the patriarchal form of family-life, conditions similar to those which we find so poetically described in the books of the old testament and which in the same countries of Asia, to which these descriptions refer, are still existing.

In this condition of society there is yet no architecture, although it may allow some degree of progress in ornamental art and luxury, manifesting itself in the productions of pottery, woodcarving, weawing, furniture making, metalworking etc.

This patriarchal form of society suffered no essential alterations in principle by being widened into the form of confederation between the different families and tribes of the same race.

This political form of free confederation between tribes of the same origine and race, although it seems to be the most natural and the most reasonable, we find it everywhere overthrown by other principles availing themselves in those countries, which are the creddles of human civilization. viz. the dynastical government and absolutisme onesides, or the hierarchical government and oligarchy othersides.

We have little notice about the circumstances under which these changes took place but we see the large centers of civilization in the ancient world allready formed and modelled after one or the other of these two principles or after a mixture of both, at the very commencement of our historical knowledge.

These principles were the first, which found or received expressions in architectural art. The history of this art begins with their prevalence. The two mentionned principles were in opposition to each other although they go together in certain points, and it is the same with the edifices, which resulted out of them.

The hierarchical governments affected the maintainment of old traditions and the forms resulting out of this | principle of conservation would be for us comprehensible enough, if they were not partly invested and made indiscerne-

fol. 2r

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fol. 2v

fol. 3r 3

able for profane eyes, by that mystical symbolism which has been expressely invented by the priesterly foundators of this political system for not beeing understood by the vulgars and forming the hieratical-linguage intelligeble for the priests only,

This renders the explanation of the architectural forms of this priniple of political institutions rather douptfull and difficult for us, although the remainders of these works are more important and in better conservation than those of any other period of human development. The Egyptian monuments were resorting out of this principle as well as those of India.

The other principle the despotical one is revolutionary in its nature, and therefore the opposite to the first in its essential point; The old forms of society are entirely abolished by it and replaced by a quite different one. | but the dynastical or despotical foundators of the new political form of society had less spirit of invention and were less learned than the first; which circumstance gives us more facility of seasing the meaning of the general forms as well as of the specialities of the architectural styles which resulted out of this despotical principle of society. For this reason I shall begin with the explanation of the architectural forms which are the expression of this social principle, and take as an instance the architecture of the Chinese, of the Assyrians and their followers, the Bactrans and Persians.

It is a curious fact, that all the traditions of the Asiatic nations, which since the beginning of history were governed by despots, agree together and concur in mentioning a terrible revolution of nature which destroied a great part of the ancient inhabitants of the country and drove together the survivors, who, in consequence of their common distress | felt induced to forget their old family-

alliances and their inimities, in order to stop by united forces the destructiv power of the elements and to regain by great national constructions the torritory which by the great revolution of nature, they had been obliged to abandon.

This aim they could not fulfill without submitting to one man's command; and subordination then became the new principle of society.

The history of China which most merveillously is ascertained to us by contemporary monuments since more than two thousand five hundert years before Christ, gives us an exemple of the influence of such an evenement on the political life of a nation. It begins with the reign of an electiv imperor, with the name Jao who was named to direct the great work of the repression of a general deluge which had overflown the whole China as far as to the western mountains near

Thybet. | The first minister of the Imperor and his follower on the throne was Sii; who undertook immense hydraulik works in order to give passage to the waters. an inscription executed in large letters was hewn into a Roc named Hong-Chan, where the old imperors held their annual sacrifices and thankgivings to God. fol. 4r

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This inscription is still existing and we have true copies of it.

fol. 5r	5	O our assistant and counsellor! All the great and small islands as far as to the highest points, all the couches of the beests and of the birds, all the human settlements are overflown everywhere, go at work and drive the waters back to the sea and make didges. It is a long time that my countrimen are waiting for assistance. I am sitting on the top of the mountain Tho-lou! I have persuaded the spirits   of the people by vigilance and by activity. The heart knows no repose.	5
		restless labour is my recreation. The mountains Hoa, Tho, Thai, Heng	ю
		were the beginning and the End of my undertakings.	
		After having finished my work I have brought in the center of the country a Sacrifice of gratification, but my sorrows have not ended.	
		The disturbances of natural forces have ceased, the great rivers of the	
		South have returned to the Sea.	15
		The dresses can now be wowen, the seads can now be prepared.	-5
		The thousand kingdoms have now peace.	
fol. 4v		This imperor and the two after him, Chun and Ju were electiv princes after	
		which the imperial crown had become hereditary; It is at the time of these first	
		imperors of the Dinasty Hia that the Chinese allways look as to a golden age that of Greatniss and happiness. Every revolution in that country is made under	20
fol. 5r	.5	the pretext of reviving the old insti-   tutions of the imperor Jao.	
<i>Ju</i> . <i>y</i>	3	These antiquarian reactions threw allways the Chinese back to the old forms	
		and is one of the reasons, why that land remained in the same state of culture	
		since the deluge to our time. So for instance has the Pallace of the Imperor Jao,	25
		become the fundamental motif of Chinese architecture, in construction as well	
		as in the general disposition. Besides, this style has been arranged and prepared	
		for every class of the nation by invariable laws, being as old as those times of	
fol. 5v		which we speak, which laws   are observed rigourously till our times.	
		We are in the possesion of an old description of the pallace of the first im-	30

We are in the possesion of an old description of the pallace of the first imperors of China, which is the following:

## Description of the Pallace of the Imperor Yao,

The roof was of Straw and clay, the rains of the summer covering it with a green coat of gras.

Behind the intrance door or triumphal port, which was laying against the South, came a large Court, where the hall of audience stood. At the opposite side of this court was a large hall, surrounded with a wall, containing the public

measures and balances, for the use of the market, which was helt in this curt. Behind this hall was another court, on the northern side of which was the modest pallace of the Emperor and his family.

The hall of audience was on a terrace of three degrees, made out of | turf. There were trees planted before the doors for those who were waiting for an audience. to protect them and the Imperial servants against the sunshine.

This simple model of a pallace contains nearly all the elements of the richest and most complicated buildings of the same destination built in later times. This is true for the general dispositions of the Chinese pallaces as well as for the details of construction and singularities of that Style. So for instance we are told that the curved form of the old roof of the imperial Pallace of Jao, a consequence of its antiquity, had become hereafter the motif for that singular curved form, which is particular to the roofs in China. And the green colour of the old shingle roof of Jao's hall was the reason, why the imperial palaces are allways covered with green tiles.

A striking contrast with it makes that most splendid Pallace of the actual Imperors at Peking but still it is in imitation of the same motif.

The first and principal disposition of this Pallace is owed to the Chief of the Mongol Cublai Chan who conquered China in the 13<sup>th</sup> Century.

The description of this old Pallace is to be found in Marco Polo's travels. but his description gives us no idea of the Ensemble of it. He mentions one hall which could hold 6000 men. and says that all the walls, inside and outside were covered with Gold and ¦ ornamented with Dragons, beests, birds and other creatures.

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The modern town of Peking is in itself a sort of imitation of the same principle of which we speak.

It is built in form of a rectangle and surrounded with walls. It is divided inside in two parts by a transverse wall. The eastern part is a sort of faubourg touching on the western side to the wall of the city.

The City is square formed and protected with walls and ditches.

It contains thre concentric square divisions of the same kind surrounded with walls.

The smallest square in the center is the residence of the Imperor and is called the forbidden town.

The space between this and the next circumvallation is called the imperial town It is the residence of the higher Classes of employed men

The Space between this and the outer wall of the city is for merchants and tradespeople and is called the town simply.

The forbidden town has 4 Gates one on each side of the square.

fol. 6v

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fol. 7r

fol. 6r

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It is impossible to give a description of the magnificence and beauty of the isoladed buildings which are symmetrically disposed and separed by richly decorated court-yards in the interior of the forbidden town. The whole Circuit is surrounded by a deep channel with parapets built of polishd Granite blocks. and between the Channel and the wall are houses which have half the height of the wall. except on the Southside where is the main intrance,

The walls are covered with glazed tiles and the way which leads to the inner courts is inlaid with mosaic parquets.

The interior is again divided into three parts separed from each other by walls the eastern, the middle and the western part. The middle part contains | the imperial pallace, which is divided into a multitude of Courts, every one of which has its one destination. The lay one behind the other from the south intrane to the north gate. The eastern and western divisions, next to the Imperial Pallace, contain many Subdivisions, each of which has its own circumvallation and contains a court with pavillons and halls.

The middle pallace is an immense suit of splendid Gateways or triumphal arches, courts, galleries, Isolated buildings terraces, ballustrades, bridges etc. It contains 13 courts, at the northern end of each is standing on an elevated terrace an isolated roofed building of one or more stories and the effect is always increasing to the | last pavillon, which is called the house of the Serene heaven, and which is the highest and most splendid of all. It is the private apartment of the Emperor: There are some other buildings belonging to the private apartments behind the main buildings This is the Serail of the Imperor. Each lady has her own house surrounded with walls containing fountains cannels, flowers and shrubbs.

But on the northern Side of the private appartments begins a new suit of courts and single edifices The last, the 17<sup>th</sup> pavillon is the Van-Sie, | which forms the intrance to the private imperial Garden of indescriptible beauty and richness forming a large square surrounded with a wall.

The two main divisions east and west to the Pallace contain the pallaces of the mother of the Imperor and of the princes, the privy Counsel hall, the academy of sciences, the temple of Confutsie, the library, the house of the historical society, the treasury, different tempels and Chappels, theaters; and schools for princes, imperial guorderobes, Offices for the different Courtcharges. the Chancery etc. On the Westside, of the pallace is the public Garden with large models of all the public buildings in China. A Sort of school for architects. The Garden is divided by a Serpentine Rivver with suspensionbridges and marmorbridges. On a high hill is a buddha temple in form of a bottle.

fol. 7v

fol. 8r

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fol. 8v

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But all these wonders are nothing as compared with the constructions, carried out by the Great Restaurator of the Chinese monarchy Tshin Chi Houang Ti, (249 before Christ).

Before him the land had been dissolved into a great many of independant states by the rebellion of the Satraps under the last feable imperors of the Dynasty Yu. He reconquished all the independant Vassals of the Empire and destroied the aristocratical power of the learned mandarins, who had formed a sort of priesthood in opposition to the monarchical system.

He gave an architectonical expression to his political system in founding a new Capital or Pallace at Hien Yong.

He made drawings of the pallaces of all the Satraps which he had vainquished and killed, and rebuild them exactly in their original forms and sizes on the place of his new Residence, furnishing them with all their original richnesses and forcing the widows and the whole household of the deceased princes to follow him at his pallace. These single pallaces he then united together in a general plan of arangement, by means of | galleries, walls and courts, exactly in the same manner as the pavillons and halls in the Pallace of Peking are united and arranged together by the same means.

One of these courts was wide enough to contain 10000 Soldiers. -

This gigantic pallace stood on the board of a rivver and was surrounded by a double storied colonade.

He then ordered his high functionaries to imitate his example and to build palaces near to his own and after the same principle.

Thus he created a new capital; 70000 families were forcibly transplated from 25 the countries into this new residence. –

A still greater work of the same Imperor is the well known Chinese wall, which extends | from the Gulf of the yellow sea to the eastern frontier at a length of 5 or 600 frensh lieux.

This was only the practical and architectonical execution of the Idea, laid down by one of the first imperors, as early as 2200 Years before Christ, who divided the Empire into 6 concentric squares. The first or innerest square was the residence of the imperor. The second was formed by the imperial dominions. The room between the second and third square was for the high functionaries and Vassals. Then came the so called district of peace. Hereafter that of the penitentiaries and lastly that of the outlaws and proscribed.

Therefore the Chinese Empire is called the Empire of the Center.

One and the same Idea prevails among all these different Chinese political and architectural forms; that | of coordination and subordination of many individuals to one great Ensemble only by outer bands. the military and despotic system of order. There is no organic development, no growing up of an individfol. 9v

10 fol. 10r

fol. 10v

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fol. gr

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ual out of a more incomplete state of Childhood into that of adultness; E contrary, the simpler specimens of architecture are only reductions of the Imperial pallaces; The houses of the lower classes are like the pallaces are, only in a smaler scale, with reduced pavillons, reduced curts, reduced terraces and so on. –

If we look at the constructiv parts and the details of Chinese architecture, we will again encounter. the same principle. – The different elements of construction are isolated, they do not work together nor do they complete each other. Every part works for itselfs in the most primitiv and material sense. The columns are simple poles sustaining the roof; without capitals or bases. and without Entasis.

The terraces, on which these constructions stand are sometimes made out of freestones and ornamented with mouldings and rusticated work, not very much different from those usual in Greec and Roman architecture, and employed after the same principles. On these terraces only and on the parapets and staircases belonging to them, the nacked stone and the art of the Stonemaçon shows itselfs.

This is not the case with the exterior walls of the houses, which generally are of hollow brick construction, covered with Stucco, and like the columns and corniches of the roofs richly decorated with painted ornaments. The ornaments of the lower parts of the walls are real or painted imitations of bambutreillis work, which is the most original mode of making wall partitions; the higher parts of the same walls are painted in imitation of curtains and draperies, or like embroidered carpets. |

The partitions inside of the houses are generally mouveable shrines or real draperies or imitations of draperies.

The outer walls have nothing to support but their own weight. They are sometimes applied on the outside of the columns; (for larger buildings) on other occasions they are placed between two rows of columns. Thirdly they are placed behind the columns inside the house, for small pavillons.

The roof with its columns shows the same most elementary system of construction.

The covering is of slate or rather of a Stone similar to our slate or of stoned tiles of different colours; The form of these tiles and the system of covering is much like that of the Ancient Greecs and Romans.



The corniches are sometimes constructed in form of a large scotia ornamented with Dragonteeth, at other cases. but generally the sparheads are hidden by a sort of tent bordering or what the Frenschmens call a lambrequin.

fol. 11v

fol. 11r

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The Spandrils between the columns, underneath of the frame or wall plate, are the most decorated part of the building, the right angels of the two lines being brocken by treilliswork |

The columns are standing on stone plints which project over the soils of the terraces. They are or square or polygon or round. without Entasis, basis or capitals. Sometimes they have brackets for supporting the projecting sparrheads.

The thickness of the columns stands, according to the ordinances of the architectonic policy, in proportion to their distances and their heights. A column of 2 feet diameter must have 14 feet for its hight The distances are, for large buildings, four times the diameter of a column. The size of a buildings is allways measured after the distances between the columns. So for instance they say: a house has nine distances of front and 5 distances of deepness.  $-\frac{1}{2}$ 

Thus, in this country, the principles of beauty and proportion in art are laid down in the policeordinances and owerwatched by policemen and constablers.

<sup>15</sup> Chambers describes the house of a Chinese merchant at Canton as follows,

The plan is an oblong The groundfloor is divided by a wide passage on each side are four apartments. Each of which contains a reception room, a bad room and an office. The Elavation to the Street is covered by shops, behind which lays the staircase. The opposite elevation opens to a court, which is enriched with flowers, artificial rocks, bambuplants, vases, fountains et.

At the wings of the house are the kitchen, the baths and the servantsrooms.

The upper floor is nearly a repetition of the Grondfloor. In the open Gallery is a house altar. The floors are inlaid with marble of different colours and the walls to the hight of 3 or 4 feet | are covered with bambu treillis. The rest of the wall is decorated with Silk draperies or with paperhangings The side of the hall, towards the garden is open, but the opening can be shutt up with a treilliswork of bambu. 4 Silk Lanterns are hung up at the ceiling of the hall. etc.

Such double stories are, according to other travellers, only allowed in the retired parts of the buildings. The Imperor himself is not allowed to have in the public part of his pallace, buildings of more than one stories hight.

The simple tradesmans house has only 3 distances of columns and two courts.

The professional man has 3 distances of columns and three courts allowed. The mandarin has 5 distances, the prince 7. The imperor alone has the right of giving 9 distances width to his houses.

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13 fol. 13r

12 fol. 12r

fol. 12V

But the distances themselfes are modified after the sizes of the columns. – Pauthier La Chine in the univers pittoresque.

Sir William Chambers on Chinese architecture furniture etc.

#### fol. 13v Assyria.

The land which shall occupy us now is that alluvial plain, watered by the Tygris and Euphrates, which extends from the Persian Gulf to the Armenian mountains unbroken by any natural elevation of ground.

It was once, what it is to day, a marchy prairie being in the spring the common pasture ground for the neighbouring tribes but for the rest of the Year a morass or a dry step without water.

It is the most fertile ground in the world, but its richnesses must be gained from nature by energetic works which can only be carried out by great national enterprises.

It was of old the great commercial Overland way between India and the western lands.

The nation, which, as far as we know first had taken possession of this land, and gained it from | nature, belonged to the Semitic race and appears in the oldest records as an ingenious enterprising but luxurious and somewhat overbearing nation.

Behold the land of the Chaldaeans, says Isaya, this people was not, till the Assyrians dammed up the land for them that dwelt in the wilderniss. They transformed the tents of the nomads into solid settlements and raised the pallaces of the land.

The first traditions of this nation are again turning about a great deluge, <sup>25</sup> which gave the first occasion for the great work of civilization.

This may be as it will, we know this land, since the beginning of history as governed by strong military institutions founded on the right of conquest, by a sort of military and feodal constitution. Its history is the continual repetition of the same political event, the submission of a highly cultivated but enervated nation by uncivilised but energetic invaders, who take possession of the land, adopt the <sup>|</sup>/<sub>1</sub> institutions language, dresses and habits of their new subjets and soon fall into the same state of political and moral decline, which was the cause of the fall of the empire which they had destroied.

There is a regular periodical regularity perceptible in the succession of such 35 circumstances in the history of the middle Asiatic Empires, like in natural phaenomena.

What applies to one period, holds also good for precedent periods as well as for those who follow.

fol. 14v

fol. 14r 14

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The conquest of Assyria by the Persians is one of the later revolutions of the country, but the instructions, which Cyrus, the Persian Conqueror, gave to his satraps, gives in a few words the essence of the political form and state of the land as it was before him under other despots, and as he restored it to the advantage of his own conquering race.

Xenophon tells us, that Cyrus, after the conquest, devided the provinces between his generals and friends, to govern the subjects, to collect the taxes and to entertain strong garrisons for the defence of the new government.

He recommends them to follow his exemple and to create a military nobility with their friends and the first families of the old vainquished race; to establish a rigid court ceremonial, to give regular audiences to the great proprietors of their provinces, to invite them often to large dinner- and hunting parties at their court, etc. "That, who in proportion to his revenues, he continues entertains the greatest number of vassals, horsemen and charioteers will be my best friend and the boldest support of my Empire. -.

The camp of Cyrus, of which the same Xenophon gives a description was arranged as follows. The tents of the king with his staff were erected on an elevated Square terrace in the center. Round this highest part was another wall, covering the tents. of the friends and life guards of the king. Round this circuit was an other, formed by the cavalry men and Charotiers, then came the fourth circuit formed by the archers and the light infantry. The last circuit was formed by the Oplites and heavy infantry. –

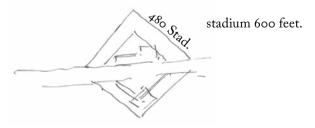
Thus we see here like in China the military principle, that of subordination order and strength prevailing in the institutions of Assyria, and it was the same in Architecture.

What we know about Assyrian architecture by historical traditions and the new discoveries made by Mrs Layard and Botta on the ground where once the celebrated town of Ninive stood, confirm this.

Herodotus on Babylone.

30 square

480 Stadiums each side walls unburnt brick with Asphalt. didges round. Two parts each side of the rivver Euphrates.



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fol. 15r

fol. 150

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The walls were 400 feet high and 100 feet thick. On the tops of walls were houses containing one room only. opposite to each other, and 100 town gates gave intrance to the town the gates and frameworks of the door were of bronze.

The houses have 3 or 4 terraces and are richer in ornament than anywhere else.

The streets are regularly disposed and very wide.

Behind the outer wall was an other wall and the space between the two walls formed an open ground, occupied with the tents of the caravans, and tributary tribes comming in town to bring their contributions.

In the middle of each interior town was a royal castels. with their own circumvallations on a very elevated terrace, so that the town was entirely dominated by it – the ancient royal Castel of the Belus at the west Side contains the Sanctuary of Belus (square, two Stadiums each side). In the interior of the sanctuary is the tower of Belus square, one stadium each Side; one stadium high, 8 terraces. |

on the top of. the highest terrae stood a tempel with the statue of Belus carried out in driven Gold.

The royal Castel was like the town itselfs, surrounded by a double wall. The Space between the walls was free and for tents. only. The second wall was circular, and enriched with glazed tiles, representing hunting parties and military scenes. (40 Stad. circumference). 100 feet hight.

Then kame a third wall forming the Acropolis or highest terrace. This wall was again richly ornamented with glazed tiles.

Three entrance doorways with Bronze pinnakels and bronze gates, which were moved with machinery.

terraced gardens or paradises were connected with the Castels.

The ancients describe the most celebrated of these works, known under the name of the hanging gardens of Semiramis. as follows.

13 terraces forming a square in the groundplan, 400 feet each side; The highest terrace was about 70 feet high.

Each terrace was 32 feet wide and planted with trees and shrubbs on a floor of large slabs supported by Stone walls 22 feet thick.

On the terraces and between the plantations stood pavillons, baths and other isolated buildings, as residences for the cool Season and the nights. Besides there were fountains water basins and other enrichments.

The spaces between the stonewalls had their lights from the distances between two terraces and contained many richly ornamented and well furnished royal apartments. – .

This last circumstance is very important for us, as it gives us the explanation of the plans of Assyrian palaces which we now know by the discoveries of Mr. Layard and Botta. near Mossul on the ground of ancient Ninive.

fol. 17r 17.

fol. 16v

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Explanation of the Groundplans. formerly more terraces. destroied by time. terracework out of freestones or Cyclopic constructions. On this ground stood other terraces with isolated buildings of which we only know now the foundations and the lower parts of the walls. made out of unburnt bricks and panneld with Stone slabs or in cases only covered with Stucco.

Explanation of these Constructions.

On columns and their uses.

On their styles as wooden and half implementary. or mouveable.

#### Egypt. - .

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Egyptian institutions based on an aristocratical form of society. before the monarchical power was founded by Menes the first king about. 5 or 6000 before Christ. Priesthood in the sane time the state of the rich landsowners The whole property in the hand of the priests and their vassals the warriors.

The greatness of a natif aristocracy grows by and by instead of the splendour military aristocray being the result of one victory.

The difference which prevails between these two

# **Explanation of the Expression of Spatial Arrangements** in Architecture

I explained in the last lecture the general idea laid down in the disposition of the 20 Egyptian temples who appear like agglomerations round an invisible kernet. formed by the sanctuaries of the Gods to the honour of whom they were erected. but it remains for us to show how | the Aegyptians succeeded in the same time in giving to these agglomerations of walls an organic development from inside; and how they became, by doing so, the first inventors of almost all the 25 local arrangements, which we know in Architecture which still to our times are current having only been augmented by very few new combinations since the time of the first foundators of the Aegiptian policy religion and architecture.

In this respect the Egyptians werre superior not to the other Barbarians only but even to the Greecs, who adapted only at later times a great part of the Egyp-30

fol. 18v

fol. 19r

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18. fol. 18r

tian interior arrangements, and this only for profane buildings; the greec templestyle excluding them absolutely.

Explanation of the Expression of local arrangements.

Importance of the precinction or the fence for the history of architure. First solid buildings in the eastern countries were mere precinctions erected more for defense than for protection on terraces. The eastern countries are covered with very old constructions of this kind, which occasionally do yet the same service for which they were erected.

as a shelter for the shephards and their floggs against pirates and robbers.

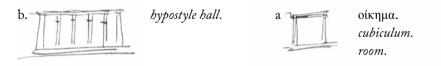
the protection from above is only an afterthought, and in many cases even at later times frequently only obtained by mouveable and provisional roofings, such as canevas, or wooden ceilings supported by mouveable columns.

The Different modes of covering such precinctions or fenced open courts. gave rise to the many different local arrangements which have become in their later developments as many elements of architectural.

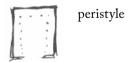
1) The open courtyard without any part covered.

precinctio.. presaepium fence.

2) the wholy covered courtyard.



3) the courtyard protected round the wall by colonades.



4) the courtyard protected only in the Center by a roof supported by colonades.





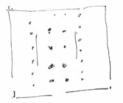
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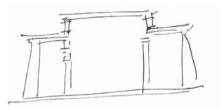
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5) the combination of 4 and 5.  $\mid$ 



tempel of. Lucsor.

6) the basilica covered court. with lower wings.



5 Details of aegiptian style compared with the Assyrian. Stone Style from the Beginnig.

*Propylon.* two large pillars or pyramids on each side of the door. heving the same destination as our steeples. a Signal for the pilgrims in the desert, as well as for the processions; the stations where the processions halted giving, together with the Allees of sphinxes in the same time the direction of the procession.

large writing tables. formig a kind of lock

Entire dependency of the parts from the ensemble no individuality even to picture and sculpture not free no action which would disturb the monumental unity.

trochleus pulley,

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Department of Practical Art. Martborough House, Putt Mall, London : the 11. day of September 1852. I am directed by the Lords of the bommittee of foring bounded for irade to inform you that they propose to estatlish a dap in order to afford metruction in the principles and practice of bronamental art applied to Tuetal manufactures, and that they have been pleased to appoint you' to conduct the same . 1 - Try Lodo consider it necessary to the sweet of this class that the several interests of the manufacturer the student, the Workman, and the general public, who are the consumers and ultimate pidges of manufactures should be consulted ; and that the measures to be adopted should be so framed as to ensure the experation of all, and judice them to apply to you for advice and assistance. 2 - your duties will be to instruct and exercise certain students of your blap in the principles and practice of concurrented art; to assist them in designing for Instal manufactures; to be responsible that their works excented in the blass are correct in principle

Pl. 6: Appointment letter from the Department of Practical Art, 1852 (gta, 20-K-1852-09-11)

SUPPLEMENTARY TEXTS

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## London

#### Lothar Bucher

London, 15. März. Vorgestern feierten die hier lebenden Deutschen, Flüchtlinge und Nichtflüchtlinge, den Jahrestag der Wiener Revolution, zur Erinnerung daran, dass, wenn die Hoffnungen des deutschen Volkes in den Jahren 1848 und 1849 nicht in Erfüllung gegangen, doch seine Ueberzeugungen und sein Glaube an die Zukunft durch die Erfahrung um so mehr gekräftigt sind. -5 Der grosse Saal der Freimaurerhalle in Queenstreet war gedrängt voll von Deutschen und von Nichtdeutschen; es fehlten natürlich nicht die edlen Frauen aller Nationen, und es erhöhten unter den Fremden die schönen Gestalten der Ungarinnen im malerischen nationalen Kostüm den künstlerischen Eindruck der geschmackvollen Anordnung. Da es allein auf die geistige Feier ankam, und то da man den Unbemittelten die Theilnahme so leicht als möglich machen wollte, so war der Eintrittspreis auf eine halbe Krone (25 Sgr.) beschränkt. Das Fest selbst war öffentlich - für Alle, auch für die Spione, die man - beiläufig gesagt hier sämmtlich kennt und zur unschuldigen Selbstergötzung oft mit den sonst auftauchenden Enthüllungen ausrüstet. Toaste fanden während des Mahles 15 nicht statt, da der ausdrückliche Wunsch der Versammelten sich dahin erklärte, dass die Grösse und der Ernst der Feier nicht durch den Ausdruck vereinzelter Gefühle verringert werde. Als die Tafel aufgehoben, verlas der Präsidirende, General Haug, sechs Propositionen, deren Annahme er der Versammlung empfahl und durch welche ihr Glaube an die Zukunft, ihr Verharren in den Grundsätzen der bürgerlichen und religiösen Freiheit und ihr Abscheu vor Despotismus und Willkür ausgedrückt werden sollten. Jede der Propositionen wurde durch zwei Redner unterstützt und vertheidigt und bei der Abstimmung genehmigt. Wir heben unter den Reden, die alle ebenso leidenschaftlos und taktvoll, als der Bedeutung des Tages angemessen waren, unter den Deutschen, die 25 von Gottfried Kinkel und Arnold Ruge, unter den andern, die von Mazzini und die eines Ungarn Roley hervor. Während Kinkel und Ruge besonders den mächtigen Einfluss der philosophischen Ideen und der Reformation auf Deutschland und ganz Europa und das Verhältniss der socialen Fragen zu denen der bürgerlichen Freiheit entwickelten, sprachen Roley und Mazzini über die Solidarität 30 der Völker und über die Bedeutung der Völkerverbrüderung. Roley sprach ungarisch und deutsch unter dem beständigen Beifall der Anwesenden, der sich namentlich bei dem letzten lateinischen Theile seiner Rede steigerte. Mazzini's edler und einfacher Ausdruck in französischer Sprache, der um so mehr durch seinen Inhalt wirkte, als er jeden rhetorischen Schmuck vermied, musste besonders wohl denen unangenehm gewesen sein, die den grossen italienischen

Patrioten gern mit den Karrikaturzeichnungen gewisser Personen in Uebereinstimmung gebracht und gern die Erzählung von einer wilden, fanatischen Rede geliefert hätten. Mazzini's Darstellung war aber leidenschaftlos, ungeschmückt und historisch. Er zeigte, wie sich bisher die Geschichte der europäischen Knechtschaft um die beiden Angeln gedreht, welche Kaiser und Papst heissen, und dass die Bestimmung der Zukunft die sei, an die Stelle des Kaisers – das Volk zu setzen und an die Stelle des Papstes – Gott (beiläufig bemerkt, nicht "Natur" wie die Times – man weiss nicht, warum? berichten, da an jedem Ende des Saales deutlich das Wort "dieu" zu vernehmen war).

Ein Gefühl hatte wohl Jeder, der diesen Reden zuhörte – das Gefühl, dass die deutsche Emigration, die freiwillige sowohl als die unfreiwillige, nach den erduldeten Leiden und Erfahrungen, ihre Aufgabe und ihre Stellung vollkommen begreift: ihre Aufgabe, die politischen Ueberzeugungen, denen sie lebt, zu läutern und durch Studien und Thätigkeit für die Zukunft nützlich zu machen;
 ihre Stellung, dass sie keine Aehnlichkeit bietet mit denen, welche die Verfolgungssucht als das Arkanum der Staatsweisheit bezeichnen, und dass sie alle Verdächtigungen nur bemitleidet, welche die Demokratie mit Mord und Kommunismus d. h. Vermögenskonfiskation in Zusammenhang setzen, als ob die Demokratie nur nachzuahmen und nicht Neues zu schaffen hätte.

<sup>20</sup> Ueber die Haltung und den Verlauf des Festes, an dem mindestens 6–700 Personen theilnahmen, bedarf es keiner Bemerkung, nachdem selbst das Blatt der heiligen Alliance dieselben "respektable" genannt – unbeschadet der vielfachen Entstellungen und *thatsächlichen Unrichtigkeiten*, mit denen das erwähnte Blatt seinen Bericht über den "anniversary of the German revolution" ausgestattet hat. Wir beleuchten den Spuk von der "socialen Republik", der natürlich in der "Times" nicht fehlen darf, mit der authentischen Bemerkung, dass die sehr kleine kommunistische Fraktion der Deutschen, welche hier lebt und die man auszuschliessen ganz und gar keinen Grund gehabt, ihre Betheiligung an

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andern Nationen.

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Vielleicht kommt die Notiz nicht zu spät, dass die Cirkular-Depesche vom 11. Februar aus der Feder des früheren Predigers, jetzigen Geheimen Legationsraths Abeken, herrührt. Welchen Eindruck die Politik, die Moral und der Styl dieses Dokumentes hier gemacht haben, braucht nicht gesagt zu werden. Besonderes Interesse erregt es, dass England für "einen wohl zu gebrauchenden Bundesgenossen" erklärt wird. – Unser Landsmann, Professor *Semper*, steht im Begriff, hier eine *Bau-Akademie* zu gründen. Semper ist einer der wenigen Künstler, der die Gunst der Grossen nicht suchte, sondern sich von ihr suchen liess und ihr den Rücken wandte, als das Vaterland rief. Der Professor an der Akademie der Künste in Dresden, Direktor der königl. Bauschule, Erbauer des

dem Feste ausdrücklich abgelehnt hatte. Es fehlten ebenso die Kommunisten der

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neuen Theaters, des Museums, der Synagoge, des Maternihospitals daselbst, warf im Mai 1849 Zirkel und Massstab bei Seite und errichtete – Barrikaden. Nachdem Dresden gerettet war, wandte er seinen Sinn dem demokratischen Amerika zu und hatte bereits das Schiff betreten, als das hiesige Gesundheitsamt ihn einlud, den Bau der Leichenhäuser zu übernehmen, die in der neuen Begräbnissbill vorgeschrieben sind. Die Ausführung dieser Gebäude ist aber durch umfassende Expropriationen verzögert. Semper benutzt diese unfreiwillige Musse zur Einrichtung einer Bauschule, von der sich unter seiner Leitung und am hiesigen Platze die besten Resultate versprechen lassen. Eleven vom Festlande bietet sie, neben der Gelegenheit die Sprache zu erlernen, den ausserordentlichen Vortheil, die industriellen Bauwerke Englands an Ort und Stelle zu studiren. Semper ist bereit, den Prospektus mitzutheilen; seine Wohnung 27 University-street, London. –

Die parlamentarischen Zustände werden trostlos. Vorgestern, wo die Bill wegen Zulassung der Juden eingebracht werden sollte, bestellt sich Lord John Russell selbst, wie man behauptet, ein unbeschlussfähiges Haus. Gestern äussert er eine Todesahnung wegen Baillies (nicht Ashley's, wie es in unserm gestrigen Berichte heisst) Tadelsvotum über Ceylon. Sehr gut bemerkt die "Times": er hätte am Budget, an der Protektion und an der Wahlreform sterben können; weshalb er sich Ceylon, die ferne Insel in der Südsee, als Sterbeplätzchen aussuche und noch im letzten Moment seinen Namen an den blutigen Namen Torrington knüpfen wolle, sei nicht zu begreifen.

#### German Studio for Architects and Engineers in London Richard Wagner

348 Wenn der Sinn für Schönheit auch in der Architektur uns zunächst durch das Studium der Antike geweckt worden ist, so haben sich die Bauwerke, die wir in der Nachahmung der Antike konstruirten, doch nie in eine warme Wechselbeziehung zu unserm Leben und dessen natürlichen Bedürfnissen stellen können. Semper klärte uns, als er vor 17 Jahren aus Griechenland zurückkehrte, in seiner berühmten Schrift: "Bemerkungen über vielfarbige Architektur und Skulptur bei den Alten. Altona 1834" – über die wesentlichen Gründe jener Erscheinung auf, indem er an den hellenischen Kunstwerken selbst ein organisches Hervorgehen derselben aus den anfangs allernächsten Bedürfnissen einer Häuslichkeit und dann einer Oeffentlichkeit nachwies, wie sie bei uns eben то

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nicht vorhanden sind. Durch eine unmotivirte Nachahmung der Antike ist unsre moderne Baukunst in den Zwiespalt gerathen, dass wir der Schönheit nur in unnützen Bauwerken - wie sie z.B. auf Anordnung des Königs Ludwig von Baiern entstanden sind - huldigen zu können, in nützlichen dagegen sie ganz ausser Acht lassen zu müssen glauben. Vermöge seiner gesunden künstlerischen Anschauung erkennt nun Semper da, wo sich unser häusliches wie öffentliches Leben am konsequentesten aus unsern Bedürfnissen entwickelt und zu so umfassender Fähigkeit ausgebildet hat wie in England, auch den gedeihlichsten Boden für die Ausbildung einer schönen Architektur in einem heimischen und innig verständlichen Sinne, weil dort unserm natürlichen Bedürfnisse bereits in so zweckmässiger Fülle genügt wird, dass diese Fülle sich ganz von selbst zum Bedürfnisse nach Schönheit gestaltet. - Wer die geniale Produktivität Sempers aus seinen berühmten Bauwerken, namentlich dem Schauspielhause und dem gegenwärtig seiner Vollendung nahen - Museum zu Dresden, kennt, - wer den ganzen Bildungsgang dieses reich begabten und hocherfahrenen Künstlers von seinen Studien auf den Trümmern Athens an bis zu seinem Erfassen des praktischen Sinnes der Engländer beobachtet hat, der wird bezeugen müssen, dass

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jungen Architekten, welche auf irgend einer Bauschule ihr theoretisches Studium beendet haben und zu ihrer praktischen Ausbildung weiter zu schreiten gedenken, kein willkommeneres Anerbieten gemacht werden kann, als das voranstehende meines Freundes, den ich mich glücklich schätze, auf das wärmste hiermit auch meinen schweizerischen Gastfreunden empfehlen zu dürfen, und über dessen Unternehmung Näheres mitzutheilen ich jederzeit bereit bin.

Zürich, 25. März 1851.

Richard Wagner.

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## Submissions for the Great Exhibition

Franz Georg Stammann

Hamburg, den 22sten März

★ Der Architect, Professor Semper aus Dresden, welcher sich gegenwärtig in London aufhält, ist im Auftrage der Executiv-Commission im Ausstellungsgebäude mit dem Arrangement der englischen Coloniewaaren beschäftigt und hat unter Anderm auch für Schweden die Aufstellung der von dort eingesandten Sachen zu besorgen. – Es wird noch jetzt für manche deutsche Behörde, Comité oder Privaten von Interesse sein, zu erfahren, dass sich dieselben in

London an diesen bekannten, zuverlässigen Landsmann wenden können, der im Gebäude selbst schon mit Arrangements beschäftigt ist, daselbst seinen steten Aufenthalt hat, die dortigen Behörden und Arbeiter kennt und also bei der Einrichtung, Decorirung &c. sowohl Einzelnen, als ganzen Landestheilen, Städten, Provinzialabtheilungen durch seine Befähigung und seine Bekanntschaften von wesentlichem Nutzen sein kann.

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#### List of Books for Customs

Gottfried Semper

#### **First Version**

93)	On Dorways by Donaldson, English, publ at London, dutyfree 1. 4°	
94)	Greec Dictionary by Schneider 2 Vol. 4°	
95)	Latin d° by Scheller 3 Vol. 8.°	
96)	d° d° by Weber. 3 Vol. 8.°	10
97)	Some numbers of the R. Institute of Br. Architects	
98)	Alderson on Steam Engineering, (dutyfree)	
99)	The Analysis given by Fisher 8°	
100)	Vieth Mathem. in their application to art and architecture. One Volume	
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101)	Thibauts Analysis 1 V. 8°	
102)	The same pure Mathematiks 1 – 8°	
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104)	Hirschs Algebra with Sax's Solutions. 2 Vol. 8°	
105)	Methematiks of Lorenz. 1 Vol 8.	20
106)	Physiks by Mayer 1 Vol. 8°	
107)	Logarithmik tables by Vega. 1 Vol. 4°	
108)	Log. tables by Lalande 1 Vol. 12°	
109.)	Mathem. by Bezout. 7 Vol. 8°	
110)	Cours de Mathematiques pures by Francoeur. 2 Vol.	25
111)	Heerens Historical works. 3 Vol. 8°	
112)	Volney's Travels, (German) one Vol. 8°	
113)	History of Poelitz. 8.	
114)	History of Mexico. 1 Vol. 8.	
115)	The old World by Bürck. 1 Vol 8.	30
116)	Universal History by Rotteck. 2 Vol. 8.	

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- 118) Nardi Storia di Firenze 1 Vol 4°
- 119) Marco Polo by Bürck. 1 Vol. 8° ¦
- 120. Homeri Ilias and Odyssea, and Prolegomena by Wolff. 5 Vol. 8.
- 121 Euripidis Tragoediae 3 Vol. 12°
- 5 122. Pindari Carmina 1 Vol. 8.
  - 123 Aristophanis Opera 2 Vol. 8.
  - 124) Herodotus 3 Vol. Tauchnitz 8.
  - 125. Sophocles. 1 Vol. 12°
  - 126. Aeschylus. 2 Vol. 12°
- <sup>10</sup> 127. Plinius, letters, 1 Vol. 12°
  - 128. Tacitus ed. Ernesti 2 Vol. 8º
  - 129. Taciti Germania 1 Vol. 8º
  - 130. Cicero by Ernesti. 5. V. 8.°
  - 131. Cicero de amicitia 8º
- 15 132. Sueton I Vol. 8°

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- 133. Persius & Juvenalis 1 Vol. 8°
- 134. Horatius 1 Vol. 8°
- 135. Livius not compl. (Tauchnitz Ed.) 12°
- 136. Virgilius 1 Vol.
- 137. Cornelius Nepos 1 Vol.
- 138. Olaus Magnus. History 1 Vol. 12°
- 139. Eginhartus. 1 Vol. 12°
- 140. Vellejus Paterculus 1 Vol. 8°
- 141. Seneca 5 Vol. 8°
- 25 142. Julius Caesar. 1 Vol. 8°
  - 143. Catullus, Tibullus, Propertius 1 Vol. 12°
  - 144. Justinus 1 Vol. 8°
  - 145. Plautus 1 Vol. 8.
  - 146. Sallustius 1 Vol. 8°
- 30 147. Vigerus eddt. Hermannus 1 Vol. 8.
  - 148. Seneca Hercules furens 1 Vol. 8.
  - 149. Homerus and Hesiodus in German, 3 Vol. 8°
  - 150. Bröders Latin Grammar. 1 Vol.
  - 151. Grotefend's d° Grammar 1 Vol.
- 35 152. Köppen's notes to Homerus. 3 Vol.
  - 153. Orationes Salustii Livii & other. 1 Vol. 12°
  - 154. Artis Latine Scribendi principia 1 Vol.
  - 155. Wolf's Philosophy 1 Vol.

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## Second Version

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I.) Books on Art and Architecture, Engineering History of Art, Sciences applied to art and architecture.

г.	Magazin for Engineers by Böhme German 12 Vol. 8°		
2).	Eytelweins Hydrotechnics, German.	1 Vol. 4°	
3)	Manuel of Hydrostatics by the same.	1 Vol. 8°	5
4)	Antiquities of Athens by Cckerell and other, in German.		
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5)	Manuel of Mechanics by Eytelwein	1 Vol. 8°	
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8)	Rondelets Art of building, German. Text only	5 Vol. 8°	
9)	Eytelweins Statics, German.	3 Vol 8	
10)	Milizia's Architecture 1 <sup>st</sup> & 3 <sup>d</sup> part	2 Vol 8º	
11)	Burg's geometrical Drawing Text only	1 Vol. 8°	
12)	Gärtner on Private dwellings German	1 Vol. 8°	15
13)	Lessing on beaty in Art, (Laocoon) German.	1 Vol. 8°	
14)	Müller' Archaeologia of Art. Text only.	2. Vol. 8°	
15)	Hirt's History of Architecture.	$_3$ Vol. $_4^{\circ}$	
16)	Rumohr's Italian Researches. only I and III Part, second		
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18)	Meissner's on heating with hot air.	1 Vol. 8°	
19)	Müllers History of the Hellenic tribes	5. Vol. 8° ¦	
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30)	Archaeologia by Schaaf	2 Vol. 8.	35
31)	Heine's Architecture.	1 V. 4°	

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	32)	The same Architectural laws	I — 8.
	33)	The same on the same	ı — 8.
	38)	Reimers Tables.	I — I2.
	29)	Böttigers, Archeologia	3 - 8.
5	30)	On Theaters. by Weinbrenner	ı — 8.
	31)	On fascineering by Eytelwein	1 — 8
	32)	Theater at Münich	ı — 8.
	33)	Models of old German Architecture	$I - 4^{\circ}$
	34)	Cavellari Historical development of the arts	ı — 8.
10	35)	Normand the Orders of Architecture	ı — fol.
	36)	Art of the Carpenter by Romberg Text only	1 – fol.
	88)	Magazin for Italian Art. by Jagemann	1 V. 8.
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	90)	The Railway of the lower Danube by Kreuter. (Several Co	pies) 4°
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106) L'art de bâtir 2. Vol. by Briseux.

108) Thiersch on Greece.

107) History of Frensh Architecture by Ramée

110) Memoires sur le pont de Jarnac. par Quénot.

109) Vallée Traité de la Science du Dessin deux Volumes.

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1 Cah. 8° ¦ 2 Cah. 8º

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111)	Traité des couleurs pour la peinture en Email.	8°	
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122)	Lettres d'un antiquaire à un Artiste. by Letronne. 1. vol	8°	
123)	Kugler's Polychromy.	4°	
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-	Etudes de Constructions by Bruères one Vol. only.	Fol.	
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129)	Description of Amsterdam by Zesel	4°.	
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133)	Vitruvius by. Barbarus.	4 <sup>°</sup>	25
134)	Pausanias, Stereotype.	3 Vol. 12º	
135)	Greec Dictionary by Schneider	2 Vol. 4º	
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## II. History, Archeology, Statistics Travels.

	I)	Heeren's Statistiks.	8.
	2)	Volney's Travels, (German) 2 Vol.	8.
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IO	4)	Plutarchs Biographies (German) 10 Vol	8°
	5)	History by Pölitz (German) 1 vol.	8
	7)	Heeren's System of the Eur. Empires	8°
	8)	History of Mexico.	
	9)	The old world by Bürck.	8°
15	10)	Universal History by Rotteck. 2 Vol	8.
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	×12)	On Saxe.	8°
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20	×15)	History of the Rev. of 1830.	12.
	×16)	Histoire de Napoleon par Ségur. first. Vol. only.	12.
	17)	Nardi Storia di Firenze.	4 <sup>°</sup>
	18)	Marco Polo translated by Burk.	8°

## III. Old. Classics. and ancient linguages.

25	Homeri Ilias and Odyssea. 5 Vol.	8.
	Euripidis Tragödiae 3 Vol.	12.
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	Aristophanis opera. 2 Vol.	8.
	Herodotus. 3 Vol. Tauchnitz. not complete.	8.
30	Sophocles. I Vol.	12.
	Aeschylus 2 vol.	8.
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	Tacitus, 2 Vol	8°
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Cicero de amicitia	$I - 8^{\circ}$	
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Livius. not complete (Tauchnitz Edition)	8°	
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Eschenburg, Classic litterature 1 Vol.	8°	

#### Modern linguages and miscellaneous books.

24 Copies of Semper's Polychromy. 6 Copies of. Kreuter's Pamphlet on Railways in Ungaria. *Italian Dictionary* by Jagemann d° d°

fol. 4r

217

Synonymics by Quandt. – 1 Vol.	8°
Fick's English-German Grammar. 1 Vol.	8°
Dante's divina Comedia 3 parts. Italian 3 Vol	8.º
Detmold's Sketches German	
Molières Comédies, (Frensch) 2 Vol.	I2 <sup>o</sup>
Bellona a Military Yournal 36 fascicles.	
Ben Johnson translated by Baudissin 2 Vol.	8°
Topiks or the Art to invent. 1 Vol.	I2 <sup>o</sup>
Börne's Works incomplete.	
Some few other books of no great value and interest.	

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## British Museum Library Call Slips

Gottfried Semper

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
196.	Description de	Fol.	Paris	1839.
1263.i	l'Asie Mineure faite			
x55.	par ordre du gouver-			
	nement Francais par			
	Charles Texier 2 Vol.			
(Date)	8 <sup>th</sup> Mars 1852.	Gottfri	ed Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
886.	Atlas von Vorder			
	Asien			
(Date)				(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1401.K.	Academies Europe.	4°	Berlin.	1839.
	Prussia. Berlin			
	Ueber den protestanti			
	schen Geist aller wahrhaften			
	Kunst etc v. Tolken.			
(Date)	12 <sup>t</sup> Mars 52	Gottfre	d Semper	(Signature)

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
786.h.23.	Rumohr (Carl Fr. von) Italienische Forschungen 3 Theile.	8°	Berlin	1827.
(Date)	27 April 52	Gottfri	ed Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
791.b.10.	Rumohr. (C. F von) Drei Reisen nach Italien Erinnerungen von – C. F. v. R.	12°	Leipzig	1832.
(Date)	27 <sup>t</sup> Apr. 52.	Gottfri	ed Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
P.P.1898.	Sammlung fur Kunst und Historie v. C. F. v. Rumohr.	8°	Hamburg	1816–23.
(Date)	29 April 1852	Gottfrie	ed Semper.	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
344.h.	Leibnitz Scriptores rerum Brunswicarum 3 Tomi	fol.	Hannover	1707–11.
(Date)	30. April 52	GSemp	er.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
564.g.	Cicognara (Leopoldo) Storia della Scultura etc. 3 Vol.	fol.	Ven.	1813.
(Date)	15 <sup>t</sup> May 52.	Gottfri	ed Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
T.487.a.	Murphy James the Arabian Antiquities of Spain	fol.	Lond.	1813.
(Date)	15 May 52.	Gottfri	ed Semper.	(Signature

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1260.e.	Pottier (A)	fol.	Paris	1839.
	Monumens Francais			
	inédits etc. accompagnés			
	d'un texte historique			
	2 Tom.			
(Date)	21 May 1852.	Gottfrie	d Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
556.h.	Agincourt Histoire	Fol.	Paris	1823.
	de l'art par les			
	monumens.			
	Sculpture & peinture			
(Date)	21 May 52.	Gottfrie	d Semper.	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1260.2.	Pottier A. Monu-	fol.	Paris	1839.
	mens Francais inedits			
	2 Tom.			
(Date)	24 May 1852.	Gottfrie	d Semper	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
130.h.2.	Seroux d'Agincout.	fol	Paris	1811.
	histoire de l'Art			
	par les monumens			
	6 vol.			
(Date)	24 M. 52.	Gottfrie	d Semper	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1394.h	Vega Georg v.	4°	Leipzig	1812.
	Tabulae Logarithmicae			
	etc.			
	2 Bde.			
(Date)	28t May.	Gottfrie	d Semper.	(Signature
	1852.			

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
529.e.	Lagrang. J. L.	8°	Paris	1806.
	Lecons sur le calcul			
	des fonctions.			
(Date)	29 May 52	Gottfri	ied Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
559.e.	Serlio Seb. Architettura	fol.	Venetia	1537.
				1559–62.
(Date)	29 May 52.	Gottfri	ied Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
559.c.	Seb. Serlio Architettura.	4 <sup>°</sup>	Vicenza.	1619.
(Date)	29 M 52.	Gottfri	ied Semper	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
535.g.	Newton Isaac. Phil.	8°	Glasg.	1822.
	naturalis principia w.			
	Commentariis illustrata			
	Le Seour & F. Jacquier.			
(Date)	2 Jun. 1852	Gottfried Semper.		(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
787.i.	Müller Karl Ottfrd	4 <sup>°</sup>	Götting	1820
	De Minervae Poliadis			
	Sacra et aede etc			
(Date)	11 Jun. 52.	GSemper.		(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1263.c.	C. Ottfried Müller	8°		1829.
	Die Alterthumer v.			
	Athen mit Beiträgen			
	von			
(Date)	11 Juin 52.	G. Semper.		(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
769.f.	Εφημερις αρχαιολογικη	4 <sup>°</sup>	Athens	-
	1837–42 and following			
(Date)	12 June 52	G Sem	per.	(Signature)

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
P.V.1926.	Revue Archeologique	8°	Paris.		
	années 1845 et 1846.				
(Date)	12 June 1852.	G. Sempe	er.	(Signature)	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
1049.f.	Fr. H. v. der Hagen	<b>12</b> °	Breslau.	1818.	
	Briefe in die Heimat				
	4 Bde.				
(Date)	28 June	Gottfried	Semper.	(Signature)	
	1852.				
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
619.g.	Zur Geschichte der	8°	Zerbst.	1837.	
	Sammlungen für				
	Wissenschaft und Kunst.				
	in Deutschland.				
(Date)	28 June 52	Gottfried	Semper	(Signature	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
1310.e.	Allgemeine Culturgeschchte der Menschheit.	8°	Leipzig	1843	
$(\mathbf{D}, \boldsymbol{\zeta})$		Cottfried	Sampar	(6)	
(Date)	28 June 52	Gottfried	Semper.	(Signature	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
350.h.	Montfaucon les monu-	fol.	Paris.	1729	
	mens de la Monarchie			-33.	
	Francaise 5 Tom.	~ • •	~		
(Date)	28 June 1852.	Gottfried	Semper.	(Signature	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
562.f.	Sir Samuel Rush	4 <sup>°</sup>	Lond.	1824.	
	Meyrick a Critical				
	inquiry into ancient				
	Armour. etc. 3 Vol.				
(Date)	30 June 1852.	Gottfried	Semper.	(Signature	

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
562.f –	Specimens of ancient	fol.	Lond	1836.
	furniture with			
	descriptions by Sir S. R. M.			
(Data)	30 June 1852	GSemp	)or	(Simpetung
(Date)	30 Julie 1852	Geent		(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
60.h.5.	Androuet Ducerceau	fol.	Paris	1559.
	Jacques. Architecte			
	de architectura opus.			
(Date)	1 July 52.	Gottfried Semper		(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
559.e.	Dieterlein Wendel.	fol.	Germ.	1593.
	Architectura			
(Date)	1 July 52	Gottfri	ied Semper.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1268.	Heideloff. Carl A.	4 <sup>°</sup>	Nurnbg.	1843–47.
g.	Die Ornamentik des			
&	Mittelalters.			
561.	3 Bde			
(Date)	1 July 52.	Gottfried Semper.		(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
85.h.1.	Oeuvres de Clement	4 <sup>to</sup>	la.	1731.
	Marot. 4 Vol.		Haye	
(Date)		G. Semper.		(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
61.d.5.	Jean Marot:	4 <sup>°</sup>	Paris.	
	Recueil des plans, profils			
	et élévations des plusieurs			
	palais chasteaux, eglises etc.			
	bâtis à Paris.			
(Date)	1 Jul[]. 1852	G Sem	ner	(Signature)

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
142.f.11.	Ciampinus vetera	fol.	Romae	1690–
	monumenta etc.			1699
	2 Vol.			
(Date)	2 July 52	GSemp	ber.	(Signature)
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
143f.21.	Ciampinus	fol.	Romae	1693
	De sacris aedificiis			
	a C. M. constructis			
	etc.			
(Date)	2 July 52	GSemp	ber.	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1367f.	Leo Marsicanus, Bishop	4°	Venice	1573.
	of Ostia Chronica			
(Date)	2 July 1852	GSemper.		(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
552.g.7.	Instituto di corrispon	fol.	Rom.	1829 &
	denza archeologica		Paris	following
(Date)	2 July.	GSemper.		(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
409g & h	Archeologia.	8°	Lond	1840-
R.R.	Vol. 28–32.			46.
(Date)	3 July 52	GSemper.		(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
409.h.	Index to Archeologia	4 <sup>°</sup>	Lond	1844.
R.R.	from Vol. 16 to			
	Vol. 30 incl.			
(Date)	3 July 52	GSemp	oer.	(Signature

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
7955.c.	Indian Archipelago Exhibition of 1851. Articles collected by the Local Comittee of Singapore etc.	8°	Singapore	1851.	
(Date)	3 July 52.	GSemper.		(Signature	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
573.e.	v. Murr Merkwürdigkeiten der Stadt Bamberg.	8°	Nurmberg	1799.	
(Date)	3 July 52	GSemp	ber.	(Signature).	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
619.e	v. Murr Beschreibung der ehemals zu Aachen aufbewahrten drei Konigl. Kronungszierden	4°	Nurnbrg	1801	
(Date)	3 July 52	GSemper.		(Signature).	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
1326.g. 12.	A true description and direction of what is most worthy to be seen in all Italy Harlejan Miscellany Volume 12.	8°	L.	1808. cet.	
(Date)	13 July 1852	GSemper.		(Signature).	
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.	
819m.	Doppelmayr. J. Gabriel. Historische Nachrich von den Nurn berger Mathematicis etc. 2 Vol.	fol	Nurnb.	1730.	
(Date)	13 July 1852	GSemp		(Signature).	

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1300–a.	Nuovissima Guida	12 <sup>°</sup>	Milan	1842
	dei viaggiatori			
	in Italia 1842.			
(Date)	13 July 52	GSemper.		(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
560–c.	Museo Borbonico	4°		1824.–37.
11 & 94	Vol 1–14 –			
(Date)	3 <sup>th</sup> Aug. 52.	Gottfri	ed Semper	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
556.c.	Forkel Ueber die	4 <sup>°</sup>	Götting	1777
	Theorie der			
	Musik.			
(Date)	18 Aug 52	GSemp	er.	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
7707.f.	Michel Angelo Lanzi	4°	Parigi	1846.
	Sec. Opera Cufica.			
	acc. di un atlante			
	in 74 tavole			
	3 Tomi.			
(Date)	19 Aug 52	GSemper.		(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1263.	Péclet, Traité de	8°	Liège	1844
f.	la Chaleur 3 <sup>e</sup> Ed.			
	Avec planches en fol.			
(Date)	19 Aug 52.	GSemp	er.	(Signature
Press Mark.	Title of the Work wanted.	Size.	Place.	Date.
1260.a.	Bötticher Carl G W	4° fol.	Potsdam	1844–52.
1260.d	Die Tektonik der			
	Hellenen. (with 45. Eng)			
	2 Volumes.			
(Date)	11 Dec.	Gottfri	ed Semper.	(Signature

## Appointment Letter from the Department of Practical Art

Walter Ruding Deverell

Department of Practical Art. Marlborough House, Pall Mall, London: the II<sup>th</sup> day of September 1852.

Sir,

I am directed by the Lords of the Committee of Privy Council for Trade to inform you that they propose to establish a class in order to afford instruction in the principles and practice of Ornamental Art applied to Metal Manufactures, and that they have been pleased to appoint you to conduct the same.

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I - My Lords consider it necessary to the success of this class that the several interests of the Manufacturer, the Student, the Workman, and the general public, who are the consumers and ultimate judges of Manufactures, should be consulted; and that the measures to be adopted should be so framed as to insure the co-operation of all, and induce them to apply to you for advice and assistance.

2 – Your duties will be to instruct and exercise certain Students of your Class in the principles and practice of Ornamental Art; to assist them in designing for Metal Manufactures; to be responsible that their works executed in the Class are correct in | principle, and to certify all those designs which you approve. – Occasional Students Workmen and Manufacturers may probably bring or send their works to receive the benefit of your advice, which you will afford them, as you may best be able under the circumstances.

3 – You will be required to give demonstrations to your Class and occasional public lectures, on the uses to be made of the objects in the Museum, the collection of casts, books, prints, drawings &c in the Library. When necessary, it will be your duty to provide illustrative drawings and designs for the use of the class, and it is expected that you will make yourself generally acquainted with the information afforded by other illustrations.

4 – You will have to visit and report on Collections when required, and upon the state of the Museum, Collection of Casts, and Library of the Department, so far as respects Metal Manufactures and to inform the Superintendents of any examples which it may appear desirable that the Museum should possess.

5 - You will be prepared to receive the instructions of the Superintendent of Art and to make the practice of Art conform to the General principles recognized by the | Department, and you will be held generally responsible for the

fol. IV

fol. 1r

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fol. 2r

success of the Class, which you will promote in every way in your power, and which, in this new experiment to afford practical instruction in Art for industrial purposes, will be chiefly dependent on your exertions.

6 – You will report annually on the progress of your Class before the 31st of December in each year.

 $_7$  – You will have to attend at Marlborough House three hours daily (except Saturdays) and register both your own attendance and that of your pupils.

8 – For these services My Lords have determined you shall receive a salary at the rate of £150 a year, together with the half of any fees which may be paid by Manufacturers, Students (not holding Scholarships, who are free) and Workmen attending your class or applying for your advice, and by the General Public attending your lectures.

You will also have the privilege of practising Ornamental Art at Marlborough House at any times when your class is not meeting, during the official hours from 10 to 4.

Your engagement commences ¦ on the 1st of September 1852, and, in the event of its being desirable to terminate it, three months notice is to be given on either side.

fol. 2v

I am, Sir, Your Obedient Servant WRDeverell Secretary.

To / Professor Semper

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## Principles and Practice of Ornamental Art Applied to Furniture, Metals, Jewellery, and Enamels

Henry Cole

II. Principles and Practice of Ornamental Art applied to Furniture, Metals, Jewellery, and Enamels. – Conducted by Professor Semper.

Arrangements are made to supply to the manufacturer, student, designer, and workman all the advice and assistance that the Professor may be able to afford them, in improving Art applied to all kinds of Metal, Jewellery, and Enamels. Professor Semper attends daily from 10 till 1.

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A class of students meet daily to practise Ornamental Art, and to become qualified as designers, or skilled workmen in the execution of works of Ornamental Art. The students may have the advantage of attending demonstrations of actual processes, such as Repoussée, Chasing, Casting, Forming, &c.

Manufacturers, Designers, &c. may consult the Professor on the execution of any works or designs originated by them, or obtain information as respects the examples in the Museum, or books, prints, &c., in the Library; also as respects the fitness of students of the Department to become designers or Art workmen, &c. |

Manufacturers, and others who are unable to attend personally, may send their works to receive the benefit of any suggestion from the Professor by paying the necessary postage or carriage of the same to and from Marlborough House, and transmitting the appointed fees.

Occasional lectures will be delivered by the Professor.

The Fees, which are to be paid in advance, are as follows: -

I. Daily students (who are required to demonstrate that they possess an adequate power of Drawing and Modelling before they are permitted to enter the class), 50s. a quarter, or 8*l*. a year.

2. Manufacturers, designers, or others, seeking occasional advice, 6s. a week, or 2s. each separate consultation.

3. Manufacturers and others, by subscribing annually 5/., may attend themselves, or send their workmen, at any time, to receive advice and assistance in originating or executing Ornamental Designs.

III. Pottery, and other Manufactures.

For information on these divisions application is to be made to Professor Semper until other arrangements are made.

# **CRITICAL APPARATUS**

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Pl. 7: Sketch of London cemetery chapel on draft letter, 1850 (gta, 20-K-1850-10-13[S])

## **PRIVATE SCHOOL OF ARCHITECTURE**

#### Introduction

Between the end of December 1850 and the beginning of March 1851, Gottfried Semper was developing plans for ways of offering his services in London as a teaching, consulting, designing and executive architect. He was also planning to establish an actual private school of architecture, modelled on the architectural college that he had directed at the Academy of Fine Arts in Dresden. He started making these plans after learning at the end of November 1850 from Edwin Chadwick, commissioner of the General Board of Health, that there were to be delays in establishing the new national cemetery near Erith, London. The German archaeologist and entrepreneur Emil Braun had involved Semper in that prospective enterprise, thus prompting him to move from Paris to London instead of North America. Semper drafted newspaper advertisements that ranged from offers of architectural drawing lessons to the establishment of an architecture school for day students and pensioners. He classified five of these twenty-two, partly fragmentary, drafts using the roman numerals I, II and III two each with 'I' and 'III' and one with 'II'. In the present edition, different versions from each of these classes are grouped together under the headings 'Lessons and Recommendation as Architect' (I), 'School of Architecture and Engineering' (II) and 'Lessons in Architecture and Drawing' (III).

Only one of these draft newspaper advertisements, from class II, made its way to publication – in the *Eidgenössische Zeitung* of 28 March 1851, under the title 'Deutsches Atelier für Architekten und Ingenieurs in London' (German Studio for Architects and Engineers in London; 13). The school of architecture is announced in the advert as being connected to a boarding house for students. The advertisement is followed by a supportive note from Richard Wagner (208–

9). The only other identified publication that included Semper's announcement of a school of architecture is an article in the Berlin newspaper *National-Zeitung* of 19 March 1851 (206–8). The plan is mentioned there in passing by the paper's London correspondent, Lothar Bucher, in a report on events in Britain. Semper had met Bucher at some time between late February and early March 1851 through Rudolph Schramm (like Semper, they were both political refugees). In the article, Bucher announced the imminent founding of an 'Academy of architecture' and the 'establishment of a school of architecture' – along with a summary of Semper's reasons for initiating the project.

A letter from Braun to Semper, dated 1 and 4 January 1851, reveals that Semper had mentioned his 'plan regarding the establishment of an architectural drawing school' on 22 December 1850 and had added the idea of a 'drawing academy in London with a well-equipped collection of plaster casts' on 23 December. Braun agreed that this might be 'a very good speculation' and recommended that Semper should look for a 'manager who could relieve you of the administrative burdens of such an institute'. He suggested the artist and later director of the National Portrait Gallery, George Scharf, with whom Semper might perhaps 'join up, to set up a drawing academy and saddle him with the business part of it'. Although Semper did contact Scharf, no specific results emerged. On 29 January 1851, Braun thereupon suggested to Semper that although he should not do without Scharf as assistant (Famulus), he should perhaps 'carry out the plan of setting up a large studio' in association with the architect Edward Falkener. With the help of Braun, Semper had been able to move into an office in Falkener's architecture practice at the beginning of October 1850. Through Falkener, Braun believed, 'quite a few other things for English industry could be linked' to Semper's plan. In general, Braun thought that this type of school - in connection, as he noted, with 'practical instruction in the theory of architecture' - was sure to be successful, since 'the public drawing schools are useless', so that 'the rush to join a reputable private institute would soon be very great'.

Semper did not favour Braun's suggestion that he should work with Falkener or Scharf as associates, but he was indeed planning to include an 'English engineer' as a 'colleague' for the school – as he noted in the plan, assigned to class II, that he drafted in a letter written to Rudolph Schramm on 25 February (9.16–17, 9.26). In his reply, Schramm – like Braun – also advised having an associate who would be able to support Semper organizationally and in financial matters for the school. The advertisement published in the *Eidgenössische Zeitung* states that Semper had 'engaged a skilful and experienced engineer for the field of engineering' – a claim that did not actually correspond to any specific agreement.

In addition to the two advertisements for the school of architecture that were published in German, Semper was also planning English advertisements. As he had scarcely any command of English at this point, he enlisted help from English speakers or people with a good knowledge of English. What is probably the very first draft is in English, in a calligraphic script from an unknown hand (pl. 1). It can be assigned to advertisement class III, in which Semper was intending to publicize lessons in architecture and drawing (14, First Version), and it was probably drawn up in connection with Braun's letters from the beginning and end of January 1851. It may have been formulated by Braun and copied out by his wife, Anne Braun – the daughter of James Thomson, an industrial chemist and calico printer.

It is possible that the same people were also the sources for the drafts in English that are written in Semper's hand – another version belonging to the third class (14, Second Version) and an initial version belonging to the second class about the actual school of architecture and engineering (8, First Version). These two drafts in English were probably made at about the same time, around mid-February 1851, before Semper began to cooperate with Karoline Heusinger, a Saxon friend of his wife, Bertha Semper. He visited Heusinger - a ladycompanion in the family of John Campbell, the Chief Justice of the Queen's Bench – for the first time on 8 February 1851, and on 22 February he brought her a draft in German belonging to the third class of adverts (254, DOK:39). The draft was translated by Mary Scarlett Campbell, John Campbell's daughter. Heusinger sent a copy of it in her own handwriting to Semper on 24 February 1851 (15, Third Version). Previously, on 23 February, Semper had sent her an initial German version, which was never translated, from the first class of adverts (4). In the advertisements belonging to this class, Semper announced not only architecture lessons offered by the hour but also his desire to set up the architecture school. He also recommended his own services as an architect and decorator. Semper immediately followed this version with another version in German (240-1, DOK:42), the translation of which – now made by herself – Heusinger sent back on 27 February 1851 (5–6, Second Version).

At the beginning of March 1851, Semper drew up some final draft advertisements in French, such as a version belonging to the third category dated 3 March (15, Fourth Version) and a version from the first category that was probably written shortly afterwards (6–7, Third Version). They were both intended for translation into English and may have been prepared as translation material for either Edward Falkener or Thomas Leverton Donaldson. Semper had known Donaldson, the co-founder and one of the secretaries of the Royal Institute of British Architects, since December 1838, when he had travelled to London in connection with the building of the Hoftheater (Court Theatre) in Dresden. Semper corresponded with both of them in French. Before drafting the French advertisements, Semper turned to Henry Cole, who was then a member of the Commission for the Great Exhibition and chairman of the council of the Society of Arts. He had first met Cole, introduced by Edwin Chadwick, on 5 December 1850, as Cole noted in his diary. On 25 February 1851, Semper wrote to Cole regarding his plan to offer his services 'as a teacher of drawing and architecture', mentioning that he had 'a plan to found an architecture studio modelled on the one in Dresden'. Until the plan was implemented, he would have to 'restrict himself to lessons at home', and for this purpose he asked Cole for his support and requested him to forward the programme he would shortly send to him to 'pass on to gentlemen with whom you are acquainted', in order if possible in this way to reach 'heads of families' who 'would be disposed to entrust me with the artistic education of their children'. However, it is not quite certain whether this programme was really sent to Cole.

Semper was planning to open the actual school of architecture and engineering in the summer of 1851, on Saint John's Day (i.e. 24 June 1851), as he wrote in the draft sent to Schramm. He did not tell his wife Bertha about these plans until the end of February 1851, in a letter with which he also enclosed a draft advertisement – probably the version dated 26 February 1851 (12), or a variant of it. He was planning for Bertha to play the role of 'lady of the house', who would do the honours and take care of purchasing, with their daughter Elisabeth helping out. Bertha was to contact Friedrich Krause, the headmaster of a private school in Dresden, about the advertisement and to ask for information about conditions in England. In his reply of 10 March 1851, however, Krause advised Semper against the plans for setting up a school. He argued that architecture students in Germany and France tended to choose countries other than England for their study trips, while on the other hand the English would be unwilling to study with a foreigner. Finally, with regard to establishing a boarding house, he pointed out that 'it is probably not the moment just now to rent a house for a longer period of time, since the interest rate will surely be much higher than otherwise due to the Exhibition'.

The Great Exhibition, which Krause mentioned here as a reason for potential financial obstacles, also played a part in the negative response to the school plans that Edwin Chadwick sent to Semper on 9 March 1851. Chadwick had been the intermediary in arranging a position for Semper as assistant to the architect of the Crystal Palace, Joseph Paxton, on his premises in Chatsworth, Derbyshire. In his reply to the offer of the position, Semper told Chadwick on 8 March 1851 about the advertisements he had drafted for publication in Germany and Switzerland in connection with his 'intention to found a studio for architects in London'. And he asked, 'Would it not be possible for me, for example, to have some pupils at Chatsworth who could at the same time be useful

and help Mr. Paxton in his work?' This would have implied a switch from being Paxton's assistant to his partner. Chadwick's answer left no room for doubt. Firstly, he did 'not think, that an architectural class could soon be got together in England'; in addition, 'more knowledge of the habits & wants of the class of architectural students would be required' than Semper 'would be likely to obtain readily'. Secondly, he had 'no doubt, that it would be entirely impracticable to carry on such a school at Chatsworth', and, with respect to Paxton, 'that it would not meet with his views'.

Ultimately, however, the Great Exhibition provided Semper with a good reason to postpone his plans for setting up a school. Henry Cole, who had promised help on 26 February 1851 in reply to Semper's request for support ('If I can aid your views I shall be happy and will try to do so'), assisted him shortly afterwards in obtaining the commissions to set up several sections in the Great Exhibition. The school plans did not fade away completely, however. After the exhibition commissions had been completed, Semper reported on 5 May 1851 to his brother Johann Carl Semper, who was a textile manufacturer in Altona, that he had 'at least one pupil already'. He returned to the school plans just under a year later, changing the date of a third draft advertisement in French belonging to class I to 2 January 1852 (7, Fourth Version). And in a renewed effort to obtain a livelihood as a teacher, Semper also wrote to Henry Cole on 29 January 1852 to offer him his services in connection with 'the Establishment of a School for art and industry' that he had heard of. With his subsequent employment in said school, the Department of Practical Art, founded in the spring of 1852, Semper again obtained success through Cole, as in the case of the Great Exhibition.

**BIBLIOGRAPHY** Semper 1880, 11, 20–1; Pevsner 1940, 251; Knoepfli 1976, 264–5; Herrmann 1978, 47–50; Herrmann 1984, 43–5; Mallgrave 1996, 191–2; Lütteken 2008, 43 fig. 107, 188; Weidmann 2010, 288–93; Weidmann 2014, 8–10; Hildebrand 2020a, 108–9

#### **Lessons and Recommendation as Architect**

#### **First Version**

#### **TEXTUAL RECORD**

DOK:38 gta, 20-DOK-undat.:38, fol. 1r-v (1v blank), in Semper's hand; breaks off after number 4 in the programme of DOK:41 without having divided it into numbers *DOK:41* gta, 20-DOK-undat.:41, fols. 1r-2v (2v blank), in Semper's hand, *copy-text* 

#### **EXPLANATORY NOTES**

Semper sent this draft, which was intended for an English readership but remained untranslated, to Karoline Heusinger together with a letter dated 'Sunday 22 Feb 1851'. If it was written on the Sunday, however, it would have been 23 February. It is a revised version of the draft he had taken to Heusinger on 22 February 1851 (254, DOK:39; its English translation 15, Third Version). In the letter, Semper explained the changes he had made by saying that the fifth point – 'making artistic architectural sketches' – seemed to him to be 'particularly important for ladies' and that he wanted to connect it to the preceding point on perspective drawing. Mention would also have to be made of the planned school of architecture. In her reply to Semper's letter and the enclosed programme, Heusinger wrote on 24 February that she would 'ensure that it was translated' but added that she could 'hardly advise setting up a boarding school'. However, as she had little experience in such matters, she recommended that Semper should ask her 'experienced and upright Dr Freund for advice'. Jonas Freund was to become Semper's physician; Karl Marx was among his other patients.

4.10 Vasen<sup>^</sup> Mustern] Vasen, Mustern 4.12–13 5) Uebungen ~ für Reisende.] In the letter to Karoline Heusinger accompanying this draft, Semper wrote: 'Die Nummer 5 scheint mir für Damen besonders wichtig ich werde sie mit Nummer 4 in Verbindung setzen und allemal einen Cours de perspective vorausschicken. Meine Methode Perspective zu lehren ist leicht und kurz. In 12 bis 18 Stunden muss alles Nöthige erworben seyn. Vielleicht kann so etwas hinzugefügt werden.' 4.16-17 Uebungen in der Französischen und Deutschen Sprache] In the above-mentioned letter, Semper wrote: 'Zu Nummer 7 habe ich ein Wort hinzugesetzt, was wichtig ist, nämlich Uebungen in der Französischen und Deutschen Sp. Mancher der nicht Deutsch kann, wird Französisch sprechen wollen.' This refers to the last sentence in the draft Semper brought to Karoline Heusinger on 22 February 1851 (254.7-8). 4.18–19 ein Atelier ~ zu gründen] In the above-mentioned letter, Semper explained this reference to the planned school of architecture: 'Besonders aber darf das Ende nicht fehlen [following the seven numbers of the programme]. Vielleicht gelingt es, einige Familienväter zu betheiligen dass sie mir ihre Söhne anvertrauen. Dann bin ich gedeckt. Mit 6 Schülern getraue ich mir die Kosten eines Ateliers zu übernehmen. Aber ohne die geringste vorherige Garantie darf ich nichts unternehmen. Eine Basis muss ich haben.' Semper similarly mentioned heads of families in his letter to Henry Cole of 25 February 1851 4.22-3 behufs der Ausführung mit einem ~ Englischen Techniker in Verbin-(236).

dung setzen] In the above-mentioned letter to Heusinger, Semper added: 'Wegen der Ausführungen hat es zwar wahrscheinlich gute Wege, doch dürfte diese Andeutung, dünkt mich, auch nichts schaden können.' The word 'Ausführungen' (implementations) can refer to two points in Semper's programme: on the one hand to his recommending himself as 'Baumeister und Dekorateur', and on the other to his plan to organize his school of architecture in association with an English engineer.

#### ALTERATIONS IN THE MANUSCRIPT

4.4 **Kunst**] del. and underl. with dots cancelling deletion 4.2 **Theaters** *interl*. 4.6 **und**] interl. 4.12 5] after del. 5) Uebungen im Ausführen landschaftlicher und architectonischer Skizzen in Bleistift und in Wasserfarben; Uebungen im Ausführen] above del. Ausführung 4.13 als Vorbereitung] *after del.* für diejenigen für] over zu Reisende.] de. added 4.14 **Ornamenten**, *altered from* ~^ Köpfen] interl. 4.14–15 der Antike after del. antiken und after del. Gypsen und Modellen 4.16 **7)**] interl. 4.16–17 Wenn es gewünscht wird ~ verbunden seyn.] inserted on fol. 2r after inserted and undel. 7) 4.19 besorgen,] above del. übernehmen, wenn] after del. wenn es ihm gelänge die nöthige 4.21 **Schliesslich**] *after del.* Anzahl von Theilnehmern

Schliesslich empfiehlt er sich als <sup>1</sup> ausübender Architect.<sup>2</sup> Er<sup>3</sup> würde sich<sup>4</sup>, behufs der Ausführung mit einem einheimischen Techniker in Verbindung setzen, und<sup>5</sup>

I als] after del. als Architect 2 Architect.] altered from  $\sim \land 3$  Er] above del. und 4 sich] after undel. er 5 und] after del. und für gute, schnelle und billige Ausführung einstehen

4.22 hiesigen] *above del.* den einheimischen 4.23 Englischen] *above del.* hiesigen 4.24 übernehmen,] *altered from* ~. aber zugleich] *inserted* 4.24–5 für ~ gewähren.] *inserted* 

#### Second Version

#### TEXTUAL RECORD

- DOK:40 gta, 20-DOK-undat.:40, fols. 11-2v, in Semper's hand; breaks off after number 5 of the programme of DOK:42
- DOK:42 gta, 20-DOK-undat.:42, fols. 1r–2v (2v blank), in Semper's hand, German source text of English translation DOK:50
- DOK:50 gta, 20-DOK-undat.:50, fol. 11-v, in Karoline Heusinger's hand, her translation, copy-text

#### **EXPLANATORY NOTES**

Semper sent the German draft translated here (240–1, DOK:42) to Karoline Heusinger shortly after that of 23 February 1851 (4). In the reply of 27 February along with which Heusinger returned the translation, she wrote that she herself had translated the text, because her 'Marie' (Mary Scarlett Campbell, John Campbell's daughter, for whom Heusinger was acting as a lady-companion) was 'busy for her father'. Heusinger added that she had given the translation to an 'English governess for review', who had advised her to 'show it to an English architect', as she was unable to 'judge the correctness of some technical terms'. Heusinger mentioned three expressions that she had found 'unclear' and for which she had not been able to find 'any English words in the dictionary' – namely 'Civilbau, rationelen und architectonische Details' (see notes 5.21, 5.25). She went on to say that if Semper 'is wary of the cost of having this long programme printed', he should venture to use 'the short one' – that is, the one brought to her on 22 February 1851 (254, DOK:39), which Mary Scarlett Campbell then translated (15, Third Version); Campbell, she stated, 'has said it is sufficient'. Heusinger ended by saying that she had 'kept a copy of both the German and the English'.

5.1 Architure] Architecture 5.21 Civil-Construction] 'Civilbau' in the German source text, i.e. civil engineering 5.24 Building of ~ Channels] 'Canalbau' in the German source text, i.e. canal construction 5.25 rational and applicative Mechanism] 'rationalen und angewandten Mechanik' in the German source text, i.e. rational and applied mechanics 5.27 Lithography] 'Steinschnitt' in the German source text, i.e. stonecutting or stereotomy 5.30 Vessels] 'Köpfen' in the German source text, i.e. heads. The translator, Karoline Heusinger, apparently read Töpfen instead of 'Köpfen'.

#### EDITORIAL EMENDATIONS

5.1 Architure] Archi- | ture 5.7 water-color] water- | color 6.2 at:] before one-half page blank

#### ALTERATIONS IN THE MANUSCRIPT

5.1 Gottfried] *interl*.

#### MANUSCRIPT VARIANTS DOK:42

*fol. 11* Professor G. Semper, vormals Director der Bauschule an der Akademie der bildenden Künste zu Dresden und Architect des dortigen Theaters, des Museum, und anderer öffentlicher und Privatgebäude beabsichtigt über folgende Gegenstände Privatvorträge zu halten und fordert zu gefälliger Theilnahme auf: 1) Perspective, vorgetragen in fasslichster und kürzester Weise und verbunden mit Uebungen im Ausführen malerisch-architectonischer Skizzen in Bleistift und in Wasserfarben. Besonders nützliche Vorbereitung für Touristen.

2) Geschichte der bildenden Künste, besonders in ihrem Zusammenhange mit der Baukunst; Alte und neue Zeit. Erläutert durch Zeichnungen, Kupferwerke und während des Vortrages auf der schwarzen Tafel mit Kreide ausgeführte Skizzen.

Diese Vorträge können, wenn es gewünscht wird, mit Uebungen in der Französischen und Deutschen Sprache verbunden werden.

Zugleich hegt er die Absicht, ein Atelier für angehende Architecten zu gründen, und die nöthige Ausstattung desselben am Lehrmitteln aller Art zu besorgen, wenn er für dieses

Unternehmen die nöthige Theilnahme findet. Er würde, gestützt auf 14jährige Erfahrung ¦ als Director einer der ersten Bauschulen Deutschlands und Vorstand eines Privatateliers aus der mehrere bereits in ihrem Fache ausgezeichnete Architecten hervorgegangen sind, diese Anstalt auf die ihm am zweckmäs-

15 sigsten scheinende Weise einzurichten suchen, und den theoretischen Unterricht an fortlaufende praktische Uebungen knüpfen.

Letztere würden sich hauptsächlich auf folgende Lehrzweige erstrecken:

I) Linearzeichnen und Civilbau, verbunden mit Unterweisung in der Kenntniss der verschiedenen Stylarten der Baukunst und in der Geschichte derselben.

20 2) Constructionslehre

3) Wege Brücken und Canalbau, verbunden mit dem nöthigen Unterricht in der rationalen und angewandten Mechanik.

4) Beschreibende Geometrie und ihre Anwendung auf Perspective, Schattenlehre, Steinschnitt etc.

25 5) Uebungen im Zeichnen und Erfinden von Verzierungen, architectonischen Details, Möbles, Vasen, Mustern aller Art.

6) Zeichnen von Ornamenten, Köpfen | und Figuren nach der Antike und nach Gypsmodellen. In allen diesen Fächern wird er auch Privatunterricht ertheilen.

Schliesslich empfiehlt er sich als Baumeister und Dekorateur, Fächer, die bei harmonisch durchgebildeten Werken der Baukunst stets in einer Hand lagen und deren Trennung für

letztere verderblich wurde. Er würde für den Erfolg des ihm anvertrauten Werkes die möglichste Sicherheit gewähren. Nähere Nachweisungen über ihn sind zu geben bereit:

(Folgen die Namen der Gewährsleute.).

27. University Street. London.

35

30

5

10

241.1 fasslichster und kürzester Weise] after del. fasslicher und unterhaltender Weise 241.2 malerisch-architectonischer] after del. malerischer 241.3 nützliche] e added 241.5 während] after del. augen[b] 241.10 am] m altered from n 241.13 bereits] after del. geschickte Architecten after del. bereits in ihrem F 241.15 und] after del. indem 241.17 folgende] f over F 241.18 Civilbau] above del. Entwerfen von Bauplänen and underl. possibly by Karoline Heusinger 241.21 Wege] before del. und Brückenbau rationalen] after del. Mechanik und Statik and underl. possibly by Heusinger 241.25 Details underl. possibly by Heusinger 241.31 den] en over ie 241.33 Nähere] after del. Nachweisungen über **über**] after del. zu []

fol. 2r

# **Third Version**

### **TEXTUAL RECORD**

- DOK:44 gta, 20-DOK-undat.:44, fol. 1r–v, in Semper's hand; breaks off with 'il propose de donner des leçons privées' (the place of this sentence corresponds roughly to that in DOK:45 and DOK:46)
- DOK:45 gta, 20-DOK-undat.:45, fols. 11–2v, in Semper's hand; breaks off with '3) exercices dans le dessin ~ après la nature.' (see below, Explanatory Notes 7.11)
- DOK:46 gta, 20-DOK-undat.:46, fols. 11-2v, in Semper's hand, copy-text

#### **EXPLANATORY NOTES**

This draft in French was intended for English translation; in it, Semper was recommending his services 'to the English public as a constructional and decorative architect'. It may have been prompted by Karoline Heusinger's advice in her letter of 27 February 1851 to submit to an English architect the programme that she had translated (235, 240). The draft in French was probably written at the earliest on 3 March 1851; the reference at the end, 'comme au programme N° 3', is probably to the last draft in French from the third class of adverts, marked with the roman numeral III and dated to that day (15, Fourth Version).

6.6 l'ecole l'école théatre *théâtre* 6.8 édificies] 'ci' 6.7 **l'academie** *l'académie* uncertain reading, *édifices* 6.11 **eue**] *eu* 6.12 pour son developpement organique et harmonieux.] 'developpement': développement; 'pour le developpement organique & harmonieux d'une conception quelconque de l'art.' DOK:44 6.13 Seurity Security 6.14 **repondre** *répondre* 6.15 **decoration exterieure** *décoration extérieure* 6.17 une école **d'architecture**] 'un atélier d'architectes' DOK:44 6.18 **d'ou**] *d'où* 6.19 actuellement employés en Saxe.] 'de son pays.' DOK:44; 'actuellement employés dans son pays.' DOK:45 6.21 **atélier**] *atelier* 6.22 ambrasseront] embrasseront 6.23 decoration] décoration 6.31 entiere] entière

7.1 differentes] différentes 7.3 comprehensiblement] compréhensiblement 7.5 particulierement] particulièrement 7.6 preparer] préparer 7.10 improviseés] improvisées 7.11 3) Exercices etc comme au programme N° 3.] '3) exercices dans le dessin et la composition des ornamens, des details d'architecture, des meubles vases etc. Les exercices se feront au crayon à l'encre et en couleurs après des originaux, après des plâtres et après la nature.' DOK:45 7.12 detaillés] détaillés

#### ALTERATIONS IN THE MANUSCRIPT

6.5 **I.**] after underl. and del. Premier projet de programme 6.10 **belles**] del. and underl. with dots cancelling deletion 6.11 **eue**] final e added 6.31 **II prendra des élèves en pension entiere ou partielle.**] interl.

7.9 par] above del. avec dessins] before del. et 7.11 au programme N° 3.] after del. à N° 3. du pr pr] after del. projet renseignemens] after del. instructions

# **Fourth Version**

#### **TEXTUAL RECORD**

DOK-1852:3 gta, 20-DOK-1852:3, fol. 11-v, in Semper's hand, dated 2 January 1852 (altered from an earlier date, probably 2 March 1851; see below, Alterations in the Manuscript 7.28), *copy-text* 

## **EXPLANATORY NOTES**

Semper assigned this draft to the first class of advertisements by marking it with the roman numeral 'I'. It is a – probably slightly earlier – variant of DOK:46, the draft published here as the third version (6–7, Third Version). However, it does not offer the lessons advertised there but is limited to the first part of it, which ends with the recommendation of his services as a consulting architect. The special aspect of this draft is also its dating; Semper altered the first date given, probably 2 March 1851, to 2 January 1852 (the month of the first date, probably 'Mars', is scarcely decipherable due to dense crossing-out).

7.15 l'academie] l'académie théatre] théâtre 7.16 edifices] édifices 7.19 au eue] a eu 7.21 repondre] répondre

### ALTERATIONS IN THE MANUSCRIPT

7.15 directoir] *interl.* 7.20 harmonieux.] *before del.* Security will be given for any work entrusted to him. 7.22 intérieure.] *before inserted and del.* ‡ voyez plus bas. 7.28 Janvier] *above del.* [Mars] 1852] 2 *over 1 before inserted and del.* ‡. Il s'offre aussi de prendre des elèves en pension entière ou partielle s'offre] *above del.* est prêt ou] *after del.* et

# **School of Architecture and Engineering**

## **First Version**

### **TEXTUAL RECORD**

DOK:47 gta, 20-DOK-undat.:47, fol. Ir-v (IV blank), in Semper's hand, in pencil (some alterations in black ink), *copy-text* 

#### **EXPLANATORY NOTES**

This draft is the first for an advertisement devoted exclusively to the school of architecture and engineering. It was written in English in Semper's handwriting but includes two phrases in French, 'I'Ecole d'architecture' and 'I'Académie des Beaux Arts' (8.3), and a spelling mistake, 'jears' instead of years (8.7). It was probably written before the English translation of the third advertisement in the third class (15, Third Version), the German source text of which Semper had taken to Karoline Heusinger on 22 February 1851 (254, DOK:39). Before they were altered in ink by Semper, manuscript lines 2–7 of this pencil-written draft ('Professor Semper ~ native Country') corresponded almost verbatim to the same lines written in pencil, also in Semper's handwriting, in the English draft of the second advertisement in the third class, the rest of which is written in ink (14, Second Version). The two draft advertisements were thus probably created at about the same time.

### ALTERATIONS IN THE MANUSCRIPT

8.1 **II.**] inserted in pencil 8.3 late Director of l'Ecole d'architecture,] transposed by use of numbers in ink from after Beaux Arts, at 8.3 late] in ink after undel. in ink 1. (indicating sequence to be altered) and both over and **I'Ecole d'architecture**, before del. in ink at Dresden, and Member of *in ink after undel. in ink* 2. (indicating sequence to be altered) and both over late Director of 8.3-4 at Dresden,] interl. in ink 8.5 **Country**] in pencil over erased Land 8.6 in the approaching Summer a School of] altered by deletion and superscription in this City a School of] in pencil over erased himself in *in ink from* in this City a School of 8.11 the science of *in pencil above del.* decorations and this Country as 8.12 original in pencil over erased drawings 8.13 **standard**] *in pencil over erased* principal 8.13-14 of this Country] after del. in ink both 8.14 **casts**] *after del*. plaster ancient] after del. 8.14-15 ornaments] before interl. and del. in pencil and models *in ink* the finest 8.15 **models**] after del. in ink in the various Museums of Europe, in] undel. construction after del. in ink public buildings,

# Second Version

#### **TEXTUAL RECORD**

K-1851<sup>1</sup> gta, 20-K-1851-02-25(S):2, fols. 1r-2v, in Semper's hand, fragmentary draft K-1851<sup>2</sup> gta, 20-K-1851-02-25(S):2, fols. 3r-5v, in Semper's hand, dated 24 February 1851 but written on 25 February 1851 (see 245, Explanatory Notes 8.17), *copy-text*  Semper outlined this draft advertisement, along with the programme, on 25 February 1851 in reply to a letter from Rudolph Schramm with the same date. Schramm informed Semper that he had 'asked the local correspondent of the National Zeitung in Berlin' - i.e. Lothar Bucher - 'to do a report ... on your project to establish a school of architecture'. Bucher's report appeared on 19 March 1851 (207-8). At the same time, Schramm also suggested 'doing the same for the Kölner Zeitung', for which he, Schramm, wanted to 'send in his own article, headed Project for a German Academy of Architecture in London'. He had 'sufficient material' for the purpose in Semper's 'previous programme'. (On the advertisement for the Kölnische Zeitung, see 247, 249-50.) The previous programme referred to here was possibly the first draft, written in English, on the project for an actual architecture school (8, First Version), as Schramm's further comments suggest. On the one hand, Schramm stated that he would consider it 'better to await the success of these German advertisements before publishing the English programme'. In the German version, on the other hand, he would want to see 'some mention of the advantages which staying in London would offer to those who are keen on architecture', with 'attention being drawn to the peculiar features of English dwelling houses and other peculiarities, such as the use of machines for construction'. These points are lacking in the previous draft advertisement in English but are included in the 'Teaching Programme' formulated by Semper in his letter to Schramm. An undated draft letter from Semper breaks off after about two-thirds (K-18511). Important differences are listed below. Some notes, underlining and crossing out, also listed, probably originate from Hans Semper.

8.17 Dienstag. 24 Febr 1851] 24 February 1851 was a Monday, but the letter was written on Tuesday, 25 February 1851 in response to Rudolph Schramm's letter of the same date. 8.23 Aufforderungen] 'Notificationen' K-1851<sup>T</sup> 8.26–7 für Architecten und Ingenieurs] 'der Civilbaukunst und der Ingenieurwissenschaft' K-1851<sup>T</sup>

9.9–12 **dass diese Uebungen ~ Repetitionen desselben bilden**.] 'dass diese praktischen Uebungen in einer gewissen Relation zu den wissenschaftlichen Vorträgen stehen, die nothwendig in mehr oder minder umfassender Weise Statt haben müssen.' K-1851<sup>I</sup> 9.16– 17 **Englischen Ingenieur ~ Ich kenne deren zwei**] possibly William Lindley and Joseph Paxton. Lindley was the engineer who provided the first reconstruction plan following the Great Fire of Hamburg in 1842, which Semper opposed with his own scheme. Semper was in contact with Lindley again after he went into exile. Contact with Paxton, whom Semper mentioned in connection with his school plans, was made through Edwin Chadwick in November 1850 at Semper's request (236–7, 314). 9.24 **hatten**] 'hätten' K-1851<sup>I</sup> 9.33 **Arch**.] 'architectonischer' K-1851<sup>I</sup> 9.36 **Uebungen in dem farbigen Ornament**.] 'Uebungen in der Anwendung der Farbe zur Dekoration.' K-1851<sup>I</sup>

10.2-4 NB. Vierwöchentlich einmal wird Conkurrenz gehalten ~ Dann ausgeführt.]
om. K-1851<sup>T</sup> 10.7-8 Doch finden auch ~ Conkurrenzarbeiten Statt.] om. K-1851<sup>T</sup>
10.12 Ferner werden Modellirübungen gehalten in Thon Gyps und Holz.] 'und das Ausführen von Ornamenten und Constructionsmodellen in Thon, Gyps. und Holz.' K-1851<sup>T</sup>
10.20 angewandte M.] 'Angewandte Mechanik (nach Belanger).' K-1851<sup>T</sup>; see Bélanger 1847
and Bélanger 1848 10.24 Physik] after deleted 'Industrielle' K-1851<sup>T</sup> 10.27 Doctrinen]
'Vorkenntnissen' K-1851<sup>T</sup> 10.31 Lehrmittel an Vorlageblättern Büchern, Modellen
u.s.w.] 'Lehrmittel, Bücher, Modelle, Vorlageblätter Gypsabgüsse etc.' K-1851<sup>T</sup> 10.34

**Um**] after 'Bestimmung des Schulhonorars – .' K-1851<sup>1</sup> 10.35 **werden**:] K-1851<sup>1</sup> breaks off with 'werden, 1) meine langjährige Praxis in Deutschland, verbunden mit der Kenntniss Französischer und Englisch sachsischer Bauweise deren Eigenthümlichkeit für den Architecten des Continents grosses Interesse haben muss, und bisher dort weder gekannt noch angewendet wurde. 2) Die grosse technische'.

11.7 **sachsisch-Englischen**] *sächsisch-englischen* 11.25 **Fälls**] *Falls* Johannis] Saint John's Day, i.e. 24 June 1851. Semper also mentioned this day as the opening date to his wife, Bertha Semper, in a letter at the end of February 1851 in which he reported his plans for a school of architecture to her for the first time (gta, 20-K-1851-02[S]:1): 'Nun also frisch an's Werk und rasch ohne Aufschub angefangen. Wenn ich nur 8 oder 12 Schüler habe, kann ich hier schon darauf anfangen und spätestens zu Johannis mein Atelier eröffnen.' 11.26-8 ist meine ganze Bibliothek ~ in New-York ~ bis ich bestimmt weiss ob ich hier bleibe] In September 1850, Semper had had a large part of his library and drawings sent to New York, to which he had been planning to emigrate before he moved to London – a plan that he only definitively abandoned in August 1852.

#### ALTERATIONS IN THE MANUSCRIPT

8.17 27.] after probably Hans Semper's underl. note in black ink in upper left corner VI. 01 VI] after probably H. Semper's del. note in black ink XII 8.19–9.1 Ich danke Ihnen ~ ans Licht stellen. Der Unterricht wäre] del. in black ink probably by H. Semper 8.24 genügende] underl. in black ink probably by H. Semper 8.26 Architecten] underl. in black ink probably by H. Semper 8.27 Ingenieurs] underl. in black ink probably by H. Semper

9.14–18 Es bedürfte ~ Auskunft ertheilen könnten.] del. in black ink probably by H. Semper 9.20 in zwei Klassen] underl. in black ink probably by H. Semper 9.21 das Atelier] after del. in dem 9.29 a. Bauschule.] underl. in black ink probably by H. Semper

10.2 Vierwöchentlich] after del. Wöchentlich 10.3 **die**] over ein eine] altered from einer after del. nach 10.15 Gebäudearten] above del. Theile der Baukunst behandelt, altered from ~^ before del. und 10.16 **nach**] *after del*. mit 10.20 rationelle] above del. 10.24 **Baukunst**, *altered from* ~^ *before del*. und Materielle etc.] interl. 10.28 rath**sam**] *after del*. gut **Eintrittsexamen**] *after del*. Examen 10.36 und die] und interl. and die over in

11.1 hiesigen] before del. grossen 11.4 5)] after del.

5) Der Umstand dass ich, durch<sup>1</sup> meine<sup>2</sup> langjährigen Reisen und praktischen Arbeiten mit allen kontinentalen Bauverhältnissen genau bekannt geworden bin und zugleich mit diesen, meine "Schüler" die <sup>3</sup> eigenthümlich Englisch Sächsische <sup>4</sup> Bauweise

 I durch] above del. wegen
 2 meine] altered from meiner
 3 die] after del. auf
 4 Eng-lisch Sächsische] Englisch | Sächsische

 11.5 praktischer Baumeister] after del. Erbauer meh[r]
 11.6 sowohl] after del. mit

 11.6–7 kontinentalen Bauverhältnissen] underl. in black ink probably by H. Semper
 11.7

 sachsisch-Englischen] underl. in black ink probably by H. Semper
 11.9 6)] after del.

6) Die Nähe Frankreichs<sup>1</sup> mit den herrlichen Monumenten der<sup>2</sup> Pikardie und Normandie

I Frankreichs] before interl. and del. und Belg 2 der] undel.

11.9 so] interl. 11.13 vorerst] underl. in black ink probably by H. Semper 11.13–14 nureine
Anzahl ~ Männer] underl. in black ink probably by H. Semper 11.18–19 Construction,]
altered from ~ before del. und 11.19 Geometrie,] altered from ~. Wege- und Brückenbau] after del. Brückenbau 11.20 Ich betrachte] after del. Es ist mir daran gelegen

## Third Version

#### TEXTUAL RECORD

- DOK:43 gta, 20-DOK-undat.:43, fol. 1r (1v Semper's fragmentary draft letter probably to Friedrich Krause, before 26 February 1851, the putative date of the drafted note), in Semper's hand
- DOK-1851:4 gta, 20-DOK-1851:4, fols. 1r-2v (2v blank), in Semper's hand, dated 26 February 1851; gives addresses of Wilhelm Semper and Bertha Semper, thus probably version of the draft Wilhelm Semper referred to in his letter to Gottfried Semper of 8 March 1851, *copy-text*

### **EXPLANATORY NOTES**

This draft advertisement, dated 26 February 1851, takes points from the 'Teaching Programme' that Semper had formulated in his letter to Rudolph Schramm of 25 February 1851 (8–11, Second Version) but did not now explain in detail. It is the first draft of an advertisement at the end of which not only Semper himself but also other figures are listed as referees – in this case, his brother Wilhelm Semper, pharmacist in Hamburg, and his wife, Bertha Semper, in Dresden. It is therefore probably the draft of which Semper sent either a copy or a variant both to Hamburg and to Dresden. He received replies from both that can be related to this draft advertisement. The draft also probably more or less corresponds to the one that Semper sent to Rudolph Schramm for an advertisement in the *Kölnische Zeitung* (249).

Semper enclosed a version of this draft advertisement in the letter to Bertha Semper at the end of February 1851 in which he first told her of his plans to found a school of architecture in London. He wrote that he had 'made one last decisive plan for a way of keeping me here if possible' – that is, for staying in London instead of emigrating to North America. He was planning 'a boarding house [*Pensionsanstalt*], i.e. a large lodging for boarders ... for young architects who want to study here in London and whom I will teach in my studio ... and also for other German and French travellers who want to stay with me'. Regarding the advertisement, he told Bertha Semper that 'The enclosed note ... will have to be printed as quickly and as much as possible in the best German papers'. She should therefore contact Friedrich Krause and send 'A copy ... to Romberg in Meissen at once with a request to print it in the next issue of his journal' (gta, 20-K-1851-02[S]:1). However, no advertisement by Semper appeared in Johann Andreas Romberg's *Zeitschrift für praktische Baukunst*, published in Leipzig.

A fragment of a draft of this version of the advertisement is found on the back of a draft letter probably addressed to Friedrich Krause; in it, Semper was writing to his 'worthy and honourable friend', and stated that he was 'relying, for Saxony, on your support' (248.19–20). The place name and characterization match Krause, who provided support for Semper on several occasions, with the exception of his negative response to Semper's school plans of 10 March 1851 (given in the name of Bertha Semper as well; 236). Similarly, Wilhelm Semper had already expressed reservations from Hamburg on 8 March. In relation to himself and Bertha being named as referees to provide information, Wilhelm also mentioned that he lacked a precise teaching programme and details on the 'location of the institution' and the type of rooms, as well as on the 'status of the costs and the income to be hoped for'.

12.10 Ingemieur] Ingenieur 12.12 öffent.] öffentlichen 12.36 d.] den Fbr.] Februar

# MANUSCRIPT VARIANTS DOK:43

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- *fol. 11* Der Unterzeichnete, wahrend 14 Jahren Director der Sächschen Bauschule an der Akademie der Künste in Dresden und gegenwärtig als Baumeister und Ingenieur in London etablirt hat die Absicht eine Anzahl junger Architecten und Techniker die sich hier theoretisch und praktisch ausbilden wollen, unter sehr günstigen Bedingungen und Aussichten in sein Atelier und zugleich in Kost und Logis aufzunehmen. Er wird persönlich den Unterricht und die Leitung der Uebungen übernehmen, wahrend er für das Ingenieurfach sich einen erfahrenen Englischen Ingenieur beigesellt hat. – Darstellung der Vortheile.
- fol. 10
  kommt die grossartige Nationalsammlung und die Lage Londons als Mittelpunkt der 10
  Länder des Westens, wo die schönsten Werke des Mittelalters entstanden sind, Belgiens und Frankreichs einerseits, und derjenigen, wo die moderne praktisch-materielle Richtung ihre Triumphe feiert andererseits. Kurz in dieser Beziehung wäre der Aufwand durch den damit verknüpften Vortheil gewiss gerechtfertigt, und es müsste dem jungen Manne wohl zur Empfehlung gereichen, wenn er seine Vorstudien unter ähnlichen Verhältnissen 15
  machte. Aber Leider ist der andere Punkt um so bedenklicher, und wird manchen Familienvater abhalten mir seinen Sohn anzuvertrauen, so dass ich bei mehrerem Nachdenken auch hier wieder verzagen möchte!

Dennoch will ich den Versuch machen; und ich baue, für Sachsen, dabei auf Ihre Stütze, edler und verehrter Freund!

Ich schicke Ihnen das geschriebene Programm bei und bitte Sie, vielleicht mit meiner Unterschrift eine kleine Notiz in eins der gelesensten Blätter Sachsens einzurücken, worin ich zur Theilnahme auffordere und um nähere Auskunft auf meine Adresse in London verweise

248.3-4 die sich hier theoretisch] above del. die sich 248.1 Sächschen] 'sächsischen' 248.4 und praktisch ausbilden wollen,] above del. seiner persönlichen Leitung unter unter sehr günstigen Bedingungen und Aussichten] inserted after inserted and del. gegen Bedingungen die von den in Deutschland üblichen 248.5 Er] after del. Für die Ausbildung im Civilbaufache und für einen Theil 248.6 Uebungen] after del. Studien im praktischen wahrend] 'während' 248.7 erfahrenen] before undel. und and both above del. ausgezeichneten 248.8 Darstellung der Vortheile.] inserted after inserted and del. Entwick 248.10 **kommt**] *altered from* kommen grossartige] altered from gross-**Nationalsammlung**] *altered from* Nationalsammlungen artigen 248.13 andererseits.] after del. Grossbrittanien after del. England 248.14 gerechtfertigt] above del. aufgewogen 248.21 lch ~ vielleicht] del. mit] after del. mit

## **Fourth Version**

#### **TEXTUAL RECORD**

DOK-1851:5	gta, 20-DOK-1851:5, fols. 11-2v (2v blank), in Semper's hand, dated
	1 March 1851
DOK-1851:6	gta, 20-DOK-1851:6, fols. 11-2v (2v blank), in Semper's hand, dated
	3 March 1851
Spyri	Spyri Archives, without shelf mark, fol. 1r-v, 'Deutsches Attelier für
	Architekten und Ingenieurs in London', in Richard Wagner's hand
EZ	'Deutsches Atelier für Architekten und Ingenieurs in London', Eid-
	genössische Zeitung (Zurich) 7, no. 87 (28 March 1851, morning issue),
	347-8 (ZB Zurich, WB 87; another copy gta, 20-DOK-1851:8), copy-text
Kirchmeyer 1985	'Deutsches Atelier für Architekten und Ingenieurs in London', 57-8, ed.
	of EZ

**BIBLIOGRAPHY** Knoepfli 1976, 264–5; Mallgrave 1996, 191–2; Lütteken 2008, 43 fig. 107, 188; Hildebrand 2020a, 109

### **EXPLANATORY NOTES**

Semper revised the draft advertisement dated 26 February 1851 (12) without waiting for responses from his wife, Bertha Semper, his brother Wilhelm Semper or Friedrich Krause. He had also sent it, in this form or a variant of it, to Rudolph Schramm, who replied with suggested corrections in a letter written probably between 27 February and 1 March 1851. Schramm also reported that it would not be he himself, as stated in the letter of 25 February, but rather the England correspondent of the *Kölnische Zeitung*, Julius Faucher, who would review Semper's project – provided a payment was made for an additional advertisement, as the newspaper required (gta, 20-K-1851-02:2). Although neither the advertisement nor

Faucher's review appeared in the *Kölnische Zeitung*, some of the proposed corrections were included in the version printed in the *Eidgenössische Zeitung*, for which Schramm had also given the initial impetus.

On 26 February 1851, Schramm had written to Semper that Julius Faucher had given him the addresses of the Basel architects Leonhard Friedrich and Johannes Müller, 'since Swiss architecture enthusiasts always like to attend foreign colleges' - Switzerland did not have a public college of architecture at the time. The orientation of Semper's planned school of architecture towards Switzerland as well was also mentioned in the letter to Bertha Semper at the end of February 1851 (Semper wrote that he would forward 'an identical copy' of the advertisement version sent to Bertha 'to Hamburg and Switzerland'). On 3 March 1851, Semper sent Leonhard Friedrich a variant, now lost, of a draft advertisement with that date (251, Manuscript Variants 13.29, 13.30), with a request to have it published 'in the most widely read papers in Switzerland' by the Berne architect Ludwig Stürler and the 'conductor Wagner', who lived near Zurich. Semper had known Stürler since they studied together in Franz Christian Gau's Paris studio. Richard Wagner persuaded Johann Bernhard Spyri, the editor of the Eidgenössische Zeitung and later the husband of Johanna Spyri, to print the advertisement he had copied along with his supporting text (for Wagner's text, see 208-9). In the letter to Leonhard Friedrich, Semper explained that he would 'submit a teaching programme ... immediately', if desired. He estimated 'that the annual fees for board, lodging and full tuition would be 100 pounds sterling'. However, he would 'certainly allow the most favourable conditions to apply for compatriots, among whom I also include the Swiss'. Friedrich only replied on 27 April 1851: he had 'forwarded the enclosed note ... soon after receipt of your letter to Mr. Stürler, as well as a copy of it to the conductor Mr. Wagner, with a request to publish your plan in an appropriate manner in accordance with your wishes' (gta, 20-K-1851-04-27). No reactions to Semper's published advertisement are so far known of. There is as yet no evidence also of whether Stürler succeeded in having the advertisement printed (perhaps in the Berner-Zeitung).

13.1 Deutsches Atelier für Architekten und Ingenieurs in London.] this title also in 1851:5 – a variant of the title 'Deutsche Bau und Ingenieurschule in London' suggested by Schramm in his letter of late February 1851 (gta, 20-K-1851-02:2, also containing Schramm's suggestions cited in the following passages) 13.6 unter sehr günstigen Bedingungen] Schramm suggested, with reference to the version of 26 February 1851 (12.5-6), 'unter sehr günstigen Bedingungen, und selbst mit Aussicht auf späteres Verdienst'. 13.18 so dass dieselben gewiss mit Unrecht bisher] Schramm suggested, with reference to the version of 26 February 1851 (12.18–19) and the phrase cited by Schramm as 'so dass sie gewiss mit Unrecht bisher bei uns', that 'statt sie ist hier deutlicher dieselben'. 13.20-I Ausserdem **bildet London** ~ einen Hauptort] Schramm suggested, with reference to the version of 26 February 1851 (12.21-2), 'Ausserdem bietet London - einen Hauptort. Ich nahm an, dass es bildet heissen soll.' However, the version of 26 February 1851 has 'bildet', not 'bietet', as Schramm seems to have read the word, unless he was referring to a version differing at least 13.22-5 und in der Mitte ~ Exkursionen ein, welche] Schramm suggestin this point. ed, with reference to the version of 26 February 1851 or one differing also in this point (12.23-6): 'Den Nachsatz habe ich der Deutlichkeit wegen mit Verwandlung eines Adverbs in ein Hauptwort so formirt: "und, in der Mitte zwischen dem Reichthume Belgiens und Frankreichs an Werken der schönen Baukunst und den über England zerstreuten berühmten

Werken der Ingenieurkunst gelegen, ladet diese Centralstadt zu schnell ausführbaren Exkursionen ein ohne". 13.30–1 **Semper. —**] before Richard Wagner's supporting text for Semper's 'Deutsches Atelier für Architekten und Ingenieurs in London' (208–9)

### MANUSCRIPT VARIANTS

13.1 Deutsches Atelier für Architekten und Ingenieurs in London.] inserted DOK-1851:5 om. DOK-1851:6 Atelier Attelier Spyri Architekten] Architecten DOK-1851:5 13.2 **Direktor**] Director *DOK-1851:5 DOK-1851:6* 13.3 bildenden] om. DOK-1851:6 **zu**] in Dresden, ?~, Spyri Architekt] Architect DOK-1851:5 DOK-1851:6 DOK-1851:6 13.4 Absicht,] ~^ DOK-1851:5 DOK-1851:6 Spyri 13.5 Architekten] Architecten DOK-1851:5 13.6 sehr] interl. DOK-1851:5 om. DOK-1851:6 DOK-1851:6 Bedingungen] before del. und Aussichten DOK-1851:5 before und Aussichten und] after del. und selbst unter Aussichten auf spätere Beschäftigung gegen Honor[a] DOK-1851:6 Atelier, Spyri 13.7-8 architektonischen] architectonischen DOK-1851:5 DOK-1851:6 13.9 wird,] ~; Spyri 13.10 Ingenieur] after Englischen DOK-1851:5 DOK-1851:6 13.12 grossartigen,] ~^ DOK-1851:5 DOK-1851:6 Wohlfahrt] Wohlfarth DOK-1851:5 DOK-1851:6 Anlagen,] ~^ DOK-1851:5 DOK-1851:6 13.13 Weise,] ~^ DOK-1851:5 DOK-1851:6 Spyri wie sie dieselben technisch durchführen] wie dieselben technisch ausgeführt werden ausgeführt] altered from durchgeführt DOK-1851:5 wie dieselben durchtechnisch] *interl*. geführt werden *DOK-1851:6* 13.14 sind. <sup>¬</sup>] ~. – *DOK*-1851:5 Spyri 13.15 in technischer und auch in künstlerischer] ~ ~ ~ selbst in künstlerischer DOK-1851:5 ~ ~ ~ selbst in ästhetischer DOK-1851:6 13.16 an Motiven] von ~ DOK-1851:5 DOK-1851:6 13.18 dieselben] above del. sie DOK-1851:5 sie DOK-1851:6 andere,] ~^ DOK-1851:5 DOK-1851:6 13.19 fast] before ganz DOK-1851:6 13.18–19 weit fremdere] *after del.* ferner *DOK-1851:5* 13.21 unserer] unserer Spyri 13.22 soll;] ~, DOK-1851:5 DOK-1851:6 altered from sollte; Spyri 13,22-4 Mitte zwischen dem Reichthum ~ und den ~ Werken des Ingenieurs gelegen, Mitte before del. zwischen dem Werken der Baukunst so reichen Frankreich und Belgien und den über England zerstreuten berühmten Werken der Ingenieurkunst, dem] altered from den England] after del. Gross-Brittanien DOK-1851:5 ~ ~ ~ an Werken der Baukunst so reichen Frankreich und Belgien und den über Grossbrittanien zerstreuten berühmten Werken der Ingenieurkunst, DOK-1851:6 13.25 Exkursionen] Excursionen DOK-1851:5 DOK-1851:6 13.28 folgender Adresse] folgenden Adressen DOK-1851:5 DOK-1851:6 13.29 **"Professor Semper**]  $\land \sim DOK$ -1851:5  $\land$  Professor G. Semper ∧Professor] *after del*. ∧Mr. G. Sem *DOK-1851:6* **University Street**] ~ street *DOK-1851:5* - London."] ∧ London.∧ | ...... | ...... DOK-1851:5 ∧ Gower Street. London.∧ | P. P. v. Stürler in Bern. Bern.] before del. Baumeister Friedrich in Basel DOK-1851:6 A London." Spyri 13.30 Gottfried Semper.] before London d. 1 Marz 1851. DOK-1851:5 before London d. 3 März 1851. DOK-1851:6 ~ ~^ Spyri

# **Lessons in Architecture and Drawing**

## **First Version**

#### **TEXTUAL RECORD**

DOK:51 gta, 20-DOK-undat.:51, fols. 11–2v (1v–2v blank), in unknown hand (pl. 1), *copytext* 

### **EXPLANATORY NOTES**

Probably the first draft of Semper's advertisements, this is so skilfully written that Wolfgang Herrmann considered it to be an 'elegantly printed prospectus' and dated it to the beginning of March 1851 (Herrmann 1984, 272 n. 154). It was probably produced after Braun's reply to Semper's proposals for a school of architecture in early January 1851. In his letter to Semper of 29 January 1851, Braun went on to write that 'Practical instruction in the theory of architecture is likely to be very attractive even for men like Chadwick, and people like that really ought not to do without it'. This recalls the passage in the present draft advertisement in which Semper recommends himself as offering 'aid to Noblemen or Gentlemen' (14.5). Thus, the advertisement may have been formulated by Emil Braun and written out by his wife, Anne Braun, daughter of the industrialist James Thomson.

# Second Version

#### **TEXTUAL RECORD**

DOK:48 gta, 20-DOK-undat.:48, fol. II-v (IV sketch of triangles in pencil probably by Semper), in Semper's hand, first third in pencil, rest in black ink, *copy-text* 

### **EXPLANATORY NOTES**

This is one of two draft advertisements drawn up in Semper's handwriting in English probably before the drafts that he exchanged with Karoline Heusinger starting on 22 February 1851. It was probably written at around the same time as the other draft, which belongs to class II (8, First Version; 235, 244).

### EDITORIAL EMENDATIONS

14.21 crayon-drawing] crayon- | drawing

## ALTERATIONS IN THE MANUSCRIPT

14.9 III.] inserted in pencil 14.10–13 Professor ~ native] in pencil 14.13 land] in ink over country country] in pencil -] in pencil 14.13–21 having ~ crayon-drawing.] in ink 14.17 Drawing] after del. Drawing, whether in pencil, crayon or Colouring or] interl. and underl. after del., or water | colours 14.18 in] interl. 14.19 of Instruction] interl. useful] after del. advantageous

# Third Version

### TEXTUAL RECORD

- DOK:39 gta, 20-DOK-undat.:39, fol. 1r–v, in Semper's hand, German source text of English translation DOK:49
- DOK:49 gta, 20-DOK-undat.:49, fol. 11-v, in Karoline Heusinger's hand, Mary Scarlett Campbell's translation, *copy-text*

### **EXPLANATORY NOTES**

This draft advertisement in English is the translation by Mary Scarlett Campbell that she was entrusted with by Karoline Heusinger, a lady-companion in the Campbells' home. Semper had brought the German source text to Heusinger on 22 February 1851 (254, DOK:39). Heusinger sent Semper her copy of the translation on 24 February 1851 (235, 238, 240).

15.3-4 in the construction, drawing and Composition of ornements] The German source text has 'in der Construction, im Zeichnen und Erfinden von Verzierungen' (254.3-4), speaking of construction on the one hand, and on the other hand of ornaments; in Heusinger's copy of Campbell's translation, the whole phrase relates to ornaments, thus speaking of the construction of ornaments. 15.7 engravings.] The following sentence 'If desired the study of German can be combined.' is deleted in Karoline Heusinger's hand, whereas the sentence is not deleted in the corresponding German source text (254.7-8).

#### ALTERATIONS IN THE MANUSCRIPT

15.1 Gottfried Semper] after del. S at] interl. after del. on on] above del. and of 15.7 engravings.] before del. on fol. 17-v If desired the study of | German can be combined.

## MANUSCRIPT VARIANTS DOK:39

fol. 1r
 Professor Gottfried Semper früherer Director der Bauschule an der Kunstakademie, und Erbauer des Theaters zu Dresden beabsichtigt in allen Zweigen seiner Kunst Unterricht zu geben; Namentlich in dem Entwerfen von Bauplänen, in der Construction, im Zeichnen und Erfinden von Verzierungen, Möbeln, Vasen, Mustern etc, in der Perspective, und im Ausführen landschaftlicher und Architectonischer Skizzen in Bleistift und in Aquarell. Auch übernimmt er es, Vorträge über Geschichte der Kunst zu halten und diese mit Zeichnungen und Kupferwerken zu erläutern. Wenn es gewünscht wird ¦ kann Uebung im Deutschen damit verbunden werden.

27. University Street Gower Street.

254.3 Namentlich] after del. Hauptsächlich after del. Hauptsächlich macht er sich verbindlich

## **Fourth Version**

#### TEXTUAL RECORD

DOK-1851:7 gta, 20-DOK-1851:7, fol. 1r-v, in Semper's hand, dated 3 March 1851, copy-text

### **EXPLANATORY NOTES**

This draft advertisement was intended for translation into English; repeating the French in English, it emphasizes benefits for travellers ('particularly useful for tourists', 15.17–18). Like the French draft from advertisement class I (6–7, Third Version), which was probably written shortly afterwards, this version may also have been prompted by Karoline Heusinger's advice in her letter of 27 February 1851 to show the advertisement she had translated to an English architect (240). It probably corresponds to the programme referred to in the French advertisement belonging to class I in the sentence 'Exercices etc comme au programme N° 3' (7.11). In comparison with other drafts belonging to advertisement class III, this version is optionally extended to include 'a complete and illustrative course on the history of decoration'.

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то

15.11 l'ecole] l'école 15.11–12 l'accademie] l'académie 15.14 comprehensiblement] compréhensiblement 15.15 procedés] procédés 15.16 l'ancre] l'encre 15.17 preparatoire] préparatoire 15.22 ornamens] ornements 15.23 l'ancre] l'encre 15.26 differens] différents demontrés] démontrés 15.29 l. 3 Mars 1851] le ~ ~ ~

## EDITORIAL EMENDATIONS

15.27 par etc.] before one-sixth page blank

## ALTERATIONS IN THE MANUSCRIPT

15.11 Professor] after del. Professor Semper, etc. etc. donne des leçons privéesetc. etc.]undel.l'ecole] after del. l'aca15.15 leçons;] altered from ~^ before del. et15.16 aucrayon] before del. et15.17 touristes] after del. personnent qui vont faire des voyages dansles pays classiques de l'ar15.20 l'architecture,] altered from ~.15.22 des décorations]interl.ornamens,] before del. des détails d'architecture,15.24 Ces études peuvent]after del.

Si l'on veut, ces etudes peuvent embrasser tout l'art du décorer et ètre combinées avec un cours illustratif d'histoire du<sup>1</sup> décor<sup>2</sup> dans le quel la difference des caractères des differens styles sera demontrée.

I du] above del. de la 2 décors] altered from décoration.

15.25–6 les differens caractères] *after del.* la difference

Tus & SP PPC

Pl. 8: Sketches of Canadian Timber Trophy, 1851 (gta, 20-Ms-94)

# THE GREAT EXHIBITION

# Introduction

The Great Exhibition of the Works of Industry of All Nations that was presented to the public in Joseph Paxton's Crystal Palace in Hyde Park from 1 May to 11 October 1851 marked a turning point in several respects for Gottfried Semper during his period of exile in London. The six months brought him work – and work of a type from which he was able to benefit directly in relation to architectural theory and indirectly in practical architectural work, particularly after his appointment to a professorship in architecture at the Swiss Federal Polytechnic School in Zurich in 1855.

The texts gathered together here are connected with Semper's commissions to decorate sections representing various countries in the exhibition at the Crystal Palace, on the one hand. On the other, they also belong in the context of *Wissenschaft, Industrie und Kunst* (Science, Industry, and Art), the booklet that Semper started writing shortly before the end of the Great Exhibition and completed in January 1852. In it, he extended the approach taken in his essay *Die vier Elemente der Baukunst* (The Four Elements of Architecture) – which he had started in October 1850 and completed in January 1851 – namely viewing architecture as a product of the combined industrial or applied arts. Central elements of these studies were incorporated into the two volumes of *Der Stil in den technischen und tektonischen Künsten, oder Praktische Aesthetik* (Style in the Technical and Tectonic Arts; or, Practical Aesthetics), which he wrote in Zurich and which contains several references to the London exhibition.

Semper obtained the commissions to decorate national sections for the Great Exhibition through Henry Cole, who was responsible for coordinating the arrangement of the exhibits in the Crystal Palace. Semper himself acknowledged this debt when he wrote to Cole in October 1854 to inform him that he had been offered the professorship in Zurich. He mentioned Cole's 'kind disposition' towards him, to which he owed his present 'position at Marlborough House' (the home of Cole's Department of Science and Art, which had been founded as the Department of Practical Art in early 1852). As a German draft of the letter notes, however, Semper was also indebted to Cole for his 'employment in the Exhibition building'. There is only scattered evidence of what this actually involved. When in 1860 Semper was working on the placement of exhibits in the Collection of Antiquities in the main building of the Polytechnic School in Zurich, he emphasized to the head of the canton's building department, Franz Hagenbuch, that he had 'decorated four sections (Canada, Turkey, Sweden, Denmark) at the great industrial exhibition in London'. Other letters and notes contain further information on Semper's commissions in the Crystal Palace but do not allow their exact scope to be determined.

Semper probably took on initial tasks at the beginning of March 1851. In a reply written on 8 March to Edwin Chadwick's offer of a position as Joseph Paxton's assistant in Chatsworth, Derbyshire, Semper wrote that he was hesitant to accept it immediately, as he had already agreed to 'some little jobs relating to the coming exhibition of industry'. This may have been referring to the decoration of the Canadian court, as Henry Cole sent a note to Semper on 12 March 1851 to tell him that John Lindley, superintendent of the colonial departments to which Canada belonged, wanted to see him in the Crystal Palace because 'The half counter on the east of the Canadian span, next the main aisle, *cannot* be occupied by Canadian goods.'

Cole's note hints at other matters as well. The counter to the east of the Canadian court next to the main avenue in the Crystal Palace belonged to the exhibition area for the British colonies in West Africa. Although Semper does not appear to have been involved in that section, the situation was different on the western corner of the Canadian court adjoining the main avenue. This had been assigned to the Cape of Good Hope, a British colony since 1814. On a coloured design by Semper for the Canadian court, it can be seen that he had designed a four-bayed oblong cabinet for the Cape of Good Hope's section (HfBK Dresden, Custody, B 969) as a continuation of the three temple-like glass cabinets along the west wall of the Canadian court. The cabinet was in fact constructed, in a form apparently different from the design – as a contemporary woodcut of a 'Group of Objects Selected from the Contributions of the Cape of Good Hope' published in The Illustrated Exhibitor of 27 December 1851 suggests. On 4 September 1851, Semper was still requesting payment for the work he had done for the Cape of Good Hope, for which he had buffalo heads suspended above the cabinet (visible in the woodcut). In the letter, which has survived in an unaddressed draft, Semper pointed out that he had carried out the work involved together with the addressee at the latter's suggestion. The individual concerned was probably William Butler Simpson, since a reply from his office for architectural decoration followed the same day.

As an advertisement of 22 March 1851 in the *Hamburger Nachrichten* shows – published by the Hamburg architect Franz Georg Stammann on Semper's behalf in order to attract exhibitors from Germany – Semper had already been commissioned in March 'among other things, also to arrange for Sweden the exhibition of items sent in from there' (209.29–30). Semper was in contact with the Swedish consul-general, Charles Tottie, who was commissioner for Sweden and Norway, which were politically allied. Work on decorating this smaller section was joined around the same time by tasks for the adjoining, similarly small exhibition from Denmark. This emerges among other things from a printed advertisement leaflet in French dated 1 April 1851. The leaflet states that Semper had been entrusted with arranging their exhibition items 'by the commission-ers of Sweden and Denmark' (18.6–7). For his part, Denmark's commissioner, Regnar Westenholz, informed Semper on 29 March 1851 that 'the ship with the things from Denmark' had 'arrived on the river today', and they would 'thus very soon be able to start setting them up or at least with preparations for it'.

There is less clarity about Semper's other contributions. Friedrich Wetzler, an acquaintance of Semper's, stated in a letter of 12 April 1851 to the Leipzig publisher Otto Wigand that Semper would in addition to his employment 'as commissioner for Sweden, Denmark, Hamburg and Canada ... also probably be representing Greece and another part of the United States'. Semper's involvement with the exhibition section from Hamburg never materialized. Greece had possibly come into view because it was exhibiting alongside Turkey, whose section Semper claimed to have decorated. Nothing else is known of the Turkish commission – which was similar in its spatial extent to that of Canada – apart from what is contained in reports on the exhibition (in which Semper's name is never mentioned) and in illustrations: a tented passage shared with Egypt led to a miniature mosque under a vaulted marquee. The alleged other 'part of the United States' that Semper was perhaps to have represented may have been due to confusion with the British colonies of Newfoundland, New Brunswick and Nova Scotia. Semper was probably involved in those sections the Hamburg advertisement mentions generally that he was responsible for 'English colonial wares', while the French announcement refers to the 'Anglo-American colonies'. Semper's Timber Trophy in front of the Canadian court did in fact assemble exhibits from manufacturers from different sections - as the above-mentioned William Butler Simpson, who erected it, pointed out in a letter to Matthew Digby Wyatt of 18 September 1851 in which he requested payment for it from the Royal Commission. Accordingly, the Trophy was crowned with a canoe from Nova Scotia, as noted in Robert Hunt's *Hand-Book to the Official Catalogues*.

At the time of the opening, Semper had 'practically completed' his decoration work at the Crystal Palace, as he reported on 5 May 1851 to his brother Johann Carl Semper in Altona. The Turkish court was completed on 22 May, as was noted by a German business journalist (Scherer 1851, 175). Semper was now combing through the exhibition as a kind of independent juror. He also received visitors, particularly from Germany. In the second half of May, his brother Johann Carl came; in August, Semper was visited by his publisher Eduard Vieweg from Brunswick, the school director Friedrich Krause from Dresden, the architect Franz Georg Stammann from Hamburg and two of Bertha Semper's acquaintances from the same city. In the meantime, Semper had also obtained new work; he wrote to Johann Carl in the letter of 5 May that he had 'commissions from various journalists and I will be well paid if I write'. He did so in two published essays and drafts of additional texts, and ultimately in Science, Industry, and Art. The ongoing preliminary work for these included the hurried 'Notes on Exhibits' that Semper wrote as he rambled around the Crystal Palace (31-9, pl. 2).

In October 1851, the architectural critique of the Crystal Palace written by Semper between the end of March and mid-May 1851 was published anonymously in *The Edinburgh Review* ('A Foreign Architect's Views of the Building', 18–20). It was incorporated into Edward Aubrey Moriarty's anonymous review of the final edition of the *Official Catalogue of the Great Exhibition*. In the other essay, 'Die grosse Ausstellung' (The Great Exhibition), which appeared anonymously in the German supplement of *The Illustrated London News* of 17 May 1851, Semper combined his observations on the Crystal Palace with an attempt – based on the exhibits – to develop criteria for assessing the relationship between 'Peoples of European and non-European Culture', as the essay's subtitle states. He took up the approach used in his never-completed 'Vergleichende Baulehre' (Comparative Architecture), which he had been working on since the 1840s.

This approach also guided Semper's plan for a series of essays on the Great Exhibition in the form of letters to Lothar Bucher, which remained unpublished (27–31). Possibly Semper began writing them as a reaction to a suggestion made by Friedrich Wetzler to the Leipzig publisher Otto Wigand that he should publish reports on the Great Exhibition by Semper as a twelve-part weekly and then in book form. This proposal did not come to fruition, nor did Wigand's alternative suggestion that Semper should write articles for the Leipzig *Illus-trirte Zeitung*. Following theoretical arguments regarding a system for classifying exhibits in his letters to Bucher, Semper attempted to organize the system into a ramified list, which he drafted as an insert for *Science, Industry, and Art* between October 1851 and January 1852 as an 'Outline of a Cultural-Historical Exhibition' (40-2), to be accompanied by a 'Note' in which he assigned the classification categories to rooms in a collection, with the products in the main rooms and the techniques and raw materials necessary for their production in the adjoining rooms (43).

The Great Exhibition, which inspired Semper to develop these plans for a collection, also provided the framework for his idea to arrange an exhibition in part of the emptied Crystal Palace in February 1852 presenting 'sketches, drawings and models from the fields of industrial art, including architecture'. The 'Association of Artists of Various Nations' that Semper initiated for the purpose appealed for contributions in the Berlin *Zeitschrift für Bauwesen* of 31 December 1851 (43–4). There is no evidence that the exhibition plan was ever implemented; Semper's ambitions might have been simply exaggerated. In a letter to Vieweg of 2 December 1851, he enclosed a draft of the essay *Science, Industry, and Art* and described it as being suitable 'to draw the attention of the English and also German audience to the purpose of this exhibition, which goes further and involves the founding of a school of industry in London'.

The fact that Semper regarded Science, Industry, and Art as also addressing an English audience is a reference to the English translation, the completion of which had delayed the revision of the German version, as he wrote to Vieweg in the same letter. Semper mentioned the offer to publish the essay in English for the first time in a letter of 17 October 1851 to Eduard Vieweg's son Heinrich just after having sent a first version of Science, Industry, and Art to Brunswick. The translation was ready for publication just a few weeks later under the title 'Remarks upon Artistic taste among the People and the means of its Development' (gta, 20-Ms-89), as Semper wrote to Vieweg on 2 and 18 December. Cole was obviously involved in the publication project: on 8 April 1852, Semper asked Cole to correct 'an erratum' in a passage of Science, Industry, and Art 'before printed' (the passage concerned with the Portland Vase; cf. 468-9, Explanatory Notes 153.24-5). Yet the translation was never published. Possibly Cole planned to have it serialized in The Athenaeum. In any case, he reported to Semper three times in February 1852 about negotiations with the editor of The Athenaeum regarding the publication of manuscripts, the last time on 24 February with the information 'that the Athenaeum will print your paper'.

Semper was nevertheless convinced – as he wrote to Vieweg on 20 May 1852 – that the 'little brochure "Science, Industry, and Art", publication of the 'English version of which has so far been prevented due to a chain of unfortunate events', had 'borne fruit', as he now had a 'prospective post as professor at the drawing school here' – that is, at Cole's Department of Practical Art, which had emerged from the Government School of Design. The reform of art education proposed in *Science, Industry, and Art* (Semper 1852, 61–72) does indeed discuss elements of Cole's programme for the new school, such as the establishment of special classes according to different branches of industry, practice in workshops, a collection of manufactures and an annual exhibition organized for the purpose of encouraging mutual competition. Cole (and not Prince Albert, as often claimed) might therefore have been the person behind the 'private request' mentioned by Semper in the preface (dated 24 November 1851) of *Science, Industry, and Art* as having prompted the writing of the essay as a contribution to 'the organization of improved teaching for trainee technicians' and to the 'development of taste'.

**BIBLIOGRAPHY** Bucher 1879; Semper 1880, 20; Ahrens 1886a, 24–47; Ahrens 1886b; Brinckmann 1903; Leisching 1903; Mrazek 1966; Lankheit 1976; Reising 1976; Rykwert 1976, 70; Vogt 1976; Herrmann 1978, 50–4, 58–60; May 1980; Herrmann 1981, 99–101, 104; Nigro Covre 1982; Herrmann 1984, 45–8, 53–4; Mallgrave 1985b; Mallgrave 1996, 189–208; Hvattum 1999; Franz 2000; Mallgrave 2002; Hildebrand 2003; Hvattum 2004b; Hildebrand 2007; Mallgrave 2007; Arburg 2008, 311–34; Luttmann 2008, 124–39; Leoni 2014; Chestnova 2017b; Hildebrand 2020a, 110–19; Leoni 2021

## Announcement

### TEXTUAL RECORD

DOK-1851:9a	gta, 20-DOK-1851:9a-d and 9f-l, Avis', dated I April 1851, eleven copies with,
	at the foot of fol. 1r, imprint 'Paris IMPRIMERIE LE NORMANT, rue de
	Seine, 10' and, on fol. 1V, stamp 'TIMBRE cen. 1. OUDINE ET VAUTHIER.
	SEINE' with figure of Justitia in the centre
DOK-1851:9e	gta, 20-DOK-1851:9e, 'Avis', dated 1 April 1851, one copy with same imprint
	and stamp as in DOK-1851:9a, <i>copy-text</i>

BIBLIOGRAPHY Herrmann 1978, 50 n. 163; Herrmann 1984, 272 n. 159

### **EXPLANATORY NOTES**

Semper drafted this advertisement for tasks related to the Great Exhibition after consulting, around mid-March 1851, Charles Séchan (one of the decorative painters with whom he had worked at the Court Theatre in Dresden). Through Séchan's efforts, it was printed in Paris and distributed in France but was not particularly successful (nor was the other print-

. . . . .

ed advert for Hamburg; see 209–10). Between 11 April and 20 June 1851, Semper received inquiries from nine French exhibitors. A producer of wine, spirits and vinegar, a cooper, a fabric printer and a lime-burner asked for further information; a shoemaker, a glass manufacturer, a spinner and a clay manufacturer commissioned him with the arrangement of their products. Another clay manufacturer, Jean-Jacques Bouvert, requested Semper after the Exhibition had already opened to present his products to the jury for assessment – even though he had already withdrawn them. Semper made remarkably energetic efforts to promote one of Bouvert's products, a fuel material. He tried to obtain a certificate through the Canadian geologist William Edmond Logan, the commissioner responsible for exhibiting Canadian minerals, and as late as January 1852 he was still negotiating with his brother Wilhelm Semper, a pharmacist in Hamburg, regarding the distribution of Bouvert's fuel.

18.23 divers] diverses (see below, Print Variants 18.23)

## PRINT VARIANTS

18.5 Exposition] Expédition DOK-1851:9a 18.23 divers] diverses DOK-1851:9a

# A Foreign Architect's Views of the Building

## TEXTUAL RECORD

gta, 20-Ms-94, fol. 6v, in Semper's hand
gta, 20-Ms-94, fol. 5r–v (5r variant of MS 94 <sup>1</sup> ), in Semper's hand
gta, 20-Ms-94, fol. 6r, in Semper's hand
gta, 20-Ms-94, fol. 7r-v (7v blank; variant of MS 94 <sup>3</sup> ), in Semper's hand
gta, 20-Ms-94, fol. 3r-v (3v blank; variant of MS 94 <sup>2</sup> ), in Semper's hand
gta, 20-Ms-94, fol. 4r-v (4v blank; variant of MS 94 <sup>5</sup> ), in Semper's hand
gta, 20-Ms-94, fols. 1r-2v (1r-v variant of MS 94 <sup>6</sup> ; 1v-2r variant of MS 94 <sup>2</sup>
and MS 94 <sup>4</sup> ), in Semper's hand
'A Foreign Architect's Views of the Building', The Edinburgh Review 94, no.
192 (Oct. 1851), 576–7 (BL, P.P.6199.h), Edward Aubrey Moriarty's English
trans. of a missing German source text, in Moriarty 1851, copy-text
'Official Catalogue of the Great Exhibition of the Works of Industry of All
Nations, 1851', The Edinburgh Review: American Edition (New York) 94, no.
192 (Oct. 1851), 285–306, here 295–6
'The Great Exhibition - The Official Catalogue', The Daily News (London),
no. 1682 (14 Oct. 1851), 6; no. 1687 (20 Oct. 1851), 2; here no. 1682, 6
'Official Catalogue of the Great Exhibition of the Works of Industry of All
Nations, 1851', Littell's Living Age (Boston) 31, no. 393 (29 Nov. 1851), 385-400,
here 392

Semper 2014 vol. 1, 411-12, Karge's reprint ed. of ER

**BIBLIOGRAPHY** Vogt 1976, 180–9; Herrmann 1978, 54 n. 173; Herrmann 1980, 49; Herrmann 1981, 65–6, 101; Herrmann 1984, 273 n. 168; Gnehm 2015, 36

### **EXPLANATORY NOTES**

Semper had been writing his critique of the Crystal Palace between the end of March and mid-May 1851, although it did not appear until October. Of Semper's essays on the Great Exhibition, it is the only one published in English at that time – alongside two German publications, one of which appeared in the German supplement of *The Illustrated London News* (20–6) and the other as the booklet *Science, Industry, and Art* of 1852. Although the essay was published anonymously, the translator, Edward Aubrey Moriarty, in his review of the *Official Catalogue* in which he inserted the text, alluded to Semper's authorship on several occasions. In introducing Semper's text, he wrote (Moriarty 1851, 575):

The original Paper emanated, we have reason to believe, from the pen of a writer, himself the architect of one of the most admired of modern edifices – the late Dresden Opera-house; and its remarks on the structural peculiarities of the building are of a character sufficiently interesting to excuse our translation and insertion of them here. The unhappy political convulsions of the year 1849 proved equally fatal to the high professional position of its author, and the graceful monument of his genius. The Paper was written on the eve, and amidst all the bustle and preparation of the opening: –

Two pages before, Moriarty referred to Semper's essay and remarked that it reflected 'the opinion of one of the most distinguished foreign architects of the day'. Moriarty's authorship both of the review (it was also published anonymously) and of the translation of Semper's text is suggested on the one hand by the fact that he edited the *Amtlicher Catalog der Ausstellung der Industrie-Erzeugnisse aller Völker* (published on 21 July 1851), the German version of the *Official Catalogue*. On the other hand, Moriarty had met Henry Cole on 31 August, as well as on 9 and 27 September 1851, in connection with an article (probably the same review) for *The Edinburgh Review*, as Cole noted in his diary. As the intermediary for Semper's employment for the Great Exhibition, Cole might have known about Semper's draft texts about the Crystal Palace. The manuscript from which the English translation was made is not extant, but various fragmentary German drafts by Semper survive; they have their own interest, as they contain passages that did not make it into the translation – for example, passages on the tower of Babel and the despotism of mechanization.

18 A Foreign Architect's Views of the Building] title taken from header in ER, 577

### PRINT VARIANTS

18.28 spared!] ~. DN18.28-9 as stimulated] ~, ~ LA19.3 lattice-work] lattice work DN19.4 her works.] ~ ~! LA19.6 honour] honor LA19.7 and, considering] ~  $\wedge$  ~ DN19.12 into form,] ~ ~ $\wedge ERAm$ 19.14 The simpleproblem] no paragraph DNopen air,] ~ ~ $\wedge DN$ 19.17 States] states DNLA19.23For the fulfilment] no paragraph DN19.28 Little was needed] no paragraph DN19.28

19.32 artistic] artististic DN19.36 harmonised] harmonized ERAm LA19.40 realised]ised] realized LAcanvass] canvas DN20.8 refined taste,] ~ ~DN20.17 of courts\_] ~ ~, LA20.19 In conclusion] no paragraph DN20.23 elsewere] elsewhere ERAm DNLA

## MANUSCRIPT VARIANTS MS 94<sup>1</sup>

Es ist eine Pracht um die beiden Bäume in der Transept des Hyde Park Palastes, wie sie lebensstrotzend sich eilen ihre letzten Blätterhüllen abzustreifen, gleich als spornte sie das hastige rings sie umbrausende Gestaltungsdrängen.

3

265.1 Es] after del. Es ist eine Pracht um die beiden Bäume in der Transept des Hyde Park Pallastes, angespornt durch das hastige Treiben, was sie umgiebt, Pracht] after del. volle (volle above del. wundervolle) des Hyde Park Pallastes] after del. des Schaumarktgebäudes angespornt] after del. wie sie, gleichsam hastige] repl. del. rege in der Transept] 'in dem Transept' 265.2 spornte] after del. wäre 265.3 rings] after del. rings sie umschwärmende after del. Treiben was sie umgiebt

#### MS 94<sup>2</sup>

Es ist eine Pracht um die beiden Bäume in der Transept des Hydepark-Palastes, wie sie
lebenstrotzend sich eilen ihre letzten Blätterhüllen abzustreifen, als spornte sie das hastige Drängen nach naher Gestaltung, das sie umschwärmt. Gleich mächtigen Fächern füllen ihre Zweige das Halbrund des Schiffes und durch ihr zartes Grün spielt anmuthig das leichte Stangen- und Gitterwerk des luftigen Baues. Noch ist das graue Segeltuch, das den Bau bedecken soll, über diesen Theil desselben nicht ausgebreitet und des Himmels Blau
mit den leichten Frühlingswolken blickt überall herrlich hindurch. Das Ganze athmet

junge Lebensfrische und jubelt dem Erbauer des Werkes ein Loblied entgegen. Kehrt dann das Auge auf den chaotischen Werdedrang dort unten zurück, dann ängstigt der Contrast zwischen diesem Gewirre und der majestätischen Ruhe, womit die Natur die Entstehung ihrer Werke vollendet.

- <sup>15</sup> Wird das unter diesen tausendfältigen Hammerschlägen Geboren die Inkarnation eines lebensfähigen Weltgedankens seyn, ¦ oder bauen wir an einem modernen, nicht die Höhe, sondern die Breite erstrebenden Nimrodswerke? Diese Frage drängt sich dann auf und mahnt zu ernsten Betrachtungen, die eine beruhigende Richtung nehmen, so oft der Blick auf jenes Bild der Eintracht des aus unbefangener Auffassung der Aufgabe hervorgegangenen Werke des Baumeisters, mit der Natur zurückkehrt.
- Gewiss wir tragen zu keinem Thurme von Babel den Stoff zusammen bei dem die Völker aus einander liefen noch ehe die Spitze des müssigen Baues erreicht war; Unser Werk hat keine despotische Spitze wohl aber soll es einen Mittelpunkt haben, an den es sich in unbestimmter stets unbestimmter bleibender Ausdehnung mit geordneter Freiheit anfügt.

 265.4 in der Transept]
 'in dem Transept'
 265.5 lebenstrotzend] leben altered from lebens

 Blätterhüllen]
 after del. Bluth (possibly for 'Blüthen')
 265.6 füllen] above del. gestalten

 sich
 265.7 Grün]
 G over g after del. Frühlings 265.8 graue] interl.
 265.9 soll

265

fol. 5r

above del. wird265.10 den leichten Frühlingswolken] after del. dem WolkenspielDas Ganze] after del. Es ist eine Lebensfrische in diesem Bilde, die dem Baumeister desWerkesEs] altered from es after del. Wahrlich265.11 Loblied] above del. herrlichesTriumphlied265.12 Kehrt] after three del. variants:

Weniger erquicklich ist das chaotische Treiben<sup>1</sup> rings um aus dem sich nur der Werdedrang nicht aber bis jetzt die künftige Gestaltung erkennen lässt.

Weniger erquicklich ist der Blick auf das Chaos dort unten, an dem sich wohl deutlich der Werdedrang, nicht aber bis jetzt die künftige Gestaltung erkennen lässt.

Kehrt dann das Auge auf den chaotischen Werdedrang dort unten zurück, so ängstigt<sup>2</sup> der Contrast zwischen der unruhigen Hast, mit

1 **Treiben**] *repl. del.* Gedränge 2 **so ängstigt**] *after del.* so wünscht man dass die Gestaltung die

265.13 Contrast] after del. Abs[t] Gewirre] above del. wirren Treiben 265.14 die above del. das Werk ihrer vollendet.] altered from ~^ before del. und findet die Frage 265.15 Wird] after del. Wird unter diesen tausendfachen Hammerschlägen ein zu nachhaltigem Leben befähigter Weltgedanke geboren und after del. Man fragt das] above del. dasjenige, was Geboren] 'Geborene'; altered from geboren before del. wird, 265.16 lebensfähigen] del. and underl. with dots cancelling deletion after del. neuen seyn,] before undel. oder oder] after del. bauen wir an einem neuen, nur statt nach der Höhe nach der Breite gehenden Nimrodswerke und steht uns aus ihm, statt der Lösung unserer neuen ~ Höhe] *above del.* modernen Thurm zu Babel uns] above del. uns eine neue Sprachverwirrung 265.17 Nimrodswerke?] altered from ~, before del. und steht uns aus ihm nicht die Lösung unserer Wirren sondern die Vollendung unserer Wirren bevor? wird statt erstrebter Harmonie nur vollständige 265.19 Bild] after del. früher erwähnte früher] after del. oben des] altered from dem after del. zwischen 265.20 Werke 'Werkes' Baumeisters,] after del. Kun (possibly for 'Künstlers') and altered from ~∧ before del. und 265.21 tragen] above del. bauen **zu**] over an Thurme] after del. Werke despotischen Uebermuthes after del. Babylonischen Thurme, den Stoff zusammen] 265.22 Baues] interl. before del. Sinnbildes der Gewalt interl. 265.23 despotische] interl. after interl. and del. Despotismus 265.24 stets interl.

#### MS 94<sup>3</sup>

*föl. 6r* Damals suchte despotischer Unsinn mit geschlossener Pyramidenform das den Elementen unerreichbare Endlose und die Völker liefen, den Wahn erkennend, aus einander, noch ehe die monarchische Spitze fertig war. Jetzt bauen wir an einem Werke, das seiner Idee nach keine festen Grenzen in den Breitenausdehnungen haben darf, sich somit jeder bildnerischen Form entziehen würde, und somit, wie jenes, nur nach entgegengesetzter Seite hin, ein Unding bleiben muss, findet sich nicht noch rechtzeitig genug der wahre Mittelpunkt der Beziehungen, der Brennpunkt, dessen Attractionskraft stark genug ist, um das Auseinanderfallen der Elemente, die der erste Anstoss der Idee zusammenrüttelte, zu verhindern und sie zu einem wahren Gebäude der Zukunft dauernd zu gestalten. Hier

> 266.2 aus einander] aus | einander 266.3 Jetzt] after del. Wie damals seiner Idee nach] after del. seinen Bestandtheilen nach keine 266.4 Breitenausdehnungens] altered from ~, before del. ja selbst keine 266.5 wie jenes, nur] interl. 266.6 ein Unding] after del. wie jener Babelsthurm noch rechtzeitig genug] above del. zur rechten

5

Zeit 266.7 dessen Attractionskraft] *after del.* dessen Attractionskraft stark genug wäre, um die variirenden und losen Elemente die der Gedanke, in seiner ersten Entwick 266.7–8 um das Auseinanderfallen] *after del.* um das Formlose zu einem Systeme zu gestalten. 266.8 zusammenrüttelte] *above del.* vereinigte 266.9 sie] *above del.* ihre bildnerische Gestaltung wahren] *after del.* harmonischen dauernd] *after del.* zu gestalten. gestalten.] *before del.* Seyn und nicht seyn

### MS 944

Damals erstrebte der mosaischen Sage nach despotischer Unsinn mit geschlossener Pyramidenform eine den Elementen unerreichbare endlose Höhe und die Völker liefen, den Wahn erkennend aus einander, noch ehe die monarchische Spitze erreicht war. Jetzt bauen wir an einem Werke, das seinem Inhalte nach, keine festen Grenzen in den beiden Breitenausdehnungen haben darf, sich somit jeder bestimmten bildnerischen Form entzieht und desshalb, wie jenes, nur nach entgegengesetzter Seite hin, so lange ein Unding bleiben muss, bis sich der wahre Mittelpunkt der Beziehungen fand, dessen Attractionskraft die unbestimmbar variirenden in Individualitäten zerstückelten Bestandtheile des grossen Baues zu einem Systeme vereinigt, und es möglich macht, dass bei grösster Gestaltungsfreiheit des Einzelnen, das Ganze ein harmonisches

> 267.1 erstrebte] interl. before del. suchte der mosaischen suchte] above del. wollte 267.2 eine] repl. del. die die] inserted before del. endlose und (end-Sage nach] interl. lose altered from Endlose after del. Unendliche, den Himmel [er] after del. das) 267.3 erkennend] before del. und das Thörichte 267.4 seinem Inhalte nach,] above del. seiner den] after del. der Ausdehnung 267.5 bestimmten] after del. Form Idee nachA 267.6 wie] after del. ein nach einer entgegengesetzten Seite hin und ab[handen] führt so lange] after del. in bildnerischer Beziehung ein Unding ist, so lange nicht ein grosser fester in bildnerischer] after del. ein Unding after del. ein Unsinn bleibt, so lange und kraft **Unding**] *after del.* formloses 267.7 die] above del. das 267.8 variirenden] inserted after del. Ausgedehnte aus 267.9 und] after del. einen wirklichen Bau er grösster] after del. möglichster 267.10 ein] after del. eine harmonische Gestaltung gewinnt

#### MS 94<sup>5</sup>

Wenn dort drüben in dem Welt-Schaumarkte der jetzt im höchsten Paroxismus begriffene Werdedrang mit seinem wüsten Getöse zu betäuben beginnt, und die Besonnenheit im eigenen Walten mitten unter diesem allgemeinen Gewühle untergehen will, dann bieten die drei letzten der Bäume des Hydeparkes die das Netzwerk des Gebäudes umspann und die Axt noch verschonte, einen wundersam beruhigenden Anblick dar. Es ist eine Pracht, wie sie, gleich wie angespornt durch die Hast die sie umschwärmt, in strotzender Lebensfülle sich eilen, ihre letzten Blätterhüllen abzustreifen. Gleich mächtigen Fächern füllen ihre Zweige das Halbrund der Transept und durch ihr junges Grün spielt anmuthig das leichte Stangen- und Gitterwerk des luftigen Baues. Noch ist das Segeltuch, das den Bau bedecken wird, über diesen Theil desselben nicht ausgebreitet und des Himmels Blau mit den eilenden Frühlingswolken blickt überall herrlich hindurch. Das Ganze athmet junge Lebensfrische und lobt den Baumeister dessen Werk sich so harmonisch mit der Natur

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fol. 3r

fol. 7r

vermählte. Und welcher Contrast zwischen dem Gewirre dort unten und der majestätischen Ruhe, womit die Natur die Entstehung ihrer Werke vollendet! Man möchte aus jenen Zweigen ein Orakel vernehmen, eine Antwort auf die wichtige Frage, ob wir Menschlein hier unten, mit unseren tausendfachen Hammerschlägen die Geburt eines lebensfähigen Weltgedankens zu fördern berufen sind, oder ob wir an einem modernen, nicht in die Höhe, aber in die Breite frevelnden Nimrodswerke den Stoff herbeitragen? Aber kein Luftzug bewegt die Zweige der gefangenen Bäume, kein Säuseln der Blätter erhebt sich, und das Orakel bleibt stumm.

> 267.11 Welt-Schaumarkte] after del. Exhibit im] above del. in seinem 267.12 **zu**] after und] after del. dann after del. dann blicke ich von Zeit zu Zeit auf del. mich 267.14 der] interl. 267.15 **noch**] *interl*. wundersam] after del. seltsam 267.18 der Tran**sept**] 'des Transepts' 267.19 Stangen-] after del. bl[] 267.20 des Himmels Blau] before del. blickt zuweilen durch Wolken herrlich hindurch. blickt] after del. mit den 267.22 dessen] after del. an

> 268.2 **Man**] *after del*. Oft frage ich diese Bäume frage] *after del*. suche ich 268.3 **die**] *above del*. jene 268.4 **tausendfachen**] fachen *after del*. fältigen 268.7 **Zweige**] *below del*. Blätter

#### MS 946

fol. 4r Wenn in dem Welt-Schaumarkte dort drüben das mich umbrausende Gewirre meine Sinne zu betäuben anfängt, dann lasse ich, um mich zu sammeln meine Blicke eine Weile auf jenen drei letzten Bäumen ruhen, die das Netzwerk des Gebäudes umsponnen und die Axt noch verschont hat. Es ist eine Pracht, wie sie, gleichsam gestachelt durch die sie umschwärmende Hast, sich eilten, ihre letzten Blätterhüllen abzustreifen und nun gleich mächtigen Fächern die hohen Bogen der Transept füllen. Durch ihr junges Grün spielt anmuthig das leichte Stangen- und Gitterwerk des luftigen Baues. Noch ist das graue Segeltuch, das den Bau bedecken wird, über diesen Theil desselben nicht ausgebreitet und des Himmels Blau mit den eilenden Frühlingswolken blickt überall herrlich hindurch. Das Ganze athmet junge und zugleich antike Lebensfrische und lobt den Baumeister, dessen Werk so harmonisch sich mit der Natur vermählte. Wir glauben aus jenen lichten Zweigen leise neue Weisen zu vernehmen, die doch wie Ahnung längst verlorener alter Herrlichkeiten klingen. Sind sie ein tröstender Spruch auf die beängstigende Frage, ob wir Menschlein hier unten mit unseren tausend Hammerschlägen die Geburt eines Weltgedankens zu fördern im Begriffe stehen

#### 268.9 Wenn] after del.

Wenn mir in dem Welt-Schaumarkte dort drüben das wüste Getöse die Sinne zu benehmen anfängt, dann lasse ich meine Augen eine Weile

268.9 in] after del. mir meine] above del. die 268.10 betäuben] above del. benehmen anfängt,] altered from ~^ before del. und die Besonnenheit mich verlassen will ich,] altered from ~^ um mich zu sammeln] interl. 268.13 nun] interl. 268.14 der Transept] 'des Transepts' 268.15 graue] after del. Segeltuch 268.16 den] after del. sie 268.18 Das Ganze athmet] after del. 5

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Das Ganze athmet junge und zugleich antike Lebensfrische und lobt den Baumeister, dessen Werk so harmonisch sich mit der Natur vermählte, das so neue und zugleich so alte längst verhallte anmuthige Weisen<sup>1</sup> singt.

#### 1 anmuthige Weisen] after del. Lieder

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268.19 Wir] after del. Neue Weisen klingen uns aus jenen Zweigen entgegen die doch. 268.20 Ahnung] interl. before del. Anklang Anklang] above del. Ahnung alter] after del. unbekannter unbekannter] repl. del. nur noch geahnter (geahnter after del. in glücklichen) 268.21 tröstender] final r over s Spruch] above del. Orakel 268.22 die] after del. einen

#### MS 947

Wenn in dem grossen Welt-Schaumarkte dort drüben das brausende Gewirre um mich her meine Sinne zu betäuben droht, dann lasse ich, um mich zu sammeln, meine Blicke eine Weile auf jenen drei letzten Bäumen ruhen, die das Gebäude mit seinem Netzwerke umsponnen, und die Axt noch verschont hat. Es ist eine Pracht, wie sie, gleichsam gestachelt von der sie umschwirrenden Hast, sich eilten, ihre letzten Blätterhüllen abzustreifen und nun fächerartig die hohen Bögen der Transept füllen.

Durch ihr junges Grün spielt anmuthig das leichte Stangen- und Gitterwerk des luftigen Baues. Noch ist das graue Segeltuch, das ihn bedecken wird, über diesen Theil desselben nicht ausgebreitet, und des Himmels Blau, mit den eilenden Frühlingswolken blickt überall herrlich hindurch. Das Bild athmet junge und zugleich antike Lebensfrische und lobt den

- herrlich hindurch. Das Bild athmet junge und zugleich antike Lebensfrische und lobt den Baumeister, dessen Werk sich so harmonisch mit der Natur vermählte.
   Aus jenen lichten Zweigen glauben wir leise liebe Weisen zu vernehmen, die so neu und doch wie Anklang alter längst verlorener, nur geahnter Herrlichkeiten herunter säuseln. | Dann verlassen uns jene Zweifel, die uns ängstigen, während wir mitten in dem Gedränge befangen sind, und das Durcheinander des bereits Erschaulichen uns wie verkörperter
- Wahnsinn fratzenhaft bunt entgegengrinzt.. Welcher Contrast zwischen diesem Gewirre und der majestätischen Ruhe, womit die Natur die Entstehung ihrer Werke vollendet! Wird das unter so tausendfachen Hammerschlägen Geborene die erste Inkarnation eines wirklich lebensfähigen Weltgedankens seyn, oder tragen wir zu einem modernen, nicht in
- die Höhe, aber in die Breite frevelnden Nimrodswerke den Stoff zusammen? Damals erstrebte, der Mosaischen Sage nach, Despotischer Unsinn mit geschlossener Pyramidenform eine den Elementen unerreichbare, den Bergen trotzende Höhe, und die Völker liefen, den Wahn erkennend, aus einander, noch ehe die monarchische Spitze vollendet war. Jetzt bauen wir an einem Werke, das keine festen Schranken horizontaler Ausdehnung kennt, |
- und aus umgekehrten Gründen so lange ein gleich unmögliches Unding bleibt, bis sich der wahre Mittelpunkt der Beziehungen findet, der Attractionskraft genug besitzt, um das Heterogene und Ungemessene zu einem lebendig gegliederten und geschlossenen Systeme zu vereinigen. Geschieht dieses nicht, sondern tritt kurzsichtiges Interesse gleich beim Anfange dem natürlichen Entwickelungsgange des internationalen Verkehres gerade bei die-
- 30 ser Gelegenheit auf eine Weise entgegen, die geeignet ist, den noch jungen Enthusiasmus der Völker für die Idee zu brechen, dann wird kein äusseres Band sie zusammenhalten und, wie damals wird alles mit allgemeiner Enttäuschung und Sprachverwirrung endigen.

fol. 2r

fol. 1r

*fol. 20* Mögen diejenigen, die Geist und Beruf dazu befähigt, sich dieses geistigen Baues mit ganzer Seele annehmen und mit allen ihnen zu Gebote stehenden Kräften das Ihrige dazu beitragen, dass er sich immer mehr gestalte und entwickele.

> Ein gutes Omen für sein Gedeihen ist der körperliche Ausdruck, den ihm der Baumeister zu geben wusste. das beste Zeichen eines genialen Werkes. Es konnte auch nur einem Gartenkünstler gelingen den Gedanken in seiner ersten Entwickelungs-

> > 269.3 **Gebäude**] after del. Netzwerk **Netzwerke**] after del. gewaltigen 269.6 **fächerartig**] above del. gleich mächtigen Fächern **der Transept**] 'des Transepts' 269.8 **ihn**] above del. den Bau 269.13 **säuseln**.] before del. on fol. *tr*-v

> > Dann verlassen uns jene Zweifel, die ängstigend sich aufdrängen, während wir mitten in dem Gedränge befangen sind und das bunte Allerlei des bereits Erschaulichen uns wie verkörperter Wahnsinn überall bunt und fratzenhaft entgegen grinzt.

> > Werden wir Menschlein hier unten berufen seyn, mit unseren tausendfachen Hammerschlägen ¦ mit unseren Tapezierarbeiten und Glaskasten, die Geburt

> > 269.14 uns ängstigen,] *inserted after del.* ängstigend sich aufdrängen, sich] *after del.* zurückkehren, 269.16 Welcher] *above del.* Welch ein 269.18 tausendfachen] fachen *above del.* faltigen erste] *interl.* 269.21 Despotischer] D over d 269.24 das] *before del.* seinem Inhalte nach Schranken] *repl. del.* Grenzen 269.25 und aus umgekehrten Gründen] *after two del. beginnings of variant on fols. 1v-2r:*

> > und wie jenes, nur nach entgegengesetzter Seite hin, so lange ein Unding<sup>1</sup> bleiben muss, bis sich der wahre Mittelpunkt der Beziehungen fand, der Attractionskraft genug besitzt um die |

und wie dort die begränzte<sup>2</sup> Bauform den Zweck der Erreichung des Unbegränzten unmöglich machte, so würde umgekehrt das Bestreben den an sich der Ausdehnung nach unbestimmbaren Stoff in begränzte Form zu bringen und wie dort

I Unding] after del. formloses 2 begränzte] after del. bestimmte after del. geschlo

269.27 zu einem] *after del.* bleibend zu vereinigen und *and before del.* einträchtigen Systeme zu vereinigen. 269.27–8 lebendig ~ vereinigen.] *inserted* 269.28 Geschieht dieses nicht] *after del.* 

Geschieht dieses,<sup>1</sup> wird der Welt-Schaumarkt erhoben zu einem Welt-Freihandelsmarkte, wird wenigstens die Anbahnung dieses letzten Zieles durch kurzsichtiges Interesse nicht gewaltsam gestört, wird wenigstens nur dem natürlichen Entwickelungsgange des internationalen Verkehres kein solches<sup>2</sup> Hinderniss entgegen gesetzt, das geeignet ist, die Theilnahme der Völker gleich beim Anfange zu kühlen

I dieses,] altered from ~^ before del. nicht, 2 solches] above del. absichtliches

269.30 noch] *interl.* 269.32 Enttäuschung und] *above del.* Verwirrung Sprachverwirrung] *before del.* [wie in] 270.1 Mögen] *after del.* 

Doch mögen dazu Befähigtere sich den geistigen Bau zu Herzen nehmen und mit allen ihnen zu Gebote stehenden Kräften dazu beitragen dass er sich immer mehr gestalte; Mir 5

sey<sup>1</sup> es nur gestattet, über das, was sich bei dieser ersten Phase der Entwickelung schon jetzt als klares Resultat herausstellt, eine

1 sey] above del. ist

270.5 Ein gutes Omen] after two del. beginnings of variant:

Ein gutes Omen für sein Gedeihen ist der Umstand, dass Es ist ein gutes Omen dafür, dass ein wahrer und lebensfähiger Weltgedanke

270.6 **wusste**.] *before del.* Es ist nun kaum möglich, sich die Aufgabe nur anders, geschweige denn besser, gelöst zu denken, seitdem sie so und nicht anders gelöst wurde; 270.7 **Entwickelungs**-] *possibly for 'Entwickelungsphase' (see note 270.1: 'bei dieser ersten Phase der Entwickelung')* 

# The Great Exhibition

## TEXTUAL RECORD

MS 94 <sup>8</sup>	gta, 20-Ms-94, fol. 9v, in Semper's hand
MS 94 <sup>9</sup>	gta, 20-Ms-94, fol. 13v, in Semper's hand
MS 94 <sup>10</sup>	gta, 20-Ms-94, fol. 16v, in Semper's hand
MS 94 <sup>11</sup>	gta, 20-Ms-94, fol. 16r (variant of MS 94 <sup>10</sup> ), in Semper's hand
MS 94 <sup>12</sup>	gta, 20-Ms-94, fol. 14r–v (14v blank; variant of MS 94 <sup>11</sup> ), in Semper's hand
MS 94 <sup>13</sup>	gta, 20-Ms-94, fols. 8r–9r, 10r–12v (8v, 10v, 11v, 12v blank; 9r variant of MS
	94 <sup>8</sup> ; 10r variant of MS 94 <sup>9</sup> ; 12r variant of MS 94 <sup>12</sup> ), in Semper's hand
MS 94 <sup>14</sup>	gta, 20-Ms-94, fol. 17r-v (17v note 'Synagoge Dresden 39' in pencil; variant of
	MS 94 <sup>13</sup> , fol. 8r), with three sketches of the Canadian Timber Trophy, one of
	them inscribed with 'Canada Timber', in Semper's hand (pl. 8)
MS 94 <sup>15</sup>	gta, 20-Ms-94, fol. 15r-v (15v blank; variant of MS 94 <sup>13</sup> , fols. 11r, 12r), in Sem-
	per's hand
MS 94 <sup>16</sup>	gta, 20-Ms-94, fol. 13r (variant of MS 94 <sup>13</sup> , fol. 12r), in Semper's hand
ILN Suppl.	'Die grosse Ausstellung. Die Völker von europäischer und nicht europäischer
	Bildung', The Illustrated London News: Deutsches Supplement, no. 3 (17 May
	1851), 34–5 (private library), <i>copy-text</i>
May 1980	'Die grosse Ausstellung. Die Völker von europäischer und nicht europäischer
	Bildung', 62–6, abridged ed. of ILN Suppl.
Semper 2014	vol 1, 260-70 Karge's reprint ed of UN Suppl

Semper 2014 vol. 1, 369-70, Karge's reprint ed. of ILN Suppl.

**BIBLIOGRAPHY** Herrmann 1978, 54; May 1979; Herrmann 1980, 49, 51 n. 4; May 1980; Herrmann 1981, 65–6, 101, 104; Herrmann 1984, 48, 273 n. 168; Squicciarino 2009, 119–21; Gnehm 2015, 37; Hildebrand 2020a, 115–16; Hildebrand 2021, 110–11

#### **EXPLANATORY NOTES**

The first publication of one of Semper's essays on the Great Exhibition in the German supplement of *The Illustrated London News* was initiated by Rudolph Schramm. On 26 March 1851, he asked Semper to write an article 'on the architectural style, the construction and decoration of the Crystal Palace'. While the first two of those points formed a special topic in the text that was translated for *The Edinburgh Review* ('A Foreign Architect's Views of the Building', 18.26–20.27), the last one was included in the essay for *The Illustrated London News*. The supplement's editor – a native Bohemian called Pokorny who had worked for Eduard Meyen and Julius Faucher's ephemeral Berlin *Abend–Post* (Beta 1852, 306) – invited Semper on 3 May 1851, the publication date of its first issue, to contribute to it.

20.31 füllende] füllenden

21.30 **zeugt**] *zeigt* (see 275.36)

22.16 unsrige] before blank until full stop, leaving space for word, thus probably unsrige ist (see 274.4, 274.7, 276.8, 279.3) 22.19–20 sich ein Durcheinander ~ sich für Originalität ausgibt] ein Durcheinander ~ sich für Originalität ausgibt or sich ein Durcheinander ~ für Originalität ausgibt (cf. 279.7–8: 'sich ein Durcheinander von allseits her entlehnten mit grundsatzloser Willkür zusammengewürfelten Motiven als Originalität gerirt') 22.19 grundsetzloser] grundsatzloser (see 279.8) 22.33 dessen] deren 24.39 fehlt] fehlen

25.24–5 unserer europäischen] unsere europäische 25.29 Künsilergabe] Künstlergabe 26.14 kann] können 26.22 erstandenen] verstandenen

#### EDITORIAL EMENDATIONS

21.7 solltenfollten (long s [f] misprinted as f)21.30-I Erfahrungswissenschaften] Erfahrungswissenschasten (second f misprinted as long s [f])22.38 scheint] fcheint (long s [f]misprinted as f)26.18 Zustande] Zustande

## MANUSCRIPT VARIANTS MS 948

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*fol. 9v* Schon sollte sie aus beschränkter Auffassung des Programmes einer Industrieausstellung aus ihr in ihren Rohproducten ausgeschlossen werden; Aber durch die Einsicht der die Ausstellung dirigirenden Hohen Commission, die auch hierin von ihrem tiefen Eingehen in den ihr zum Grunde liegenden noch im Werdedrange begriffenen Weltgedanken und von ihrer Befähigung für das grosse ihr anvertraute und so glücklich von ihr vollendete Werk

272.I-6 Schon ~ Werk] del. 272.I Schon] after del.

die<sup>1</sup> schon Gefahr liefen aus beschränkter Auffassung des Programmes einer<sup>2</sup> Industrieausstellung aus ihr ausgeschlossen zu werden, aber durch die Einsicht der sie dirigirenden Hohen Commission, die auch hierin von ihrer Befähigung für das grosse ihr anvertraute und so glücklich von ihr vollendete Werk

1 die] inserted 2 einer] repl. del. der

272.1 sollte] after del. liefen sie] i.e. die Natur (nature) 272.3 Hohen] after del. Commissi

#### MS 949

er befähigt sey, den Heerd und das Mittel aller Beziehungen des Baues zu behausen, immer muss der symbolische Stamm durch alle Jahrhunderte und wo immer künftig ein folgender Weltmarkt aufgeschlagen werde, vertreten bleiben.

Die zweite Palme, auch das zeigt sich schon jetzt als unzweifelhaft, gebührt der Wissenschaft in ihrer Anwendung auf das Nützliche. Sie feiert in dem Gebäude selbst einen schönen Triumph. Preis dem Architecten, der den Gedanken dazu niederlegte, Preis den erfinderischen Baumeistern und Ingenieurs, die den mächtigen so luftigen und doch so festen

Bau mit neuen von der Wissenschaft gebotenen Mitteln und unglaublich geringem Aufwande an Materiale und an Arbeitskräften in so kurzer Zeit vollendeten.

Unabsehbare Reihen von Maschinen und Instrumenten aller Art füllen die Räume aller Nationen von Europäischer Bildung und zeigen zum Theil, gleich jenem rein konstructiven Bauwerke, eine gewisse unbefangene und naturwüchsige Zierlichkeit und Schönheit in den Formen, wodurch sie die

> 273.I-I3 er ~ wodurch sie die] del. 273.1 er] above del. er besser als jetzt den Heerd] das Mittel] after del. den Baues] above del. Weltmarktes *after del*. das Herz 273.2 Stamm] above del. Ulmenstamm ein folgender] above del. der 273.3 vertreten blei**ben**] *after del.* Wiederholung finden 273.4 auch] interl. 273.4-5 Wissenschaft] after interl. and del. Europäi 273.7 mächtigen] interl. doch] interl. 273.9 Materiale] after del. Materiellem vollendeten] after del. und after del. vollendeten; Preis denen 273.10 Arta] before del. , bestimmt 273.11 zum Theil] interl. 273.12 eine] after del. selbst after del. in ihren Formen.

#### MS 94<sup>10</sup>

in den besten Fällen aus dem falschen Zirkel der studirtesten Nachbildung älterer Weisen nicht

273.14–15 in ~ nicht] *del.* 273.14 in den besten Fällen] *inserted before del.* Doch *and after del.* Doch aus dem falschen Zirkel des Veralteten und in seiner Wiederaufnahme in unserer Zeit studirtesten] *after del.* Nachahmung des Alten das für uns

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fol. 16v

273

#### MS 9411

*fol. 16r* in dem falschen Zirkel der Nachahmung älterer Weisen gebannt bleibt, die desshalb mit Recht als schön und musterhaft bewundert werden, weil sie der sprechende Ausdruck von Zeiten sind, die mit sich selbst und der sie beherrschenden Idee schon mehr fertig waren, als es die unsrige ist, aber die an Werken

274.1-4 in ~ Werken] del. 274.1 in] after del.

in dem falschen Zirkel der Nachahmung älterer Weisen gebannt ist, die uns desshalb stets schön und musterhaft bleiben, weil sie die reinen Ausdrücke<sup>1</sup> einer<sup>2</sup> mit sich selbst mehr im Klaren befindlich

I Ausdrücke] *before del.* ihrer Zeit sind, 2 einer] *after del.* von einer *after del.* einer minder unklaren

274.3 fertig] before del. und im Klaren 274.4 aber] after del.

aber die in ihrer verbalen Wiederholung an modernen Werken des industriellen Fleisses und der Kunst nur ein der Blutwärme<sup>1</sup> ermangelndes

I **ein der Blutwärme**] *after del.* ein blut *after del.* als leblose Hüllen erscheinen aus denen das geistige Element und die Blutwärme des leblose] *after del.* seelen *after del.* seelenlose []

#### MS 94<sup>12</sup>

fol. 14r E. in dem falschen Zirkel der Nachahmung älterer Weisen gebannt bleibt, die desshalb ihr ewiges Anrecht auf Bewunderung behaupten, weil sie der sprechende Ausdruck von Zeiten sind, die mit sich und der sie beherrschenden Idee mehr fertig waren, als es die unsrige ist. An den Werken unsereres modernen industriellen Fleisses, der alle Bestrebungen früherer Zeiten überflügelte, können diese einst lebensfrischen Formen nur zu larvenhafter der Blutwärme ermangelnder Scheinexistenz

274.5 ihr] after del. mit Recht 274.8 An] after del. In ihrer verbalen unsereres] 'unsereres' der] del. alle] after del. so sehr after del. Dank de after del. in der Richtung zum Nützlichen 274.9 können] after del. erscheinen diese

#### MS 9413

*fol. 8r* A. Selbst denen, die den Enthüllungsprocess der das vaste Ausstellungsgebäude füllenden Schaugegenstände von Anfang zu verfolgen Gelegenheit hatten und ihre ganze Zeit und Aufmerksamkeit der prüfenden Vergleichung dieser Gegenstände widmen konnten, wird es schwerlich bereits gelungen seyn, über die Fülle des Gebotenen nur eine oberflächliche allgemeine Uebersicht gewonnen zu haben; Noch weit weniger würde sich eine vergleichende Critik und ein darauf begründetes Urtheil über das noch so lückenhafte Ganze jetzt schon rechtfertigen. Aber Eine Thatsache tritt dennoch bereits so deutlich hervor, dass

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es erlaubt ist, sie hervorzuheben, ehe sie von einer gewissen dem ganzen neueren Ideenumschwunge abholden Parthei in ihrer Weise ausgebeutet wird:

Wie sich von selbst versteht, wird in diesem grossen nun eingeleiteten Wettkampfe der Natur, "der Gottheit lebendigem Kleide" die nie bestrittene erste Palme verbleiben. ||

- 5 Schon sollte sie aus beschränkter Auffassung des Programms nach Einigen aus der Industrieausstellung in ihren Rohproducten ausgeschlossen bleiben; Aber durch die Einsicht der die Ausstellung dirigirenden hohen Commission wurden letztere in umfassendstem Maasse mit in das Programm gezogen. Diese hohe Behörde, der wir für die vortreffliche Leitung und Vollendung des Ihr anvertrauten grossen Werkes unsere Bewunderung, unsere Ver-
- 10 ehrung und unseren Dank zollen, hat auch hierin von ihrem tiefen Eingehen in die wahre Bedeutung des diesem Werke inliegenden, noch im Werdedrange begriffenen Weltgedankens Zeugniss abgelegt. –

Aus der Bekanntschaft mit den Rohproducten der Länder unseres Erdkörpers und ihrem zweckgemässen freien Austausche muss die vielchörige reichgegliederte Harmonie eines

- <sup>15</sup> künftigen Weltverkehres und zugleich höchster materieller und geistiger Entwickelung aller Völker nach allen Richtungen hin emporwachsen, und schon jetzt wird mancher Gewerbtreibende, mancher Künstler, und zwar je der Beste unter der Menge ahnungsvoll seinen Sinn an der Betrachtung und Vergleichung der von der Natur gespendeten, hier in wohlgeordneten Proben repräsentirten Stoffen erfrischen, wenn ihn das bunte und zugleich
- 20 monotone Gewirre der ihn umgebenden Erzeugnisse Europäischen Kunstfleisses ermüdete und Zweifel über Richtung und Ziel eigenen und fremden Strebens ihn ängstigen. Der Triumph der Natur ist in den die Bögen der Transept füllenden Laubkronen der Ulmen wunderbar schön symbolisirt und wie auch künftig dieser Theil des Baues sich anders entwickeln und gestalten möge, so dass || er geeignet sey, den Heerd und das Mittel aller
- 25 Beziehungen des grossartigen Weltmarktes würdig zu behausen, so muss dieser symbolische Stamm durch alle folgenden Zeiten und wo immer künftig ein neuer Bau von gleicher Bestimmung aufgeschlagen wird, vertreten bleiben. Die zweite Palme, auch dieses zeigt sich schon jetzt als unzweifelhaft, gebührt der Wissen-

schaft in ihrer Anwendung auf das Nützliche. Sie feiert, Dank dem Architecten der den

- 30 Gedanken dazu niederlegte, und Dank den erfinderischen Meistern der Technik und der Verwaltung, die ihn in so kurzer Zeit zur Thatsache gestalteten, die den mächtigen, so luftigen und doch so festen Bau mit neuen von der Wissenschaft gebotenen Mitteln und unglaublich geringem Aufwande an Stoff und Arbeitskräften herrlich vollendeten, einen schönen Triumph! –
- Unter seinem Zeltdache füllt eine Welt von Werkzeugen, Maschinen, Instrumenten, Apparaten, und Modellen die Räume aller Nationen von Europäischer Bildung, und zeigt entweder ganz neue sinnreiche Anwendungen der Theorie und der Erfahrungswissenschaften oder bietet durch Weiterbildung des bereits Erworbenen, oder durch die Vollendung der Arbeit die an ihnen erscheint, ein reiches Feld des Forschens, des Prüfens und Ver gleichens. ||

Lang gereihet stehen sie da in bewegungsloser, fast unheimlicher Ruhe, gleich einer schlagfertigen Phalanx bei der Musterung vor dem Kampfe. Jetzt, da diese stummen Werkzeuge nur erst ihr nächstes materiellstes Ziel verrathen bieten sie mit ihren Hebeln und Rädern von denen wir ahnen dass sie die Welt erobern müssen, ein unenthülltes Geheimniss der Zukunft.

Wenn bei ihnen, wie sich gebührt, nur ihre Bestimmung und der Stoff aus dem sie gebildet sind, und dessen zweckmässigste Gestaltung und Stärke die Wissenschaft verbunden mit

45

C. fol. 10r

B. fol. gr

D. fol. IIT

der Erfahrung feststellte, formengebend auftreten, so beschämen sie dennoch in ihrer unbefangenen, gleichsam naturwüchsigen Zierlichkeit, alle die neben ihnen angehäuften Producte der Europäischen sogenannten Kunstindustrie, die meistentheils ein unstätes und prinzipienloses Ringen nach stets neuen Mustern und Formen kund giebt, aber in ihrer rastlosen Beweglichkeit doch ¦| in dem falschen Zirkel der Nachahmung älterer Weisen gebannt bleibt, die desshalb ihr ewiges Anrecht auf Bewunderung behaupten, weil sie der sprechende Ausdruck von Zeiten sind, die mit sich und der sie beherrschenden Idee mehr fertig waren, als es die unsrige ist, die aber nur zu larvenhafter und der Blutwärme ermangelnder Scheinexistenz bei uns wieder aus der Vergangenheit heraufbeschworen worden sind; Und dieses nur in den besseren Fällen; Meistens gerirt sich in unserer modernen Kunstindustrie ein Durcheinander von allerseits her entlehnten willkürlichst zusammengewürfelten Motiven als Originalität und wird der allgemeinen Richtung zum Nützlichen durch gänzliche Nichtachtung des durch den Zweck Gebotenen bei der ornamentalen Ausstattung der Gegenstände Trotz geboten. Dabei ist es interessant zu verfolgen, wie das Maschinenwesen, indem es jenem unklaren Walten scheinbar dient und seine tausend mächtigen Arme zu wohlfeilster Vervielfältigung seiner Einfälle willfährig leiht, als sein geheimer Feind das bevorstehende Ende seines Reiches beschleunigt. -Ueber diesem Theile unserer Europäischen Betriebsamkeit wird ein strenges Gericht wal-

ten; Nicht bloss von den Persern, Indern und Arabern, Völkern deren Kunstfertigkeit und Geschmack schon früher in einigen Theilen ihrer Industrie anerkannt wurde, sondern auch von den Chinesen und selbst von den Canadischen Wilden und den Hottentotten werden wir besiegt werden.

#### 274.11 Selbst] after two del. beginnings of variant:

Selbst demjenigen, der seit der Eröffnung der Industrieausstellung Selbst denen, die den Enthüllungsprocess der das vaste Ausstellungsgebäude füllenden Schaugegenstände von Anfang zu verfolgen Gelegenheit hatten, und ihrer Vergleichung und Prüfung ihre volle Zeit widmen konnten, wird<sup>1</sup> es schwerlich schon jetzt gelungen seyn, über die Fülle des Dargebotenen nur eine oberflächliche und rein sachliche Uebersicht zu gewinnen; Noch viel weniger würden sie sich eine vergleichende Critik über das zum Theil noch

1 wird] *after del.* möchte es schwer fallen, schon jetzt eine nur oberflächliche und rein sachliche Uebersicht über den ganzen Reichthum des Dargebotenen

274.13 **prüfenden**] *interl.* **Vergleichung**] *before del.* und Prüfung 274.16 **Critik**] *before del.* über das noch so lückenhafte Ganze über] *after del.* über das zum Theil noch unvollkommen, oder zum Theil noch gar nicht

275.1 ist] after del. seyn mag sie 275.4 verbleiben.] before del. In ihren Rohproducten, die beschränkte Auf-275.5 Programms] before del. einer Industrieausstellung 275.5-6 der Industrieausstellung] repl. del. letzterer 275.13 Aus] after del. Die Rohproducte müssen die Grundtöne seyn, der] r *over* n Bekanntschaft mit den] interl. 275.13-14 und ihrem zweckgemässen freien Austausche] inserted 275.15 materieller und] 275.16 emporwachsen,] altered from ~. 275.16-17 und schon jetzt ~ ahinterl. nungsvoll] repl. del. Mancher Gewerbtreibende, mancher Künstler, und zwar je der Beste Mancher] after del. Mancher Industrielle, mancher Künstler, den die unter ihnen, wird Richtungslosigkeit die sich an eigenen und an Anderer Werken kund giebt, ängstigt, der über Richtung und Ziel 275.18 Vergleichung] after del. Prüfung 275.19 Stoffen] 275.21 Zweifel] after del. ih[m] gerechte 275.22 der Transept] 'des Transepts'; 'Stoffe'

fol. 12r

Ε.

5

то

15

20

der altered from des 275.23 anders] interl. 275.24 das Mittel] after del. Mittel. 275.25 so] repl. del. immer 275.30 Meistern] above del. Männern 275.36 Räume] after del. wesentlichsten Theile der den einzelnen Nationen angewiesenen Räume 275.37 sinnreiche Anwendungen] after two del. beginnings of variant:

sinnreiche<sup>1</sup> Anwendungen der Mechanik<sup>2</sup> zu den verschiedenartigsten industriellen und wissenschaftlichen Zwecken

sinnreiche Anwendungen der Wissenschaft zu den verschiedenartigsten

1 sinnreiche] before del. Applicationen der Kräfte zu Ersetzung menschlic 2 Mechanik] before del. zum Zwecke der Vervollkommnung und Erleichterung

 275.37-8
 Erfahrungswissenschaften]
 before del. zu industriellen
 275.38
 Weiterbil 

 dung]
 after del.
 Vollendung und after inserted and del.
 zweckfördernde
 oder durch]

 oder below del. und and durch interl.
 275.41
 Lang]
 after del.

Gereihet<sup>1</sup> stehen sie da in bewegungsloser Ruhe, gleich einer schlagfertigen Phalanx bei der Musterung vor dem Kampfe. Ihre Hebel und Räder sollen die<sup>2</sup> Welt erobern; Jetzt, da diese stummen Werkzeuge nur erst ihr nächstes materiellstes Ziel erkennen<sup>3</sup> lassen, stehen sie wie

I Gereihet] above del. In langen Reihen 2 die] after del. in friedlichem Kampfe 3 erkennen] after del. dem Eingeweiheten

275.43 **verrathen**] *above del.* enthüllen, *after del.* erkennen lassen, *after del.* dem Eingeweiheten 275.45 **Zukunft.**] *altered from* ~, *before del.* das zu den ernstesten Betrachtungen und Muthmassungen über dessen endliche Lösung auffordert.

276.2 Zierlichkeit,] before del. ohne über müssiges die Form überwucherndes Beiwerk die Form überwucherndes] *after del*. ornamentales alle die] inserted after del. ornamentales Beiwerk, die 276.3 meistentheils] inserted after del. ein rastloses prinziplos 276.4 Mustern] after del. ungewohnte giebt] above del. geben aber in] after del. ohne sich jemals and before del. dem falschen Zirkel 276.7 Zeiten] before del. und Civilisationszuständen 276.10 Und dieses nur in den besseren Fällen;] repl. del. Doch sind dieses noch die besseren Bestrebungen unserer modernen Kunstindustrie, in welcher Meistens] M over m gerirt sich] inserted 276.10-11 in unserer modernen Kunstindustrie] above del. sich 276.12 Originalität] before del. gerirt wird] interl. 276.14 **geboten.**] altered from  $\sim_{\wedge}$  before del. wird. 276.18–19 walten; altered from  $\sim_{\wedge}$  before del. das wenn es auch diessmal noch mit seinem Endurtheile zurückhält, dennoch gewiss sehr bald 276.19 Inderna] altered from ~, und] interl. **Arabern**,] *altered from*  $\sim \land$  *before* 276.19-20 Kunstfertigkeit und] interl. 276.20 Geschmack] bedel. und Chinesen, fore del. in gewissen Theilen der Industrie wir schon] after del. wir 276.22 werden.] altered from  $\sim_{\wedge}$  before del. und zwar in F

#### MS 94<sup>14</sup>

Selbst denen, die der allmählichen Enthüllung der das Ausstellungsgebäude füllenden Gegenstände von Anfang her zu verfolgen Gelegenheit hatten und ihre Zeit ganz der Prüfung derselben widmen konnten, wird es schwerlich bereits gelungen seyn, über die Fülle des Gebotenen nur eine allgemeine Uebersicht gewonnen zu haben; Eine vergleichende, in das Einzelne übergehende Critik des noch so lückenhaften Ganzen liesse sich

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fol. 17r

277.1 **der allmählichen**] 'die allmähliche' 277.2 **Prüfung**] repl. del. Prüfung und Vergleichung Prüfung und] above del. prüfenden 277.4 **Eine**] after two del. variants:

Noch weniger würde sich eine vergleichende Critik, <sup>1</sup> über das noch so lückenhafte Ganze bisjetzt rechtfertigen können.

Eine vergleichende oder gar in das Einzelne gehende Critik

I **Critik**, ] *before del*. und ein *before del*. über das noch so lückenhafte Ganze *before del*. ein allgemeines Urtheil

#### MS 94<sup>15</sup>

fol. 157Lang gereihet stehen sie da bald in bewegungsloser, unheimlicher Ruhe, gleich einer<br/>schlagfertigen Phalanx bei der Musterung, bald geräuschvoll ihre Kraft und Gewandheit<br/>vor der erstaunten Menge übend. Sie bieten mit ihren Hebeln und Rädern, von denen wir<br/>ahnen, dass sie die Welt erobern müssen, ein unenthülltes Geheimniss der Zukunft. Ver-<br/>wegen wäre es über das letzte allgemeine Resultate ihres Wirkens in Beziehung auf die<br/>socialen Verhältnisse des Menschengeschlechtes Vermuthungen zu wagen. Bis jetzt geben<br/>diese stummen Werkzeuge kaum mehr als ihr nächstes materielles Ziel zu erkennen und<br/>Zeugnisse ihres Wirkens, Leistungen, deren Vollendung Zweckdienlichkeit und Wohlfeil-<br/>heit kein menschlicher Fleiss keine menschliche Geschicklichkeit erreicht, treten überall<br/>entgegen, wohin der Blick sich wendet. Kaum eine von den verschiedenen Kategorieen des<br/>menschlichen Kunstfleisses die in der Industrieausstellung repräsentirt sind, ist frei von<br/>ihrem Einflusse geblieben.

то

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278.1 Lang] after four fragments of variant del. in unclear sequence:

Als rastlos fleissige geschickte und unbedingt gehorsame Arbeiter bieten sie ihre tausend Briareusarme dienstwillig<sup>1</sup> jeglichem Dienste, und keine menschliche Geschicklichkeit erreicht nach langen Mühen, was sie in Augenblicken schaffen,<sup>2</sup> und ihre Werke Verwegen wäre es über das letzte Resultat der socialen Umwälzungen die sie herbeiführen müssen, Vermuthungen aufzustellen

Die nächsten Ergebnisse ihres Wirkens, deren Zweckdienlichkeit, Wohlfeilheit und Vollendung keine menschlicher<sup>3</sup> Fleiss, keine Handgeschicklichkeit erreichen kann,

Lang gereihet stehen sie da in bewegungsloser, fast unheimlicher Ruhe, gleich einer schlagfertigen Phalanx bei der Musterung vor dem Kampfe oder sie üben ihre Kraft und Geschicklichkeit zum Schauspiele der staunenden Mengen in

1 dienstwillig] *above del.* willfährig 2 schaffen,] *altered from* ~. *before del.* Treu ergebene Knechte 3 menschlicher] *altered from* menschliche *before del.* Geschicklichkeit

278.1 unheimlicher] after del. fast 278.3 Rädern] above del. Armen 278.5 Resultate] 'Resultat' 278.6 Bis jetzt] above del. Jetzt 278.8 Zeugnisse] after del. ihr Wirken Vollendung] after del. Wohlfeilheit 278.11 ist frei] after del. ist von von] after del. ihrem Einflusse

#### MS 94<sup>16</sup>

in dem falschen Zirkel der Nachahmung älterer Weisen gebannt bleibt, die desshalb ihr ewiges Anrecht auf Bewunderung behaupten, weil sie der sprechende Ausdruck von Zeiten sind, die mit sich und der sie beherrschenden Idee mehr fertig waren, als es die unsrige ist, die aber nur zu larvenhafter und der wahren Blutwärme ermangelnder Scheinexistenz an

- 5 Werken unserer Zeit wieder aus der Vergangenheit heraufbeschworen worden sind. Und diess sind noch die besseren Erscheinungen unserer Europäischen Kunstindustrie, in welcher in den meisten anderen Fällen sich ein Durcheinander von allseits her entlehnten mit grundsatzloser Willkür zusammengewürfelten Motiven als Originalität gerirt und der allgemeinen Richtung zum Nützlichen durch gänzliche Nichtachtung der durch den Zweck gebotenen Form der Gegenstände bei ihrer ornamentalen Ausstattung Trotz gebo-
  - Zweck gebotenen Form der Gegenstände bei ihrer ornamentalen Ausstattung Trotz geboten wird. – Dabei ist es interessant zu verfolgen, wie das Maschinenwesen, indem es jenem Unsinne scheinbar dient und zu wohlfeiler Vervielfältigung seiner Einfälle benutzt wird, sein ärgster Feind ist und das bevorstehende Ende seines Reiches beschleunigt

279.1 desshalb] after del. an alten Werken 279.5 wieder aus der Vergangenheit] inserted heraufbeschworen] after del. wiederbel 279.6 Und] after del. Die künstlerische Gestaltung after del.

Und diess sind noch die besten Erscheinungen unserer <sup>1</sup>Europäischen Kunstindustrie, bei welcher in den meisten Fällen ein Durcheinander von allseits her entlehnten heterogenen<sup>2</sup> mit grundsatzloser Willkür zusammengeworfenen und sich der allgemeinen Richtung zum Zweckmässigen und Nützlichen entgegen

1 unserer] repl. del. der modernen 2 heterogenen] before del. Motiven

279.6 **besseren**] *above del.* besten 279.9 **Nichtachtung**] *before del.* des Zweckmässigen 279.11 **Dabei**] *after del.* 

Dabei ist es interessant<sup>1</sup>, wie das Maschinenwesen dadurch, dass es zu wohlfeiler Vervielfältigung des ornamentalen Schmuckes benutzt wird, und jenem Unsinne dienen muss, dem<sup>2</sup> bevorstehenden Ende seines Reiches

1 interessant] above del. seltsam 2 dem] after del. mit furchtbarer

279.11 **das**] *before interl. and del.* die Errungenschaften des Wissens er 279.12 **seiner Einfälle**] *interl. before del.* des ornamentalen Schmuckes 279.13 **beschleunigt**] *after del.* mit E. fol. 13r

# Letters on the Great Exhibition

# Outline

## **TEXTUAL RECORD**

$MS 95^{1}$	gta, 20-Ms-95, fol. 5r-v (5v blank), 'Plan des Aufsatzes', in Semper's hand,
	version 1
MS 95²	gta, 20-Ms-95, fol. 7r-v (7v blank; variant of MS 95 <sup>1</sup> ), in Semper's hand, version 1
MS 95 <sup>3</sup>	gta, 20-Ms-95, fol. 3r (3v see 287, MS 95 <sup>10</sup> ), 'Plan des Aufsatzes', in Semper's
	hand, version 2
$MS 95^4$	gta, 20-Ms-95, fols. 11–2v, in Semper's hand, version 3, <i>copy-text</i>
$MS 95^5$	gta, 20-Ms-95, fol. 15r–v (15v blank), in Semper's hand
$MS 95^{6}$	gta, 20-Ms-95, fol. 11r-v (11v blank; possibly variant of MS 95 <sup>4</sup> , fol. 1v; variant of
	MS 95 <sup>5</sup> ), in Semper's hand
MS 95 <sup>7</sup>	gta, 20-Ms-95, fol. 16r–v (16v blank), in Semper's hand
MS 95 <sup>8</sup>	gta, 20-Ms-95, fol. 14r-v (14v blank; possibly variant of MS 95 <sup>4</sup> , fol. 1v; variant of
	MS 95 <sup>7</sup> ), in Semper's hand

**BIBLIOGRAPHY** Herrmann 1978, 52 n. 170; Herrmann 1981, 101, 104; Herrmann 1984, 273 n. 165; Hildebrand 2003, 263; Hildebrand 2007, 245–7; Luttmann 2008, 124, 128–32

### **EXPLANATORY NOTES**

Semper's unpublished essay on the Great Exhibition in the form of a series of letters is extant only in numerous fragmentary drafts of an outline and of the first two letters, which have Lothar Bucher as their unnamed addressee. Semper mentions the letters as being addressed to Bucher in one of the drafts of the second letter (288.2). He was working on this essay while Bucher's series of essays on the 'Gewerbeausstellung aller Völker' (Industrial Exhibition of All Peoples) was being published in the Berlin National-Zeitung from May to July 1851. In speaking of 'Bucher's ingenious expression' that the Great Exhibition offered a 'cross section of cultural history' (29.1–2), he indirectly referred to Bucher's essays (published in book form as Kulturhistorische Skizzen aus der Industrieausstellung aller Völker by the end of 1851). Semper tried to develop, as he wrote in one of the drafts, an 'Explanation of an architectonic survey of the Exhibition's contents and results' (283.2-3). He considered ways of carrying out a 'systematic examination of the objects in the exhibition' with the aim of carrying out a classification of them reflecting the history of knowledge, modelled on 'comparative architecture' as the intellectual 'creator' and 'orderer of a comparative cultural history' (27.6–7, 27.11–14, 29.17–19). The manuscript bundle contains eight drafts of the outline, three drafts of the first letter and two of the second. Another five single manuscript sheets with drafts of passages either intended for this essay series or for Science, Industry, and Art are not detailed here. In Science, Industry, and Art, Semper referred to the idea he had had, around the time of the opening of the Great Exhibition, 'to give a comparative overview of its contents in a series of essays' (Semper 1852, 5-7). Bucher's expression 'cross section of cultural history' also made it into one of Semper's drafts of 'Comparative Architecture'

(gta, 20-Ms-97), which he referred to in the draft of the second letter (30.15–17). It also appears in the manuscript of the catalogue of 'Practical Art in Metals and hard Materials' of 1852, in which Semper stated that 'A complete and universal Collection must give, so to speak the longitudinal Section, the transverse Section and the plan of the entire Science of Culture' (NAL, 86.FF.64, art. 1, 15; cf. Semper 2007a, 55). Similarly, one of the draft letters addresses 'the complete and comparative museum of the future' (288.5–6).

27.4 gehorheich] gehorche ich 27.6 **sytematischer**] systematischer 27.7 Gegenstande Gegenstände 27.15 der Formeln] den ~ 27.19 Gegenstande] Gegenstände 27.21 offnet] öffnet 27.26 **s.**] so 27.29 Maroketti] Marochetti 28.7 **D.**] Die Gottlichkeit Göttlichkeit **d**.] des 28.27 **v** von 28.33 1t I tes 28.34 **d**.] die fangt *fängt* 28.35 **d.**] dem 28.37 Lehrsatze] Lehrsätze 28.39 **d**.] des 29.5 **fruherer** *früherer* 29.6 d.] der 29.20 tritten] treten (cf. 282, Alterations in the Manuscript 29.20)

# EDITORIAL EMENDATIONS

29.21 in einander] in | einander

# ALTERATIONS IN THE MANUSCRIPT

27.5 es seinem Ermessen überlassend] *after del.* indem es frei steht *after del.* mit dem Bemerken 27.6 zu] *after del.* bei Musterung] *after del.* Beurtheilung 27.7 Gegenstande] Geg over Exp Wäre] *after two del. beginnings of variant:* 

Ein guter Plan muss nicht bloss den bloss äusserlichen Erfordernissen der Ordnung Uebersichtlichkeit und

Wäre die Aufgabe damit gelöst, dass<sup>1</sup> er neben der Uebersichtlichkeit Symmetrie und Ordnung

1 dass] after del. einen Plan

27.7 wenn] before del. es einem gelang27.7-8 ein solcher Plan] after del. nach einembestimmten Systemenach ~ Systeme] before del. alles sich übersichtlich27.8 enthiel-te] before del. und der reiche Stoff sich ausserlich27.14 mehr] after del. mit einem Worte27.15 Formeln] n added27.18 übertrifft. -] before del.

Sammlungen Geschichte derselben<sup>1</sup>, Querdurchschnitt der Culturgeschichte. Rumpelkammer

I Geschichte derselben] underl.

27.25 **Ostende**] *after del.* Westende. England, Colonien 27.32–3 **u. Maschinen**] *interl.* 28.9–10 **Erfindungen der Einzelnen**] *before del.* die bloss Ausdruck 28.10 **Ausdruck des**] *before del.* Gesammt 28.16 **abstrakt**] *before del.* mangel *before del.* unvollkommen 28.22 der menschlichen Wissens] der before del. Wissenschaften 28.23 beschliesst] after del. 28.25 Scheidens] interl. 28.26 Critik] after del. Sammlungs beginnt 28.29 Erforschen] *after del*. Zurückführen der entferntesten 28.33 Naturwissenschaften] after del. Naturgeschichte after del. Geschichte der Sammlungen Newton] after del. Cuvier **Leibniz**] *above del*. Cuvier 28.34 ausser der] before del. todten before del. nur 28.36 Betracht] above del. Rechnung behandelte] before del. Lehrsätze 28.41 geborene after del. entstandene

29.1 **Querdurchschnitt**] *before del.* athnographischer 29.5 Erkenntniss] after del. Combinati 29.7 antiken Studien] after del. Kuns[t] 29.8 thatenkräftiges] th over kr 29.14 fehlt] altered from führt before del. dieser Ordnung dieser] altered from diese 29.18 Schaffnerin] interl. 29.19 Die] interl. after del. Die Baukunst ist das Haus 29.20 tritten] altered from tritt 29.22 Bibliotheken.] before del. Räumliches Wissen, Korper okulares Wissen, linguistisches Wissen, linguistisches] after del. phone 29.25 den Stoffliche] Stoffliche altered from Stoff Zeitliche und Oertliche] interl. 29.28 u. Angemessenheit] interl.

# MANUSCRIPT VARIANTS MS 951

#### Plan des Aufsatzes..

Zum erstenmale ein kulturphilosophischer Ueberblick über Vergangenheit, Gegenwart und Zukunft gestattet. und es wäre sicher nicht die unwichtigste Folge welche dieses grosse internationale Unternehmen haben könnte sollte es einem

> 282.2–4 **Zum ~ sollte es einem**] *del. in pencil* 282.2 Zum] Z over D 282.3 gestattet.] before del.

> Schwierigkeit<sup>1</sup> Sollte es Begabteren gelingen die höheren Beziehungen zusammenzufassen und<sup>2</sup>

I Schwierigkeit] underl. 2 und] after del. so würde da

#### MS 95<sup>2</sup>

fol. 7r Wie von der Terrasse eines geschickt angelegten Belvedere dem Blicke die Herrschaft über 5 waldige Bergtriften gelingt, so gestatten vielleicht die Gallerieen des Crystallpallastes zum erstenmale einen umfassenden Ueberblick über die gesammte vergleichende Culturphilosophie und es wäre sicher nicht der geringste Gewinn, den dieses grossartige internationale Unternehmen zur Folge hätte, wenn es einem umfassenden Geiste gelänge, den überschwänglichen Reichthum des dargebotenen Stoffes einer Doctrin zu vindiziren und unterzuordnen, welche auf wahren Prinzipien begründet wäre Lebensfähigkeit genug besässe, das Nothwendigkeit Werdende aus dem Gewesenen und Seyenden zu folgern und letzteres zu zwingen sich vor dem denkenden Bewussseyn zu rechtfertigen.

282.5 **Wie**] after del.

Wie von der Terrasse eines geschickt angelegten Belvedere dem Blicke die Herrschaft über waldige Bergtriften gelingt, so bieten die Gallerieen des Crystallpallastes zum erstenmale einen umfassenden<sup>1</sup> Ueberblick über die gesammte<sup>2</sup> vergleichende<sup>3</sup> Culturphilosophie. Hiervon überzeugt sich selbst der einfache Fachmann bei der Fülle der Beobachtungen und darauf begründeten Inductionen die schon in seiner beschränkteren<sup>4</sup> Sphäre<sup>5</sup> sich ihm aufdrängen. Er muss es Befähigteren überlassen den Blick zu jenem höchsten und

 I umfassenden] above del. weiteren vergleichenden
 2 gesammte] before del. Culturphilosophie. der Menschheit

 J vergleichende] interl.
 4 beschränkteren]

 altered from beschränkten
 5 Sphäre] before del. des Beobachtens

282.6 gestatten vielleicht] above del. bieten 282.7 einen] after del. vielleicht 282.10 einer] after del. einer Doctrin zu unterwerfen, welche after del. in diesem Sinne der Wissenschaft zuzueignen in letzterer die Doctrin] underl. Doctrin] after del. lebendigen 282.11 auf wahren Prinzipien begründet wäre] interl. 282.12 Nothwendigkeit] interl. Gewesenen] wesenen over del. wordenen und Seyenden] interl. und letzteres] after del. und die Irrationalitäten Widersprüche und Unvernünftigkeiten des letzteren aus aus] after del. nachzuw 282.13 Bewussseyn] 'Bewusstsein'

#### MS 953

### Plan des Aufsatzes.

Endzweck. Darlegung einer architectonischen Ueberschau über Inhalt und Ertrag der Ausstellung.

*Einleitung*. Die L. Ausstellung kann als der Anfang einer neuen Aera der Culturgeschichte betrachtet werden Die Wahrheit dieser Ansicht kann nicht in Zweifel gezogen werden aber

- 5 betrachtet werden Die Wahrheit dieser Ansicht kann nicht in Zweifel gezogen werden aber ihre Weiterfuhrung und Verfolgung im Einzelnen kann doch nur zu mehr oder weniger scharfsinnigen Hypothesen führen, von wenig praktischem Interesse. Sie kann zweitens als der letzte Ausdruck von Zuständen gelten, die schon in das Leben getreten sind und hier zum erstenmale fasslich vor die Augen treten. Von diesem Gesichtspunkte aus betrachtet
- <sup>10</sup> muss sie auf positivere Resultate führen und praktisches Interesse nach allen Richtungen hin bieten.

Diese Aufgabe vom höchsten kulturhistorischen internationalen politischen Standpunkte aus anzugreifen muss höheren Begabten überlassen bleiben

Aber es hat ein Jeder das Recht es von seinem engeren Standpunkte aus so zu betrachten
und die Richtigkeit der Behauptung für das Feld das er zu übersehen vermag zu verfolgen.
Erst Wenn diess von vielen Seiten aus geschehen ist, kann die allgemeine Auflösung erfolgen. Diess ist der Gang der Entwickelung jeglicher Materien.
Diess rechtfertige mein Vorhaben, die Bedeutung d. Sammlung von dem Standpunkte der Architecturgeschichte zu betrachten.

20 Die Extreme berühren sich; In diesem abgenutzten Gemeinspruch liegt eine höhere Wahrheit verborgen. Das Ende knüpft an den Anfang an in der Bahn der Himmelskörper so wie in dem Laufe der Entwickelungen menschlicher Verhältnisse Alles war schon einfol. 3r

mal da. Nur dass die durchlaufenen Bahnen keine geschlossenen Kurven sondern Spirallinien sind, denn sonst wäre kein Fortschritt, der doch sonst evident ist unmöglich. Die Wissenschaften haben die Herrschaft über die Praxis erworben und sind, verbunden mit dem Spekulationsgeiste dem Bedürfnisse vorangeschritten der Bedarf geht nicht mehr zu Markte, sondern der Markt schafft neuen Bedarf.

> 283.2 Inhalt und] above del. den kann] after del. reiht d 283.4 L.] 'Londoner' 283.5 betrachtet werden] before undel. und von before del. diesem Gesichtspunkte aus kann der Scharfsinn zu Hypothesen führen. 283.6 Weiterfuhrung] 'Weiterführung' 283.12 kulturhistorischen] *before del.* und 283.13 höheren] after del. einem bleiben] before del. Aber 283.14 hat] above del. darf das above del. mit 283.15 und before del. zu zeigen **Feld**] *after del.* eng 283.16 Erst] above del. Dadurch geschehen] altered from geschieht before del. , kann es 283.18 **d.**] 'der' 283.20 abgenutzten] interl. 283.21 verborgen.] after del. gebo and before del. Die Geschichte des Fortschreitens der Bewegung

> 284.2 unmöglich] 'möglich' 284.3 Wissenschaften] before del. in ihrer Anwendung auf das Nützliche 284.4 Spekulationsgeiste] before del. und der Industrie der Bedarf] after del. der Markt ist after del. welches sie

#### MS 955

*fol. 151* Ordnung von eigentlich ganz zufälligen Dingen abhängig machen; Dort von der Disposition des Hauses. und dem durch sie geleiteten Zuge der Neugier, hier von dem willkürlichen Uebereinkommen bei der Vertheilung des Raumes und den fast ebenso willkurlichen politischen Eintheilungen der Völker; Beide ermüden durch Monotonie und erschweren das Erkennen der Unterschiede und Eigenthümlichkeiten mehr noch

> 284.6 machen] en *above del.* t 284.7 **Hauses**.] *before del.* und dem Raum 284.8 fast] *interl.* willkurlichen] *'willkürlichen'* 284.9 **Monotonie**] *after del.* die 284.10 das **Erkennen**] *repl. del.* die Vergleichung

#### MS 956

fol. 11r

Ordnung von eigentlich ganz zufälligen Dingen abhängig machen, dort von der Disposition, welche der Architect dem Hause gab und dem durch sie geleiteten Zuge der Neugier, hier von willkürlichem Uebereinkommen bei der Vertheilung der Räume und den fast eben so willkürlichen politischen Eintheilungen der Völker. Beide ermüden durch Monotonie und erschweren die Vergleichung, die erst zuletzt, nachdem man sich durch das Ganze durchgearbeitet und über dem Einen das Andere zum Theil vergessen hat, erfolgen kann. Beide Pläne lassen nichts aus, auch verhindern sie keinen, der sie befolgt, in ihr Maschenwerk ein noch so reiches und buntes Muster von Einfällen des Geistes und der Laune hineinzusticken, aber sie leiten nicht, wie sie sollen, von selbst auf diejenigen Resultate, worauf es hauptsächlich ankommt.

Scheinbar organischer ist das System, welches mit den Rohstoffen anfängt, dann zu den Werkzeugen und Maschinen zu ihrer Verarbeitung übergeht, zuletzt die Fülle der Erzeugnisse unseres Kunstfleisses nach den Stoffen aus denen sie bestehen gruppirt, und nur das 5

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hierin Gleichartige der verschiedenen Länder zusammenhält. Es hat aber genau genommen wenig voraus vor den beiden zuerst genannten Wegen der Vergleichung, ist eben so äusserlich und materiell und

284.11–12 Ordnung ~ durch] first three lines of manuscript over 6. 284.13–14 eben so] eben so 284.14 ermüden] above del. erschweren 284.15 zuletzt,] altered from ~ hefore del. erfolgen kann, 284.16 zum Theil] interl. 284.17 Beide] after del. Der Plan befolgt,] before del. ihnen durch 284.20 ankommt.] before del. Was 284.23 und] after del. nur das hierin Gleichartige bei den verschiedenen Zusammenhälten und für die Industrie der verschiedenen Völker nach einer gewissen Anzahl von Categorieen 285.2 eben] after del. ebenfalls

#### MS 957

Ein solches System der Ordnung hat seine grossen Bequemlichkeiten. Es kann alles in sich aufnehmen und jedem seine Zelle zutheilen, aber das Zusammenwachsen der äusserlich zusammengehaltenen und geregelten Massen zu organischem Leben ist damit noch nicht erreicht. Da es darauf nicht hinwirkt, ist es auch unfähig jener anarchischen Zerfahrenheit Einhalt zu thun, von welcher oben die Rede war. – Mich dünkt, dass alle bisherigen Versuche, den in dem Hyde Park zusammengetragenen Stoff systematisch zu ordnen, an demselben Gebrechen der

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285.4–10 Ein ~ Gebrechen der] *del.* 285.5 jedem] *below del.* es ihm 285.7 darauf nicht hinwirkt,] *above del.* dieses nicht vermag, 285.8–9 bisherigen Versuche] *after del.* 

hinwirkt,] above del. dieses nicht vermag, 285.8–9 bisherigen Versuche] after del. bisher befolgten Pläne, befolgten] above del. beobachteten 285.10 der] before undel. [U]

#### MS 958

Ein solches System der Ordnung hat seine grossen Bequemlichkeiten und Vortheile. Es kann alles in sich aufnehmen und es zusammenhalten, aber das Zusammenwachsen der äusserlich verbundenen und geregelten Massen zu organischem Leben vermag es nicht zu erzwingen. Da es dieses nicht vermag, sind aber auch alle seine Vortheile der Kollectivität und Uebersichtlichkeit nur scheinbar und ungeachtet aller Regeln und Fächer giebt sich jene anarchische Zerfahrenheit kund, von

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285.13 verbundenen] *after del.* zusammenge (probably for 'zusammengehaltenen'; see 285.6) Massen] n added 285.14 aber auch] interl. 285.15 ungeachtet] after del. den Regeln und Vorschriften fol. 16r

fol. 14r

# **Draft of First Letter**

# **TEXTUAL RECORD**

- MS 95<sup>9</sup> gta, 20-Ms-95, fol. 4r-v, in Semper's hand
- MS 95<sup>10</sup> gta, 20-Ms-95, fol. 3v (3r see 283-4, MS 95<sup>3</sup>; variant of MS 95<sup>9</sup>), in Semper's hand

*MS 95<sup>11</sup>* gta, 20-Ms-95, fol. 10r-v (10v blank; variant of MS 95<sup>10</sup>), in Semper's hand, *copytext* 

### ALTERATIONS IN THE MANUSCRIPT

29.30 das] above del. mein gegebene] altered from gegebenes 30.1 Es] above del. Mir 30.2 ideellen] after del. geistigen 30.4–5 innerhalb] after del. in jenen grossen 30.5 Grundideen] ideen above del. motiven

# MANUSCRIPT VARIANTS MS 959

fol. 4r Lieber Freund

fol. 4v

Ich habe das Ihnen gegebene Versprechen über den Inhalt unserer neulichen Unterhaltung einen Aufsatz zu schreiben, seitdem stets im Kopfe herumgetragen und war bei meinen täglichen Wanderungen durch den Hydeparkpalast ämsig beschäftigt, die dort angehäuften Gegenstände im Geiste nach einem Systeme zu ordnen, welches bei der grossen Schwierigkeit in der Wahl eines Planes zu systematischer Musterung derselben, die jedem der ernstlich darüber nachdachte entgegen getreten seyn wird, mir noch immer als dasjenige erscheint, ¦ welches die *inneren* Verbindungsfäden dieser bunten Welt von Gegenständen am besten zusammenhält. –

Bei diesen Versuchen fügte sich alles wie von selbst zusammen, was durch Raum Zeit und Stoff getrennt war, und die

286.1 Lieber] after del.

Lieber Freund!

Ich habe das Ihnen gegebene Versprechen über den Inhalt unserer neulichen Unterhaltung einen Aufsatz zu schreiben, seitdem stets im Kopfe herumgetragen und war bei meinen täglichen Wanderungen durch den Hydepark-Palast ämsig beschäftigt, die dort angehäuften Gegenstände im Geiste nach einem<sup>1</sup> Systeme zu ordnen, welches<sup>2</sup> mir bei der grossen Schwierigkeit der Wahl eines Planes zu systematischer Musterung der Gegenstände dieser Ausstellung

1 einem] altered from meinem 2 welches] after del.

Besticht mich das Gefühl der Vaterschaft oder ist es wirklich der Fall – ich finde dass bei der grossen Schwierigkeit der Wahl eines Planes zu systematischer Muste5

то

rung der Gegenstände dieser Ausstellung, die jedem der ernstlich darüber nachdachte, entgegen getreten seyn wird, die architectonisch vergleichende Anordnung derselben immer noch die meiste Logik enthält und wie von selbst auf die

286.8 welches] after del.

welches<sup>1</sup> die inneren Verbindungsfäden dieser bunten Welt von Gegenständen am besten zusammenhält und<sup>2</sup> ihren Zusammenhang nicht bloss von örtlichen, zeitlichen und stofflichen also bloss zufälligen und äusserlichen Bedingungen oder gar von ihrer noch zufälligeren räumlichen Vertheilung innerhalb des Gebäudes abhängig macht.

1 welches] *after del. on fol. 4r–v* welches nicht bloss meinem | Standpunkte der Anschauung dieser Gegenstand[e] entspricht, sondern 2 und] *after del.* und vielleicht, später bei grösserer Entfaltung des Gedankens einer permanenten kulturhistorischen Sammlung

#### MS 95<sup>10</sup>

#### Lieber Freund

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Ich habe den Inhalt unseres neulichen Gespräches und mein Ihnen gegebenes Wort darüber einen Aufsatz zu schreiben, seitdem stets im Kopfe herumgetragen und war bei meinen fast täglichen Wanderungen durch den Hydepark Pallast beschäftigt, die Sachen auf bauwissenschaftlicher Basis im Geiste zu ordnen. Es wurde mir immer klarer, dass dieser Plan vor allen anderen den grossen Vorzug besitzt, die intimeren Verbindungsfäden dieser bunten Welt von Gegenstanden am besten zusammenzuhalten, und dass er den Blick auf gewisse unverrückbare Punkte leitet, die uns gestatten, bei der Beweglichkeit sowohl des eigenen Standpunktes der Beobachtung wie der uns umgebenden Erscheinungen deren gegenwärtige Lage und Richtung sowohl der Zeit als dem Raume nach richtig zu bemessen.

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287.4 Hydepark Pallast] Hydepark | Pallast auf] after del. nach 287.5-6 vor allen anderen] *interl*. 287.7 Gegenstanden] 'Gegenständen' und dass er] after del. und dass sich aus ihm after del. und dass er von selbst auf gewisse unverrückbare Punkte leitet, die uns gestatten after del. und dass dessen Folgerungen von selbst auf dasjenige führen, den Blick] after del. wie von selbst was after del. ohne dass 287.9-10 gegenwärtige] repl. del. wahre 287.10 **Richtung**] *before del*. zu bemessen. zu bemessen.] after del. zu sowohl] after del. Dieselben Haltpunkte dienen aber auch zu der Beurtheiberechnen. lung früherer und entfernterer Dieselben] after del. Denselben Halt gewährt er zu der Beurtheilung richtig] inserted bemessen.] altered from ~, before del. ein Vorzug den keine anderere Disposition Disposition] before three del. variant parts of next sentence:

Dadurch zwingt er <sup>1</sup> uns zu der Anerkennung gewisser Thatsachen und Erscheinungen im äusseren, deren richtige Würdigung verbunden mit

Dadurch zwingt er uns gewissermassen zu der Anerkennung der Ursachen gewisser Erscheinungen in nicht<sup>2</sup>

Ohne diese wichtige Eigenschaft desselben, würde jeder<sup>3</sup> andere noch so

1 zwingt er] after del. führt er after del. leitet er 2 Erscheinungen in nicht] each word del. separately 3 jeder] after del. ich fol. 30

# **Draft of Second Letter**

## **TEXTUAL RECORD**

MS 95<sup>12</sup> gta, 20-Ms-95, fol. 6r-v (6v blank), '2<sup>ter.</sup> Brief', in Semper's hand

MS 95<sup>13</sup> gta, 20-Ms-95, fols. 8r–9v (8v, 9v blank; variant of MS 95<sup>12</sup>), in Semper's hand, copy-text

#### **EXPLANATORY NOTES**

30.8 **P. P.**] *praemissis praemittendis*; 'premising what is to be premised', 'as above', referring to the addressee: in first letter 'Lieber Freund!' 30.17 **Buchhandleres**] *Buchhändlers* **V**.] *Vieweg* 30.21-2 **unabhangig**] *unabhängig* 

# ALTERATIONS IN THE MANUSCRIPT

30.9 Sie] before del. mir 30.12 eigenen] after del. meinen Ein] above del. Mein ganzer
30.16 Werk] before del. von mir 30.28 ihren] above del. seinen 30.31 an] interl. Stärken] altered from ~, before del. raschere Entwickelung
31.3 unnütz] after del. als and before del. zu beseitigen 31.8 die Druckmaschine] interl.

### MANUSCRIPT VARIANTS

MS 95<sup>12</sup>

fol. 6r

2<sup>ter.</sup> Brief.

Lieber Freund

Anfang eines Briefes an L. Bucher. im Jahre 1852.

Was Sie mir neulich über die Geschichte der Sammlungen sagten, über das Durchgehen derselben durch drei Phasen bis zu dem vollständigen vergleichenden Museum der Zukunft, deren Ansatz Sie mit Recht in dem "Crystallpallaste" sehen, fällt auffallend mit meinen eigenen Ansichten zusammen; Mein ganzer Plan einer wenn auch vorerst nur im Gedanken ausführbaren Organisation dieser Sammlung, den ich wie Sie wissen schon lange hege, ist darauf begründet, und dieser hangt wieder eng zusammen mit ganz verwandten Ideen über vergleichende Baukunde über welche ich seit Jahren meditire und ein halb fertiges Werk von mir bereits in den Händen des Buchhändlers V. ist. Es herrscht ein vom individuellen Streben unabhängiges Walten des Mikrokosmus eine Spontaneität in der kollectiven Menschheit durch die sie sich als denkendes selbsthandelndes Individuum hoherer Gattung kund giebt. Gewisse Weltgedanken machen sich von selbst Bahn wenn die Zeit dazu reif ist, frei und unabhängig von dem Sinnen und Trachten des Einzelnmenschen, der bloss zuweilen rechtzeitig genug den Ausdruck des reif gewordenen Weltgedankens fand, um ihm als Geburtshelfer zu dienen. Gehen Wahrheiten nicht gleichen Schrittes mit dem ruhig fortwaltenden voüc der Gesellschaft, so sind sie es nicht, sondern

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Irrthum und krankhafte Rebellion des Gliedes gegen das Ganze, zuweilen auch Zuckungen des ungeborenen im Schoosse der Zukunft verborgenen Weltgedankens und des Marthyrerthums der Menschenretter etc. Sie verschwinden wie Phänomene

Dagegen kann nichts den Gang der Menschenidee aufhalten, was sich ihr in den Weg stellt, wird von den neuen saftigen Sprösslingen der Zeit aus den Fugen gerissen oder umwuchert, und dient zu reicherer Gestaltung das sonst eine zu schematische und unseren historisch erzogenen Sinnen nicht schmackhafte Form angenommen hätte.

Der Gedanke gewinnt in diesem Kämpfe mit dem Alten Stärke raschere Entwickelung, historische Haltung und Farbe. So wirkt die Reaction gerade in den Entwickelungsperioden des Menschenthums am thätigsten und ihr Widerstand dient der kreisenden Zeit als

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nothwendiger. Stützpunkt. Nur diejenigen, die nach ihrem vorwitzigen Ermessen bald vorwärts bald rückwärts drängen, und über dem Kampfe zu stehen glauben werden sind unnütze und schädliche Kräfte.

> 288.1 2<sup>ter.</sup>] after Lieber Freund turned upside down near bottom of page 288.I-3 Anfang eines Briefes an L. Bucher. im Jahre 1852.] in pencil (in Semper's hand, probably early 1870s) 288.1 Anfang] after in pencil and del. in pencil Angefangene 288.2 L.] 'Lothar' der] after del. ihrer ethnogra-288.3 **1852**] '*1851*' 288.5 dem] inserted before del. der phisch-historischen Vollständigkeit vergleichenden] after del. Sammlung der 288.7 eigenen] interl. 288.10 über welche] after del. an welcher ich nun schon seit 288.11 von mir] *interl*. bereits] after del. bereit after del. im Schreibtische V.] 'Vieweg' 288.12 individuellen] after del. menschlichen 288.13–14 hoherer] 'höherer' 288.16 der] above del. dessen Genie rechtzeitig] above del. frühzeitig 288.17 Gehen] altered from Geht after del. Kommt er damit vor der Zeit zum Vorschein, so gilt er nicht nur als Träumer und Schwärmer, sond Wahrheiten] above del. Erfindungen Erfindungen] after del. letztere (letztere above del. das Genie mit seinen) 288.18 es] after del. nicht Gedanken nur Einfälle, und der

> 289.2-3 **im Schoosse ~ Phänomene**] *inserted after del*. Weltgedankens. etc etc 289.5 **wird**] *before del*. umgestossen 289.5-6 **umwuchert**] *after del*. so 289.6 **und dient**] *after del*. dass es 289.8 **Kämpfe**] *Kampfe*' **Stärke**] *before del*. Gestaltung und Gestaltung und] *after del*. und 289.9 **Reaction**] *before del*. für für] *after del*. als nothwendige Kraft 289.9-10 **Entwickelungsperioden**] *after del*. Zeiten der 289.10 **dient**] *after del*. giebt in den Mutterwehen 289.11 **nothwendiger**.] *interl*. 289.13 **und über**] *after del*. die

# Notes on Exhibits

# TEXTUAL RECORD

MS 96 gta, 20-Ms-96, eight individual manuscript units with notes in pencil, in Semper's hand, *copy-text* (with the exception of the first unit)
 <sup>1</sup>fols. IT-4v: notes on the Salon of 1849 in Paris, with brief discussions and some sketches of works by Auguste Girardin, Pierre-Joseph Garrez, Victor Ruprich-Robert, Jules Bouchet (see Explication des ouvrages 1849)
 <sup>2</sup>fols. IT-2v (IT-2r printed matter): notes written on prospectus for 'Blake's Patent Mineral Fire and Water Proof Paint, or Artificial Slate'

<sup>3</sup>fols. 1r-2v (1r, 2r printed matter; 1v blank): notes written on prospectus for 'Eddy's Patent Toughened Iron Railway Wheel' (pl. 2) <sup>4</sup>fols. 1r-2v (1v-2v blank) <sup>5</sup>fols. 1r-2v (1r-v blank) <sup>6</sup>fol. 1r-v <sup>7</sup>fols. 1r-4v <sup>8</sup>fols. 1r-2v

BIBLIOGRAPHY Herrmann 1981, 104; Hildebrand 2020a, 114–15

### **EXPLANATORY NOTES**

These notes on exhibits, jotted down during several walks through the Crystal Palace, are part of the preliminary work for what was to become *Science, Industry, and Art.* In its preface 'To the German audience', Semper explained its larger scope: while its 'content concerns primarily only English and American conditions', he had intended to add 'some more specifics about German, Belgian and Russian industry and art' – notes he had collected during the Exhibition (Semper 1852, 1). However, the notes preserved relate mainly – as does *Science, Industry, and Art* – to exhibits from the United States and, to a lesser extent, to Russian exhibits. We have established the probable sequence of these notes by dividing the seven manuscript units into three groups, which may perhaps correspond to that number of walks through the Crystal Palace by Semper.

The first group contains notes written on two American advertising leaflets (31.12–33.8); accordingly, these notes refer exclusively to American exhibits such as textile raw materials, minerals, food products and tools (such as tomahawks). The second group comprises the largest portion of the notes (33.9–38.17); they alternate between notes on American technology and Russian luxury industry and address exhibits such as Cyrus McCormick's reaper and malachite vases and furniture from St Petersburg. The notes in the third group focus again on American exhibits (38.18–39.25), some of which, addressed as 'Hinzu gekommene Sachen' (Items added; 38.18), were apparently shown only towards the end of the Great Exhibition (among them Robert Ball Hughes's sculpture of Oliver Twist). Semper took these last notes perhaps in early October, after returning from a two-week reunion with his family in Bruges.

All in all, Semper's notes present a motley collection of brief comments on exhibits that range from fancy soap, toys, false teeth and artificial legs to the latest photographic exploits in the field of daguerreotypes, talbotypes, hyalotypes and the magic lantern. Photography was obviously intriguing for Semper, as he made notes about it in all three manuscript groups and discussed it in *Science, Industry, and Art* (Semper 1852, 10, 74–5). The large number of exhibits on which Semper made notes has led us to identify them in the list below (wherever possible) by their reference numbers in the last, probably the third, edition of the three-volume *Official Descriptive and Illustrated Catalogue* of 1852 (ODIC 1852; for the dating, see Cantor 2013, 1:XXXii), to which a supplementary volume was added. The state of this edition corresponds to that of the 'Presentation Copy' of the *Reports by the Juries* of 1852 (Rep. Jur. 1852), to which reference is also made. The smaller *Official Descriptive and Illustrated Catalogue* is cited if the information on exhibits or exhibitors differs from that in the *Official Descriptive and Illustrated Catalogue*.

**32**] ODIC 1852, 3:1434 (no. 32) 31.14 288 ODIC 1852, 3:1453 (no. 288) 37] ODIC 1852, **178**] ODIC 1852, 3:1449 (no. 178) 31.15 **Rochstofte**] uncertain reading, 3:1434-5 (no. 37) 31.18-27 Marylandschrank ~ 3 Sorten Marmor] ODIC 1852, 3:1459 (no. 371), Rohstoffe 1460 fig.; Rep. Jur. 1852, 151, 651-2 31.20 **Chromgrun**] *Chromgrün* 31.21 schwefelh.] 31.28 Mehl von Hecker] ODIC 1852, 3:1440 (no. 114) schwefelhaltig 31.30 Schinken ODIC 1852, 3:1449 (no. 200), 1459 (no. 363); Rep. Jur. 1852, 65; Rodgers 1852, 24-5; Tallis/ Strutt 1852, 2:87 31.32 **Oelkuchen**] ODIC 1852, 3:1467 (no. 530)

32.1 Holzsorten ~ Sammlung] ODIC 1852, 3:1440 (no. 115); Rep. Jur. 1852, 149; Rodgers 1852, 137-8 32.2 Schusterzwecken] ODIC 1852, 3:1450 (no. 211), 1462 (no. 422) 32.4 Fournirholz mit Cirkularsäge] probably ODIC 1852, 3:1452 (no. 244) 32.9 Flintglas ~ Flint Glas Company] ODIC 1852, 3:1440 (no. 113); Johnson 1852, 147; Rep. Jur. 1852, 536; Rodgers 1852, 57 and pl. 32.10 Schmelztiegel von Wasserblei] ODIC 1852, 3:1463 (no. 426); Rep. Jur. 1852, 585-6 32.12 Blakes fire proof paint] ODIC 1852, 3:1451 (no. 233); Johnson 1852, 23; Rep. Jur. 1852, 587 32.13 n° 62 Hyalotypie ~ Lat Magica Langenheim] 'Lat': Laterna; ODIC 1852, 3:1437 (no. 62); Arnoux 1851; Rep. Jur. 1852, 277; on Langenheim's magic lantern, see Semper 1852, 75 32.14 Bettstelle 552] ODIC 1852, 3:1468 (no. 552); Hunt 1851, 2:778 32.19 Wachstuch; 135] ODIC 1852, 3:1441 (no. 135) 32.20 424 ~ Wassereimer] ODIC 1852, 3:1462 (no. 424); Rep. Jur. 1852, 602 32.21 Orn. Teppich] 'Orn.': Ornamentaler or Ornamentierter; ODIC 1852, 3:1464 (no. 453); Rep. Jur. 1852, 475 eigenth.] eigenthümliches 32.23 Stocks for Mattresses. 253] ODIC 1852, 3:1452 (no. 253); Rep. Jur. 32.24 Baumwollenbaum Alabama] Amtl. Ber. 1852/53, 1:354 1852, 103 32.26 Allen's improved arithmetical Tables] ODIC 1852, 3:1470 (no. 591): 'Educational tables' presented by John Ellery Tyler, probably comprising those by Edwin Allen; for the latter, see Seton 1850 32.29 Deutschland u Amerika] ~ und ~ 32.33 Drathproben ~ Washburn] 32.34 New Orleans Moos] Off. Cat. 1851<sup>3-5</sup>, 192 (no. 559): ODIC 1852, 3:1462 (no. 421) 'Hicks, G. London. – Samples of New Orleans moss'; cf. Rep. Jur. 1851, 103; a different exhibitor for this catalogue number listed in ODIC 1852, 3:1469 (no. 559): 'Miller, John E., New York. New Orleans moss' 32.35 **Tapeten**] ODIC 1852, 3:1435 (no. 48), 1452 (no. 260) 32.36 402 imitation of wood ODIC 1852, 3:1462 (no. 402) 32.37 282. Papier ODIC 1852, 3:1453 (no. 282)

33.1 Maroquin] ODIC 1852, 3:1447 (no. 165) 33.2 Grossen] Grössen 33.3-4 Logan, Vail & C° New York] agents for George Vail & Co., Speedwell Iron Works, Morristown; see advertisements in Scientific American 6, no. 28 (29 March 1851), 223, and 7, no. 12 (6 Dec. 1851), 95. Neither Logan, Vail & Co. nor George Vail & Co. are listed as exhibitors in ODIC 1852. 33.5 Werkzeuge ~ Brown & Wells] ODIC 1852, 3:1452 (no. 259); Rodgers 1852, 42 Aexte Tomohawks] ODIC 1852, 3:1439 (no. 97), 1441 (no. 119); Johnson 1852, 136; Rep. Jur. 1852, 489–90; Rodgers 1852, 42 33.11 Geometrie, Dial of the seasons] ODIC 1852, 3:1452 (no. 263); Rep. Jur. 1852, 313-14 Ruder nº 92] ODIC 1852, 3:1439 (no. 92); Johnson 1852, 152 33.12-14 A. M. Perkins ~ Screw joint] ODIC **Geräthe. 423** ODIC 1852, 3:1462 (no. 423) 33.15 Pneumatische Lokomotiven] ODIC 1852, 3:1466 (no. 504) 1852, 3:1468 (no. 541) 33.16 Mähmaschine] ODIC 1852, 3:1437–8 (no. 73), pl. 393; ODIC Suppl. 1852, 1530–1 and pl.; ILN 1851b; Cryst. Pal. 1852, 12–13; Johnson 1852, 93–9; Rep. Jur. 1852, 231–2; Rodgers 1852, 14–16, 139; Tallis/Strutt 1852, 3:19 and pl. 33.17–18 India rubber Ueberzug ~ Spielzeug] ODIC 1852, 3:1461 (no. 378) and fig.; Johnson 1852, 120, 149; Rep. Jur. 1852, 594-5, 678; Rodgers 1852, 16–18; Tallis/Strutt 1852, 2:77–9 33.18 Venering] veneering **Spielzeug** Rep. Jur. 1852, 595; Amtl. Ber. 1852/53, 2:705: rubber toys produced by Charles Goodyear Velocimeter] ODIC 1852, 3:1468 (no. 542); Rep. Jur. 1852, 253 33.19 M' Hobbs] probably the

American Alfred Charles Hobbs, agent of Day & Newell, who picked the safest English locks (by Bramah & Co. and Chubb & Son) during the Great Exhibition; see ILN 1851c; Johnson 1852, 139–43; Rodgers 1852, 66–71, 90–1; Hobbs 1853, 99–102, 115–30; Giedion 1948, 57; on Day & Newell, see note 38.26

34.5 1 Louis quinze mit Blumenwerk] 'i': 1); ODIC 1852, 3:1383-4 (no. 365), pl. 373; Cryst. Pal. 1852, 136 and fig.; Tallis/Strutt 1852, 3:33 34.5-6 Chinesische Vasen ~ Unterbau] ODIC 1852, 3:1377-9 (no. 323), possibly pls. 366-7; Illustrated Exhibitor 1851, no. 16 (20 Sept.), 286 and fig.; Cryst. Pal. 1852, 4 and fig., 304 fig.; Rep. Jur. 1852, 570-1. During his Dresden years, Semper himself had designed two pedestals for Russian malachite vases on behalf of Frederick Augustus II, the Saxon king; see Semper's draft letter to Heinrich Wilhelm Schulz, 9 September 1851 (gta, 20-K-1851-09-09[S]), cited in Weidmann 2010, 266 n. 5; Orelli-Messerli 2010, 75. 34.6 ubereinandergestellt] übereinandergestellt 34.8 - 9Arntikisirend baroker Candelaber mit ~ gothischem Knopfwerk] 'Arntikisirend' uncertain reading, Antikisierend; ODIC 1852, 3:1376 (no. 287), pl. 353; Art-Journal Cat. 1851, 278 and fig.; Cryst. Pal. 1852, 4 and fig., 136 and fig.; Tallis/Strutt 1852, 1:127 34.10-11 Russischer Styl ~ Barbarischer Zopf] ODIC 1852, 3:1384 (no. 370), pl. 381; Illustrated Exhibitor 1851, no. 8 (26 July), 127 fig., 129; Cryst. Pal. 1852, 136 and fig. 34.10 Russen^ in den **Ecken**] Russen, in den Ecken 34.12 **Porphyrvase**] jasper mistaken for porphyry; ODIC 1852, 3:1379-80 (no. 326), pl. 353; Cryst. Pal. 1852, 4; Rep. Jur. 1852, 566; Tallis/Strutt 1852, 34.13-14 298 ~ Florentiner Arbeit] ODIC 1852, 3:1376 (no. 298), pl. 1:128; see also note 35.7 34.15-16 Porzelanvasen ~ Antike Vasen] ODIC 1852, 3:1376 (no. 355; Rep. Jur. 1852, 567 318), pls. 359–60; Illustrated Exhibitor 1851, no. 8 (26 July), 125 fig., 128 fig., 129 34.16 Warwik Wase ~ Warschau] 'Warwik Wase': Warwick Vase; ODIC 1852, 3:1381 (no. 329) and fig.; gehammertem] gehämmertem 34.17 Malachitgegenstände ohne Semper 1852, 52-3 Charakterunterschied] ODIC 1852, 3:1377-9 (no. 323), pls. 363-8; Illustrated Exhibitor 1851, no. 16 (20 Sept.), 286 and fig.; Cryst. Pal. 1852, 4 and fig., 304 fig.; Rep. Jur. 1852, 569–71; Tallis/Strutt 1852, 1:127–8 and pls. 34.18 Official Catalogue, pa 296] 'pa': pagina; probably relating to the first page of the list of Russian exhibits in Off. Cat. 1851<sup>2</sup> or Off. Cat. 1851<sup>3</sup> (the list of Russian exhibits in Off. Cat. 1851<sup>1</sup> comprises pages 290-5) 34.20 Porcelan **Tisch**] ODIC 1852, 3:1376 (no. 318), pl. 361 34.22-30 Silberzeug ~ im barbarischen Style] ODIC 1852, 3:1384 (no. 366), pls. 375–80; Rep. Jur. 1852, 515 34.22 **Tannenbaum** obenauf Blumenbouquet] ODIC 1852, 3: pl. 375; Cryst. Pal. 1852, 5, 136, 137 fig.; Tallis/ Strutt 1852, 1:128; 3:33 and pl. 34.24 die Französisch Rokoko] 'die': either das, referring to 'Rokoko', or *der*, referring to *Styl* die Russisch Rokoko] 'die': either das, referring to 'Rokoko', or *der*, referring to *Styl* 34.25 bauchiges Gefäss von vergoldetem Silber] ODIC 1852, 3: possibly pl. 380 34.27-8 Krug ~ Dito nº 9] ODIC 1852, 3: possibly pl. 380 34.28 Tannzapfen in Silber] ODIC 1852, 3: pl. 377 34.29 24 Russin Sasikoff] '24': probably nº 24; one of the figures of Russian women exhibited by Ignace Sazikoff; see ODIC 1852, 3:1383 fig. 34.30 Hähne im barbarischen Style] unverifiable; two possible meanings of 'Hähne': roosters or faucets 34.31 Malachit] see note 34.17 34.32 Caucasian Sable ~ shahka] 'Sable' derived from German Säbel: sabre; 'shahka': shaska; ODIC 1852, 3:1371–2 (nos. 162–3) **Caucasian Daggers**] ODIC 1852, 3:1372 (nos. 164–5) 34.33 Noori Ogli Oaste Selim Molla ~ Nookha] 'Oaste': Ooste; ODIC 1852, 3:1372 (no. 165) 34.34 Werk in lithochromem Abdruck] ODIC 1852, 3:1383 (no. 362); Rep. Jur. 1852, 706 34.38 265) Articles of furniture] ODIC 1852, 3:1375 (no. 265); Cryst. Pal. 1852, 6; Rep. Jur. 1852, 600; Tallis/Strutt 1852, 1:129 Fliz Filz 34.39 Stickereien 276. Shirkhonin Torjok] 'Shirkhonin': Shikhonin; ODIC 1852, 3:1375 (no. 276); Amtl. Cat. 1851, (no. 276)

35.1-3 Barbarische Decke ~ Sophia Papinoff Tiflis] 'Papinoff': Popinoff; ODIC 1852, 35.4 W. Kämmerer und Saeftigen Joaillers 3:1376 (no. 310); Rep. Jur. 1852, 472, 479-80 a St Petersburg] 'Joaillers a': joailliers à; ODIC 1852, 3:1384 (no. 376), pl. 382; Cryst. Pal. 1852, 5; Rep. Jur. 1852, 515; Tallis/Strutt 1852, 1:128 35.5 Kaiserliche Polirfabrik in St Petersburg] ODIC 1852, 3:1376 (no. 298), pls. 355-6; Rep. Jur. 1852, 567 35.7 Tische] ODIC 1852, 3:1377-9 (no. 323), possibly pl. 364; Rep. Jur. 1852, 570-1; Tallis/Strutt 1852, 1:128 Vasen **von grünem Porphyr**] jasper mistaken for porphyry; ODIC 1852, 3:1380–1 (no. 327) and fig., pl. 360; see also note 34.12 ähnl. Malachitgegenstände] see note 34.17 35.8 Gold u Silbererz] ~ und ~; ODIC 1852, 3:1362-3 (no. 4), 1377-9 (no. 323); Rep. Jur. 1852, 34 35.9 Malachitgefässe mit Gold] see note 34.17 35.10 Parkettafeln] ODIC 1852, 3:1376 (no. 299), pls. 357-8; Cryst. Pal. 1852, 327, 328 fig.; Rep. Jur. 1852, 545 Glasscheiben] ODIC 1852, 3:1376 (nos. 294–5) buntes Papier] ODIC 1852, 3:1375 (nos. 261-2), 1383 (no. 359) 35.11 Clodion] possibly the clock by Félix Chopin, for which he was inspired by the terracotta model for the monument 'The Invention of the Balloon', an allegory of the first manned balloon flight designed by the sculptor Clodion in 1784; ODIC 1852, 3:1383-4 (no. 35.12-13 290. Aga-Melik ~ Fingerhüte] ODIC 1852, 3:1376 365), pl. 374; Veillerot 1851, 182 (no. 290) 35.15 Lithographirte Blätter] ODIC 1852, 3:1383 (no. 362); Rep. Jur. 1852, 706 35.16 **mochte**] possibly *möchte* 35.16-17 Germania ~ Frankreich] probably ODIC 1852, 3:1381 (no. 328), pls. 368-71; commemorative plaster medallions by the sculptor Fyodor Petrovich Tolstoy showing allegories of the wars of 1812-14, among these pl. 370 representing the liberation of Berlin perhaps addressed here by Semper 35.19 292. Durchsichtige Seife von Taylor] ODIC 1852, 3:1453 (no. 292); Rep. Jur. 1852, 615; Rodgers 1852, 48 35.20 der ausser sich ist] uncertain reading 35.21 Fancy Soaps. von X. Bazin] ODIC 1852, 3:1434 (no. 36); Rep. Jur. 1852, 613 35.24 weisse Schwäne] pelicans mistaken for swans; ODIC 1852, 3:1374 (no. 244) Zobel Silberfuchs Peltze] ODIC 1852, 3:1384 (no. 381); Cryst. Pal. 1852, 6; Tallis/Strutt 1852, 1:130–1 35.25 Amelung & Sohn Dorpat ODIC 1852, 3:1376 (no. 296) aufgehangt] *aufgehängt* 35.26 Zobel ~ Zobelpeltze] see note 35.24 35.28-30 Gestickte Decke ~ Hadji Aga Baba] ODIC 1852, 3:1375 (no. 269) 35.29 in d. 35.31 Gouvernt] Gouvernement 35.32 Schaal ~ Gau Orenburg] ODIC Mitte] ~ der ~ 1852, 3:1375 (no. 282); Cryst. Pal. 1852, 6; Tallis/Strutt 1852, 1:131 35.34 Austellung] Aus-35.36 Gänsekiele Riabzewitch St Petersburg] ODIC 1852, 3:1383 (no. 360) stellung 35.37 Papierfabrik von Caluga. (Aristarkoff)] ODIC 1852, 3:1383 (no. 359) 36.2 Pendeluhr von Chauncey Jerome] ODIC 1852, 3:1467 (no. 514); Hunt 1851, 2:782; ILN 36.4 294] ODIC 1852, 3:1453 (no. 294); Rep. Jur. 1852, 595 410] ODIC 1852, 3:1462 1851a **411**] ODIC 1852, 3:1462 (no. 411) **295**] ODIC 1852, 3:1453 (no. 295) 382] (no. 410) ODIC 1852, 3:1461 (no. 382); Rep. Jur. 1852, 596 **471**] ODIC 1852, 3:1465 (no. 471) 36.6-8 Landcharte ~ August Mitchell] ODIC 1852, 3:1458 (no. 360) 36.9 Drilliche ~ Amoskeag] ODIC 1852, 3:1433 (no. 2); Rodgers 1852, 58-9 36.10 Vattenmuster] Watten-36.11 Landcharte Vereinigte Staaten von A] 'A': Amerika; probably Augustus muster Mitchell's map of the United States; see note 36.6-8 36.13 Luxusschuhwesen] ODIC 1852, 3:1441 (no. 116) 36.14–18 **Tauwerk ~ improved machinery**] ODIC 1852, 3:1465 (no. 474) 36.14 **Strangen** *Strängen* 36.16 glanzt glänzt 36.17 Man.] Manilla 36.20 **Tapetenproben**] ODIC 1852, 3:1435 (no. 48), 1452 (no. 260) 36.22 Boot aus vollem Holze

**geschnitten**] ODIC 1852, 3:1438 (no. 174) 36.24 eisernes Bett] possibly ODIC 1852, 3:1470 (no. 634) **Teppich**] Johnson 1852, 133, 155; Rep. Jur. 1852, 474 **Glasmalereien**] possibly ODIC 1852, 3:1453–4 (no. 311); another exhibitor of stained glass additionally listed in Off. Cat. 1851<sup>2–5</sup>, 189 (no. 346) 36.25 **Sud**] Süd 36.26 **441. Johnson Flanell**] ODIC

1852, 3:1463 (no. 441) $407 \sim$  wollene Decken] Off. Cat.  $1851^{2^{-5}}$ , 190 (no. 407)36.30Deane Dray & Deane  $\sim$  London bridge] ODIC 1851, 1:389-91 (no. 180) and figs.; 2:591(no. 6), 613-14 (no. 186) and figs.; Cryst. Pal. 1852, 12 fig., 13Charles Howland] ODIC1852, 3:1465 (no. 486); Hunt 1851, 2:775-6; Cryst. Pal. 1852, 295; Rep. Jur. 1852, 295; Rodgers1852, 56; Tallis/Strutt 1852, 1:6936.32 King William Street au pont de Londres] probably referring to gunsmiths Deane, Adams & Deane; ODIC 1851, 1:353 (no. 223); Cryst. Pal.1852, 386 fig., 387; Rep. Jur. 1852, 220; Amtl. Ber. 1852/53, 1:67936.36 Vergrosserungsglas;Jur. 1852, 3:1433 (no. 16); Rep. Jur. 1852, 26736.37-9 Aufsätze  $\sim$  459. in or molu] ODIC 1852, 3:1464 (no. 459)36.38 Glasgefasse] Glasse

37.1 Modell einer Brücke] possibly ODIC 1852, 3:1467 (no. 511); Rodgers 1852, 38-9 and pl. 37.2 Patent metallic air exhausted coffins] ODIC 1852, 3:1451 (no. 229); Hunt 1851, 2:779-37.3 Susquehanna Viaduct] ODIC 1852, 3:1455-6 (no. 327) 80; Tallis/Strutt 1852, 1:69 37.4 227 ~ Miniaturmusterfabrikation] ODIC 1852, 3:1451 (no. 227) 37.6 Modell einer schwimmenden Kirche] ODIC 1852, 3:1457 (no. 356), 1458 fig. 37.7 Chirurgische Instrumente. (Zapfenzangen)] ODIC 1852, 3:1434 (no. 26) 37.8 Violinen] ODIC 1852, 3:1463 (no. 442); Rep. Jur. 1852, 330; Rodgers 1852, 32-3 37.9 Notenbuchwender ODIC 1852, 3:1467 (no. 527) 37.10 Blitzableiter mit magnetischen Spitzen ODIC 1852, 3:1433 (no. 5); Rep. Jur. 1852, 312-13 37.12 20. Schlosserarbeit] ODIC 1852, 3:1434 (no. 20) 37.13 **419**] ODIC 1852, 3:1462 (no. 419) **9**] ODIC 1852, 3:1433 (no. 9) 350] ODIC 1852, **518**] ODIC 1852, 3:1467 (no. 518) 558] ODIC 1852, 3:1469 (no. 558) 3:1457 (no. 350) 33 **47**] ODIC 1852, 3:1435 (no. 47) **61**] ODIC 1852, 3:1437 (no. 61) ODIC 1852, 3:1434 (no. 33) 37.14 **63**] ODIC 1852, 3:1437 (no. 63) **220**] ODIC 1852, 3:1450 (no. 220) 302] ODIC 1852, 37.16 künstliche Beine ~ Palmer] ODIC 1852, 3:1435 (no. 39); Art-3:1453 (no. 302) Journal 1851, 211; Johnson 1852, 121; Rep. Jur. 1852, 345; Rodgers 1852, 50-1, 81-3, 121-4, 136-7; Giedion 1948, 390-1 37.18 Lampen Cornelius] ODIC 1852, 3:1435 (no. 46), 1436 fig.; Illustrated Exhibitor 1851, no. 14 (6 Sept.), 255 fig., 256; Cryst. Pal. 1852, 294-5 and fig.; Rodgers 1852, 42-3; Tallis/Strutt 1852, 1:68 and pl. 37.20 Modell einer Brücke ~ 147 ODIC 1852, 3:1446 (no. 147); Rep. Jur. 1852, 208; Rodgers 1852, 38-9 and pl. 37.21 New Brunswick **Rubber Co.**] ODIC 1852, 3:1469 (no. 560) 37.22 Sattelzeug von Lloid ODIC 1852, 3:1438 37.24 Sattelzeuge. 41] ODIC 1852, 3:1435 (no. 41); Illustrated (no. 78); Johnson 1852, 127 Exhibitor 1851, no. 29 (20 Dec.), 547, 548 fig.; Cryst. Pal. 1852, 294; Rep. Jur. 1852, 394; Tallis/ Strutt 1852, 1:68 37.25 (138) Kassenschlosser mit veränderlichem Schlüssel] 'Kassenschlosser': Kassenschlösser; ODIC 1852, 3:1441 (no. 138) 37.26 Gekrepptes Pferdehaar] ODIC 1852, 3:1450 (no. 205); Rep. Jur. 1852, 388 Silberfuchs (87] ODIC 1852, 3:1438 (no. 37.27 **Bürsten**] ODIC 1852, 3:1433 (no. 17), 1449 (no. 190) Sattel (476)] ODIC 1852, 87) 3:1465 (no. 476); Rep. Jur. 1852, 394 37.28 Perücken (133) ODIC 1852, 3:1441 (no. 133) Hüthe 130 (Castor) ODIC 1852, 3:1441 (no. 130) **232**] ODIC 1852, 3:1451 (no. 232) 303 Damenhüthe] ODIC 1852, 3:1453 (no. 303) 37.30 **Kinderkleider**] ODIC 1852, 3:1440 (no. 108); Johnson 1852, 135

38.2-3 **1 Rahmen ~ Notre Dame**] '1': *r.*; ODIC 1852, 3:1465 (no. 491); Arnoux 1851; Rep. Jur. 1852, 277 38.2 wahrsch.] *wahrscheinlich* 38.3 Lords Prayer] on John Edwin Mayall's daguerreotype 'The Lord's Prayer' (1843–44), see Gernsheim 1991, 73; Hannavy 2008, 1:907 38.4 223) ~ Harrison] ODIC 1852, 3:1450 (no. 223); Arnoux 1851; Cryst. Pal. 1852, 295; Rep. Jur. 1852, 275, 277; Tallis/Strutt 1852, 1:69 38.6 Rahmen von Brady ~ Vortreffliche Porträts] ODIC 1852, 3:1441 (no. 137); Arnoux 1851; Rep. Jur. 1852, 277; Rodgers 1852, 19 and pl. 38.7 From life by John A. Whipple] ODIC 1852, 3:1464 (no. 451); Arnoux 1851; Rep. Jur. 1852, 277; Tallis/Strutt 1852, 1:136 38.9-10 Mayall ~ Vaterunser] see notes 38.10 2 Stück, aussen] 2 Stück, aussen 38.2-3, 38.3 38.12 Panoramatische Ansichten ~ Langenheim] see note 32.13 38.13 do von Cincinnati ~ Fontayne und Porter 'do': dito; ODIC 1852, 3:1468 (no. 550); Arnoux 1851; Rep. Jur. 1852, 277 38.14–17 Rahmen von M. M. Lawrence ~ Bryant] ODIC 1852, 3:1446 (no. 151); Arnoux 1851; Rep. Jur. 1852, 277 38.14 Vew York] New ~ 38.15 Bild die 3 Zeiten] on Martin M. Lawrence's 'Past, Present, Future', see Semper 1852, 75. A copy of the daguerreotype is reproduced in Dinius 2012, 82 fig. 7. 38.19-20 Skulptur Olliver Twist ~ Bell Hughes] 'Bell': Ball; Hunt 1851, 2:780; 38.21 Ashmead & Hurlburt's ~ Gold Foil] ODIC 1852, Tallis/Strutt 1852, 2:38 and pl. 38.21-2 Chas. Abbey & Son Philad.] ODIC 1852, 3:1436 (no. 54) 3:1467 (no. 535) 38.24-5 Robin ~ serrure avec clef avec panneton changeant] unverifiable. None of Pierre-Marie-Bernard Robin's locks is mentioned among the exhibits or the components of Charles Aubin's lock trophy; on the latter, see ODIC 1851, 2:665 (no. 663); Cryst. Pal. 1852, 402; Hobbs 1853, 166-71. 38.26 Day & Newell] ODIC 1852, 3:1453 (no. 298); Cryst. Pal. 1852, 402 and fig.; Rep. Jur. 1852, 500; Rodgers 1852, 29-30; Giedion 1948, 58-9 and fig.; see Mc. Gregor] ODIC 1852, 3:1434 (no. 20) 298] see note 38.26 on Day & also note 33.19 Newell **20**] see note 38.26 on McGregor 38.26-7 Arrowsmith ~ permutation Lock] 38.28 London Gallery Buffalo] ODIC 1852, 3:1440 (no. 105); Arnoux 1851; see note 37.25 Rep. Jur. 1852, 277; the 'London First Premium Daguerrian Gallery' in Buffalo, run by Oliver Benton Evans (Buffalo Directory 1851, 91) 38.29 Whitehursts Galleries of Premium Daguerotyps] ODIC 1852, 3:1461 (no. 377); Arnoux 1851; Rep. Jur. 1852, 277; Tallis/ 38.30 grösten] grössten 38.30-3 Portrats ~ Meade Brothers] 'Por-Strutt 1852, 1:136 trats' uncertain reading, Porträts; ODIC 1852, 3:1440 (no. 109); Arnoux 1851; Rep. Jur. 1852, 277; Hannavy 2008, 1:915-16 38.32 Charge chargé

39.1-6 Daguerotyps von Brady ~ n° 6 Kind] see note 38.6; on Mathew Brady's portrait photographs and the lithographs published in his Gallery of Illustrious Americans (1850), see Trachtenberg 1989, 21–79; Hannavy 2008, 1:197–200 39.1 **Daguerotyps**] possibly written as 'Daguorotyps' 39.4 **Selleck**] unidentified person **Dohm**] uncertain reading, unidentified person 39.9 **Talbotyp von Langenheim**] see note 32.13 39.10 Daguerotyp von Cyncinati ~ Fontayne et Porter] see note 38.13 39.11 M. M. Lawrence] see note aufgehangt] *aufgehängt* 39.12 London Gallery. (Evans proprietor) see note 38.14-17 39.13 Hoggs American Dagureotype Gallery] 'Dagureotype': Daguerreotype; 38.28 Rep. Jur. 1852, 277; possibly the 'American Daguerrean Portrait Rooms' in London, run by Robert Hogg (Ruff 1852, 219), brother of the English surgeon and photographer Jabez Hogg 39.14 Whitehurst Gallerie of premium Daguerotypes] see note 38.29 39.17 Meade **Brothers**] see note 38.30–3 39.18 Sammlung Ausgezeichneter Manner von Virginia] 'Manner': Männer; ODIC 1852, 3:1452 (no. 264); Arnoux 1851; Rep. Jur. 1852, 277 39.20 Sophas und Stühle ~ zum Stellen] ODIC 1852, 3:1449 (no. 193), 1470 (no. 590); Johnson fur] *für* 39.21 Pianos] ODIC 1852, 3:1437 (no. 59), 1438-9 (no. 90), 1460 (no. 1852, 148 374), 1463 (nos. 435, 438), 1464 (no. 458); Art-Journal Cat. 1851, 128 and fig., 252 and fig.; Hunt 1851, 2:776–7; Cryst. Pal. 1852, 42, 202, 295; Rodgers 1852, 32, 136; Tallis/Strutt 1852, 1:68 39.22-3 transportables Bettstelle Whitmarsh's Patent] 'transportable': transportable; ODIC 1852, 3:1456 (no. 334); Hunt 1851, 2:778 39.24-5 Elfenbeintafeln ~ Julius Pratt] ODIC 1852, 3:1469 (no. 567); Rep. Jur. 1852, 599 39.24 Holyssäge] probably Hollysäge; thus a holly saw as used for cutting holly veneers in the manufacture of marquetry work

### EDITORIAL EMENDATIONS

34.22 **obenauf**] oben | auf *(see 292, Explanatory Notes 34.22)* 37.10 **Blitzableiter**] *doubly underl.* 

### ALTERATIONS IN THE MANUSCRIPT

32.30 Schneidermuster] after del. Dress 32.36 recht gut] after del. schl (possibly for 'schlecht')

33.2 Sensenklingen] klingen *interl.* 33.7–8 – Hinter] *after undel.* Hi 33.11 423.] *after del.* 43.

34.5 2] interl.

35.12 **Becher**] *after del.* Ringe, 35.29 **Mäander**] *after del.* Flecht[w] 35.32 **Schaal**] *altered from* Shawl 35.35 **Glaskasten II.**] *after del. on fol. 1r* Riabzewitch Schöne Ganse-kiele. Riabzewitch] *underl.* 

36.6 2.] above del. Eine Landcharte von] before del. Nord 36.7 hauptsächlichsten] after del. Reis 36.9 manufacturing Co] above undel. Manufactur. 36.37 2] over 1

37.2 coffins] before del. Särge 37.8 Violinen] before undel. J 37.13 518. 558. 33. 47 61. 220.] interl. 37.15 5<sup>t</sup>] over 4 37.17 4] over 11 37.24 Sattelzeuge] before del. in dem Glaskasten. 37.25 (138) ~ Medaillen.] inserted 37.27 6<sup>te</sup>] 6 over 4 (476)] interl. 37.30 Büchsen] after del. G (possibly for 'Gewehre')

38.7 From life ~ Whipple] above del. Hon. David Sears David Sears] *underl*. 38.9 5 38.12 **Panoramatische**] *after del*. Daguerotyp by over 4 over 3 over 2 **Porträts** *interl*. **Philadelphia**] *before del*. und Cincinnati Pratt & Co 264. 38.18 **Hinzu**] *after del*. Oli[v] after in ink and del. in pencil Mein verehrter Herr Westenholz | Der Ueberbringer dieses ist der Mann von dem ich Ihnen sagte 38.24 serrure] after del. des 38.26 **Day**] after del. & Mc. Gregor] & interl. **20**] *after del*. 216. 38.30 die grösten mir bekannten Se[r] **Portrats** *inserted* mir bekannten Portrats] on opposite page (fol. 2r) 39.6 alte Dame] interl. Kind] interl.

# **Outline of a Cultural-Historical Exhibition**

# **TEXTUAL RECORD**

- MS 92<sup>1</sup> gta, 20-Ms-92, fol. 5r-v (5v blank), in Semper's hand, fragmentary draft
- MS 92<sup>2</sup> gta, 20-Ms-92, fols. 6r–9v (6r variant of MS 92<sup>1</sup>), 'Beilage zu dem Aufsatze: Vorschläge zur Anregung nationalen Kunstgefühles', in Semper's hand, fragmentary draft
- MS 92<sup>3</sup> gta, 20-Ms-92, fols. 3r-4v (3v-4v blank), in Semper's hand, fragmentary draft
- MS 92<sup>4</sup> gta, 20-Ms-92, fols. 11–2V (11 variant of MS 92<sup>3</sup>), in Semper's hand, fragmentary draft
- MS 92<sup>5</sup> gta, 20-Ms-92, fols. 107–11V, 'Beilag II. Plan einer allgemeinen kulturgeschichtlichen Sammlung', in Semper's hand

- *MS 92*<sup>6</sup> gta, 20-Ms-92, fols. 127–15V (14V–157 calculations and sketches possibly for Semper 1859; 15V blank; variant of MS 92<sup>5</sup>), 'Beilage. Plan zur Uebersicht einer kulturhistorischen Ausstellung', in Semper's hand, probably the draft of the plan which Semper sent to Eduard Vieweg on 20 January 1852 (for the letter, see 308–9), *copy-text*
- K-1855 gta, 20-K-1855-08-28(S), fols. 2r-4v (1r-v copy of Semper's letter to Lothar Bucher, 28 August 1855; 4v blank; variant of MS 92<sup>6</sup>), 'Plan zu der Anordnung einer culturhistorischen Sammlung', in Manfred Semper's hand, 1880, copy of appendix to Semper's letter to Lothar Bucher

**BIBLIOGRAPHY** Herrmann 1976, 211–12, 232–5; Herrmann 1981, 100; Hildebrand 2007, 245–50; Luttmann 2008, 124–5, 128–32, 137–9

### **EXPLANATORY NOTES**

Semper envisaged this plan for the way in which an exhibition should be organized as an insert for *Science, Industry, and Art.* Between October 1851 and January 1852, he drafted four incomplete and three complete versions. The first complete version, which he probably sent to his publisher Eduard Vieweg on 17 October 1851, has as its header a reference to the passage in *Science, Industry, and Art* to which it refers as an enclosure: 'Beilag II. (zu Seite 4)' (302.1). Enclosure I was probably the fair copy of part of the manuscript of *Science, Industry, and Art*, enclosed with the letter to Vieweg (for the letter, see Herrmann 1976, 232). The indicated page number '4' to which the exhibition outline refers identifies it as a complement to the first chapter of *Science, Industry, and Art* where, at the beginning, Semper reported on his plan for a series of essays as a 'comparative overview' of the contents of the Great Exhibition, to be organized in an 'architectural' way (Semper 1852, 5–7).

In one of the manuscripts of Science, Industry, and Art, Semper added the reference 'Siehe Beilage' after the published passage in which he explained his 'architectural' exhibition plan (gta, 20-Ms-88, fol. 4v): 'The plan conceived was an architectural one, based on the elements of domestic settlement: hearth, wall, terrace, roof' (Semper 1852, 7). Correspondingly, the main headings in the plan consist of the four basic elements that Semper had developed in The Four Elements of Architecture of 1851. In Science, Industry, and Art, Semper went on to explain a fifth element, also presented in the exhibition plan: 'A fifth main section was to comprise the interaction of these four elements: the high art and, in a symbolic sense, the high science.' The plan, Semper added, was intended to 'make visible by itself the derivations of objects and forms from their original motifs and the change of their style according to the determining circumstances'. In this way, Semper's exhibition plan was a ramified visualization of 'the complete and comparative museum of the future' that he intended to discuss in his 'Letters on the Great Exhibition' (288.4-11). The idea that a list or its architectural arrangement would allow the connections of the elements exhibited to become selfexplanatory, is, of course, highly idealistic. The problems associated with this are evident not least in the varying classifications of the material in the different versions, which are hardly ever free of contradictions.

Vieweg did not ultimately include Semper's exhibition plan in *Science, Industry, and Art.* Semper, however, continued to think about it. On the one hand, he drew up a truly architectural plan for it in his catalogue of 'Practical Art in Metals and hard Materials; its Technology, History and Styles' of 1852: a square with each side reserved for one of the four elements, which meet in the centre of the square for interaction (NAL, 86.FF.64, art. 1, 18; cf. Hildebrand 2003, 263; Hvattum 2004b, 129; Semper 2007a, 57). On the other hand, Semper discovered his exhibition plan anew when reading Lothar Bucher's reports on the Paris Exposition universelle of 1855 (published in the Berlin *National-Zeitung*). He sent him a copy of that 'old plan for an overview of the field of cultural history' on 28 August 1855, suggesting the possibility of 'publishing or mentioning it' in the subsequent reports (Herrmann 1976, 211 n. 42). This third version of Semper's exhibition plan corresponds mostly to the second one but expands it in several details; thus it was probably not written until 1855.

40.25 gelasirt] glasiert (see 299.29, 303.4) 40.26–7 vde Anmerkg] vide Anmerkung 40.30 vde] vide bis] uncertain reading; possibly in the sense of *to repeat*, referring to 'vde Anmerkg oben' (40.26–7)

41.37 **Pasementirarbeit**] *Passementierarbeit* 

42.7 Wege∧ und Brückenbau] Wege- und Brückenbau (see 300.33, 304.5-6; cf. 306.45: 'Wege∧ & Brückenbau' 42.18 s.] siehe 42.23 Saulenordnung] Säulenordnung 42.34 --] curlicue

# EDITORIAL EMENDATIONS

42.25 B. Dachbedeckung.] B. Dachbedeckung. | B. Dachbedeckung.

# ALTERATIONS IN THE MANUSCRIPT

# 40.2-3 Plan ~ Niederlassung:] above del.

Plan einer Uebersicht über eine Industrieausstellung<sup>1</sup> basirt auf den Grundelementen häuslicher Niederlassung:

I Uebersicht über eine Industrieausstellung] above del. kulturphilosophischen Sammlung kulturphilosophischen] after del. allgemeinen

40.2 zur] after del. zu einer 40.5 symbolisch.] before del.

Das wärmende<sup>1</sup>, lichtbringende, Nahrung bereitende Prinzip. Der Mittelpunkt der geselligen Beziehungen

1 wärmende] after del. nährende after del. körperlich

40.12 Gegenstände] after del. licht40.22 C] over c40.36 a] before del. 1)41.14 a] after del. B.41.22 NB.] after del. c.41.25 hervorgehen] after del. Anwendungfinden.41.35-8 Schneiderei ~ etc etc etc] in pencil42.2 Erd-] after underl. and del. Erdarbeiten42.4 (Schlosserarbeit] inserted

tungsbau] altered from (~ 42.19 Dach] after underl. and del. Gerüste 42.26 Ueberzug,] before del. [G] 42.27 Metall] interl.

# MANUSCRIPT VARIANTS MS 92<sup>2</sup>

# Beilage zu dem Aufsatze: Vorschläge zur Anregung nationalen Kunstgefühles.

# Plan

5		einen kulturphilosophischen Sammlung nach der Gemeinschaft des Ursprunges
	und den Ver	rwandschaften der Gegenstände geordnet.
	Die vier Ha	upteintheilungen der Sammlung entsprechen den vier Elementen der häuslichen
	Niederlassu	ng:
	1) Heerd, 2)	Unterbau, 3) Wand. 4) Dach.
	T to Q J	
10	I <sup>te</sup> Sammlun	
		elpunkt jeder Niederlassung, materiell und symbolisch. Das körperlich nähren-
		nende, das geistig belebende und sammelnde Prinzip, welchem die drei anderen
		ndtheile des Hauses dienen.
		r Heerd in seiner substantiellen Bedeutung. Der Heerd als Wärmenschar
15	a)	Der Heerd als Wärmegeber. <i>Caloricalogie.</i> Dreifüsse, Kamine, Oefen, etc.
	b)	Der Heerd als Nahrung bereitend.
	D)	Culinarische Wissenschaften und Künste
		<ul> <li>I) Pflanzenspeisen, – Feldbau mit allen seinen Verzweigungen, Oekonomie,</li> </ul>
20		Agricultur, Mühlenbau etc.
		2) Fleischspeisen, – Viehzucht, Jagd, Fischerei.
		3) Getränke, Technologie ihrer Bereitung.
		4) Gewürze wie oben.
		5) Luxusgenüsse, Cafe, Thee, Tobak, Opium, Parfüms. etc.
25		Technologie dieser Gegenstände.
	c)	Der Heerd als Werkofen.
		Gefässkunde. (Keramik.)
		1) Urgefäss, (Kürbisse).
		2) Thongefässe, roh, gebrannt, glasirt, Glas. Durch alle Sorten von Erd-
30		waaren durchzuführen mit Einschluss des Glases und Porcellanes.
		3) Metallgefässe, (Metallurgie) Schmelz- und Treibekunst Löthen und
		Schmieden, Ciseliren und Emailliren. Legirung. Vergoldung. Galvano-
		plastik etc etc.
		4) Gefässe aus Stein.
35		5) d° d° aus Holz und anderen Stoffen.
		Anmerkung. Diese reiche Sammlung ist stylistisch und technologisch so
		instructiv wie möglich zu ordnen. Sie muss die Procedur des Bereitens vom
		Rohstoffe an mit den dabei angewandten Werkzeugen und Maschinen vom
		Ursprünglichsten bis zur letzten Erfindung enthalten. Es ist wünschenswerth,
40		die Producte in einer in sich abgeschlossenen Abtheilung zusammenzustellen,

fol. 6r

fol. 6v

fol. 7r

wodurch das künstlerische Studium erleichtert wird. In den korrespondirenden Nebenräumen muss dann möglichst nahe die Technologie dieser Producte zu finden seyn. Diese Bemerkung ist für alle Sammlungen gültig. d.) Der Heerd als Lichtbringer. 5 Photologie. Optik. Spähne, Fackeln, Kandelaber, Lampen, Lichter, (aus Harz, Wachs, Talg etc) Leuchter, Kronleuchter, Gasbeleuchtung. e) Der Heerd als Ruheplatz. Stühle, Tische, Möbel aller Art. Nach den Stoffen aus denen sie bereitet sind zu ordnen. ¦ το Der Heerd als Sinnbild der äusseren Reinheit 5) Wasch- und Reinigungsapparate. B. Geistige Bedeutung des Heerdes. Sitz des Nachdenkens. Logik. a) b) Sitz der Mittheilung, der Belehrung und der Unterhaltung. 15 1) Redekunst. (Schreibekunst - Druckerei) 2) Poesie. 3) Musik 4) Geschichte 5) Tanz. 20 6) Drama. c) Sitz der Krankenpflege (Medecin). d) Ort der Verträge, Staatskunst, Gesetzgebung, Handel, Rechenkunst. etc. e) Ort der religiösen Gebräuche. Altar, Ahnenbilder, Bildnerei. Theologie. 25 f) Sinnbild geistiger Reinheit Moral. II<sup>te</sup> Sammlung. Der Unterbau. des Heerdes. A) Erdarbeiten. a) Schutz des Heerdes gegen Ueberschwemmungen. Wasserbau. Deichbau etc. 30 b) Schutz des Heerdes gegen Feinde. Festungsbau, Waffen. Erleichterung des Zuganges zu dem Heerde und der Verbindung zwischen c) von einander entfernt liegenden Niederlassungen. Wege- und Brückenbau, Canalbau, Schiffarth. Feldmesskunst, Geometrie etc. etc. Fuhrwerke, Dampfwagen, 35 B.) Maurerarbeiten. Ziegelkonstruction, Steinkonstruction Gewölbe. Steinschnitt. Formen der höheren Baukunst die aus diesem Theile der Construction hervorgegangen sind und hervorgehen können, nebst ihren von den angewandten Stoffen abhängigen Modificationen. 40 NB. Dieser wichtige Theil umfasst eine grosse Menge von theoretischen und praktischen Bethätigungen des Menschen, die sich auf verschiedene | Weise innerhalb desselben ordnen lässt. Da die Arbeiten der Maurer sich am spätesten künstlerisch entwickelt haben, so sollte eigentlich diese Sammlung die vierte in der Reihenfolge seyn, überall wo es die Hauptabsicht bei der Anlage der Sammlungen ist, den 45 Formensinn zu bilden.

fol. 7v

fol. 8r

fol. 8v

# III.<sup>te</sup> Sammlung.

Die Wand.

- A. Die Wandbereitung in ihrer Anwendung auf Raumesabschlüsse.
  - a) Das Pfahlgehege und das Zweiggeflecht als der ursprünglichste Raumesabschluss. (Gitter und Ballustraden).
  - b) Fortbildung des Motives. Bastmatten, Binsengeflecht, Pflanzenfadengewebe, Gewebe aus animalischen Substanzen, Muster aus der Textur entsprossen. Ornamentik, Färberei. Grundmotiv aller Wandverzierung und der Malerei in der Teppichwirkerei zu suchen. Ursprung der Relief- | kunst in der Stickerei. (Haute lisse, China, Assyrien)
  - c) Nachbildung der Teppichwände in Platten aus Holz, Stein, Metall, Erdwaare, glasirten Ziegeln, Glas. (Mosaik)
  - d) Nachbildung der Teppichwände in Leder und Papier. (Tapetenmanufactur).
  - e) Nachbildung der Teppiche als Fenstervorhänge. (Fensterglasmalerei)
- NB. Bei dieser wichtigen Abtheilung muss durch gute Anordnung der Gegenstände anschaulich gemacht werden, wie eins aus dem anderen hervorgewachsen ist und wie sich die Wand mit dem konstructiven Prinzipe der Mauer vermischte und wie diese Vermischung erst spätere Geltung in der höheren Baukunst erhielt. Es muss auf die Stylveränderungen hingewiesen werden die aus den Eigenschaften der Stoffe hervorgehen, in welchen das Motiv zur Erscheinung tritt.
  - B. Die Wandbereitung in ihrer Anwendung auf Bekleidung. Dieser Abschnitt muss die ganze wichtige Industrie der Leder- Pelz- Linnen Baumwollen- Wollen- Seiden Filzfabrikation umfassen und in den oberen Abschnitt ergänzend eingreifen. Beide müssen von einem Mittelpunkte ausgehen und nach zwei entgegengesetzten Seiten auslaufen.

IV. te Sammlung.

Das Dach mit seinem Gerüste.

- A. Dachbedeckung.
  - a) Ueberzug. Felle, Gewänder, Filze, Asphalt, Steinplatten, Holzplatten, Metallplatten. etc.

Diese Abtheilung spielt hinüber in das Gebiet der Wandbereitung; Es gilt von ihr das Gleiche was von letzterer in Beziehung auf ihren dekorativen Einfluss anschaulich zu machen ist.

 b) Schuppendach Blätter, Schindeln Schiefer, Dachziegel; Gränzt an die Abtheilung der Maurerarbeiten.

299.6 Gegenstände] before del. in ihren 299.7 vier Haupteintheilungen] after del. Grundeintheilu 299.9 Heerd,] before del. Wand, 299.12 geistig] below del. moralisch 299.16 Dreifüsse,] interl. 299.26 c) Der Heerd als Werkofen.] after del. c) Der Heerd als Mittelpunkt der Beziehungen für den Hausrath. c)] undel. 299.28 (Kürbisse).] before del. Hieran können sich die Holzgefässe Tonnen etc anschliessen. 299.30 Porcellanes.] before del. Stylistisch und technologisch so instructiv und vollständig wie möglich zu ordnen. 299.32–3 Galvanoplastik etc etc.] before del. on fols. 6v–7r

Diese reiche Abtheilung muss, die Procedur des Bereitens vom Rohstoffe an, mit den dabei angewandten Werkzeugen und Maschinen etc. vom Einfachsten und Ursprünglichsten bis zur letzten Erfindung enthalten. Es ist wünschenswerth, die Pro-

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ducte in einer | in sich geschlossenen Abtheilung zusammenzustellen, um das Formenstudium zu erleichtern. In den korrespondirenden Nebenräumen muss dann möglichst nahe die Technologie dieser Kunstproducte zu finden seyn.

299.34 Stein] before del. und anderen Stoffen 299.35 5) ~ anderen Stoffen.] interl. 299.40 Abtheilung] before del. als Hauptgegenstände

300.2 **Producte**] *after del.* Kunstpro- 300.4 **alle**] *before del.* folgenden 300.5 **d.**] repl. 300.7 **Gasbeleuchtung**] beleuchtung *after del.* flammen del. 3 300.8 e] repl. del. 4 300.9 Möbel] before del. und Geräthe 300.11 Sinnbild der äusseren Reinheit] repl. del. Prinzip der Reiniger. Reiniger.] *before del.* (hier materiell) 300.14 Logik.] before del.

Philosophie, (diese Abtheilung kann die Astronomie und andere abstracte Wissenschaften enthalten.) Ist eine Bibliothek mit der Sammlung verbunden, so muss erstere eine analoge Eintheilung erhalten und jeder

300.25 Altar,] above underl. and del. Theologie, 300.28 des Heerdes.] inserted 300.34 Schiffarth.] transposed by guide line from after Dampfwagen, at 300.34-5 300.43 am spätesten] after del. geschichtlich 300.44 vierte] above del. letzte 300.45 überall] interl.

301.15 muss] before del. das stufenweise Wachsen der [ ] 301.17 Wand] before del. später 301.18 wie diese Vermischung erst spätere] interl. erhielt.] altered from ~, 301.29 Felle, Gewänbefore del. nachdem die Wand vorher lange Zeit die ungemischt der,] above del. Gewand, Fell, Filze] e added Steinplatten] final n added Holzplatten] n added 301.29-30 Metallplatten] n added 301.31 spielt hinüber] after del. gränzt 301.34 Blätter, Schindeln] interl. Dachziegel] before del. Schindeln

#### MS 92<sup>5</sup>

Beilag II. (zu Seite 4).

# Plan

einer allgemeinen kulturgeschichtlichen Sammlung, geordnet nach der Gemeinschaft des Ursprungs und den Verwandschaften der Gegenstände in ihren Motiven, basirt auf den Grundelementen häuslicher Niederlassung:

- Heerd, Gehege, Terrasse, Dach.
- Heerd. Mittelpunkt jeder Niederlassung, materiell und symbolisch. Das körperlich I. nährende und wärmende, das moralisch belebende Element, dem die drei anderen zum Schutze dienen. In seiner höchsten Bedeutung der Altar, das Symbol der höheren gesellschaftlichen Bande, der Religion.
  - A. Der Heerd in seiner materiellen Bedeutung.
    - Wärmend, Kamin, Ofen etc. Caloricologie a.
    - Nahrung bereitend. Culinarische Wissenschaften und Künste h
      - 1) Pflanzenspeisen Feldbau mit allen seinen Verzweigungen. Oekonomie, Kameralwissenschaft. Ackerbau, Mühlenbau u.s.w.
      - 2) Fleischspeisen Viehzucht, Jagd, Fischerei. Waffen.
      - 3) Getränke Milch, Bier, Wein etc. Technologie ihrer Bereitung.
      - 4) Gewürze, Salz, Zucker u. s. w. wie oben.
      - Luxusgenüsse, Cafe, Thee, Toback, Opium Parfüms etc. etc. 5)

fol. 10r

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			<ul> <li>c. – Mittelpunkt der Beziehungen für den Hausrath.</li> <li>I) Gefässkunst (Ceramik)</li> <li>α Kürbiss. (Urgefäss)</li> </ul>
5			<ul> <li>β. Thongefäss, roh, gebrannt, glasirt, Glas. Durch alle Sorten von Erdwarren durchzuführen incl. des Glases und Porcellanes.  </li> <li>γ. Metallgefässe, Metallurgie. Schmelz- und Treibekunst. Löthen und Schmieden, Emailliren und Ciselliren. Vergolden, Galvanoplastik.</li> <li>δ. Gefässe aus Stein und anderen Stoffen</li> </ul>
10			NB. Bei diesen Abtheilungen muss die Procedur des Bereitens vom Roh- stoffe an mit den dabei angewendeten Werkzeugen und Maschinen etc. vom Einfachsten Ursprünglichsten, bis zur letzten Vervollkommnung verfolgt werden.
15			3. Der Heerd als Lichtbringer. Photologie. Spähne, Fackeln, Candelaber, Lampen, Lichter (aus Harz, Wachs, Talg
15			etc) Gasflammen (Siehe Anmerkung oben). Optik. 4) Der Heerd als Ruheplatz.
			Stühle, Tische, Möbel und Geräthe aller Art.
		В.	Moralische Bedeutung des Heerdes.
			a. Sitz des Nachdenkens. Logik.
20			b. Sitz der Mittheilung und Unterhaltung.
			1) Redekunst. Schreibekunst – Druckerkunst.
			2) Poesie
			3) Musik
			4) Geschichte
25			5) Tanz.
			6) Drama.
			c) Sitz der Krankenpflege. Medecin
			d) Ort der Verträge, Staatskunst, Gesetzgebung, Handel. Rechnenkunst. etc.
			e) Ort der religiösen Gebräuche, <i>Theologie</i> Ahnenbilder, Bildnerei.
	тт	D.	117 1
30	11.		Wand.
		А.	Das Pfahlgehege oder das Zweiggeflecht der ursprünglichste Raumesabschluss.
		В.	(Gitter und Balustraden) Fortbildung des Motives: Bastmatten, Binsengeflecht, Grasgewebe, Pflanzen-
		Б.	fädengewebe, Gewebe aus animalischen Substanzen. Muster aus farbigen Fäden
35			aus der Textur entsprossen. Ornamentik, Färbereien. Grundmotiv aller Wandver-
55			zierung und der Malerei in der Teppichwirkerei. Ursprung der Reliefkunst in der
			Stickerei. (China, Assyrien.)
			Nachbildung der Teppichwände in Platten aus Holz, Stein, Metall, Erdwaare.
			Mosaik, Glasmalerei, gebrannte Ziegel, Tapeten. u. s. w.
40			Bei der Entwickelung des Motives muss die stufenweise Ordnung beobachtet und
			zugleich auf die Stylveränderungen hingewiesen werden, die aus den Eigenschaf-
			ten der Stoffe in welchen das Motiv zur Erscheinung tritt, hervorgehen.
		С.	Die Wandbereitung in ihrer Anwendung auf Bekleidung.
			Dieser Abschnitt muss die ganze wichtige Industrie der Leder, Pelz, Linnen,

Dieser Abschnitt muss die ganze wichtige Industrie der Leder, Pelz, Linnen, Baumwollen- Wollen und Seidenfabrikation umfassen und in den oberen Abschnitt ergänzend eingreifen. Beide müssen von einem Mittelpunkt ausgehen und nach zwei entgegensetzten Seiten auslaufen.

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fol. 11r

III. Die Terrasse.

304

- A. Erdarbeiten.
  - a) Schutz des Heerdes gegen Ueberschwemmung. Wasserbau.
  - b) Schutz des Heerdes gegen Feinde. Festungsbau. Waffen.
  - c) Beschützung und Erleichterung des Zuganges zu dem Heerde. Wege- und 5 Brückenbau. Canalbau.
  - d) Feldmesskunst (Geometrie und Geodäsie)
- B. Maurerarbeiten.

Steinkonstruction, Ziegelkonstruktion, Gewölbe, *Steinschnitt*. Formen der höheren Baukunst die aus diesem Theile der Construction hervorgingen, nebst ihren 10 von den angewendeten Stoffen abhängigen Modificationen.

Dieser wichtige Theil umfasst eine grosse Menge von theoretischen und praktischen Bethätigungen der Menschen, die sich auf verschiedene Weise innerhalb desselben ordnen lässt.

# IV. – Das Gerüste.

- A- Holzkonstruction, technische und bildnerische Entwickelung derselben. Formen der höheren Baukunst die diesem Ursprunge angehören. *Giebeldachform, Säulenordnung. Thüren*, Fenster.
- B) Eisen Metallkonstruction. technische und bildnerische Entwickelung. Schlosserarbeit.
- C.) Dachbedeckung.
  - 1) Ueberzug. Gewand, Fell, Filz, Asphalt, Steinplatten, etc. gränzt an die Abtheilung von der Wandbereitung
  - 2) *Schuppendach*. Schiefer, Ziegel u. s w. gränzt an die Abtheilung von der Maurerarbeit.
- V. Zusammenwirken der vier Elemente. Culturphilosophie. Hohe Wissenschaft. Hohe Kunst.

302.1 Beilag] 'Beilage' 302.12 Caloricologie] inserted with a thinner pen 302.13 Culinarische Wissenschaften und Künste] inserted with a thinner pen 303.2 1) Gefässkunst altered from 2) ~ after del. I) Formen des Heerdes selbst, Kamine, Oefen Kochöfen. 303.4-5 **Erdwarren**] 'Erdwaren' 303.6 Metallurgie.] interl. 303.13 **Photologie.**] inserted with a thinner pen 303.14 **Spähne**] after del.  $\alpha$ ) 303.15 **Optik.**] *inserted with a thinner pen before del.*  $\beta$ . 303.19 des Nachdenkens] after del. der Erfindung und Logik.] inserted with a thinner pen before del. Philosophie Logik. Schreibekunst - Druckerkunst. Reine Wissenschaften. Astronomie. Philosophie] underl. Logik.] interl. Schreibekunst] underl. Druckerkunst] underl. 303.21 Schreibekunst – Druckerkunst.] inserted with a thinner pen 303.28 Staatskunst] after del. Politik, 303.30 Die Wand.] after underl. and del. Gehege 303.36 Ursprung 303.38 Erdwaare] with a thinner pen above del. Topfwaare after del. Plastik 303.41-2 Eigenschaften der] interl. 303.42 Stoffe] altered from Stoffen tritt,] before del. und 303.44 der Leder, Pelz,] inserted before del. der ihren Eigenschaften 303.47 entgegensetzten] 'entgegengesetzten' auslaufen.] before del. Die natürliche Textur 304.2 A. Erdarbeiten.] after del.

A. Erdarbeiten. Wege und Brücken, Mittel des Fortkommens. Wasserbau, (Schutz des Heerdes gegen Ueberschwemmung) 25

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304.4 Feinde] after del. wilde Thiere und feindliche wilde] after del. feindselig 304.9 Steinkonstruction] after del. Constr 304.15 IV. - Das Gerüste.] above underl. Das Gerüste.] in faint ink after underl. and del. Das and del. C. Dacharbeiten. Dachgerüste 304.18 Thüren, Fenster.] inserted in faint ink before inserted and del. in faint ink Schlosserarbeit. 304.19 technische] after del. Nach 304.19-20 Schlosunmöglich] after del. schwer serarbeit.] in faint ink above del. Letztere unmöglich. 304.22 **Steinplatten**] *interl. with a thinner pen* gränzt an] repl. del. fällt in 304.22-3 Abtheilung] A over Ca 304.24 gränzt] above del. fällt an] a over i 304.24-5 Maurerarbeit.] before interl. in faint ink and del. in faint ink D. Thüren und Fenster 304.26 Culturphilosophie] after underl. and del. Tectonik, 304.26 Hohe Kunst] after del. Mathematik.

### K-1855

Plan zu der Anordnung einer culturhistorischen Sammlung basirt auf den vier Grundbestandtheilen häuslicher Einrichtung, nämlich: Heerd, Wand, Damm, Dach & den Ideen welche durch dieselben symbolisirt werden.

- 5 I. Heerd Mittelpunkt jeder Niederlassung & Embryo der Gesellschaft.
  - A. wärmegebend
    - Kohlenpfannen, Kamine, Öfen etc (kalorische Wissenschaft)
  - B. *lichtbringend* Spähne, Fackeln, Kandelaber, Lampen, Leuchter (alles kleine Heerde) Leucht
    - thürme Gaslaternen. (Photologie)

# C. nahrungbereitend

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kulinarische Kunst

- a. *Pflanzenspeise*. Feldbau in seinen Verzweigungen Agronomie, Oeconomie Horticultur, Mühlenanlage
- b Fleischspeisen. Viehzucht, Jagd, Fischerei.
  - c. Getränke. Wasser, Milch, Bier, Wein, geistige Getränke überhaupt. Brunnenbau, Hirtenleben, Weinbau, Technologie der Bereitung der Getränke.
  - d Gewürze. Salz. Zucker. Pfeffer. (Salinen, Plantagen)
  - e Luxusgenüsse. Café, Thee, Opium u. s. w. (Plantagencultur)

# D rauchend

Reinigung mit Schwefeldämpfen, Weihrauch, Parfüms, Tabak (Religiöse Bedeutsamkeit dieser Funktion des Heerdes. Der Dampf des Heerdes als geistigster Theil des Nahrungsstoffes den Göttern geweiht. (siehe unten) ¦

- E. Mittelpunkt der Beziehungen für den Hausrath.
  - a 1. Gefässe. Keramik.
    - a. Urgefässe. Kürbiss, Ei, hohle Hand, Horn.
    - β. Thongefässe. Durch alle Sorten von Erdwaaren durchzuführen.
    - $\gamma. \quad \textit{Metallgefässe.} \ Metallurgie. \ Schmelz \& Treibekunst, Löthen \& Schmieden,$
    - Emailliren u. Ciseliren, Vergolden, Elektrotypiren u.s.w.
    - δ. Gefässe aus Stein u. anderen Stoffen
  - b Anderer Hausrath wie Besen, Fächer, Blasebalg etc.

fol. 2r

	F.	<i>Rubeplatz.</i> Stühle, Tische, Möbel u. Geräthe aller Art (Tischlerei, Schnitzerei u. s. w.)	
	G.	Sitz des Nachdenkens der Mittheilung & Unterhaltg	
		<ul> <li>a Logik.</li> <li>b Redekunst, Schreibekunst, Buchdruckerei</li> <li>c. Poesie.</li> </ul>	5
		<ul> <li>d. Musik.</li> <li>e. Tanz.</li> <li>f. Drama. (Zusammenwirken der Künste</li> <li>z. Dute. (wichtigen Artikel für die Kunstfragen)</li> </ul>	
	Н.	g. Putz. (wichtiger Artikel für die Kunstfragen). Sitz der Krankenpflege. Medizin, Kräuterkunde, Chemie, Botanik.	IO
	I.	Ort der Berathung & des Abschlusses v. Verträgen Gesetzgebung, Staatskunst, Handeln, Rechenkunst, Politik. Jurisprudenz.	
	K.	<i>Ort der religiosen Gebräuche.</i> Ahnenkultus, Bildnerei, Altar, Theologie.	15
II		Wand Ursprünglicher Raumabschluss Pfahlgeflecht.	
		Bast & Binsenmatten Pflanzenfädengeflecht & Gewebe aus anderen natürlichen Substanzen. Muster aus natürlich-farbigen Naturstoffen zusammengewirkt, geben ein frühes, der Textur entsprossenes farbiges Ornament, das in der Baukunst grösste Bedeu-	20
		tung behält. Die <i>Teppichwirkerei &amp; Stickerei</i> . Der Ursprung der Malerei & Reliefkunst (China, Assyrien) Gobelins. Nachbildung der Teppichwände in Platten von Holz, Metall, Stein, Erdwaaren (Mosaik, Glasmalerei, gebrannte Ziegel, Tapeten u. s. w. <i>Anmerkung</i> . Bei diesem wichtigen Abschnitte muss auf die Stylgesetze hingewie-	25
		sen werden die aus dem gemeinschaftlichen Ursprunge u. der Verschiedenheit der Stoffe die in Anwendung kommen bei jeder einzelnen Verzweigung des Motives hervorgehen.	30
	B.	Die Wandbereitung in ihrer Anwendung auf Bekleidung. a Pelz & Leder (Kürschnerei, Schuhmacherei) b Linnen.	35
		<ul><li>c. Baumwolle</li><li>d. Wollen</li><li>e. Seide u. s. w.</li></ul>	
III	Der	<i><sup>r</sup> Damm.</i> Erdarbeiten. Ingenieurwissenschaft. a. Schutz des Heerdes gegen Überschwemmung. Wasserbau.	40
		<ul> <li>b. Schutz des Heerdes gegen Feinde (Festungsbau &amp; Waffen) ¦</li> <li>c. Beschützung &amp; Erleichterung der Verbindung zwischen den verschiedenen Feuerstellen.</li> </ul>	
		Wege & Brückenbau. Canalbau, Schifffahrt, Telegraphie etc	45

306

fol. 3r

fol. 3v

d. Grenzbestimmung des zum Heerde gehörigen Geometrie, Geodasie. Cameralistik

Anmerkg. Dieser Theil umfasst eine Menge v. wichtigen theoretischen sowie praktischen Bethätigungen der Menschen die sich auf unterschiedliche Weise innerhalb desselben anordnen lassen.

# B. Maurerarbeiten.

Steinkonstruction, Ziegelconstruction, Gewölbe (Steinschnitt) Formen der höheren Baukunst die aus diesem Theil der Construction hervorgehen nebst ihren von den Stoffen u. anderen Umständen abhängigen Modificationen.

- In diese Rubrik gehören auch die Künste die sich mit der Bearbeitung harter Stoffe το auf kaltem Wege & mit der Zusammensetzung von Systemen der Construction aus vielen kleinen harten Theilen beschäftigen z. B. Steinschneidekunst - Graviren, selbst das Schmieden ist eine Übergangsform & gehört halb hierher. Es muss bei allen diesen Abtheilungen jedes Einzelne vom ursprünglichsten Keime u. vom ersten Stoffe, der in Frage kam, an bis zur letzten Verkörperung des Gedankens ver-15 folgt werden. Alles zur Verkörperung des Gedankens Beitragende, der Rohstoff, die Werkzeuge u. die Maschinen müssen zusammen bleiben.
  - IV Das Dach.
    - A. Gerüste.
      - a. Holzgerüste, technische & bildnerische Entwickelung, Formen der Baukunst die diesem Ursprunge angehören. Giebel - Säulen, Fenster. Thüren (selbst Geräthe)
        - b. Metallgerüste technische & bildnerische Entwickelung der Metallconstructionen.

#### B. Dachbedeckung. 25

- а Überzug. Gewebe, Felle, Filz, Holz. Asphalt, Metall Stein (gränzt an die Categorie v. Wand)
- b. Schuppendecke. Schiefer, Schindel Ziegel, Metall in kleinen Platten, desgleichen Stein (gränzt an die Categorie der Maurerarbeit
- Hohe Bedeutung des Giebels in der Baukunst als Symbol der göttlichen Weihe des 30 Heerdes. Baldachin Schirm des Buddha - Aëtos der Griechen.
  - V. Zusammenwirken der vier Grundbestandtheile der häuslichen Einrichtung.
    - A. Hohe Kunst.
      - a Architektur
      - b. Drama.
    - B. Hohe Wissenschaft. Theologie Physiologie Moral. -

306.3 Unterhaltg] 'Unterhaltung' 306.14 Handeln] 'Handel' 306.15 religiosen] 'religiösen' 307.2 Geodasie] 'Geodäsie' 307.3 Anmerkg] 'Anmerkung' 307.13 Ubergangsform] 'Übergangsform'

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# Note on a Cultural-Philosophical Collection

### TEXTUAL RECORD

ViewegVieweg Archives, V1S:246, fols. 1v-2r (1r, 2r Semper's letter to Eduard<br/>Vieweg, 20 January 1852, see 308-9; 2v note '1852 Janr 20 Prof Semper<br/>London' probably by Eduard Vieweg), 'Note', in Semper's hand, copy-textHerrmann 1976'Briefe Gottfried Sempers an Eduard Vieweg 1843-1852 aus dem Verlags-<br/>archiv Vieweg: 15', 234-5, here 235, emended ed. of Vieweg

BIBLIOGRAPHY Herrmann 1976, 211–12, 234–5

### **EXPLANATORY NOTES**

Semper conceived this note as a complement to the version of the 'Outline of a Cultural-Historical Exhibition' sent to Eduard Vieweg on 20 January 1852 (40–2). The note's divergent title reflects the fact that Semper had changed the title of the ramified plan several times and was also wavering between whether it was intended for an exhibition or a collection. Both the outline and the note were planned as addenda to *Science, Industry, and Art.* Semper included the note in his letter to Vieweg, explaining its role after having referred to an 'announcement' to be appended to *Science, Industry, and Art.* This was the prospectus of his planned 'Comparative Architecture' and was published at the end of some rare copies of *Science, Industry, and Art.* The beginning of the letter in question reads:

London 20<sup>t</sup> Jan. 1852

Verehrter Herr und Freund.

Ich schickte Ihnen gestern einen Brief mit den gewünschten Erweiterungen der Epistel die als Annonce dienen soll. – Das zweite von Ihnen zur weiteren Prüfung mitgegebene Beiblatt, (den Plan einer kulturphilosophischen Sammlung,) behielt ich zurück, glaube aber vergessen zu haben, Ihnen zu schreiben, dass der Plan mir etwas zu spekulativ vorkommt, und ich desshalb bedenklich bin ihn zu veröffentlichen. Doch beurtheilt man seine eigenen Sachen nicht immer richtig, daher appellire ich heute bei zweiter Ueberlegung an Sie und stelle es Ihnen ganz frei, ihn mitzugeben oder es zu lassen. Nur müsste im ersten Falle folgende Note unten beigedruckt werden:

Then follows the note which, like the 'Outline of a Cultural-Historical Exhibition', was not published. It provides an explanation of the spatial arrangement in Semper's plan for a 'complete and universal museum' which he drew up in his slightly later catalogue of 'Practical Art in Metals and hard Materials' (297–8). Further comments on the 'Outline of a Cultural-Historical Exhibition', interrupted by a remark concerning Theodor Kell's translation of a work on flax and cotton (Ryan 1852; cf. Herrmann 1976, 232), conclude the letter:

Noch habe ich zu bemerken, verehrter Freund, dass ich an dem beiliegenden Plane ein paarmal die Folge der Abtheilungen verändert habe; aber wenn es zu viele Umstände macht, das abzuändern, so lassen Sie es ja beim alten.

Noch eine Angelegenheit, die mich eigentlich hauptsächlich dazu bewogen hat, Ihnen diesen zweiten Brief nachzuschicken.

Herr Kell erwartet sehnlich von Ihnen eine Auskunft ich weiss nicht genau mehr über welche Anfrage über eine litterarische Arbeit die er an Sie gestellt hat. Ich habe es schon zweimal vergessen, Ihnen diess zu schreiben.

Viele Empfehlungen an die Ihrigen Ganz der Ihrige GSemper.

Ich wiederhole, dass ich es ganz Ihrem Ermessen überlasse, ob Sie den Plan beigeben wollen. Vielleicht kann er manchem Ordner v. Sammlungen interessant werden.

The last sentence is preceded by a deleted comment on the plan: 'Er ist nicht genug durchgebildet.' (It is not developed enough.)

43.2 Schriftchens] Schriftchens; i.e. Wissenschaft, Industrie und Kunst 43.7 Gegenstände] Gegenstande

### ALTERATIONS IN THE MANUSCRIPT

43.1 Note] after del. on fol. 1r

# ... Note ...<sup>1</sup>

Es mag in dem gegebenen Plane manche Gezwungenheit in der Rubricirung der Gegenstände, besonders in dessen erster Hauptabtheilung hervortreten, aber selbst für<sup>2</sup> diejenigen Gegenstände, welche sich ihm nur mehr oder weniger gezwungen fügen, würde<sup>3</sup> es schwer seyn, einen anderen Plan zu erdenken, der das Zusammengehörige besser vereinigte und übersichtlicher als dieser wäre, und zugleich die Eigenschaft hätte, die anderen Objecte, für welche der gegebene Plan der einzig<sup>4</sup>

 I ... Note ...] ellipses by Semper
 2 selbst für] interl.
 3 würde] after del. und welche

 und] after del. würden dabei in ihrer Uebersichtlichkeit
 4 der einzig] del. separately

43.2-3 diesen Plan ~ erlaube] *above del.* den gegebenen Plan 43.2 **Es**] *above del*. Man der vielleicht nicht unverdiente Vorwurf den] n over m Plan] altered from Plane der] r *over* n unverdiente] *altered from* unverdienten 43.3 **der**] *interl*. treffen] above del. machen **sey**] *above del*. ist 43.4 füge] e over t 43.5 einige] above del. manche 43.6 könne,] *altered from* kann, 43.7 **der**] *above del*. alles alles] *after del*. und anwiese,] 43.8 **die**] ie altered from ~. **und**] *after del*. Es ist der] above del. dieselben Absichten over en **Erreichung**] *after del.* Zweck des 43.9 auseinander setzte] above del. des Weiteren darlegte des Weiteren] after del. darlegte, 43.10 die für den] after del. diejenigen Gegen 43.14 instructiv in over ei 43.20 Mitteln] after del. Masch

# **Association of Artists of Various Nations**

### TEXTUAL RECORD

- Vieweg Archives, V3:1.1.3.32, fols. IV-2r (IT-V, 2r-V Semper's letter to Eduard Vieweg, 2 December 1851, with request to quickly publish *Science, Industry, and Art* as an advertisement for the planned exhibition), in Semper's hand; written on paper with letterhead 'Great Exhibition of 1851. Official Catalogue. Contractors, Spicer Brothers, Stationers, and W. Clowes & Son, Printers, City Office, 29, New Bridge Street, Blackfriars'
- *ZfB* 'Bauwissenschaftliche und Kunst-Notizen', *Zeitschrift für Bauwesen* (Berlin) 1, no. 11/12 (31 Dec. 1851), 385 (ETH Library, P Rar 331), *copy-text*

BIBLIOGRAPHY Herrmann 1978, 58–9; Herrmann 1981, 100; Herrmann 1984, 53

### **EXPLANATORY NOTES**

Semper developed the idea for an exhibition in part of the emptied Crystal Palace following an initial suggestion that he had made in August 1851 to Jules Dieterle (the artistic director of the Sèvres porcelain manufactory near Paris, whom he had known since their collaboration on the Court Theatre in Dresden) to 'open an office for information and advice on industrial art, including decoration and even architecture', focusing on 'ceramics, glassmaking ... furniture, tapestry, wallpaper, designs for fabrics, etc., etc.' Due to reservations expressed by Dieterle, Semper turned for the 'project for an exhibition room' to Dieterle's friend Charles Séchan (who had also worked on the Dresden Theatre), who replied equally critically on 28 November 1851. Despite this, Semper continued to pursue the exhibition project further, for which – as he wrote to Eduard Vieweg on 2 December 1851 – the 'Exhibition building' had now 'been placed at our disposal'. He asked Vieweg to forward the enclosed 'letters to various notable people of my acquaintance' (311.12–13), probably including Friedrich Hitzig as a member of the editorial board of the Zeitschrift für Bauwesen, in which the call for entries was published (Semper was still praising Hitzig in 1860 as one of the best architects in Berlin). The letter to Vieweg contains a summary of the context and objective of the exhibition, a kind of variant of the published advertisement, of which no draft is known. So far, nothing more is known about the fate of this exhibition, which apparently did not take place.

43.23 **Es**] after introduction by journal editor:

*London*. Von dem Architekten Herrn *G. Semper* geht uns die nachfolgende Mittheilung zu, auf welche wir hiermit das betreffende Publikum Deutschlands aufmerksam machen:

43.24 **Deutschen**] *Deutsche* 43.25 **Blagmann**] *Klagmann* **Lienard**] *Liénard* 44.16 **tragen.** –] before conclusion by journal editor:

Wir empfehlen diese Angelegenheit dem betheiligten deutschen Publikum hiermit auf das Wärmste.

# MANUSCRIPT VARIANTS Vieweg

Eine Anzahl Französischer, Englischer und Deutscher Künstler hat sich vereinigt, im Februar eine industrielle Kunstausstellung zu veranstalten, und wir haben dazu das Exhibition building zu unserer Disposition erhalten. Natürlich werden wir nur eine einzige kleine Abtheilung davon in Anspruch nehmen.

5 Die besten Franz. Künstler werden ihre Beiträge dazu liefern, wie Dieterle, Lienard, Klagmann u. a. Der letztere Klagmann ist der ausgezeichneteste Bildhauer von denen welche die industrielle Kunst ihres Talentes nicht unwürdig halten. |

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Er bildet ein Mitglied unseres Comité, welches ausserdem mich, den Arch. Horeau und den Bronzefabrikanten Matifat und einige andere Künstler und Techniker zu seinen Mitgliedern zählt.

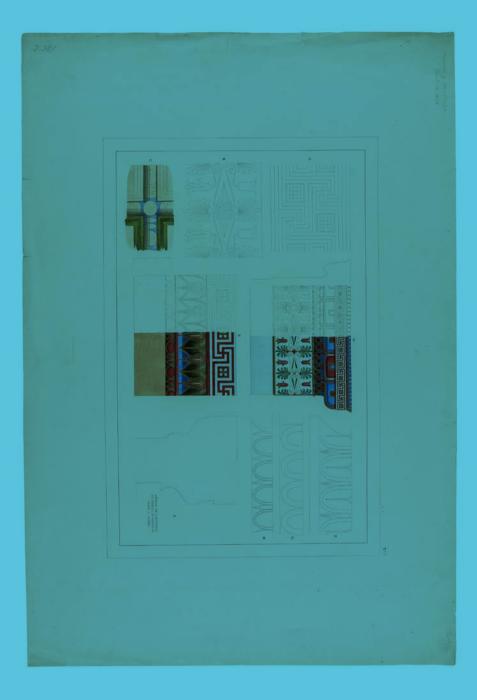
Es liegt uns daran, die Deutschen Kunstler u. Architecten für die Ausstellung zu interessiren, wesshalb ich einige Briefe an verschiedene mir bekannte Notorietäten unter ihnen beilege, welche Sie gütigst mit der Post weiter besorgen wollen.

Diese Schrift wäre geeignet, sowohl das Engl. wie d. Deutsche Publikum auf den Zweck
dieser Ausstellung aufmerksam zu machen, der weiter geht und die Begründung einer Industrieschule in London betrifft.

> 311.2 industrielle] after del. Ausstellung industrieller Zeich Exhibition] E over g 311.5 Lienard] 'Liénard' 311.6 u. a.] 'und andere' ausgezeichneteste] after del. beste von denen welche] above del. in der sich auf after del. manufa 311.11 Kunstler] 'Künstler' 311.9 Bronzefabrikanten] fabrikanten after del. manufa 311.11 Kunstler] 'Künstler' 311.14 Diese Schrift] i.e. Wissenschaft, Industrie und Kunst d.] 'das'

fol. IV

fol. 2r



Pl. 9: Plate from Die Anwendung der Farben in der Architectur und Plastik, 1836 (RIBA Library)

# **POLYCHROMY IN ARCHITECTURE**

# Introduction

Semper's two essays in English on polychromy in architecture – the first of which was published in Edward Falkener's Museum of Classical Antiquities of 1851, the second in Owen Jones's Apology for the Colouring of the Greek Court in the Crystal Palace of 1854 - take up topics that he had been developing in two essays in German: in his very first booklet, published shortly before he became professor of architecture at the Academy of Fine Arts in Dresden, Vorläufige Bemerkungen über bemalte Architectur und Plastik bei den Alten (Preliminary Observations on Painted Architecture and Sculpture of the Ancients) of 1834, and in the booklet Die vier Elemente der Baukunst (The Four Elements of Architecture), published in the autumn of 1851. Semper had sent the completed manuscript of this booklet to his publisher Eduard Vieweg on 19 January 1851, explaining that it was 'actually written for England'. As a matter of fact, on 1 December 1850, Semper had learned from Rachel Chadwick that Henry Cole was trying to have the booklet published by the Society of Arts, whose council Cole chaired. And indeed, both of Semper's English essays on polychromy are variants of parts of The Four Elements of Architecture. The first - 'On the Study of Polychromy, and Its Revival' (48-61) - synthesizes several of its six chapters, while the second - 'On the Origin of Polychromy in Architecture' (61-73) summarizes large parts of the fifth chapter, entitled 'Die vier Elemente' (The Four Elements).

The issue of architectural polychromy in antiquity was attracting some attention in London around this period. In the autumn of 1850, Owen Jones was commissioned to design the polychromatic interior decoration of Joseph Paxton's Crystal Palace in Hyde Park. Semper came into direct contact with the current English debate on polychromy for the first time here. In a letter of 13 November 1850, he asked Edwin Chadwick to recommend him to Paxton 'for the decoration of the Building for 1851', which was to involve the application of polychromy – as he learned at the latest from Chadwick's reply of 26 November, stating that Paxton was unable to consider Semper's 'services for the Polychrome decoration of the edifice for the new exposition' because 'the task of painting and decorating the edifice, is in the hands of Mr Owen Jones'. Jones presented his design in a paper 'On the Decorations Proposed for the Exhibition Building' that was read at the Royal Institute of British Architects (RIBA) on 16 December 1850. Shortly before this, on 2 December, Matthew Digby Wyatt had read a paper at RIBA on 'Observations on Polychromatic Decoration in Italy, from the 12th to the 16th Century'. Semper himself took part in subsequent debates on polychromy held at RIBA about a year later. On 12 January 1852, Thomas Leverton Donaldson read a paper on Jacques Ignace Hittorff's Restitution du temple d'Empédocle à Sélinonte of 1851. Donaldson also referred to works by Semper - as Hittorff had also done - namely to Preliminary Observations on Painted Architecture and Sculpture of the Ancients and to the hand-coloured lithographs in the folio work Die Anwendung der Farben in der Architectur und Plastik (The Use of Colour in Architecture and Sculpture) of 1836. The lithographs were displayed at the meeting, among them details from the Temple of Theseus (pl. 9) and the restoration of a part of the Parthenon. Donaldson's paper was discussed at the RIBA meetings of 26 January and 9 February 1852, again with drawings by Semper being shown. At the first of these two meetings, Semper explained the drawings and 'his colored restoration of the Parthenon' and referred to the interpretation that he had put forward in the first of his English essays on polychromy in defence of the proposed mainly red tint.

Semper's contributions in English to the debate on architectural polychromy had been prompted by yet other factors. These relate to his then still continuing work on 'Vergleichende Baulehre' (Comparative Architecture), which he had started in Dresden at the instigation of Eduard Vieweg. Semper was to have delivered the first part to him in the autumn of 1844 but did not send it until 13 May 1850, while he was in exile in Paris – a manuscript of about 400 pages containing chapters on the primal elements of architecture and the domestic architecture of Assyria, Chaldea, Media, Persia, China, India and Egypt. Shortly after Semper's arrival in London on 28 September 1850, Emil Braun – the person who had persuaded Semper to move to England instead of America – suggested that he should carry out a 'revision' in English of his 'Comparative Architecture', as Semper wrote to Vieweg on 2 October 1850. After Semper had moved into an office on Edward Falkener's premises a few days later, he took the opportunity to present an outline of the work in Falkener's journal *The Museum of Classical Antiquities*, the first issue of which was to be published in January 1851 with essays on polychromy by Jacques Ignace Hittorff and Falkener himself.

By around mid-May 1851, Semper had drafted an initial proposal for Falkener's Museum in French (MS 79; pl. 3), the language that he and Falkener shared. In a prefatory note to Falkener, he wrote that - instead of giving the planned 'summary' of the 'work on comparative architecture' - he had restricted himself to 'a few salient pages from its contents' and focused on a 'specialized archaeological subject', namely 'the question of Greek polychromy and its origin', which was beginning to attract 'more general interest, particularly in England'. However, the manuscript is a first adaptation and translation by Semper into French of the fifth chapter ('Die vier Elemente') of the booklet The Four Elements of Architecture, which primarily situates the origins of architecture in the industrial arts. It is thus an early witness to Semper's transformation of his arguments on polychromy into A Contribution to Comparative Architecture, as the subtitle of The Four Elements of Architecture reads. Falkener did not publish this manuscript but another, missing, one which he received by the end of May or the beginning of June 1851 (on 7 June 1851, he urged Semper to respond to his request of a few days earlier, namely 'to see me and examine your MS etc., etc. I need to send it to the printers'). Published as 'On the Study of Polychromy, and Its Revival', the essay centres on the polychrome debate in general and particularly on Franz Kugler's attack – published in German in 1835 and in English in 1836 - on Semper's position as expounded in Preliminary Observations on Painted Architecture and Sculpture of the Ancients.

Semper's first French draft (MS 79) – the summary of the fifth chapter of *The Four Elements of Architecture* – became part of the source material for the essay 'On the Origin of Polychromy in Architecture' in Owen Jones's *Apology*. Jones wrote the latter in defence of his Greek Court with its three partial, and painted, copies of the Parthenon frieze, which formed part of the Crystal Palace's Fine Arts Courts that opened on the building's new site in Sydenham on 10 June 1854. Semper had already revised the first French draft during the summer of 1851 (again in French), now giving it the title 'Second Essay. Sur l'origine de l'architecture polychrome' (MS 82). However, the English version published in Jones's *Apology* is neither a direct translation of the first French version nor of the second but a combination of the two supplemented by arguments which Semper had developed in the third chapter of *The Four Elements of Architecture*, entitled 'Der chemische Beweis' (Chemical Evidence). The manuscript of the English essay is missing.

Semper's involvement in the English debate on architectural polychromy had some lasting material effects. Semper donated some of his works on the subject to RIBA (where they are still held) - presenting a copy of Preliminary Observations at some time before 13 January 1851 and, on the occasion of the meeting of 12 January 1852, a copy of *The Four Elements*, as well as the five lithographs from The Use of Colour in Architecture and Sculpture that were shown at the meeting. A complete copy of The Use of Colour was incorporated into the library of the Department of Practical Art, now in the National Art Library at the Victoria and Albert Museum. Interestingly, the RIBA Library does not hold an ordinary copy of The Four Elements but one of the rare copies that have a different main title (the subtitle is the same) - namely Ueber Polychromie und ihren Ursprung (On Polychromy and Its Origin). Semper must have received some of these copies in late August 1851 when Vieweg visited the Great Exhibition, while he acknowledged the receipt of copies with the final title (upon which he decided on 9 September 1851) in mid-November 1851. Three of the variant copies survive in London; in addition to the one at RIBA, there are two copies in the library of the Victoria and Albert Museum, one of which is the one that Semper presented to Henry Cole with the autograph dedication 'H. Cole Esq. with the Authors fullest Respects May 17<sup>th</sup> 1852'. Finally, Semper referred to both of his English essays on polychromy in the first volume of Style in the Technical and Tectonic Arts, when discussing his 'principle of coating' (Semper 1860/63, 1:226-7).

**BIBLIOGRAPHY** Ettlinger 1937, 49–63, 69–78; Van Zanten 1977a, 27–9, 50–6; Van Zanten 1977b, 8–10, 41, 42a–44, 52–64, 73–4, 155, 167–9, 403–5; Herrmann 1978, 46–7, 62; Herrmann 1981, 95; Van Zanten 1982, 187, 209–15; Herrmann 1984, 42, 56; Jenkins/Middleton 1988; Pisani 2003; Hildebrand 2020a, 105–8

# On the Study of Polychromy, and Its Revival

#### **TEXTUAL RECORD**

MCA 'On the Study of Polychromy, and Its Revival', *The Museum of Classical Antiquities* (London) 1, no. 3 (July 1851), 228–46 (BL, P.P.1900.b), *copy-text*JDM 'On the Study of Polychromy', *The Journal of Design and Manufactures* (London) 6, no. 34 (Dec. 1851), 112–13; reprint of the conclusion of MCA (241–6) without the notes, introduced by Henry Cole
Semper 2014<sup>a</sup> vol. 1, 371–89, Karge's reprint ed. of MCA
Semper 2014<sup>b</sup> vol. 1, 390–1, Karge's reprint ed. of JDM

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**BIBLIOGRAPHY** Reising 1976, 56 and n. 43; Van Zanten 1977a, 28; Herrmann 1978, 46–7, 62; Herrmann 1981, 95; Van Zanten 1982, 213; Herrmann 1984, 42, 56; Mallgrave 1989, 2–19; Gnehm 2004, 55–69; Weidmann 2014, 6; Gnehm 2017b

## **EXPLANATORY NOTES**

Semper's English essay on polychromy in the July issue of Falkener's Museum of Classical Antiquities of 1851 is the first, partial, publication of the German version of The Four Elements of Architecture, which was published only in the autumn of 1851. It comprises roughly the book's first and second chapters and touches on topics developed in the fourth and fifth chapters. The essay begins with an overview of the polychromy debate (48.4-52.2), corresponding to the book's first chapter (Semper 1851b, 1-12), and then moves on - in a passage which is missing from The Four Elements of Architecture - to Semper's critique of Franz Kugler's only partial acknowledgement of polychromy by differentiating between two positions (52.3-53.25): the first position, in which polychromy is regarded 'as a means of art' to 'assist and increase the effect of sculpture and architecture', and the second one, in which sculpture, architecture and painting are considered to be 'one indissoluble whole' without any 'limits between the different manifestations of Greek art'. Then follows Semper's detailed critique of Kugler's position (53.26-56.15), a summary of large parts of the book's second chapter (Semper 1851b, 13-29) and a critique reiterated at the RIBA meeting of 26 January 1852. After a passage, absent in the book version, on Hittorff as a representative of the second position (57.1-22), the essay concludes with arguments for a Greek polychrome architecture in accordance with the other arts, listed in eleven points (57.23-61.17) - a concise summary not offered in the book version, in which the corresponding parallels are to be found in the fourth and fifth chapters. Henry Cole reprinted this eleven-point conclusion (without the footnotes) in his Journal of Design and Manufactures of December 1851, partially fulfilling his promise to have The Four Elements of Architecture published by the Society of Arts (see 313).

48.4-5 Quatremère de Quincy - Le Jupiter Olympien] Quatremère de Quincy 1815; cf. Semper 1851b, 1 48.23-4, 49.1-2 This controversy ~ ancient Greece.] German philhellenism underwent a major revival with the outbreak in 1821 of the Greek revolution against Ottoman rule, which led to the establishment of the Kingdom of Greece in 1832 with its first King Otto, son of King Ludwig I of Bavaria; cf. Semper 1851b, 2. 48.25-7 Kugler ~ in the Trans. Inst. B. Archts. vol. i. part 1, 1835-6] Franz Kugler's Ueber die Polychromie der griechischen Architektur und Sculptur und ihre Grenzen (1835), translated by William Richard Hamilton; for this and all further references to 'Kugler' and 'Hamilton's Kugler', see Kugler 1836 48.30 Hittorff ~ in the first number of this periodical] Jacques Ignace Hittorff's essay 'On the Polychromy of Greek Architecture' (Hittorff 1851b)

49.15–16 splendid work ~ by Baron Stackelberg] Stackelberg 1826 49.16–17 Bröndsted, in his Voyages et Récherches en Grèce] for this and all further references to 'Bröndsted' and his Voyages et recherches en Grèce, see Brøndsted 1826/30 (with 'Récherches' as recherches). Semper mentions Brøndsted's work 'on the sculpture of the Parthenon' in Preliminary Observations on Painted Architecture and Sculpture of the Ancients (Semper 1834, 5 n. \*\*, 18). 49.18–19 Duc de Luynes ~ discoveries at Metapontum] Luynes/Debacq 1833 49.19 Duca di Serradifalco ~ researches in Sicily] Serradifalco 1834/42, referred to in Semper 1834, 18 49.20–1 restoration of a small temple at Selinuntum, published by M. Hittorff] Hittorff/Zanth 1826/30, mentioned in Semper 1834, 18 49.30 Herman] Gottfried Hermann, a philologist Semper refers to in *Preliminary Observations* and *The Four Elements* (Semper 1834, 43, 49; Semper 1851b, 2 n. \*, 52 n. \*) 49.38–42, 50.36–7 researches ~ cholera] On his study trip of 1830–33, Semper left Rome in February 1831 together with the French architect Jules Goury. After a journey through the Alban Hills and the Lepini Mountains, they travelled to Naples and Pompeii, sailed to Sicily and then to Greece, where they arrived in October 1831. In the spring of 1832, Goury continued his journey together with Owen Jones, travelling to Constantinople, Palestine, Egypt and Granada, where Goury died of cholera in 1834 while working on his drawings of the Alhambra, which were later published by Jones (Jones 1842/45); cf. Semper 1851b, 3–4, 9, 32–3; Semper 1860/63, 1:516; 2:318 n. 1.

50.3-4 larger work ~ Mediæval] Semper's folio work The Use of Colour in Architecture and Sculpture with six hand-coloured lithographs (Semper 1836). Only the first part on Greek and Etruscan polychromy was published. 50.12-13 restoration of the Cathedral of **Bamberg by Gärtner**] The remains of the polychrome interior of Bamberg Cathedral were found during its restoration, which was intended to remove later additions to the original building. Commissioned by Ludwig I of Bavaria, the painter Friedrich Karl Rupprecht began the refurbishment process in 1829; it was continued by two architects: 1831-34 by Carl Heideloff and 1834-37 by Friedrich von Gärtner. Semper had visited Bamberg in 1833 on his return from the study trip to Italy and Greece. He refers to Heideloff's Bamberg work in Preliminary Observations (Semper 1834, 42) and discusses medieval polychromy with reference to Bamberg Cathedral in The Four Elements (Semper 1851b, 6). 50.25-6 **Sainte** Chapelle, by M. Duban] Félix Duban, assisted by Jean-Baptiste Lassus, began the restoration of the Sainte-Chapelle in Paris in 1837; Lassus took over in 1849, and Émile Boeswillwald completed it in 1857-63. In The Four Elements, Semper refers to the Sainte-Chapelle on account of the completeness and richness of its polychrome system (Semper 1851b, 6). In Style in the Technical and Tectonic Arts he mentions the Sainte-Chapelle as an example of the way in which medieval polychromy served to give calm and stability to the dynamics of the Gothic ribbed vaults and the system of slender pillars (Semper 1860/63, 1:511-12). 50.40 Bemerkungen über die vielfärbige Architectur und Sculptur bei den Alten] This is how the title (with 'vielfärbige' printed correctly as vielfarbige) appears on the engraved title page of Preliminary Observations (Semper 1834).

51.17-18 Gowry and Jones's work on the Alhambra] 'Gowry': Goury; see note 49.38-42, 51.27 publication of the Mosque of Santa Sophia] Fossati 1852; cf. Semper 50.36-7 1851b, 9 n. \* 51.29 discoveries in Assyria] In The Four Elements (Semper 1851b, 10), Semper refers to 'two beautiful works' on Assyria, meaning Paul-Émile Botta and Eugène Flandin's Monument de Ninive (1849-50) and the first series of Austen Henry Layard's Monuments of Nineveh (1849/53) - both actually describing not the ruins of Nineveh but those of Khorsabad and Nimrud, respectively. Layard unearthed the remains of the actual Nineveh in a second expedition, published in the second volume of his work (1853). Semper later refers to Layard's and Botta's discoveries in his London lectures (128.22-3, 163.20, 199.26-8, 200.40-1; 447.1-2). 51.30 monuments of Persepolis and of Egypt] In The Four Elements (Semper 1851b, 10), Semper mentions Eugène Flandin and Pascal Coste's Voyage en Perse (1851). The monuments of Egypt had been published, for example, by Semper's Paris teacher and friend Franz Christian Gau in his Antiquités de la Nubie (1822). 51.32-6 monuments of Athens ~ Dilettanti Society] Semper refers to Francis Penrose's Investigation of the Principles of Athenian Architecture in The Four Elements as a forthcoming publication of the Society of Dilettanti (Semper 1851b, 10–11). Earlier publications of the Society of Dilettanti include Antiquities of Ionia (1769/1840) and The Unedited Antiquities of Attica (1817). 51.37–9 Donaldson ~ Trans. R. Inst. B. Archts. i. 85, 86] Donaldson's observations on colour discovered at the Temple of Theseus in Athens date from 1820, not 1830; they were partially published in Kugler 1836, 85–6 n. ‡, and translated by Semper into German in The Four Elements (Semper 1851b, 31–2).

52.I-2 work by M. Hittorff, the plates of which were obligingly shown to me by that author] Hittorff's *Restitution du temple d'Empédocle à Sélinonte* (Hittorff 1851a); cf. Semper 1851b, 1I–12. Semper had known Hittorff since his studies in Paris in 1826–27 and 1829–30; he kept in touch with him during his Parisian exile in 1849–50. 52.35 géneral] 'général' in Brøndsted 1826/30, 2:146 52.38 materiaux] 'matériaux' in Brøndsted 1826/30, 2:146

53.1 des veritables] 'de véritables' in Brøndsted 1826/30, 2:146 53.15 if no] 'If then no' in Kugler 1836, 84 53.24 that of marble] 'that marble' in Kugler 1836, 84 53.25 made resplendent] 'made' missing in Kugler 1836, 84 53.37 Herod. iii. 57] for this and all further references to 'Herod.' and 'Cary's Herod.', see Herodotus 1848, 194–5, with minor differences to the cited text

56.16 **Faraday's Report**] Michael Faraday's analysis of the Elgin Marbles of 1837, published in Hamilton 1842, 106–7; cf. Semper 1851b, 44–5; Semper 1860/63, 1:516–17

57.1-22 The second class ~ of the cella.] missing in Semper 1851b 57.27-8 2. ~ tapestry.] cf. fifth chapter in Semper 1851b, 59 57.29-32 3. ~ construction.] cf. fifth chapter in Semper 1851b, 66-7 57.38 metropes] *metopes* 

58.1-4 4. ~ ceiling.] cf. fifth chapter in Semper 1851b, 67-8 58.5-6 5. ~ stone.] cf. fifth chapter in Semper 1851b, 57-9 58.6 burnt] *baked* 58.7-13 6. ~ polychromy.] cf. fourth chapter in Semper 1851b, 46-7 58.14-24, 59.1-5 7. ~ practice.] cf. fourth chapter in Semper 1851b, 47-8 58.27 Vitruvius] Semper had a copy of Daniele Barbaro's edition of Vitruvius's *Ten Books of Architecture* among his books (see 214.25), probably the Latin edition first published in 1567. 58.30-1 Wiegmann, Die Malerei der Alten] Wiegmann 1836 58.34-5 Plin. H. Nat. xxxv. 39] here and in further references Pliny's *Naturalis Historia* (Natural History); also cited in Semper 1851b, 47 n. \*. Semper had one volume of it among his books (see 215.32). 58.38-9 Plin. H. Nat. xxxv. 41] also discussed in Semper 1851b, 48 n. \*

59.4-5 Further proof ~ granite] together with note 18, 'See ante, p. 99' (59.42), a reference to Falkener's contribution to the debate on polychromy, 'On the Application of Polychromy to Modern Architecture' in the first issue of The Museum of Classical Antiquities, which discusses the decoration of the Crystal Palace; see Falkener 1851b, 99: 'Among the coloured decorations at Thebes, I was much struck with granites stained artificially with transparent colour approaching to yellows and reds; the felspar, mica, and quartz, being perfectly distinguishable underneath.' 59.6-26, 60.1-10 8. ~ ornament and sculpture.] cf. fifth chapter in Semper 1851b, 96-8 59.20 forms of Doric architecture were derived from Egypt] together with note 19, 'See ante, p. 87' (59.43), a reference to Falkener's paper 'On Some Egyptian-Doric Columns in the Southern Temple at Karnak' published in the first issue of The Museum of Classical Antiquities. Falkener's discussion of an Egyptian capital is accompanied by a woodcut (Falkener 1851a, 87) which Semper copied for the first volume of *Style* to illustrate what he calls a 'Protodoric capital' (Semper 1860/63, 1:419). 59.30-1 Plin. H. Nat. xxxvi. 22] In Style, Semper cites this passage from the edition by Jacques Daléchamps, originally published in the sixteenth century; Semper 1860/63, 1:460 n. 1; this edition is also cited in Semper 1860/63, 2:283 n. 5, 584 n. 2.

60.25 **eastern climate**] Van Zanten 1982, 272 n. 83, observes: 'In Semper's original text a small "e" is used, but this makes no sense; Semper must mean Oriental, not eastwards.' This was actually corrected in Cole's reprint of the paper (see below, Print Variants 60.25). In a parallel passage of *The Four Elements*, Semper speaks of 'southern regions', where the 'red-dish vitreous coating' conferred on the marble temple a 'tonal key of colour' which made the building mass fade into the 'tone in which the lower portion of the sky glows ... at high noon' (Semper 1851b, 39–40). 60.34–5 "Pictura ~ Petronius, Init.] a line in the beginning of Petronius's *Satyricon* where the narrator scolds the decay of rhetoric and poetry (also referred to in *The Four Elements*; Semper 1851b, 98). Semper translates the sentence in *Style* (Semper 1860/63, 1:494): 'Auch die Malerei nahm kein besseres Ende, seitdem die frechen Aegypter ein Schema dieser grossen Kunst erfanden' (Painting, too, has come to no better end since the impudent Egyptians invented a scheme for this great art). 60.36 tryglyphs] *triglyphs* 

# PRINT VARIANTS

48.I-2 **XX. On the Study of Polychromy, and its Revival.**] On the Study of Polychromy, by Gottfried Semper. *before Henry Cole's introduction:* 

Already a considerable change has taken place in public taste on the subject of colouring public buildings, and a more genial feeling for colour has begun to develope itself. All nations have shewn their natural instinct towards colour, and it has been the means of completing and adorning all styles of architecture in all ages. The English were as natural in their love for colour as any other people until the Puritanic movement set in after the Reformation, and deluged the churches with whitewash. That and our transitional state, which has left us without principles of any kind in art, have helped, even to this day, to make the mass of the public sceptical about the good taste of colouring public buildings. But a better feeling is already growing, and it may be foreseen, that, in a few years, any architect will be considered as leaving his building naked and imperfect who shall fail to complete it with the charms of colour. In the "Museum of Classical Antiquities," a learned quarterly periodical, we have some condensed remarks on this subject, which convey useful information: they are by M. Gottfried Semper, the tasteful architect of the Berlin theatre, who is at present resident in this country: –

48.4-57.24, 57.33-9 **Since the publication** ~ white.] *om*.

57.30 Romans,  $] \sim 10^{-1}$ , 58.25–31 The influence ~ Alten. ] om.

58.15 development] development 58.32-5 "Ceris ~ Plin. H. Nat. xxxv. 39.] om. 58.36-44 "Encausto ~ Architects.] om.

59.2 coloured and] ~ or 59.12 civilization] civilisation 59.19 shown] shewn 59.27– 41 "Durat ~ Id. vii. 5.] om. 59.42 See ante, p. 99.] om. 59.43 See ante, p. 87.] om. 60.3 painting] paintings 60.23 terra cottas] terra-cottas 60.25 eastern] Eastern 60.34-5 "Pictura ~ Petronius, Init.] om. 60.36-9 I have ~ fact.] om. 60.40-1 This was ~ green.] om.

61.16–18 painting. Gottfried Semper.] painting." before Henry Cole's conclusion:

Mr. Semper it was who so skilfully arranged the Canadian Court in the Great Exhibition. His knowledge both of architecture, and generally of decoration, is profound, and his taste excellent. It is men of his acquirements from whom our manufacturers would be likely to obtain great help.

61.29-30 This bordering ~ black.] om.

# **On the Origin of Polychromy in Architecture**

## TEXTUAL RECORD

MS 79	gta, 20-Ms-79, fols. 1r-25v, 'On Tapestry & the origin of Polychronic Decor- ation' ('Polychronic': <i>Polychromic</i> ), in Semper's hand; French translation of part of a draft of the fifth chapter of <i>The Four Elements of Architecture</i> , written in German to be translated into English (gta, 20-Ms-78; Rachel Chadwick, Edwin Chadwick's wife, began the English translation on or shortly before 26 November 1850 but abandoned it in late January or early February 1851)
MCO	
MS 80	gta, 20-Ms-80, fols. 11-17v, partly in Mary Semper's hand (11-13v, 151-17v;
	emendations in Manfred Semper's hand), partly in Manfred Semper's hand
	(14r-v), early 1880s, copy of MS 79
MS 82	gta, 20-Ms-82, fols. 1r–17v, 'Second Essay. Sur l'origine de l'architecture poly-
	chrome', in Semper's hand, dated 2 August 1851
Apology	'On the Origin of Polychromy in Architecture', in Jones 1854a, 47-56 (BL,
1 00	RB.23.a.29891), copy-text
Semper 2014	vol. 2, 551–60, Karge's reprint ed. of Apology

**BIBLIOGRAPHY** Herrmann 1981, 95–6; Mallgrave 1989, 19; Gnehm 2004, 41–2; Gnehm 2007, 64–5; Weidmann 2014, 11

## EXPLANATORY NOTES

Semper's second English essay on polychromy was included in the appendix of Owen Jones's *Apology for the Colouring of the Greek Court in the Crystal Palace* (published on 12 June 1854), together with additional texts on architectural polychromy, among them George Henry Lewes and William Watkiss Lloyd's 'Historical Evidence', which discusses literary sources, and Thomas Leverton Donaldson and Michael Faraday's 'Material Evidence' concerning the polychromy of the Elgin Marbles that were examined in 1836–37, with the results published in 1842. A note to the text explains that it was 'Extracted from an Essay in 1852, and published in Germany under the title of "The Four Elements of Architecture". Besides the wrong date – the booklet *Die vier Elemente der Baukunst* was published in 1851 – it would be

more accurate to say that the essay published in Jones's Apology is an adaptation of Semper's first French manuscript (MS 79) and its revision (MS 82), both of which furnish summaries of the fifth chapter of *The Four Elements of Architecture* (see 315). Both titles of these French versions point to the title of the published English essay: the first one being 'On Tapestry & the origin of Polychromic Decoration', and the other 'Second Essay. Sur l'origine de l'architecture polychrome', which contains the exact French variant of the title of the English essay. The manuscript of the latter is missing but - despite or precisely because of some French remnants - was possibly written directly in English with the assistance of Manfred Semper, Gottfried's son, who helped him in writing letters in English on other occasions. Just to mention two examples of the relations and differences between the French manuscripts and the English text: The beginning of the published essay is the same as that of MS 82; both here omit the beginning of the fifth chapter of The Four Elements of Architecture on the composite character of Greek culture, with which MS 79 begins in its turn. However, the English essay incorporates this passage a few pages further on (69.17-70.4). Finally, its concluding part is omitted in both French manuscripts - a condensed discussion of the colour system of the Greeks adapted from the third chapter of The Four Elements of Architecture, entitled 'Der chemische Beweis' (Chemical Evidence).

Hans Semper, in a biography of his father, assumed that 'On the Origin of Polychromy in Architecture' appeared 'as an appendix to the Description of the Greek Court in Samuel Sharpe's work on the "Crystal Palace" (Semper 1880, 20) – a mistake that seems to confuse several publications issued on the occasion of the opening of the Crystal Palace at Sydenham: Jones's *Apology*, George Scharf's *Greek Court Erected in the Crystal Palace* (Scharf 1854) and Jones's *Description of the Egyptian Court*, which contains Samuel Sharpe's 'Historical Sketch of the Egyptian Buildings and Sculpture' (Jones 1854b, 35–71).

### 61.22-8, 62.1-64.8 From the time ~ subject.] cf. Semper 1851b, 56-9

63.9 πιναξ] πίναζ (pinax) 63.10 burnt] baked (see also 63.20–1, 63.37, 65.37, 66.1) 63.11 πινακες (πinakes, plural of pinax) in Semper 1851b, 58, 66; translated in Semper 1860/63, 1:293, as 'Täfelung' (panelling) 63.15–16 Wiegmann ~ causes.] see Wiegmann 1836, 29–30, 46–7, 79–80; see also Semper's discussion of that point, with reference to Wiegmann 1836, in 'On the Study of Polychromy, and Its Revival' (58.27–31)

64.9-66.15 **The Assyrians** ~ fixed.] cf. Semper 1851b, 59-62 64.34 irregularity] 'angulosité' (angularity) in MS 79 and MS 82. An equivalent word is missing in the corresponding passage of *The Four Elements of Architecture*, which describes how the rigid ('steif') posture of Assyrian sculpture is an indication for its origin in embroidery (Semper 1851b, 60).

65.8 tapesteries] tapestries 65.10 orignals] originals

66.5 unburnt] *unbaked* 66.5–7 next, they covered with these painted bricks ~ the interior of the room; and lastly, they placed a fire in the room to fix the varnish which covered the walls.] This passage differs from the French versions of MS 79 and MS 82 in that there the bricks are described as first painted in the order in which they would cover the wall of a room, then numbered and put into the furnace and fixed onto the wall only at the end. In *The Four Elements of Architecture*, the corresponding passage suggests similarly that the bricks were painted and baked ('ornamentirt und glasirt', ornamented and glazed) before being applied to the wall (Semper 1851b, 61–2). 66.21–3 It is only in the terraces ~ the mason's oldest domain.] cf. Semper 1851b, 67

67.4–68.13 **The Egyptians ~ covered.**] cf. Semper 1851b, 62–3 67.29 **French expedition**] Napoleon Bonaparte's invasion and occupation of Egypt in 1798–1801 68.4 torus moulding] see the drawing in MS 82 and the corresponding woodcut in Semper 1851b, 63
68.11 Palace of Osirtesen] Semper addresses the structure that King Senusret I (Sesostris I) – equated with Osirtasen I in the nineteenth century – is said to have built inside the temple complex at Karnak.
68.14–31 The Chinese ~ polychromy.] cf. Semper 1851b, 64
68.32–69.3 The Indians ~ Greece.] cf. Semper 1851b, 64

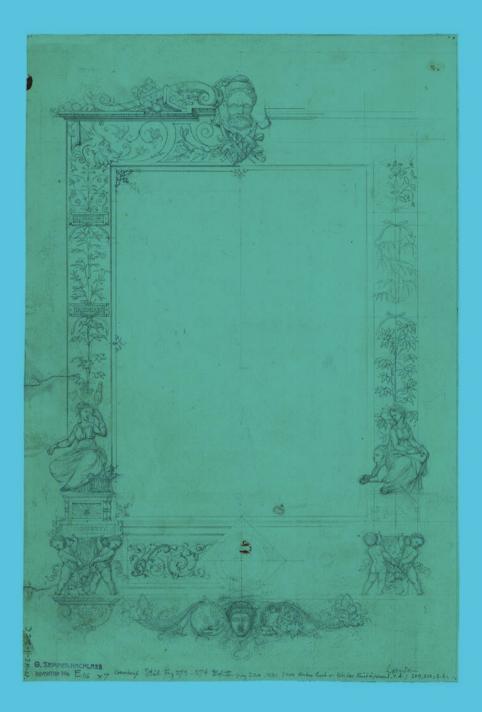
69.4-10 The Jews ~ "the Enclosure."] cf. Semper 1851b, 64-5 69.10 Enclosure] one of Semper's four elements, the French word in MS 79 and MS 82 being 'l'enclos' and the German word in Semper 1851b, 55, 'die Umfriedigung' 69.12-13 Temple of the Slaves at **Mechlenburg** ~ **Baron von Rumohr**] 'Slaves': French for *Slavs*. The passage is missing in MS 79, MS 82 and Semper 1851b. This temple of the Slavs was the main sanctuary of a Slavic tribe that is thought to have lived, from the tenth to the twelfth century, in a region on the Baltic Sea that corresponds to Mecklenburg in north Germany; for Semper's reference to the discussion of the temple, see Rumohr 1816/23, 1:9-122. 69.17-70.4 Hellenic art ~ cosmogony.] Besides the remarks on polychromy, this passage corresponds to the beginning of the fifth chapter of The Four Elements of Architecture (Semper 1851b, 52-3); Semper concludes his essay 'Die grosse Ausstellung' with similar remarks (26.20-4) and adapts the passage in Science, Industry, and Art (Semper 1852, 33), in drafts of the first and third lectures that he was to give at the Department of Practical Art (99.22-32, 131.22-5) and in Style in the Technical and Tectonic Arts (Semper 1860/63, 1:220, 426-7). While MS 79 begins with this passage, it is missing in MS 82 in which Semper announces that 'Quant à l'ensemble de l'architecture Grecque, il sera demontré dans un autre memoire qu'elle étoit d'un caractère très composite' and then briefly discusses the four elements of architecture in connection with the use of panelling in a variant version of the corresponding passage in The Four Elements of Architecture (Semper 1851b, 65-7; see also note 63.11).

70.5-34 **The system ~ easily mastered**.] a passage towards the end of the fifth chapter in Semper 1851b, 97 70.35-40 **It would ~ professed by it**.] missing in MS 79, MS 80 and Semper 1851b

71.I-72.34 **Traces** ~ painted eyes.] This next to last part of the essay is a summary of the findings expounded in the third chapter ('Chemical Evidence') of *The Four Elements of Architecture* (Semper 1851b, 30-45). 71.19-20 oves, or eggs] part of an ornament called egg-and-dart moulding; see Semper 1851b, 23 n. \*: 'mit blauen Oven am Simms' 71.22-3 moulding ~ opisthodome of the temple of Theseus] The opisthodomos is the rear hall of a Greek temple (see Semper 1834, 48; Semper 1851b, 32). Its moulding at the Temple of Theseus is illustrated in *The Use of Colour in Architecture and Sculpture* (pl. 9; Semper 1836, pl. 2 figs. D, E) and in *Style* (Semper 1860/63, 1: pl. IX). 71.36 plate, in my work ~ panel of the temple of Theseus] Semper 1836, pl. 4; see also Semper 1860/63, 1: pls. V-VI

72.5-6 In the portion which I have found in the wall with the niche (see my work), these details are not to be seen.] The 'portion' refers to a fragment covered with a 'glassy, enamel-like colour' which Semper had discovered – as he says in *The Four Elements of Architecture* in a citation of *Preliminary Observations on Painted Architecture and Sculpture of the Ancients* – in the 'niche between the antae of the porch which were made of fragments of the temple's ceiling during Christian times'. Semper had brought one of these fragments with him 'to the evidence ad oculos for the doubters' (Semper 1834, 48–9, cited in Semper 185tb, 30–1); it is the fragment of the ceiling of the Temple of Theseus reproduced in *The Use of Colour* (pl. 9; Semper 1836, pl. 2 fig. C). In *The Four Elements of Architecture*, in which it is depicted as a woodcut, Semper notes that it had been 'badly damaged on travelling and by touching' (Semper 185tb, 36, 38 fig.; cf. 35, 39 n. \*); the fragment is also mentioned and re-

produced as a colour plate in *Style* (Semper 1860/63, 1:523, pl. II). 72.7 Monument of Lysicrates] cf. Semper 1851b, 37-8. In Style, Semper discusses this monument only briefly with respect to colour (Semper 1860/63, 1:485) but repeatedly in connection with ceramics and tectonics (Semper 1860/63, 2:95, 115 n. 1, 242 n. 2 and fig.) and stereotomy (Semper 72.18 Some years after my sojourn at Athens] 1860/63, 2:355, 385 fig., 468-71, 473-4). see 318, Explanatory Notes 49.38-42, 50.36-7 72.18-20 portions of this building ~ **Hecatompedon**] This excavation of the Parthenon and parts of the Hecatompedon temple is the one that was undertaken in 1835-36, reported by Charles Holte Bracebridge (see note 72.33-4) and mentioned by Semper in The Four Elements of Architecture (Semper 1851b, 43). 72.25 orvolos] ovolos; the ornament in the form of carved 'oves, or eggs' of the Greek convex moulding (see note 71.19–20) 72.26 Tower of the Winds] In Semper 1851b, 37, this octagonal tower in Athens is called 'Tempel der Winde' (Temple of the Winds). 72.33-4 Mr. Bracebridge ~ painted eyes.] Charles Holte Bracebridge described these statues in a letter of 1837 which was published as part of the report on the examination of the Elgin Marbles in 1842 (Hamilton 1842, 104-5). In The Four Elements of Architecture, Semper paraphrases Bracebridge's whole letter in German (Semper 1851b, 42-4); most of it was reprinted in Owen Jones's Apology (Jones 1854, 39-40). 72.34-73.7 The figures of the pediment ~ gilding.] This concluding passage is not to be found in The Four Elements of Architecture. 73.4 **Trajan Column** ~ examined] a reference to Semper's first publication on polychromy in antiquity, 'Scoprimento d'antichi colori sulla colonna di Trajano', published in the Bullettino of the Prussian Instituto di corrispondenza archeologica in Rome (Semper 1833). Semper refers to this text again in Style (Semper 1860/63, 1:500); on Trajan's Column, see also Semper's Preliminary Observations (1834, 36-9).



Pl. 10: Design of certificate for art instruction at Science and Art Department, 1853 (gta, 20-0163-265C)

# DEPARTMENT OF PRACTICAL ART

# Introduction

From the autumn term of 1852 to the autumn term of 1854, which lasted up to the end of February 1855, Semper taught at the Department of Practical Art – the school founded by Henry Cole under this name in the wake of the Great Exhibition in early 1852 and reshaped by the Board of Trade to become the Department of Science and Art in March 1853. By then, it also included the Schools of Art (the former Government Schools of Design), the School of Science Applied to Mining and the Arts (the former School of Mines), the Museum of Ornamental Art, the Museum of Practical Geology and other institutions. Semper started teaching on 18 October 1852 at Marlborough House in Pall Mall, London – the Department's location – as the *First Report of the Department of Practical Art* records (DPA<sup>1</sup>, 225). His subject area, as described in the appointment letter of 11 September 1852, was 'the principles and practice of Ornamental Art applied to Metal Manufactures' (226.7). However, Semper's responsibility at the Department soon underwent changes, encompassing architecture officially from the autumn of 1853.

When Semper's appointment as a professor was announced in *The Athenaeum* on 25 September 1852, his teaching area was already described against the backdrop of his architectural expertise. Along with Octavius Hudson, who was to teach 'Ornamental Art applied to woven fabrics of all kinds and to paper staining', the announcement first states that 'Prof. Semper of Berlin' (Dresden would have been the correct location) had been appointed for the field of 'Ornamental Metal Work' and then notes that 'Besides his constructive knowledge, Prof. Semper has made the treatment of metals his particular study.' Henry Cole, the superintendent of the Department, had already observed in December 1851 – in

the concluding note to a partial reprint of 'On the Study of Polychromy, and Its Revival' – that Semper's 'knowledge both of architecture, and generally of decoration, is profound, and his taste excellent. It is men of his acquirements from whom our manufacturers would be likely to obtain great help' (321, Print Variants 61.16–18). Before Semper's architectural background officially came to the fore, his teaching area was specified and expanded to include jewellery, enamels and even furniture, as Cole's prospectuses for Semper's class indicate (see 228, 554). An advertisement signed by the Department's secretary, Walter Ruding Deverell, in *The Athenaeum* of 8 January 1853 (announcing the resumption of 'Special Classes for the Study of the Principles of Ornamental Art' on ro January) already described Semper's and Octavius Hudson's subject areas as being 'Ornamental Art in Metals, Furniture, and all kinds of Woven Fabrics'.

Overall, Semper was apparently soon able to extend his subject area to include the industrial arts in general and architecture in particular. In his 'Plan of Instruction for the Metal and Furniture Classes', drafted by 1 February 1853 and published in the First Report of the Department of Practical Art, he proposed that the curriculum should also include lectures 'on the relations of the different branches of practical art to each other, and to architecture' (88.13-14) - which was to be the title of his first public lecture, held at the Department on 20 May 1853 (see 96.3-4, 97). A text by the art superintendent, Richard Redgrave, in the same Report confirms at least an intention to enlarge Semper's responsibility to also include 'architectural arrangements of surfaces' and 'architectural construction, &c.' (Redgrave 1853, 370). Semper's area of responsibility in the Department, which soon became wide-ranging, is reflected in his teaching for the autumn term of 1853, which started on 3 October and was announced in The Athenaeum of 10 September 1853 under the title 'Practical Construction, including Architecture, Building, and the various processes of Plastic Decoration, Furniture, and Metal Working'. This corresponds to Semper's subject area as stated in the 'Prospectus of the Central Training School of Art' for October 1853 in the First Report of the Department of Science and Art (DSA<sup>1</sup>, 195). In the area of technical courses, Semper was now the only person responsible for architecture, which had been taught by Charles James Richardson under the title of 'Architectural Details and Practical Construction' from the autumn term of 1852 (DPA<sup>1</sup>, 225, 383); Cole proposed to terminate Richardson's appointment on 23 July 1853 'to coincide with reopening of School in Autumn' (Herrmann 1984, 277 n. 247). In the autumn terms of 1853 and 1854, architecture became an integral part of Semper's special class, which, in his two reports on his teaching during 1852-54, is called the 'Class for Practical Construction, Architecture, and Plastic Decoration' (88, 91) – additionally termed as 'Plastic and Architectural Design' for the autumn term of 1854 (DSA<sup>2</sup>, 201).

Before Semper was entrusted with teaching on the subject of metals, Cole appears to have considered him primarily as a professor of ceramics. Semper himself had drawn attention to this in a letter of 29 January 1852 in which he offered Cole his services in the context of the imminent 'Establishment of a School for art and industry' (which was to become the Department of Practical Art). As 'the head of an practical atelier for architects and artisans' in Dresden, he wrote to Cole, the 'decorative part of architecture' had been one of his particular specialities, including works in bronze, furniture and 'the exigencies of China fabrication'. To document this, he enclosed with the letter a basic treatise on painting on porcelain (in Semper's English, 'the first part of an elemental treaty on China picture') - a treatise that he had written in French in Sèvres in June 1850 (gta, 20-Ms-47). Cole – who promised on 4 February 1852 that 'If I have an opportunity I will endeavour to promote your wishes' - sent Semper to Herbert Minton's pottery factory in Stoke-on-Trent for three weeks on 20 March 1852, asking him to prepare a lecture on ceramic manufacture (Herrmann 1984, 58-60). However, shortly after Semper's return, Cole commissioned him in mid-April 1852 to 'provide a kind of illustrated catalogue raisonné for the whole field of metals technology', as Semper wrote to his publisher, Eduard Vieweg, on 20 May 1852. In the same letter, he presumed that he was awarded the commission due to the attention he had received from his booklet Wissenschaft, Industrie und Kunst (Science, Industry, and Art) and described it as a task that would serve as an 'introduction to more permanent official work' at the 'School of Design' (261-2).

In asking Semper to specialize in metals, Cole had apparently changed his mind after having been unable to attract Matthew Digby Wyatt to take up the post. This was despite the fact that Wyatt - who was just completing a book on Metal-Work and its Artistic Design (Wyatt 1852) – had told him on 18 March 1852 that he was 'willing to lecture on Metals' (Cole Diary). Yet Semper expanded his catalogue of 'Practical Art in Metals and hard Materials; its Technology, History and Styles' to include both ceramic and metal vessels (NAL, 86.FF.64, art. 3.2, 95-142; cf. Semper 2007a, 189-227). What he presents in this part of the catalogue might correspond to elements of the lecture that he was commissioned to prepare in connection with his visit to Minton. Around mid-August, Semper sent the catalogue to Cole, who began to read it on 19 August. However, Cole had prepared Semper's appointment before receiving the catalogue – as he noted in his diary, he had already 'Settled Class book in Metals for Semper' with Joseph Warner Henley, the president of the Board of Trade, on 2 July 1852. On 8 September, he arranged with Henley for Semper to be appointed to a professorship in metals, and Semper approved the conditions of employment on 10 September 1852 (Cole Diary). But in the list of the Department's prospectuses, directly after the listing for Semper's class on 'Principles and Practice of Ornamental Art applied to Furniture, Metals, Jewellery, and Enamels', Cole still continued to refer to Semper as the person to contact for information concerning 'Pottery, and other Manufactures' (228.3I–3). Semper himself included pottery in the draft of his 'Plan of Instruction' (373.I).

In addition to teaching in the Department, Semper was busy with research work for its Museum of Ornamental Art, which opened provisionally in Marlborough House on 19 May 1852 and definitively on 6 September 1852. According to his terms of employment, he was obliged to 'report on Collections ... and upon the state of the Museum, Collection of Casts, and Library of the Department' and 'to inform the Superintendents of any examples which ... the Museum should possess' (226.28-31). The research included a 'Report on the Private Collection of Arms at Windsor Castle', a list of suggested purchases in relation to 'Berlin Productions of Plastical Art, Metal Casts, Plaster Casts' and 'Observations on Some of the Specimens of Metal Work' in the Museum (76-85). All of this was related to one of the central issues for which the Department was aiming to provide new foundations in art education - namely surface decoration. Semper's own objective was to convey the theoretical role of ornament in direct relation to practical concerns and to provide students with opportunities for practical collaboration in courses that were organized along the lines of the studio workshop. Semper's theoretical and practical position on ornament was expressed in his design for the school certificate of the Department of Science and Art, approved on 10 September 1853 (pl. 10): in his pencilled draft, the central inscription on one of the two vertical bands of the ornamental frame, which stands for 'Industry', bears the name 'Jacquard' - symbolizing the industrialization of the textile arts and the fundamental role that Semper assigned to textiles not only for ornaments but for the arts in general (the final version of the certificate has 'Flaxman' instead). In Style in the Technical and Tectonic Arts, he reproduced the lateral and central pendant triangles of the certificate when discussing tectonics (Semper 1860/63, 2:220-1).

In his 'Plan of Instruction for the Metal and Furniture Classes', Semper had already proposed that students should assist in the professor's practical work (86.7), and he referred to opportunities to carry this out in the two reports on his 'Class for Practical Construction' – opportunities including the commission to design the funeral car of the Duke of Wellington, at the beginning of the autumn term of 1852 (89.16–25), and the commission to design one of the commercial exhibition spaces in the rebuilt Crystal Palace in Sydenham in 1854, the Mixed Fabrics Court – one of Semper's rare architectural commissions during the London years, which was actually executed. The practically oriented side of Semper's teaching met with some scepticism from Henry Cole, who emphasized in the conditions for Semper's appointment that it was a 'new experiment to afford practical instruction in Art for industrial purposes' (227.2–3).

In the autumn term of 1854 – from October 1854 to February 1855 – Semper for the last time held his class on 'Practical Construction, including Architecture, Building, and the various processes of Plastic Decoration, Furniture, and Metal Working', as it was announced in *The Athenaeum* on 9 September 1854. His presence and availability in the spring term, from 1 March to 31 July 1855, was also mentioned. However, at this point he was only sporadically active for the Department and was otherwise busy with moving to Zurich. On 16 November 1854, Semper had accepted the offer of the Chair of Architecture at the newly founded Swiss Federal Polytechnic School. Apart from a visit to Switzerland lasting around a week, he spent a considerable part of the spring term of 1855, from 21 March to 5 June, in Paris, where under Cole's supervision he was concerned with the decoration of the British section of the Exposition universelle on behalf of the Department of Science and Art.

Also during the spring term of 1855, at the command of Prince Albert, Semper designed a vast complex of buildings in part of the area of South Kensington that had gradually been purchased by the commissioners for the Exhibition of 1851. As Henry Cole noted in a memorandum of 24 May 1855, Prince Albert suggested a building that was to combine 'temporary galleries for Marlborough House Museum, Educational Museum, Patent Museum, &c.', and – like the Palais Royal in Paris – 'shops with a colonnade, and flats for residence above', all arranged around 'a large covered building suitable for the performance of Music'. Semper presented the design (reproduced in Physick 1994) to Cole on 15 June 1855; ten days later, the Board of Trade had the plans examined by a Mr Cubitt (probably the building developer Thomas Cubitt) and the engineer Samuel Morton Peto. Both of them considered 'that the scheme could not be carried out to pay' (Herrmann 1984, 79–80, 282 n. 311). On 26 or 27 June, Semper left London via Rouen and Paris for Zurich, where he arrived (with a ticket from Basel dated 11 July) on 12 July 1855.

Richard Redgrave had already noted in May 1855 that the 'loss of the valuable services of Professor Semper' had 'not ... yet been adequately supplied' (DSA<sup>3</sup>, 225). The respect Semper enjoyed in London certainly contributed to his thoughts of returning there while he was experiencing professional frustration during his early period in Zurich. In mid-1856, he asked the industrialist Carl Wilhelm Siemens (who was working in London) to inquire of Cole whether he might return to the Department of Science and Art, under the condition that he would have 'a good prospect of practical work in addition to theoretical work'. Following prolonged clarifications, Cole asked Semper on 4 July 1857 to 'give me an idea of what sort of arrangement you would desire to have made with you'. In the draft of his response, Semper demanded 'architectural work or work as an artist, and not merely as a teacher'. With the approval of the Board of Education, Cole reported back to him on I August 1857 that he was 'authorized to offer the following terms for your consideration. I° You would have to give a course of practical instruction to a class of Students and some public lectures on Architecture .... II° The Department would give you other work connected with Architecture'. Semper negotiated with Cole in London on 4 September 1857 on the conditions of employment and discovered – as he wrote to Bertha Semper – that he was to be employed 'on extensive buildings' in South Kensington. On 30 November 1857, he tried through Siemens to persuade Cole to increase the associated salary. The effort was unsuccessful, and Semper abandoned the idea of returning to London.

**BIBLIOGRAPHY** Semper 1880, 20–1; Cole 1884, 1:281–9, 294–301, 305–7, 322; Leisching 1903; Ettlinger 1940; Pevsner 1940, 251–3, 255–6, 264; Ettlinger 1964; Macdonald 1970; Sheppard 1975; Herrmann 1976, 236–7; Reising 1976, 56–63; Van Zanten 1977b, 242–56; Diephouse 1978; Herrmann 1978, 62–93; Schädlich 1980; Herrmann 1984, 56–83; Physick 1994; Mallgrave 1996, 208–18; Burton 1999, 46–7, 112–13; Bonython/Burton 2003, 145–69, 172–5; Hildebrand 2003, 263–8; Squicciarino 2009, 143–8, 256–75, 288–93; Orelli-Messerli 2010, 163–293; Weidmann 2010, 341, 569–77; Bryant 2011; Hildebrand 2013; Chestnova 2014; Hildebrand 2020a, 119–31; Hvattum 2021; Nichols 2021

# **Report on the Private Collection of Arms at Windsor Castle**

## TEXTUAL RECORD

MS 108	gta, 20-Ms 108, fols. 1r–2v (2v blank), in Semper's hand
MS 109	gta, 20-Ms-109, fols. 11–2v, in Semper's hand
MS 110	gta, 20-Ms-110, fols. 1r–4v (1v blank), in Semper's hand
MS 107	gta, 20-Ms-107, fols. 17–11v (all versos blank), in Semper's hand (emendations
	in Henry Cole's hand), dated 20 September 1852
$DPA^{I}$	'Report on the Private Collection of Arms at Windsor Castle', in First Re-
	port of the Department of Practical Art, London: Eyre & Spottiswoode for Her
	Majesty's Stationery Office, 1853, 364–7 (NAL, 602.AD.0777), dated 20 Sep-
	tember 1852, <i>copy-text</i>
Semper 1884	'Bericht über die Waffensammlung in Windsor Castle', 76–83, dated 20 Sep-
	tember 1852, German trans. of DPA <sup>1</sup> (76.6–23, 76.25–80.9, 80.12–13)
Semper 2014	vol. 2, 538–41, Karge's reprint ed. of DPA <sup>1</sup>

**BIBLIOGRAPHY** Herrmann 1978, 72 n. 263, 131–2; Herrmann 1981, 107; Herrmann 1984, 277 n. 247; Squicciarino 2009, 347–50

## **EXPLANATORY NOTES**

Semper's report on the collection of arms at Windsor Castle is related to the Museum of Ornamental Art, which was established with the Department of Practical Art at Marlborough House in Pall Mall, London, and fully opened to the school and the public on 6 September 1852. Initially also known as the Museum of Manufactures, it took over holdings of the former London School of Design and was supplemented by donations and loans, as well as exhibits acquired from the Great Exhibition, to form a comprehensive collection of the decorative arts. Semper's report was the first commission from the Department of Practical Art, and its purpose was to identify arms from Queen Victoria's collection that could be recommended for loan to the museum.

On 9 September 1852, one day after Semper's appointment had been decided, Henry Cole sent him and Richard Redgrave to Windsor to inspect the royal collection of arms (Cole Diary). In addition to its content, the text is of particular interest because Semper's complete draft with Cole's emendations is extant (345–52). In his report, Semper not only points out weapons of instructive value but also discusses the artistic significance of weapons in general and recommends that the Department purchase further teaching materials from this area. In the process, he elaborates on the observations on weapons as a special field of metalwork from his catalogue of 'Practical Art in Metals and hard Materials', previously commissioned by Cole (NAL, 86.FF.64, art. 3.2, 95–142; cf. Semper 2007a, 180–4). He now more explicitly declares the weapons industry to be 'that branch of Metalworking, which affords the greatest interest for the Study of Ornamental art' (339.15–17).

Semper completed the report, as stated in the last of the four drafts and in the printed version, on 20 September 1852 (80.12, 348.27) and sent it – illustrated with three drawings of swords (347.15) – to Cole a week later. Cole revised the report, as stated at the top of the same draft and in his diary, on 28 September (348, note 345.1). When Semper's report was printed in the *First Report of the Department of Practical Art*, which appeared in the spring of 1853, it underwent further minor changes. It likely contributed to the Queen lending to the Department of Science and Art some 150 items of arms and armour in the spring of 1854. In *Style in the Technical and Tectonic Arts*, Semper refers to the report in the section on metals technology and in relation to the 'practical question of style', arguing that the 'armourer must follow the strictest laws of practicality' and 'Therefore at all times there prevailed a certain relative chastity and purity of taste in weapons' (Semper 1860/63, 2:549).

76.1 **B.**] designates the report as one of several miscellaneous texts in 'Appendix VII' of the *First Report of the Department of Practical Art*, to which also belongs Semper's 'Plan of Instruction' (85–8) 76.9–10 **principal laws of fitness, convenience, and style**] a variant of Vitruvius's three architectural principles of *firmitas, utilitas, venustas* (solidity, utility, beauty) 76.19–28 **Secondly ~ study of style ~ Thirdly ~ study of ~ the history of styles ~ distinguishable from each other**] Cole here changed the meaning of the last sentence in a not insignificant way by altering Semper's 'study of ... the *Historical Style*' (345.20–1; italics in original) to 'study of ... the history of styles'. For Semper's understand-

ing of the 'term' *style* as defined by the artistic use of 'means', the 'limits' of the 'task and problem', the 'accessories' and the 'peculiar character' of works 'of the different countries and ages', see his definition and discussion of style in two of his lectures of 1853, 'On the Relations of the Different Branches of Industrial Art to Each Other and to Architecture. Third Version' (108–11) and 'General Remarks on the Different Styles in Art' (119–21). 76.29–30 **The history of ornamental art in metals cannot therefore be better illus-trated than by a collection of arms and weapons**] Semper's complete draft here has 'The History of Ornamental Art can not better be summed as by a collection of Arms and veapons' (345.23–4). Cole replaced 'summed as' with 'illustrated than' and restricted Semper's contention that weapons are representative of the history of ornamental Art'.

77.5 relative purity and chastity of taste and style] Semper adopted this sentence in Style (Semper 1860/63, 2:549, cited above, 333) and had already put forward the corresponding view in Science, Industry, and Art, where he contends - when speaking of the 'confused muddle of forms or childish dalliance' of objects shown at the Great Exhibition - that 'At most, objects whose seriousness of use does not permit anything useless, such as carriages, weapons, musical instruments, and the like, sometimes show more healthiness in the decoration and refinement of the forms strictly defined by their purpose' (Semper 1852, 11-12). 77.15 Vienna, formerly at Castle Ambrass] In his catalogue of 'Practical Art in Metals and hard Materials', Semper refers for the former collection of Ambras Castle in Innsbruck to Primisser 1819 and Richter 1835 (Semper 2007a, 67). 77.26-8 works of Meyrick, of Tubinal on the Madrid armoury, that on the imperial collections of Russia, and Baron von Ebner's work on costumes of the middle ages] Semper's drafts have the name of the misprinted 'Tubinal' correctly as 'Jubinal' (340.1, 341.17, 346.24), while the error in the name of the misprinted 'Ebner' is also contained in Semper's complete draft (346.25) and in one of the fragmentary drafts (341.19); a third, fragmentary, draft has the correct name of 'Hefner' (340.5). In one of the drafts (339.26), Semper refers to the two volumes of Engraved Illustrations of Antient Arms and Armour that depict Samuel Rush Meyrick's collection at Goodrich Court, Herefordshire (Meyrick 1830). He had already requested Meyrick's Critical Inquiry into Antient Armour (Meyrick 1824) from the British Museum Library on 30 June 1852, when he was working on his catalogue of 'Practical Art in Metals and hard Materials' (221.26-31). Publication of Achille Jubinal's work on the Royal Armory at Madrid (La Armeria real) started in 1837 (Jubinal 1837/54). The three-volume work on the Russian imperial collection of arms at Tsarskoye Selo, near St Petersburg, with lithographs after drawings by Alois Rockstuhl, was published in 1835-53 (Gille 1835/53), and Jakob Heinrich von Hefner-Alteneck's Trachten des christlichen Mittelalters in three volumes from 1840 to 1854 (Hefner-Alteneck 1840/54). In one of the drafts (340.4), Semper additionally mentions the section on armoury in Le Moyen-Âge et la Renaissance (Saulcy 1851), which is also cited in his catalogue of 'Practical Art in Metals and hard Materials' (Semper 2007a, 107). Most of these works are referred to in *Style*: Meyrick's collection at Goodrich Court in the section on ceramics (Semper 1860/63, 2:70), his Critical Inquiry into Antient Armour in the section on metals technology, together with Jubinal's Armeria real (Semper 1860/63, 2:550). Semper also refers to the latter for examples of Moorish swords as counterparts to the 'Saracen sabre allegedly from Charlemagne's time', which was part of the imperial regalia of the Holy Roman Empire (Semper 1860/63, 2:546 n. 4). He had it sketched by an unknown person during his period in London (gta, 20-1-16), possibly for the catalogue of 'Practical Art in

Metals and hard Materials', where it is mentioned (Semper 2007a, 110, 181). Hefner's work on medieval costume is cited in Style particularly for illustrations of the 'bronze effigy of Emperor Louis the Bavarian' and the 'grave plate of Rudolf of Swabia ... in the Cathedral of Merseburg' (Semper 1860/63, 1:170; 2:526 n. 1). 77.28-9 acquisition for the library of the Department of Practical Art] In a report on the Department's library, dated 10 November 1852, Ralph Nicholson Wornum illustrates desiderata through the example of books on metalwork that are lacking and notes that 'the Library possesses neither Jubinal's great work on the "Royal Armoury of Madrid," containing beautiful illustrations of the most remarkable ornamental metal-work in existence; nor the great work of Rockstuhl on the "Imperial Armoury of Russia," containing Oriental as well as European specimens; nor does it possess even Sir J. Meyrick's "Illustrations of ancient Arms and Armour" (DPA<sup>1</sup>, 296). The Department purchased the second edition of Meyrick's Critical Inquiry into Ancient Armour in 1854 (DSA<sup>2</sup>, 192; Meyrick 1842); the other books recommended for purchase by Semper - with the exception of Meyrick's Engraved Illustrations and Hefner's work – were also acquired by 1855 at the latest (Wornum 1855, 161).

78.13-14 breast-plates, forming part of the armour of Tippo Saib (hanging in the passage, decorated like a tent)] Tipu Sahib's armour, captured after his defeat and death at Seringapatam, was placed in a niche fitted up as a tent in the North Corridor of Windsor Castle (known today as the China Corridor) – then the location of the armoury. 78.22 Rénaissance] Two of Semper's drafts correctly have 'Renaissance' (342.45, 347.13). 78.24 swords ~ three of the first distinction] Two of Semper's drafts here refer to sketches of these swords (342.47, 347.15). The sketches (preserved at gta, 20-2) are drawn in Semper's hand on three individual sheets and show the hilts of two of the three swords that Semper praises as being 'of the first distinction': The first, erroneously attributed to Benvenuto Cellini (78.25), and the other with the number '222' (78.29). Semper's third example - the sword numbered '276' (78.31) – has not been identified. The third extant drawing corresponds to the 'sword of the time of Louis XVI.' (78.38). 78.25-6 One of them ~ attributed to Benvenuto Cellini without reason] The catalogue number of this sword is also missing in two of Semper's drafts (343.1, 347.17). The sword in question is a rapier of c. 1640, reputed to have belonged to John Hampden; the blade is stamped with the marks of Clemens Horn of Solingen (Laking 1904, 32-3, pl. 10 [no. 65; RCIN 62994]). One of the three drawings that Semper had attached to the draft of his report shows the hilt in all its details, with subjects 78.26-7 shield belonging to the Queen, which from the life of King David (gta, 20-2). is at present in the Museum] This shield with scenes from the life of Julius Caesar 'has been supposed to be the work of Cellini; another tradition regarding it is, that it was presented to Henry VIII, by Francis I' (Meyrick 1842, 3:114 n. 3); it is now believed to be of French or Belgian origin, from the mid-sixteenth century (Laking 1904, 35-7, pl. 12 [no. 71; RCIN 62978]; Norman/Eaves 2016, 277–82). The so-called Cellini Shield was exhibited at the Museum of Ornamental Art (CatM<sup>1</sup>, 59; DPA<sup>1</sup>, 287, 386) after it was brought as a loan from Windsor Castle on 12 May 1852 (Cole Diary). 78.29 The second, No. 222] a sword with an iron hilt of the first quarter of the seventeenth century. The pommel and the outer side of the guards are encrusted with flowers and leaves in silver against a blackened ground (gta, 20-2; Laking 1904, 29, pl. 9 [no. 60; RCIN 62964]). 78.33 sword, probably of James II.'s time, has a hilt formed by serpents] possibly the sword once believed to belong to William the Conqueror but later identified as being of French workmanship of the first quarter of the seventeenth century. Its pommel is 'shaped as four intertwined serpents', while 'numerous serpent-like shapes that coil and intercoil' form 'the knuckle-guard, the shells, the quillon and the counter-guards' (Laking 1904, 204, pl. 30 [no. 681]). 78.35-6 Dutch sword of the 17th century  $\sim$  decorated with  $\sim$  medallions, with portraits of **some heroes of the Dutch history**] possibly a sword with a hilt which is, if not identical with, then similar to that of the German sword said to have been a wedding gift on the occasion of the marriage of Frederick William of Brandenburg to Louise Henriette of Nassau. The portraits of the medallions in relief on this hilt are identified as those of the descendants of the house of Brandenburg from the late fifteenth to the early seventeenth centuries (Laking 1904, 27-8 [no. 58; RCIN 62988]). In one of the drafts, Semper has instead of 'portraits of some heroes of the Dutch history' - 'Portraits of the time of the Dutch Revolution' (343.11). In the complete draft, he had altered 'Dutch Revolution' to 'Dutch History' (347.27). 78.38-9 sword of the time of Louis XVI. ~ in the catalogue ~ given as an English work ~ with enamel pictures in cameo] The hilt of this sword bears the Paris hallmark of 1786 (Laking 1904, 177, pl. 24 [no. 609]). Semper has annotated his drawing of the hilt with detailed comments on the colouring (gta, 20-2). The technique of 'enamel pictures in cameo' is referred to in Semper's drafts as 'en Camajeu' (343.13, 347.30; properly spelled en camaïeu, a technique that imitates cameos), altered by Cole to 'en Cameo' (350, note 347.30). The pictures are oval panels in shadings of blue and white, which are dispersed about the hilt and represent cupids, gods and goddesses, and musical and warlike trophies.

79.13-14 arrangement in the Museum of Practical Geology] The Museum of Practical Geology in London, established in 1835, reopened in a new building in Jermyn Street in May 1851. In addition to the fact that Semper had the opportunity to visit the institution, he had certainly also read about it in the papers, for example in the article on the Museum's inauguration published in the third issue of the German Supplement of The Illustrated London News on 17 May 1851 – the issue in which Semper's essay on the Great Exhibition was published (see 20-6). Another article on the Museum appeared in the fifth issue of the German Supplement of The Illustrated London News on 31 May 1851 (ILN Suppl. 1851). In this article, the objective of the Museum is described as being 'to demonstrate the different ways in which ores are formed and, as far as is practicable, to show the way in which mining is carried out', accompanied by 'models of the machines and hand tools used for the work' and explanations of the 'chemical process by which the various metals are obtained', as well as of their 'use ... in art and manufacture'. Besides this, 'earth and clay materials ... for the production of glass and porcelain' were exhibited in the context of 'giving a history of the various manufactured products', including a historically comprehensive collection of pottery, glass fabrication, building and ornamental stones from all parts of the British Empire. The 'similar arrangements' based on a predominance of the 'artistic element', which Semper suggests for the Museum of Ornamental Art (79.16–17), correspond to the concept of an ideal museum that he developed in the catalogue of 'Practical Art in Metals and hard Materials' in 1852, in which he also mentions the Museum of Practical Geology (Semper 2007a, 79.20 Lazarino Cominazo guns] Lazarino Cominazzo (also Cominazo) is the 55-8). name of an Italian family of gunsmiths, active in Brescia from the sixteenth century; for three pairs of flintlock pistols of the second half of the seventeenth century, stamped with the name 'Lazarino Cominazzo', see Laking 1904, 114, pl. 22 (nos. 357–8; RCIN 61065); 134 (nos. 439–40; RCIN 67158); 140 (nos. 471–2; RCIN 61606). 79.23-5 gun of Louis XIV. ~ by Piraube ~ probably the finest gun in the world ~ head-sight steel ~ in open work] a richly ornamented hunting gun ornamented with classical scenes, made by Bertrand Piraube in 1682 for Louis XIV (Laking 1904, 129-30 [no. 425; RCIN 61115]). It has a pierced rear sight, which corresponds to the 'open work' of the part which Semper calls 'Hindsight' in the complete draft (348.5). In the same draft, Semper considers this weapon to be 'the finest gun in the world', which was altered by Cole to 'probably the finest gun in the world' (348.4; 350, note 348.4). 79.29 Spanish gun of Joachim da Zelaja] for the flintlock fowling piece by the gunsmith Joaquín de Zelaya, signed and dated 'Joachin de Zelaia, en Madrid. Año de 1753', see Laking 1904, 126 (no. 414; RCIN 67155) 79.29-31 pistols ~ by Weiss at Suhl ~ two guns ~ finest specimens of Louis XV. style] for a mid-eighteenth century pair of flintlock pistols and a flintlock rifle by Johann Georg Weiss of Suhl, Thuringia, see Laking 1904, 123-4 (no. 405; RCIN 61118); 142, pl. 23 (nos. 485-6; RCIN 61562) 79.34 Kuchenrenter guns and pistols] Kuchenreuter (correctly named in the complete draft, 348.14) is the name of a family of gunsmiths who were active in Regensburg from the seventeenth century onwards; for mid-eighteenth-century guns and pistols by Johann Jacob Kuchenreuter, see Laking 1904, 90 (no. 281; RCIN 61752); 123 (no. 403; RCIN 61098); 141 (nos. 479-80; RCIN 62951); 142 (nos. 487-8; RCIN 61136).

80.6 répoussé works] repoussé works; 'Repousse works' in the complete draft (348.23) 80.8-10 that electrotypes be made ~ electrotypes ~ of the beautiful shields which are at Dresden] Electrotypes, making use of an electro-galvanic process named after Luigi Galvani, are reproductions made of base materials, such as plaster, wax or gutta-percha, and an electrolytic coating usually of copper. In the draft before Cole's revision, Semper specifies that 'One of the Officers of the Historical Museum at Dr. is a clever Electrotypist and has allready reproduced several of the beautifull Shields which are at Dresden' (348.25-6). This 'clever' official was Gustav Büttner, Inspector of the Royal Historical Museum at Dresden, who had displayed 'Three electrotype copies of classical shields' at the Great Exhibition (ODIC 1851, 3:1113 [no. 187]). Emil Braun, Semper's mentor, had founded a galvanoplastic institute in the later 1840s and, in February 1851, tried to persuade Semper to act as an agent for him to gain market share in England, where he was in contact with Elkington, the English market leader in Birmingham (Braun to Semper, 19 February 1851, gta, 20-K-1851-02-19:1). Semper discusses Braun's collaboration with Elkington in Science, Industry, and Art (Semper 1852, 49) and classifies 'Galvanoplastik' as being among the ceramic arts grouped under the architectural element of the hearth in his 'Outline of a Cultural-Historical Exhibition' (40.30). He again refers to electrotypes in his recommendation of purchases for the Museum of Ornamental Art (82.2).

## MANUSCRIPT VARIANTS MS 108

The instruments of war and of Chase, notwithstanding their terrible uses and applications, have been at all times considered as the true and most worthy ornaments of man. – These two very distinct Qualifications of the arms and veapons, as ornaments and as instruments, for or against destruction, procure the greatest interest to them with respect to the Study of ornamental art, its history and Style; for in no other application ornamental art is

more strictly bound to observe the first principles of Style as it is the case with the Arms and

Weapons. |

fol. 10 The Armurers and Swordcuttlers were the conservators of the processes and traditions of the art of Metalworking through the Centuries of Barbarism, and the same observed relative purity of style in the ornamentations of their products amidst the Extravagancies of other times, when true principles and laws of ornamental art were misregarded at every other occasion.

And while thus they were so strongly resistant to Barbarism and Degeneration in the times of Decay, we find them at the Summit of high Art in the times of florishing civilisation. The masterpieces of the Italian Armurers Swordcuttlers and Gunmakers of the Period of the Renaissance, give interesting Evidences of the absolute Validity of Principles not only for ornamental art, | but for Art in General. – .

The importance of this branch of industry for the study of art, history of art, and Style has been justly appreciated in our times, while such objects, as arms, veapons and Costumes were formerly collected for their historical or ethnological interest they afforded.

Such were the original caracters of the most important wellknown armuries of Europe; but they have been long time unhappily neglected,

337.1 The instruments] after two variant beginnings, the first one del. and the second one undel.:

The instruments of war and Chase, the arms and weapons have been objects of decoration and <sup>1</sup> art since the beginning of human civilisation. They have allways been regarded as the very <sup>2</sup> ornaments of the warriors,<sup>3</sup> and

The instruments of war and of Chase were objects of Decoration and art, since the first<sup>4</sup> beginning of Civilisation, they having been allways considered as the most distinguished ornements of the body<sup>5</sup>, notwithstanding their terrible and dangerous uses,<sup>6</sup> which last confined the

I decoration and] repl. del. ornamental ornamental] after del. decorative 2 very] above del. most worthy 3 warriors,] before del. notwithstanding 4 first] after del. carliest 5 the body] after del. the warriors and 6 uses,] altered from ~; before del. The last The last] after del. which forcibly confined the decorative arts

337.1 terrible] after del. dangerous and 337.2 have] after del. were objects of Decoration and Art since the beginning of Civilisation, and man.] repl. del. the warlike Youths. 337.3 These two very distinct Qualifications] repl. del. these double destinations These] altered from This destinations] above del. caracter 337.6 strictly] before del. and forcibly observe] after del. hold and 338.1 The Armurers] after del. on fol. rr-v

We observe<sup>1</sup> an early endeavour for embellishments<sup>2</sup> in the armurers<sup>3</sup> works of <sup>1</sup>/<sub>1</sub> the times, when practice of art. was sunk into decline or allmost lost,<sup>4</sup> and, at<sup>5</sup> other times, when true principles and laws of ornamental art were misregarded and forgotten, a sort of relative purity of Style is allways to be

I observe] after del. therefore 2 an early endeavour for embellishments] repl. del. a relative elevation and elegance of Style a] undel. elegance] repl. del. purity 3 armurers] after del. ornaments 4 lost,] altered from ~; before del. we see a sort of purity and sobriety of Style 5 at] interl. after del. amidst of the extravagances of

fol. 2r

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10

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338.2-3 relative] above del. relative relative] after del. the 338.5 occasion.] above del. application of ornament. 338.6 so strongly] interl. 338.7 civilisation.] altered from ~; before del. and their works rivalise with 338.8 Armurers] before del. and 338.9 interesting] above del. the 338.1 The importance] after del.

The importance of this Branch of industry<sup>1</sup> for the study of Art. has been justly appreciated in our times, while <sup>2</sup> before, arms<sup>3</sup> weapons, and Costumes were brought together and collected only by historical<sup>4</sup> and ethnographical Interest. Such is<sup>5</sup> the caracter of all the most important armoiries of Europe,

I industry] altered from industrialindustrialafter del. Metalworks and before del.art2 in our times, while] del. separately3 arms] after del. the collections of andbefore del. and4 historical] before del. or technological5 is] after del. are

338.13 for] after del. merely by 338.14 were] above del. are original] interl. wellknown] inserted Europe;] altered from ~, before del. which contain 338.15 neglected,] before del. and and] after del. so that after del. even

#### MS 109

#### Report on

The instruments of war and Chase, besides their terrible destinations have allways been considered as the glorious ornaments of their warlike bearers.

They have been among the first objects of art and Decoration, which last has always been profusely applied to them, although in no other application than in that of arms and veapons ornamental Art is more strictly bound by necessity to observe the first and most important principles of Style and convemience. |

Thus it comes that The Armurers and Swordcuttlers were the Conservators of the Traditions of the Art of Metalworking through the Centuries of Barbarism and Decay; and that the

- same stood on the Summit of Decorative art in the florishing times of Civilisation and their Craft formed one of the Seminaries for artistical celebrities of every extraction; – and amidst the Extravagancies of Luxury, when the true principles and laws of Ornamental Art were misregarded at every other occasion, this craft has been obliged by necessity to observe a relative purity of style and taste in its productions. –
- The works of the Armurers Swordcuttlers and gunsmiths must therefore be considered as that branch of Metalworking, which affords the greatest interest for the Study of Ornamental art and its History and style. and we have full opportunity to indulge to it, since we possess a great number of fine and rich collections of arms and veapons in Europe; which formerly were pure conservatories for arms etc. (Arsenals) and had a practical destination,
- or which have been assembled in a interest for History and Antiquarian science. They importance for the study of art has only now been better appreciated, so that they form as much almost | inexplored shafts for artistical Inquiry. .

The Descriptions and works on Armuries, we possess, bear still the same Character as the Collections themselves. viz they are simple inventories with some few Dates and notes

about the single objects, or they are Antiquarian and Historical Essays. – Some illustrated Publications about Armuries, as the work of Meyriks on the Goodrik court Collection, that fol. Ir

fol. 2r

of Jubinal on the Armury of Madrid and that which is now in Publication on the Imperial Armuries of Russia, contain good Representations of some of the most interesting pieces of Armury, although they give little more than the general Forms and Characters of the Objects. Other Specimens are given in the Moyen-Age et la Renaissance and by the Baron von Hefner in a Work on the Costumes of the Middle-Ages, which is much recommended by those who have seen it. –

These and other collections of Stamps and lithographies on Arms and Weapons will be excellent means for instruction, but | a small, artistically selected number of real specimens arms, and some exact Drawings of other, which have a really artistical Interest or which are instructive for history of art and Style, will be much more usefull.

There are principally three points which must be taken into consideration by selecting these Objects.

*First* the Knowledge of Processes, which last have always been applied in their fullest development on arms. No other productions of Metalworking not even the mere Jewellers ornaments show the same variety and concurrence of all possible processes which we observe on arms.

*Secondly.* The Study of practical Style, that is to say of style, in so far as it is depending upon the materials coming into consideration, and upon the Destinations and uses of the objects. *Thirdly* The Study of historical Style, which last is that peculiar coin which

339.2 **allways**] *interl.* 339.3 **considered**] *before del.* at all times and everywhere **glorious**] *after del.* hon[o] *after del.* most 339.4 **They**] *after del.* Ornamental art has *after del.* 

and allthough<sup>1</sup> the two distinct qualifications as ornaments and as instruments

I **and allthough**] *after del*. These two distinct qualifications which occur also in many other

339.4 among the first] *interl.* 339.4-5 which last ~ applied to them,] *inserted* 339.5 although] *above del.* but 339.8 Thus it comes that] *interl. after del.* The interest, which is attached The] *after two del. beginnings of variant on fol. 1r-v:* 

The arms and veapons must therefore be considered as that branch of Metalworking, which affords the greatest interest for the study of ornamental Art its History and Style. – The Armurers, Swordcuttlers, and the Gunmakers have been obliged by necssity to observe a relative purity of Style in their works amidst the Extravangancies of certain times, when the true principles and laws of ornamental Art were misregarded at every other occasion. This Craft was the conservatory of the traditions of the art of Metalworking through the Centuries of Barbarism. It was the same, which stood on the Summit of the Art<sup>1</sup>, in the florishing times of civilisation, and which formed <sup>2</sup> one of the great Seminaries for artistical celebrities of every extraction. <sup>1</sup> Its importance with respect to the Study of Art has justly been appreciated only in our

I the Art] the above del. High and Art altered from art 2 and which formed ~ extraction.] repl. del. and which procured artists of the highest qualification for many

339.12 Luxury] above del. certain times 339.15–17 The works ~ History and style.] inserted 339.17 and we have full opportunity to indulge to it, since] inserted before del. Happily and after del. on fols. iv-2r

fol. 20

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Its importance<sup>1</sup> for the Study of art has only now been appreciated – and the existing collections of arms in Europe which are numerous and very rich, form as much allmost inexplored shafts for artistical inquiry.

They formerly were pure Conservatories<sup>2</sup> for arms, (Arsenals,) and had a practical destination or they were collected together in a historical<sup>3</sup> or antiquarian sense; and so the existing

Its importance] *after del*. This important place, which the art of the armurers takes among the 2 formerly were pure Conservatories] *repl. del*. have been collected partly 3 historical] *after del*. mere

339.19 destination] before del. for war and Chase 339.20 They] 'Their' 339.22 shafts] Semper uses this word in the sense of 'wells', but he actually means 'sources'. 339.23 bear] above del. are the same] after del. of 339.25 Some illustrated] repl. del. The best and most important

340.2 good] repl. del. very interesting 340.3 little] after del. nothing 340.5 which] after del. which I have not yet seen, but 340.7 **Stamps**] 'prints' Arms] after del. Metal 340.8 excellent] above del. usefull instruction] before del. for metalworking a small] after del. on fol. 2r-v it is very | desirable to have not only a collection of Drawings num**ber**] *above del.* collection **specimens**] *interl.* 340.9 exact interl. 340.14 productions] *above del*. branch 340.14-15 the mere Jewellers ornaments] repl. del. that of the Jewellers 340.15 **show**] *repl. del.* can produce variety] after del. Richness, and before *del*. in the Ensemble of the Richness] *before del*. and 340.18 and upon] after del. upon objects.] before del. It has been sayd that instruments which 340.19 coin] 'stamp'; after del. Direction of

#### MS 110

The Armurers, Swordcuttlers and Gunsmiths and their works take therefore perhaps the first Place in the whole Department of Metalworking and it is this branch of the last, which affords the greatest Interest for the Study of Ornamental Art, its History and Style.

Happily have we better opportunity to pursue this study on them, than on any other branch of Metalworking, since we have many fine collections of Arms and veapons in Europe, which form as many almost inexplored treasuries for artistical inquiries;

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The largest and most renowned Armuries in Europe were in the beginning practical institutions, as arsenals. Some other, for Instance that of Wienna, formerly at Castel Ambrass in Tyrol, had a more antiquarian and historical Destination. –

10 Other pertake of both of the two qualities; Such are the private Collections of arms of Souverains, Princes, and some healthy Private Personages.

Among the last is the Royal Collection of Arms at Windsor undoubtedly one of the most important chiefly by the artistical value and interest of the rare and beautiful Specimens, it contains.

<sup>15</sup> But the artistical importance of the objects of this as well as of the other celebrated collections, has not yet been explored sufficiently. Some illustrated Publications on Arms, as the Works of Meyricks, that of Jubinal on the Armury of Madrid, another collection of Lithographs on Russian and Oriental Arms in Russia, Baron v. Ebners || Work on the Costumes of the Middle-Ages, contain very usefull

20 Materials for Students, and their acquasition for the Library of the Departement of Practi-

	cal Art is highly desirable; – But they give scarcely more than the General Forms and Char- acters of the Objects and the informations they give appear not to be sufficient for practical	
	Instruction. It may therefore be allowed to recommend to the High Superintendency for examination the following Propositions, respecting the Enrichment of the Museum of the Department of Practical Art, with a Collection of Specimens of Arms, weapons guns etc. – . Those Products of Metalworking are important firstly for the Study of the Processes of Metalworking, which have been always applied in their fallest development on arms. Even the Goldsmiths and the Jewellers-works present herein not the same variety and complete- ness.	5
fol. 2v	Secondly for the Study of <i>Style</i> , in so far as we understand by Style that perfections in Works of Art, arrising from artistically using the means, which   are given by a Practical Problem and by all the Accessories, which modifie the Embodiment of it. They thirdly are of the greatest interest for the Study of the Historical Style, which is that	10
	peculiar caracter by which the artistical works of the different ages and people are distin- guisheable.	15
fol. 3r	It would be difficult and very expensive, to provide the new established Museum at once with a number of selected Specimens of Arms, proportionate to their importance for public instruction in practical art.	20
	This Gap of the Museum may be temporarely filled out in some degree by borrowing from the rich Collections of arms, which are in England, some of their contents. Some beautiful Pieces have already been generously lent by Her most gracious Majesty the Queen, and by some Private Gentlemen, but they are not sufficient to give any survey of the richness of this class of Arts manufacture, and it will be necessary to appeal once more to Her Majesties kindness for lending some more specimens of the rich containts of the Wind- sor-Castle Armury.	25
fol. 3v	The Windsor Collection is unique for the richness and beauty of the oriental arms it con- tains, – but thinking, that this branch of armury is still now better represented in our Mu- seum, than the other, There may be pointed out only three as very instructiv for the richness and ¦ Originality of the Processes emploied in their Manufacture	30
	1) <i>Burmese Sword</i> no 9356 remarcable for the richness and beauty of the Chased Handle etc. 2) Sword, which passes for Moorish, but which certainly is Chinese, no. 2315, for the beauty and originality of the Processes employed for Decorating the Handle and scabbord with Reliefo Ornaments in different metals.	35
	3) The <i>Breast-Plates of Tippo Saib</i> , (in the Passage decorated as a Tent) remarcable as a Spe- cimen of Steel-cutting and for the simplicity and purity of the ornamentation. – . A strong Gallo Roman Iron-sword, at the same Collection with Bronze Handle would appear modern and counterfeid, if it was not decorated on its Handle with small Silver Rosaces, which once were filled up with Enamel. These Rosaces are very interesting for the Study of the Process of the Art of Enameling and its History	40
fol. 4r	its History. – . The Collection of Renaissance veapons is very considerable, and beautiful and the same have without contest the most interest for our practical modern.   Practice. – Among the Number of fine Swords, the three which are represented in the bygiven sketch, are distinguished.	45

The first is (falsely) attributed to Bonvenuto Cellini. It has great resemblance in Style and execution with the fine Shield which is now in the Museum of Präctical Art and belonged perhaps to the same Full-Armure. – .

The second no. 222. is of a somewhat later Period as the first and inlaid with Silver; The General Form is very elegant and the Ornaments in the finest Style.

The third *no 276*. has been executed after the same Principle as the second, and shows the third Stepp of development of the (modern) Sword Handle form.

An other Sword, perhaps belonging to James's the II time, has a handle formed by Serpents well executed and of good invention.

10 The Hilt of an Dutch Sword of the 17<sup>th</sup> Century is decorated with fine chased Medallons with Portraits of the time of the Dutch Revolution. –

I shutt the series of the Swords in mentioning one very fine Sword of the Time of Louis XVI which ¦ is in Gold, with Enamel Pictures en Camajeu upon Azur Ground undoubtly executed by one of the best Masters in Enameling of the time. I newer saw better Enamel pictures.

This Sword is not only recommendable for the beauty of its Details, but also for its General Form and the good Taste and careful execution which appear on it. –

It gives an Evidence of what has been said before, that Purity of Style is to be found on arms and veapons even in the Times when generally bad taste had taken Possession of the Arts.

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Among the Guns are the Oriental Guns distinghed by the Richness and often by the good taste and Style of their ornamentation, but not less by the beauty of the workmanship of their barrels. It may be allowed to mention here occasionally the profit which would derive for the Institution of Practical Art, from the establishment of similar

341.3 Style.] before in opposite column  $\ddagger$  siehe unten before probably del. line pointing to the space between this paragraph and the next one 341.7–16 The largest ~ celebrated collections,] in opposite column after undel.

They formerly were conservatories<sup>1</sup> for Arms of War and Chase, with a pure practical Destination, or they were collected together in a antiquarian or historical Interest. Other partake of both of the two qualities, as the Armuries of some Souverains, Princes and healthy Private Personages<sup>2</sup>.

1 conservatories] after del. pure 2 Personages] after del. men

341.7 were in the beginning] *interl. after del.* had formerly a practical] after del. pure 341.7-8 institutions] interl. before del. caracter 341.8 arsenals] after del. conservatories 341.10 pertake] 'partake' 341.11 healthy] 'wealthy' 341.13 important] above del. interesting 341.16 has not yet been explored sufficiently] repl. del. has been only occasionally mentionned by single connaisseurs and in the Guidebooks and Catalogues has been] after del. They contain objects of the highest artistical Interest, which last 341.19 341.20 acquasition] 'acquisition'; altered from acquain **contain**] *before del*. certainly 342.1 scarcely] *above del*. little 342.2 the informations they give *above del.* they will not **appear not to be**] *inserted before undel*. be 342.4 It] after del. The after del.

the undersigned <sup>1</sup> ventures therefore<sup>2</sup> to Submit the following Propositions, respecting the Enrichment of the Museum of The Department of Practical Art with some selected Specimens of Arms, and Veapons, in Originals in Plastercasts, Electrotyps and in Drawings.  $-^3$ 

fol. 4v

I the undersigned] after del. In consideration of what has been fore-noticed, 2 therefore] interl. 3 Drawings. -] before undel. Siche oben.

342.4 **Superintendency**] before del. of the Departement of Practical Art 342.5 re **specting**] after del. submitted with 342.7 **Those**] altered from those after del. The high importance of **Metalworking**] before del. is trifold. They 342.8 **fallest**] 'fullest' 342.9 **herein**] inserted 342.9–10 **completeness.**] altered from  $\sim hefore$  del. with regard to the means of 342.11 **Secondly**] before del. they are important and after del. on fol. 2r-v

Secondly they are important for the Study of Style, in so far as by Style is understood the artistical treatement of a practical problem ¦ and of all inward and outward cooperative

342.12 which] del. before del. on fol. 2r-v which are given in 'a practical Problem, and all which are given] before del. and contained 342.15 **peculiar**] after del. peculiar coin what the progressing time impresses upon the works of mankind and marks them with a time] after del. age works] after del. the artistical works of the centuri **caracter**] above del. coin and mark **by which**] after del. which impresses upon the human works the progressing time. The different Styles of the after del. which progressing ages 342.15–16 **distinguisheable**] altered from distinguished 342.18 **lt**] after inserted and del. In considering that after three del. beginnings of variant on fol. 2v:

In consideration, that it would be impossible to complete<sup>1</sup> the Museum with a sufficient number of Originals

In consideration, that it will be impossible to acquire for the Museum at once such a number of selected specimens of Arms, as will be necessary to give an abstract of the whole Armurers Art, it will be very desirable:

firstly, that, in order to compensate this Gap

It will be<sup>2</sup> impossible to acquire for the Museum at once a proportionate number of selected Specimens of arms, proportionate to the importance<sup>3</sup> of the object for public instruction in art, it will be very desirable

firstly to fill up partly this Gap by some originals

I complete] *after del.* make the acquisition of a sufficient number of original pieces of arms, 2 **It will be**] *after del.* In consideration that 3 **to the importance**] *after del.* so as will be necessary to answer

342.20 **art.**] *altered from*  $\sim$ , *before del.* – In this it will be desirable 342.21 **This**] *altered from* this *after del.* firstly that firstly] *underl.* 342.22 **contents.**] *altered from*  $\sim \wedge$  *before del.* and exposing them for a time to the public 342.23 **Some**] *after four del. beginnings of variant:* 

*secondly.* that None The Royal Collection of Arms at Windsor is one of the We have allready

342.23 generously] interl. 342.24 and by some Private Gentlemen,] inserted any] altered from an before del. abstract of the whole 342.26 the rich] after del. the after del. those beautiful containts] 'contents' 342.29 The Windsor] repl. del. This 342.30 still now] repl. del. already better] repl. del. very well 342.31 for the richness] after del. for the Knowledge of Processes and of s after del. for the richness and beauty of the 342.38 simplicity] inserted before del. beauty 342.39 A strong Gallo Roman] after del. Mediaeval [G] 342.40 was] after del. had not two small 342.41 Rosaces,] inserted after del. Medallons, Enamel.] altered from ~^ before del. which is now gone 342.45 have] above del. are the most interest] inserted before undel. the most interesting interest] after del. practical practical modern.] inserted 342.46 bygiven] by- | given derived from German 'beigeben': 'enclosed'

343.6 **the second**] *after undel*. the 343.3 Full-Armure] 'full armour' shows] repl. del. forms 343.7 **Stepp**] *after del*. Development development of the] inserted 343.8 **has**] *after del.* is intersting for the formed] after del. decoration. wi[t] 343.10 Hilt] above del. Handle 343.12 I shutt] after del. The Halbard 343.13 Enamel] after del. Azur en Camajeu] 'en camaïeu' 343.17 careful] after del. good execution Enamel 343.18 343.21 distinghed] 'distinguished' 343.23 barrels] after del. gives] after del. shows It may] after del. At this Occa after del. It will perhaps be recommendable to Cannons **allowed**] *after del.* occasionally mentionne[d] give a survey of th 343.24 from the of similar] before del. colle and inserted after del. of practical establishment] inserted of practical] after del. if there were in the Collection some

#### MS 107

To the Superintendency of the Departement of Practical Art.

Report on the Collection of arms at Windsor Castle etc.

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The Instruments of War and of Chase have always been considered as the most suitable ornements of their proud bearers, and therefore, they were very early objects of ornamental art, while, by their serious applications and uses they permit no other Decorations, than such, as answered rigorously to the principal laws of Style, fittness and convenience.

Their importance for the Study of Ornamental Art in general and of Metalworking especially is therefore evident. These Products of the Armurers and Swordsmiths-craft are firstly interesting for the variety and perfection of the different Processes occurring in the Art

<sup>10</sup> of Metal-working, which processes have been applied in their fullest development on arms and veapons. It is certain, that no other branch of Metalworking, not even that of the Goldsmiths and Jewellers, presents the same choice, variety and perfection of Processes, as we find on the branch in question.

But they are not less important secondly for the Study of *Style*, in so far as we understand by this term those perfections || in works of art, arrising from artistically using the means and observing the limits, which are contained in and defined by the Task and Problem which is in question, as well as by all the Accessories, which modify the Solution of it in every cases. It has already been mentionned why the objects in question must necessarely be suitable models for Stylistical studies. –

20 Arms and veapons are thirdly interesting for the study of what might be called the *Historical Style*, which is that peculiar character, by which the artictical productions of the Different countries and ages are distinguishable from each other. The History of Ornamental Art can not better be summed as by a collection of Arms and

veapons; For we see at all conditions on them, what has been done the most convenient for Style and the most pure and rich for decoration. So we observe a relative elevation of art

25 Style and the most pure and rich for decoration. So we observe a relative elevation of art manifesting itself on the Arms and veapons of the very circumstances, when everywhere else the Practice and science of Art was allmost lost, in the centuries of Barbarism and Decay. 2

fol. 1r

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fol. 3r	3	The same appeared at the Summits of Ornamental Art in the Ages of florishing    Civilisa- tion; The Craft of the Armurers has often been the Seminary for artistical Talents of every direction, and High art did not disdain this branch of Application. A relative purity and Chastity of Taste and style is finally observeable on arms in those luxurious periods of Art, when the principles of style were misregarded, and the Arts fol- lowed the general Direction of the Age for Novelties and Extravagancies of all kind. We have happily a greater opportunity to pursue the before mentionned studies on the Arms and Veapons, than is given in any other Branch of Ornamental Art; since many fine collections of Arms are restant or new established in the Different countries of Europe, which form as many allmost <i>inexplored</i> treasuries for Ornamental art and for artistical in-	5
fol. 4r	4	vestigations. The largest and most renowned Armuries in Europe were in the beginning practical insti- tutions, they were Arsenals. – Some other, for instance that of Wienna, formerly at Castle Ambrass, had since the beginning a more Antiquarian and Historical Destination    Other pertake of both of the two qualifications; such as the Private Collections of Souve-	15
		rains, Princes, and other healthy Private Personages. Among the last is the Royal Collection of Arms at Castle Windsor without doubt one of the most interesting and perhaps the most valuable of all. Besides the Richness of its containts, it is highly important for the artistical significance of many of the Objects and their rare conservation.	20
		But the artistical Significance neither of the Windsor Collection nor of any other Collec- tion of Arms has as yet been sufficiently explored. Some illustrated Publications on arms and veapons, as for instances the Works of Meyricks, that of Jubinal on the Madrid Armury, an other Publication on the Imperial Collections of Russia, Baron von Ebner's Work on Costumes of the Middle Ages, contain very usefull Materials, and their acquisition for the Library of the Departement of Practical Art is most desirable, as well as that of the printed Catalogues of some of the most important Collec-	25
fol. 5r	5	tions in Europe.    But they give scarcely more than the general Forms and Caracters of the Objects and are not sufficient for practical Instruction. It may therefore be allowed to recommend moreover to the attention of the High Superin- tendency the following Propositions, respecting the Enrichment of the Museum of the	30
		Department for Practical Art with some Specimens of Arms, swords, guns etc. It would be difficult to provide the new Establishment at once with a sufficient number of selected Specimens of arms, proportionate to their importance as means of Instruction; But this blanc of the Museum may be temporarely filled out with the contributions of the Pos- sessors of Collections of Arms, who will kindly favor the new Institution with their patri- otical Sympathy, and lend some specimens of the contents of their collections.	35
fol. 6r	6	Some beautiful pieces have already been generously lent by Her Majesty the Queen and by some Private Gentlemen, but it will be necessary to appeal once more to Her Majesties Grace for some more Specimens    of the Rich Windsor-Caste Collection of Arms. The last is unique for its Treasures of oriental Arms, – but thinking, that Oriental Art is still now very well represented in our Museum, I spare my propositions for other branches of the	40
		armurerers art and mention here only three objects as very instructive and interesting for the Richness and Originality of the Processes, employed in their ornamentation.	45

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I.) Burmese Sword nº 9356 for the beauty and Peculiarity of the Chased hilt etc.

2) Sword, which passes for Moorish, but which certainly is Chinese. nº 2315. for the Richness and Originality of the Processes employed for the Decoration of its Hilt and Scabbard with Ornaments of Various Metals,

5 3) The Breast-Plates, forming part of the Armurs of Tippo Saib. (hanging in the Passage, decorated like a Tent.). It is remarcable as a beautiful Specimen of Steel-chasing and of pure Simplicity of Design.

Among the Western arms may firstly be mentionned a strong Gallo Roman Sword of Iron, with Bronze Hilt. It ¦| would appear modern and counterfeid, if it had not on the hilt some

small Silver Rosaces, like filigranworks, which once were filled up with Enamel. The General Form of the Sword and this Ornament on it, render this specimen interesting. The Rosaces are instructive for the History and practice of the Enamellers art.

The collection of Renaissance veapons is very considerable; The same have perhaps the most interest for our modern practice.

<sup>15</sup> Among the Swords, the three, which are given in the bylaid Sketches, are of first distinction.

One of them  $n^{\circ}$  has been attributed to B. Cellini without reason. It has some relation in Style and Execution with the fine Shield which is at present in the Museum and perhaps belonged to the same Panoplie.

The second, n° 222 is of a somewhat later period, and inlaid with Silver.
The general Form is very elegant and the Ornaments are of the best Style.
The third n° 276 has been executed after the same Principle as the Second, and shows the third stepp of the Developpment of the Modern Swordform. ||
Another Sword, probably of James's the II. time, has a Hilt formed by Serpents, chased in

- Steel, and is of very good invention and well executed. The comes the Dutch Sword of the 17<sup>th</sup> Century, which is decorated with fine Chased Medallons with Portraits of some Heroes of the Dutch History. This Series may be shutt in mentionning one very beautiful Sword of the time of Louis XVI, which in the Catalogue is given as an English work. The Hilt is Gold, with Enamel-Pictures
- en Camajeu on Azur Ground which no doubt are done by one of the best masters of the time. I newer saw better Enamel-pictures.
   This specimen is not only recommendable for the beauty of its Details, but also for its general Form and the good taste and carefull Execution which appear on it.

It gives an Evidence of what has been said before, that Purity of Style is to be found on arms and veapons even when generally bad taste is dominant in Art.

Among the other Occidental veapons, except the guns, it must be noticed here for attention the beautifull Halbard of the Time of Henry 8<sup>th</sup> a Présent of the Pope to the || King, and of Italian Workman-ship. –

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Among the Guns are the Oriental Guns not less destinguished by the beauty of the Workmanship of the barrels, than by the good taste and the Richness of their ornamentation, and

it is principally for the first quality that they excell our modern guns. It may be allowed to allude here occasionally to the excellent arangement in the Museum of Practical Geology, where the different Processes, (among the other also that of Barrelmaking) are shown in Technological surveys, to the greatest profit of the Students. Should it not

45 be desirable to have similar Arrangements for our Museum? with the Difference, that the artistical element must predomine above the geological and the metallurgical. –

g fol. gr

fol. 7r

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Among the Occidental Guns, which are alltogether excellent, I distinguish only the famous Lazarino Cominazo Guns, for the Style of their Barrels, which is in the same time Decorative and practical. They are manufactured with the nails and the shoes of the Appenin-Mules. The Gun of Louis XIV, worked by Piraube, is the finest gun in the world. The Barrel is || inlaid with Gold-flowers, the Sight is Silver, the Hindsight Steel corved in open work. The

whole is rich and sober in the same time, and the distribution of the decorated part is per-

fol. 10r

70

fectly well understood. The execution is also very beautifull. It is a modell for ornamental Art in its application on Guns. The same Case contains admirable other specimens of more modern workmanship. One Spanish Gun of Joachim da Zelaja, and the fine Pistols, worked by Weiss at Suhl in Germany. The same Master made two Guns which are at the same spot. These arms are the finest specimens of Louis XV Style, and for this reason, as well as for their fittness and for

the excellent workman-ship of the whole, very interesting. The same case holds also the renommated Kuchenreuter Guns and Pistols, they are the best for practical use, and the application of the Ornaments on them is gracefull.

These are the Objects which, among so many other things which call to attention, may be sufficient to point out for special notice. –

It may be allowed now to make two other propositions, relating to the same object. ||

*fol. 117* 11 Firstly to collect colourd drawings of the most interesting armours and veapons to be seen at the Windsor Collection and at other Armuries in England and elsewhere. Sometimes colourd drawings are more usefull then plaster casts for Students.

Secondly to collect plastercasts for such cases, where this manner of reproducing the Originals is more usefull, as for instance for Repousse works. and Steel-carvings.

Thirdly to order Electrotypes to be made of the finest specimens of armures, for instance those at Dresden. One of the Officers of the Historical Museum at Dr. is a clever Electro-typist and has allready reproduced several of the beautifull Shields which are at Dresden.

London 20 Sptber 1852.

Gottfried Semper.

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345.1 To] after Henry Cole's insertion in top margin:

for annual report in Demy 8°.

set in Bourgeois – full measure. 4 proofs, Henry Cole

28 Sep: '52

345.1 Superintendency] cy altered by Cole to ts 345.2 Report] doubly underl. by Cole Private] above inserted and del. by Cole Royal **on the**] *before interl. by Cole* Private Collection of arms] doubly underl. by Cole etc.] repl. by Cole's insertion the property of Her Majesty the Queen, prepared with Her Majesty's gracious permission, by G Semper Professor of Metalworking in the Department of Practical Art G Semper Professor] 345.3 Chase] after interl. by Cole the underl. by Cole G] altered by Cole from Gotfried the] del. by Cole 345.4 ornements] first e altered by Cole to a of] repl. by Cole's insertion proud] repl. by Cole's insertion noble therefore] before interl. by Cole from a very for very early] del. by Cole ornamental] repl. by Cole's insertion decorative early period 345.5 by their serious applications and uses they] repl. by Cole's insertion the uses to

345.6 answered] repl. by Cole's insertion which they were put did not **no**] *del. by Cole* conformed **Style**] *altered by Cole to* & Style & Style] transposed by Cole's guide line to after convenience at 345.6 (cf. 76.10) and] del. by Cole 345.7 for] repl. by Cole's insertion in 345.8 Armurers] altered by Cole to Armourers Armourers] after interl. by Cole craft of the Swordsmiths-craft] Swordsmiths- craft craft] del. by Cole 345.8-9 firstly] 345.10 Metal-working] del. by Cole 345.9 interesting] before inserted by Cole 1° Metal- working have been applied] transposed by Cole's guide line to after development at 345.10 (cf. 76.15) 345.12 the same choice, repl. by Cole's insertion greater **as**] repl. by Cole's insertion than those which 345.13 **on**] o altered by Cole to i the e altered by Cole to is **branch in question**] del. by Cole 345.14 **But they**] altered by Cole to They secondly] transposed by Cole's guide line to before But they at 345.14 (cf. 76.19) 345.15 perfections] repl. by Cole's insertion achievements arrising] second r del. by Cole artistically] transposed by Cole's guide line to after means at 345.15 (cf. 76.21) 345.17 cases] es altered by Cole to e 345.19 Stylistical] del. by Cole studies. -] altered by Cole to ~. of Styles 345.20 thirdly] transposed by Cole's guide line to before Arms at 345.20 (cf. 76.25) 345.20-I Historical Style] repl. by Cole's insertion History of Styles 345.21 artictical] 'artistical' 345.23 Art] before interl. by Cole in Metals can not] can not summed as] repl. by Cole's insertion illustrated than 345.24 at] before interl. by Cole once them,] altered by Cole to ~^ observed; done^] altered by Cole to ~; what is 345.25 Style and] before del. by Semper princip and before interl. by Cole what is **observe**] after interl. by Cole may 345.26 of after interl. by Cole arising out

346.1 same] before interl. by Cole results at the Summits of] del. by Cole after interl. by Cole when Art] before interl. by Cole attained its highest Elevation 346.1-2 Civilisation;] altered by Cole to ~. 346.2 Armurers] altered by Cole to Armourers 346.4 **observeable**] altered by Cole to observable 346.5 misregarded] m altered by Cole to d 346.7 a greater] del. by Cole before interl. by Cole better opportunity] y altered by Cole to ies 346.7-8 the Arms] the del. by Cole 346.8 given in] repl. by Cole's insertion afforded by 346.9 restant or new established] repl. by Cole's insertion established restant 'extant' 346.10 as] repl. by Cole's insertion so 346.12 Armuries] u altered by Cole to 0 346.13 **they**] after inserted by Cole for other] altered by Cole to others Wienna] W altered by Cole to V 346.14 since the] repl. by Cole's insertion from its 346.15 Other] altered by Cole to Others pertake] first e altered by Cole to a 346.16 other] altered by Cole to others healthy Private Personages] del. by Cole 346.17 Castle] transposed by Cole's guide line to after Windsor at 346.17 (cf. 77.19) 346.19 containts] ai altered by Cole to e 346.20 rare] before interl. by Cole state of conservation.] altered by Semper from ~~ before del. by Semper and beauty. and con altered by Cole to pre 346.21 neither] del. by Cole nor] repl. by Cole's insertion or 346.22 has] before interl. by Cole not explored.] before Cole's line connecting explored. and Some at 346.23 (cf. 77.25), thus deleting paragraph 346.23 instances] es altered by Cole to e Meyricks] s del. by Cole 346.24 that] del. by Cole an other Publication] repl. by Cole's insertion that 346.25 Russia,] altered by Cole to ~^ & 346.25-7 of the Middle Ages ~ desirable] marked to the left, possibly by Cole, by a vertical double line in pencil 346.29 Caracters] altered by Cole to Characteristics 346.30 sufficient] altered by Cole to sufficiently sufficiently] before interl. by Cole detailed Instruction.] inserted by Semper after del. by Semper institution. - 346.31 It may therefore be allowed to] repl. by Cole's insertion I therefore beg leave to moreover] del. by Cole High] del. by Cole 346.31-2 Superintendency] altered by Cole to Superintendents before interl. by Cole of the Department of Practical Art 346.32-3 of the Department for Practical Art] del. by Cole 346.36 blanc] c altered by Cole to t (blanc can be misread as 'Wanc' which consequently was altered by Cole to 'Want'; see 77.38: 'want') filled out with the contributions of] repl. by Cole's insertion supplied by loans from 346.37-8 who will kindly ~ contents of their collections] del. by Cole 346.39 Some beautiful pieces have already been generously lent by] del. by Cole 346.39-41 and by some Private Gentlemen ~ for some more] del. by Cole 346.41 Specimens] after inserted by Cole has already graciously permitted the Department to borrow of ] altered by Cole to from Windsor-Caste] 'Windsor Castle'; after inserted by Cole in and both transposed by Cole's guide line to after Collection of Arms. at 346.41 (cf. 78.2) 346.41 of Arms.] del. by Cole 346.42 **last**] repl. by Cole's insertion collection **thinking**] repl. by Cole's insertion as it appears to me 346.42-3 **still now**] repl. by Cole's insertion at present 346.43 **spare**] repl. by Cole's insertion reserve **propositions**] altered by Cole to proposals 346.44 **armurerers**] u altered by Cole to 0 (armurerers can be misread as 'armuurers' which would have been altered to 'armourers'; see 78.5: 'armourer's') **objects**] before interl. by Cole of Eastern art **as**] before inserted by Cole being

347.4 Ornaments] after del. by Semper Reliefo 347.5 Armurs] urs altered by Cole to our 347.6 remarcable] c altered by Cole to k 347.8 firstly] del. by Cole mentionned] second n del. by Cole 347.9 counterfeid] d altered by Cole to t 347.10 Rosaces] repl. by Cole's filigranworks] an altered by Cole to ee 347.11 interesting] repl. by insertion rosettes 347.12 **Rosaces**] aces *altered by Cole to* ettes Cole's insertion remarkable for repl. by Cole's insertion in 347.13 **The same have** *repl. by Cole's insertion* and has most] repl. by Cole's insertion greatest 347.15 **the three**] the altered by Cole to there are which are given in the bylaid Sketches, are] del. by Cole bylaid] derived from German 'beilegen': **of**] *before interl. by Cole* the 347.17 n°] before blank left for number (see 335, 'enclosed' **B.**] *before interl. by Cole* envenuto Explanatory Notes 78.25-6) 347.18 Shield before inserted by Cole belonging to the Queen 347.19 Panoplie] ie altered by Cole to y 347.20 Silver.] before Cole's line connecting Silver. and The general Form at 347.21 (cf. 78.29-30), thus deleting paragraph 347.23 stepp of of repl. by Cole's insertion in Modern after interl. Swordform] form del. by Cole 347.25 invention] repl. by Cole's by Cole form of the insertion design 347.26 The] altered by Cole to Then 347.27 History] after del. by Semper 347.28 **shutt**] repl. by Cole's insertion closed closed] before interl. by Cole for Revolution the present 347.30 **Camajeu**] ajeu *altered by Cole to* eo Azur] altered by Cole to Azure are] repl. by Cole's insertion were 347.31 newer] 'never'; after interl. by Cole have saw Enamel-pictures.] before Cole's line connecting Enamelrepl. by Cole's insertion seen pictures. and This specimen at 347.32 (cf. 79.1), thus deleting paragraph 347.32 recommendable] altered by Cole to recommended after inserted by Cole to be 347.33 appear on] repl. by Cole's insertion pervade 347.35 generally] ly del. by Cole in Art.] transposed by Cole's guide line to after bad taste at 347.35 (cf. 79.5) 347.36 Occidental] above del. by Semper Modern except] after del. by Semper is specially and repl. by Cole's insertion besides it] del. by Cole for attention] del. by Cole 347.38 Workman-ship] Work-347.42 allowed] ed repl. by Cole's insertion able occasionally] del. by Cole man-|ship 347.45 Arrangements] after del. by Semper Groups of 347.46 predomine] final e altered by Cole to ate

348.1 distinguish only] repl. by Cole's insertion remark for the present 348.2 for] after interl. by Cole distinguished in altered by Cole to at 348.3 nails before del. by Semper of the Italian **shoes**] altered by Semper from Horseshoes 348.4 is the finest] is before interl. by Cole probably 348.5 **Hindsight**] 'rear sight' corved 'carved' 348.6 in] 348.11 **spot**] repl. by Cole's insertion place 348.13 workman-ship] altered by Cole to at workman- | ship whole,] before interl. by Cole are 348.14 renommated] ommated 348.16 which call to] repl. by Cole's insertion exacting repl. by Cole's insertion owned 348.18 It may be allowed now] repl. by Cole's insertion I take **may**] after interl. by Cole it 348.19 Firstly to collect] repl. by Cole's insertion I beg leave to this opportunity to recommend 1° that **to be seen**] del. by Cole 348.20 at the at repl. by Cole's insertion in elsewhere.] before inserted by Cole should be made 348.21 **then**] '*than*' plaster casts] plaster | casts 348.22 Secondly] underl. by Cole to collect] repl. by Cole's insertion that plastercasts] before interl. by Cole be made for] repl. by Cole's insertion in 348.23 Steel-carvings.] before inserted by Cole And 348.24 Thirdly ] underl. by Cole to order] repl. by Cole's insertion that to be] to del. by Cole armures] 'armours' for repl. by Cole's insertion such for instance] before interl. by Cole as 348.25 One of the Officers of the Historical Museum at Dr. is a clever] repl. by Cole's insertion Some Dr.] 'Dresden' 348.25-6 Electrotypist] ist altered by Cole to es 348.26 and] del. by Cole has] s altered by Cole to ve reproduced] after interl. by Cole been several] del. by Cole

#### MS 107

#### WITH HENRY COLE'S EMENDATIONS

76.1 (B.) – Report Windsor Castle,  $\sim \sim 76.2$  prepared,  $\sim 76.3$  G. Sem-Metal Working] Metalworking 76.3-4 Practical Art.] ~ ~^ per,]~^~~ 76.5 **To** the Superintendents of the Department of Practical Art.] before title, with 'Department' as Departement 76.7 period<sub>A</sub>] ~, 76.8 while<sub>A</sub>] ~, 76.9 decorations<sub>A</sub>] Decorations, 76.10 of fitness, ]~, fittness convenience, ]~^ such<sub>^</sub>]~, and style] & Style 76.11 **in general**,] ~ ~^ 76.11–12 metal working] Metalworking 76.12 especially,] ~^ 76.13 interesting, ] ~ 76.14 First, ] 1° connected with ] occurring in 76.15 metal 76.16–17 **metal** working] Metal- | working 76.16 weapons] veapons certain\_] ~, working] Metalworking 76.17 goldsmith] Goldsmiths jeweller] Jewellers 76.18 76.19 **Secondly, they**] secondly A They processes, Processes, 76.22 problem in question; Problem which is in question, 76.23 mentioned mentionned 76.23-4 **such objects**] the objects in question 76.24 **necessarily**] necessarely 76.25 **Thirdly**, weapons] veapons 76.26 arising out of] which is character ^] ~, thirdlv∧ 76.27 different] the Different 76.29 **cannot**] can | not artistic] artictical therefore be **better**] better be 76.30 **weapons; for**] veapons; For requisite] om. 76.30-1 conditions ~ on them 76.31 **observed,**] ~; done,] ~; **style**,] Style∧ 76.32 **Thus** So 76.33 arms and weapons] the Arms and veapons these] the 76.34–5 in the centuries of barbarism and decay the practice and science of art was otherwise almost lost.] everywhere else the Practice and science of Art was allmost lost, in the centuries of Barbarism and Decay.

77.2 flourishing florishing armourer Armourers 77.3 artistic artistical descrip-77.6 art<sub>A</sub>] Art, 77.7-8 extravagances] Extravagancies tion direction 77.8 kinds 77.9–10 study of art on arms and weapons<sup>1</sup> before mentionned studies on Arms kind and Veapons, 77.11 to be found] established **Europe**<sub>A</sub>] ~, forming] which form 77.12 **almost unexplored**] allmost inexplored treasuries of] ~ for for artistic investigation] and for artistical investigations 77.13 armouries] Armories 77.14 arsenals. -] Arsenals. -77.15 commencement] beginning 77.16 destination.] Destination∧ 77.17 qualifications,] ~; 77.18 sovereigns] Souverains 77.19 Windsor Castle,] ~ ~^ 77.21 contents. ~, artistic] artistical 77.23 artistic] artistical collection, Collection 77.24 arms, Arms 77.25 **weapons** veapons as, for instance,  $] \sim \sim \sim \sim \sim 77.26$  Tubinal Jubinal armoury Armury 77.27 **Russia, and** ~^ & 77.27-8 middle ages] Middle Ages 77.28 useful] usefull 77.29 Department] Departement **the printed catalogues**] that of the printed Catalogues of some 77.31 scarcely give jeve scarcely 77.32 weapons, Objects 77.34 proposals Propositions, 77.35 **&c.**] etc. 77.38 instruction.] Instruction; want] blant (cf. 349, note 346.36) temporarily] temporarely 77.39 arms.] Arms,.

78.2 Windsor Castle.] ~-CasteA 78.3 Oriental arms, A] oriental Arms, – 78.4 meA] ~, 78.5 armourer's art,] armorerers artA (cf. 350, note 346.44) only] here ~ 78.6 Eastern art,] ~ ~A 78.7 processesA] Processes, 78.8 1.] I.) Burmese sword, No. 9,356,] ~ SwordA n° 9356A 78.9 &c.] etc. 78.10 2.] 2) 78.10–11 Chinese, No. 2,315,] ~. n° 2315. 78.12 scabbard,] ScabbardA various metals.] Various Metals, 78.13 3.] 3) Tippo SaibA] ~ ~. 78.14 tentA] Tent. 78.18 filigree works] filigreeworks 78.19 sword,] SwordA 78.22 Rénaissance weapons] Renaissance veapons considerable,] ~; 78.24 swordsA there are threeA] Swords, ~ ~ ~, 78.25 them, No. ,] themA n° A

78.27 Queen,]~^ **Benvenuto**] B.envenuto Museum,]~^ 78.29 No. 222, nº ~A 78.31 third, No. 276,] ~∧ n° ~∧ 78.30 elegant,]~^ 78.32 **step**] stepp development 78.33 James II.'s] James's the II. Developpment 78.36 medallions, Medallons 78.37 by mentioning] in mentionning 78.38 Louis XVI.] ~ ~^ 78.39 enamel pictures Enamel-Pictures in cameo] en Cameo azure ground,] Azure Ground 78.40 never] newer 78.41 enamel pictures Enamel-pictures

79.2 **careful**] carefull 79.5 **weapons**] veapons art<sub>A</sub>] Art. dominant.] ~^ 79.6 weapons] veapons may] must 79.7 **beautiful halberd**] beautifull Halbard Henry **VIII.**] ~ 8<sup>th</sup> present] Présent 79.8 workmanship. A] Workman- | ship. -79.9 distinguished] destinguished Oriental guns,] ~ Guns 79.10 barrels^] ~, 79.11 ornamentation;]~, **excel**] excell 79.13 arrangement] arangement 79.14 pro**cesses**<sup>A</sup>] Processes, **others**] the other also 79.15 **barrel-making**] Barrelmaking 79.16–17 Museum,] ~? 79.17 this difference] great] greatest 79.16 Would] Should the Difference artistic] artistical 79.18 metallurgical? ^] ~. – 79.19 altogether alltogether 79.21 which is,] ~ ~ time,] ~ 79.22 Appenine mules] Appenin-Mules 79.23 Louis XIV.] ~ ~^ 79.24 gold flowers] Gold-flowers head-sight] Hindsight 79.25 **steel, carved** Steel corved 79.27 **beautiful**] beautifull model] modell 79.28 other admirable] admirable other 79.28–9 workmanship. –] ~.  $\land$ 79.29 pistols guns,] Guns∧ Pistols. 79.30 Suhl,]~^ 79.31 Louis XV. style:] ~  $\sim \wedge$  Style, 79.32 workmanship] workman- | ship 79.34 Kuchenrenter] Kuchenreuter fitness] fittness pistols; Pistols, 79.36 graceful] gracefull 79.38 notice. h = 79.39 to make to to make

80.1 **– Firstly,**]∧1°∧ **coloured**] colourd 80.2 **arms and weapons**] armours ~ veapons armouries] Armuries 80.3 elsewhere ]~. made.]~^ **coloured**] colourd 80.4 useful than] usefull then 80.5 Secondly, ~^ plaster casts plastercasts cases 80.6 originals, Originals useful;] usefull, as, for instance, ] ~^ ~ ~^ ~, répoussé works\_] Repousse ~. 80.7 steel carvings; and,] Steel-carvings. And 80.8 Thirdly,]~^ arms; armures, 80.8-9 such, for instance,  $] \sim \land \sim \sim \land \qquad 80.9$  already allready 80.10 **beautiful**] beautifull 80.11-12 Gottfried Semper. London, September 20, 1852.] London 20 Sptber 1852. Gottfried Semper.

# Berlin Productions of Plastical Art, Metal Casts, Plaster Casts

#### **TEXTUAL RECORD**

- MS 112<sup>1</sup> gta, 20-Ms-112, fol. 5r-v (5r, beside and below the text, calculations and sketches in black ink and pencil; 5v calculation and sketch in pencil), in Semper's hand
- MS 112<sup>2</sup> gta, 20-Ms-112, fols. 1r-4v (1r notes by Hans and Manfred Semper, early 1880s, see 355-6, Alterations in the Manuscript 80.14; 1v, 4v blank), in Semper's hand, dated 11 October 1852, *copy-text*
- K-1852 gta, 20-K-1852-10-11(S), fols. 1r–4v (receipt forms for Semper's fees for the Vienna Hofmuseen and Hofburgtheater on all versos), in Manfred Semper's hand, early 1880s, copy of MS 112<sup>2</sup>

BIBLIOGRAPHY Herrmann 1978, 131-2; Herrmann 1981, 108; Mallgrave 1996, 213

#### **EXPLANATORY NOTES**

When Semper submitted the report on the collection of arms at Windsor Castle to Henry Cole on 27 September 1852, he also informed him about a visit from an 'Importer of Berlin Metal works etc.' two days earlier - a certain 'Mr. Born, Southampton Street Strand' (probably the German David Born). Semper promised he would deliver a report as soon as he saw the catalogue. In the completed report, dated 11 October 1852 and published here, he presents Born's offer of plaster casts and metal casts from historical and modern objects of the applied arts - jewellery in renowned royal collections, and some private collections, in Berlin, such as engraved gems, medallions, brooches and bracelets, and a shield manufactured by the recently deceased Munich artist Ludwig von Schwanthaler. Semper makes recommendations for purchases for the Museum of Ornamental Art, which already had a considerable collection of casts and whose curator was Ralph Nicholson Wornum, later secretary of the National Gallery of London. The museum's catalogue records six items 'Purchased of Mr. D. Born' in 1852 'as examples of fine casting in metal' (CatM<sup>4</sup>, 40; DPA<sup>1</sup>, 265; CatM<sup>5</sup>, 56; CatM<sup>6</sup>, 35-6). These metal castings correspond to those offered by Born as being 'cast Iron Ornaments of Devaranne at Berlin' and were recommended by Semper 'as proofs of Skill in Casting Iron' (81.26-9). Richard Redgrave agreed to these suggestions in a note at the bottom of Semper's manuscript and added some further comments (356, Alterations in the Manuscript 82.7). The cast iron jewellery acquired can be identified with some certainty with items held in the Victoria and Albert Museum (see below), although only three of them are attributed to Siméon Pierre Devaranne, one of the foremost artists of fashionable Berlin iron jewellery around 1850.

80.14 **Henry Cole Esquire**] preceded by a contemporaneous sheet with notes by Hans and Manfred Semper from the 1880s, which describe the manuscript's contents and the decision (in Manfred's hand), 'Not to be included because of too little general interest' (355–6, Alterations in the Manuscript 80.14) – that is, Hans and Manfred decided not to translate the

report for Gottfried Semper's Kleine Schriften (Semper 1884). 80.19 Museum] the Department's Museum of Ornamental Art at Marlborough House, Pall Mall, London 80.20 **bygiven**] derived from German *beigeben*: *enclosed* (see also 81.2) 80.24-5 Stosch Collection ~ Museum at Berlin] Philipp von Stosch's collection of antiquities (mostly engraved gems) was acquired by the Prussian King Frederick the Great in 1764; in Semper's time, it was kept in the Königliches Museum (Royal Museum) in Berlin, as Karl Friedrich Schinkel's Altes Museum of 1830 was originally called. 80.27 Catalogue ~ by Winkelmann in ~ 1769] This catalogue, established by Johann Joachim Winckelmann after Stosch's death, was published in 1760 (Winckelmann 1760). 80.29 pens pence 80.30 Hundert German for Hundred

81.1 3444 pieces] the complete number of engraved gems in the Stosch collection 81.5 **Speckstone**] derived from German *Speckstein*: *soapstone* Royal Museum] see note 81.6 Kunstkammer] The Royal Kunstkammer was housed in the Berlin 80.24-5 Stadtschloss (converted by Andreas Schlüter around 1700) up to 1855, when it was transferred to Friedrich August Stüler's Neues Museum. 81.8-9 Pisani ~ Jamnitzer] 'Pisani': Pisanello. All of these artists were working as medallists; for identification of their names, see Index. 81.14 **peaces** *pieces* 81.15 pens pence 81.21-2 table with Zinc-casts of Mr Eichler's Manufacture ~ exposed in the Exhibition of 1851] The Berlin publisher Gustav Eichler had founded 'G. Eichler's Kunstanstalt für plastische Arbeiten' in 1841; among other things, he had on offer plaster casts of the engraved gems in the Stosch collection. If Eichler's 'table with Zinc-casts' (referred to by Richard Redgrave in his comment added to Semper's manuscript as 'frame of Zinc Castings'; 356, Alterations in the Manuscript 82.7) was shown at the Great Exhibition, then it was probably not a collection of zinc casts but rather the collection of plaster casts described as 'Tableaux with 52 portraits and medallions, cast in plaster of Paris, after sculptures of German artists of the 16th century' (ODIC 1851, 3:1064 [no. 272]). 81.26 recommands recommends 81.27 cast Iron Ornaments of Devaranne at Berlin] Berlin cast iron jewellery, invented as a patriotic substitute for jewellery made of precious metals at the time of the Napoleonic wars, had become highly fashionable during the first half of the nineteenth century; Siméon Pierre Devaranne was appreciated for his original designs. All of the cast iron jewellery by Devaranne that Semper recommended was purchased by the Museum of Ornamental Art and listed in its catalogue, indicating its provenance from 'D. Born'. The items are identified below by their purchase price and description in the museum catalogue with the numbers there and – by comparing the purchase price – in the inventory of the South Kensington Museum of 1868 (Inventory 1868, acquisitions of 1852), from which the museum numbers in the Victoria and Albert Museum were derived and where the items can be located with some certainty. 81.30 **Brooch 2/6.**] CatM<sup>5</sup>, 56: 'M 112. – Cast iron brooch from Berlin. Purchased of Mr. D. Born'; Inventory 1868 (1852), 5: 'Brooch. Cast-iron filigree work. German (Berlin), modern'; V&A, 935-1852, attributed to Devaranne Bracelet 5/6. – n° 540] CatM<sup>5</sup>, 56: 'M 113. – Cast iron bracelet from Berlin. Purchased of Mr. D. Born'; Inventory 1868 (1852), 5: 'Bracelet. Castiron filigree work. German (Berlin), modern'; V&A, 937-1852, attributed to Devaranne 81.31 Each à 4/6. – n° 126 – Bracelet and Brooch] CatM<sup>5</sup>, 56: 'M 110. – Cast iron brooch from Berlin. Purchased of Mr. D. Born'; Inventory 1868 (1852), 5: 'Brooch. Cast-iron filigree work. German (Berlin), modern'; V&A, 934-1852, tentatively attributed to Johann Conrad Geiss who, besides Devaranne, dominated the production of Berlin iron jewellery in the first half of the nineteenth century; CatM<sup>5</sup>, 56: 'M III. - Cast iron bracelet from Berlin. Purchased of Mr. D. Born'; Inventory 1868 (1852), 5: 'Bracelet. Cast-iron filigree work. German (Berlin), modern'; V&A, 936-1852, registered as a work of an unknown artist 81.32 6./ - nº 113 - Pendants] CatM<sup>5</sup>, 56: 'M 114. - Pair of cast iron ear[r]ings from Berlin. Purchased of Mr. D. Born'; Inventory 1868 (1852), 8: 'Ear pendants, a pair. Cast-iron filigree work. German (Berlin), modern'; V&A, 922-1852, attributed to Devaranne 81.33 3/.6. n° 558 – Brooch] CatM<sup>5</sup>, 56: 'M 115. – Cast iron brooch from Berlin. Purchased of Mr. D. Born'; Inventory 1868 (1852), 5: 'Brooch. Cast-iron filigree work. German (Berlin), modern'; V&A, 938-1852, registered as a work of an unknown artist 81.38-40 Copy of the Shield of Hercules ~ by Schwanthaler in Munich ~ cast and ciselld in Copper or Bronze by the artist] 'ciselld': chiselled. Ludwig von Schwanthaler was a most successful Munich sculptor with many commissions from Ludwig I, the Bavarian king. His Shield of Hercules, which Schwanthaler designed and modelled after Hesiod's description, was a bronze cast manufactured in several copies by the Königliche Erzgiesserei (Royal Bronze Foundry) at Munich starting in 1841. In the second half of the 1840s, there were already several copies in collections in Germany and England, including the collection of the Duke of Devonshire in Chatsworth. In the first draft of his first lecture at the Department, 'On the Relations of the Different Branches of Industrial Art to Each Other and to Architecture', Semper mentions Schwanthaler as one of the modern artists who had worked according to Hesiod's and Homer's description of works of industrial art (99.1).

82.2 Electro-type Copy of the Shield] In 1841, the director of the Königliche Erzgiesserei (Royal Bronze Foundry) at Munich, Johann Baptist Stiglmaier, had already announced the manufacture of electrotype copies of Schwanthaler's shield. In his comment added to Semper's manuscript, Redgrave recommends postponing the purchase of a reproduction of the shield 'until the success of the repetition of Her Majestys is seen' (356, Alterations in the Manuscript 82.7). This refers to the shield attributed to Benvenuto Cellini, which Semper mentions in his 'Report on the Private Collection of Arms at Windsor Castle' (78.26-7) and which was brought to London on 12 May 1852 after Prince Albert agreed to lend it 'to be electrotyped' (Cole Diary). The shield was shown at Gore House during the exhibition of students' works there in May 1854, together with an electrotype copy prepared by Elkington from Birmingham, the intention being to have electrotype copies of choice objects produced for purchase both by the Schools of Art connected with the Department and also by the general public (DSA<sup>2</sup>, 166, 202; Spectator 1854). An electrotype copy of the shield is also listed in the exhibition catalogue of a selection from the Museum of Ornamental Art, which circulated in the provincial schools of art from 1855 (Robinson 1856, 71 [no. 310]). 82.6 **feathfully**] *faithfully* 

#### EDITORIAL EMENDATIONS

 81.3 Cinque-cento] Cinque- | cento
 81.21 Zinc-casts] Zinc- | casts
 82.1 summ] m

 geminated by upper horizontal stroke
 82.2 Electro-type] Electro- | type

#### ALTERATIONS IN THE MANUSCRIPT

80.14 Henry Cole Esquire] after Hans and Manfred Semper's notes on fol. 1r:

III. e.<sup>1</sup>
Brief an H. Cole
Vorschläge<sup>2</sup> für Ankäufe für das Marlborough-house<sup>3</sup> Mus. – an Henry Cole *complet.*(1 Blatt; Entwurf dazu)
1<sup>1</sup> Oct. 1852.
Nicht<sup>4</sup> aufzunehmen, weil zu wenig allgemeines Interesse.

 III. e. ~ H. Cole] in black ink by H. Semper
 2 Vorschläge ~ 1852.] in violet ink by H.

 Semper, with correction in black ink by M. Semper
 3 Marlborough-house] inserted in black ink by M.

 semper before del. in black ink by M. Semper Kens.
 4 Nicht ~ Interesse.] in pencil by M. Semper

80.19 **Museum**] M over Co **specified**] *after del.* contained 80.27 ranged] after del. and 80.28 of transport] *after del*. for 80.30 pieces] ie over ea 81.12 **Italian**] *before del*. Masters 81.19 from Berlin] before del. of the Commands 81.22 thinks] th over is 81.23–4 for the comparison] after del. as a mean 81.24 with] after del. 81.27 gives i over a and s added 81.29 Skill in Casting] after del. skilfull between 81.30 The Brooch 2/6. the Bracelet 5/6. – ] inserted in red ink castings **2**] over 5 81.31 Each à 4/6. –] inserted in red ink 81.32 **6./-**] inserted in red ink 81.33 3/.6. -] inserted in red 81.34 **peculiar**] *above del*. particuliar seems] se over is 81.35 | therefore] after ink 81.36 **Museum**] *after del.* collection 81.37 by the mediation] *after del.* and *del*. so that I 82.1 large] *repl. del.* much 82.2 **suffice**] *after del.* as well 82.5 11 October 1852.] inserted 82.7 **GSemper**.] before Richard Redgrave's note in black ink:

Order the 2<sup>1</sup> bracelets & Brooches pendants

The frame of Zinc Castings

perhaps 2 frames Casts of Medals - from £2 to 3£

Casts of Cinque Cento medals to the same amount – Sand for Berlin casting – Shield had better be left until the success of the repetition of Her Majestys is seen –

Rich<sup>d</sup> Redgrave

1 2] above del. 4

# MANUSCRIPT VARIANTS MS 112<sup>1</sup>

fol. 5r 4b The German Medals, which are extremely interesting for the beauty of their execution are alltogether to be bought for 2 liv. Sterling.
It would be very desirable, to have together with the German Masters, some of the finest Italian Medals, for their comparison.

If the Superintendency agrees to purchase some of these articles, it will be good to commend them instantly, for in the winter season the water communication is sometimes interrupted.

4 Mr. Born proposed also to

356.3 **It**] altered from it after del. But 356.4 **comparison**.] before del. The last are more Grand in Style, but less finished and true as the first. – 357.1 **some**] after del. those arti 357.1-2 **commend**] 'order' 357.2 **season**] interl.

# **Observations on Some of the Specimens of Metal Work**

#### **TEXTUAL RECORD**

MS 111 <sup>1</sup> MS 111 <sup>2</sup>	gta, 20-Ms-111, fols. 5r–6v (6r–v blank), in Semper's hand, draft of CatM <sup>4</sup> gta, 20-Ms-111, fols. 1r–4v (4r and all versos blank), in Semper's hand, draft of CatM <sup>4</sup>
MS 111 <sup>3</sup> CatM <sup>4</sup>	gta, 20-Ms-III, fols. 7r–8v (8r–v blank), in Semper's hand, draft of CatM <sup>4</sup> 'Observations on Some of the Specimens of Metal Work', in <i>A Catalogue</i> <i>of the Articles of Ornamental Art, in the Museum of the Department</i> , 4th ed. (Feb. 1853), London: Eyre & Spottiswoode for Her Majesty's Stationery Office, 1853, 22–3
DPA <sup>I</sup>	'Observations on Some of the Specimens of Metal Work', in <i>First Report of the Department of Practical Art</i> , London: Eyre & Spottiswoode for Her Majesty's Stationery Office, 1853, 248-9
MS 113 <sup>1</sup>	gta, 20-Ms-113, fols. 3r-4v, in Semper's hand, draft of second part of CatM <sup>5</sup>
MS 113 <sup>2</sup>	gta, 20-Ms-113, fols. 11–2v (2v blank), in Semper's hand, dated March 1853, draft of second part of CatM <sup>5</sup>
CatM <sup>5</sup>	'Observations on Some of the Specimens of Metal Work', in <i>A Catalogue of the Museum of Ornamental Art, at Marlborough House, Pall Mall</i> , 5th ed. (May 1853), London: Eyre & Spottiswoode for Her Majesty's Stationery Office, 1853, 37-9 (NAL, V.1853.003), <i>copy-text</i>
${\rm Cat}{ m M}^6$	'Observations on Some of the Specimens of Metal Work, Enamels, &c.', in <i>A Catalogue of the Museum of Ornamental Art, at Marlborough House, Pall</i> <i>Mall</i> , 6th ed. (March 1854), London: Eyre & Spottiswoode for Her Maj- esty's Stationery Office, 1854, 18–20, revised and abridged ed. of CatM <sup>5</sup>
Semper 1884 <sup>ª</sup>	'Bemerkungen über einige Gegenstände der Metallotechnik', 86–9, Ger- man trans. of DPA <sup>I</sup> ; omits the last part of the concluding sentence (DPA <sup>I</sup> , 249.36–8, corresponding to CatM <sup>5</sup> , 84.11–13)
Semper 1884 <sup>b</sup>	'Kritik von Ankäufen für das Museum of practical art', 84–5, dated March 1853, German trans. of MS 113 <sup>2</sup>
Semper 2014ª	vol. 2, 516–17, Karge's reprint ed. of DPA <sup>1</sup>
Semper 2014 <sup>b</sup>	vol. 2, 545–7, Karge's reprint ed. of CatM <sup>5</sup>

**BIBLIOGRAPHY** Herrmann 1978, 82 n. 308, 132–3; Herrmann 1981, 107–8; Wainwright 1994; Mallgrave 1996, 213

#### **EXPLANATORY NOTES**

Semper's introductory remarks to the division on metalwork in *A Catalogue of the Museum* of Ornamental Art discuss a selection of items acquired from the Great Exhibition in 1851 and 1852, which was supplemented by further purchases in 1852 and early 1853. The first selection was made by a purchasing committee consisting of Henry Cole, Richard Redgrave, Owen Jones and Augustus Welby Northmore Pugin for the former School of Design. Semper wrote the first part of his 'Observations' (82.12–84.13) until February 1853, when it was published in the fourth edition of the museum catalogue and reprinted in the *First Report of the Department of Practical Art*. The second part of the 'Observations' discusses 'The newly acquired additions to the Museum' (84.14) and was published together with the almost unchanged first part in the fifth edition of the museum catalogue of May 1853, reprinted with some revisions and substantial abridgements in the sixth edition (see 364).

The first part of the 'Observations' focuses on three metal objects indicated in the earlier print variants with the subheading 'On M 1, M 20, M 2' (CatM<sup>4</sup>, DPA<sup>1</sup>; also in two fragmentary drafts, see 364.3, 365.7). The three numbers designate Indian metalwork – two bracelets and a sword – among which Semper devotes most space to the sword (M 20). He mainly discusses here the way in which enamel colours are used, thus pursuing his general interest in questions of polychromy (in *Style in the Technical and Tectonic Arts*, he refers to his 'Observations' – citing the fifth edition of the catalogue – when discussing colours in textile work; Semper 1860/63, 1:52 n. 1). The other objects are alluded to in a cursory way, often without giving a catalogue number. Among the new objects added by early 1853, Semper highlights a few specimens of objects wrought and chased in metal – a technique that he introduced towards the end of the first part with works particularly by Antoine Vechte and now discusses in relation to architectural issues.

The extant fragmentary drafts of both the first and second parts of Semper's 'Observations' contain some interesting differences from the printed versions - apart from the fact that they were not revised like the latter, probably by Cole or Redgrave. One of the drafts of the second part mentions a 'Chinese Censor' (367.32), which is omitted in Semper's printed text (listed in CatM<sup>5</sup>, 58, as 'M 129. – Bronze tripod incense burner. Purchased of Hewett & Co. ... Rosewood stand and cover, and carved soapstone handle'; Inventory 1868 [1852], 23: 'Incense burner. Bronze. Standing on three legs, rosewood base and cover. Chinese'; V&A, 1566-1852). The printed text also omits the concluding sentence of the second draft, which provocatively states that 'Some of the Emblems etc. appear to me not interesting eno[ugh], to [keep] their places in the Museum' (369.22-3). Semper's discussion of the metalwork objects mostly differs in content from the short descriptive texts that were included with their listing in the museum catalogue. They were not provided by him but probably by members of the purchasing committee, as is fairly obvious in the case of the items from the Great Exhibition, which are described in a text that remains almost unchanged starting from the first edition of the museum catalogue, the introduction of which - signed by Henry Cole, Owen Jones and Richard Redgrave – is dated 17 May 1852 (CatM<sup>1</sup>, iii–v). Most of the metal objects discussed are still preserved at the Victoria and Albert Museum; they are located by

comparing the list of metal objects in *A Catalogue of the Museum of Ornamental Art* with the list of acquisitions from 1852 and 1853 in the inventory of the South Kensington Museum of 1868 (Inventory 1868), from which the Victoria and Albert Museum numbers were derived.

82.12 M 1] CatM<sup>5</sup>, 41: 'M 1. – Dagger, with enameled sheath and handle. Manufactured at Scinde'; Inventory 1868 (1852), 25: 'Knife, or Dagger. Steel. With gold enamelled sheath. Indian (Scinde), modern'; V&A, 109-1852; cf. Wainwright 1994, 362 and fig. 22 M 20 CatM<sup>5</sup>, 44: 'M 20. – Drinking cup, silver-gilt and enameled. Manufactured at Kangra'; Inventory 1868 (1852), 7 (129-1852): 'Cup. Silver gilt, inlaid with floriated ornament in champlevé translucent enamel. Indian (Kangra), modern'; missing from V&A today 82.13 M 2] CatM<sup>5</sup>, 41: 'M 2. – Thulwar or sword, with enameled hilt, point, and scabbard. Manufactured at Kotah, in Rajpootana'; Inventory 1868 (1852), 40: 'Sword ("Thulwar.") Steel, mounted in enamelled gold. In crimson velvet scabbard also mounted, and green velvet sword belt with two gold enamelled buckles. Indian (Kotah in Rajpootana), modern'; V&A, 110-1852 82.14-17 blue and green enamel grounds ~ without being united by a com**mon parentage** ~ **more harmonious**] The description in the catalogue characterizes the sheath of M I as 'a perfect illustration of the principle ever adopted by Eastern nations of always decorating their construction, and never constructing decoration' (CatM<sup>5</sup>, 41). This observation corresponds to Pugin's dictum in his True Principles of Pointed or Christian Architecture of 1841, 'that all ornament should consist of enrichment of the essential construction of the building' and should not be 'actually constructed, instead of forming the decoration of construction'. Semper would not have shared this apodictic opinion because of its reductive simplification of the relation between ornament and object. Accordingly, he comments only on the lack of colour harmony, which could not be compensated for by introducing ruby colour, and thus gives an alternative reading of the judgement in the catalogue list, which states that the sheath 'suffers a little from the absence of ruby colour, which would have made it more harmonious' (CatM<sup>5</sup>, 41). 82.17-19 Even in M 20 ~ deficiency of harmony ~ less violent, the green and blue tints being broken and connected together by the neutral black In contrast, the catalogue list observes about this drinking cup that 'the colour is imperfect, requiring purple to balance the green' (CatM<sup>5</sup>, 44; CatM<sup>1</sup>, 33, having 'to well balance the green'). 82.20–2 Tulwar or Sword, M 2, and ~ M 11 and M 12 ~ same system of colouring and ornamentation] M II and M I2 are enamel bracelets; see CatM<sup>5</sup>, 42: 'M II. – Bungaree or bracelet, enameled, and set with diamonds and rubies. Manufactured at Dholepore, in Rajpootana'; Inventory 1868 (1852), 4: 'Bracelet. Gold, enamelled and set with diamonds and rubies. Indian (Dholepore in Rajpootana), modern'; V&A, 119-1852; CatM<sup>5</sup>, 42: 'M 12. – Bungaree or bracelet, enameled, and set with diamonds. Manufactured at Dholepore, in Rajpootana'; Inventory 1868 (1852), 4: 'Bracelet. Gold, enamelled and set with diamonds. Indian (Dholepore in Rajpootana), modern'; V&A, 120-1852. The observations in the catalogue list praise the sword M 2 for its 'arrangement of form, and harmony of colour' and point to its hilt and scabbard as specimens of Indian art which is 'adapting the ornament to the form or space to be ornamented'; the concluding sentence, however, reverses this relationship between ornament and form when it says that 'The lines of the ornament ... seem to suggest the general form, rather than to have been suggested by it' (CatM<sup>5</sup>, 41; CatM<sup>1</sup>, 26, having 'adapting the ornament so perfectly to the form or space to be ornamented'). Semper does not discuss this relationship but focuses on the way in which the distribution of colours results in 'variety and contrast ... combined with harmony and repose' due to 'a common key' of 'the whole tone of the system of colours' and to 'the system of subordination' (83.4–7). However, Semper's fragmentary drafts differ from the printed text in one major point. Whereas the latter – speaking of the colours used for the bracelets M II and I2, as well as for the sword – states that 'a common hue or tint' is 'passing from the green through the white to the red, which last ... is thus made the dominant colour of the whole system' (82.23–6), the drafts do not mention white or red as belonging to the 'general hue or tint', nor do they identify red as dominating the colour system generally but only refer to 'a neutral Jade Colour, which is the base and the key of the whole System' (365.20–I; similarly at 364.15–16). 82.28 greenish on the scabbard, where] The version in the sixth edition of the catalogue changes the sentence to 'greenish. On the scabbard' (CatM<sup>6</sup>, 18), thus erroneously claiming that the neutral jade colour of the bracelets is green (it is blue on the actual bracelets, combined with red, green and white) – which is, according to Semper, the dominant colour only of the scabbard and the lower part of the hilt.

83.20 jade vases of the Chinese and Indian] Matthew Digby Wyatt's monumental work on *The Industrial Arts of the Nineteenth Century* has two corresponding plates with a 'Group of crystal vases, and Indian jewellery' (Wyatt 1851/53, 1: pl. 40) and 'Chinese vases in jade stone' (Wyatt 1851/53, 2: pl. 118). 83.23 jade vases, M 102 and M 103] M 102 is not a vase but a box; see CatM<sup>5</sup>, 55: 'M 102. – Jade box and lid, inlaid with rubies. Manufactured at Lahore'; Inventory 1868 (1852), 4: 'Box. Green jade. Oblong, octagonal; with cover inlaid with gold and rubies. Indian (Lahore), modern'; V&A, 1627-1852. For M 103, see CatM<sup>5</sup>, 55: 'M 103. – Jade cup, inlaid with rubies and emeralds. Manufactured at Lahore'; Inventory 1868 (1852), 56: 'Vase. White jade, inlaid with gold and with rubies and emeralds. Indian (Lahore), modern'; V&A, 1625-1852. It is the vase illustrated to the left of the plate with Indian jewellery in Wyatt 1851/53, 1: pl. 40.

84.2–3 works of Vechte ~ worthy of being placed at the side of the works of Michael Angelo and Cellini] The French goldsmith and jeweller Antoine Vechte was exiled in London from 1848. Two of his works purchased from the Great Exhibition are listed in A Catalogue of the Museum of Ornamental Art: the shield with subjects from Italian poets, which he designed and executed in iron repoussé for the Parisian gunmaker Le Page Moutier (M 63 in CatM<sup>5</sup>, 49; Inventory 1868 [1852], 39; V&A, 1482-1851), and 'A large rosewater dish (suitable for a sideboard, centre ornament), representing a battle of Amazons', first being identified as a copy of 'The original ascribed to Cellini, but (? by Vechté)', and then of 'The original at Berlin, in iron, by Antoine Vechté' (M 91 in CatM<sup>4</sup>, 38; CatM<sup>5</sup>, 54). In Science, Industry, and Art, Semper refers to the electrotype copy of this dish exhibited by Elkington, Mason & Co. at the Great Exhibition (illustrated in Wyatt 1851/53, 2: pl. 138) – the original of which was bought for the Royal Kunstkammer in Berlin in the early 1840s – as Vechte's 'wellknown dish in the Berlin Museum ..., which was purchased as an old-Italian work after drawings by Raphael' (Semper 1852, 48-9). He cites Elkington as an example of the growing quality of English manufacture, also praising the Cellini-like quality of a shield and vase by Vechte, namely the 'date-shaped vase with the battles of the Titans and the shield with the apotheosis of Shakespeare, Milton and Newton', 'of which Benvenuto had no need to be ashamed' (Semper 1852, 48). Vechte made them in silver repoussé for the jewellers and silversmiths Hunt & Roskell, who had shown them at the Great Exhibition (ODIC 1851, 2:686-8 [no. 97], here 686; Rep. Jur. 1852, 513, 736). Digby Wyatt, who illustrated them (Wyatt 1851/53, 1: pl. 27; 2: pl. 117), referred to 'the marvellous grace and refinement of the modelling and chasing' of Vechte's 'exquisite vase and unfinished shield' as proof that there

was 'ample room for improvement in English silversmith's work of the highest class' in his lecture of 1852 on the results of the Great Exhibition (Wyatt 1853, 241). Digby Wyatt's and Semper's praise stand in contrast to the position of A. W. N. Pugin, who - as a proponent of the Gothic style - was opposed to the plans of the purchasing committee to acquire one of Vechte's shields. This was probably the shield with the apotheosis of Shakespeare, Milton and Newton, of which only the Milton section was complete. Hunt & Roskell loaned the shield and vase to the Museum in 1852 (DPA<sup>T</sup>, 287, 386), and the Museum appears eventually to have acquired the apotheosis shield (Cole 1884, 1:294). Vechte's Italian Poets Shield was shown (together with the Queen's 'Cellini Shield') with an initial specimen of a commercializable electrotype copy at Gore House during the exhibition of students' works there in May 1854 (DSA<sup>2</sup>, 166, 202; Spectator 1854). Semper suggested Vechte as a teacher in the Department in a draft of his 'Plan of Instruction for the Metal and Furniture Classes' (372, 84.3-4 vases and other works of Sèvres manufacture Explanatory Notes 88.7; 374.26). are beautiful specimens of modern enameling] Semper had a special affinity to the royal porcelain manufactory at Sèvres through his friend Jules Dieterle, its principal designer, whom he had known since their collaboration on the Dresden Court Theatre. The Department took advantage of this contact in early January 1853, when Semper was sent to Paris to obtain technical information on porcelain painting from the directors of the Sèvres manufactory. On 9 January 1853, he reported to Henry Cole that 'Since I am at Sèvres, I have taken practical instructions in Enameling'. Three of the Sèvres enamels listed in the museum catalogue are illustrated in Matthew Digby Wyatt's work on the industrial arts with the plate of a 'Group of enamels from the royal manufactory at Sèvres' (Wyatt 1851/53, 1: pl. 51): In the foreground and background 'M 67. - Tazza and ewer, in enamel, on blue ground' (CatM<sup>5</sup>, 50), listed in Inventory 1868 (1852), 21, as 'Ewer and Stand or Plateau. Enamel on copper. In imitation of Limoges painted enamel. French (Sèvres), modern' (V&A, 549-1852, ewer dated 1850; 550-1852, stand); in the middle of Wyatt's illustration 'M 68. – Large ewer, in enamel, on blue ground' (CatM<sup>5</sup>, 50), listed in Inventory 1868 (1852), 21 (60-1852) as 'Ewer. Enamel on copper, mounted in ormolu. Imitation of Limoges painted enamel; in front an oval medallion with a group of Venus and two cupids. French (Sèvres). 1849'. The Sèvres vase with lid to the left of Wyatt's plate is the vase of which Semper had sketched the silhouette as an illustration of 'Emaille' in his 'Notes on the Great Exhibition' (33.9). Semper discusses Sèvres porcelain and enamels at some length in his Department lecture on the Influence of the Materials and Their Treatments upon the Development of Ceramic Types and Style' (156-8). 84.5 sword, M 55] CatM<sup>5</sup>, 48: 'M 55. - Sword. Manufactured by Froment Meurice, 52, Faubourg St. Honoré, Paris ... a copy of the sword presented to General Changarnier by the City of Paris'; maybe another copy in Inventory 1868 (1854), 29, as it was bought for a different price in 1854: 'Sword. Steel scabbard, oxydised silver hilt, with figure of the Archangel Michael; a copy of a sword presented to General Changarnier by the municipality of Paris. French. Made by Froment Meurice. Dated June 13, 1849'; V&A, 164-1854 84.7 hunting knife in the style of the 15th century, manufactured by Marrel Freres]  ${
m The}$ version of CatM<sup>6</sup>, 19, also has 'in the style of the 15th century', while that in CatM<sup>4</sup>, 23 (also DPA<sup>T</sup>, 249), has 'in the style of the thirteenth century', in accordance with the catalogue lists in CatM<sup>4</sup>, 31; DPA<sup>1</sup>, 256; CatM<sup>5</sup>, 47: 'M 50. - Hunting knife, representing the legend of St. Hubert. Style of the 13th century. Manufactured by Marrel Frères, 27, Rue Choiseul, Paris' (in the list of CatM<sup>6</sup>, 26, the dating is omitted altogether); Inventory 1868 (1852), 40: 'Sword. Steel. A hunting sword ("couteau de chasse") with hilt and sheath in chiselled silver, representing subjects from the legend of St. Hubert, and various attributes of the chase. French, modern. (Marrel, Frères, Paris.)'; V&A, 159-1851. 84.9 amourer's] this misprint of ar*mourer's* also in CatM<sup>4</sup>, DPA<sup>1</sup> and CatM<sup>6</sup> 84.12 for the copying] The earlier and later print variants all correctly have 'or the copying' (CatM<sup>4</sup>, DPA<sup>1</sup>, CatM<sup>6</sup>). 84.14-15 **newly** acquired additions to the Museum, included in the numbers M 123 to M 134] In contrast to this scope of new acquisitions by the Museum of Ornamental Art from early 1853, the fifth edition of the catalogue, in which Semper's supplementary text was first published, lists three additional numbers following M 121 – the last number for metalwork objects in the fourth edition of February 1853 (CatM<sup>4</sup>, 41; CatM<sup>5</sup>, 57–8): M 122 ('A series of medals in commemoration of the late Duke of Wellington'), M 135 ('Gold necklace') and M 136 ('An antique bronze jug'). The sixth edition of March 1854, which replaces some of the acquisitions of 1853, lists eight additional objects, M 137-M 144 (CatM<sup>6</sup>, 37-8), while the list of the objects purchased for the museum during 1853 in the First Report of the Department of Science and Art of 1854 has forty-one additions, M 122-M 162 (DSA<sup>1</sup>, 239-41). 84.17-19 cast-iron knocker, M 125 ~ from the end of the 15th century] This door knocker, together with the Gothic key (85.6), was purchased from A. W. N. Pugin's collection of ancient objects sold at auction by Sotheby's on 12 February 1853. Pugin lent the knocker to an exhibition which took place at the Society of Arts in 1850; it is described in the catalogue of this exhibition as having 'probably belonged to some religious house dedicated to St. John the Baptist, as it presents the subject of his decollation; a curious example of the transition from Gothic to Renaissance' (Wainwright 1994, 358 and fig. 16). In one of the drafts, Semper similarly states in a deleted passage that 'It shows the first traces of Renaissance elements, introduced into the Gothic Style' (367–8, note 367.2), and later he calls it a 'very inter[e]sting specimen of this period of transition' (367.22). Semper's mistake of identifying this door knocker as being cast was corrected in the sixth edition of the catalogue, where the sentence stating that 'It is one of the earliest pieces of iron casting I know' was deleted and the knocker explicitly listed as 'Wrought iron knocker' ( $CatM^6$ , 36). The knocker with plate and hammer is now said to be a composition assembled in the early nineteenth century from parts dating from the sixteenth century. See CatM<sup>5</sup>, 57 (M 125): 'Iron Knocker. Purchased at the sale of Mr. Pugin's property'; CatM<sup>6</sup>, 36 (M 125): 'Wrought iron Knocker, (Date, early part of 16th Century.)'; DSA<sup>1</sup>, 239 (M 125): 'Ancient iron knocker wrought and chased'; Inventory 1868 (1853), 42: 'Knocker. Wrought iron. In form of a canopy; male and female figures in full relief on the columns; straight projecting hammer, on which is a kneeling figure under a canopy. Ger-84.34-8 Peter Visscher's monument of St. Sebalman. About 1520'; V&A, 1221-1853. dus ~ contrasts ~ with the design, made by another sculptor of the time ~ published by Heidcloff] The bronze founder Peter Vischer cast the large shrine of St Sebaldus in St Sebaldus Church, Nuremberg, in 1507–19. The alternative design 'by another sculptor', dated 1488, had been attributed to Veit Stoss by Carl Heideloff in his Ornamentik des Mit*telalters*, where he had published it in three fascicles (Heideloff 1843/52, fasc. 6: pl. 3; fasc. 9: pls. 5–6; fasc. 10: pls. 2–4). The misprint of the author's name – correctly stated in the drafts (367.15, 369.3) – is corrected in CatM<sup>6</sup>. Semper had requested Heideloff's work from the British Museum Library as early as 1 July 1852, when he was working on his catalogue of 'Practical Art in Metals and hard Materials' (222.16–21). 84.38-9 it would have been an error if Viet Stop's design had been adapted, suited as it is for wood carving, to be executed in cast-metal] Both of Semper's drafts have the correct name of the woodcarver Veit Stoss. The misprint (also in CatM<sup>6</sup>) apparently was the result of a misreading of the manuscript. In the extant drafts, Semper has written the ss in *Stoss* as a German  $\beta$  which looks similar to p (367.17, 369.4). The letter sequence *ei* in *Veit* is difficult to read in Semper's

roofing to Veit Stoss is no longer upheld, which somewhat weakens Semper's argument that it follows the logic of wood construction instead of metal casting. Semper similarly argued in his catalogue of 'Practical Art in Metals and hard Materials' that Vischer's shrine 'was intended to be executed in a so called pure Gothical Style after the wooden Models of Veit Stoss who was a Wood-carver ..., the Actual monument of Peter Visher, if less pure in its Architectural parts, is nevertheless better adapted to Metal Casting than it would have been the Case, if the bronze Sculptor had followed the prescriptions of his Wood Carving Competitor' (Semper 2007a, 240-1). Digby Wyatt had discussed Vischer's shrine with reference to Heideloff in his Metal-Work and Its Artistic Design of 1852, describing it as 'in that style which is generally known as the German Renaissance' (Wyatt 1852, 63). In the First Report of the Department of Practical Art, where the first part of Semper's 'Observations' was reprinted, a brief text on the 'Shrine of St. Sebaldus, at Nuremberg' by the architect Sydney Smirke (dated 6 December 1852) suggests obtaining for 'the School of Practical Art a perfect cast of this fine work' (DPA<sup>I</sup>, 375; see the plaster cast of *c*. 1869 in V&A, REPRO.1869-14). Semper also refers to Vischer's Sebaldus shrine in his lecture 'Classification of Vessels' (145.25-8) and discusses it in the section on metals technology in Style in the Technical and Tectonic Arts as an example of the appropriation of the Italian Renaissance style in Germany and of 'a genuine cast-metal style ... in comparison to the purer toreutic forms of the design prepared by Veit Stoss' (Semper 1860/63, 2:539, 586-7 n. 1).

85.6 small Gothic key] CatM<sup>5</sup>, 57 (M 126): 'Gothic Key. Purchased at the sale of Mr. Pugin's property'; CatM<sup>6</sup>, 36: 'Gothic key'; DSA<sup>1</sup>, 239: 'Gothic key in chiselled iron'; Inventory 1868 (1853), 42: 'Key. Steel. Triangular head pierced with Gothic ornament, and transverse perforated tube on the stem. 15th centy'; V&A, 900-1853 85.9-12 Indian enamel vase ~ only example in the Museum  $\sim$  All the other Indian enamels are of the nature of Champleve's enamels ~ handles look rather Chinese or Japanese ~ a fine specimen of Oriental art] This vase, which is tentatively identified here for the first time, seems to be missing from later inventories of the South Kensington Museum, as well as from V&A; the passage is omitted in the print variant of the sixth edition of the catalogue. The vase is listed as 'M 123. – An enameled Indian vase. Purchased of Mr. Heigham, at 7s. 6d. 1853' in the edition of the museum catalogue, in which Semper's text was first published (CatM<sup>5</sup>, 57), while the next edition of the museum catalogue corrects the attribution from Indian to Chinese, apparently due to Semper's critique (CatM<sup>6</sup>, 36, and DSA<sup>1</sup>, 239, both have 'An enamelled Chinese vase'). Semper challenges the first attribution on formal grounds, saying of its handles that they 'look rather Chinese or Japanese', and adds technical reasons for distinguishing the enamels of the allegedly Indian vase from champlevé enamels (not 'Champleve's enamels', as misprinted in the catalogue; correctly written in the drafts: 367.29, 369.16) - the technique in which he says that all the other Indian enamel objects in the Museum are executed. His expert opinion on the vase under scrutiny as not being done in champlevé and thus not being Indian left its mark in a review of the Museum of Ornamental Art in The Illustrated London News of January 1854, where what is probably the same vase is illustrated - a small slender vase with six vertical bow handles at its short neck - and is described in Semper's words, together with the misprint, as being 'of Oriental (perhaps Japanese or Chinese) manufacture; and the only example in the Museum of this kind of enamelling executed in that part of the world; all the others being of the nature of Champleve's enamels' (ILN 1854, 60).

#### PRINT VARIANTS

82.9 Metal Work.] ~ ~, Enamels, &c.  $CatM^6$  82.10–11 Semper. —] before subheading On M 1, M 20, M 2.  $CatM^4$  DPA<sup>1</sup> 82.16 system] ~ of arrangement  $CatM^6$  82.27–8 pale, but always greenish on the scabbard, where] pale, but always greenish. On the scabbard  $CatM^6$ 

83.15 enter often] often enter  $CatM^6$  83.20 Chinese and Indian.] ~ ~ Indians.  $CatM^6$ 83.22 in general.] also.  $CatM^6$  83.23 jade vases, M 102 and M 103,] jade vases M 102 and M 103  $AtM^4$  DPA<sup>1</sup>

84.2-4 The works of Vechte ~ enameling.] om.  $CatM^6$  84.5 sword, M 55,] sword  $\Lambda$  M 55  $\land CatM^4 DPA^i$  84.7 15th century] thirteenth ~  $CatM^4 DPA^i$  84.12 required] called for  $CatM^6$  for the copying] or ~  $\sim CatM^4 DPA^i$  84.13 candelabra.] candelabras.  $CatM^4 DPA^i$  84.14-85.15 The newly acquired additions ~ models in themselves.] om.  $CatM^4 DPA^i$  84.17 cast-iron] iron  $CatM^6$  84.38 Heidcloff] Heideloff  $CatM^6$ 

85.1 classical (antique) style] revived classical style  $CatM^6$ 85.3 cast-iron] iron  $CatM^6$ 85.4-5 It is one of the earliest ~ specialty.] om.  $CatM^6$ 85.9-15 3. Indian enamelvase ~ models in themselves.] om.  $CatM^6$ 

## MANUSCRIPT VARIANTS MS 111<sup>1</sup>

*fol. 5r i a* Observations on the Examples of Metal-Work in the Museum of the Department etc. etc. by GSemper.

To M. 1, M. 20, and M. 2.

The comparison of the two numbers M 1 and M 20 with the number M. 2 is very instructive for the Study of the use of colours in ornamental art.

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We see at n° 1 hov the blue and green enamel-grounds stand crudely one against the other without being bound together and harmonized by a common tint. Even the introduction of Ruby or Purple colours into the system would hardly be sufficient for rendering it harmonious.

In M' 20 we observe the same deficiency of harmony but less evidently, because the green and blue tints are broken and bound together by black.

In opposition to these and some similar Works of Indian art stand the beautiful Thulwar or sword  $n^{\circ}$  2. Here are the different brillant colours connected together by a general hue  $\frac{1}{1}$  or tint, which is spread over the whole. Every colour is one shade of the scale to which all the other belong, and the Ground is formed by a Neutral Jade Colour, which forms the base of the whole system.

This base is very pale greenish on the Scabbard; here it works together with the green leaves and gold rims, in opposition with the ruby or rather Sang de beuf flowers, which last are here governed by this combination.

The same "Alliance" between the Green of the leaves and the base or the Jade Ground 20 against the Red is more expressively pronounced on the lower part of the hilt, where the Jade ground assumes a darker greenish tint.

fol. 5v

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364.6 hov] 'bow' enamel-grounds] s added 364.7 being bound] after del. reliance tog 364.10 ln] after del. The same deficiency is visible but less 364.13 n° 2.] altered from ~ ~, before del. with 364.14 is one] is repl. del. forms a step upon the to] above del. by 364.15 belong,] altered from ~. before del. The Red is mixd with 364.18 beuf] 'bœuf' 364.19 here] after del. in 364.22 the] above del. an assumes] above del. takes

#### MS 111<sup>2</sup>

Few Observations on the Examples of Metal-Work, exhibited in the Museum for Practical 2 a fol. 1r Art.

by G Semper.

To M 1. M. 20. M. 2.

The comparison between the numbers M 1 and M 20 and the number M 2 is very interesting for the Study of ornamental color.

10 We see at n° I how the blue and green Enamel Grounds stand crudely one against another without beeing bound together and harmonized by a common parenty. The introduction of Ruby or Purple into the System as it is, will hardly be sufficient for rendering it more harmonious.

In M. 20 we observe some deficiency of harmony, but here less evidently because the green and blue tints are broken and bound together by black.

In Opposition to these and some similar Works of Indian art stand the beautiful Thalwar or Sword n° 2 with some other || Objects of the same Style, as for instance the bracelets M II and M 12.; Here are the different brillant colours connected together by a general hue or tint, which is spread over the whole. Every colour is one shade of the Scale to which all the other belong, and the Ground is formed by a neutral Jade Colour, which is the base and the

other belong, and the Ground is formed by a neutral Jade Colour, which is the base and the key of the whole System.
 This base is very pale, but greenish on the scabbard, here it works with the green leaves and

This base is very pale, but greenish on the scabbard, here it works with the green leaves and the Gold rims against the ruby or rather against the Sang De boeuf flowers, which last are here governed by this combination.

- This alliance between the green leaves and the Jade-coloured base against the Red is more powerful on the lower part of the hilt, where the Ground assumes a darker greenish tint. On the middle part of the hilt, we see the Base or Ground || entering into an alliance with the Red and so putting the Green into the Minority and Opposition. The two principles of ornamental colouring are here most happily combined, viz variety and opposition, harmony and repose, and this result has been obtained by observing the common relations
  - between the colours and by the system of hierarchy, which has been adopted for them.

365.4 Few] interl. 365.8 and the] and repl. del. with 365.9 color] after del. Col after del. Colorit 365.11 parenty] after del. tint 365.14 some] inserted before del. the Same 365.27 Ground] before del. entirely 365.28 The] inserted two] t over T 365.29 most happily] repl. del. happily 365.30 observing] repl. del. holding 3 a fol. 2r

4 a fol. 3r

#### MS 1113

fol. 7r	of colours has been tempered, as well as by the hierarchical principle, which has been car- ried throw the whole. –	
	The first quality, the harmony obtained by a common base or tune of the colours which	
	enter into the system, is one of the great mysteries of beauty, which prevail unerring throughout the whole nature, and such works of men, which are simple expressions of nat- ural artistical instinct.	5
	They are generally very harmonious in colours, which result has been obtained by the nat- ural hue of the materials which were employed for their confection, which hue forms the	
	base and the ligament between the lively colours, which enter sometimes into their com- positions.	10
	So for instance the Straw and rush carpets of the Oriental, American, and African people, so the Embroideries upon Leather and Wood-barks of the Canadians, so the Raw-Silk and	
	Cotton Tissues of the Chinese and the wool Shawls of the Persians. So also the Terra Cotta works of the Ancients, and the Jade vases of the Indian and Chinese.	
	Specimens of these and other objects of primitive ornamental art are extremely necessary for the Museum, and their utility will be increased by the juxtaposition of such things,	15
fol. 7v	which give occa- ¦ sions for comparison and explication. So for Instance will it be perhaps good to place the Jade Vases, n° 102 and n° 103, near the Enamels, which I mentionned be-	

The accomplishment of an object of ornamental art, which arises from the due subordination of the ornamental parts under one main impression, is not often to be found on objects of early periods of art, and seldom prevails in oriental art, which generally suffers from the Absence of this principle. We see flowers and Ornaments spread over the whole forms like net-works. So most of the Vases, the pieces of armour and several other Objets of Oriental Art. The above mentionned Sword forms, herein a beautiful exception, though the hierarchical principle in it seems to be neutralized by its double application.

fore, the last being quasi imitations of the inlaid Stones upon the neutral ground of the

Herein the Egyptian, Greec and Renaissance works are far more instructiv

366.1 of colours] inserted 366.2 throw] 'through' 366.3 harmony] before del. of colours 366.4 **beauty**] *above del.* art prevail] above del. we find unerring] 'unerringly'; inserted 366.9 their] ir added 366.9–10 **compositions**] *after del*. systems of systems] 366.11 Oriental, American,] repl. del. Indians 366.12 Raw-Silk] after final s added del. Yellow 366.14 and the Jade vases] after del. and of some 366.15 Specimens of] inserted these] t over T 366.17 perhaps] after del. very 366.18 which] before del. are 366.19 quasi imitations of ] after del. a sort of imitation of 366.21 accomplishment 366.27 it seems] after del. it appears not so effectfully as it is only *after del*. second

#### MS 1131

*fol. 3r* 5.*a* The objects, which have been newly acquired for the Museum (from n° 123 – n° 134) are alltogether more or less interesting for history of style, and some of them are very fine specimens of ornamental art. Among the last are to be named

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natural materials. -

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a) the Iron knocker, coming probably from Nurnberg or Augsburg and dating from the End of the 15<sup>th</sup> or the Beginning of the 16<sup>th</sup> Century. –

The Gothic style in Germany had lost all its simplicity and purity with the beginnig of the 15<sup>th</sup> century and before and this early decay of the Gothic style was owed partly to the introduction of new processes in executing the objects of architecture and practical art.

duction of new processes in executing the objects of architecture and practical art. One of the most influential innovations of this kind was that of casting objects, in metal; which before | were used to be cut or built in stone or other hard materials, or to be executed in chased, hammered, and forged Metal. - .....

The objects had obtained under the influence of the old processes a certain conventional style, which now became contradictional to the new manner of execution, and its conserva-

tion therefore would have been a fault from the part of the artist instead of being a merit. Peter Vishers Monument of St. Sebald forms one great and very interesting evidence of this fact. It is very impure in style as a Gothical monument, and contrasts in this respect very much with the plan for the same monument, which had been made by Veit Stoss, an other great Saultory who's working drawings have been published by Hardeloff in its greatent

15 great Sculptor; who's working drawings have been published by Heydeloff in its ornanental art.

Now it would have been a great fault if Veit Stoss's project had been executed, instead of that impur but for Metal-casting better adapted plan of Peter Fisher. –

The classical (antique forms | and practical art in General, which first became at this time *6 a fol. 4r* to be introduced in architecture and practical arts, was therefore a happy solution of contradictions, which longtime before was felt

The Cast Iron knocker is a small but very intersting specimen of this period of transition. It is one of the earliest known Iron-Casts, and has therefore a special Interest for the Study of processes. –

25 The small Gothic key is in some regard of companion to the first. as it shows Iron forging in combination with the purer forms of Gothic style. –

3) The Indian Enamel Vase if it is Indian, is the only example at the Musium which shows, that this kind of processes. in Enameling is known by the Indian Artisans. All the others are Champlévé Enamels or some-thing near to it. The handles look rather Chinese.

30 At all Events it forms a fine Specimen of Oriental Art and gives an evidence of the limits in employing bright colours without disharmony.

The Chinese Censor is a beautiful Specimen of old China Casting | The other Objects have more interest for the history of art. than for themselves.

366.29 The objects] after two del. variant beginnings:

Some<sup>2</sup> new<sup>1</sup> acquisitions for the Museum of practical Art are fine specimens<sup>3</sup> of Some of the new acquisitions for the Museum are fine Specimens of practical art, and all of them have Interest for

I Some new ~ Interest for] accompanied by sketch of what is possibly a plan of houses and streets 2 Some] repl. del. Among the the] undel. 3 fine specimens] after del. some some] before del. very interesting, as well for

366.29 n° 123] n° interl. n° 134] n° interl. 366.30 style] after del. ornamental art and ornamental art] repl. del. art very] interl.

367.1 probably from] inserted before del. without doubt from **Nurnberg or Augsburg**] repl. del. Germany, 367.2 **15<sup>th</sup>**] before del. century. **Century.** –] before del. It shows the fol. 30

first traces of Renaissance elements, introduced into the Gothic Style. 367.3 simplicity 367.4 **before**] *after del*. even 367.4-5 introduction] after del. progresses after del. purit and before del. of new processes, by which the objects of prac[t] processes, altered from ~^ *before del.* in art 367.6 that] after del. the more general employment of Cast meta more] *after del*. intr **objects**,] *before del*. which before 367.7 were] *after del*. had taken [t] 367.9 The] after del. used to be] *above del*. usually or other hard materials] *interl*. The influence of the old processes in executing them had given to these objects a certain conventional style, and this style, allthough and] *after del*. which was not more necessary 367.10 and] after del. and by this conflict, purity of forms of the old *repl. del.* of these 367.12 Vishers] V over F great and] interl. could not well be this] t over I after 367.14 plan] above del. del. what 367.13 and] after del. and if the Models in wood working drawings working drawings] *before del.* of another arti an other] an other 367.15 who's] after del. which its] 'his' 367.18 Metal-casting] Metal- | casting after del. casti Fisher] 'Vischer' 367.19 The] after del. This and before del. introduction of first] interl. forms] *before del. on fol. 4r* in the forms of Architecture became] inserted before inserted and del. reknown and repl. del. took place 367.20 to be introduced ~ 367.21 was] as over ere **a**] after del. long wished for and practical arts, *inserted* 367.23 known] inserted after del. Cast-Iron specimens 367.22 Cast Iron] after del. Iron Cast-Iron] underl. Iron-Casts,] before del. as metaland before del. which I kn[o] Casting which I know, as] after del. as Iron-Casting. 367.25 in some regard] repl. del. so to speak of companion] after del. a sort (see 369.12: 'the companion') 367.26 style.] altered from ~, before del. which 367.27 if it is Indian Indian after del. true at the Musium] 'at the Museum'; interl. 367.27-8 which shows, that] inserted before del. of Indian Enamels of of Indian] after del. of that process of Enameling Enamels] before del. of the third 367.29 **some-thing**] some- *altered from* ~ \(\lambda\) *and* thing *after del.* kind 367.30 At] after del. This in] after del. which 367.32 Censor] 'censer' 367.33 the] after del. s[t]

#### MS 113<sup>2</sup>

*fol. 1r* The Objects, which have been newly acquired for the Museum (from n° 123 – to n° 134) are, allmost all, very interesting for history of style and some of them are fine specimens of ornament. – .

Among the last takes the first place the Iron knocker, which comes very probably from Nürenberg or Augsburg, or some other town of Middle-Germany. It dates from the End of the 15<sup>th</sup> Century. –

The Gothic Style in Germany had lost all its simplicity and purity with the beginning of the  $15^{th}$  Century and even before. and the early decay of the Goth. Style was owed partly to the Introduction of new Processes in executing the Objects of Architecture and Practical Art. One of the most influential innovations of this kind was that of Casting metal and of forming objects of architecture and ornamental art by casting them, which were used before to be cut or built in hard materials or to be executed in chased, hammered and forged metal. |

The architectural and ornamental forms had obtained under the influence of the old processes a certain conventional style, which now became contradictory to the new manner of execution. –

Under these circumstances it would have been a fault, instead of being a merit, if the strong forms of the old style were conserved by the artists and architects of the 15<sup>th</sup> century. Peter Visher's Monument of St. Sebaldus forms a great and very interesting Evidence of this fact.

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fol. IV

It is indeed very impure in style as a Gothical Monument and contrasts in this respect very much with the plan, which was made by another Sculptor of the time, Veit Stoss. for the same Monument, who's working Drawings have been published by Heideloff.

# Now I maintain that it would have been a great fault, if Veit Stoss's Wood-carved Models had been executed in Cast-Metal instead of that impur but for Metal-casting admirably adapted plan of Peter Visher.

The Classical, (antique) style, which at this time became to be introduced, was therefore a happy solution of these contradictions, which long before was waited for.

The Cast-Iron Knocker is a small, but very interesting specimen of this Period of Transition. It is one of the earliest *Iron-Casts* I know, and has a special Interest for the history of this speciality.

2° The Small Gothic key is in some respect the companion to the first, as it shows Ironforging in combination with the purer forms of Gothic style.

3°) Indian Enamel Vase.

15 If it is Indian, then it is the only Example at the Museum of this kind of Enameling executed by Indians. All the other Indian Enamels being Champlevé enamels or something of the kind.

The Handles look rather Chinese or Japonese.

At all Events it forms a fine Specimen of Oriental Art and gives an evidence of the limits in employing bright colours without disharmony.

The other objects have more Interest for history of Style than they are beautiful models for themselves. Some of the Emblems etc. appear to me not interesting enow, to behold their places in the Museum.

GSemper March, 1853.

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368.2 allmost all, very] repl. del. alltogether more or lessfine] after del. very368.17were] after del. wouldand architects] inserted368.17

369.2 Veit Stoss.] inserted 369.7 style] above del. forms therefore] fore added 369.12–13 Iron-forging] Iron- | forging 369.15–16 executed] repl. del. used 369.16 being] repl. del. are 369.21 more] repl. del. only 369.22 appear] after del. are not very behold] derived from German 'behalten': 'keep'

# A Plan of Instruction for the Metal and Furniture Classes

#### TEXTUAL RECORD

MS 114	gta, 20-Ms-114, fols. 11–10v (9r, 10r and all versos blank), in Semper's hand,
	dated 1 February 1853
$DPA^{I}$	'A Plan of Instruction for the Metal and Furniture Classes', in <i>First Report</i>
	of the Department of Practical Art, London: Eyre & Spottiswoode for Her
	Majesty's Stationery Office, 1853, 372–4 (NAL, 602.AD.0777), copy-text
Semper 1884	'Unterrichtsplan für die Abteilung für die Metall- und Möbeltechnik',
	100–4, German trans. of DPA <sup>1</sup> (85.20–87.33, 87.37–8, 88.8–21)
Wingler 1966	'Unterrichtsplan für die Abteilung für Metall- und Möbeltechnik am De-
	partment of Practical Art', 83–6, ed. of Semper 1884
Semper 2014	vol. 2, 542–4, Karge's reprint ed. of DPA <sup>1</sup>

**BIBLIOGRAPHY** Pevsner 1940, 251–3, 255–6, 264; Reising 1976, 60; Herrmann 1978, 65, 73–4, 129; Herrmann 1981, 108; Herrmann 1984, 59, 66–7; Mallgrave 1996, 212; Squicciarino 2009, 263–6

#### **EXPLANATORY NOTES**

Semper's explanation of his plans for teaching in the Department of Practical Art outlines his own input into the reform of education in the decorative and applied arts that Henry Cole was seeking to achieve through the founding of the successor organization of the Government Schools of Design. The latter were primarily concerned with teaching the basics of drawing and the mastery of ornamental forms. Semper's proposals correspond to the ideas for the new Department that Cole set out also in the First Report of the Department of Practical Art - namely, systematically combining into special classes instruction on the theories and principles of ornamental design and its stylistic history on the one hand, and the technical side of the various fields of manufacture on the other (DPA<sup>I</sup>, 18–19). Yet Semper went beyond this for his special class on metalworking, furniture and jewellery by proposing new solutions to the never fully implemented objective of the Schools of Design, which was 'the direct practical application of the arts to manufactures' (DPA<sup>1</sup>, 22). Semper's proposals were only novel and revolutionary in England, as he was adopting the teaching system that he had already used in the Dresden Academy of Fine Arts, consisting of courses organized as studio workshops in which students at all levels worked together and were involved in the professor's private commissions, thus continually being in direct contact with practical work in manufacturing and architecture. Although Cole approved of this in principle, he called for 'much caution' and emphasized the experimental character of this kind of practical teaching (DPA<sup>1</sup>, 22, 28) - a point explicitly highlighted as a 'new experiment' in Semper's appointment conditions (227.2). Cole's reservations may also be reflected in certain differences between the published text and Semper's extant draft - differences that arose due to revisions, possibly by Cole, not only of language but also content. Semper had also outlined his teaching principles in Science, Industry, and Art in terms of courses

conceived as practical studio workshops and against the backdrop of collections, lectures and competitions (Semper 1852, 62-72) – in a manner similar to his teaching plan for the Department of Practical Art and Cole's intentions. Cole may therefore have been the person at whose 'private request' *Science, Industry, and Art* was written (see 262).

85.18 F.] designates the text as one of several miscellaneous texts in 'Appendix VII' of the First Report of the Department of Practical Art, to which Semper's 'Report on the Private Collection of Arms at Windsor Castle' (76-80) also belongs 85.26-7 It differs in the following essential points from that of schools of design and academies] Semper here defines three 'essential points' - joint studio workshops for students of all levels, subjects of instruction according to the interests of the students, participation in work for which the professor has been commissioned - that correspond to the basic elements of his method of teaching architecture at the Dresden Academy of Fine Arts. He refers to this in the draft at the end of the third point, where he addresses 'practical knowledge and experience' (86.9); the draft here mentions an 'Apendix on the School of architects at Dresden' (373.15). The appendix must have largely corresponded to Semper's report on his Dresden teaching programme, of which Hans Semper published a German version (Semper 1880, 10-11). This programme specifies the three 'essential points' of Semper's London 'Plan of Instruction' and says of the second point that 'The exercises took place in no particular order on the principle that each work was to be continued uninterruptedly until it was completed, although each person was free to take on another work in-between for a change'. Semper had already referred to his Dresden system of instruction in his plans for a private school of architecture. In one of them, he says of the 'System of instruction' that it 'will embrace every branch of Architecture, comprising the science of Engineering, and the principles of Decoration' (8.10-11). In the most elaborate school programme given in a German draft, Semper differentiates between the preparatory 'Bauschule' (school of architecture) and the 'Atelier' (studio) 'where the work is carried out in front of my eyes and right next to my working cabinet' (9.20-2). Cole was aware of the practical side of this teaching method, as Semper wrote to him about his school plans and probably sent the programme to him in March 1851 (see 236). When he wrote to Cole on 8 April 1852 – the letter is dated 'Thursday 9 April 1852' but written on Thursday, 8 April 1852 – during his visit to Herbert Minton's pottery factory in Stoke-on-Trent, he also sketched out his Dresden method as a reference point for reversing the relationship between the teaching of details and the overall context of a practical work, from which 'higher instruction in the Schools of Design ought to go out': 'I used to go this way with my pupils, which, after some short preparing exercises in the first use of drawing utensils, in projections etc, soonly tried to set upon paper some part of a building in conformity to modern practice in domestic disposition and construction, and then afterwards to put together a whole cottage etc, in working out, as well as possible, the whole inner & outer parts of the building. It was only when they wanted leaves, flowers, figures etc for some decorative parts of their compositions, that they were let to draw such objects, and to make studies after casts or after nature, which they could use for the purpose they actually intended' (Semper to Cole, 8 April 1852). Semper again refers to his Dresden 'system of instruction' in his 'Second Report on the Class for Practical Construction, Architecture, and Plastic Decoration' (92.3-5).

86.25–30 Composition of objects of ornamental art ~ art of composition] Semper's draft instead speaks of 'Instruction how to invent objects of ornamental art' and of the 'talent and spirit for composition' (373.26, 373.30). 86.33–6 Those copies ~ work out to

**completion**.] Semper's draft formulates a sharper critique of the traditional adherence to the task of copying after models and nature (373.31-2): 'Many good talent has been spoild by having been too long time engaged with copiing and studiing from models and even from nature.'

87.28–30 To that medal might be attached, by the Board of Trade ~ advantages ~ to be ~ determined upon] a cautious reformulation of the costly proposal in the draft, where Semper suggests a travel scholarship of three to four years, following the example of academies of art (374.15-16)

88.I-6 Professors of the Department ~ combined for instructional purposes ~ Simpson ~ Townsend, Brucciani, and Semper] In the First Report of the Department of Practical Art, Richard Redgrave similarly suggested ways of combining the special classes into 'a systematic course of instruction' intended to 'bring the various professors of those classes into more united action'. Semper is included there along with John Simpson, Domenico Brucciani and Henry James Townsend, with somewhat different responsibilities in the field of the 'Constructive and Plastic Art', where 'The instruction ... would belong to Professor Semper, conjoined with Mr. Townsend, for artistic anatomy, and the study of the figure by drawing, modelling, painting, &c.; with Mr. Richardson for geometrical &c. drawing, &c.; with Mr. Simpson for enamelling, and, assisted by Mr. Brucciani, for moulding, casting, and cast making.' While Semper does not name the architect Charles James Richardson, Redgrave in turn names Semper in the following group responsible for the 'Decoration of Surfaces', where 'The instruction ... would be entrusted to Mr. O. Hudson, conjoined with Mr. Simpson for enamels and the surface treatment of china, and with Professor Semper for architectural arrangements of surfaces' (Redgrave 1853, 369–70). Redgrave thus indirectly anticipated Richardson's replacement by Semper (see 328). 88.7 Chasing and embossing. By] The blank left for a name is filled with that of Antoine Vechte in Semper's draft (374.26). Henry Cole had already 'agreed to allow Vechte to teach Repousee' on 19 October 1852 (Cole Diary). However, further evidence of efforts made to employ Vechte in the Department is as yet lacking. Semper refers to Vechte in his 'Observations on Some of the Specimens of Metal Work' (84.2) and discusses some of his works in Science, Industry, and Art (Semper 1852, 48-9). 88.13-14 on the relations of the different branches of practical art to each other, and to architecture] This became the title of Semper's first public lecture at the Department of Practical Art given on 20 May 1853, of which he says in his 'First Report' that it had as its objective the explanation of his system, which he was developing in the following lectures (91.1-3; see section 'Lectures'). 88.20-I Department of Practical Geology for the application of geological museology to teaching of the arts and crafts, see 'Report on the Private Collection of Arms at Windsor Castle', 79.13-18

### MANUSCRIPT VARIANTS MS 114

Scheme of Instruction for the Metal, – Furniture, – (and Pottery). division conducted by Professor Semper

#### I. Method of Instruction.

It has been proved by experiences, that for teaching practical art the form of the *work-shops* or *Ateliers* answers the best, which I propose to adopt for this class.

It differs essentially from that of classes or schools by a less systematical mode of instruction. In the workshops are

r<sup>o</sup> no divisions by classes of the Pupils or Students after their Ages and progresses in Art. – 2<sup>o</sup>) no strong divisions of the time for teaching after a Plan of Studies, except for lectures

10 and such instructions, which the students will have || in common with other classes and by other Professors.

3) The Pupils or Students assist the Patron of the Atelier in his profession, and being brought by this way into contacts with the practice and with the different crafts, they will have the best opportunity of getting practical knowledge.

15 (See Apendix on the School of architects at Dresden.).

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#### II. Subjects of Instruction.

a. *Geometrical principles of Design*, including Perspective and shadow-construction, illustrated with examples, which are taken so as to be in the same time exercises in proportions and the elementary forms of practical Art and Architecture. (See Lectures.) ||

b) *The principles of Style*, illustrated with examples, which are to be copied by the students. These exercises must be in the same time courses of technology and history of practical art. The models are either real objects of practical Art, or facsimiles of them, or finally drawings. The most usual mode of copiing is by drawings with or without colours. But it will be in many circumstances desirable, to have them done by modelling, and therefore opportunities are given in the Rooom for modelling in clay and wax.

are given in the Rooom for modelling in clay and wax.*C*) Instruction how to invent objects of ornamental art.

This essential part of the instruction in art is the most neglected. The Students pess the whole of their time in copiing and making studies after nature, without triing their forces || on their own creations.

30 The talent and spirit for composition ought to find encouragement from the beginning of the artistical education – Many good talent has been spoild by having been too long time engaged with copiing and studiing from models and even from nature. I therefore make for my class, the following proposition.

#### Competitions

35 Competitions between the students will take place, regularly every fortnight on Monday. The Students must then spend one day by composing sketches for any objects of ornamental art, which have been proposed in written Programms fixed on the wall, the morning of the same Day, by the Professor.

Two such Programms will be given at the same time, one for the beginners and one for the more advanced Students. || which will be classified only by this distinction.

40 more advanced Students. || which will be classified only by this distinction. The sketches must be ready *in one day*. Those who are not delivered the same day, are out of competition. I. fol. Ir

fol. 2r

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3. fol. 3r

fol. 4r

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The Professor will hold the next, or one of the next days a critical review of the delivered sketches and point out, together with his students, which of the sketches are the best. Small Rewards and official Certificates will be delivered to the compositors of the two best sketches.

#### Great Prices.

Besides these small competitions there will be twice a Year competitions of finished works. (concours rendus) The Programms of these compositions will be given at the first Mondays of the Month's April, and September. The time allowed for the works is 6 weeks. The competition of the Month of September || will be the so called great price competition.

fol. 6r Then the winners will be rewarded by golden, Silver and Brass Medals, and by Certificates. - The Great golden Medal is the highest price, which will only be given in such cases when one of the competitors was not only the best relating to the other, but did absolutely well; This great medal procures to the winner the pension, for travelling three, (or four) Years for finishing his artistical education;

> The other competition takes place the same way as the former, except that no higher prices than the Silver Medal will be given.

The works of the Pensionairs are proprieties of the Department.

The works which have gained medals or certificates will in cases be acquired by the Departe-20 ment.

Further Details about these competitions must be given in a special Programm. ||

#### D. Different Processes. fol. 7r 7

I) Enameling, different processes of Enameling by Mrs. Simpson and Semper.

2). Modelling, forming and casting (in plaster) by M<sup>rs</sup> Townsend, Semper and Brucciani. 25 3) Chasing and embossing by Mr. Wechte.

E. Lectures.

I) on the relations of the different branches of practical art between each other and to architecture. (including notions on Style and history of art.).

Public lectures.

2). On the geometrical principles of Design, including Perspective and Shadow Construction.

For Students only.

Lecture prepared for following Semesters, on ||

I. *Technology*, especially with regard to metalworking furniture, decoration etc. Public. 8 2. Construction. Private.

1<sup>t</sup> February 1853.

Gottfried Semper

373.4 for teaching] after del. for institutions work-shops] work- | shops 373.8 1º] accompanied in opposite column by del. note. As conditions for intrance note.] underl. 373.16 Instruction.] altered from ~^ before del. within the Atelier. 373.27 pess] 'pass' 373.31 Many] altered from many after del. On the other hand 373.28 without] with | out 373.34 Competitions] in left margin

374.6 Great Prices.] in left margin 374.7 **twice**] above del. 3 times 374.8 rendus] after 374.10 April] above del. January, May 374.11 September] below del. October del. de 374.19 proprieties] 'the property' (see 87.31) 374.20 will] after del. will occasionally be

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fol. 8r

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374.24 M<sup>™</sup>] *Messrs*' 374.25 M<sup>™</sup>] *Messrs*' 374.26 Wechte] *Vechte*' 374.27 E.] after del. 4) 374.34 Lecture] altered from Lectures 374.35 metalworking furniture, decoration etc.] *repl. del.* the different productions of ornamental and practical art. furniture] after *del.* and

# First Report on the Class for Practical Construction, Architecture, and Plastic Decoration

#### TEXTUAL RECORD

	ina
MS 159 gta, 20-Ms-159, *fol. 147r-v (on thin greyish paper, in a manuscript relat	mg
to Semper 1859), in Semper's hand	
MS 115 <sup>2</sup> gta, 20-Ms-115, fol. 3r-v (on thick brownish paper), in Semper's hand, co	on-
tinuation of MS 159	
DSA <sup>1</sup> (Report of Professor Semper on the Class for Practical Construction	on,
Architecture, and Plastic Decoration', in First Report of the Departmen	t of
Science and Art, London: Eyre & Spottiswoode for Her Majesty's Static	on-
ery Office, 1854, 210–11 (NAL, 97.PP.83), <i>copy-text</i>	
Semper 1884 Bericht über die Abteilung für Architektur-, Metall- und Möbeltech	nik
und praktisches Entwerfen', 95–9, German trans. of DSA <sup>1</sup> (88.27–89	.36,
90.1–6, 90.10–27, 90.32–91.17)	
Wingler 1966 'Bericht über die Abteilung für Architektur, Metall- und Möbeltech	nik
und praktisches Entwerfen', 87–90, ed. of Semper 1884	
Semper 2014 vol. 2, 561–2, Karge's reprint ed. of DSA <sup>1</sup>	

**BIBLIOGRAPHY** Ettlinger 1940; Reising 1976, 60–1; Herrmann 1978, 74–5, 80; Herrmann 1981, 108; Herrmann 1984, 67–9, 73; Mallgrave 1996, 214–15; Bonython/Burton 2003, 152–3; Squicciarino 2009, 268–71; Orelli-Messerli 2010, 210–36, 250–2; Hvattum 2021

#### **EXPLANATORY NOTES**

Semper's first report on his 'Class for Practical Construction' at the Department of Practical Art and its successor organization, the Department of Science and Art, is an important document – despite its brevity. It encompasses many of the topics that Semper addresses in his 'Plan of Instruction for the Metal and Furniture Classes' and gives information about two commissions with which he was able to put into practice the idea of organizing his teaching according to the concept of studio workshops – Wellington's funeral car, as a work connected to Semper's metal class, which he spent a great deal of energy on; and a sideboard for the Secretary of the Board of Trade, James Emerson Tennent, as a work related to his instruction in furniture, to which Semper attached less importance. Three fragmentary

drafts are extant; the first part of the most complete one is identified here for the first time (MS 159, with MS 115<sup>2</sup> as its already known continuation), preserved in a folder with notes for another text on which Semper was working at the time – his essay *Ueber die bleiernen Schleudergeschosse der Alten* (On the Leaden Slingshot Bullets of the Ancients). On 24 January 1854, Henry Cole reminded Semper that 'We have not yet received your Annual Report, will you send it as soon as possible – as we are waiting to send it to the Printers'. Cole, or perhaps Richard Redgrave, must have revised Semper's definite manuscript – probably also with changes to the content in the places where the differences between the existing drafts and the printed text are particularly striking (see, for example, notes 88.28, 89.14).

88.24 d.] denotes Semper's report as the first of the 'Reports on Technical Instruction in Art' (DSA<sup>1</sup>, 210), which include the reports on 'Textile Classes for Surface Decoration' (e), 'Mechanical Drawing' (f), 'Wood Engraving' (g), 'Lithography' (h) and 'Porcelain Painting' (i) 88.28 practical composition] The term 'practical composition', possibly an amendment by Henry Cole, generalizes the term 'practical construction' named both in the title of Semper's report on his special class and in the drafts, which here also have 'practical construction' or 'practical construction in general' (381.2-3, 381.20, 383.2). Equally, Semper's drafts have - instead of 'subject of practical composition' in the next sentence (88.29) -'practical instruction' (with 'instruction' preceded by deleted 'ar', for 'architecture'; 381.4), 'practical construction and the principles of architecture' (in a parallel variant; 382, note 381.2) or, again, 'practical construction' (381.27, 383.3). One sentence later, the same amendment led from 'practical construction, as I understand this expression' (383.4-5) to 'practical composition in the more extended sense of the expression (as I understand it,)' (88.30-1). Semper apparently had in mind construction as a general term covering the foundations not only of architecture but also of other arts, including metalworking and furniture making, for which he was primarily responsible. The change from 'construction' to 'composition' was also made in the title of his position as 'professor of practical construction', as he wrote in one of the drafts (384.10-11), which was amended to 'Professor of Practical Composition' (90.10). In contrast, Semper's 'Second Report' refers to his 'class for Practical Construction' (91.24–5). If the amendments from 'construction' to 'composition' are due to Cole, they may have resulted from the criticism the Board of Trade had expressed against the proposal of 'a class for architectural details and practical construction' (Cole 1884, 1:299) – the class with which Charles James Richardson was entrusted in 1852. since its commencement] Semper's drafts have 'in the Year 1853', 'during the Year 1843' and 'in the Year 1852' (381.3, 381.20, 383.2). While '1843' is obviously a misspelling of 1853, which applies to the spring and autumn of 1853, '1852' applies to the beginning of Semper's teaching in the Department from the autumn of 1852. 88.29-30 subject of practical composition ~ entrusted to me since the last session] Apart from 'practical composition' amended from 'practical construction' (see note 88.28), two fragments in one of Semper's drafts have, instead of 'since the last session', 'since the last six months' or 'since the last 6 Months' (381.4, 381.28; cf. 383.4). This roughly corresponds to the date of Semper's first public lecture held on 20 May 1853, while 'the last session' refers to the term that began in the autumn of 1853 (see 328). 88.31 the foundation of my system of exposition] Semper's drafts have 'instruction' instead of 'exposition' (381.5, 381.29, 383.5); for Semper's system, see his 'Plan of Instruction' (85-8). 89.I–2 The want of knowledge of composition and of practice, the ignorance of the architectural principles of design, of style, and of beauty generally] Some of Semper's drafts emphasize architecture to a greater extent: one version speaks of the 'want of acquaintan[c]e with the architectural and ornamental principles of beauty and stile and with practical construction' (381.9-10), another mentions 'the want of knowledge of the difficulties which are connected with the practice of ornamental art' (381.30-1), and a third refers to the 'want of constructiv knowledge, the ignorance of the architectonical principles of beauty 89.14 experimentally as it were This emphasis on the experimental and style' (383.6–7). character of the practical studio workshop as an essential part of Semper's teaching method is missing in the second draft, in which Semper stresses the importance that the students make 'their own experiences' (383.16). It was apparently amended by Cole, as it is a concession to the latter's reservations about this point (330–1, 370–1). 89.17–18 funeral car of the late Duke of Wellington] When Arthur Wellesley, the first Duke of Wellington, died on 14 September 1852, the Department of Practical Art was asked by Brownlow Cecil, the Lord Chamberlain, after a delay of more than a month, 'to suggest a design for a triumphal car and superintend its execution', as Henry Cole reported (Cole 1853, 29). Cole seized the opportunity to demonstrate the practical benefits of the Department's special classes, to which he assigned the work after the Board of Trade permitted the Department's assistance with the reservation 'that it was to be viewed as a private transaction' (DPA<sup>1</sup>, 29). He states of the 'general design of the car' that it was 'chiefly suggested' by Richard Redgrave, while 'the successful realisation of the structure, with its ornamental details, was due to the ability of Professor Semper' who, as the head of the metal class, was particularly in charge of the lower parts of the carriage, which were cast and chased in bronze. Octavius Hudson, professor of the class for woven fabrics, superintended the textile decorations (Cole 1853, 31). The funeral procession through London took place on 18 November 1852 and ended in St Paul's Cathedral, where the car was subsequently kept in the crypt; today, it is at Stratfield Saye, Wellington's estate in Hampshire. The question of whether Redgrave or Semper can be credited with the greater part of the overall design is a controversial one, and was so already in 1852. Designs by Redgrave and Semper were presented to Prince Albert on 23 October 1852 (sketches of the car by Redgrave and one drawing by Semper, inscribed 'Redgrave design', at V&A; further drawings by Semper in Hamburg, Kunstgewerbemuseum, and at ETH Zurich, gta Archives). Cole wrote to Semper a day later that 'The Prince liked many parts of your design'. Semper, together with Octavius Hudson, Norman Macdonald, comptroller of the Lord Chamberlain's office, and William Banting, the royal undertaker, held a conference about the funeral car at Marlborough House on 25 October (Cole Diary). On 6 November 1852, The Illustrated London News reported the Queen's approval of the design for the funeral car and spoke of 'Mr. Semper's splendid design' (ILN 1852a), while The Builder, on the same day, knew of 'Some dissatisfaction ... at the fact that the design for the car was intrusted to Professor Semper, the Berlin architect' (Builder 1852). The car was included by Manfred Semper in an initial fascicle of engravings of Gottfried Semper's works in 1881 (Semper 1881, pl. 49) – in a form similar to the actual car, except for two major differences. In the executed car, the bier and the coffin on top of the carriage superstructure were covered by a canopy supported by four halberds. In the version published in 1881, the canopy is missing and, instead of the halberds, four candelabra surround the superstructure. Apart from the candelabra, this comes close to the illustration in The Illustrated London News of the car as executed, which was published after the funeral procession had taken place. The magazine now asserted that the 'design of the Car ... was given by ... Mr. Redgrave', but it stated that the canopy was omitted in the woodcut 'by the wish of Professor Semper' (ILN 1852b). Afterwards, The Illustrated London News apologized for the omission, saying that the engraving was drawn by students at Marlborough House 'by especial arrangement with Mr. Cole' (ILN 1852c). However, two of Semper's early sketches (in Hamburg) also show the funeral car with a canopy, although carried by six Nikes instead of the halberds, and with the corners of the carriage (with four wheels, instead of the six as executed) adorned by candelabra. This roughly corresponds to the description of Alexander the Great's funeral car that Semper discusses in Style in the Technical and Tectonic Arts, in connection with which he refers to Wellington's funeral car in stating that he had 'the opportunity to carry out a work for the corpse of the second greatest commander of our century, which was similar in purpose' (Semper 1860/63, 1:317-18 and n. 2). In the obituary for Semper, Thomas Leverton Donaldson wrote that Semper 'also designed the Wellington Car' and that 'it was conceived in the spirit of the Imperial Carpentum on the Roman coins' (Donaldson 1879, 234). However, Semper had less a chariot (carpentum) in mind than a triumphal car in the form of a Roman funeral pyre, such as he discusses and illustrates in *Style* with reference to the funeral monuments depicted on Roman medals. (In his example, the monument is surmounted by a chariot; Semper 1860/63, 1:315 fig.) The pyre's terraced, pyramidal form is best expressed in one of Semper's drawings of the funeral car without the canopy (gta, 20-108-1). Finally, Semper concludes the second volume of Style, at the end of the section on metals technology, with a woodcut showing the prow of the Wellington funeral car in a variant with two personifications of victory and fame instead of the lions as supporters of the coat of arms, stating that it was 'executed differently due to lack of time' (Semper 1860/63, 2:589). 89.18 Mr. Whittaker and Mr. Wills] C. H. Whitaker held a scholarship at the Department of Practical Art for 1852–53 as a student of artistic anatomy and metals (DPA<sup>I</sup> 297); he resigned from it in January 1853 (Cole Diary). During the same period, the student William J. Wills was appointed master of the modelling class (DPA<sup>I</sup> 210, 216; DSA<sup>I</sup>, 167). The Illustrated London News reported that Whitaker and Wills had modelled 'Some beautifully-designed figures of Victory, introduced on the bronze ornaments' of the Wellington funeral car (ILN 1852a). They were probably also involved in the manufacturing of the 'Bronze Wheel of the Wellington Funeral Car. Manufactured by Tylor and Son, London. Designed by Professor Semper, Marlborough House', which, in 1858, was shown in an exhibition of students' works of art manufacture done in connection with the Department (Cat. DSA 1858, 43). Whitaker, to whom Semper refers as a medal winner for work done under his supervision (90.31), is mentioned as having been awarded a book for a work exhibited in May 1853 (DSA<sup>1</sup>, 358). He possibly was the Charles Henry Whitaker who went bankrupt as a designer of art manufactures in Birmingham in the early 1860s (London Gazette 1862a, 3241; London Gazette 89.19 models of the ornamental posts] One of the drafts has 'Models for 1862b, 3562). the bronce ornaments' (381.15-16), another has 'details of the ornamental parts' (383.21). 89.20-I employed in inspecting ~ the bronze casts] One of the drafts says of the two students that 'they have even been directing the moulding and chasing of the casts' (381.17), while another names 'Whitacker' as the only student who had 'been sent to the casters, for surveilling the operations of moulding and chasing' (383.21-2). 89.21 A third student of Somerset House] Both of Semper's drafts contain a blank at the place where this student was to be named (381.18, 383.23). Somerset House in the Strand, London, is a large neoclassical palace dating from the last quarter of the eighteenth century, where the Government School of Design was established in 1837. 89.23-5 One of the students ~ appointed ~ in one of the great industrial establishments at Sheffield.] A deleted passage in one of Semper's drafts names 'Whitacker' to be this student (384, note 383.24<sup>2</sup>). 89.28-9 sideboard commissioned by Sir James Emerson Tennant ~ in ebony wood] James Emerson Tennent (in one of Semper's drafts 'Charles Emerson Tennant'; 383.28) was colonial

secretary of Ceylon (today Sri Lanka) 1845-50 and secretary to the Board of Trade 1852-67. He commissioned the ebony sideboard for his dining room after having contacted Henry Cole, and sent sketches to Richard Redgrave and Semper on 20 November 1852, accompanied by an issue of The Art-Journal with reference objects. The sideboard, as Tennent explained, was to have cupboards on each side, which were to frame a recessing central part with shelves, the whole carrying a buffet at the back with further shelves between two niches, crowned by a canopy done in open carved work. He suggested oriental ornaments such as elephant heads, alligators, serpents, Indian fruits and plants. Semper had drawn a first perspectival sketch of the sideboard on the sheet containing one of the explanatory drawings sent by Tennent to Redgrave (gta, 20-K[DD]-1852-11-20:1) and delivered two variant proposals for the sideboard, of which Tennent reported to Redgrave on 5 February 1853 that he was 'greatly pleased with the designs' but suggested a combination of elements of both variants (gta, 20-K[DD]-1853-02-05). Tennent's sideboard was shown in 1858 at the exhibition of students' works of art manufacture done in connection with the Department (Cat. DSA 1858, 68). A review of the exhibition gave 'special notice and commendation' of the sideboard and highlighted the oriental subjects of 'elephants' heads, peacocks, &c.' and 'an error', namely that 'the upper parts of the two side mirrors are framed in Saracenic arches, whilst those of the larger mirrors in the centre are bounded by low elliptic arches: the combination is incongruous' (ILN 1858). The sideboard passed to the family of Ethel Sarah and Charles Arthur Langham in 1893 and was auctioned in 2004 (Jones 2006, fig. 8). 89.30 The two students who were appointed to design this piece of furniture] One of the drafts has 'The two skillfull artists who were appointed to execute this piece of furni-89.31 Mr. Cuthbert and Mr. King] John S. Cuthbert and John Lewis ture' (383.29–30). King held scholarships at the Department of Practical Art for 1852-53 as students of artistic anatomy and furniture (DPA<sup>1</sup>, 297); Semper refers to them further below as 'decorators' and as having been awarded medals for work done under his supervision (89.40 and 90.31). However, only King is listed for medals awarded in May 1853 (DSA<sup>1</sup>, 357). Cuthbert is the illustrator of John Marshall's Anatomy for Artists (Marshall 1878). The catalogue of the 1858 exhibition of students' works of art manufacture records the sideboard without reference to Semper but as being designed by Cuthbert, while King assisted him in the working drawings (Cat. DSA 1858, 68). One exhibition review, which credited Semper as the designer, doubted that improvements in English manufacture were due to English students from the schools of design, arguing that students had played only a minor role in the design of the outstanding exhibits, as in the case of the sideboard, for which 'the drawings of the design were enlarged ... by a student' (Literary Gazette 1858, 57). 89.32 course of architecture and practical composition] One draft has 'course of architecture and practical construction' (383.31; see also note 88.28). 89.39 Fallen Charles Follen, whose full name was Charles Christopher Follen, was born in Boston as the son of the abolitionists Charles Theodore Christian and Eliza Lee Follen. He continued to study with Semper in 1854 (386, Explanatory Notes 91.29) and became an architect, practising in Boston until 1867. In a draft letter to Edward Falkener probably dating from 1851, Semper called Follen his 'Ami et elève'. Follen was possibly the person Semper had succeeded in recruiting as a pupil in early 1851, perhaps through Rachel Chadwick, who wrote to Semper at the time about a 'young acquaintance' who 'wished to receive instruction from you' (see 237). In any case, Follen wrote to Semper in a letter, probably also dating from 1851, that 'Le mardi prochain, il ne me sera pas possible de prendre une leçon.' As late as 1867, Semper remembered Follen as his 'former student' in a letter to Heinrich Mölling, his son-in-law. Austin ~ Armitage] Walter Austin and Charles Armytage held scholarships in the Department of Practical Art for 1852–53 as students of artistic anatomy and metals (DPA<sup>1</sup>, 297). Both are mentioned as medal winners for works exhibited in May 1853 (DSA<sup>1</sup>, 356). Armytage, who resigned from the scholarship in January 1853 (Cole Diary), is mentioned by Semper as having been awarded a medal for work done under his supervision (90.31). 89.41 **Semper, architect**] Manfred Semper; see also 90.9. Manfred continued to study with his father in 1854 (386, Explanatory Notes 91.29).

90.I-4 At the exhibition of furniture at the Gore House ~ I superintended ~ practical course] Gore House was a Georgian mansion dating from the 1750s on the estate in Kensington on which the Royal Albert Hall was built in 1867-71. It was purchased, together with the whole estate, by the Royal Commission for the Exhibition of 1851 in 1852 and served as an exhibition space for the Department of Science and Art starting in the spring of 1853 until its demolition in 1857. The exhibition of cabinet work in May 1853 consisted of specimens of furniture from the fifteenth to the nineteenth centuries, which were lent to the Department by the Queen and other persons. This exhibition was accompanied by student works to 'illustrate the progress of the Schools of Art'; Semper and Octavius Hudson held classes in the exhibition (DSA<sup>T</sup>, 299-300; cf. 384.3-9). Semper refers to the cabinet work exhibited and photographs taken from it in 1853 as a basis for the woodcut illustrations in the section on tectonics and metals technology in Style (Semper 1860/63, 2:347 n. 1, 560). 90.8 Halgate, and Brenan] Edward Holgate, from York School, and John J. Brenan, from Cork School, held metropolitan scholarships as students of drawing ('Shading from the round'; DPA<sup>1</sup>, 297). John J. Brenan, who became a painter principally of backgrounds to portraits by his brother James Butler Brenan, was probably the student elsewhere called John Joseph Brennan who won a medal for work done in Semper's special class for 'Plastic and Architectural Design' (387, Explanatory Notes 93.3). 90.10 Since I have been appointed the Professor of Practical Composition] One of the drafts has 'professor of practical construction' (see note 88.28) and mentions 'the second session of the year' as the moment of appointment (384.10-11) – that is, the term starting in the autumn of 1853 (see 328).

91.1-3 one lecture, as an explanation of my system  $\sim$  a series of lectures] The dates of eight lectures up to the end of 1853 were listed in the First Report of the Department of Science and Art (DSA<sup>1</sup>, 223), after the 'Prospectuses of the Lectures on Art' gave an outline of six lectures only (96-7). Semper's first lecture at the Department, in which he explained his system, took place on 20 May 1853 and was announced under the title of 'On the relations of the different branches of industrial art to each other and to architecture' (see 96.3-4 and, for the draft variants, 97-117) - a title to which Semper also refers in his 'Plan of Instruction' 91.6 Letaroulz on Roman Architecture] Letarouilly started the publication (88.13-14). of his *Édifices de Rome moderne* in 1825; in 1854, the Department purchased the edition published in 1840-54; an additional fascicle was published in 1857 (DSA<sup>1</sup>, 339; Letarouilly 91.11 Dieterle] see 310; 361, Explanatory Notes 84.3-4 1840/57). 91.14-16 locality ~ unfit for a School of Design ~ students ought to be altogether in one room ~ benefit of a system of mutual instruction and emulation] This critique of the classrooms takes up the suggestion in Semper's 'Plan of Instruction' to establish 'workshops or ateliers' with 'no classification of the pupils or students' (85.28).

### MANUSCRIPT VARIANTS MS 115<sup>1</sup>

To the Superintendents of the Department of Practical art.

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20

I have the Honour to submit a report of the state and activity of the Class for practical construction, metal working and furniture, in the Year *1853*.

I am only intrusted with the latter part of practical instruction since the last six months, but I made it since the beginning of my appointment the base of my system of instruction.

I made it since the beginning of my appointment the base of my system of instruction. The students who frequented my Class next after its first opening were partly well advanced in design and prepared for higher artistical education, but they had little | taste and a Sort of prejudice against the application of art to usefull things.

I knew by experience that the reason of this was only their want of acquaintane with the architectural and ornamental principles of beauty and stile and with practical construction. and that it would be other when the occasion should be given to introduce them at wonce

into practical Art. A first occasion of this kind presented itself, when I was intrusted at the beginnig of the

Year, with the execution of the funeral Car of the late Duke of Wellington. –

Two students of the Sculpture Class, Mr. Whitake and Mr have executed the Models for the bronce ornaments jointly with me and after my working drawings. and afterwarts they have even been directing the moulding and chasing of the casts. An other | student of the Somersethouse Mr.

I have the honour to submit a report of the state and the activity of the Class of metalworking, furniture and practical construction in general, during the Year 1843.

The Students who frequented my Class soon after its opening were good designers and modellers, they had received a preparatory education for what is generaly understood under high Art, they had little taste and a sort of prejudice against the application of art to industry and to material utility.

25 This was not the first time that I met with these prejudices, which generally prevail among youthfull artists, and which ¦

The latter part of my division, namely the teaching of practical construction, has only been intrusted to me since the last 6 Months – nevertheless I made it since the beginnig of my courses the base of my system of instruction.

- <sup>30</sup> For the want of knowledge of the difficulties which are connected with the practice of ornamental art, and the ignorance of the fact, that a high degree of artistical accomplishment is wanted for the execution of objects of ornamental art, is the principal reason of the prejudices, which prevail among the students of our acadenies against the application of their talent to industry and material utility.
- 35 The first students which frequented my Class since its opening had made their preparatory studies for what is generally calld high art, they

381.2 I have the Honour] after del. Having been appointed after undel. in opposite column

I have the Honour to submit a report. of the activity and progress of the Class for metalworking furniture and practical construction. fol. 2v

fol. 1r

fol. 2r

Although<sup>1</sup> being only commissioned first only with the former two branches of technical art, I considered<sup>2</sup> the last, namely practical construction and the principles of architecture allways the

I Although] after five del. beginnings of variant:

Although it is

Although the last of these three branches has only been expressly Although I am only commisioned with the last of these three branches of practical art, namely practical construction Although the last of these three branches, that of practical construction, I am only commissoned with since the last six months I made it I was only commissioned

2 considered] above del. made

381.2 activity] after del. progress of t[h] **Class**] after del. practical Class of met of] undel. 381.4 **I am only intrusted**] after del.

The special object<sup>1</sup> of the class for metalworking and furniture has with the beginning of the Year 1853<sup>2</sup> been successfully furthered by several not unimportant works of practical art which have been executed by the Department and partly under the superintendance of the undersigned Professor and

I The special object] after del. Since my appointment 2 beginning of the Year [1853] the term beginning in the autumn of 1852

381.4 instruction] after del. ar 381.6-7 The students ~ had little] accompanied in left column by inserted and undel. I observed that they 381.6 next] after del. at its 381.10 architectural] after del. more stile] 'style' 381.11 at wonce] 'at once' 381.15 Two students] after del. The after del.

The two Sculptors, which jointly with the undersigned have executed the models and

381.15 and Mr] before blank left for Wills (89.18)381.16 afterwarts] above del. not onlythis,381.17 directing] after del. sent, formoulding] after del. c[a] after del. execution381.19 Class] after del. class of practic[a]381.20 during] after del. to which I am appoint-ed in the1843] '1853'381.21 The Students] after two del. variants:

The Students who frequented my Class soon after the opening of the last were good designers and had made their preparativ

The students who, at the opening of my Class, frequented my instructions, had received their preparatory education for the exertion of what is generally calld high art, they were well advanced in design but

381.21 frequented after del. followed my 381.22 **they**] *after del*. but they for] after del. for entering into the career of 381.25 This] after del. I knew by experience that this prejudice. (generally prevailing among youthfull artists, di after del. This was not the first time that I met with such prejudices and 381.26 artists,] before del. being consequences of the which] before del. may only 381.27 The latter part] after del. Being only intrust-381.29 **base**] *after del.* starting point ed with the instruction of instruction.] altered from ~, before del. being convinced and 381.30 For the want] after inserted and undel. in opposite column

For the want of knowledge of the difficulties<sup>1</sup> which are connected with the practice of every branch<sup>2</sup> of ornamental art<sup>3</sup> and of the resources and means which arise from the same4

I difficulties] *before del.* and resources, which arise 2 of every branch] inserted without insertion mark 3 of ornamental art] before del. in general, 4 the same after del. them for the deve

381.31 accomplishment] after del. talent and perfec 381.33 students] after del. juouthfull and

#### MS 159 MS 115<sup>2</sup>

I have the honour to submit a report of the state and activity of the Class for metalworking furniture and practical construction, in the Year 1852.

The latter part of my division, namely the practical construction, has only been intrusted to me since the last Session, - nevertheless I made the practical construction, as I understand

- this expression, the foundation of my system of instruction since the opening of my Class. 5 The want of constructiv knowledge, the ignorance of the architectonical principles of beauty and style, the ignorance of the fact, that a high degree of artistical accomplishment is consistent with industrial art and even more that it is absolutely wanted for it, is the reason, why our jouthfull artists show little taste and a kind of prejudice against this sort of application
- 10 of their talent, and generally believe that in applying themselves for this branch they lower their position.

The students who frequented my Class soon after its opening were well adwanced in the academical principles of design and skillfull drawtsmen and modellers, but they partoke a little of the same prejudice knowing by precedent experiences that it would be useless to

15 preach against this feeling, I waited for an opportunty of introducing them at once into practice and imparting them by their own experiences with the difficulties means pleasures and profits of the practical branch of art.

This opportunty presented itself when, at the beginnig of the Year, I was intrusted with the execution of the | Metalworks of the funeral Car of the late Duke of Wellington.

have executed in common with me and after 20 Two Sculptors, Mr. Whitacker and Mr. my working drawings the details of the ornamental parts of the car, and Mr Whitacker has been sent to the casters, for surveilling the operations of moulding and chasing. A third ancient student of the Somerset House, Mr - has been employed afterwards for chasing those parts of the ornaments, which could not be finished before. - One of these Students,

has in consequence of his share of the work since been placed in one of the great industrial 25 establishments at Sheffield. After this came some other practical works of less importance, for instance a piece of furniture, commended by Sir Charles Emerson Tennant, destined for being executed in Ebony

wood at Ceilan by Indian workmen. The two skillfull artists who were appointed to execute this piece of furniture, Mr. Cuthbert and Mr. - | have made at this occasion a short but 30 effective course of architecture and practical construction which I believe vill add to the abilities by which they distinguish themselves.

Several other students for architecture were occupied in the same time their special studies in architectural drawing and ornament. Some Copies of pieces of metalworking, belonging \*fol. 1470

\*fol. 147r

fol. 3r

to the Meseum connected with the Department. have been made by Mr. Amentage and Austin.

At the Exhibition of furniture at the Gorehouse which opened last spring I was appointed as the intendant of the Atelier, established near the collection for copiing modelling and casting the Ensembles and the Details of the most important pieces of the Exhibition An interesting collection of drawings of Models and of Casts has been the result of this practical course, and several students, who knew little about architectural drawing, mouldings proportions, ornament and colouring, have learned at this occasion to manage such kind of works..

With the second session of the year when I was appointed as professor of practical construction, together with the above mentioned branches, I had to follow an other system of instruction: Formerly I had to deal with Students, who by their academical instruction were rather to much mounted by the Idea of executing high Art, while I now am endeavouring of comporting some higher direction and artistical feeling to the students in the same time with the practical knowledges which they exclusively reclaim and with the first elementary instructions of geometrical design of which they are ignorant, their school instruction beeing generally very much neglected

To Show the connection between practical application and Artistical conception has been the leading Idea of my course of lectures on the relations which exist between the different branches of practical Art among each other and to architecture.

> 383.2 in] after del. which 383.3 **The latter part**] *after del.* Since my 383.4 Session] after del. 6 [M] 383.5 foundation] above del. basse basse] *after del*. fund[a] 383.6 **constructiv knowledge**] *after del.* knowledge of the constructiv laws of bea architectonical] after del. more 383.8 industrial art] after del. practical industry 383.9 jouthfull] 'youthful' show] after del. generally 383.10 believe] below del. think that] after del. they abase their position in 383.12 soon] interl. 383.13 drawtsmen] 'draughtsmen' partoke 'partook' 383.13–14 **a little**] *interl*. 383.14 prejudice] before del. and had but littl taste for 383.18 beginnig of the Year] the term beginning in the autumn of 383.19-30 Metalworks ~ Mr. Cuthbert and Mr. -] accompanied by note written up-1852 side down on the same sheet:

 Name Stanley Bird<sup>1</sup>.

 Age 16 [ ]
 n° 1.

 38 Edgeware Road
 D[ ] [ ]

 Articled to a builder
 Freytag.

I Stanley Bird] Stanley George Bird, later colonel and president of the Central Association of Master Builders of London, born in 1837 as the son of the builder George Bird of Edgware Road, Marylebone, London

383.20 Sculptors] after del. students of thWhitacker] 'Whitacker' (see also 383.21)andMr.] before blank left for Wills (89.18)383.21 details] after del. wholeornamentalparts] after del. carMr Whitacker] interl.has] altered from have383.22 casters]after del. different383.24 before.-] before del.

This practical course<sup>1</sup>, I trust, has not been without consequence<sup>2</sup> for them.

I This practical course] *after del*. I believe that they have had profit 2 consequence] *after del*. utility for them and one at least of them, Mr. Whitacker, has since

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383.24 Students,] before del. who had little taste for the application of his art for technical taste] after del. application and the] undel. application] after del. technical applicat the] above del. our 383.27 less] after del. smaler 383.28 383.25 since] after del. rece[i] **commended**] 'ordered' 383.30 Mr. –] dash as placeholder for King (89.31) made] after del. doubtless 383.31 vill] 'will' 383.33 Several] after del. At the Exhibition of furnitures I was appointed as the surintendend were occupied] above del. have made 384.4 of the Atelier] after del. of the 384.1 Meseum] 'Museum' Amentage] 'Armytage' modelling casting and copiing Atelier eastablished there 384.5 **Exhibition** *after del.* 384.10 when] after del. the general princ[i] 384.11 together] after del. in Collection. after del. united an other] after del. an oppos[i] 384.11-12 instruction:] altered from ~, before del. for the before del. public [0] 384.12 deal above del. do do] after del. complain 384.13 **to**] 'too' mounted] uncertain reading (cf. 90.13: 'elevated') high Art,] before del. and had little taste for practical 384.14 **comporting**] *'imparting'* to the students after del. to those after del. to the joung Gentlemen 384.16 are] after del. generally 384.18 **To Show the connection between**] *above del.* The combination of combination] 384.20 architecture.] before del. on fol. 3v The students who *after del*. same The] after del. Several of my students have employed their time by

# Second Report on the Class for Practical Construction, Architecture, and Plastic Decoration

#### **TEXTUAL RECORD**

MS 116	gta, 20-Ms-116, fols. 11–2v (1v, 2v blank), in Semper's hand
$DSA^2$	'Report of Professor Semper on Class for Practical Construction, Archi-
	tecture, and Plastic Decoration', in Second Report of the Department of Sci-
	ence and Art, London: Eyre & Spottiswoode for Her Majesty's Stationery
	Office, 1855, 147-8 (NAL, 97.PP.83), copy-text
Semper 2014	vol. 2, 563–4, Karge's reprint ed. of DSA <sup>2</sup>

**BIBLIOGRAPHY** Herrmann 1978, 74 and n. 268, 80–3; Herrmann 1981, 108; Herrmann 1984, 67, 73–6, 277 n. 251; Mallgrave 1996, 214–15; Hildebrand 2003, 265; Nerdinger/Oechslin 2003, 285–7; Piggott 2004, 68, 129

#### **EXPLANATORY NOTES**

Two fragmentary drafts on separate sheets of the same paper quality are extant for Semper's second report on his special class at the Department, the first in German and the second in English (see 388). The English draft starts on the same sheet as the German draft and continues on the second sheet with reformulations of the first paragraph left unfinished, yet undeleted, on the first sheet. The German draft and the English draft variants contain information that is not retained in the printed text, such as the names of students. Both the German and English drafts refer, in relation to the 'System of instruction', to Semper's

'First Report' (covering the period from the autumn of 1852 to the end of 1853 and printed in 1854), in which he explains his system of instruction as focusing on introducing the students 'in medias res', to the 'principles and elements of design and composition' (90.18-19) – that is, when they already had to work on some practical task. Semper explained that this practice-oriented method accommodated the students' short attendance period – a point that he mentions critically in the German draft of his 'Second Report': 'Short stay of the pupils disadvantageous and makes work more difficult' (388.1-2). He now adds that the short period of study made it impossible to generally apply the teaching system that he used in the Dresden Academy of Fine Arts, which consisted of 'combining theory and æsthetics with immediate practice' (92.3-5). Whereas in the 'First Report' he implied that this practical teaching was particularly directed at the 'operatives' (90.15), he now limits it to the day students in his architecture class (92.1-2). The evening students, who 'are employed during the day in ... crafts connected with house-building' (92.18–19), are said to have been taught the basics of construction drawing - a specification of the field of 'geometrical projection' generally noted in the 'First Report' (90.20-7). Semper's German draft of his 'Second Report' contains one particularly important piece of information - namely the involvement of his students in the design and construction of the Mixed Fabrics Court in the rebuilt Crystal Palace in Sydenham.

91.29 The day students of my special class] In the German draft, Semper names Alexander Pilbeam, Charles Follen and Manfred Semper as the day students (388.12) and also mentions Pilbeam as the only student with perseverance, who - like Follen - 'has since taken on private work as an architect' (388.3-6). Pilbeam and Follen are the students of whom Semper says in the printed report that they 'have since entered into practice as architects' (92.36); on Follen, see 379, Explanatory Notes 89.39. 91.30 Those who attend only in the evenings] In the German draft, Semper says that these students were 'Handwerker' (craftsmen) who had learned to copy construction parts (388.13) - a narrower definition of the subject of 'geometrical drawing' as specified in the printed report (92.22–3). 91.31 **The** masters in training] In the German draft, Semper notes 'descriptive geometry' and the columnar 'orders' as subjects of the lessons for the training masters - the students who were to become teachers of drawing for the Schools of Art (388.14). In the printed text, this is replaced by a brief discussion of the importance of teaching 'the general principles of style in architecture' as 'being the same which prevailed in the whole world of industrial art' (92.25-7) – a summary that reflects Semper's contention as discussed in the drafts of his first lecture held in the Department on 20 May 1853 (see section 'Lectures').

92.3-4 system of instruction ~ at the Royal Academy at Dresden] see 371, Explanatory Notes 85.26-7 92.6-8 opportunity ~ of employing the students on the works in course of execution, and making my class a real atelier for architects] The German draft describes this opportunity as having been the 'work in Sydenham, in which I involved those students who agreed to participate', as it 'gave the opportunity for practical work' (388.9-10). This practical work was related to the redesigning of the Crystal Palace at its new location in Sydenham in south-east London, where it was rebuilt in a modified form after it had been dismantled at the close of the Great Exhibition in Hyde Park. Semper was commissioned through Joseph Paxton to design one of seven 'Industrial Courts' in Sydenham's Crystal Palace, namely the Mixed Fabrics Court, a commercial exhibition space for the presentation of textile samples. Semper discussed the involvement of the Department with Henry Cole on 21 January 1854 (Cole Diary) and received the contract from the Crystal Palace Company with a letter from the Company's secretary, George Grove, dated 4 February 1854. At the opening of the new Crystal Palace on 10 June 1854, work on Semper's Court was still in progress; it was completed only towards the end of 1854 with the help of Semper's Paris friends Charles Séchan and Jules Dieterle. Despite these delays, Semper's contribution to the new Sydenham Crystal Palace was described in detail at the time of the opening, even in relation to elements not vet completed – apparently because Semper had provided detailed information. In the case of Routledge's Guide to the Crystal Palace and Park at Sydenham, its author, Edward MacDermott, had asked Semper on 2 May 1854 whether he would 'oblige me with the description of your Court for Printed Fabrics in the course of the present week' (gta, 20-K-1854-05-02:2). Although Semper's work is confused here with that of Charles Barry Junior and Robert Richardson Banks, who were responsible for the Printed Fabrics Court, the description of the 'Court for Woollen and Mixed Fabrics' in MacDermott's Guide possibly reflects Semper's description (MacDermott 1854, 157-8). Other details concerning the organization and decoration of the exhibition space divided into two parts (an open entrance part and a covered rear part) are omitted in the text but are present in the description of Semper's 'Mixed Fabrics Court' in the Company's concurrent official Guide to the Crystal Palace and Park - including objects that were still waiting to be executed, such as 'On the roof of the covered portion ... a fountain, composed of Majolica ware, at the angles of which are placed small figures of boys on sheep' (Phillips 1854, 117). In any case, the general descriptions correspond neatly to Semper's extant drawings of the court's plan, elevation and templates for ornaments (Nerdinger/Oechslin 2003, 286-7 figs. 71.1-3).

93.3 Five Department medals and one book have been awarded] The Second Report of the Department of Science and Art lists six students who attended Semper's special class for 'Plastic and Architectural Design' as having been awarded medals for works shown in the student exhibition at Gore House in May 1854: John Joseph Brennan (probably the student elsewhere properly spelled Brenan; see 380, Explanatory Notes 90.8), Arthur Crux, Charles Follen, Alexander Pilbeam, Manfred Semper and George Andrew Stubbs (DSA<sup>2</sup>, 204–6). The exhibition presented 114 works by Semper's students, the results of his 'instruction in architectural construction and details in plastic relief ornament, and in the scientific projection of shadows' (DSA<sup>2</sup>, 201). It probably included 'a valuable series of studies from the ancient furniture exhibited last year' (DSA<sup>2</sup>, 209-10; for the 1853 furniture exhibition, see 90.1-6; 380, Explanatory Notes 90.1-4). In a review of the exhibition, The Builder judged that 'The architectural works of the metropolitan normal school (under M. Semper), are very unsatisfactory. It would have been wiser to have kept them out of sight altogether' (Builder 1854a). In a reply signed by the students, who felt 'bound in gratitude to do justice to Professor Semper', a request was made to take into account the fact that the drawings were the result of a period of instruction of 'averaging only six months', in which 'the whole of our class', which 'understood nothing about architecture before they came here', had 'been taught perspective, shadow-construction, tinting, and the principal laws of architecture' 93.6-7 two courses of five public lectures] Semper apparently gave (Builder 1854b). both courses in the autumn of 1854; see 393-4.

## MANUSCRIPT VARIANTS MS 116

*fol. 1r* I. Bezug auf den Rapport v. 1854. Kurzer Aufenthalt der Schüler nachtheilig und erschwert die Arbeit.

Pilbeam der einzige der Ausdauer gezeigt hat und wirklich in kurzer Zeit bedeutende Fortschritte machte. Er war ganz ohne alle Kenntnisse und verliess die Schule nach 1½ Aufenthalt mit Kenntniss der Composition und Verhältnisse so dass er seitdem als Architect Privatarbeiten übernommen hat. Desgleichen der Amerikaner. Follen. – .

Die Abendschüler gehören meistens der arbeitenden Klasse an und beschäftigen sich fast ausschliesslich mit Kopiren der Constructions-Theile. –

Die Arbeiten in Sydenham bei denen ich diejenigen Schüler welche dazu sich bereit erklärten betheiligte, gaben Gelegenheit zu Praktischem.

3) Klassen. Tagesschüler, Abendschüler, Trainingmasters.

1) Klasse. - . Pilbeam, Follen, Semper.

2. Klasse. – . Handwerker. Kopiren von Constructionstheilen.

3 Klasse. – . Trainingmasters Descriptive Geometrie, Ordnungen. zu sehr beschäftigt. Trockenheit des Stoffes, zu weit vorgerückt in den übrigen Theilen der Kunst und zu weit zurück in den materiellen Kenntnissen..

### Sir.

The System of instruction pursued this Year in  $r^{\circ}$ ). the class for practical construction, Architecture and plastic Decoration was based on the principles noticed in my report fothe Year 1854 and has undergone since then only some modifications according to circumstances. and to the different classes of Students which ||

fol. 2r

The System of instruction pursued this Year in the Class for practical construction remained generally that specified in my report for the Year 1853 but with some modifications according to the special applications of the students. I have three distinct classes of students under my instruction each of which requires its own method of instruction. r° the day students 2°) those who attend only the Evenings. 3°) the training masters. Of these three classes the first named only which consists of Students of architecture properly speaking enables me to apply in some degree that method of instruction which I practised for many years past at the Royal Academy at Dresden, combining theoretical and aesthetical instruction with real practice, that is to say with the employment of the Students for copiing plans of buildings and other architectural works in curse of execution, making estimates for carriing out details and working drawings etc. That time I had full opportunity of carring out

388.1 1854.] before del. Fortsetzung desselben Systemes UnmöglichkeitKurzer Aufent-halt] after del. Wunsch eines systematischen Kurses.Wunsch eines] undel. after del.Einige Schüler haben.388.4 1½] 1½-jährigem'; above del. einjahrigem388.10 bethei-ligte] after del. beschaf388.14 Descriptive] after del. Construc after del. Perspective388.15 zu weit vorgerückt] after del. vorgerücktes Geschicklichsein388.16 Kenntnis-sen] after del. Theilen388.17 Sir.] after del.388.17 del.

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Sir. – In making my report on the state and general working of the Class for Practical construction, architecture and plastic Decoration I refer to the

388.18 this Year] interl. before del. by myself 1°).] inserted 388.19 was based] after del. has been explained in my report of the Year principles] after del. same and before del. which I had the honour to explain to noticed] after del. I fothe] 'for the' 388.21 and] after del. The course of instruction to] interl. 388.22 The System] after two del. variant beginnings:

The system instruction<sup>1</sup> pursued this Year in the class for practical construction was based on the same principles noticed<sup>2</sup> in my report for the Year 1853<sup>3</sup> (mit Ausnahmen) The system of instruction pursued this year in the class for practical construction was generally. based on the same priniples<sup>4</sup> specified in my report for the Year 1853.<sup>5</sup> I have three<sup>6</sup> distinct<sup>7</sup> classes of students under my instruction, 1° the day students 2° those who attend only in the Evening 3° the training masters. It was only<sup>8</sup>

I system instruction] system above del. system of 2 noticed] after del. which I had laid before 3 1853] 3 over 4 4 priniples] 'principles' 5 1853.] altered from ~^ before del. with some modifications according to circumstances. 6 I have three] after del. The after del. As for the method 7 distinct] above del. different 8 It was only] after del. Of these

388.24 **special**] *altered from* specialities applications] interl. after interl. and del. and **the students.**] *altered from* ~ ~^ *before del.* who attended my class. They 388.25 method 388.26 1º] after del. 1º the Day students who are generally studiing after del. treatement architecture as an art. and architecture] *before del.* as their speciality and 388.29 com**bining**] *after del.* consisting of a combination of theoretical and practical theoretical after del. practical 388.30 real practice] after del. practice and making the last the base of the system. I had then a great and] undel. after del. and introducing the students as early as possible into the the last] the *undel*. 388.31 curse] 'course' 388.31-2 making estimates] *interl*. 388.32 etc.] *before del*. which I had the the] *after del*. full That time I had] after del. That time I had after del. I then had after del. This system 388.33 carring] 'carrying'

lating of a Freilles apported by pillers. 3 ming a rigid cystem Example. forthe over the at kichmont in nover Ninginia. Stagramme). ystern, to alis The Inbules be wapted in te - nigil 7 and Juscipfally employed / Victoria bridge 61 the Riger Jystem with acapory ? between the pellars lin rasps . 1 with Generally ) tid you ingloff Per the middle ages was upual The Gothin certain Seloper in lish tio f the. but ruher e deid This France. to ato Hampto Buntifule Prosen, Hawn 1 Itely. heeter medde as main ystew with c/ the rigid , stend an acceptory d. of extension Raphael and atter Brandon an infrance of this conformat in the book intitled the Open is the more of covering the tricher - Roof of the mostle ages cet. Lowon 1849. large that with with Velas suspended on the I with the ai high thates, sarroand my - tuvering above the high eff woraiches of the Wales, Regranding aptation of this

Pl. 11: Draft of lecture on timber construction, 1853 (gta, 20-Ms-136)

# LECTURES

# Introduction

In the lectures he gave at the Department of Science and Art, the successor of the Department of Practical Art, Semper combined two perspectives involving the history and theory of architecture. On the one hand, he was following up on the essay *Die vier Elemente der Baukunst* (The Four Elements of Architecture) of 1851, in which he had condensed his project of a 'Vergleichende Baulehre' (Comparative Architecture), ongoing since the early 1840s; on the other hand, he was reformulating the latter's global approach through his experiences at the Great Exhibition, from which he developed his booklet *Wissenschaft, Industrie und Kunst* (Science, Industry, and Art). All of this was finally incorporated into the two volumes of *Der Stil in den technischen und tektonischen Künsten, oder Praktische Aesthetik* (Style in the Technical and Tectonic Arts; or, Practical Aesthetics) of 1860–63.

Semper's letter of appointment from the Department of Practical Art, dated 11 September 1852, lists under point 3 the lectures he would be obliged to give in connection with his class on 'the principles and practice of Ornamental Art applied to Metal Manufactures' (226.7). The lectures were to include 'occasional public lectures, on the uses to be made of the objects in the Museum, the collection of casts, books, prints, drawings &c in the Library' (226.22–4). During his time at the Department, Semper gave public lecture series in the autumn terms of 1853 and 1854. The lectures indicate that his initial subject area – metal manufactures – rapidly expanded to include the relationship of the industrial arts to architecture.

As was also announced in an advertisement by Henry Cole of 4 March 1853 (which was published several times in *The Athenaeum*), Semper gave the first of his public lectures in London – his inaugural lecture – at Marlborough House on the evening of 20 May 1853. It was entitled 'On the Relations of the Different Branches of Industrial Art to Each Other and to Architecture'. Starting from 11 November 1853, according to the original schedule – which was published on the same date in *The Journal of the Society of Arts* and was announced again in *The Athenaeum* on 12 and 19 November 1853 – five further public lectures were to follow. Both there and in the 'Prospectuses of the Lectures on Art' published in the Department's *Report*, the dates were listed under the general title 'On Architecture, Practical Construction, and Plastic Art Generally'. Lectures were scheduled for the Friday evenings of 11, 18 and 25 November and of 2 and 9 December 1853 (96–7).

In his inaugural lecture on 20 May 1853, Semper announced the programme of the five public lectures planned for the autumn term of 1853 (117.24-39). The stated structure of the public lectures corresponds to that of the detailed version of the programme in the 'Prospectuses of the Lectures on Art': it follows the five-part discussion of architecture tracing the elements of industrial art that Semper had used in 1851 in *The Four Elements of Architecture* (Semper 1851b, 54–6): textile art, ceramic art (including metallurgical works), timber construction (later termed 'tectonics'), stone construction or stereotomy and the combination of these industrial arts in architecture. Semper used the same lecture structure in connection with his proposed reform of art education in Science, Industry, and Art, completed in January 1852 (Semper 1852, 67–8). In the draft of the English translation, the structure reads (gta, 20-Ms-89; see also 261): '1. Art applied to ceramics in its widest meaning. 2. Art applied to Textile Industry 3. Art applied to Carpentry. 4 Art applied to Masonry and Engineering. 5. Comparative Architecture in which the working together of the above mentioned four elements under the Presiding power of Architecture must be shewn.'

Following the printing of the lecture programme for the autumn term of 1853, Semper's public lectures were additionally scheduled for 16 and 23 December, as noted in a table listing the 'Lectures delivered in the course of the year 1853', dated 30 December 1853, in the *First Report of the Department of Science and Art* (DSA<sup>1</sup>, 222–3). As the same *Report* records, these were the dates planned for two public lectures by Octavius Hudson 'On Surface Decoration' (DSA<sup>1</sup>, 221). Another table in the *Report* on the public lectures delivered 'during the Autumn and Winter Session of 1853–4' shows that Hudson gave two public lectures 'On Surface Decoration' on 20 and 27 January 1854, as well as two additional public lectures 'On the Varieties of Lace' on 4 and 11 January 1854 (DSA<sup>1</sup>, 198–9).

There is no programme detailing the additional two lectures and thus the total of seven lectures of the autumn term of 1853. In the *First Report of the Department of Science and Art*, Semper himself sums up his lecturing activity by

stating that he 'delivered in the month of May one lecture, as an explanation of my system, which, in the course of the second session', he had 'been endeavouring to develop in a series of lectures' (91.1–3). On the basis of the dates mentioned and the drafts of Semper's lectures that are held in the gta Archives at ETH Zurich, the following programme can be hypothesized (the titles are taken from the printed prospectuses, except for the lectures of 25 November and 2 December, the titles of which are translated from those given by Manfred and Hans Semper in *Kleine Schriften*, and except for the lecture of 9 December, the manuscript of which includes the title):

20 May 1853	On the Relations of the Different Branches of Industrial Art
•	to Each Other and to Architecture (MS 122, with a rejected
	draft in two versions, MS 118 and MS 117)
11 November 1853	General Remarks on the Different Styles in Art (MS 124)
18 November 1853	The Ancient Practice of Wall Coating and Tubular Con-
	struction (MS 129)
25 November 1853	Classification of Vessels (MS 133)
2 December 1853	On Vessel Parts (MS 134)
9 December 1853	Influence of the Materials and Their Treatments upon the
	Development of Ceramic Types and Style (MS 135)
16 December 1853	On Timber Construction, and Its Influence upon the De-
	velopment of Architectural Forms (MS 136)
23 December 1853	The Combined Action of the Four Preceding Branches of
	Industry in Architecture (MS 138)
<b>T 1</b>	

This structure shows some divergences from the original programme for the autumn term, which was restricted to five lectures. The lecture initially planned for 11 November 1853, devoted to textile art, would have been divided into two lectures, while the one on ceramic art would have been expanded to three lectures. The lecture on timber construction would have been held as the sixth instead of the third, while the lecture on stone construction originally planned as the fourth would have been omitted. Semper does in fact already discuss stone construction at some length in what was to have been the second lecture, on 'Wall Coating'. The final seventh lecture corresponds to the last, fifth lecture in the original programme.

The programme for Semper's public lectures in 1854 is less clear. The prospectus for instruction in art at the Department of Science and Art in the spring term, from 1 March to 31 July 1854, published in *The Athenaeum* starting on 11 February 1854, mentions class lectures but no public lectures relating to his field of teaching. Accordingly, a list of public 'Lectures delivered at Marlborough House from October 1, 1853 to October 1, 1854', dated December 1854 and printed in the *Second Report of the Department of Science and Art*, does not include any lectures given by Semper in the spring term of 1854 (DSA<sup>2</sup>, 162–3). The prospectus for art instruction in the next two terms, from 1 October 1854 to 28 February and from 1 March to 31 July 1855, published in *The Athenaeum* on 9 September 1854 (and reprinted in the Department's *Second Report*; DSA<sup>2</sup>, 123–5), says that Semper would give public lectures 'On Architecture and Plastic Decoration' in each term. However, travels to France and Switzerland, due to his departmental work for the British section at the Exposition universelle in Paris and his prospective professorship in Zurich, most probably prevented him from giving the spring lectures of 1855.

Semper himself notes in his 'Second Report on the Class for Practical Construction, Architecture, and Plastic Decoration' that, in 1854, he 'delivered, in the public lecture-room at Marlborough House, two courses of five public lectures on the different styles of ancient architecture, their distinctions and connexions' (93.6-8). However, drafts of only three lectures for this period are extant in the gta Archives. In accordance with the above-mentioned records of public lectures then given by Semper, they are clearly identifiable for the autumn term of 1854: The draft of the last of these lectures is dated 6 December 1854 (201.19), a Wednesday, and the two other draft lectures (the first of which exists in two versions) directly precede it in terms of content - a connection confirmed by corresponding cross-references. Henry Cole's diary reveals that Semper was staying on the Continent at least from 7 to 13 November and gave a lecture on 22 November 1854 – apparently the date of his first public lecture in the autumn of 1854. This fits in with a weekly lecture rhythm for the extant drafts of these public lectures (the titles of the first two lectures are translated from those given by Manfred and Hans Semper in Kleine Schriften and derived from Semper's draft in the case of the third lecture):

- 22 November 1854 On Architectural Symbols (in two versions, MS 141 and MS 142)
- 29 November 1854 On the Relation of Architectural Systems with the General Cultural Conditions (MS 144<sup>1</sup>)
- 6 December 1854 Explanation of the Expression of Spatial Arrangements in Architecture (MS 144<sup>2</sup>)

The term's remaining weeks in December 1854 would have allowed two more lectures (possibly adding – as promised in both drafts of the first of these lectures – a more extensive discussion of Greek architecture), so that one course of five lectures would have been completed. This suggests, in relation to Semper's two courses of five public lectures, that he gave the same course twice – possibly, as other professors did, in the morning and evening of the same days.

Semper's drafts of the London lectures scarcely reflect the textual state in which they were given. They are mostly so heavily revised that it would hardly

have been possible for him to read from the manuscript while giving the lectures. Several draft lectures have survived only in fragmentary form. Semper most probably revised the drafts not only during the first writing of them but also after the lectures had been held - perhaps with a view to publication. Wolfgang Herrmann has interpreted a list by Semper (gta, 20-Ms-151), possibly drawn up while he was still in London, in this sense - as representing variant titles for a new work. The list includes 'Tectonologische Studien' (Tectonological Studies), 'Vorträge über Baukunst und die in ihr zusammenwirkenden technischen Künste' (Lectures on Architecture and the Technical Arts Combined in It), 'Culturgeschichtliche und kunsttechnische Studien über Baukunst mit Holzschnitten und farbigen Tafeln illustrirt' (Cultural-Historical and Art-Technological Studies on Architecture, Illustrated with Woodcuts and Coloured Plates) and a 'Handbuch der Tectonologie' (Handbook of Tectonology). These titles may perhaps also reflect an attempt by Semper to organize the lecture material in accordance with his project for the book 'Comparative Architecture', regarding which he resumed contact with his publisher Eduard Vieweg in summer 1855, after he had already settled in Zurich. Semper wrote to him that 'I held lectures in the Department of Science and Art on comparative theory of forms, emphasizing specific aspects of industrial art'.

One of the most intriguing issues in Semper's London lectures concerns the relationship between architecture and the arts of Western peoples and the rest of the world. He made it a special topic in his first published essay – in German – on 'The Great Exhibition', in which this topic is addressed with the subtitle 'The peoples of European and non-European culture' (20.29). Semper is genuinely committed to doing justice to the particularities of non-European peoples as he sees them expressed in their artistic production. With regard to the handling of ornament in the industrial arts, he speaks in *Science, Industry, and Art* of 'the recognized victory which the semi-barbarian peoples, above all the Indians, had over us in some points of their magnificent industries of art', compared to which 'we have as yet achieved little on these points with our science' (Semper 1852, 11). However, as becomes evident here and in his lectures, this superiority of non-Europeans is at most a partial one. For Semper, it is left to European science and culture to assemble the fragmentary elements scattered across the world into a higher unity with a global scope.

**BIBLIOGRAPHY** Pevsner 1972, 260–2; Herrmann 1978, 78–80; Herrmann 1984, 71–3; Mallgrave 1996, 216–18

# **Prospectuses of the Lectures on Art**

#### TEXTUAL RECORD

DSA<sup>T</sup> 'Appendix F.III.(j.)', in *First Report of the Department of Science and Art*, London: Eyre & Spottiswoode for Her Majesty's Stationery Office, 1854, 218–21, here 220–1 (NAL, 97.PP.83), *copy-text* 

**BIBLIOGRAPHY** Herrmann 1978, 78 nn. 287–8; Herrmann 1981, 108–9, 111–12; Herrmann 1984, 278 n. 267, 279 n. 269

#### **EXPLANATORY NOTES**

Under the title 'Prospectuses of the Lectures on Art', 'Appendix F' to the First Report of the Department of Science and Art lists several of the public lectures planned for the period between April 1853 and January 1854, including six lectures by Semper. The details given for Semper's lectures certainly derive from Semper himself. A draft by Semper for the first public lecture of 20 May 1853 has a German title (97.6-7) that corresponds precisely to the English title given in the 'Prospectuses of the Lectures on Art'. In an advertisement dated 4 March 1853, Henry Cole announced Semper's inaugural lecture under this title (printed in The Athenaeum on 9, 16 and 23 April 1853): 'May 20. - A Lecture on the Relations of the different Branches of Industrial Art to each other and to Architecture, will be delivered by Professor Semper.' An advertisement in *The Athenaeum* on 14 May also indicates the time for the start of the lecture (6 p.m.). In a table of 'Lectures delivered in the course of the year 1853' dated 30 December 1853 that was printed in the same 'Appendix F' (DSA<sup>1</sup>, 223), this lecture is listed under the title 'On architecture and its relation to industrial arts'. The details of the five other lectures given by Semper were probably published in a separate brochure. In newspaper advertisements, only the general title of Semper's lecture series was given along with the dates, as in The Journal of the Society of Arts, which announced on 11 November 1853 – the day the series started – that Semper would be giving five lectures 'on Architecture, Practical Construction, and Plastic Art Generally' on Friday evenings from 11 November to 9 December. This information was repeated in The Athenaeum on 12 and 19 November. As explained in the introductory section (392-3), the lecture programme for the autumn term of 1853 that is given in 'Appendix F' differs from the actual series, with its two additional lecture dates.

96 Prospectuses of the Lectures on Art] title taken from DSA<sup>I</sup>, vi, 218 96.1 Architecture.] subtitle taken from left margin in DSA<sup>I</sup>, 220; see next note 96.3-4 On the relations ~ to architecture. By Professor Semper.] accompanied in left margin by 'Professor Semper. Architecture.' 96.6-8 On Architecture ~ Five Lectures. By Professor Semper.] accompanied in left margin by 'Professor Semper. Architecture, &c.' 96.23 thbular] *tubular* 96.28-97.2 Lecture V. ~ these examples.] accompanied in right margin by 'Appendix F. — Prospectus of Lectures on Art. — Architecture. &c.' 96.29 architecture] *architecture* 

# On the Relations of the Different Branches of Industrial Art to Each Other and to Architecture

# **First Version**

### **TEXTUAL RECORD**

MS 118	gta, 20-Ms-118, fols. 11-4v, 'Entwurf zu den Vorlesungen über die Bezie-
	hungen der verschiedenen Zweige der industriellen Kunst zu einander und
	zur Architectur' (1v calculations and sketches probably for Semper 1859), in
	Semper's hand, <i>copy-text (97.6–19, 98.6–1</i> 00.11)
MS 161	gta, 20-Ms-161 (Konv. 7), *fol. 73r-v (one preceding sheet missing at least;
	72r-v, 73v calculations and sketch probably for Semper 1859; in a manuscript
	relating to Semper 1859), in Semper's hand, <i>copy-text (97.20–98.6)</i>
MS 1231	gta, 20-Ms-123, **fols. 1r-2v (2r-v blank), in Semper's hand, copy-text
	(100.11–32)
MS 121	gta, 20-Ms-121, fols. 11–11v (all versos except 3v blank), partly in Hans Sem-
	per's hand (1r-2r, 4r-11r; two emendations in Manfred Semper's hand),
	partly in Manfred Semper's hand (3r-v), early 1880s, Hans and Manfred
	Semper's German trans. of MS 118, fols. 2r–4r (additional sections: German
	trans. of MS 117; see 403), published in Semper 1884; see Herrmann 1981,
	109
Semper 1884	'Ueber das Verhältnis der dekorativen Künste zur Architektur', 344-50,
	German trans. of MS 118, fols. 2r-4r (additional sections: German trans. of
	MS 117; see 403); for details of this composite translation, see Herrmann
	1981, 168–70

**BIBLIOGRAPHY** Herrmann 1978, 78–80; Herrmann 1981, 108–10, 169; Herrmann 1984, 71–3; Mallgrave 1996, 217; Hildebrand 2021, 116 fig. 7, 117

### **EXPLANATORY NOTES**

Manfred and Hans Semper combined parts of manuscripts MS 118 and MS 117, which correspond to the first and second versions of Semper's inaugural lecture, into a single text, the German translation of which they published in *Kleine Schriften* under the title 'Ueber das Verhältnis der dekorativen Künste zur Architektur', describing it as a 'Lecture, given in London in 1854' (Semper 1884, 344 n. \*). Wolfgang Herrmann correctly assumed that these two manuscripts refer to the lecture Semper gave on 20 May 1853 (Herrmann 1981, 108). However, he did not notice that manuscript MS 122 represents a third version of the same lecture – namely the one that Semper actually delivered (see 410, 426).

The first version (MS 118) is clearly identifiable from the fact that the first third of it is written in German. Its title, 'Entwurf zu den Vorlesungen über die Beziehungen der verschiedenen Zweige der industriellen Kunst zu einander und zur Architectur', corresponds to the English title of the lecture given on 20 May 1853 that appeared in the 'Prospectuses of the Lectures on Art' (see 96.3–4). The subtitle 'Erste Vorlesung' (First Lecture) indicates that Semper regarded this lecture and the lectures given in the autumn term of 1853 as a coherent series. The first version is fragmentary: it includes only an incompletely preserved introduction (97.10–100.18) and two paragraphs of the main part (100.20–32). In addition, three manuscript pages archived in other document bundles can also be assigned to it, whose connection with it was not yet recognized by Herrmann (97.20–98.6, 100.11–32; see Herrmann 1981, 109).

Semper begins the introduction to the first version of his lecture with the principle established by Owen Jones and adopted by the Department of Science and Art that 'The decorative arts arise from and should properly be attendant upon Architecture' (97.11–14; see below, Explanatory Notes 97.11–12, 97.13–14). He takes up a position critical of this principle: even if 'the individual arts' could find 'an external bond and a route towards a common artistic effect' through architecture (98.3–5), it would nevertheless be the case – as he demonstrates on the basis of descriptions in Homer and Hesiod of early Hellenic industrial works of art and buildings (98.23–30, 99.5–18) – that 'the forms and rules of architecture' can be traced back to 'those practised long before in the more specialised branches of practical art' (98.15– 17). He therefore states that the plan of his lecture course is to discuss 'the relations of the different branches of practical art' first and then 'their combination in architecture' (97.20– 2). Semper abandoned this draft after two paragraphs of the main part. Apart from the fact that he needed to draft the entire lecture in English, he may have felt that the firmness with which he stated that his view 'may ... appear contradictory to the principle' set out by Owen Jones (100.16–17) was too provocative.

97.11-12 The decorative arts ~ upon Architecture] With a few divergences in orthography and punctuation, this principle corresponds to the first of thirty-four propositions that Owen Jones discussed on 3 and 7 June 1852 in a lecture – given twice – on the collection of the Museum of Ornamental Art (see CatM<sup>1</sup>, 10). In a printed summary of the lecture, the proposition reads (Jones 1852b, 1): 'The Decorative Arts arise from, and should properly be attendant upon, Architecture.' Jones had already presented propositions 11 and 14-34 to the Society of Arts on 28 April 1852 (Jones 1852a, 7-12), and he repeated most of them in The Grammar of Ornament (Jones 1856, 4-6). The Department of Science and Art in turn printed propositions 1-11 and 14-33 in 'Appendix D' of the fifth and sixth editions of the catalogue of the Museum of Ornamental Art (CatM<sup>5</sup>, 118-20; CatM<sup>6</sup>, 96-8). 97.13-14 Dieser Satz steht an der Spitze der ~ Grund Regeln, welche das Departement ~ aufgestellt hat.] In a deleted passage in the second version (MS 117), Semper describes Owen Jones's principle as 'the first of those who are fixed on the walls of the Marlborough-House' (404, Alterations in the Manuscript 101.4). These principles probably corresponded to those printed by the Department of Science and Art in 1854 under the title 'General Principles of Decorative Art' in 'Appendix B' of its *First Report* (DSA<sup>1</sup>, 22-4). 97.13 Grund Regeln Grundregeln 97.15 nachdachte] nachdächte 97.18 konnte] könnte 97.24-5 sie nach dem vergleichenden Prinzipe in Arten, Geschlechter und Familien gruppiren] This grouping resembles zoological classification and is probably inspired by Georges Cuvier's comparative anatomy, which Semper regarded as a model for comparative architecture (see 105.26-37, 118.19-28).

98.18-23 There was a rich industrial art ~ before the invention of architectural forms ~ Domestical industry ~ furnished ~ trinkets.] cf. Semper 1852, 31 = 98.24-6 Homer and Hesiodus, whose brillant Descriptions ~ are ~ formed upon things, they had seen **before their eyes**] cf. Semper 1860/63, 1:130, 161 n. 1, 234, 275-6, 287, 304 n. 1; 2:76, 487 n. 2, 576 n. 2 98.36 **Mihel Angelo**] *Michelangelo* 

99.1 Thorwaldson] In 1830, during his first study visit to Rome, Semper lived 'in via Gregoriana no. 17, near Thorwaldson' (gta, 20-K-1830-12-03[S]), and he probably also became acquainted with the Danish sculptor during the stay. In 1857, there was a portrait of (or a reproduction of a work by) Bertel Thorvaldsen hanging in Semper's study in Zurich (gta, 20-K-1857-12-08[S]; see 545, Explanatory Notes 213.16). Flaxmann] cf. Semper 1852, 54-5, 62; Semper 1860/63, 1:XIII Schwanthaler] Semper informed Henry Cole on 11 October 1852 that he had been offered 'a Copy of the Shield of Hercules, composed and executed by Schwanthaler in Munich' (81.38–9). 99.2 rang] derived from German Rang: rank (see 99.9 with fireplaces] The two manuscripts of the first version (MS 117, MS also 100.30) 119), in which the discrepancy between the luxury of the industrial arts and primitive architecture is also discussed, state the opposite: 'no fireplaces' (101.37, 406.27). 99.15 tent of Achilles] cf. Homer, *Iliad*, 24.448–56 99.16 Pallace of Priamus] cf. Homer, Iliad, 6.242-50 99.17 Pallace of the King of the Phaeaks] 'Phaeaks': Phaeacians; i.e. Alcinous's palace; cf. Homer, Odyssey, 7.78–133; Semper 1860/63, 1:302 n. 1 99.18 dwelling of Ulissees': Ulysses; cf. Homer, Odyssey, 17.264-71 99.30 reciets possibly Semper's anglicization of French récits or a misspelling of English recites (obsolete by the end of the eighteenth century), which both mean narratives; cf. 401, Alterations in the Manuscript 99.30

100.10-14 This column ~ shows flowers ~ in the same manner as ~ hairdresses.] cf. Semper 1860/63, 1:211, 420-1 100.20-32 As I was ~ a Student at Paris, my usual walk was to the jardin des plantes ~ the same ~ will be the case with the works of my art.] Semper revised and enlarged this reference to Georges Cuvier's Cabinet d'Anatomie comparée in the third version of his inaugural lecture (105.1-31).

## ALTERATIONS IN THE MANUSCRIPT

97.13 Dieser Satz] after five del. beginnings of variant:

This principle, which forms the

Dieser Satz<sup>I</sup>, der an der Spitze der Grundprincipien<sup>2</sup> steht, welche das Departement der praktischen Kunst

Dieser Satz<sup>3</sup> der an der Spitze der<sup>4</sup> für das Department aufgesetzten Grundprincipien der praktischen Kunst, steht,<sup>5</sup> veranlasste<sup>6</sup> mich,<sup>7</sup> zu diesem Versuche, den ich den verehrten Hörern in dem Laufe weniger Vorlesungen mitzutheilen veranlasst worden bin – Nur die Zuversicht, die ich auf Ihre gastfreundliche Nachsicht setzte, konnte mir den Muth geben, Dieses Prinzip<sup>8</sup> ist Ihnen wohlbekannt, es steht

Sie wissen, meine Herren.9

I Dieser Satz] after del. So 2 Grundprincipien] after del. für das Departement als Norm des 3 Satz] after del. erste and before del. in den 4 der an der Spitze der] inserted 5 steht,] inserted 6 veranlasste] after del. erweckte in mir den Gedanken, dasjenige, after del. gab mir die erste Veranlassung, die folgenden [] 7 mich,] before del. das folgende das folgende] after del. dasjenige, 8 Dieses Prinzip ~ steht] inserted in opposite column 9 Sie wissen, meine Herren.] inserted in opposite column after inserted and del. Sie 97.13 wenigen Grund Regeln] *repl. del.* Grundprincipien Grundprincipien] *after inserted and del.* Grund- Grund] *interl.* 97.14 Doch jeder] *after del.* Doch fühlt *after del.* 

Er<sup>1</sup> bedarf, in der gedrängten Kürze und Allgemeinheit wie er hingestellt ist, naherer Durchführung um in seinem ganzen Inhalte verstanden und anwendbar gemacht zu werden, und freilich auch um zu verhindern, dass

I Er] repl. del. Er ist sehr inhaltreich und Er] after del. Er ist so inhaltreich

97.16 in seiner] after del. erstens 97.17 **Consequenz**] *after del*. Ausdehnung praktisch anwendbar] after del. für die Anwendung 97.18 zu denen er führen] after del. zu denen nicht] *after del*. absoluter 97.22 dann] repl. del. und zuletzt er bei nicht hinreichend 97.23 die Werke] after del. das so entstandene Resultat, auf] interl. 97.23-4 **als die** 97.24 behandeln] after del. unter sich vergleichen repl. del. als als] *after del*. unter sich. und ihre Verwandschaften und Unterschiede 97.27 ersten] inserted 98.1 Die Baukunst] after del.

nämlich<sup>1</sup> dass die Baukunst wohl ihrem Namen nach und in vieler Beziehung auch der Sache nach die erste der Künste, die Urkunst ist, dass sie aber unter allen Künsten.

## I nämlich] after del. Ich meine

98.1 als Urkunst] after del. und ist auch in der That 98.2 Beziehungen,] before del. besonders in der 98.3 brauche.] *before del*. Dazu gehört finden] repl. del. fanden 98.5 eigentliche] below del. höchste [K] 98.6 ist die Baukunst] after del. sind die Werke der hoheren Baukunst des after undel. on \*fol. 73r ist 98.7 praktischen Künste] after del. 98.8 und artistischen Elemente] after del. und Formen, dieselben Gesetze Künste 98.11 der übrigen Zweige] after del. der Formen und Verzierungen, auf die Behandlung der Stoffe 98.13 Entlehnten die übrigen Künste] after del. Entlehnte die Baukunst ihre Processe der Behandlung ihrer Stoffe, ihre Formen und Ornamente von Behandlung] 98.17 Sicher das letztere. -] before del. *after del*. stoffliche

Dieses in speziellen Beispielen<sup>1</sup> nachzuweisen, wo immer sich spätere Gelegenheit dazu darbietet, behalte ich mir vor – halte<sup>2</sup> diese Aufgabe für die wichtigste die ich mir stelle –

I Dieses in speziellen Beispielen] repl. del. Dieses Dieses] after del. So weit es die Zeit after del. Dieses after del. Dieses im Einzelnen nachzuweisen und die Elemente der Baukunst 2 halte] after undel. ihre after del. es after del. ich halte diess für eine der wichtigsten Aufgaben after del. es wird zu

98.18 There was a rich industrial art and *inserted* 98.19 the invention after del. monumental Architecture and monumental] after del. architecture as a monu 98.24 the **lonic poets**] *after del.* Homer, whose descriptions of the tent the whose] after del. so it descriptions] *after del.* practical brillant Descriptions] after del. descriptions of was the camps baracks descriptions] *after del*. well 98.25 **hellenic** *above del.* art industrial art,] *before del*. howerver poetically th 98.26 **no doubt**] *above del.* certainly eyes;] altered from ~, before del. and and] after del. although embellishe after del. however 98.28 **be mere**] *above del*. invent inventions of their rich imagination] above del. them entirely 98.29 In this case] after del. they would not have been understood by their hearers. art] *repl. del.* artful inventions 98.32 **modern**] *inserted after del*. the practice before del. of our times 98.33 Greec] repl. del. Renaissance of art] *interl*. occupied] below del. influenced the greatest talents] after del. these artists who were the most powerfull 98.34-5 Phidias ~ at Athens] inserted with caret erroneously placed after the artists (98.33) 98.35 Leonardo da Vinci] before del. Michel Angelo 98.34 **Parthenon**] *after del*. Acr[0] who decorated] after del. who painted a beautiful shie 98.36-7 in many of his powerfull **compositions**. *inserted* 98.37-8 are attributed to] repl. del. go under the name of 98.38 whose] se *added* **name got** *inserted after del.* got

99.1 Schwanthaler.] after del. and 99.2 did more] after del. tried and succeeded to introduce *after del.* succeeded to influence greatly the 99.5 **buildings**] *above del.* architectural 99.6 state] before del. of architecture **no**] *repl. del.* the absence of works 99.6-7 **monumental architecture**] *before interl. and del.* at all 99.7 **organic laws**,] *before undel*. barraks, court-Yards, Halls, Halls] *after del.* coarse 99.7-9 Luxury ~ ornamental] 99.9 with] after del. and inserted 99.8 **barraks**] *after del.* all ornamental parts, 99.10 **partly of**] partly *above del*. greatly 99.11 moveable] interl. 99.13 give] after del. be 99.14 matter for] *after del.* stuff of usefull reflexion] after del. contemplation 99.20 **Greec mythology**] *after del*. The Ionic poets, of the Greec] *interl*. 99.22 **The** *inserted* the foundators of the foundators] merged from Italian 'fondatori' and English 'founders' **an**] n added ingenious] inserted before del. compound of 99.23 and so to speak ~ plastical] *repl. del.* out of a dead 99.24 **borrowed from**] *after del*. introduced from t[h] 99.29 representations] repl. del. objects 99.30 reciets] after del. compositions 99.33 But] after del. It would conduce to for if I would and before del. We shall see in one of the to for] 'too far' in one of the] *after del*. toward the end of o[n] 99.38 Many thousand Years before we see] inserted the Greec] after del. While making their first steps] repl. del. were in the infance 99.39 national] after del. their 100.1 **following its**] *after del.* forming their **Nevertheless**] *after del.* However it mey be,

 100.1 following its] after del. forming their
 Nevertheless] after del. However it mey be,

 100.3-4 originally borrowed from] after del. originating from
 100.4 industrial art,]

 altered from ~ ~. before del.
 100.4

It will not yet be in time to give<sup>1</sup> the caracteristics of the different styles in architecture<sup>2</sup> but You may see<sup>3</sup> here by some details taken from Egyptian monuments of the eldest periods, that the ornaments are mere applications and based<sup>4</sup>

I give] above del. explain2 of the different styles in architecture] repl. del. of Egyptian Assyrian and Chinese art, or to3 You may see] after del. as an illustrative example4 and based] after del. hiding the after del. fixed on t[h]

100.5 **ornamental**] *repl. del.* practical 100.7 **to**] *del*. penetrate deeper in this question analysing] above del. giving by analysing] repl. del. give 100.7-8 the different styles of architecture] *inserted after del.* the caracteristics of the] *undel*. caracteristics] after del. different and before del. of Aegyptian, Assyrian and other styles of] inserted 100.9 **pure structure**] *repl. del.* construction is] del. before del. only only] before del. forms, given by constructiv parts are **veiled by**] after del. disguided b 100.12 evidently *interl*. only] after del. not 100.15 l thought] after five del. beginnings of variant: It may be possible to As I was a Student at Paris it This for apologizing for the system which I adopted for this paper These remarks wer I thought these few Remarks necessary for the apology of the plan<sup>1</sup> which I adopted by treating the difficult and rich material which forms

> I plan] *repl. del.* System and the order System and the order] *after del.* order *after del.* System which I adopted

100.17 **I alluded to**] *after del*. I have placed on the head of 100.20 my usual walk] after *del*. I used to walk l used] *after del*. it was my 100.22 like] above del. as 100.23 fore**gone formations of the earth**] *repl. undel.* animals animals] *above del.* vorweltlichen Thiere (vorweltlichen Thiere repl. del. Vorwelt) together] *after del*. are ordered 100.24 carcasses of] before del. Stone **species**] *above del.* creatures stand *repl. del.* are 100.25 comparation.] before del. by the celebrated inventor of the comparing Osteology, by ~ Cuvier] after del. as all these various formations and before del. are but differ-Cuvier ent variations and developments of some few (as after del. Like and before del. in) 100.26 As all] after del.

As all<sup>1</sup> those antedeluvial and postdiluvial organic formations are but different developments of the same principles, as<sup>2</sup> Nature, for its<sup>3</sup> infinite rihness<sup>4</sup> variety and originality of <sup>5</sup> creations, is nevertheless very sparing and simple in its elementary forms, <sup>6</sup> from<sup>7</sup> which the different species are derived so the same.

I **all**] *after del*. the infinite variety of 2 **as**] *after del*.

as Nature for the infinite richness is very simple and sparing in its elementary forms

richness] *before del.* in creating *before undel.* millions of different species, (millions of different species *repl. del.* new forms) forms] *after del.* ideas,

3 **its**] *above del.* the 4 **rihness**] *'richness*' 5 **of**] *repl. del.* in its 6 **forms**,] *before del.* so I sayd to myself, the same the same] *after del.* there must be some anological 7 **from**] *repl. del.* to

100.26 **organisations**] altered from organic before del. formations 100.28 **ideas**,] before del. the same, will be the case with our human creations same,] before del. I told to myself **observe**] above del. see 100.28–9 **the same scaffolding**] after del. in all the most different after del. the same sceleton after del. a repetition of 100.30 **rang**] after del. gradual **which**] above del. of of] after undel. of the after del. which the imdividuals possess in the (second the undel. and imdividuals after del. creatures o) **universal creation**] after del. scale of gradual progress 100.32 **my**] above del. human

# Second Version

### **TEXTUAL RECORD**

MS 119	gta, 20-Ms-119, fols. 4r–5v, 1r–3v (all versos with calculations and sketches possibly for Semper 1859), in Semper's hand
MS 117	gta, 20-Ms-117, fols. 11-6v (all versos blank; 2r, 3r, 4r, 5r variant of MS 119,
	fols. 5r, 1r, 2r, 3r; 6r variant of MS 119, fols. 4r, 5r), in Semper's hand, <i>copy-text</i>
MS 120	gta, 20-Ms-120, fols. 11-6v (5v-6v blank), in J. Ruston Palen's hand (emend-
	ations in Manfred Semper's hand), 1880, copy of MS 117
MS 121	gta, 20-Ms-121, fols. 17-11V (all versos except 3V blank), partly in Hans Sem-
	per's hand (1r-2r, 4r-11r; two emendations in Manfred Semper's hand),
	partly in Manfred Semper's hand (3r-v), early 1880s, Hans and Manfred
	Semper's German trans. of MS 117, fols. 1r–6r (additional sections: Ger-
	man trans. of MS 118; see 397), published in Semper 1884; see Herrmann
	1981, 109
Semper 1884	'Ueber das Verhältnis der dekorativen Künste zur Architektur', 344-50,
	German trans. of MS 117, fols. 1r–6r (additional sections: German trans. of
	MS 118; see 397); for details of this composite translation, see Herrmann
	1981, 168–70

**BIBLIOGRAPHY** Herrmann 1981, 108–9, 168–70; Mallgrave 1996, 217; Squicciarino 2009, 401–3; Gnehm 2020, 30–2

#### **EXPLANATORY NOTES**

The second version of Semper's inaugural lecture is not complete in itself, as Wolfgang Herrmann thought (Herrmann 1981, 109), but is limited to the introduction. With several modifications, it takes over from the first version only the part referring to Egyptian, Assyrian and early Hellenic architecture as described by Homer and Hesiod (101.18-37, 102.6-12, 102.21-31). In the second version, Semper again starts from Owen Jones's principle that 'The decorative arts arise from and should be attendant upon Architecture' (101.3; cf. 398, Explanatory Notes 97.11-12). As in the first version, he takes up a critical position towards this principle by insisting on 'its true meaning', on the correct interpretation of it (101.4-5). Whereas in the first version he confines himself to the remark that architecture gave the various arts 'an external bond and a route towards a common artistic effect' (98.4-5), in the second version he adds to this the view that 'The laws of beauty and style which we aknowledge in practical art and in art generally speaking, have first been fixed and systematically settled by architects' (101.10-11). But this contradicts the statement implying the priority of the industrial arts, that 'the rules and laws of beauty and style ... were determined and practised long before the existence of any monumental art' (102.29-31). This contradiction reflects Semper's diagnosis that architecture - as the second version concludes - had lost its supremacy, which could be regained only by giving renewed attention to the 'present state of Industry', that is, to 'practical art' that needs to be reformed (103.28–31). Semper's rejection of this second version as well may be explained by the fact that he now regarded even a direct reference to the Department's principle as being too provocative.

Another fragmentary manuscript of the second version has been preserved (MS 119; 406–7). It corresponds almost exactly to three-quarters of the later manuscript (MS 117) but is structured differently: the first three parts (406.1–10) correspond to the end of MS 117 (103.24–34), while the rest (406.11–407.34) appears at an earlier point in MS 117 (101.18–103.14).

IOI.I-2 1° Some excuses ~ etc.] This shortened heading may be a relic of a lecture 'On the present state of practical art', the fragmentary draft of which (gta, 20-Ms-93) starts with the crossed-out words 'Some excuses and introductory remarks, first relative to the difficulty I must feel to read an English paper' and continues with the following sentences in their place: 'I. Some Excuses relative to the ambarrassement I must feel to read a paper in English before the high committe. 2°) Some introductory remarks about the plan and aim of the intended exhibition.' If 'the intended exhibition' refers to the furniture exhibition that the Department of Science and Art held in Gore House in 1853, which is probable (see 411), then the reference to 'the high committe' is to the Royal Commission for the Great Exhibition. 101.3 The decorative arts ~ upon Architecture.] see 398, Explanatory Notes 97.11–12. This sentence differs from the corresponding one in the first version (97.11-12) in that 'should properly be' is reduced to 'should be'. 101.4 **bee**] be 101.18–19 Luxury dwelt in simple tents ~ before the invention of architectural forms.] see 398, Explanatory Notes 98.18-101.21-3 The descriptions ~ are ~ based upon real things.] see 398-9, Explanatory 23 Notes 98.24-6 101.36 cowered covered 101.37 no fireplaces] see 399, Explanatory Notes 99.9

102.1-2 Homeric dwellings] see 399, Explanatory Notes 99.15, 99.16, 99.17, 99.18 102.4-5 I refer for this to ~ Mr Layard ~ in his travels in Mesopotamia.] cf. Layard 1851, 69-71 102.14 deviding] *dividing* 102.21-7 Again if we look at the Aegyptian columns ~ we recognize ~ flowers ~ in the same manner as ~ Hairdresses.] see 399, Explanatory Notes 100.10-14

103.14 then] *than* 103.16–23 At the end ~ things. - .] crossed out in thin pencil probably by Hans Semper or Wolfgang Herrmann and omitted in Semper 1884, 350; cf. Herrmann 1981, 170 103.26 loose] *lose* 

### EDITORIAL EMENDATIONS

101.2 etc.] before one-quarter page blank

## ALTERATIONS IN THE MANUSCRIPT

101.2 **feel**] before del. of of] over to 101.4 **This principle**,] before del. in ink over pencil which is the first of those who are fixed on the walls of the Marlborough-House, **bee**] transposed by guide line in ink over pencil from after freely at 101.4 101.5 relations,] repl. del. intimate connections 101.6–7 in the choice of forms and colours.] transposed by guide

line in ink over pencil from after hands at 101.7 101.6 in the] in pencil repl. del. in pencil by 101.10 **in art**] *after del*. generally 101.11 **first**] *after del*. the **fixed**] *before del.* and settled 101.12 The] T in pencil over t seems] after del. gives us 101.13 Nevertheless] transposed by guide line in pencil from before The History at 101.12 101.15 **A.**] inserted **Firstwefind** after del. First we find that the periods in which the arts in general and the so called industrial arts especially had arrived to a high degree of Development, 101.20 Homer altered *in pencil from* Homeros 101.21 **Hesiod**] *altered in pencil from* Hesiodos 101.23 **based** above del. traced 101.23-4 by that liberty which poets take] transposed by guide line in pencil from after richness of these objects, at 101.24-5 101.25 **but**] after del. in pencil and have, **had no**] *in pencil above del. in pencil* been effect] after del. in pencil without and both above del. effectless 101.29 alltogether,] transposed by guide line in pencil from after prouve at 101.29 101.31 arrangments.] before del. Architecture had not yet reached to that state, where it stands as an independant art for itself.

102.1 might here be drawn if time allowed] *interl*. 102.2 which before del. in pencil still **own**] *interl. in pencil* 102.3 Orientals] before del. would be here on its place if it was permitted by time nations] *interl*. 102.5 of interl. in pencil an account] interl. in pencil **his travels**] *after del. in pencil* the report on 102.6 Greeks] k in pencil over c were in this stage] *in pencil repl. del. in pencil* stood on that step 102.7 ancient] repl. del. 102.10 **Thebes**] s *in pencil over* n **undoubted**] *above del*. doubtless old 102.13-14 materials for ~ room,] *repl. del.* Divisions of space, 102.15 for their] after del. to make 102.19 **history**] *above del.* system system] after del. whole begins and *inserted* 102.20 **motive**] ve *in pencil above del. in pencil* f 102.21 Again inserted in pencil if] i in 102.25 Lottusplant] first t added thrust] in pencil repl. del. in pencil stick pencil over I stick] *altered in ink from* stickt **capital**] second a over e 102.28 A great part] after del. A great part of the forms used in Architecture, took origine in the works after del. A part Architecture,] *before del.* and the laws of beauty and proportion origine] after del. their thus] *after del*. are **originate**] *altered from* originating 102.30 determined and insert**practicised**] *repl. del.* practised **long**] *before del.* time 102.34 **B**. *inserted* 102.35 that the periods *after del*. that it shows 102.37 **or**] *above del.* and industrial *in pencil* above del. in pencil practical 102.38 In inserted **relation**] *altered from* relations *after del*. on fols. 4r and 5r state || of state] *del. in ink* of] del. in pencil 102.39 directly the opposite of what has been described] repl. del. to be the inverse of the first

103.1 pointed] transposed by guide line from after Gothic at 103.1 103.2 dependant ant 103.3 **decorative motives**] *above del.* motifs of decoration above del. ing 103.3-4 con**struction.**] *altered from* ~^ *before del.* more than 103.5 **ogee**] in pencil above del. in pencil 103.6 became] before del. even motives] ves above del. fs gargussed 103.7-8 the dominant influence ~ downwarts even to the] repl. del. the pointed style governs even the even] *undel*. the *before del.* arts of the 103.7 **dominant**] in pencil above del. in *pencil* hierarchical 103.8 **bootsmaker**] *altered in pencil from* bootsmaker's 103.12 archi-103.13 upheld] above del. beheld **tectonic**] *altered from* architectonical 103.14 furni**tures**] *altered from* furniture *after del*. Arc[h] 103.15 to] in pencil repl. del. in pencil for 103.16-23 At the end ~ things. - .] crossed out in thin pencil probably by Hans Semper or Wolfgang Herrmann (cf. 404, Explanatory Notes 103.16–23) 103.16 the empire] after del. an other principle to be we see] after del. which is 103.17 and especially] repl. del. namely] after del. in pencil and guided] after del. in wich it was and before del. namely only and repl. del. on fol. 5r influenced only 103.19 allso] interl. 103.22 stone,] altered from  $\sim_{\wedge}$  before del. and plaster and architects adopted forms, which accompanied by probably Semper's own note in ink imesforms, which] before del. were first intended to be **can**] *after del.* can be justified if ex executed in Porcelain 103.24 **Revolutions**] altered from revolutions after del. We see that We] altered from we after del. So thus] interl. in 103.26 dominion] repl. del. hierarchy pencil 103.25 **mode**] *repl. del.* manner over above del. upon 103.28 over] above del. upon 103.29 shall above del. will 103.31 **practical**] after del. in pencil the **art**] altered in pencil from arts 103.32 In this light we may] in pencil above del. in pencil Therefore we may praise and right feeling] after del. in pencil skill and 103.32-3 efforts] after del. in pencil generous

# MANUSCRIPT VARIANTS MS 119

*fol. 4r thirdly* that revolutions in the architectural styles were allways prepared by innovations which had been introduced before in the manner of practicising Industrial art, which has for its object the embellishment of the necessities of life.

*Fourdly* That our architecture is devoyd of originality and has lost its influence upon the other arts. That it will only revive when more attention will be payd to our present state of Industry by modern architects and that the impulsion to such a change will again go out from the practical arts. ||

*fol. 5r* That therefore lastly we may recognise the skill and right feeling, which presides the generous efforts of our government for the artistical education of the nation, by paying especial attention to the practice of the industrial arts. – .

Luxury dwelt in simple tents, in baracks and in rude strong-holds many thousand Years before the invention of architecture and of architectural forms. So it was for instance with the Greecs downwards to the time of Homeros and Hesiodos. and even much later. The descriptions which these old Greec poets give of the arms of the heros, of tripods, vases, draperies embroideries and other objects of practical art are without doubt traced upon real things; they were allowed to exagerate the beauty and richness of these things, by that liberty which poets take and have, but their art would have been effectless, if their hearers were not acquainted with things analogous to those which they describe. Now what are the descriptions of monuments and architectural works which the same poets lay before us? These descriptions proouve, that an immense luxury was then combined with the most primitive simplicity of construction in buildings. Architecture had not yet reached to that state, where it stands as an independent art for itself. ||

*fol. 11* All the embellishments of the barracks of the heros, as well as those of the more solid dynastical Halls and Court Yards were mere applications consisting in draperies or metallic incrustations, in shields, trophees, Metalfigures, festoons, flowers and other mouveable things, borrowed from the industrial arts, or from natare. The same buildings, which were covered with Gold and tinplates, had no floors, no fireplaces no flues.

> A parallel between the Homeric dwellings and that singular mixture of luxury and simplicity which still in our times prevails in the interiors of the Orientals, would be here on its place if it was permitted by time.

> I must refer for this to the lively description which gives Mr Layard in his report on his travels in Mesopotamia of a tent of an Arabian Cheik.

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But while the Greecs stood in that state of antearchitectural civilization, there existed in other parts of the old world some centerpoints of very old culture, based upon other principles, which were, if considered under a certain point of view more favorable for the development of architecture as a selfexisting art.

5 But what see we on the monuments of Niniveh and Theben? The doubtless proofs of the same what has been advanced before; the architectural forms and motifs of the Aegyptian and Assyrian Monuments are all borrowed from the industrial arts.

Mats, and afterwards carpets and draperies || were the earliest divisions of space they were employed for this service long time before the construction of walls with bricks was invent-

ed, and the well known Alabasterplates with which the earthwalls of the Assyrian Pallaces were covered, are nothing but imitations of the original carpets, plastically executed in stone.

If we look at the Aegyptian columns of the earlier periods, we recognize square pillars, covered with cane, which is fastened with strings and a piece of ornamented tapestry round

- 15 it, so that the square pillar remains visible at the top above the capital. the last is formed by flowers, or knops of the Papyrus and Lothus plant, stickt into the strings by which the ornamental cover of the column is supposed to be fastened, quite in the same manner as the fair Egyptian Ladies of the time used to stick the same flowers into the Laces of their hairdresses.
- 20 A great part of the forms, used in architecture, as well as the laws of beauty and proportion, have their origine in the works of industrial art, which last practiced the same laws long time before the existance of any monumental art.

The works of industrial art give therefore very often || the veritable keys for the understanding of the architectural forms and rules.

<sup>25</sup> But in other periods of art, the state of relations between the two manifestations of art became to be the inverse of the first mentionned.

Under the influence of the so cald Gothicalstyle for instance the forms of the industrial arts became quite depending upon those which prevailed then in architecture. The reliquaries were small houses, the vases had buttresses ogival arches, mouldings with gargusses, and

30 covers like roofs. the arches became even the principal motifs of the surface ornamentations. The pointed style was introduced even in the art of the bootsmaker and tailor. Was this a normal and sound state of things? I believe not.

The architectonical System of decoration beheld its influence a long time after the revival of the antik principles of art, at least for some parts of practical art, for instance for furniture.

406.1 thirdly] after del.

*thirdly*, that periods of revolutions in architectural styles were allways prepared by innovations which before had taken place in the manner of practicising the practical arts, and that probably an improvement of the present state of architecture, which is devoyd of originality, will begin with improvements and new

406.2 Industrial] repl. del. that 406.3 life.] altered from ~, before del.

and that probably the first impulsion for an improvement of the present state of architecture, which is devoyd of originality, will go out from progresses in practical art; that therefore the attempts which

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#### Lectures

406.4 **Fourdly** 'Fourthly' 406.5 **only** interl. **revive**] before del. only under the condition that our architects will pay more attention to the 406.8 **That therefore lastly**] after del. on fol. 4r

that therefore finally<sup>1</sup> the generous care<sup>2</sup> with which our government watches<sup>3</sup> over the education of national taste and artistical feeling

I that therefore finally ~ feeling] *repl. del.* that therefore finally the generous attempts which we see of the government, to forward and improve the 2 care] *above del.* attempts 3 watches] *after del.* is endeavouring to forward and forward] *before del.* the education of

406.9 for] *after del.* in *after del.* in spending 406.11 **strong-holds**] strong- | holds 406.12 **forms.**] *before del.* Domestical Industry, trade war and robbery furnished the house-hold 406.14 **heros**] *'heroes' (see also 406.23)* 406.15–16 **real things**] real *interl. and* things *before del.* they had seen before 406.17–22 **their art ~ for itself.**] *inserted after del.* 

would not' have been understood by their hearers, if the last had never<sup>2</sup> seen some analogical things before them. Theyr artful descriptions would have been without effect.

I would not] *after del*. these exagerated descriptions 2 had never] *after del*. were not acquainted with the view of some analogical things

406.19–20 These descriptions] above del. They 406.20 proouve] altered from prove 406.23 heros] after del. warr[] 406.25 incrustations] after del. wall 406.26 natare] 'nature' 406.27 no flues] no above del. and 406.32 Cheik] 'sheikh'

407.8 Mats, and afterwards] inserted carpets] after del. The 407.9-10 invented,] 407.15 the last] after del. And is formed by] above del. are repl. del. known, 407.16 stickt 'stuck' 407.23 give] above del. are 407.25 state of relations] after del. relation 407.27 **Under**] after del. This may be shortly shown by one example; that of Gothical art. In the cald] 'called' 407.28 The reliquaries] after del. The details of the vases and even their ornaments were small imitations of ogival arches and 407.29 **the vases**] *after* del. and even the vases borrowed their forms from the ogival arches gargusses] after del. water 407.30 **became**] *repl. del.* were even] *before del*. introduced as motifs 407.32 I believe not] after del. It is perhaps not yet not yet] after del. audacious f over v 407.33 beheld] derived from German 'behalten': 'retained' revival] after del. introduction 407.34 antik] 'antique' furniture.] before del. But the Greec forms of Architecof the ture were perhaps for this more accomodating. Architecture] before del. with the (the after del. their)

# **Third Version**

## **TEXTUAL RECORD**

MS 123 <sup>2</sup>	gta, 20-Ms-123, fols. 3r–4v (4v calculations possibly for Semper 1859), in Semper's hand
MS 123 <sup>3</sup>	gta, 20-Ms-123, fols. 6r-v, 5r-v, 8r-v, 7r-v (between 5v and 8r one sheet missing at least), in Semper's hand
MS 123 <sup>4</sup>	gta, 20-Ms-123, fol. 9r-v, in Semper's hand; continuation of del. passage in MS 122, fol. 16v (see 418–20, Alterations in the Manuscript 116.29)
MS 122	gta, 20-Ms-122, fols. 1r–23v (19v–23v blank; 2v–3v variant of MS 123 <sup>2</sup> ; 3r–8r variant of MS 123 <sup>3</sup> ; 17v–18v variant of MS 123 <sup>4</sup> ), in Semper's hand, <i>copy-text</i>
MS 125	gta, 20-Ms-125, fols. 1r–22v (21v–22v blank), in J. Ruston Palen's hand (add- itions and emendations in Manfred Semper's hand), 1880, copy of MS 122
MS 147 <sup>1</sup>	gta, 20-Ms-147, fols. 13v, 14v (11–131, 141, 151–22v see 515, MS 147 <sup>2</sup> ), in un- known hand (emendations in Hans and Manfred Semper's hands), early 1880s, Manfred Semper's del. German trans. of MS 122, fols. 81–91, 111–V
MS 127	gta, 20-Ms-127, fols. 11–39V (2V, 3V, 4V, 5V, 6V, 7V, 8V, 9V, 10V, 11V, 12V, 13V, 20V, 21V, 24V and all following versos blank; 14V, 15V, 16V, 19V, 22V, 23V notes re- lating to Semper's new Dresden Court Theatre; 17V three del. words), 'Ent- wurf eines Systemes der vergleichenden Stillehre', partly in unknown hand (1r–13r, 17r, 18r–V, 20r–22r, 23V–38r; emendations in Hans and Manfred Semper's hands), partly in Manfred Semper's hand (1r, 8r, 11r, 13r–14r, 15r, 16r, 18r, 19r, 22r, 23r, 37r–39r; one emendation in Hans Semper's hand), early 1880s, Manfred Semper's German trans. of MS 122, fols. 1r–8r, 9r–18r (ad- ditional sections: German trans. of MS 124; see 426), published in Semper 1884; see Herrmann 1981, 110
Semper 1884	'Entwurf eines Systemes der vergleichenden Stillehre', 259–91, German trans. of MS 122, fols. 1r–8r, 9r–18r (additional sections: German trans. of MS 124; see 426); for details of this composite translation, see Herrmann 1981, 159–66
Semper 1983	'London Lecture of November 11, 1853', 5–22, here 8–17, Mallgrave's ed. of MS 122

**BIBLIOGRAPHY** Semper 1880, 21; Rykwert 1976, 74–5; Vogt 1976, 191, 193–4; Herrmann 1978, 79–80; Herrmann 1981, 109–10, 114, 159–66; Mallgrave 1983b; Rykwert 1983, 6 fig.; Herrmann 1984, 73; Hauser 1985; Herrmann 1990, 76, 78, 80; Laudel 1991, 9, 43–5; Waenerberg 1992, 60–4, 143; Mallgrave 1996, 217–18; Gnehm 2004, 32; Arburg 2008, 271–2; Squicciarino 2009, 359–61; Poerschke 2012; Hildebrand 2014, 9–10; Papapetros 2016, 55; Poerschke 2016, 75, 82–3; Hildebrand 2020b, 67–8; Hildebrand 2021, 114–16, 119 and fig. 11

#### **EXPLANATORY NOTES**

This manuscript (MS 122), identified here as the third, definitive version of the inaugural lecture of 20 May 1853, was previously considered to be a variant of another manuscript (MS 124), with which it has certain similarities. Manfred and Hans Semper combined parts of MS 122 and MS 124 into a single text, the German translation of which they published in Kleine Schriften under the title 'Entwurf eines Systemes der vergleichenden Stillehre', describing it as a 'Lecture, given in London in 1853' (Semper 1884, 259 n. \*). Wolfgang Herrmann and Harry Francis Mallgrave believed that MS 122 corresponded to the lecture Semper gave on 11 November 1853 and that MS 124 was a preliminary version of it (Herrmann 1981, 109–10; Mallgrave 1983b, 23). However, the connections between the content of MS 122 and the first and second versions of the inaugural lecture (MS 118 and MS 117) and - even more obviously - its references to the planned lecture series reveal that it is the definitive version of the lecture Semper gave on 20 May 1853. It mentions 'a plan for a course of lectures on the different branches of industrial art, to which this paper may be considered as an introduction' (109.4-6), and explains the plan by outlining the contents of five subsequent lectures (117.27-34). This list of contents corresponds precisely to that given in the 'Prospectuses of the Lectures on Art', originally limited to five public lectures in the autumn term of 1853 (see 96-7), which then started on 11 November with MS 124, 'General Remarks on the Different Styles in Architecture'. The 'Remarks' in turn refer to the lecture of 'some months' ago – the inaugural lecture – as an 'introduction to a series of lectures' (118.1–2). The third version of the inaugural lecture, which is preserved in full, no longer starts with Owen Jones's principle, supported by the Department of Science and Art, like the first and second versions, but rather – appropriately for an inaugural lecture – with an address to the audience, followed by an admission of the difficulty for a foreigner of discussing a topic in English which in itself is already difficult (104.1–10). However, Jones's principle still reverberates in a paragraph of the main part on the relationship between architecture and the industrial arts (108.3-11). The contradiction latent in the second version (see 403) persists. On the one hand, 'The laws and principles of Style and beauty which we aknowledge in art, have probably been the first systematically fixd by Architects' (108.4-6), while on the other, 'The principles of Aesthetics in Architecture have had their first applications on objects of Industry' (108.8-9). In addition to the admission of his difficulty with English mentioned above, the detailed remarks on the division of the sciences caused by 'the immense amount of learning' (104.23) and on the few attempts that had been made to overcome this division through a comparative or unifying approach can be regarded as providing the introduction to the lecture (104.1-106.26). Most of these remarks are taken from a prospectus for 'Comparative Architecture' published in 1852, which in turn is based on a letter that Semper wrote to the publisher Eduard Vieweg on 26 September 1843 (see Herrmann 1976, 211, 215-18). As in the last two paragraphs of the first version (100.20-32), the third version also refers to the Cabinet d'Anatomie comparée established by Georges Cuvier in the Jardin des Plantes in Paris (105.1-22). However, it arrives at the remarkable suggestion that Cuvier's comparative approach should be transferred to the arts to obtain 'a Sort of topic or Method, how to invent' (105.26-31).

Semper begins the main part (106.27–117.20) with a second admission: he confesses that in his Dresden lectures he had paid 'too little' attention to the relationship between architecture and 'the other branches of practical art' – that is, the industrial arts (106.33–4). It was only in 1851, in *The Four Elements of Architecture*, that he had connected each architectural

element to a specific 'original technique' and investigated the connection between the element of enclosure and tapestry (Semper 1851b, 56–68). Despite the lecture's promising title, Semper does not discuss the relationships in question in the first London lecture systematically but only on the basis of examples and with constant reference to the explanation of his concept of style. The explanation starts with a provisional representation of a work of art as a mathematical function with variable coefficients that determine its style (108.35–41), runs through the rest of the main part and makes use of several of Semper's writings: *The Four Elements of Architecture, Science, Industry, and Art*, 'Practical Art in Metals and hard Materials' and the first draft of a treatise *Ueber die bleiernen Schleudergeschosse der Alten* (On the Leaden Slingshot Bullets of the Ancients). The main part concludes by developing the programme for further lectures planned for the autumn term of 1853 on the basis of a classification of the practical arts (116.30–117.39). Henry Cole, who attended Semper's inaugural lecture – among an audience of 90 (DSA<sup>1</sup>, 223) – described it in his diary entry of 20 May 1853 as 'thoughtful & suggestive' (Cole Diary).

The material state of MS 122 indicates that Semper replaced the front and back parts (104.1–108.17, 116.30–117.39) and therefore wrote them after the middle part (108.18–116.29). The pages of the front and back parts are much smaller than those in the middle, and a manuscript fragment preserved in the gta Archives (MS 123<sup>4</sup>) originally continued the middle part of MS 122 (see 418–20, Alterations in the Manuscript 116.29). This means it must be assumed that another, partly lost stage of the drafts existed between the second and third versions.

Wolfgang Herrmann assigned the second half of another manuscript (gta, 20-Ms-93) to the manuscripts that are here classified as the third version (Herrmann 1981, 100, 110). Although this fragment corresponds fairly precisely to two passages in MS 122 (111.11–112.23, 113.10–20), Herrmann's assignment is not plausible, since the second half of the manuscript in question is materially connected (with the same paper sheets) with the first half, entitled 'On the present state of practical art', and thus most likely refers to the same event, namely 'the intended exhibition'. Herrmann's assumption that this refers to the art exhibition planned for February 1852 in the Crystal Palace (Herrmann 1981, 100; cf. 43.23–44.4) cannot be correct, as the manuscript contains reflections on 'the power of animal and vegetable life', which Semper began to make only after he had attended the presentation of a paper on 'Proportions and Curves of the Parthenon of Athens' by David Ramsay Hay at the Royal Institute of British Architects on 7 February 1853. The manuscript probably refers to the furniture exhibition that the Department of Science and Art held at Gore House from May to September 1853 (DSA<sup>I</sup>, liii–liv, 329; see 404, Explanatory Notes 101.1–2).

#### 104.18 simetimes] sometimes 104.21 it not new] is ~ ~

105.16 which] with 105.29 a Sort of topic or Method, how to invent] The word 'topic' is altered from 'topics', which would be closer to what Semper was wishing to express (see 414, Alterations in the Manuscript 105.29). In two fragmentary manuscripts of the inaugural lecture (MS 123<sup>3</sup>, MS 123<sup>2</sup>), the corresponding phrase is 'a sort of topic or science of invention' (422.1) or 'a science how to invent' (420.26; cf. 421, note 420.25). It is therefore similar to the title of a book written by Christian August Lebrecht Kästner that Semper apparently owned: *Topik, oder Erfindungswissenschaft* (Kästner 1816; see 216.8). When Semper returned to the subject in the lecture 'General Remarks on the Different Styles in Art' (MS 124), he shortened the phrase used in the inaugural lecture to 'a Sort of Method how to invent' (118.21). On 26 September 1843, he had already written to Eduard Vieweg: 'es wird ...

möglich seyn, eine architectonische Erfindungslehre ... zu begründen, welche den Weg der Natur lehrt' (it will ... be possible to found ... a theory of architectural invention that teaches the path of nature). The words 'Topik oder' are deleted before 'Erfindungslehre' in the letter (Vieweg Archives, VIS:246; cf. Herrmann 1976, 217). In the 'Outline' of the 'Letters on the Great Exhibition', by contrast, Semper left the words 'Erfindungslehre, Topik' in place (29.27). On Semper's relation to topics, see Gnehm 2004, 30–4, 45–8. 105.33–4 **Book of Cuvier on the animal Empire and his comparing Osteology**] Cuvier 1812, Cuvier 1817 105.34 **Cosmus of Humboldt**] Humboldt 1845/62. Only three of five volumes of Alexander von Humboldt's *Kosmos* had been published when Semper gave his inaugural lecture. He owned two of them but had not read them by the summer of 1852 (see 212.32; 541–2; 544, Explanatory Notes 212.32).

106.1 Durand in his parallels and other works on Architecture] Durand 1800/01, Durand 1802/05, Durand 1821 106.2 looses] *loses* (see also 106.6, 112.16)

107.4–108.2 Let us compare ~ Greek Architecture.] Semper repeated the comparison between the Egyptian *situla* and the Greek *hydria* almost verbatim in the first lecture on ceramic art (137.5–40); see 454. 107.10 Jockes] *yokes* 107.15 chaped] *shaped* (see also 112.22) 107.21 to] *the* 

108.36 indefite] *indefinite*; cf. 414, Alterations in the Manuscript 108.36 108.38  $U = \Phi x, y, z, t, v, w.$ ] Mallgrave has 'U = C x, y, z, t, v, w.' (Semper 1983, 11). In the 'Kunstformenlehre' (Theory of Art Forms), the predecessor of *Style*, Semper also represented a work of art as a mathematical function, there using the equation 'U =  $\Phi$  (x, y, z, t, v, w, . . . .)' (Vieweg Archives, V3:1.1.3.32, sect. 'Introduction', 34).

109.3 **undefined**] Wolfgang Herrmann translates this word as 'unbestimmbar' (Herrmann 1981, 161). In fact, Semper himself used the word 'unbestimmbar' (undefinable) in the corresponding sentence of the 'Theory of Art Forms' (Vieweg Archives, V3:1.1.3.32, sect. 'Introduction', 35). 109.14–110.11 **That part of the Doctrine of Style ~ at our times.**] cf. Semper 1852, 16–18 109.24 **wether**] *whether* 

110.12 shiefly] chiefly110.25–111.21 Every morket ware ~ Study of Style.] cf. Semper1852, 24–6 and n. \*\*110.25 morket] market110.30 recommandation] French for rec-ommendation110.37 soal] soul

111.21 **aesily**] *easily* 111.39 **exercing**] *exerting* (see also 112.7)

112.24–5 Sling bullets, which have the form of plumkernets executed in lead] In On the Leaden Slingshot Bullets of the Ancients, bullets of this type are illustrated and described as 'slingshot bullets made of lead in the shape of almonds or plum kernels (hence called balanoi among the Greeks and glandes among the Romans)' (Semper 1859, frontispiece figs. 1, 3-4; 112.25 laying lying 112.26 Prussian pointed musket-ball] cf. Semper 1859, fron-6). 112.28-30 It is questionable tispiece fig. 5; 416, Alterations in the Manuscript 112.26 weither these Projectiles are the Result of an instinctiv feeling ~ or ~ proofs of the high state of Mechanical Science with the Greecs.] 'weither': whether. Semper still does not resolve this question even in On the Leaden Slingshot Bullets of the Ancients of 1859, where he remarks that evidence might 'perhaps' be found to show 'that the leaden almond projectiles of the ancients were shaped in accordance with strictly scientific principles' (Semper 1859, 12). In 'Practical Art in Metals and hard Materials' in 1852, by contrast, Semper does apparently exclude the first alternative, as he admires ancient slingshot bullets 'for their well calculated general forms' (Semper 2007a, 227). 112.33 preceeding *preceding* 112.33-8 **If** such a leaden bird is fliing ~ positive power.] 'fliing': flying (see also 113.1); cf. Semper 1859, 14-15 112.41-113.6 So does Nature ~ by the same reasons.] cf. Semper 1859, 11

113.3 **allongated**] derived from French *allonger: elongated* (see also 113.7) **tale**] *tail* 113.10–114.3 **We know pretty well ~ only to History.**] cf. Semper 1859, 3–5 113.11 **fricture**] *friction*; cf. Semper's draft of a report 'On the present state of practical art' (gta, 20-Ms-93, fol. 4v): 'the laws of certain natural forces, for instance that of gravity; the friction and others' 113.13 **sattled**] *settled* 

114.2 joung voung 114.6-9 Attempts have often been made to explain the Greek forms and to find out a Scheme for them  $\sim$  by comparing the Geometrical projections ~ after these measures.] Two such attempts of which Semper was evidently aware are Francis Cranmer Penrose's Investigation of the Principles of Athenian Architecture (Penrose 1851; see Semper 1851, 10–11) and David Ramsay Hay's paper 'An Attempt to Develope the Principle which Governs the Proportions and Curves of the Parthenon of Athens'. This paper, read by Penrose at the Royal Institute of British Architects on 7 February 1853, prompted Semper to plan the book On the Leaden Slingshot Bullets of the Ancients (see Semper 1859, 1-7). Shortly before Semper's inaugural lecture, Hay published an expanded version of his paper under the title The Orthographic Beauty of the Parthenon Referred to a Law of Nature (Hay 1853). 114.9 **drown**] drawn 114.12 artistical] Mallgrave has 'artificial' (Semper 114.26 lays] *lies* (see also 114.36) give a systematical suit to] derived from 1983, 14). French donner systématiquement suite à: systematically pursue 114.41 **separed**] derived from French séparer: separated

115.6-7 **Style ~ represents them.**] In his *Italienische Forschungen*, Carl Friedrich von Rumohr wrote (Rumohr 1827/31, 1:87; italics in original): 'We shall therefore not be diverging substantially either from the word's usage or from the true intentions of the best artists of this [recent] period if we define style *as a compliance, which has become habitual, with the inner requirements of the material in which the sculptor shapes his figures in reality and the painter makes them appear.*' 115.17 **revue**] French for *review* 115.32 **separing**] *separating*; cf. 418, Alterations in the Manuscript 115.32

116.10 Othersides] derived from German *anderseits: On the other hand*. Mallgrave has 'Otherwise' (Semper 1983, 16). 116.16 penneld] *panelled* 116.17 Pantheon Doors and that of Remus in Rome] cf. Donaldson 1833/36, 1:41–4, pls. 17–20; Semper 1860/63, 1:367–9 116.22 pennypeace] *penny piece* 

117.16 **Antik**] *antique* 117.21–3 **A thorough illustration ~ towards this object.**] Semper expressed similar reservations to Eduard Vieweg on 26 September 1843 in relation to the planned 'Comparative Architecture' (Vieweg Archives, VIS:246; cf. Herrmann 1976, 217): 'I repeat that I do not feel equal to the task of creating a pure theory of architecture in this sense; however, I do believe that I am able to make occasional contributions to it from what I have thought, observed and collected in the context of my work as a teacher and practising architect.' This passage, with slight changes, was included in the printed prospectus for 'Comparative Architecture' in 1852. 117.24 **purpose**] Mallgrave has 'propose' (Semper 1983, 17). 117.34 **chown**] *shown* 

#### EDITORIAL EMENDATIONS

104.17 overpowered by] overpowered by | by 106.6 tabular-formularies] tabular- | formularies 113.4 Ground-plans] Ground- | plans 114.41 treating] trea- | (ting missing) 116.18 Cabinets makers-work] Cabinets makers- | work 117.29 timber-construction] timber- | construction

#### ALTERATIONS IN THE MANUSCRIPT

104.3 English after inserted and del. broken 104.12 **are our own**] *above del*. belong to us 104.22 and classifications] and *above del*. of 104.23 instituted] *after del*. made 104.26 104.32 **things**, *before del*. which we no longer ages, *after del.* times, 104.34 **coordin**ation] after del. comparison. 104.35-6 Sciences, begins now to be much] accompanied by probably Semper's own note? 104.36 more constructive than it was before, accompanied by probably Semper's own note? **constructive**] *below del.* spirited 104.38 **natural** forces.] inserted altered from nature. after del. laws of

105.4 the present] after del. our105.6 empire,] after del. world,105.26 which] after del.by105.29 topic] altered from topics105.34 Empire] above del. world

106.8 many] after del. And after del. And finally at his time the amount of 106.9 which we now possess, *inserted* 106.10 time] *before del*. for instance that of mediaeval art for instance] *after del.* which was not yet prepared for **as Durand**] *after del.* as he intended to execute. 106.15 less] after del. with and before del. fortune. happily.] inserted 106.16 **the amount**] *after del*. very precious 106.19 **England**] *after del*. France 106.22 But] after del. But all these works are evidences of what 106.24 **at**] *after del*. to 106.25 all these knowledges] repl. del. knowledge 106.37 **paragons in** *after del*. types in Industrial art.] *after del.* practical art. 106.38 **The laws**] *after del.* The laws of proportion, of Symmetry and harmony, the principles the traditional forms which are current in the letter, principles] *before del.* of ornamentation the special forms which occur by tradition letter 'latter'

107.13 Greek] k over c 107.20 traced] repl. del. taken

108.2 **Greek**] k *over* c 108.4 in one] in *above del*. to 108.5 aknowledge] after del. recognize 108.10 **causes.**] *repl. del.* reasons 108.18 **I shall**] *after undel*. been treated by philosophers and artists of all periods. Many Volumes. have been written about it; treated *in pencil above del. in pencil* treatened Volumes.] *repl. del.* books it;] *altered from* ~, *before* del. without bringing certainty in the and *interl. before del.* which have been made of the aesth 108.19 **senses**] *inserted before del.* and notions 108.20 **connection**] *before del*. between these notions which over is 108.21 **them**] *altered from* these *before del*. notions 108.22 pursued] after del. well defined and 108.24–6 I therefore ~ expression; but the] inserted 108.24 **to**] *after del*. for that of Style] *after del.* that which will be sufficient for 108.25 for the following inserted on fol. 70 **sense**] *after del.* sense of this word for the following [] 108.26 **expression**; *altered from* ~^ *before del.* in t **but the**] *before del.* definition following] *after del*. The 108.27 absolute and of] repl. del. of 108.29 **This** is over e term] before del. style 108.35 **using**] after del. in ink over pencil for 108.36 indefite] te *in pencil over hyphen of* indefi- | ned indefined] ned *del. in pencil* 108.39 **coefficients**] *before del.* of **vary**] in pencil below del. in pencil variate variate 108.39–40 **likewise**] *in pencil above del. in pencil* the same above del. vary 108.40 fea**tures**] s added in pencil

109.3 Their number] after four del. beginnings of variant:

Their<sup>1</sup> number is undefined and we shall point out<sup>2</sup> only some of the most influentials<sup>3</sup>, such, which will lead us to the explanation of that System of classification of the objects of industrial art

Their number is undefined and we shall only point out here some of them, such, which are of the most<sup>4</sup> influentials, and which will lead to the explanation of the order which I adopted<sup>5</sup> for a course of lectures on the industrial arts,<sup>6</sup> which I have prepared on

Their number is undefined, and we shall only point out here some of them, which are of the most general influence; for it lays<sup>7</sup> not in the plan of this lecture to give a systematical Suit<sup>8</sup> to this important question

Their number is undefined, and we shall only point out here some of the <sup>9</sup> most important, for it lays<sup>7</sup> not in the plan of this lecture to give to the question a systematical Suit<sup>8</sup> and to give more specialities as will be necessary for the explanation of a plan for a suit<sup>10</sup> of lectures which has been prepared by the reader

 I Their] after del. Bef
 2 point out] repl. del. take out of their rang
 3 influentials]

 s added
 4 of them, such, which are of the most] repl. del. of the most
 5 l adopted]

 after del. has been adopted for the
 6 on the industrial arts,] inserted
 7 lays] 'lies'

 8 give a systematical Suit]
 'systematically pursue' (see 413, Explanatory Notes 114.26)
 9 the] after del. them, such as may be considered as
 10 suit] 'course'

109.4 **course**] *in pencil above del. in pencil* suit 109.7 **We must distinguish**] *after four del. beginnings of variant on fols.* 8v–9r:

But before giving some specification, we may devide<sup>1</sup> | But before We may devide<sup>1</sup> the agents, which are acting upon [t] We may divide them into two distinct Classes

1 devide] 'divide'

109.9 of the] in pencil above del. in pencil which lay in the lay] 'lie' 109.10 laws of nature] *after del*. natural **all**] *in pencil above del. in pencil* every 109.11 circumstance] e in pencil above del. in pencil es 109.13 a work of art] *after del.* an artistic 109.14 **treats**] *in* pencil repl. del. in pencil treatens of] in pencil above del. in pencil on embraces] in pencil repl. del. in pencil embrasses 109.15 the elementary Ideas] after inserted and del. 1°) 109.16 **cloathed.**] *before del.* ‡ ‡] *accompanied by del.* ‡ 2°. the 109.23 **Mattings** *after del.* Watting 109.31 principles] s added 109.32 historical element] above del. part 109.34-5 But this first part ~ should teach,] repl. del. But the second division contains another part, which we commonly call the practical part, which should teach, 109.37 **of** in pencil above del. in pencil to 109.38 in] in pencil above del. in pencil at

110.13 climate] in pencil above del. in pencil clime country,] after del. Land, 110.19 the doctrine of] inserted 110.27 latter] in pencil above del. in pencil last 110.31 the] in pencil repl. del. in pencil a 110.33 appropriately] inserted in pencil 110.38 even] interl.

 III.1 the] in pencil above del. in pencil a
 III.3 sense] in pencil above del. in pencil thought

 III.5 soldiers] in pencil repl. del. armed Fellows
 armed] del. in pencil
 Fellows] del. in ink

 over pencil
 III.11 appliances] after del. sciences
 III.23 different] interl.
 III.24 uni 

versal] *repl. del.* general 111.27 **the things**] the over a and things altered from thing 111.33 **Idea**] *after del*. fundamental of satisfying] in ink over pencil repl. del. in pencil for It is] repl. inserted in pencil and del. in ink suffice it to be suffice it to be] *repl*. contenting del. in ink over pencil It is 111.34 or above del. and 111.35 no matter inserted in ink over 111.39 on the one hand above del. in ink over pencil onesides and accompanied in pencil opposite column by undel. identical insertion in pencil on the other above del. in ink over pencil othersides and accompanied in opposite column by undel. identical insertion in pencil 112.3 arrive at] at above del. in ink over pencil to and accompanied in opposite column by undel. identical insertion in pencil 112.9 natural forms] after del. in pencil the 112.13 never fails] in ink over pencil repl. del. in pencil fails never 112.14 **case**] *after del. in pencil* Same. the more] more *after del*. less we 112.14–15 it seems] *repl. del*. we seem to loose loose] 'lose' 112.16 strength] before del. in pencil and sharpness attained to the] in pencil repl. *del. in pencil on fols. 11v–12r* arrived to | that 112.17 **this**] is over e loss] before del. of instinctiv feeling. 112.18 **led**] *in ink over pencil above del. in pencil* conduced 112.19 were *above del*. are **heretofore**] *repl. del. in pencil* till now *and accompanied in opposite column by* undel. identical insertion in pencil semi-] in pencil repl. del. in pencil half 112.20-1 pebbles] in pencil repl. del. in pencil Galenas 112.21 ground] repl. del. in ink ground ground in pencil above del. in ink over pencil grinded 112.24 ancient interl. in ink over pencil **Sling bullets**] above del. Projectiles and accompanied in opposite column by undel. identical *insertion in pencil* 112.26 **a**] *after del*. one of the *and both above del*. a musket-] inserted **ball**, *altered from* balls, *before del*. which they shot into the window of my sitting Room in the Year 1849; 112.28 **It** altered from it after del. But 112.30 of Mechanical after del. of 112.32 knowledge] altered in pencil from knowledges for the defense] after Greec M *del.* for defending their 112.33–113.9 These bullets ~ great masses.] inserted in left column of fol. 12r, in right column of fol. 12v and in left column of fol. 13r 112.33 bullets above **preceeding.**] *altered from* ~ *hefore del.* assertions. 112.34 **an**] n *added del.* forms En**velop**] *above del.* nymbus 112.35–6 **The condensed air**] *after del.* Now *after del.* Now nature 112.36 in proportion to its density *interl*. 112.37 also in proportion to its density *interl*. 112.39 **Further**] *repl. del.* Secondly Secondly] repl. del. Now 112.40 therefore,] altered from ~^ after del. it will and before del. be reasonable to **by** *interl*. filling] ing added vacuum] after del. room 112.41 we] interl. will] *after del*. and to increase by this way the living force of the bullet which and before del. diminue the vacuum diminue] derived from French 'diminuer': 'diminish' and

this] altered from the before del. thik 113.3 filling up] 113.2 **form**, *before del*. with sharp *after del*. forming 113.4 **the** *interl*. and of above del. all 113.4-5 their bodies, before *del.* have the same form. 113.5 The same is] repl. del. It is evident on the] above del. the form of the on the flame] on above del. of 113.9 masses.] before siehe oben. (indicating continuation on fol. 12r; see 113.10) 113.10 We know] after del. If we go principles] 113.14 gasses] in pencil above del. in pencil 113.11 **instance that**] *interl*. *above del*. laws 113.15 the investigations] after del. to our science 113.16 of] above del. in pencil gazes from and accompanied by undel. identical insertion in pencil 113.17 it, altered from ~. and that it is a defined force.] *inserted* 113.28 industrial] *repl. del.* artistical 113.31 **application**] over acc (for 'accessories') accessories,] *repl. del.* forms, Aegyptians] before 113.34 **Greek**] k *in pencil over* c 113.35 **Greeks**] ks *in pencil over* cs *del*. and 113.36 **entablatures**] en *added in pencil* 113.38 aware and *interl*.

114.1 Greek Architecture] k in pencil over c Greek art] k in pencil over c 114.6 Greek] k in pencil over c 114.11–12 natural] before del. forms 114.12 and] above del. of 114.15 or what they call templates.] inserted below inserted in pencil and del. in ink (templates) 114.16 treats] altered in ink over pencil from treatens of] altered in ink over pencil from on 114.17 simplest] after del. most 114.19 in] in ink over pencil above del. in pencil for 114.20 Greeks] altered in pencil from Greecs before del. in pencil are 114.24 We pass now] after del. on fol. 13v

We pass now to the materials<sup>1</sup>. -

The general principles of Style, in so far as depends  $^{2}$  on  $^{3}$  the substance are the following: r<sup>o</sup>) Take that material which is the most adapted for the proposition, which You intend to resolve.

1 materials] after del. second 2 depends] after del. in pencil it 3 on] after del. upon

114.24 we employ] after del. come into consideration for the 114.26-7 this important question;] this altered from the and question; altered from questions, before del. and 114.31 The abstract of] inserted 114.32 is] after del. may be 114.34 You] interl. intend] altered from intended after del. is resolve.] before inserted and del. in opposite column

The choice of the best<sup>1</sup> material is a very important question, for instance Modelling Vax or Clay, *Choice of the Paper for drawings*<sup>2</sup> and<sup>3</sup> of the other drawing materials a condition of Style which we feel every day.

I best] interl.2 drawings] before del. is a very3 and] after del. Choice of the bestpencils or coco] undel. after del. br[]

114.35 **but observe**] *after del.* which lay within the limits of the lay '*lie*'; *after del.* may be 114.36 **a**] *above del.* the 114.37 **whatever**] *repl. del.* in question **will**] *after del.* comes 115.1 **The importance**] *after del.* The importance of the material in the question of Style is so great, that some of the best writers – . 115.2 **it**] *repl. del.* it **it**] *after del.* the manner of treatement of the materials 115.10 **We generally order**] *after del.* 

We generally order them after the materials of which they are made. We devide<sup>1</sup> them in different classes

1 devide] 'divide'

115.13 **facility**.] altered from ~^ before del. for their arrangement. 115.14 **mistake**] in ink over pencil above del. in ink over pencil fail **belongs**.] before del.

But is it in the same time the most accomodating for <sup>1</sup> study of Style? This leads to some remarks with which I may be allowed to conclude this introductory lecture.

1 for] after del. for comparisons and

115.15–19 It will ~ For instance] inserted115.15 allways] after del. thereforethe simplestplest] after del. the best for museumsperhaps] interl.115.17 But for an ideal collection]infer del. But is it in the same time the most accomodating for study of Style? after del.

But for *after del*. But it will appear that for or rather] after del. it may perhaps be less 115.18 **may**] *after del*. will **be**] *above del.* appear 115.19 accomodating.] *altered from* ~^ before del. as it is under is] *after del*. appears to be 115.22 Indians.] *repl. del.* the same people. 115.23 related] after del. very 115.24 not by] after del. by 115.29 Systems of arrangement] *repl. del.* modes, for collections of art] below del. to observe 115.32 **separing**] ing *above del*. ating **conspicoous** second o over u 115.33 **not less**] *after del.* and interesting] *after del*. to be made conspicoous. very 115.34 **Before**] *after del.* We must *after del*. but 115.35 **have**] *interl. in pencil* 115.36 **this paper**] *after del*. the course of 115.37 **A as we have seen**, *above del.*, as You know, 115.40 types.] before del. In the 116.1 **plastic**] *altered in pencil from* plastical 116.4 of the types] of *above del*. with 116.5 **latter**] *in pencil repl. del. in pencil* last 116.6 of the style] of *above del*. with 116.8 happens] in pencil above del. in pencil comes, material] repl. del. stuff 116.11 qualities, before del. for instance, Leather, Wowen stuffs, Wood and Metal, 116.14 with flat surface **ornamentations**, *inserted in pencil* 116.17 **Remus**] *in pencil over* R *and blank space* in **Rome**] *interl. in ink over pencil* 116.18-19 In this state ~ principle.] inserted in pencil 116.19 **another**] *above del*. the 116.21–2 have no more relation] *in pencil repl. del. in pencil* 116.22 than] after del. in pencil not more and before del. in pencil to are not at all relating **has.**] has inserted in pencil and full stop inserted in ink 116.23 Mails s added 116.24 else**where.** –] *in pencil repl. del. in pencil* occasionally. occasionally.] *altered from* occasion. 116.25 A system of Classification] after del. on fol. 16r–v *after del*. on an other

The impressions<sup>1</sup> which are produced by forms and colours upon our minds are partly based upon conventional or traditional signs or symbols, like<sup>2</sup> as<sup>3</sup> is the case in Musik and in Speech; which<sup>4</sup> we are not free to neglect or to change, <sup>1</sup>/<sub>1</sub> if we wish to be understood<sup>5</sup>. Art in its highest progress enriched by all the discoveries which science has made,<sup>6</sup> cannot and indeed should not,<sup>7</sup> entirely free itself from this influence.

This is<sup>8</sup> one of the first rules of Style which we have to observe.

**The impressions** ~ influence.] del. in pencil 2 like] after del. like in Musik 3 as] in pencil below interl. in ink and del. in pencil it 4 which] after del. like in Musik 3 as] in (a type is a letter, a Character.) 5 understood] before del. in pencil and to act upon the minds 6 made,] altered from ~ hefore del. since 7 cannot and indeed should not,] in ink repl. del. in ink cannot and indeed should not cannot and indeed should not] in pencil above del. in pencil can and must not (not del. in ink) 8 This is ~ observe.] del. in ink

116.25-6 to indicate] before del. as well as I was allowed to 116.26 close] above del. near 116.27 **Space;**] repl. del. room, 116.29 **Heroic age.**] before del. on MS 122, fol. 16v, and undel. on MS 123<sup>4</sup>, fol. gr-v

The<sup>1</sup> whole Province of practical art may be<sup>2</sup> brought according to such a system, into 4 General Classes, for their relations<sup>3</sup> to certain types, which they have in common.

The *first Class* comprehends all the things which have their types in the art or in the *industry* of Coating.<sup>4</sup> Weawing forms.<sup>5</sup> one important branch of this very extensive and important Class, but it includes a great number of other methods of <sup>6</sup> covering or protecting things with thin<sup>7</sup> surfaces.

*Second Class.* Things which have their types<sup>8</sup> in the ceramic art;<sup>9</sup> | *Third Class.* Manufactures, which have their types in Woodconstruction

Fourth Class Such as have their types in Stone Construction or maçonry<sup>10</sup>.

Fifth Class. Monumental Art, the combining of the special branches of Art. - .

Many formations<sup>11</sup>, are transitional, they may find their places between the classes of which they partake. For.. instance the Chinese Bamboo treillis, which is an important element for industrial art in China. It<sup>12</sup> is the transition from *weaving* toward<sup>13</sup> *wood construction*, and the type for some higher forms in Antik<sup>14</sup> and mediaeval Architecture.<sup>15</sup>

A thorough illustration<sup>16</sup> of the system I have briefly sketched out, is too arduous a task for me. But I shall perhaps be able to offer some usefull contributions towards this object; <sup>17</sup> This then is the extent of my ambition; and with this view I purpose to give five lectures. as follows.

1°) on the Industry of Coating.

2°) On ceramic Art.

3°) on woodconstruction

4°) On Stone construction

5°) On monumental Art.

1 The] altered from the after del. It seems that 2 may be] repl. del. can be 3 relations] after del. common 4 Coating.] above inserted in pencil and del. in ink coating coating] repl. underl. in ink and del. in pencil Coat-making. 5 Weawing forms.] repl. del. Weaving forms Weaving] altered in pencil from Weavery (Weavery above del. The Art of Weaving) 6 methods of] above del. in ink methods of methods of] in pencil repl. del. in pencil contrivances, which consist in 7 thin] after del. in pencil the aid of and before del. in ink and generally pliable 8 types] after del. fundamental 9 art;] before del. if we take this word in its more general sense, where it 10 maçonry] merged from French 'maçonnerie' and English 'masonry' 11 Many formations] after three del. beginnings of variant:

There are many transitional formations, and others, which are composite, Many transitional formations, Many formations are transitional and stand at the boundary.

Many formations are transitional and stand at the boundary

There are  $\sim$  composite,] *accompanied in opposite column by del.* for instance the Chinese Bamboo treillis, which form an important motiv for housebuilding in Ch and others] *after del.* which may have theyr places

12 It] after del. It is the type for some higher forms in Antik and modern European Architecture. This treillisworck is evidently a transition from the It is] after del. It is a transition from Weaving to and before del. also higher] after del. important Antik] 'antique' 13 weaving toward] repl. del. the art of weaving to 14 Antik] 'antique' 15 Architecture.] before del. Others are composite, which then more or less 16 A thorough illustration ~ monumental Art.] in right column after four del. beginnings of variant in left column:

A thorough illustration of the System, I have here briefly sketched out, is scarcely possible in the present state of artistic knowledge – it is too arduous a task for me to hope to grapple with on it entirely, but I flatter mysel

A thorough illustration of the System I have here briefly sketched out, is too arduous a task for me

A thorough illustration of the system I have here briefly sketched out is too arduou

A thorough illustration of the System I have here briefly sketched out is scarcely possible in the present

too arduou] after del. is scarcely possible in [t]

17 this object;] before del. and and] after del. and the artisti[c]

116.33 **First**] altered from first after del. The **It**] interl. 116.35 **extensive**] before del. and important 116.36 **or**] repl. del. and 116.39 **Ceramic**] before del. or rather in the plastic plastic] underl.

117.1 first] before del. Class **Pottery**] *before del.* for this class 117.2 Ceramic] after del. 117.5 in timberconstruction.] repl. del. in Woodconstruction plastic 117.6 their ori-117.11 Many formations] after underl. and del. Fifth Class. gines] repl. del. their types 117.18 Other] repl. del. Many after del. Many formations 117.16 as well] repl. del. and Many] repl. del. Other 117.19 elements,] repl. del. formes, 117.20 which I mentionned above.] after del. which I named before. 117.26 as follows:] after del. Each of the first four of them would treat of one of the four Classes o of one] of interl. 117.27 1°) Art *after del.* 1°) On the Industry of coating 117.36 **material**.] altered from  $\sim \wedge$  before del. on fol. *197* for industrial art. 117.38-9 Industrial art, repl. del. execution,

# MANUSCRIPT VARIANTS MS 123<sup>2</sup>

This beautiful collection is the work of the celebrated inventor of the comparing system of fol. 3r Zoology, Mr Cuvier who showed, that all those antediluvian and postdiluvian creatures were and are but different developments of principles, which are common to all. Nature for its infinite richness is nevertheless very sparing and simple in its elementary ideas. For instance the Same scaffolding of the sceleton, goes threw the whole of that part of animal 5 creation which has bones but it is more and less developd and thousandfoldly modified according to the rangs and gradual progresses of the individuals and their conditions of existance. Some inferior animals have the elementary spina dorsalis without any extremities, others are nothing but head, like the fish, called Orthagoriscus Mola, other are nothing but tail, like the Myxine glutinosa. - The Kenguru has short forefeet but very long and well 10 developped hind feet, with the zeal it is the opposite case its hindfeet are nothing but indications of feet, they are the transitions to fins. With the birds we see the forefeets transformed into wings and some of them, have no wings at all, as for instance the Australian Ostrich. But even these beheld some slight indications of the non developped articulations, like symbols – They are all related together by one and the same fundamental | principle. – fol. 3v 15 When I was observing this variety of nature in its oeconomy and simplicity I very often sayd to myself - The same as in nature There exist similar fundamental laws for the creations of my art, and a comparing method of contemplating them, analogous to that of Cuvier for natural history, will enable us to find out the elementary forms and the principles, of which all millions appearances in art are but as much different modifications. It may be of conse-20 quence to search out these fundamental forms of architecture, and to follow them from the simplest to their highest expressions and even to their state of misformation Verkrüppelung – | fol. 4r By this way we will be able to get a wide survey over the history of art the knowledge of the 25

principles of beauty, of style and construction, and far more, it will enable us, to make this system the base of a science how to invent architectural compositions, which is more than it was allowed to the naturalist in his department. –

The man of Genius it is true knows no laws, he will half inconsciously succeed in its creations, he wants no instruction how to invent, no matter, it may always be a worthy proposition, to explore the dominion of the arts upon this way and to pursue thereby the porticular aim of fixing some chalons and starting points for invention for his own use and for other. He will meet with the greatest difficulties and in the best case obtain a Result full of errors and voids, but by this endeavour being obliged to

> 420.1 **This**] *after del*. All those 420.5 sceleton,] before del. more or less developd and threw] 'through' 420.6 thousandfoldly] above del. differently modified 420.7 rangs] derived from German 'Rang': 'ranks' and gradual progresses] inserted individuals] *before del*. which they occupy in the 420.9 Orthagoriscus Mola] scientific name for 'sunfish' 420.10 Myxine glutinosa] scientific name for 'hagfish' Kenguru] derived 420.11 zeal] 'seal' 420.11–12 indications] before del. from German 'Känguru': 'kangaroo' 420.13 some of them] before del. behelt only some short indications of and Symbols wings, like useless symbols as for instance the Australian Ostrich. 420.14 beheld] derived from German 'behalten': 'retained' 420.15 related] above del. bound 420.16 When] after four del. beginnings of variant:

When I observed this

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By observing<sup>1</sup> all these different variations of th

By making such comparisons I told to myself that

When I observed<sup>2</sup> this variety of Nature in its simplicity I very often thought by muself<sup>3</sup>, that it may be possible to reduce the creations of man, and especially the works of architecture to certain normal and elementary forms, which, may<sup>4</sup>

I observing] after del. following 2 When I observed ~ forms, which, may] undel. in opposite column 3 muself] 'myself' 4 may] inserted before del. although the same by their general ideas, may permit an infinite variety of apparitions

420.16 variety] after del. beautiful 420.17 The same as in nature] interl. exist] above 420.18 method of contemplating them] above del. system 420.20 **all** del. must be millions] *above del.* every appearances] es over e are] over is 420.21 follow 420.21-3 them ~ Verkrüppelung -] repl. del. their gradual developabove del. pursue ments and embranchements from the Origins to their accomplishments and accomplishments] after del. highest 420.22 state] after del. starved and after del. miscreat 420.24 **By**] after del. on fol. 3v It may be possible by this way, not only to find a good base wide *interl*. **survey**] *after del*. good base for good] *above del*. real for 120 24-5 the principles of beauty] after del. styles 420.25 far] above del. what is enable us] above del. be possible to make] after del. to base upon this system an architectural Topic or art to invent this] *above del*. such a 420.27 the naturalist] after del. Cuvier department. -] before del.

I tried to give consequence to these speculations, in gradually working out a system which<sup>1</sup> I explained in my lectures which I helt annually as Professor of architecture at the academey of fine arts at Dresden. Some essays on architecture, which I have published in Germany were.

I system which] before del. formed afterwards the base of

421.1 The] after del. The Genius will succeed in his creations without the knowledge of rul[e] succeed] after del. not want man of] interl. it is true] interl. its] 'bis' 421.2 may] above del. will 421.3 dominion] above del. territory 421.4 chalons] derived from French 'jalons': 'range poles' probably in the sense of 'reference points' 421.5 and] after del. and in the best case he will in this aim

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#### MS 123<sup>3</sup>

- *fol. 6r* not only that, it may be the base of a sort of topic or science of invention, which may enable us to find the natural way of composition and may hold equally distant from Schematism without individuality and from arbitrariness without thoughts. And This will be more than what was possible for the great Naturalist to do upon his field. |
- fol. 6v
   These reflections I made at. an early period of my life, and since that time I was investigating in the works on art and esspecially on architecture in search of a guide for artists analogous fol. 5r
   to the book on the animal world of Cuvier or the Cosmus of Humboldt | which are guides for naturalists and will be more effectif for the progress of that science than are all the Volumns which were written before them on the same matter.

Very few among the great number of writers on art have made attempts of the kind I allude to, and these few followed the track of some special preference they felt for one or the other branch of art or style of art, by which they were unconsciously distracted far from the aim which they had perhaps before their mind. The Frenchman Durand in his works on architecture has perhaps comen the nearest to that aim, but he looses his way under the influence of the proposition which was maid to him, namely to set up a sort of compendium of art for the pupils of the ecole polytechnique, which were by no means artists, as well as under the influence of the general tendency of the time of Napoleon; He looses himself into the domain of schematism, he puts the things into rows and brings about a sort of alliance between them by the mechanical way instead of showing the organic laws by which they are connected together. Nevertheless, and in spite of these defects, his books, and namely his paralels, are remarcable and important for the comparing principle which they contain. Some new attempts have been made upon the same principle but with less fortune.

fol. 5v
Some new attempts have been made upon the same principle but with less fortune.
On the other hand we are so much richer in specialities and the mass of materials which increases every day, is allmost overpowering. while these publications of matters of fact and of representations of real objects of art of all periods were multiplying in France and England, the speculative Germen on the other side were the inventors of that abstract science of taste, which they call Aesthetic, and the history of Art was the first treatened by them on a more critical system. But all these publications are nothing but evidences of what I mentionned before, that we have not yet arrived to that point where knowledge will increase the power of artistical invention in art instead of paralizing it as it now does. – .
Since the time that the reader first felt this want, he had the opportunity of giving frequent lectures on architecture at one of the first schools for Architects in Germany, and it needs not to be added, that these lectures were more or less influenced by the same impressions. But since then his position has altered, and the point of view, out of which he now considers the same question |

# fol. 8r

Let us compare for instance those two forms of ancient vases.

The first is the holy Nile pail or Situlus of the ancient Egyptians, the other is that beautiful Greec Vase which is kalld the hydria.

Both forms relate to the same use, that of intercepting water. But the first is a drawing vessel, for intercepting water out of a river, and therefore caracteristic for Egypt; – Two of these Vessels were carried and ballanced on bars or Jokes so that one hung before and the other behind. The haviest part is very properly the bottom, as a precaution to prevent spilling. this

5 form which is prescribed by use and fittness, is calld the canopic form. It forms a very significant contrast to the Greec Hydria, which was a *well-Vessel*., for intercepting water which runs from fountains. Hence the funnel chaped feature of the neck and mouth which was rigourously bescribed by the object in view, and the mode in carriing them naturally led to the Idea of removing the heavy part of the vessel towards the summit. For they were carried

on the heads, upright when full, and lenghtways, when empty. (as is to be seen on a pictore at one hydria of the Brittish Museum.) |
 Any one attempting to balance a stick on his finger will find the feat much easier if the

heaviest end is uppermost.

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This explains the form of the Greec Hydria, which by the Addition of two horizontal
Handles placed in the high of the point of Gravity was completed, tho' a third vertical handle was often added, not only for the sake of variety, and as a mark of distinction between the front and back of the Vessel but also with respect to its utility.

How striking symbolical appears the light spiritual and lucid Sense of the Greecs in this structure, opposed to the Sytulus of the Egyptian, in whose Genius the physical Laws of Gravity found a corresponding expression. And the two nations were well conscious of the

significance of these forms, – in making them to national and religious emblems. The Nilepail was the holy vessel of the Egyptians, and in like manner the hydria of the Greecs was the sacred Vessel carried by Virgins in religious processions.

It may be added, that the fundamental features of Egyptian architecture seem to be contained in Embryo in the Construction of the Nile-pail |

- And in the same manner we are allowed to recognise in the Hydria of the Greecs the Key to the Doric order of Hellenic Architecture.
- No doubt, The history of architecture and of art in general is based upon that of practical art; The laws of beauty and style in architecture have their Analogs and parallels, and it may be added their origines and keys in the principles of Style in practical art. The separation which now exists between both of them, has shown itself as one of the principal reasons of their decay.

But it may be asked here, which are those principles of beauty and what is style?

35 This question leads us to a very dangerous matter, which has been treatened by philosophers and artists of all ages; Many books in folio and in 8° have been written about it. the result of which for practice was not very great.

I shall not enter into an examination of the different definitions which have been made of such notions, as Beauty and beautiful  $^{|}_{|}$  It luckily happens, that all the notions which con-

40 stitute the aesthical science, are such, that you be allowed to attack the matter where You like one of these notions if well defined and pursued in its consequences leading to the understanding of the others.

I shall therefore restrict myself in explaining how I wish to be understood in using here in this paper the word style. in this paper I say, for I have not the pretention of giving a definition of general application and valeur.

45 ition of general application and valeur. By the term style I mean those achievements in works of art, arising 1° from using artistically the means and fol. 7r

fol. 8v

423

2° from observing the limits which are contained in and defined by the task and problem in question, as well as by the accessories which modify the solution of it in every case.

Every work of art is a result or for using a Mathematical term, it is a function of a indefined number of quantities or powers,

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422.1 it may be] repl. del. we may be able to make it be able] after del. by this way to] undel. topic] 'topics' (see 411-12, Explanatory Notes 105.29) 422.3 individuality] above del. Character And] inserted 422.4 possible] after del. was allowed to 422.5 These] after del. on fol. 6r-v

A fundamental form, the simple expression of an Idea, will, in its application undergo a great variety of modifications Now one of the greatest secrets<sup>1</sup> of art will consist first in making prevail and showing the fundamental forms and Idea through these modifications, secondly in making evident the reasons and what we kall the motifs of the variations of the fundamental forms which we altered. So we will have a work which will be consistent with itself and with ¦ what it is surrounded.

The Genius<sup>2</sup> may and will find the true way<sup>3</sup> by itself and half inconsciously but it may allways be a worthy proposition for an architect, to investigate on the field of his art after those simple relations which I alluded to before. This I thought<sup>4</sup> then w

**1 secrets**] *after del.* mysteries **2 Genius**] *after del.* force of **3 the true way**] *above del.* this natural way of inventi **4 This I thought**] *after del.* He will encounter in this way the greatest difficulties and in the best case have a result full of errors and deficiencies, but he will at least fixe although it may be to great a proposition for one man fixe] *before del.* some of the most conspicous to] '*too*'

422.5 investigating] before del. in vain after a guiding 422.8 progress] repl. del. devel-422.11 **special** *before del.* direction, 422.11-12 preference ~ art, inserted opment 422.12 branch] after del. special **far**] after inserted and del. very 422.13 mind. altered from ~, before del. but we are rich in materials collected and even The] after del. One remarcable work has been 422.14 looses] 'loses' (see also 422.17) 422.15 maid] 'made' 422.17 Napoleon] after del. the great after del. the Frensh Empire 422.18 alliance *after del*. unity by the mechanical way, 422.21 **principle**] *after del*. Idea which 422.23 materials] before del. collected in beautifull editions which] after del. increases every day and is allmost impossible to be overlooked 422.25 real objects repl. del. objects 422.26 Germen] 'Germans' were] after del. gave their contributions on their way 422.26-7 science of taste] after del. art 422.27 treatened 'treated' (see also 423.35) 422.28 But] after del. But all these publications belong to that critical period of the sciences, what I mentionned before. critical period] after del. second period of [] *repl. del.* we have 422.30 artistical interl. before interl. and del. skill 422.31 the felt this want] repl. del. felt the want for instruction reader above del. I he above del. I frequent] interl. 422.32 first] above del. largest 422.33 the] after del. ideas similar to the impressions of my after del. the same idea which I laid before You 422.34 the point of view] after del. my ideas on art, which then were his above del. my he above del. I **considers** *final* s *added* 422.35 question before del. has in the same time undergone 422.36 Let] after del. If we take for instance a parallel between two very expressif forms of ancient vases, between the Egyptian Situlus or Nile Bucket and the beautiful Hydria of the Greecs, that after del. It may be allowed to illustrate this by 422.37 holy] interl. pail] above del. bucket an example. 423.1 Both] after del.

Both forms relate to<sup>1</sup> the same use, that of intercepting<sup>2</sup> water. Both are in the same time symbolical and National emblems, they had a religious and mystical signification. the first<sup>3</sup> of these formes contains the fundamental features of Egyptian Archtecture<sup>4</sup>, in Embryo.<sup>5</sup> The second is the key to the Doric Order of Hellenic Architecture.

I relate to] *repl. del.* are founded upon 2 intercepting] *repl. del.* collecting 3 the first] *after del.* In *after del.* The first form gives us evidently the fundamental features *after del.* And in the same time 4 Archtecture] Arch-| tecture 5 in Embryo.] *repl. del.* it seems to be the Embryo of Egyptian Archi Archi] *undel.* 

423.4 part] before del. of these vessels 423.6 which] after del. which 423.3 Jokes] 'yokes' was used for intercepting water from springs, well-Vessel] 'spring water vessel' 423.7 **chaped**] 'shaped' 423.8 **bescribed**] 'prescribed' 423.9 part] above del. point 423.10 423.15 high] 'height' 423.19 Egyptian] altered from **pictore**] *after del.* representation 423.20 And the two nations] after del. How after del. How caracteristic are Egyptians the[] caracteristic] after del. speaking 423.21 in making] after del. for they made 423.29 No doubt, inserted them to their national and religious Emblems. The] altered from the after del. This is only one instance out of many others, which show the assertion, that 423.30 **art;**] altered from  $\sim_{\wedge}$  before del. and that **The**] T over t 423.34 But] after del.

But what are these laws of beauty<sup>1</sup> and what is style? This question<sup>2</sup> may be

> I beauty] *before del.* which I alluded to at several times 2 This question] *after del.* Here it would seem

423.35 This question] after del.

This question leads us to a dangerous matter<sup>1</sup>, which has already filld up many books in folio, and <sup>2</sup> octavo, without bringing <sup>3</sup> any great practical.

**I matter**] *above del.* chapter 2 **folio, and**] *before undel.* and 3 **without bringing**] *after del.* without being carried to any

423.35 has been treatened] after del. has occupied many and before del. so often since the philosophers] *after del.* many 423.36 ages;] altered from ~, before del. and filld up 423.37 great.] repl. del. large. 423.38 enter] before del. here 423.39 such] above del. as Beauty and beautiful] inserted before del. and **It**] after del. in restricting these myself only in the explanation of what I understand under the word style. in restricting] explanation] after del. question after del. in confining after del. confine style] *underl*. 423.40 **aesthical** 'aesthetical' 423.40-2 are such ~ others.] *repl. del.* are such, that one of them includes all the other; you be allowed to attack the matter where You like. includes] *above del*. contains 423.41 one of these notions] after del. one of them, if pursued consistely leading consistely] 'consistently' 423.44 in this paper] after del. This definition has no way the pretention of general application and I say here **I say** *interl*. **I have**] *after del.* it has not the pretention of a *after del*. I give it not 423.45 valeur] French for 'value', here misused for 'validity' 423.46 mean] repl. underl. and del. understand arising] before del. from using the means artistically and

424.2 **case**.] *before del*. Style is the artistical treatement of some fundamental Idea in a work of our hands, - 424.3 **Every**] *repl. del*. A A] *over a after del*. We may consider **is**] *above del*. as **for**] *after del*. as a function (if it is allowed to 424.4 **number**] *after del*. quantity of **quantities**] *after del*. variable

# **General Remarks on the Different Styles in Art**

# TEXTUAL RECORD

MS 124	gta, 20-Ms-124, fols. 11–21v (1v, 2v, 3v, 4v, 5v, 6v, 7v, 8v, 9v, 10v, 11v, 21r
	blank; 21v notes and sketch), in Semper's hand, <i>copy-text</i>
MS 126	gta, 20-Ms-126, fols. 1r-14v (14r-v blank), in J. Ruston Palen's hand
	(emendations in Manfred Semper's hand), 1880, copy of MS 124
MS 128	gta, 20-Ms-128, fols. 11-7v, 'Vergleichende Technologie', in Hans Semper's
	hand (five emendations in Manfred Semper's hand), early 1880s, Hans
	Semper's German trans. of MS 124, fols. 11–14v; see Herrmann 1981, 111
MS 127	gta, 20-Ms-127, fols. 11–39v (2v, 3v, 4v, 5v, 6v, 7v, 8v, 9v, 10v, 11v, 12v, 13v, 20v,
	21v, 24v and all following versos blank; 14v, 15v, 16v, 19v, 22v, 23v notes re-
	lating to Semper's new Dresden Court Theatre; 17v three del. words), 'Ent-
	wurf eines Systemes der vergleichenden Stillehre', partly in unknown hand
	(1r-13r, 17r, 18r-v, 20r-22r, 23v-38r; emendations in Hans and Manfred
	Semper's hands), partly in Manfred Semper's hand (1r, 8r, 11r, 13r–14r, 15r,
	16r, 18r, 19r, 22r, 23r, 37r–39r; one emendation in Hans Semper's hand), early
	1880s, Manfred Semper's German trans. of MS 124, fols. 3r–7r, 9r–14v (ad-
	ditional sections: German trans. of MS 122; see 409), published in Semper
	1884; see Herrmann 1981, 110
Semper 1884	'Entwurf eines Systemes der vergleichenden Stillehre', 259-91, German
	trans. of MS 124, fols. 3r–7r, 9r–20v (additional sections: German trans. of
	MS 122; see 409); for details of this composite translation, see Herrmann
	1981, 159–66
Semper 1983	'London Lecture of November 11, 1853', 5–22, here 18–22, Mallgrave's ed. of
	MS 124, fols. 5r–11r, 13v, 14v–20v (119.21–120.23, 120.37–121.26, 122.34–126.38)

**BIBLIOGRAPHY** Vogt 1976, 191, 193–4; Herrmann 1981, 109–11, 159–66; Mallgrave 1983b; Herrmann 1990, 80; Mallgrave 1996, 217–18; Gnehm 2004, 45–6; Poerschke 2012; Poerschke 2016, 79–82; Hildebrand 2020b, 67, 69–70; Hildebrand 2021, 114, 118 fig. 10

# **EXPLANATORY NOTES**

Wolfgang Herrmann and Harry Francis Mallgrave assumed that manuscripts MS 122 and MS 124 relate to one and the same lecture – the first lecture in the 1853 autumn series, held on 11 November – and that MS 124 was written before MS 122 (Herrmann 1981, 109–10; Mallgrave 1983b, 23). Both of these assumptions are incorrect, since MS 122 is obviously the manuscript of the inaugural lecture given on 20 May 1853 (see 410). The fact that MS 124 actually relates to the lecture of 11 November 1853 is evident from the first paragraph (118.1–6), which refers to MS 122.

The first assumption by Herrmann and Mallgrave is understandable to the extent that, in the first half of the lecture of 11 November 1853, Semper discusses topics that he had already dealt with in the inaugural lecture: the lack of comparative books on architectural history,

In the second half of the lecture, Semper discusses part of the topic announced in the 'Prospectuses of the Lectures on Art' under number 1, 'The ancient practice of wall coating, and its significance in history of architecture and art in general' (96.14–15). He regards the use of hedges, fences, skins and mats for spatial separation as being the origin of this practice. Quite briefly, he explains the way in which these methods were replaced due to secondary needs by solid walls, the coverings of which – regardless of their material quality – reveal their descent from meshes and textiles, 'the true representants of the idea of *Space-separation*' (124.34). Semper discusses only one example in greater detail, that of glazed brick walls (125.27–126.14). Finally, he concludes that 'the principle of *Coating*' dominated ornamental art and architecture throughout the whole of antiquity (126.33–4). This is the first time that he mentions this principle, for which he provides detailed evidence in the first volume of *Style in the Technical and Tectonic Arts* in 1860 (Semper 1860/63, 1:217–513).

Semper based his explanations of wall covering closely on *The Four Elements of Architecture* (Semper 1851b, 54–9, 61–2) – in accordance with his remark that 'the principal material to the present and to the following lectures' was based on his 'pamphlets' that had been published in Germany (118.37–8). However, his claim that he had already had 'different pamphlets' published 'under the title of Contributions to a comparing science of architecture' (118.34–6) is overstated: only one of his books, *The Four Elements of Architecture*, had been published with a similar subtitle.

118.1 For some months Some months ago 118.6 our naturalists This non-specific wording has been changed from 'our great naturalist' (see 429, Alterations in the Manuscript 118.6), a phrase that repeats 'the great Naturalist' from the inaugural lecture (105.31) almost verbatim. A fragmentary manuscript of the inaugural lecture (MS 123<sup>2</sup>) shows that the great naturalist being referred to is Georges Cuvier: it includes the words 'the naturalist' following the deleted name 'Cuvier' (420.27; 421, note 420.27). 118.21 a Sort of Method how to invent] see 411-12, Explanatory Notes 105.29 118.34-6 different pamphlets ~ published in Germany under the title of Contributions to a comparing science of architecture] These 'pamphlets' can only be Preliminary Observations on Painted Architecture and Sculpture of the Ancients (1834), which does not have a subtitle, and The Four Elements of Architecture (1851), which has the subtitle Ein Beitrag zur vergleichenden Baukunde (A Contribution to Comparative Architecture). Semper's other books - Ueber den Bau evangelischer Kirchen (On Protestant Church Building, 1845), Das königliche Hoftheater zu Dresden (The Royal Court Theatre in Dresden, 1849) and Science, Industry, and Art (1852) - can scarcely be regarded as 'Contributions to a comparing science of architecture'.

119.15–16 The laws and principles ~ fixd by Architects.] cf. the similar passage in the definitive version of the inaugural lecture (108.4–6) 119.18–19 considering ~ art and Industry ~ as attendant upon Architecture] an echo of Owen Jones's principle that 'The Decorative Arts arise from, and should properly be attendant upon, Architecture' (see 398, Explanatory Notes 97.11–12) 119.24  $Y = \Phi(x, z, t, v, w, .)$ .] Mallgrave has 'Y = C (x, y, z, the state of the state of

t, v, w, ...)' (Semper 1983, 18); he has 'C' wherever ' $\Phi$ ' stands in the following text. For the reading of ' $\Phi$ ', see 119.27: 'the Greec letter  $\Phi$  or Function'. Accordingly, Manfred Semper noted on fol. 3r of MS 128, Hans Semper's partial German translation of MS 124, where ' $\epsilon$ ' stands instead of ' $\Phi$ ': 'In mathematics,  $\varphi$  (phi) is used as an indication of the expression "function". Therefore, I have corrected all  $\epsilon$  by replacing them with  $\varphi$ .' Gottfried Semper did in fact write the capital letter phi ( $\Phi$ ) like an oversized small phi ( $\varphi$ ). In *Kleine Schriften*, however, the Greek letter  $\varphi$  is replaced by the Latin letter F (Semper 1884, 267–9). 119.26 **to gether** 119.32 **cet**] *etc.* (see also 119.36) 119.33 **before**\_] ~,

120.1 shedula] schedule, here misused for formula; see 119.25, 120.38; cf. 430, Alterations in the Manuscript  $120.1-2^{1}$ ,  $120.2-3^{2}$  120.6 cub] cup 120.38 formule] French for formula 121.9 Clime] climate 121.14 commenders] commanders, here misused for establishers or purchasers 121.30 vues] French for views

122.27 **Antik**] *antique* (see also 125.24) 122.37 **maid**] *made* 

123.7–13 **constituent parts ~ fireplace ~ Roof ~ Enclosure ~ Substruction**] These parts correspond to the architectural elements distinguished in *The Four Elements of Architecture*: 'Feuerstätte' or 'Herd', 'Dach', 'Umfriedigung' and 'Erdaufwurf' or 'Terrasse' (Semper 1851b, 54–5, 55 n. \*). However, the word 'Substruction' translates neither 'Erdaufwurf' nor 'Terrasse'. It refers to a substructure consisting of solid material, which – in contrast to 'Erdaufwurf' or 'Terrasse' – is a part of the building rather than of the terrain.

124.3 maçonry] merged from French *maçonnerie* and English *masonry* substrution sub-124.4 **Appartenences** *appurtenances* 124.11 tresses] French for *plaits*. Mallstruction grave has 'dresses' (Semper 1983, 21). 124.14 **propriety** *property* 124.21 New Seelanders] merged from German Neuseeländer and English New Zealanders 124.24 barches of trees] barks ~ ~, here inner barks; cf. Semper 1884, 287: 'Baumbast'. Mallgrave has 'branches of trees' (Semper 1983, 21). 124.27 **barches of trees**] *barks* ~ ~, here *outer barks*; cf. Semper 1884, 287: 'Baumrinde'. Mallgrave has 'branches of trees' (Semper 1983, 21). 124.28 preceeded] preceded 124.30 interlaces] wattles 124.31 **beheld**] derived from German behalten: retained

125.6 enterlacs and tress works] 'enterlacs' derived from French *entrelacs: wattlework*; 'tress works': *plaitwork* (see note 124.11). Mallgrave has 'interlaced and trellis works' (Semper 1983, 21). 125.15 reimplaced] *replaced* 125.22 maçons] French for *masons* 125.27 reimplacement] *replacement* 125.30 unbournd] *unburned*, here misused for *unbaked* 125.31 burning] *baking* (see also 125.35, 126.10, 126.13) 125.35 unburnt] *unbaked* (see also 126.12) 125.36 whith] which

126.1 **fourdly** *fourthly* 126.7 **last** *latter* 126.12 **than**] *then* 126.34 **Romains**] French for *Romans* 126.35 **lais** *lies* 126.36 jet] yet 126.38 depassing] derived from French dépasser: exceeding (cf. 435, Alterations in the Manuscript 126.38). Mallgrave has 'surpassing' (Semper 1983, 22). permit it. -] This is followed by a deleted passage first stating that the Assyrians were 'the most faithful adhearants of the principle in question' - i.e. of the principle of wall covering – and then discussing 'Assyrian tapestries' (435–6, Alterations in the Manuscript 126.38). Semper takes the content of this passage, which is borrowed from The Four Elements of Architecture (Semper 1851b, 59–60), over into manuscripts MS 129 and MS 131 for the lecture 'The Ancient Practice of Wall Coating and Tubular Construction' (see 128.26, 129.2–4, 129.9–11, 448.26, 448.28–32).

# EDITORIAL EMENDATIONS

122.16 timber-construction] timber- | construction 122.26 timber-construction] timber- | construction 124.37 stone-walls] stone- | walls

# ALTERATIONS IN THE MANUSCRIPT

118.2 **series of**] *after del*. suite of for which] before inserted and del. since long 118.2 - 3prepared the materials] *after del.* collected and collected] before del. the materials and 118.3 **outlines**] *repl. del.* plan plan] *after del*. outlines At that time] after del. In after del. I then after del. I endeavoured to prove in the paper I allude to, after del. In after del. It was 118.4 want of a] *after del.* utility of a *after del.* necessity of t to **Technology** *after del.* since] after del. since by our 118.5-6 so very successfully *above del.* since 118.6 art **naturalists**] *altered from* naturalist *after del.* great 118.8 we] interl. in black ink may] before del. in black ink we not will] above del. may 118.9 **art.**] altered from ~? 118.22 **composition.**] *in black ink below del. in black ink* invention invention] before del. which would be more 118.24 a guide] after del. in red ink such 118.26 **Cosmos**] second o over u 118.29 I allways painfully felt this want] repl. del. I felt this want at an early time of my I felt ~ my] repl. del. Since the time that I first felt this want, (Since after del. I do not entertain the pretention to *after del*. I felt this want at an early) allways] in pencil below del. in red ink very often 118.29-30 at my lectures ~ opportunity of giving at] *in red ink repl.* del. in red ink and having had the opportunity of giving lectures on Architecture at one of lectures on Architecture at one] *undel*. 118.30 Academie] altered in red ink from Acadat Dresden;] in red ink above del. in red ink in Germany. emies and *interl.* in red ink it was] after del. As 118.31 that *interl*. by this feeling.] above del. by similar reflections; and accompanied in opposite column by del. by the desire of parallelising the by the desire of parallelising the] above del. by the desire of parallelising between (by undel.) 118.31–2 Although] *repl. del.* but 118.32 pretention] before del. of giving a filling up] **want;**] altered from  $\sim \land$  before del. by after del. succeeding in givi 118.33 it was then inserted in red ink **my**] in red ink above del. in red ink My My] after del. I only was endeavouring of prepar to contribute] after del. in red ink was then only 118.34 have *inserted* **laid down**] *after del.* collected and published in severa 118.35 were published repl. del. I wrote on the subject in Germany] *interl*. 118.37-8 The contents ~ lectures.] in red ink repl. inserted and del. in red ink These publications will form the frames to this and to my following lectures. These publications] *repl. del.* They (They *after del.* The contents of these essays form the esse *after del*. The content of my) 118.37 have in pencil above del. in pencil will suggested] ed added in pencil

119.1 But] inserted before del. at that time at] a over A when I wrote them] interl. existing] interl. in pencil 119.12 This will be shown ~ instances.] repl. del. Instances of this will be given in the course of these lectures 119.13–16 So architecture ~ Architects.] in pencil repl. del. in pencil

So<sup>1</sup> Architecture is certainly<sup>2</sup> the last born<sup>3</sup> of the<sup>4</sup> arts, but it is the combining to gether<sup>5</sup> of all the branches of industrial art and of art in general in one great general<sup>6</sup> effect and after one directing Idea; The laws and principles of Style and beauty which we aknowledge in art have probably been the first systematically fixd by Architects

**I** So] *inserted after del*. But in the same time it can not be denied that architecture is the com But ~ com] after del. But in the same time Practical art had reached to a high degree of development long before 2 certainly] *interl.* 3 last born] *above del.* joungest joungest' 4 the] *above del.* her sister-5 to gether] 'together' 6 general] after del. com[]

119.17 **apologizing**] *after del.* just *after del.* explaining or of 119.18–19 by considering ~ **art and Industry**, *repl. del.* in materials by considering them mai[n] in] *undel. before del.* 119.21 **a result**] *after del*. the 119.24 **x**,] before del. in red ink y, producing the 119.25 formula,] *before del*. where 119.26 which way] repl. del. which and inserted 119.27 119.29 **(x + a)**] *before del.* or z **here**] *interl. in pencil* **U**, *interl*. 119.30 in the principle repl. del. in the same time in the same time] after interl. and del. remain principle altered in pencil from principles 119.30-1 remain identical to the last, being inserted 119.30 **identical**] *after del*. principally 119.33 change ~ fundamentally] repl. del. change again and will be principally principally] *underl*. than before *in red ink repl. del. in red ink* than than] *'then'* 119.34 the Change took place *interl. in red ink* 119.35 have **The**] altered in pencil from This 119.37-40 It will be said ~ taste.] repl. *after del*. remain del.

I know what objection will<sup>1</sup> be made<sup>2</sup> against this, it will be said<sup>3</sup> that an artistical Problem is not a mathematical one and that artistical results are hardly obtainable<sup>4</sup> by calculation This is very true and I certainly am the last to<sup>5</sup> believe,<sup>6</sup> that the creating force<sup>7</sup> of artistical genius<sup>8</sup> may<sup>9</sup> be obtainable by the way of mere reflexion and knowledge.

I objection will] above del. You may object 2 be made] inserted and del. in pencil 3 it will be said] above del. You will say 4 are hardly obtainable] del. in pencil but repl. del. can not be obtained 5 to] interl. 6 believe,] after del. of those who may pretend this. 7 the creating force] del. in pencil but repl. del. creations creations] above del. works 8 genius] after del. skill and 9 may] above del. could

119.37 **It**] altered in red ink from it after del. in red ink I know what objection will be made against this argumentation; 119.38 results] after del. the 119.39 mere reflexion] after del. genius 119.40 talent] after del. genius and] interl. in pencil taste] before del. in pencil and genius

120.1-2 Also I only wanted ~ subject] repl. del. in pencil

I only wanted this general shedula<sup>1</sup> as<sup>2</sup> a crutch<sup>3</sup> for leaning on it in explaning<sup>4</sup> a subject which otherwise it would be difficult<sup>5</sup> for me to explain as shortly and clearly in a linguage which I know but little.

**1 shedula**] *repl. del.* formula **2 as**] *after del.* for facilitating **3 crutch**] *before del.* for the explanation **4 explaning**] *interl.* **5 difficult**] *after del.* more

120.1-2 this shedula ~ subject] inserted in pencil 120.2-3 | therefore ~ letters.] repl. del. in pencil

Let us therefore<sup>1</sup> give some attributions and values to those letters.<sup>2</sup>

I Let us therefore] del. in ink after del. in ink Besides there will be 2 letters.] altered from ~~ before del. which constitute the sheme which I layd before You. sheme] 'scheme'

120.2 1] in pencil above del. in pencil You **be**] inserted in pencil allowed] altered in pencil from allow me my proposition] after del. the theme which I 120.3 real attributions and values to those letters.] *inserted in pencil* which are] *after del*. the 120.5 **in**] *interl*. use and destination 120.7 for all nations] *after del*. every where and at every times, when 120.8 in principle] *above del.* principally 120.9 **no matter.**] *interl*. 120.10 The elementary Idea] after del. The fun (for 'function') after del. The elementary idea, prescribed by the use of a thing, may this use be materially or symbolically understood, no matter, a thing] *after del*. the symbolical no matter] after del. nor 120.10–11 destination;] altered from ~, *before del*. (may the last be materially or symbolically understood, no matter,) 120.11 upon material and upon] *interl*. 120.12 **conditions**.] accompanied in opposite column by del. And this is the case, this] altered in pencil over red ink from these before del. in pencil elementary idea idea] altered in pencil over red ink from ideas motiv altered in pencil from motives 120.19 **Motive**] *after del*. fundamental 120.20 **observed** *altered from* ~. 120.20–1 **in composition.**] *inserted in red ink* 120.23 fashion.] before del. Consistency and clearness in expressing the elementary idea in a work of art is the first and most important qualification of an artist, which he may acquire only by incessant study of nature and of the 120.30 **works**] s added in pencil works of early art. 120.33 **consider**] *after del.* should 120.34 **art**] inserted in red ink leading] repl. del. leads **Direct** *interl*. 120.37 those 120.39 **Those**] o **coefficients**] *after del.* the qualification of 120.38 **x**, *before del.* y over e

121.1 I must specify them here forthwith] *repl. del.* They must be specified here undefined,] *before del. in red ink* 

and I  $^{\rm r}$  shall only point out some of the most important which will lead to the explanation of my plan  $^{\rm 2}$ 

**I**] *interl. and undel.* 2 **plan**] *before del. in black ink* for this course of lectures. lectures.] *altered from*  $\sim \wedge$  *before del.* on the different branches of industrial art.

they] t in red ink over T 121.2 **but**] *inserted in red ink* 121.3 1°) Materials and pro-121.7 2°) Ethnological influences, *inserted* **cesses**. *inserted* 121.8 comprises] altered from comprehends 121.10 conditions.] altered from ~^ before del. which have influenced and will allways influence the productions of human skill; the history 121.11 includes after del. comprehends and both above del. comprises personal] before del. and individual 121.13 arise] repl. del. come 121.14–15 and the practical performers] after del. and manufa 121.16 different] above del. groups 121.17 significations] after del. notions of that im-121.18 of above del. which we call **portant artistical** *inserted after del.* general 121.19 **Thus we say**] *after del*. The first signification is first] *before del.* and most when above treated] before interl. in ink and del. in pencil by the maker 121.25 of Style] indel. if serted in red ink **can**] *in pencil repl. del. in pencil* could could] *after del.* may be 121.27 The first two] after del.

The <sup>i</sup> first two <sup>2</sup> of these three significations of style <sup>3</sup> will be taken up as the general proposition of the following:

First<sup>4</sup> The<sup>5</sup> treatement of the materials, principally<sup>6</sup> as influencing the<sup>7</sup> style of the works of art<sup>8</sup> and secondly, in an additional lecture, some general remarks on the historical notion of Style.

**1** The] *after del.* The Specification of that what constitutes the notion style will be the first object of the following, but only as 2 two] *interl.* 3 of style] *interl.* 4 First] *insert-ed and altered from* Firstly *and del. in red ink* 5 The] *del. in red ink* 6 principally] *above del.* mainly 7 the] *above del.* upon 8 of the works of art] *interl.* 

121.29 with respect] after del. chiefly style] after del. its influencing the its] after del. the development of (development after del. modification) 121.30 on the works of art,] repl. del. on art, 121.30–1 and especially of architecture] inserted 121.31 expressions of] above del. influenced by 121.31–2 of the ~ institutions] of repl. del. by 121.34–6 The different manners ~ certain] repl. del. on fols. 11r and 12r

The manners<sup>1</sup> of treating raw materials and of transforming them to productions of industrial art<sup>2</sup> are so manifold that it will appear<sup>3</sup> almost impossible to<sup>4</sup> || classify them in a manner that every one of them finds its right place.

1 manners] after del. different 2 industrial art] after del. industry and art 3 it will appear] after del. at the first sight they 4 to] del. before del. bring them into classifications so [t]

121.36 **types**] *after undel*. certain 121.37 **common**.] *altered in pencil from* ~, *before del. in pencil* according to our comparing system.

122.3 word coating] after del. branch of industry in the widest 122.7 pottery] underl. in red ink 122.13 Stone,] inserted in red ink 122.16–17 This is ~ textile art.] inserted 122.22 These are] after del.

These are the four classes which will be specified<sup>1</sup> in this and the following lectures<sup>2</sup> as far as time

I specified] before del. as far as it may be allowed for as far] as undel. 2 lectures] undel.

122.22 transitional] after del. trad122.23 find] after del. belong to122.26 is] above del.forms122.29–123.20 for Metalworking ~ fireplace.] repl. del. on fol. 14r

for Metalworking<sup>1</sup>. The reason for this lies near; Metal is not a primary material. The types were fixed before the emploiment of metal for their execution. But we shall not forget this branch of industrial art to be sure.

These different branches of industrial art find their common application<sup>2</sup> and act together in the works of architecture,<sup>3</sup> and<sup>4</sup> Each<sup>5</sup> of the 4 classes of industry has<sup>6</sup> given the type to one of the constituent<sup>7</sup> elements of architectural construction.

Which are these constituent elements of architectural construction?

The earliest<sup>8</sup> Symbol of Settlement<sup>9</sup> is the arrangement of a fire place, and the lighting of a warming, vivifing and nurrishing flame; The first groups of men, forming the germs of association<sup>10</sup> and civilisation met round the hearth, on which the first alliances<sup>11</sup> were concluded and the first religious<sup>12</sup>

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I for Metalworking] after undel. on fol. 13r for 2 application] before del. in the works of architecture and every one of the four classes is represented by the four principal is represented] after del. found so to speak. after del. has given 3 architecture, *altered* 6 **has**] *after del.* is the from ~. 4 and *interl*. 5 Each] above del. Every one 7 constituent] after del. most 8 earliest] above del. first 9 Settlement] before del. the first beginning is now 10 **association**] *after del*. human 11 alliances] after del. pledges were 12 religious] before one-sixth page blank

122.29 for Metalworking] after inserted and del. on fol. 12v for metal working, The re 122.35
been mentionned] after del. in red ink here 122.35–8 It may be doubtfull ~ education,] in black ink repl. del. in black ink

It may be doubtful, if it is that in which the<sup>1</sup> earliest<sup>2</sup> attempts of mankind in artistical productions were maid<sup>3</sup>, if it is the first by anciennity – but undoubtedly it has had the greatest influence upon the general development of art,

1 the] after del. artistical skill began to 2 earliest] above del. first 3 maid] 'made'

122.37 **earlier**] *before interl. and del.* and stron 122.38 **by giving**] *after del.* by its early application on [a] **first**] *repl. del.* earliest 122.41 **other**] *interl.* 

123.1 one Element] after del. one of after del. one of the three principle elements of<br/>principal'prin-<br/>123.3 substance] after del. materialall] above del. every123.4settlement] after del. humanity and civili123.6–15 But Here ~ Architecture,] repl. del.

The hearth<sup>1</sup> is the first, and the most important, the moral element of architecture. It forms the center to which all the other parts of the building relate and it is the only element of architecture which is selfexisting<sup>2</sup> and has<sup>3</sup> a meaning without the coexistance of other constructions, without the protection of a roof, without beeing included by walls, or elevated on basements and terraces. It therefore constitutes in itself the elementary<sup>4</sup> idea of a great number of edifices, of those namely which we comprise under the term of monuments, if we take this term in its special sense.

I The hearth] after del. The lighting of a after del. The Hearth is the 2 is selfexisting] after del. by itself 3 and has] after del. and forms an 4 elementary] after del. fun (for 'fundamental')

123.6 **But**] *inserted* 123.7 **constituent parts**] *after del*. constructiv elements 123.13 **Substruction**] *before del*. or the 123.17 **near**] *repl. del*. at at] *repl. del*. round 123.19 **The Altar**] *after del*.

The fireplace forms, <sup>I</sup> Through all the Phases of social development the <sup>2</sup> holy focus, <sup>3</sup> the center of relations for <sup>4</sup> all the other formal expressions of society.

I The fireplace forms,] *interl.* 2 the] *after del.* the fireplace formed 3 focus,] *before del.* round which the whole 4 for] *above del.* of

123.19 this early Symbol] *after del*. this highest Symbol *after del*. the Symbol of spiritual live and 123.21 The hearth] *repl. del*. It 123.24–5 certain important class] *above del*. num-

123.25 edifices] *after del*. important 123.28 will relate.] *after del.* relate. ber 123.30 form] *after del*. are 123.31-2 **These defenders of the hearth are** *repl. del.* namely 123.33 these] *altered from* the 123.33-4 protected and protecting parts] *repl. del.* four above grew up] *repl. del.* mentioned constituant parts 123.35 take place.] repl. del. grew up **happened**] *after interl. and del.* generally developped themselves; 123.37-41 | shall ~ practical art.] inserted after inserted and del. I Shall explain this | Shall explain this] before del.

At<sup>1</sup> the same time they became the centers for the division of labor. The different krafts<sup>2</sup> of industry were grouped around them;

I At] after del. In the same time they became at an very early time 2 krafts] 'crafts'

124.2 representative tive *above del.* nt 124.3-4 Engineering ~ Appartenences.] after del. The art of Engineering a and repl. del. The Engineering and Maçonry round the Terrace, the Carpenters kraft round the Roof and its appertenences; Maçonry] 'masonry' (see 428, appertenences] 'appurtenances' Explanatory Notes 124.3) kraft] *'craft'* 124.7 of mat**makers**] *after del*. of Coatmakers, 124.8 **appear**] *above del*. seem strange, *altered from* ~^ *before del.* to You, at the first t (for 'time') wants justifying.] *repl. del.* wants to be 124.10 sill] *after del*. first treshold of 124.12 tribes,] *above del*. people motivated. here. 124.15 As the first raw attempts of this kind] repl. del. As The first raw motive for separ**perhaps**] *before del*. with some right ation of space As inserted 124.17 **of a**] *repl. del.* with *above del.* which possesses 124.18 **has**] *above del*. knows that shows a a Sort 124.19 **nothing**] *before del.* else 124.25 **fibrous**] *after del*. other of inserted 124.26 hangings] *after del.* such 124.28 by far preceeded] after del. preceded far 124.29 walls.] after del. stone walls or even that of wooden 124.31 **beheld**] *after del.* became 124.32 part of its *interl*. 124.34 **remain**] *repl. del.* were 124.35 **are**] *above del.* were 124.36 walls;] above del. Separations; 124.38 to give] inserted after del. to be supporters of haevy to] inserted after underl. and del. Security, and before del. Stability, Durability etc. 125.1 Where *after del*. Every where else, except on 125.2 means of inserted separ**ation**] *altered from* separations when] above del. where 125.3 **they**] *after del.* there 125.8 **the visible part**] *after del*. the outer part, the] *undel*. 125.9 **has**] *after del*. is derived 125.10 root] above del. racine 125.10-11 The constructiv part of] after del. The inner part 125.13 The significance of the] *repl. del.* These relations between the o *after del*. It **space**] *before del.* and the material walls, 125.14 were] *after del*. became 125.16 **new** above del. such 125.19 **coolness**] *above del.* freshness freshness] *before del.* or Durability etc.] inserted before del. on fol. 18r

# better conservation and durability.

One of the most ancient and most generally adopted surrogates was suggested by the maçons<sup>1</sup>; the coating of the walls with stucco. The <sup>2</sup> painting on Stucco and the style of wall-decoration<sup>3</sup> with the antik<sup>4</sup> nations down to the late Romans never denied its origine. The<sup>5</sup> same is the case with the mediaeval Walldecorations, for instance with those well known decorations in the Church of Francesco di Assisi which have been modelled upon Drapperies and which even in their historied parts show<sup>6</sup> the caracter and Style of Embroideries

The Wall decorations of Pompeia<sup>7</sup> suggest<sup>8</sup> the same

I maçons] French for 'masons' 2 The] altered from the after del. We shall later see that later] undel. 3 and the style of wall-decoration] inserted 4 antik] 'antique' 5 The] after inserted and del. We see the proofs of this 6 show] after del. belong to 7 Pompeia] 'Pompeii' 8 suggest] after del. give a

125.20 Every branch of Industry] after del. Every branch of industry has been set into has been] repl. del. was (was after del. took its part after del. contributed one requisition. requisition.] *altered from* ~^ *before del.* for suppliing new 125.23 of painting] or more 125.23–4 Wall-painting] *repl. del.* it 125.28 the glazed bricks] *repl*. after del. of the art *del*. the Glaced tyles This invention] after del. which seem to be invented by the Assyrians to 125.29 **probable**] *after del.* more than 125.30 **glazing**] *after del.* colou bricks *above del*. tiles 125.31 bricks.] *repl. del.* the tiles. 125.32 glazed after del. paint bricks 125.35 **quite**] *repl. inserted and del.* perfectly unburnt] after del. in a quite *above del*. tyles 125.36 Glazing] after del. cover of and before del. state 125.37 Glazings] before del. or 125.38 fixed] *before del.* on these tyles Enamelings smooth fire] after del. soft fire 125.39 ornamental] after del. archite

126.1 bricks only] only *interl*. 126.7 ornaments] repl. del. different patterns 126.8 work *interl. before del.* in colourd bricks 126.9 excepting on the basements of the **buildings**] repl. del. even at instances where the raw materials appeared and were only covered with a thin coating of Colours. excepting on] above del. except on 126.10 **bricks**] *above del.* tiles 126.12 **put**] *repl. del.* placed 126.13 process] repl. del. method **bricks**] *repl. del.* tiles 126.18 Metal plates] after del. thin 126.18–19 sometimes with Goldplates, inserted 126.21 Finally may be mentionned] repl. del. As the last of Surrogate may be mentionned the last] after interl. and del. one of 126.22 stones,] before del. which we find on the remains with which the walls *inserted* 126.23 were frequently invested. *inserted* 126.25 Such heterogeneous] after del. on fols. 19v-20r

These<sup>1</sup> different materials and processes applied to Wall decoration, must have produced naturally results<sup>2</sup>, very different from the old<sup>3</sup>, – but this variety of Artistical inventions and improvements was bount together by a common relation; | Painting amd plastical Art, on Wood, Stucco, Terra Cotta, Metal or Stone remained perhaps inconsciously dependant upon that Style, which is peculiar<sup>4</sup> to Embroidery and tabestry. Ornamental Art and Architecture in its general features<sup>5</sup> down to the Romains<sup>6</sup> remained subject to the same principle of *Coating*. Polychromy<sup>7</sup>, the mode of covering the entire edifices even those of Marble, with Colours, t<sup>8</sup>

I These] after del. in opposite column The Character wich was observed for the treatement of the new employed stuffs, was [b] 2 results] after del. great changes in the 3 the old] after undel. the 4 peculiar] after del. particular 5 in its general features] repl. del. never entirely 6 Romains] French for 'Romans' 7 Polychromy] after del. Antik polychromy Antik] 'Antique'; after del. That System of (of undel.) 8 t] after del. is

126.33 was] after del. on fol. 20r-v remained, ¦ lengtime dependant upon that Style, which is peculiar lengtime] 'for a long time' 126.38 depassing] repl. del. exceding besides.] repl. del. apart permit it. –] before del.

By<sup>2</sup> passing<sup>1</sup> through the history of art<sup>3</sup> and by examination<sup>4</sup> of the remaining traces of ancient architecture we must feel convinced, that the Assyrians<sup>5</sup> have been the most faithful adhearants of the principle in question.

The Assyrian tapestries are mentionned and celebrated in the oldest records of mankind, for the richness of their colours and the art<sup>6</sup> with which they were ornamented. The descriptions of Dragons<sup>7</sup>, Lyons<sup>8</sup>, Tigers unicorns and other mystic animals which we read, accord perfectly with what we

I By passing] above del. If we pass If] after del. One remark after del. But one remark must 2 By] over In 3 art] above del. architecture 4 by examination] after del. examine the remnants of the oldest edifices, 5 the Assyrians] after del. there after del. among the nations of the old civilised world 6 art] before del. of the repres 7 Dragons] after del. mystic animals, 8 Lyons] 'lions'

# The Ancient Practice of Wall Coating and Tubular Construction

# TEXTUAL RECORD

MS 131	gta, 20-Ms-131, fols. 11–6v (6v blank), in Semper's hand
MS 1301	gta, 20-Ms-130, fols. 11–3v (31–v blank), in Semper's hand
MS 130 <sup>2</sup>	gta, 20-Ms-130, fol. 4r–v, in Semper's hand
MS 129	gta, 20-Ms-129, fols. 11–18v (131–18v blank; 1v–6v variant of MS 131, fols. 1r,
	2v–6r; 7r–8r variant of MS 130 <sup>1</sup> ; 9r–v variant of MS 130 <sup>2</sup> ), in Semper's hand, <i>copy-text</i>
MS 132	gta, 20-Ms-132, fols. 11–31v (all versos blank), 'Entwickelung der Wand-
	und Mauerconstruction bei den antiken Völkern', in Hans Semper's hand
	(one emendation in Manfred Semper's hand), early 1880s, Hans Semper's
	German trans. of MS 131, fols. 1r–3r, 6r, and of MS 129, fols. 1r–8v, partly
	published in Semper 1884 <sup>ª</sup> ; see Herrmann 1981, 111
Semper 1884 <sup>a</sup>	'Entwickelung der Wand- und Mauerkonstruktion bei den antiken Völ-
	kern', 383–94, German trans. of MS 131, fols. 11–2v, 6r, and of MS 129, fols.
	Ir-8v; for details of this composite translation, see Herrmann 1981, 175-7
Semper 1884 <sup>b</sup>	'Ueber den frühesten Stil der Metallkonstruktion und Metalldekoration',
	90-4, German trans. of MS 129, fols. 9r-12v; for details of this translation,
	see Herrmann 1981, 159
Semper 1986a	'London Lecture of November 18, 1853', 33–42, here 33–9, 41, Mallgrave's
	ed. of MS 129

**BIBLIOGRAPHY** Herrmann 1981, 32, 36, 55, 58, 111, 159, 175–7; Herrmann, 1984, 144, 148, 167, 169; Squicciarino 2009, 351–4; Gnehm 2020, 37

# **EXPLANATORY NOTES**

On 18 November 1853, Semper concluded the topic he had started on in the second half of the lecture of 11 November (122.34–126.38) – namely the ancient practice of wall covering. Using the example of a hut on the Caribbean island of Trinidad, a model of which had attracted his attention in the Great Exhibition, he illustrates the four elements of architecture that he had distinguished on 11 November (123.6–13). He evidently regards the hut, to which he returns in two later lectures (174.16, 178.24-32, 185.5-15), as providing evidence of the origin of architecture as described in *The Four Elements of Architecture* (Semper 1851b, 54-5) and also of the phenomenon mentioned on 11 November that 'the oldest ornaments in architecture' can in most cases be traced back to 'the process of twisting and weaving with natural stuffs of different colours' (125.5-7). He places Chinese architecture, which has remained unchanged for thousands of years (127.18-20), at the same elementary level of development but recognizes in it two changes directly affecting the topic: firstly, the transition from wattled or woven walls to covered wooden panels and brick walls (127.21-2, 127.37-8), and secondly, the covering of another element, the wooden supports and beams of the roof, with small ornamental laminae and coloured paint (127.25-9). Starting from contemporary Chinese architecture, the ornamentation of which appears to him to provide a key to the understanding of ancient ornaments and buildings (128.7-9), he sets out to trace 'the gradual transition of the principle of wallcovering to a more constructiv style' in the architecture of the Assyrians, Persians, Egyptians, Greeks and Romans (128.15-18).

In his explanations, Semper goes beyond The Four Elements of Architecture in many places. In discussing Greek architecture, for example, he emphasizes two aspects that are not mentioned in the book: firstly, 'an organic connection between the single elements of construction' (131.27-8), and secondly, the inseparable connection between the constructive parts and the ornaments (131.37-8). The emphasis on this second aspect can be regarded as a way of distancing himself from Karl Bötticher, whose Tektonik der Hellenen Semper borrowed and made excerpts from in December 1852 (see 225.27-32, 499). In contrast to Bötticher, Semper does not recognize in Greek monuments any applied ornamentation that is distinguishable from the constructive parts but does see this in 'barbarian architecture', which for him includes Assyrian, Persian and Egyptian architecture (131.34-6). Whereas Semper discusses Assyria, Persia, Egypt and Greece in more or less equivalent detail, he deals with Rome in a single paragraph (132.15-22) and dispenses with any explicit discussion of the Roman use of wall coverings. He expects the members of his audience themselves to be able to interpret, in relation to the principle of covering, his remarks that the Romans were 'the inventors of real stone construction' (132.15-16) and, through their inclusion of vaulting among architectural forms, that they were also 'the inventors of architecture as an selfexisting art' (132.20–I). When Semper describes the Romans as 'the inventors of real stone construction', he is implying that - in contrast to the Assyrians, Persians, Egyptians and Greeks - they used uncovered stone construction, designed in accordance with its own rules, not only in the element of substructure but also in the elements of enclosure and roof. The description of the Romans as 'the inventors of architecture as an selfexisting art' is scarcely understandable, as the Romans developed their wall and vault architecture from one of the industrial arts, stereotomy. Semper expresses himself more cautiously and comprehensibly in The Four Elements of Architecture: under the Romans, he explains there, stone wall construction attained a 'higher artistic validity' and extended its dominance 'into the area of the roof' (Semper 1851b, 99).

In partial fulfilment of his earlier promises that he would not ignore metalworking, which had been excluded from the four general classes of industrial arts (117.38–9, 122.31–2), Semper supplements his remarks on the principle of covering with a few comments – closely modelled on 'Practical Art in Metals and hard Materials' – concerning metal objects: ornaments and insignia, furniture and weapons, roofs and doors (132.32–135.26; cf. Semper 2007a, especially 104–13, 115–17, 120, 148–9). He describes the procedure used to reinforce thin sheet metal in Greek and Roman protective armour 'by corrugations and curvatures' as being 'an important moment for the history of construction' (134.26–8). In the lecture, Semper does not explain that the procedure appears to be important to him because tubular construction is also based on it (cf. Semper 1860/63, 1:366–7). The subject announced in the 'Prospectuses of the Lectures on Art' under number 2 – 'Tubular construction, well known by the ancients, and forming the fundamental idea of Greek architecture' (96.15–16) – is dealt with in a few sentences (135.1–15), in which Semper hints only vaguely at the influence of tubular construction on Greek architecture (135.5–6).

Three additional drafts of the lecture 'The Ancient Practice of Wall Coating and Tubular Construction' have survived. The first (MS 131), which – in contrast to what Wolfgang Herrmann assumed (Herrmann 1981, 111) – is probably complete, does not begin with the explanation of a Caribbean hut but rather, after a brief introduction, with the description of two Israelite buildings (447.6–448.6): the Mosaic Tabernacle and the Temple of Solomon, to which Semper inadvertently still makes a reference in the final draft of the lecture (131.17–18). This description, which takes up about one-third of the entire draft, would involve Semper having to postpone discussion of the principle of covering in Greek and Roman architecture – and consequently also the treatment of the second topic, tubular construction – until the following lecture (see 449.34–6). The second, fragmentary draft (MS 130<sup>°</sup>) is concerned with Greek architecture and, in contrast to the definitive draft, deals with individual parts of temples – for example, the entablature of the Parthenon (451.15–23). The third draft, also fragmentary (MS 130<sup>°</sup>), contains a few remarks 'On the early style of Metalconstruction and of Metalornamentation' (453.3–15).

127.I-2 On Friday last ~ division.] Wolfgang Herrmann's assumption that this sentence refers to MS 122 (Herrmann 1981, 111) is not correct. Semper did not draw a distinction between the four elements of architecture in MS 122 but rather in MS 124 (123.10-13). However, his claim that he had based the plan for his lectures on this distinction on the previous Friday, i.e. on 11 November 1853, is inaccurate. On that date, he only hinted at the plan in connection with the three groups of stylistic influences (121.27-32), whereas in his inaugural lecture on 20 May 1853 he derived it from the classification of the practical arts (117.24-34). 127.1 **devided**] *divided* (see also 127.10) 127.4 **Caraib**] derived from French *caraïbe*: *Caribbean* (see also 127.20, 127.24) 127.5 52 1851 127.19 pallases palaces 127.21 shrines] screens (see also 127.22); cf. 518, Explanatory Notes 196.25; Semper 1986a, 34 n. \* 127.35-7 At other cases ~ room.] cf. Chambers 1757, 8 127.33–4 of the flooring] off ~ ~ 127.36 gase] gauze; cf. 443, Alterations in the Manuscript 127.36; Chambers 1757, 8; Mallgrave 1986a, 34 n. 3

128.1 **lit up and down**] *open and close.* Mallgrave has 'lift up and down' (Semper 1986a, 34). William Chambers, whose *Designs of Chinese Buildings* Semper uses for support on some points, describes the typical house of a Cantonese merchant as having a saloon that is open on the courtyard side, 'having only a cane-mat, which lets down occasionally to keep out rain or sun-shine' (Chambers 1757, 8). 128.4 gilt paper] Mallgrave has 'yellow paper' (Semper 1986a, 34). 128.5 Arnamental ornamental 128.13 rapports respects 128.18 **Romain**] French for *Roman* 128.21 **tumbs**] *tombs* (see also 131.7) 128.26 The Assvrians ~ old principle.] see 428, Explanatory Notes 126.38 128.30-1 The Assyrian architecture ~ as we shall see it in the last lecture.] see 176.26 - 177.6128.32 macon] French artistical] Mallgrave has 'architectural' (Semper 1986a, for *mason* (see also 130.1, 130.29) 35). 128.39 Frieses friezes

129.2-4 those renomated Assyrian Tapestries ~ Skillfull execution] 'renomated': renowned; see 428, Explanatory Notes 126.38 129.9-11 The descriptions ~ Embroideries which we] see 428, Explanatory Notes 126.38 129.18 52] *1851* 129.23 Queen] wife 129.33 pannelating] *panelling* 129.37 beautiful publication on Persia, made by Mrs Coste and Flandin] 'Mrs': Messrs; Flandin/Coste 1851; cf. 449.7-8 129.40-1 in immense blocks, of black marble] In *Kleine Schriften*, this phrase is translated without comment as 'von ungeheuren Blöcken weissen Marmors', and thus the colour is expressed as white, not black (Semper 1884, 390).

130.1 **stopps**] *stops*. Mallgrave has 'steps (forward)' (Semper 1986a, 36). 130.5 **behold**] derived from German *behalten: retain* 130.6–7 **This we shall see in the Chapter on wood Construction**.] This sentence refers to the lecture 'On Timber Construction, and Its Influence upon the Development of Architectural Forms'. However, in the two fragmentary manuscripts for that lecture (MS 136, MS 137), Semper does not touch on Persian stone columns derived from wooden columns. If he did actually include them in the lecture, he would have had to discuss them before roof forms and roofing tiles (161.2–162.23). 130.14 **unburnt**] *unbaked* 130.25 **roc**] French for *rock* 130.28 **cisel**] merged from French *ciseau* and English *chisel* 

131.2 **Torus**] see 323, Explanatory Notes 68.4 131.6 Champlevé Enameling] Champlevé enamels are produced by pouring liquid enamel into troughs gouged out of a metal base. Semper addresses champlevé enamelling in his 'Observations on Some of the Specimens of Metal Work' (85.11) and mentions its technique as being known to the Egyptians in Style (Semper 1860/63, 1:425), where he also gives a definition of it when discussing enamels in the chapter on metals technology (Semper 1860/63, 2:566). 131.12 interlaces plaits 131.16 massivity] Mallgrave has 'majesty' (Semper 1986a, 37). 131.17-18 like we have seen ~ Tempel of Salomon] an inadvertent reference to a passage in the abandoned manuscript MS 131; see 447.6–448.6 131.23 **overkame**] *overcame*, here misused for *received*; cf. Semper 1884, 393: 'empfingen'. In the corresponding passage of a rejected draft (MS 1301), Semper uses two verbs: 'took up and overkame' (451.3). He apparently writes 'took up' for adopted and 'overkame' for received there (not for overcame, as the next sentence reveals). An equivalent passage in The Four Elements of Architecture reads (Semper 1851b, 52): 'Hellenic culture could only have arisen on the humus ... of foreign motifs ... brought over from abroad'. The question of who brought over the motifs remains unexplained. In 'On the Origin of Polychromy in Architecture', Semper states that the Greeks 'inherited' foreign artis-131.31 depassed] derived from French dépasser: overstepped; cf. tic principles (69.34). Semper 1986a, 38 n. 11 131.32 is] I 131.36 kernet] kernel, here misused for core 132.9 **Ewery where**] *everywhere* 132.35 sheeds] sheets. Mallgrave has 'shields' (Semper 132.38–133.1 Ornaments in Gold- Silver and Tinleaves ~ at the Brittish 1986a, 39). Museum ~ stamped and pierced with ornaments and figures] In 'Practical Art in Metals and hard Materials', Semper mentions 'Gold, Silver and tin leaves, with stamped and pierced figures and Ornaments' preserved in the British Museum (Semper 2007a, 105). 133.1-2 metalshieds] metal sheets. Mallgrave has 'metal shields' (Semper 1986a, 39). 133.3 metalthreads and filigran work] cf. Semper 1860/63, 2:490-5 133.4 processes] Mallgrave has 'principles' (Semper 1986a, 39). 133.6 **alse**] also 133.8 Chains] cf. Semper 1860/63, 2:497-500 133.11–12 woven staffs and Embroideries] 'staffs': *stuffs*; cf. Semper 1860/63, 1:160-5; 2:495 133.13-14 The Pallaces of the Kings of Babylone ~ were ornamented with carpets in Gold and Silverweavings instead of pictures.] cf. Semper 1860/63, 1:364. In 'Practical Art in Metals and hard Materials', Semper describes the same sentence as being a quotation from Philostratus's 'life of Apollonius of Tyane' (Semper 2007a, 107). However, the relevant passage in Giovanni Francesco Salvemini's French translation, Vie d'Apollonius de Tyane, to which Semper is probably referring, reads differently (Philostratus 1774, 2:148): 'Les maisons royales sont couvertes de cuivre qui leur donne un certain éclat; les chambres des hommes & des femmes, les portiques & les colonnades sont, au lieu de peintures, ornés de tapisseries tissues d'argent & d'or, & même d'or massif." 133.15-16 Gold and Silver-embroideries ~ Walldecorations of the temple of Jerusalem] In 'Practical Art in Metals and hard Materials', Semper mentions 'The Wall decorations of the Temple of Soloman, consisting in Wooden pannels, covered with Gold Plates and representing Palm Trees, Cherubim &c (Book of "the Kings", Flavius Josephus Jewish Antiquities)' (Semper 2007, 108). While Josephus does not specify these coverings, they are described in the biblical Books of Kings in a passage Semper refers to in Style (I Kings 6:29-30; cf. Semper 1860/63, 1:402-3): 'And he [i.e. Solomon] carved all the walls of the house round about with carved figures of cherubims and palm trees and open flowers, within and without. And the floor of the house he overlaid with gold, within and without.' Semper's 'Gold and Silver-embroideries' are an interpolation possibly derived from the Books of Chronicles (also cited in Style) - with 'cieled' for covered or coated (2 Chronicles 3:5-7): 'And the greater house he cieled with fir tree, which he overlaid with fine gold, and set thereon palm trees and chains. ... He overlaid also the house, the beams, the posts, and the walls thereof, and the doors thereof, with gold; and graved cherubims on the walls.' Semper might have had in mind also Aloys Hirt's discussion of Solomon's Temple in the work he had in his library (Hirt 1821/27, 1:124): 'The walls ... were thoroughly panelled with planks of cedar, with carvings of flowers, palms and cherubs.' 133.18-19 The arts of nielling and enameling ~ derive from the same origine.] In 'Practical Art in Metals and hard Materials', Semper claims that 'The Art of Nielling is derived from Tattoo' (Semper 2007a, 105). 133.18 nielling and enameling] cf. Semper 1860/63, 2:564-74. In 'Practical Art in Metals and hard Materials', Semper defines niello as 'Engraved Ornaments and Figures filled out with black or dark Mastick', while in Style he defines it as 'a fluid metal compound with which engraved indentations in a heated sheet are filled' (Semper 1860/63, 2:564; Semper 2007a, 100). 133.21 Emaux ~ Cloisonnés] In *Style*, Semper defines *émaux* cloisonnés as 'thin gold threads that are soldered onto a metal surface, with the spaces between them being filled with enamel' (Semper 1860/63, 1:425). 133.21-2 7 different Styles of Enameling] These seven styles are described in 'Practical Art in Metals and hard Materials' (Semper 2007a, 97–9). 133.23-31 Oriental art ~ antiquity.] These sentences are taken over almost verbatim from 'Practical Art in Metals and hard Materials' (Semper 133.25 instinctive] Mallgrave has 'intuitive' (Semper 1986a, 39). 2007a, 108–9). 133.32-3 gold ornaments ~ in the Tomb of Childeric] In 'Practical Art in Metals and hard Materials', Semper describes these ornaments as 'A sort of filigran Work with transparent Enamels', referring to the 'Magazin pittoresque year 34, p 272' and to a 'Work of Montfaucon' (Semper 2007a, 109; cf. Semper 1860/63, 2:518 n. 1). The ornaments are described and illustrated in Bernard de Montfaucon's Monumens de la monarchie françoise (Montfaucon 1729/33, 1:10-16, pls. 4-6) and in the nineteenth volume of *Le Magasin pittoresque* (Magasin pittoresque 1851b) but not in the second volume of the journal, published in 1834. 133.33 imperial Ornaments of Charlemagne] In 'Practical Art in Metals and hard Materials', Semper mentions 'The Crown and Sword of Charlemagne at Present at Vienna', referring to 'Arneths Monography relative to the Gold and Silver Works of the Cabinet in Vienna' and to 'Willemin' (Semper 2007a, 110; italics in original). The ornaments are described and illustrated in Nicolas-Xavier Willemin and André Pottier's Monuments français inédits (Willemin/Pottier 1839, 1:12-14, pls. 19-20), but not in Joseph Arneth's catalogue Die antiken Gold- und Silber-Monumente des k. k. Münz- und Antiken-Cabinettes in Wien (Arneth 1850), which also includes a few post-classical objects. 133.37–8 The taste for rich  $\sim$  implements preceeded ~ the want of fixed settlements.] 'preceeded': preceded. This sentence is taken over almost verbatim from 'Practical Art in Metals and hard Materials' (Semper 2007a, 111); cf. 98.18–20, 101.18–19.

134.3-4 The Egyptians ~ Metal.] These sentences are taken over almost verbatim from 'Practical Art in Metals and hard Materials' (Semper 2007a, 112). 134.4 A.] Aegyptian 134.5–6 The Assyrian Warcharriots  $\sim$  in the former style those of Egyptians  $\sim$  of Cast metal.] cf. Semper 1860/63, 2:375-6 134.10-11 Wooden Chair covered with Goldplates and with Precious stones] In 'Practical Art in Metals and hard Materials', Semper describes this chair as 'gold Covered Wood ... richly ornamented with stones, gems and enamels', referring to 'v Murr. The Imperial Ornaments at Aix la Chapelle' (Semper 2007a, 113; cf. Semper 1860/63, 2:274 n. 2). However, Christoph Gottlieb von Murr's Beschreibung der ehemals zu Aachen aufbewahrten drey kaiserlichen Krönungs-Zierden does not refer to the chair but to three other items owned by Charlemagne: a book of Gospels, a sabre and a reliquary known today as St Stephen's Purse. Both the book's cover - which was only made around 1500 - and the reliquary have wooden cores, which according to Murr's details are 'covered with gold foil and set with jewels' or 'covered with gold foil' and 'set with pearls and very many uncut jewels' (Murr 1801, 10, 25; cf. pl. 1 figs. 1, 3). 134.13-18 In the Life of Charlemagne ~ other compositions.] Chapter 33 of Einhard's Vita Caroli Magni cites a codicil of Charlemagne, which names the 'valuable things' that Semper mentions. Semper also refers to the codicil in Style, although he incorrectly assigns it to Chapter 27 (Semper 1860/63, 2:525 and n. 3). He listed a duodecimo edition of the Vita Caroli Magni in the inventory of his Dresden library (see 211.22). 134.13 secertery] secretary constained] con-134.22 Application of Metal for defensiv arms] cf. Semper 1860/63, 2:485-90 tained 134.24-8 The oriental Style of defensiv arms ~ not adopted by the Greeks and Romans  $\sim$  the principle of strenghtening thin Metal plates by corrugations and curvatures] In 'Practical Art in Metals and hard Materials', the corresponding passage reads (Semper 2007a, 120): 'The Oriental Style of Defensive Arms, a sort of Wire texture (coat of Mail) not adopted by the Greeks and Romans. Greek and Roman Shields, helmets and Armures, show a perfect Application of the principle of strengthening thin metal plates by corrugations & curvations, thus combining strength with lightness.' 134.26 Armures French for *armours* 134.27-8 principle of strenghtening ~ by corrugations and curvatures] 'strengh | tening': strengthening. Mallgrave has 'strength (by) tensing' (Semper 1986a, 41). When Semper explains the historical significance of this principle in *Style*, he also clarifies the principle itself more precisely: it is based on the fact 'that curved and pleated metal sheets enclosing a space of suitable stereometric shape as an envelope achieve the greatest solidity and stability with the least material expense' (Semper 1860/63, 1:366). 134.34 **Id**] *id*: Latin for *it* 134.35 Chield shield **alle**] German for *all* 134.36-7 screw **Zones** Mallgrave has 'seven doves (?)' (Semper 1986a, 41). 134.37 Haeven heaven 135.8–9 roof of the Pantheon which formerly consisted of tubular bronze spars, riveted together] 'spars': rafters; cf. Semper 1860/63, 1:368, 369 fig.; Semper 2007a, 149 135.10-II brassplates ~ taken in time of Sixte V by ~ Borromini for the large Baldachin in **St Peters**] This claim is doubly incorrect: the baldachin in St Peter's was in fact created during the reign of Pope Urban VIII, and it was based on a design by Gian Lorenzo Bernini. In 'Practical Art in Metals and hard Materials' and in *Style*, Semper attributes the baldachin correctly to Bernini, without mentioning the reigning pope (Semper 1860/63, 1:368; Semper 135.12 antik Bronze doors ~ a second example of tubular construction 2007a, 149). 'antik': antique. In 'Practical Art in Metals and hard Materials', Semper describes 'the Splendid doors of the Pantheon, which consist of two Cast bronze panels separated by a space, and only connected by the Cross panels, at the four edges' as being examples of 'the Tubular Style' (Semper 2007a, 148; cf. Semper 1860/63, 1:368 and fig., 369 figs.). 135.18-19 Such were the Silver Doors of St Peters ~ 975 tb.] 'Ib': abbreviation of Latin librae (pounds); cf. Semper 2007a, 116–17 135.19 **Jear** year 135.20-2 This styles appeared ~ in the Byzantine doors at St Peter et Paolo at Rome, which dissapeared ~ some 20 Years ago.] 'et': French and Latin for and. In 'Practical Art in Metals and hard Materials', Semper notes under 'Specimens of Metal Coated Doors' (Semper 2007a, 117): 'Door of S<sup>t</sup> Pauls, Donation of Gregory VII. flat, with inlaid figures in Silver and Damascen Work. It was covered with brass on the outside, No longer existing, XIII. (D'Agincourt Sculpture)'; cf. Agincourt 1823, sect. 'Sculpture', 2:48; 3:13-17; 4: pls. 13-20. In Kleine Schriften, Manfred and Hans Semper note on this (Semper 1884, 94 n. \*): 'Fragments of them, packed into chests, were found by Piper in the monastery of St Paul several years ago.' 135.23-5 But elder doors, in Germany ~ belong rather to the advanced Roman Style with pannels in imitation of wooden framework.] cf. Semper 2007a, 117, 150 135.25 brass doors of the Cinque Cento] cf. Semper 2007a, 151-2

#### EDITORIAL EMENDATIONS

127.23 frame-work] frame- | work 130.13 Door-frames] Door- | frames 130.17 some thing] some | thing 133.6 Gold-bracelets] Gold- | bracelets 133.15 Silverembroideries] Silver- | embroideries

#### **ALTERATIONS IN THE MANUSCRIPT**

#### 127.1-3 On Friday last ~ sketch, which] repl. del.

On Friday last I endeavoured<sup>1</sup> to demonstrate the development of the principle<sup>2</sup> of wallcovering on the tabernakle<sup>3</sup> of Covenant of the ancient Israelites and of the Temple of Salomon, which are known only by the records of the sacred<sup>4</sup> scriptures. We<sup>5</sup> shall now pursue the gradual development of this principle on actual existing buildings or remnants of buildings.

An<sup>6</sup> interesting example of primitive<sup>7</sup> housebuilding is this cottage; This sketch<sup>8</sup>

I endeavoured] after del. mentionned the2 principle] after del. important3 thetabernakle] after del. the descriptions of4 the sacred] after del. sacred and profane5 We] over I1] after del. But it will be6 An] after del. One7 primitive] after del. after del. aconstruction, where all the elements8 This sketch] after del. This drawing has beenmade

127.2 **based**] *after del.* made this division the base of plan] *above del*. order order] before del. which I thought to observe by triing to give a **of**] *in black ink repl. undel.* for on] in black ink repl. del. in black ink upon **An instructiv**] *after del*. Here is one 127.4 exhibit**ed**] *after del. in black ink* which was 127.5 **we**] *after del*. Here here *interl*. construction] after del. housebuilding and before interl. in brown ink and del. in black ink exhibited **expressions** *final* s *added in black ink* 127.6 **combinations**] s added in black ink Everv altered from every after del.

Every Element stands for itself without being connected together with the other by any intention from the side of the builder You see here

127.6 **is**] *interl*. alone] before del. and protecting the fireplace which stands in the center. 127.6–7 and has no connection with the others.] *inserted* 127.8 This] after del. There is no architectural or decorativ intention to be after del. There is no intention to be seen, from the side of the builder. after del. You observe 127.10 which devide] after del. which are employed here as the divisions of the inner localities inner] after del. roo 127.12 barks of trees] before del. on fol. IV and Coconut bones first] *after del*. very 127.14 There is a nation] after del. There is a nation which stands on a high step of industrial 127.19 **ages.**] altered from  $\sim \land$  before del. and their] altered from the **imperial pallases**] *after del.* house of the Imperor of China 127.20 pillars,] before del. which are simple beams, regularly 127.21 **mouveable**] *after del*. simple 127.25 inside] before del. and richly ornaround mented. 127.27 **are**] *before del*. generally of Wood; even for 127.28 Entasis, before del. and Canne (for 'Cannelures') 127.35 At other cases the *above del*. The bottom The] 127.36 gase] accompanied in opposite column by probably Hans Semper's note *after del*. All the gaze] French for 'gauze' 127.37 wood,] before del. have several caracters in pencil gaze? and figures on them

128.4 **paper**, *before del.* and instead of pictures they 128.5–7 We may say ~ is also very *repl. del.* These details are very These details are very] inserted before del. There is nothing 128.5 Chinese] after del. the Study of is] repl. del. has been more disdained] after del. neglected 128.8-9 nations,] before del. on fol. 2v than the actual Chinese 128.10 **compleatness**] *altered from* compleatedness compleatedness] above del. true appear-128.11 frameworks,] *altered from* ~^ *before del.* and mouveables, ances mouveable *altered from* mouveables things] *interl*. 128.12-13 approach] after del. seem to us as 128.15-23 We shall now proceed ~ Botta and Layard.] repl. del.

The Aegyptian<sup>1</sup> monuments are without doubt the most ancient<sup>2</sup>; Some<sup>3</sup> of them, and the most important, have been built many thousand Years before the Assyrian<sup>4</sup> monuments, which have been discovered<sup>5</sup> since a few Years by Mrs<sup>6</sup> Layard and Botta.

The Aegyptian] after del. Among the rest of ancient Architecture and ornamental Art on the Egyptian 2 ancient] before del. documents of human art which exist art which] undel. 3 Some] after del. they are many thou-5 have been discovered] after del. we know only since a few Years only] after del. now 6 Mrs] 'Messrs'

128.15 proceed in] *above del.* try to showing] ing *added* 128.23 greater] *interl.* 128.27 Construction,] *altered from* ~. *before del.* and had also made some progress towards 128.29 mention at once,] *repl. del.* add 128.30 Architecture;] *before del.* That element of architecture which we called the terrace, was even the dominant and Characteristic constructiv element 128.32 the cooperation] *after del.* the stone construction and the] *undel.* 128.40 analogical to] *above del.* like

129.2 **renomated**] *above del*. celebrated 129.3 richness, altered from  $\sim \land$  before del. of 129.3-4 and designs, *interl*. **colours**] *after del.* Colouring and 129.6 ornaments on the outer walls, *interl*. *after del.* representatio[n] as well as for *repl. del.* and likewise they were the models for for] *undel*. 129.7 about 5 to 8 feet *after del.* 5 to 6 feet high from the 129.8 pavement.] altered from ~; before del. and for the whole inner Wall-decoration in general. 129.10 the ornaments] after del. those well known Assyrian Basreliefs at the Brittish museum. Basreliefs] *after del*. Repre 129.13 ancient inserted **Descriptions**] *before del.* of Daniel and Herodote 129.15 but by the reaction *after del*. the sculpture after del. on fol. 3v but by the reaction of certain laws of execution and of processes upon sculpture 129.27 **Very often**] *after del.* The ceilings and at many occasions t after del. Thus the Assyrian dwellings show the first step towards stone Construction, the pannelating pannelating] 'panelling' 129.31 and covered] after del. and richly gilt o and] *undel*. 129.40–1 **of black marble**] *after del*. freestones 129.41 very regularly] *after del*. very regularly although not allways s **view**] *above del*. intention 129.41-2 employing] repl. del. taking

130.13 only built] after del. constructed130.16 a few] after del. one or t[w]Corner]after del. lower130.18 covered] after del. probably130.19 by the history] after del. bythe circumstance, that this building has been destroid130.25 The] above del. The massesof130.26 first formed] after del. became afterwards not only scuptured,130.34 Onsome] after del. We shall130.36 appears] above del. remains

**Corners**; *altered from* ~, *before del*. where it would look 131.1 **employ**] *before del*. still walls] after del. Egyptian 131.3 The sculptured] after del. 131.2 **Torus**] *after del.* round greatly] *inserted after del*. have lost a great The principle of Walldecoration by picture part of their original typical 131.4 **origine**;] *altered from* ~ *hefore del.* being transformed 131.9 like inserted as being] after del. in the frame of t 131.10 patterns, exeinto **cuted in a**] *repl. del.* examples of 131.13 Lastly interl. 131.13–14 The ceilings ~ Hypostilium.] inserted before del. The fourth path towards the constructiv 131.15 | shall trie after del. We shall see at the **principle**] *after del*. whole 131.16 has taken its Analoga after del. is related and deriveable 131.19 by the Greecs. *before del.* 

While<sup>1</sup> the Architectural styles of the Barbarians were the simple expressions of one condition<sup>2</sup> of social life, the Architecture of the Greeks was of a very compount caracter.<sup>3</sup> I While] altered from while after two del. beginnings of variant:

We shall see in one of the following lectures that, Greec Architecture was not a simple combination;

combination;] altered from ~, before del. like the other barbarian

2 **condition**] *above del.* principle 3 **caracter**.] *altered from* ~^ *before del.* and contained in itself the whole whole] *before del.* All the

131.20 The Greeks] after del.

the roofs.

2°) the ornamental parts are one and indivisible with the constructiv parts. 3°) the

131.26 pure artistical sense.] *after del*. higher symbolical sense; 131.27 We first observe on the Greec monuments] *after del*. On t[h] *after del*.

We see on the Assyrian and Aegyptian monuments the ornamental parts being real applications or atleast<sup>1</sup> being represented like such; This was not the case with

I atleast] 'at least'

131.30 The Greecs] after inserted and del. on fol. 7r

We will see<sup>r</sup> that the Greecs, by carriing out their conceptions felt even in some cases obliged to be<sup>2</sup> inconsistent in their principles of construction.

I We will see ~ construction.] *repl. del.* We will see that the Greecs in certain cases felt obliged to sacrifice for the embodiment of a sacrifice] *after del.* depass the bounderies of (depass *derived from French 'dépasser': 'overstep'*) 2 be] *after del.* tr[] *after del.* sacrifice the consistency of their construction

131.30-I by doing so ~ principles,] repl. del. herein 131.32 idea] inserted after del. inten-131.34 architecture] *above del.* art 131.37 are one] after del. are organically grown tion together and both 131.39 **functions**] over expr (for 'expressions') 132.1 They] inserted after del. The Greec ornaments, with the Exception of the historical representations **explain**] before del. and to support the artistical effect of the constructiv *interl*. forms] *before del*. to which they belong 132.3 **on**] *repl. del.* of 132.6 The accuracy] after del. The principle of coating, led the Greecs first to the Idea of tubular It appears that the] the *after del*. hollow construction Construction. It appears that the 132.14 Assyrians. -] before del. The Stone, as a selfrepresenting material, was only entirely The Stone ~ entirely] after del. The new principle of Stone construction after del. The last step to the emancipation of the Stone as a selfrepresenting] after del. selfexisting 132.16–17 in the whole civilised old world] after del. in Euro 132.17 The art] after del. 132.18 were acquainted] *after del.* knew 132.19 adopted] repl. del. accepted Perhaps 132.20 this form] after del. the vaults element of architecture.] after del. artistic one. 132.22 exist] repl. del. standart.] before del. The stone132.24 lt would be interesting]after del. After the fall of the Western Roman Empire after del. It ispursue] above del.follow132.25 again] after del. once132.26-7 and the starting point ~ in general.]inserted before del.

The<sup>1</sup> swaddling cloths of the arts, the variegated hangings and carpets, became in the dark centuries of the bas Empire<sup>2</sup>, as it were the winding sheets of the first.<sup>3</sup>

**1 The**] after del. In the dark time of centeries of the bas **2 bas Empire**] derived from French 'Bas-Empire': 'late Roman Empire' **3 first**.] altered from  $\sim \land$  before del. and the modern o the modern] after del. the same were the

132.29 which] after del. or art 132.32 On the early style ~ Metaldecoration.] accompanied by Manfred Semper's underl. note in pencil NB

133.6 Gold-bracelets, before del. Arm 133.8 Chains] before del. and coats of mails 133.10 in *above del.* at 133.11 Metal threads] after del. A very old application of Metal threads was also that for w 133.16 **Jerusalem**, *altered from* ~. 133.18 The arts of niel**ling**] *after del.* Othersides the inlaid stones, 133.20 precious] after del. inserted 133.21 (Emaux à Cabochon and Cloisonnés] inserted 133.24 oriental art] after del. The Char-133.31 productions of the earliest antiquity.] after del. earlier oriental producacter of tions. after del. original and far more ancient productions of the 133.36 Furnitures] s 133.39 Wooden furnitures] after del. The most ancient specimens of furniture on added which metal is employed

134.2 **earlier**] ier *in black ink over* y **times**] s *added in black ink* 134.7 in the early mediaeval ages] after del. under the Frankish Kings in France and Germany 134.9–12 **The** Imperor Othon ~ Vienna.] inserted in black ink on fol. 10r after underl. Folgende Seite. 134.13–14 In the Life ~ list of *in black ink* 134.14 Imperor, ] before del. Eginhard 134.16 **others**] *altered from* other *before del*. things of valu Eginhard *after del*. He mentions 134.29 **after** *after del.* afther the forms of the Breast 134.30 **Interesting** *after del.* Insta[n] and both above del. One of the earliest 134.33-7 consisting ~ Haeven.] inserted 134.33 plates of *interl*. 134.35 reproduce the] *after del.* represent the 134.36 the praecited] after del. the given

135.1 hollow Metal construction *after del.* principle of 135.I-2 tubular construction *after undel*. of 135.7 have] above del. know 135.8 **the roof**] *before del.* and the waults 135.11 **for the large**] *after del*. and smelted *and before del*. and ugly 135.12 The antik Bronze **doors**] *before del.* of the later Roman ti (for 'time') **construction**,] *before del*. but which 135.14 **propositions**] *after del*. objects 135.18 **Silver**] *above del*. Golden stripped of their valuable coat *repl. del.* taken away 135.19 **The silver** *after del.* These doors were 135.20 This] is over e 135.21 destruction] after del. great 135.23 Hildesheim] before del. and Augsburgs.

# MANUSCRIPT VARIANTS MS 131

Since the important discoveries of Layard and Botta at the Ground which once was the Seat of the Assyrian Capital, and since we are, by recent publications, better informed about the Art of the ancient Persians, the materials of a complete history of the pannelated Style of Wall construction lais before us. We can now follow it from the beginning to its final tran-

5 sition to an other principle of more constructiv Style of Decoration and Architecture. – The records of the holy scripture, and Josephus book on the Jewish Antiquities contain very important details about this subject, which are completely intelligible only now, since the abovementionned discoveries at Nimrud and Chorsabad.

Who knows not the celebrated description of the tabernakle of covenant in the Exodus! It was the Original type to the magnificent tempel of Jerusalem, which was built meny centuries afterwards by Salomon.

10

The Tabernakel was a mouvea- | ble edifice, a Sort of richly decorated hut, it remained the only sacred Edifice of the nation, down to the time of Salomon, throw 592 Years. Its construction and richness are testimonies of a very advanced state of practical Art with the

15 Yews in that early time. They had learnt it from the Aegyptians. The Hutt was 30 Yards long, 10 Yards wide and had the same hight. The Walls were executed in wooden frameworks and pannels, The pannels fixed one next the other in the Ground, by means of silver shoes on their bottom. Outerly of the wooden Walls were rings, 5 on each Pannel, one over the other, which contained as many transversal

20 beams, for fastening the pannels one to the other. A Sort of Construction very similar to our Shopshutters.

Inside the room was divided into two, by 4 Pillars, which were the holders of precious draperies. which formed the division of the Room. –

The smaler division on the bottom of the hut was the Sanctuary containing the ark of the Covenant. The intrance was on the East Side, and here also were hangings for the only Separation of space, attached | on wooden Pillars with Silverbases, and golden Capitels; The wood on all these Pannels, Pillars and transverse beams inside and Outside of the building, was *covered with Goldplates*.

Four Carpets, one over the other, formed the roof of the Hutt; The lowest carpet, that which

30 appeared inside, was a rich woven Staff of Cotton. The Second was of Wool or Goathares, the third was of read Leather and the fourth of skins.

The whole was surrounded by a Peribolus 100 Yards long 50 Yards wide.

It was enclosed by hangings fastened on stringes between pillars, similar to those of the Hutt, but mounted only with bronze on the bottom. –

- The entrance to the Peribolus was, like that of the tabernakel shut by drapperies. . The Tempel of Salomon was a treatement of this given type in an higher style; it was not a large building, only twice de size of its Original, 60 Yards to 20, and 30 Yards high. We Shall not give here all the Details of it; it is sufficient to say that the walls were constucted in stone but covered with Metal. The Cealing was of Cedarwood with a Roof of the same
- 40 material. The Roof was outerly covered with Goldplates, and on the Gables of the Roof were Golden Acroteries.

The inner decoration of the tempel was magnificent; the *walls were entirely* covered with Cedarwood, which was sculptured in the Style of Draperies, with flowers, Palm-leaves and Winged Lyons. But these covering Sculptures were covered on their side with Goldplates,

so applied on the basreliefs, that the forms of the sculptured wood appeared.

fol. 2r

2

fol. 1r

Τ.

fol. IV

fol. 2v

The wooden Doors were decorated after the same Style and plated with Gold. The ceilings and even the floors were covered with Goldplates.

This the Description of the temple so far as it belongs to our present object. We see the Strong walls of the building hidden behind a rich cover of Wood and Gold, being the Stone Scaffolds of the last, which itself was the Representetiv of the former Tapestries of the Tabernakel.

Very interesting for our Question are also the Chinese buildings, as they are Still now They fol. 3r give the striking example | of an Architecture, whose elements have remained unaltered 3 through the ages, The Roof has its own pillars, and has nothing to do with the walls, which 10 are only shrines, or hollow brick Constructions made in imitation of the shrines. The wall does not touch the Roof there is a distance between the top of the Wall and the frame of the Roof. Bamboo hedges and treillis are very often employed on the stead of the walls, and the principal motif of Decoration is taken from this simplest production of textile Art. Tapestry has in China the same significance which it had of old with the Assyrians. The Stucco Sur-15 rogates for the Corpets and the paper hangings, a Chinese Invention, are very usual in China; Polychromy in architecture and Sculpture was the natural consequence of this manner of Construction, as it was the Same in Antiquity, with the Assyrians, Egyptians, and Greeks. |

But still more interesting are the Antiquities of Assyria Aegypt Greece and Rome, for the fol. 30 20 study of the gradual progress to an other more constructiv Style of Architecture. We feel convinced, that the Assyrian monuments are the most primitives in style and principle, although they have been built thousand of Years after the monuments of Egypt; Notwithstanding their higher antiquity the last belong to a later state of Development, but this is true only respecting the *constructive* elements of Aegyptian Architecture 25 The Assyrians remained the faithfull Adhaerants, of this principle, although they knew very well Stone-Construction and had also maid even one Step towards the last even for the interior of their houses by pannelating them with Stoneslabs; on the place of those Assyrian tapestries, which are mentionned in the oldest records of Mankind, and celebrated for their richness of colours and skillfull Execution. 30

fol. 4r The Description of Dragons, Lyons, Tigers, Unicornes and other Mystic Animals, which 4 we read in the ancient books, accord perfectly with what we now see at the Brittish Museum, with the representations on Dresses of the Gods and Kings and other Personages. But even more, the whole ensemble of the Assyrian Basreliefs reminds us the Description of Similar Objects as being represented on tapestries. It is little doubt that the last were the Originals for the first.

> These Sculptures remain within certain limits which seem not to be prescribed by hierarchical laws, which was the case in Aegypt.) but by the reaction of laws of execution, which belong not to Stone sculpture.

They are copies in stone of woven or embroidered Tapestries, and look like that. We have 40 seen in the Great Exhibition of 51 certain Chinese Hautelisse figures which reminded perfectly those basreliefs.

These figures are, as it were shakled but they are not mere types or hieroglyphs like the fol. 4v Egyptian figures are.

> Other representations such like battles, hunting partys etc, remind very much the well 45 known Bayeux drapery with the battles between the Normans and the English.

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Real Draperies and rich floor carpets were combined with the sculptured and painted tapestries to a splendid general effect.

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The second stepp towards an other principle of Construction is visible on the Ruins of Persepolis and Pasargadae, in Persia. They are better known since the publication of Coste's work. Here are the same imposing foundations | but in a better State of Conservation, and better executed. The Sculptures are neorly the same in general Style, but Stone is already employed not only as a Cover, but also as a Constructiv part.

For inst. the beautiful Columns in white marble, instead of the Wooden or bronze-covered columns of the Assyrians.

Very interesting are the Morble Doors and the marble blocks at the corners of the former walls, which exist no more because they were only of unburnt bricks. They are Stones of

<sup>15</sup> immense size, one or two of them forming one Corner of the Wall. but they are hollowed out, so that they form some thing like a solid shell for the protection of the angels of the Earthenwalls.

The Stone began to be constructively employed, but not yet as a selfrepresenting material.

We pass now to Egypt, whose Monuments show the third stepp of progress towards stone Construction.

The Aegyptian temples are Stonebuildings the old type of Wallconstruction is not more very distinguishable on them. | Nevertheless the *constructiv* principle of decoration was not yet adopted. These Masses are no *Stoneconstructions*, they are cutt out of an artificial rock; The joints are not regular on them, and must not have been calculated to be seen.

On some of the oldest edifices, as for instance on the *Pyramids* and in the oldest part of the temple of Karnac the principle of *Coating* remains visible, The Sandstones are covered with Coatings of Granite.

There is a moulding in Aeg. Architecture, one of the two which the Aegyptians knew, which seems to me to be a reminiscence of the oldest Style. I mean the Slab round the angels of the walls, which may have originally had the destination to cover the joints of the cover-

of the walls, which may have originally had the destination to cover the joints of the covering slates. Our carpenters emploi the same moulding | on similar occasions.
 The columns of the Aegyptians have partly the appearance of reed bunds, fastened together with an envelopping carpet and surrounding the pillar;

The forth path of development of the constructiv principle was made by the Greeks; we shall see next what they made out of the panneld style, and how the constructiv principle of ornamental Art and Architecture was carried out. under the Romans.

> 447.2-3 and since ~ Persians,] inserted 447.3 pannelated] 'panelled' (see also 448.28) 447.4 lais] 'lies' it] inserted before del. the the] after del. on the rests of the monuments after del. the 447.6-7 The records ~ and Josephus book ~ contain ~ details about this subject] see the descriptions of Solomon's Temple and Palace in the Books of Kings (I Kings 6-7), the Books of Chronicles (2 Chronicles 3-4) and Flavius Josephus, Antiquities of the Jews, 8.61-94, 8.130-40; cf. 440, Explanatory Notes 133.15-16 447.7 details] repl. del. revelations 447.12 mouveable] mouvea- { (ble missing) hut] after del. barr[a] (for 'barrack') 447.13 447.14 are testimonies] after del. shows the progress in art, which throw] 'through' 447.15 Yews] 'Jews' 447.17 wooden] after del. panneld 447.22 precious] after del. beautiful 447.30 Staff] 'stuff' Goathares] 'goat hair' 447.31 read] 'red' 447-33

fol. 50

6. fol. 6r

5

fol. 5r

stringes] 'strings' 447.35 drapperies] after del. mouveable 447.37 de] 'the' 447.39 covered] after del. entirely Cealing] 'ceiling'; repl. del. Roof 447.43 sculptured] after del. hidden Palm-leaves] Palm- | leaves 447.44 Winged Lyons] 'winged lions'; after del. Cherubims or

448.1 plated after del. guilt 448.8 Very interesting] after del. Another living illustra-448.10 **The Roof**] *after del.* Each of the Elements th[] *after del.* and have never tion of 448.11 shrines] 'screens' (cf. 518, Explanatory been combined and stand isolated toget Notes 196.25) **hollow**] *after del*. feable 448.12 Wall] altered from Wan (for 'Wand') 448.17 Polychromy in architecture and Sculpture] repl. del. A System of Polychromy, Antik] *'antique*' probably very related to that of the Antik nations, 448.26-32 The Assyrians ~ accord perfectly with what we] cf. deleted passage at the end of  $MS_{124}$  (435-6, Alterations in the Manuscript 126.38) 448.27 maid 'made' 448.28-9 Assyrian tapestries] after del. celebrated 448.31 Lyons] 'lions' 448.45-6 Other representations ~ English.] repl. del.

The<sup>1</sup> Appearanceces<sup>2</sup> of other subjects <sup>3</sup> on Assyrian Slates such like battles, Hunting parties Ceremonies,<sup>4</sup> look still more like embroideries than these large figures do. They are treated in the same Style as the celebrated Bayeux drappery with the battles between the English

**I** The] *after del.* The fact of being sculptured imitations of Tapestries **2** Appearanceces] ces *added* **3** subjects] *repl. del.* representations **4** Ceremonies,] *be-fore del.* and others

449.1 Plates] in pencil repl. del. in pencil Slabs Slabs] above del. Stones, 449.2 freestones,] before del. which 449.6 **The second**] *after del*. We will see now 449.9 general Style] after del. style 449.11 **For inst.**] accompanied in opposite column by probably Hans Semper's note in ink For instance bronze-covered] bronze- covered 449.13 **are**] after del. is the Morble Doors and the *inserted before del.* the appearence of the of the] before interl. and undel. D 449.14 unburnt] 'unbaked' 449.16 some thing] some thing angels 'angles' (see also 449.29) 449.18 constructively after del. more 449.21 the old type] after del. the old type has been bannished substantially, not more 449.22 on them.] inserted before del. on fol. 5v but nevertheless it shows itself at many parts. 449.23 These Masses] after del. The Stone walls are rock;] altered from ~, before del. prepared for this purpose bef 449.29 angels] after del. corners 449.32 bunds] 'bundles' 449.33 an envelopping] after del. strings and pillar;] after del. constructiv and before del. Other indices of this transitional State of Aeg. Architecture are visible in the tumbs tumbs] 'tombs' 449.34 The forth path] after two del. beginnings of variant:

The fourth path toward the Emancipation of the matter<sup>1</sup> in construction and decoration<sup>2</sup> was made in Greece; but their Architecture was under this point of vieuw little more advanced than the Aegyptian was.

The fourth path towards the Emancipation of the Mate[r]

I matter] after del. constructiv 2 in construction and decoration] inserted

449.34 **forth**] '*fourth*' 449.35 **next**] *before del. in pencil* time **panneld style**] *repl. del.* principle principle] *before del.* in question 449.36 **was**] *after del.* only was invented by the Romans. and carried out in **out.**] *in pencil repl. del. in pencil* out only

### MS 1301

The Greecs were a heap of tribes, not much distant in civilisation from the condition of the American Indians, while Assyria and Egypt were already the seats of highly developped forms of society. So it was natural that The former took up and overkame the types for their institutions and for their art at a period, when the last were not more understood in their

- proper and material sense. The Greecs remained faithfull to these traditional types, but they took them up in a higher symbolical sense. The accuracy and beauty of Greec Stoneconstruction has never been reached since, but their edifices are sculptured, and not constructed in stone. Also they did not show the stone in its natural appearance; it was generally coverd with a
- thin coating of Stucco which last was painted and ornamented after the ancient principle; This was even the case for white marble monuments, which last material was adopted principally for the reason, because the marble surface was favorable and indispensable for a new invented process that of Encaustic painting, unknown to the Aegyptians and to the Assyrians;
- 15 Many parts of the Greec buildings chiefly those which from the beginning have the destination to be ornamented with sculptured and painted subjects, show the antique slab construction. Such are for instance the tympanons or fields | of the pediments, the opaea, which in the oldest types of Doric architecture were Apertures between the Triglyphs, the frieses, which turn round the outer walls of the Doric temples, forming a rich bandeau of sculptured
- 20 representations, finally the slabs which formed a sort of sculptured parapet between the Columns like those on the Egyptian temples, all these parts remember the old style of Slabconstruction; and the same is even visible on the more constructiv parts of the building which are hollowed out, as we see here on this section of the Parthenon entablement. These instances show that the ancient principle was in reality and entirely laid acide with the

These instances show that the ancient principle was in reality not entirely laid aside with the 25 Greecs, but they took it up in a higher symbolical sense. – ¦

By examining the Assyrian and Egyptian monuments we observe the following.

 $I^{\circ})$  The elements of construction are not very much more connected together than on the Chinese buildings

 $2^{\circ}\!)$  the ornamental parts are as it were fastened round the kernet of construction, they are mere applications

3°) The ornamental Symbols have a historical or a political or a religious sense, but they have no relation to the constructiv and dynamical function of that part of the building whereto it is applied.

On the Greec monuments in the contrary we observe

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35 1°) an intimate connection of all the different elements of construction, which even in some cases are combined in a not quite justifiable manner to a general Ensemble. Instances the walls supporters of

451.1 The Greecs] after seven del. beginnings of variant:

Religious<sup>1</sup> and political principles, which Like in nature, th They Greecs have borrowed or inherited the old forms from the barbarians of earlier<sup>2</sup> civilisation, and by

45I

fol. IV

fol. 1r

fol. 2r

#### Lectures

Like <sup>3</sup> nature produced its most perfect<sup>4</sup> creation, *mankind*, after having fixd the types for all the qualities which are united in the man Like nature created its like it was the case with their religious and political institutions. They

1 Religious] after del. principles of 2 earlier] above del. older 3 Like] L over 1 4 most perfect] after del. best

451.3 So it was natural that] interl. overkame] 'overcame', here misused for 'received' (see 439, Explanatory Notes 131.23) 451.4 art] before del. ready made but 451.5–6 proper and material sense ~ symbolical sense.] inserted after del. first meaning. But they took them up in a new form and with a new idea, by taking took them up in a] inserted before del. combined those elements in a 451.5 proper] above del. original faithfull] before del. observers of the 451.6 sense.] before del. This is true for the General Character of their architecture, which will be shown in one of the following lectures, but it is also true for 451.7 The accuracy] after del. on fol. rr

Thus we observe the Stone constructed buildings of the Greecs materially not very progressed towards the new principle as compared with Aegyptian architecture. Although<sup>1</sup> the Accuracy of workmanship of Stonecutting

I Although] after del. The constructiv elements of the building are more

451.7 reached since,] before del. it is true, 451.7-8 but ~ stone.] repl. del.

but nevertheless this material was not yet entirely<sup>1</sup> emancipated with the Greecs. Their monuments<sup>2</sup> are Sculptured but not constructed in stone.

I yet entirely] *repl. del.* more more] *after del.* yet 2 with the Greecs. Their monuments] *repl. del.* with the Greecs than it was under the Aegyptians. The tempels

451.9 **Also ~ generally**] *inserted after del*. The stones were *after del*. A great *after del*. All the *after del*.

The stones<sup>1</sup>, and even the white marble of the Athenian temples were covered with coatings of picture and ornamented<sup>2</sup> with motivs<sup>3</sup>, which mostly<sup>4</sup> take their origines from the art of weaving.

 I The stones] after del. They
 2 ornamented] after del. over and over
 3 motivs]

 after del. painte
 4 mostly] below del. altogether

451.13 that of Encaustic painting] repl. del. of Wall-painting Wall-painting] Wall-451.17 **opaea**] *repl. del.* triglyphs and frieses painting frieses] 'friezes' 451.18 Triglyphs,] before del. which last formed the supports of the frame-work of the roofs; the frame-work] frame- | work frieses] 'friezes' 451.19 rich] above del. richly ornamented 451.23 **are**] *after del*. general entablement] 'entablature' 451.24 principle] repl. del. mode of construction 451.25 they took] after del. now it remains to be proved that 451.29 round] after del. only **kernet**] 'kernel', here misused for 'core' 451.31 **3°)**] after del. 3°) the sense of the ornamental-symbols has no relation to the constructiv or dynamical function of the part of the building, whereto they are applied, they give historical, political, religious and other notices, which have nothing to do with artistical feeling ornamental-symbols] ornamental- | symbols (ornamental- *inserted*) 451.32 and dynamical] *inserted before del.* or historical 451.34 On] *after del.* We observe the opposite of all this on 451.36–7 in a not quite justifiable manner ~ supporters of] *inserted after del.* in a manner, which is not justifiable before 451.36 general] *after del.* common

#### MS 130<sup>2</sup>

I may now be allowed to give some additional notices about the different specialities of industrial art, which derive from and are connected with the same principle of coating.

On the early style of Metalconstruction and of Metalornamentation.

Man in his material state is more anxious about ornament than the habiliments of his body. and the earliest attempts in the art of decorating and ornamenting are made on things

which have no practical utility

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Goldleaves employed as ornaments by the Indians on the discovery of America by Columbus and Cortez.

Such Ornaments in Gold- Silver- and Tinleaves with stamped and pierced ornaments and figures have been found in Aegyptian and Etruscan tombs. Br. M. |

- So the processes of Stamping and engraving metalsheeds and bending the sheeds into certain forms was probably the first treatment of Metal Afterwards the Art of enchasing cabochon stones and the filigran work came into application. Very early Egyptian ornaments with inlaid Stones and pearls are at the Brittish Museum.
- <sup>15</sup> The inlaid stones lead to the invention of artificial stones and of the process of Enameling.

453.1 I] above del. We additional] above del. Short 453.3 On ~ Metalornamentation.] repl. underl. and del. On Dresses and ornaments. 453.5 earliest] above del. first made] after del. independant from the u 453.7 Goldleaves] after del. Metall employed after three del. beginnings of variant:

I shall therefore begin with the ornaments as being connected with the question about textile art<sup>1</sup> and such arts which derive from the last  $-^2$ 

I shall omitt the feather and teath<sup>3</sup> ornaments of the Savages and begin with the Metallic ornaments.

I shall only speek of metallic and stone ornaments, as [ ]

1 **textile art**] *after del.* dresses and 2 **last**-] *before del.* Metalsheeds are the earliest and most simple orna Metalsheeds] *Metal sheets*' 3 **teath**] *'teeth'* 

453.10 Br. M.] 'British Museum' 453.11 metalsheeds] 'metal sheets' sheeds] 'sheets' 453.12–13 cabochon] after inserted and del. coloured 453.13 the] after del. that of 453.15 lead] 'led'; after del. let after del. were replaced

# **Classification of Vessels**

# TEXTUAL RECORD

MS 133gta, 20-Ms-133, fols. 11-14v (14r-v blank), in Semper's hand, copy-textSemper 1884'Klassifikation der Gefässe', 18-34, German trans. of MS 133; for details of<br/>this translation, see Herrmann 1981, 156-7

**BIBLIOGRAPHY** Van Zanten 1977b, 249–50; Herrmann 1981, 33, 111, 156–7; Herrmann 1984, 145–6; Hauser 1985, 105–6; Waenerberg 1992, 64–5; Mallgrave 1996, 216–17; Gnehm 2004, 218–21; Squicciarino 2009, 339–42; Poerschke 2016, 61–4, 66, 69–70, 77; Chestnova 2021, 125–6, 128–30

### **EXPLANATORY NOTES**

In discussing ceramic art, Semper diverges considerably from the initial intentions expressed in the 'Prospectuses of the Lectures on Art' (96.17–19). Firstly, he devotes not one but three lectures to the subject (see 393); and secondly, he scarcely discusses the topics announced in the spring of 1853, 'On the Connexion of Ceramic Art with the art of Metal casting' and 'Its influence on architecture and the other arts'. He mentions metal casting explicitly only once (136.22) and touches only faintly on the influence of ceramic art (136.16-31, 137.36-40). The first divergence can probably be explained by the fact that Semper considers that ceramic art is the most important of all the industrial arts 'for the general history of art and for artistical science' (135.27–8), since he regards it as having major significance 'with all the nations at all times' and strong direct and indirect influences on monumental, architectural art (136.26-31). The fact that he nevertheless places ceramic art in the second class of industrial arts (116.38-9, 122.5-6) and discusses it in second place in the lecture series may therefore seem inconsistent. But the contradiction can be resolved by Semper's remark that the art of covering, 'by giving the first motives for monumental decoration', had an earlier influence on 'the general artistic education' than the other industrial arts (122.37–9). The second divergence is more difficult to explain than the first. It may be due to the fact that the topics 'On the Connexion of Ceramic Art with the art of Metal casting' and 'Its influence on architecture and the other arts' would have required too much involvement with material questions, which Semper considered secondary, and with tectonics, which he intended to discuss in a later lecture.

None of Semper's other lectures was structured more systematically than the three on ceramic art. This was probably one reason why large parts of the lecture manuscripts on ceramics were later incorporated into his 'Kunstformenlehre' (Theory of Art Forms) and *Style in the Technical and Tectonic Arts.* Semper starts the first lecture with an etymological explanation of the words 'pottery' and 'ceramic' and with remarks on the historical significance of ceramic art, returning to the comparison of the Egyptian *situla* – which he now calls *situlus* – with the Greek *hydria* (137.5–40). He had already discussed this comparison in the inaugural lecture and had mentioned it for the first time in 'Practical Art in Metals and hard Materials' (107.4–108.2; NAL, 86.FF.64, art. 3.2, 117, 119–20; cf. Semper 2007a, 210,

212–13). After a few remarks on bibliographic matters, and with support from Jules Ziegler's *Études céramiques* (Ziegler 1850), he explains the basic forms of ceramic vessels and the combined forms derived from them (138.1–140.14). From this geometrically descriptive explanation – illustrated with a few examples – Semper moves on to distinguishing the functions that determine the shapes of vessels: storing, scooping and pouring (140.21–28). Following these functions and a fourth, hybrid function, drinking, he divides the vessels into four classes, which he discusses and provides examples of in detail (141.16–145.8). He closely follows the corresponding sections of 'Practical Art in Metals and hard Materials' (NAL, 86.FF.64, art. 3.2, 98–142; cf. Semper 2007a, 191–227). Finally, he explains a few rules related to the ornamentation of the individual parts of vessels (145.9–146.24). The mechanical justification provided for these recalls the definition of the craft product as a machine, as mentioned in the inaugural lecture (111.32–112.8).

135.29-31 The word pottery ~ drinking cup.] These sentences are translated almost verbatim from Alexandre Brongniart's Traité des arts céramiques ou des poteries (Brongniart 1844, 1:3), which Semper follows closely, particularly in the third lecture on ceramics (see 468). 136.5-9 The Greec name for pottery ~ analogical applications.] These sentences are also translated almost verbatim from Brongniart's Traité (Brongniart 1844, 1:3). In Kleine Schriften, they are replaced with a sentence that has the opposite meaning (Semper 1884, 18): 'The Greek word for pot is  $\kappa\epsilon\rho\mu\mu\sigma\varsigma$ , which originally referred merely to clay, i.e. the material of the vessel.' In his 'Theory of Art Forms', Semper himself had implicitly rejected Brongniart's derivation of the word 'ceramic' by translating  $\kappa \epsilon \rho \alpha \mu o \varsigma$  as 'the clay, the plastic earth' (Vieweg Archives, V3:1.1.3.32, sect. 'Ceramics', 2); and in Style he explained that the word 'ceramic' 'in the first place suggests only the material to be handled, namely the clay (*κέραμος*)' (Semper 1860/63, 2:1). 136.8-9 applications.] This is followed by a deleted passage on the *rhyton* (see 458, Alterations in the Manuscript 136.8–9), which possibly borrows from Brongniart's Traité and Joseph Marryat's Collections towards a History of Pottery and Porcelain (Brongniart 1844, 1:3-4; Marryat 1850, 285). 136.10-12 But the signification ~ was afterwards extended ~ even to the terra cotta sculptures.] cf. Brongniart 1844, 1:4; Marryat 1850, 260 136.11 unburnt] unbaked 136.16–19 The vases of Gold ~ settled by potters.] cf. Semper 2007a, 190 136.38 burnt] fired 136.39 mor more 137.5-40 I had at an other occasion the opportunity ~ Nile-pail;] cf. 107.4-108.2 137.12 137.18 chaped shaped 137.30-I monteneer inhabitants mountaineers Jokes vokes 138.1 **possede**] derived from French *posséder*: *possess* 138.2 work of Brogniard, traité des arts ceramiques] Brongniart 1844 138.3-4 history of pottery by Marriat Marryat 1850 138.7-8 Ziegler ~ Etudes Ceramiques] Ziegler 1850 138.10-11 He gives a Sheme ~ which I reproduced here] The scheme is presented in Jules Ziegler's *Études céramiques* under the heading 'Classification et nomenclature' (Ziegler 1850, 40-2). Semper attached a copy of the same illustrated scheme to 'Practical Art in Metals and hard Materials' (Semper 2007a, 227), and he also reproduced the scheme in *Style* (Semper 1860/63, 2:80-1). In contrast to Semper, Thomas Delf - under the pseudonym Charles Martel - printed Ziegler's illustrated scheme in his Principles of Form in Ornamental Art in 1856 without naming its author (Martel 1856, frontispiece, ix-x). 138.18 Cylinder] cf. Ziegler 1850, 71-8 138.19 **Conoid** cf. Ziegler 1850, 79–85 138.20 Clavoid] cf. Ziegler 1850, 91-7 138.23 **Spere**] uncertain reading, sphere 138.25 **Spheroid**] cf. Ziegler 1850, 98–101 thre three 138.26 **Ovoid** cf. Ziegler 1850, 109–13 138.27 Ogivoid] cf. Ziegler 1850, 102-8. In a deleted passage, Semper oddly enough describes the pineapple not as a spheroid, but as 'an Ogivoide of great beauty by its general form and by its natural ornamentation' (see 459, Alterations in the Manuscript 138.40). In *Style*, he replaces 'Ogivoid' with 'Umgekehrtes Ovoïd' (inverted ovoid; Semper 1860/63, 2:81).

139.2 Austrich] derived from French *autruche: ostrich*; cf. 459, Alterations in the Manuscript 139.14 **Canopian form**] cf. Ziegler 1850, 114–16, 118–20 139.2 139.17 Phoceenform Phocaean form; cf. Ziegler 1850, 114, 117-20 139.21-3 The Phocean form ~ of upper Egypt, ~ the Nile pale ~ of the lower Country ~ called Canopus.] 'pale': *pail* (see also 139.24). This sentence suggests that the Nile pail had a Canopic form, but Hans Semper correctly noted in MS 133 that the Nile pail corresponded to the Phocaean form (see 459, Alterations in the Manuscript 139.21-3). In Kleine Schriften, 'the Nile pale' is accordingly replaced with 'die kanopische Form' (Semper 1884, 23). Semper himself confirms in the next sentence of the draft lecture that the shape of the Nile pail was Phocaean (139.23-4). 139.25 momies] French for *mummies* 139.34 Corolle ~ first third of its hight] cf. Ziegler 1850, 139.36 Corolle ~ Second theird of the hight] cf. Ziegler 1850, 120 120 139.37 Campa-139.38 tiges] cf. Ziegler 1850, 121 nula] cf. Ziegler 1850, 120-1 139.39 distinguable French for *distinguishable* 

140.1 Crateroids and discoids] cf. Ziegler 1850, 121–3 140.13–14 This diagramm ~ denominations] cf. Ziegler 1850, 125 140.13 vase mixt] vase of mixed form; cf. Ziegler 1850, 125 and fig.: 'un vase de forme mixte' 140.14 Composite Vase] cf. Ziegler 1850, 125 fig.: 'un vase composite' 140.20 first Consideration] In Kleine Schriften, Manfred and Hans Semper note that Semper dealt with the second consideration in a separate 'treatise' (Semper 1884, 25 n. \*). The 'treatise' referred to is the lecture 'Influence of the Materials and Their Treatments upon the Development of Ceramic Types and Style' (151-60). 140.21 distinct] Poerschke 2016, 63, has 'different'. **devide**] divide 140.24 holding a containing] ~ or ~ (cf. 141.16, 146.16–17). Poerschke 2016, 63, has 'holding or containing'. 141.31 uns] urns **Unrs**] urns

142.13 vessels of state] In Kleine Schriften, this phrase is translated as 'Prachtgefässe' (Semper 1884, 27). 142.28 Gold Patera found at Rennes] cf. Semper 2007a, 201 142.29 Sardonyx Cup] In 'Practical Art in Metals and hard Materials', Semper notes under 'Basins with convex bottoms requiring a stand to rest upon' (2007b, 198-9; italics in original): 'A rare Vessel of this kind is the Costly Sardonyx Cup, six inches in diamater, richly ornamented on both sides, preserved at Naples, perforated in the centre by an unskillful Artist, and originally intended of stand upon a golden Tripod.' With the exception of the diameter, this description matches the Tazza Farnese (Farnese Cup), which is today held in the National Archeological Museum of Naples - known as the Real Museo Borbonico in Semper's time. 142.30–2 The inside is coverd with a flat Goldplate  $\sim$  which can be separated from the body of the cup  $\sim$  an Emblem in the first sense of the word.] These sentences are inserted beside the text column without any mark indicating their position in the text (see 460, Alterations in the Manuscript 142.30-2). In Kleine Schriften, the corresponding sentences precede the remarks on the sardonyx bowl and thus relate to the Patera of Rennes (Semper 1884, 28). This relation is confirmed by the fact that Semper notes in 'Practical Art in Metals and hard Materials', concerning the 'Gold-Patera discovered at Rennes' (2007b, 201; italics in original): 'the bottom is ornamented with a Composition in repousse Work which can be separated from the body of the Cup. This is what the Ancients called an *Emblem* in the first Material sense of the Word ... see Magazin pittoresque 1851'. The implied report, which appeared with three illustrations in the nineteenth volume of Le Magasin pittoresque, contains three sentences that were evidently misunderstood by Semper (Magasin pittoresque 1851a, 199; italics in original): 'La patère a été fondue tout unie. Le fond est orné d'une composition exécutée au repoussé qui se détache de la coupe: c'est ce que les anciens appelaient l'*emblêma*.' These sentences mean that the Patera of Rennes was cast as a single unit and that the base, whose inside is decorated with repoussé, differs from the rest of the bowl artistically. 142.30 rihly] *richly* 142.36 Holy Graal at Genova] 'Graal': French for *Grail*; the so-called Sacro Catino in the Cathedral of San Lorenzo at Genoa 142.37 flet] *flat* 142.39 the take] *they* ~

143.2 **subverted**] *inverted* 143.20 **Le Moyen Age et la Renaissance**] Lacroix/Seré 1848/51 143.21 **Mediaeval spoons**] cf. Lacroix/Seré 1848/51, 3: four unnumbered coloured plates under the titles 'Orfèvrerie religieuse' and 'Orfèvrerie civile'

144.4-5 **spouded** *spouted* 144.6 **Spoud**] *spout* (see also 144.21, 145.35) 144.24 **Bures**] derived from French *buire*: *ewers* (see also 144.26); cf. Semper 1860/63, 2:62-4 144.26 **Mayolica Enamel**] probably *maiolica*, *enamel*; cf. Semper 1884, 31 144.29 **Evers**] *ewers* 144.33 **Geek**] *Greek* 

145.2 **bespoken**] derived from German besprechen: discussed 145.8 **solemnel**] merged from French solennel and English solemn 145.9–10 remarks about the laws of ornamentation of vessels] Semper borrows points in these remarks from Karl Bötticher's Tektonik der Hellenen. Under the heading 'Abstecher von den Geräthen', he had taken excerpts from Bötticher's remarks on vessels and candelabras in the British Museum Library in 1852 (gta, 20-Ms-150c, ed. in Gnehm 2004, 218–21; cf. Bötticher 1844/52, 1:42–57). 145.11-15 Every vase ~ appearance] cf. Bötticher 1844/52, 1:42 145.19-20 Like it is necessary ~ mouveability.] cf. Bötticher 1844/52, 1:42. Wolfgang Herrmann incorrectly claimed that Semper emphasized the fundamental difference between utensil and monument 'for the first time in "Die Theorie des Formell-Schönen" (Herrmann 1984, 145), i.e. in the introduction to the 'Theory of Art Forms'. 145.25 Stowly slowly 145.27 Fisher Vischer Sebaldus monument] cf. 84.34-41; 362, Explanatory Notes 84.34-8 145.30 vanted] wanted 145.32-7 A composite Vessel, has ~ handles.] cf. Bötticher 1844/52, 1:43 145.39 rifled derived from German *riffeln*: grooved 145.40 rifles] derived from German *Riffel*: grooves 146.6 structive] structural 146.7 Rubans] rubans: French for 146.1 **f.e.**] for example ribbons

# EDITORIAL EMENDATIONS

141.10 Ground forms] Ground | forms 144.24 Hand-washing] Hand- | washing 145.6 semi-ovoidal] semi- | ovoidal

# ALTERATIONS IN THE MANUSCRIPT

135.27-8 The most important ~ industry] above del. Among the different branches of in-<br/>dustry the most important Among ~ important] accompanied in opposite column by del.

Among<sup>1</sup> the different branches of practical art the<sup>2</sup> most important for the history of art and for artistical<sup>3</sup> science is the Ceramic art, of which I shall try to give some notions in the following. –

The potters art is after the  $^4$  textile art  $^5$  and that of manufacturing veapons that, which has been cultivated by men the first.  $^6$ 

**1 Among**] *after del.* There is no other branch of practical art **2** the] *after del.* there is none which **3** artistical] *after del.* science is **4** the] *inserted* **5** textile art] *after del.* the art of cloating the] *undel.* cloating] '*clothing*' **6** first.] *altered from* ~^ *before del.* and which has been everywhere the first

135.28 perhaps] *interl*. 135.31 **object**] *altered from* objects *before* 135.27 general *interl*. *del.* which were understood. with it with it] *interl.* (with *repl. del.* by) 136.1 Another name] after del. Another name for this branch of art is taken from the Greecs, after del. There is another Word, the this branch of art] *above del.* potteries 136.6 **but** the horn of an animal] underl. in pencil probably by Manfred Semper and accompanied in opposite column by Manfred Semper's note in pencil KEpuc Siehe Styl, II Bd. pag 1. Κερας] 'κέρας': Greek for 'horn' 136.7 has been] after inserted and del. occasionally and before del. 136.8-9 applications.] before del. maintained its antique right

This<sup>1</sup> form was very usual with the ancients even at the time of their highest artistical development. It then became ornamented with heads of Lyons<sup>2</sup>, eagles<sup>3</sup>, dogs, stags and other sculptures, and garnished with precious stones and gems. In this later period the horn-shaped drinking cup, that original wessel, was calld Rhiton.

1 This] after del. In the after del. The Greecs called their horn shaped drinking vassel vassel] 'vessel' 2 Lyons] 'lions' 3 eagles] after del. birds

#### 136.10 But] after five del. beginnings of variant in opposite column:

Thus we are fully justified when we take the expression<sup>1</sup> Ceramic<sup>2</sup> art and even that of pottery in a wider sense in understanding with it all the

But the proper sense

This word, *ceramic art*, comprehends all the productions of the potter, from the brick and the tile

Thus we are fully justified by taking the expression ceramic art in our own sense, and Afterwards the entire domain of the potters craft, from the brick to the finest<sup>3</sup> earthen Vase and even to the terra Cotta sculptures were comprehended, at<sup>4</sup> their precedence by the

I expression] above del. word2 Ceramic] after del. pott3 finest] before del. andrichest ornamented4 at] after del. by the Greecks and

136.10 the] *after del*. her her] referring to female German noun 'Töpferei' (pottery): 'its' signification] after del. first 136.14 or above del. and 136.17 **wood**] *above del*. other 136.18 natural and traditional laws of generation and *after del.* precious materials traditional and natural laws of formation and 136.24 in statuary] *after del.* for 136.25 division.] before del. But the first consideration must be paid to the products of pottery properly speaking. pottery] underl. 136.29 **parts**] *after del.* ornamen materially inserted adopting] above del. assuming 136.30 ornamentation] repl. del. eurithmy 136.31 and] repl. del. by potters and 136.32 **pottery**] *above del.* the potters art 136.37 **conservation**] con *above del*. pre 136.38 The burnt clay] after del. The material after del. The softest after del. These fragil works

137.4 Show me] after del. Show me some Urns which bel[0] 137.5 tell] after del. be able to 137.6 forms] after del. kinds 137.10 of the Nile,] after del. of a River, 137.11 Gift of the Nile.] before del. They have no running fountains in the Valley of the Nile. 137.14 lowest,] repl. del. bottom 137.24 feat] after del. task 137.28-9 a second person ~ woman] repl. del. assistance 137.37 sacred] after del. Secondary 137.38 type for] repl. del. model of 137.39 in] repl. del. for

138.1 some] above del. manymany] above del. someCeramical art,] before del. and richcollections of engravings but the material has at yet been treated technically and historical-ly rather than artistically.technically] after del. more by scientifical men and by arc[h](probably for 'archaeologists')which] above del. the first138.1 dia opposite column without insertion mark beside the manuscript line artist and manufacturer at 138.7138.10 He gives a Sheme] after del.

He gives an Classification of<sup>1</sup> the works of Ceramic art after the fundamental forms to which they belong, which I shall reproduce here as being usefull, allthough it shows not the relations which exist between the forms and the destinations of the things and the material which is employed.

I of ] *del. after del.* of the different forms which occur in *and before del.* the Ceramic w w] *after del.* forms o[f]

138.11 gives] after del. shows not the relations which 138.12 among] repl. del. between 138.14 He derives] after del. He classifies 138.17 From the first derive] after del. From these he de[r] 138.30 it appears] after del. it has no direction towards a certain upper and lower part, no 138.34 Ellipsoid;] after del. Spheroid, 138.39 architecture;] altered from ~, before del. where it forms the 138.40 The Ovoid] after del. The pineappel is an Ogivoide of great beauty by its general form and by its natural ornamentation; the Eggs and the Flam (for 'Flames')

139.2 Austrich] s inserted clay or marble and] inserted after del. Stone and 139.3 the oldest] est added 139.12–13 I. Such ~ inside:] inserted *above del.* a very 139.21-3 The **Phocean form ~ Canopus.**] accompanied in opposite column by Hans Semper's notes in ink ? and (Die phokäische Form entspricht nach Stil II p. 80 E. 1. dem Nileimer.) phokäische 139.21 Phocean] above del. Canopian 139.22 upper Egypt,] after del. lower underl. Egypt, while the Nile pale] underl. in black ink probably by Hans Semper the lower 139.31 **Some**] *above del.* The **Country**] *after del*. Lower **Columns**] before del. themselves 139.41 are very important] after del. form without accessories very beautiful form] *above del.* are applicable

140.1 are the Crateroids] after del. are those which deriveare] undel.140.4 insideand] before del. have no140.10 Nevertheless] repl. del. But140.13 three prncipal]above del. different140.16 by taking these forms and their ornamentations as] repl.del. Their forms and ornaments] repl. del. first from the pointof140.17 supposed uses]after del. symbolical uses,140.18 come] after del. are140.21 preside] after del. direct140.22 as] after del. to

141.1 Vessel,] altered from ~^ before del. invented 141.10 By connecting] after del. The most ancient Vessels are without feet Ground forms] after del. original 141.12 accessory Components] after del. Accessories 141.20-2 The Spanish Tinajas ~ Reservoirs] inserted in opposite column without insertion mark, starting alongside the manuscript line

antique Dolia are nearly at 141.19 141.23 **The**] after del. An Egyp **dolia**] after del. oldest 141.23-4 **small apertures** ~ lower end and] repl. undel. no feet, feet,] altered from ~^ before del. and 141.23 no necks,] before del. no handles 141.25 **Deriving forms**] after del. When the orifices of the Dolia become wider, they take the character of Amphorae and 141.26 **dolia**] after del. small **high**] after del. higher 141.30 no necks,] before del. wide openings and 141.36 **The Urns with feet**] after del. In the high Classic Age these urns became low feet; became] derived from German 'bekommen': 'obtained'

142.1 **class**] *after del.* derived for[m] 142.8 whole] *after del*. Crater 142.13 vessels] after *del*. first 142.14 Villa Albani,] before del. The vase of the Museum Barberini 142.15 **Class.**] *altered from* ~^ *before del.* of Craters. Craters] *underl*. 142.20 **Tanks**, *altered* from  $\sim \land$  before del. or or Basins] inserted 142.23 There] after del. They are convex on the lower part 142.24 **rest**] *before del*. upon 142.28 the Gold Patera ~ now] repl. del. is Gold] after del. Silv 142.30-2 The inside ~ word.] inserted in opposite a Gold Basin column without insertion mark, starting alongside the manuscript line Paris library and the celebrated at 142.29 (cf. 456-7, Explanatory Notes 142.30-2) 142.30 **inside**] *above del*. outside **coverd**] *above del*. ornamented 142.31 **separated**] *after del.* taken 142.35 sacrifices. altered from ~^ before del. with the pagants, pagants,] altered from  $\sim \land$  before del. and the *inserted after del. on fol. 8v* adopted in the **form**] *before del.* which is one of the sacred 142.37 flet] before del. and low for

143.1 Cups] s added **are**] *after del.* in Silver is 143.4 **Christianity**] *after del.* our 143.6 Division] *above del*. Class of for] after del. are such, which 143.11 religious] after del. 143.16 **antiquity**] *after del*. old 143.17 **numbered**] *after del.* were verv 143.18 are as **many**] *repl. del.* schow the 143.19 proofs] *after del.* artfull feeling 143.21 Mediaeval spoons] after del. Silver 143.23 As the type for the] repl. del. As The second As] inserted after del. We scarcely possede an Example of an antique funnel as a selfstanding Vase and **considered**] *above del*. mentionned 143.26 signification tion over nce 143.29 **Division contains**] *repl. del.* types are types] *after del.* great division 143.39 mediaeval times.] before del. An especially important kind of Vessels, nearly related to this division are the lamps which have had at all times a highly religious and Symbolical meaning and are of considerable importance even in private life. lamps] *underl*. 143.40 this form,] *before del*. the pouring form Art] *after del*. fine

144.4 Ancient and modern] after del. The richness and beauty of forms, which the ancient lamps show – is combinations] after del. other and before del. where the 144.21 The Egyptians] after del. The old 144.21–2 the ancient writers] after del. Apulejus and 144.22 a small modell in] repl. del. a small collection of small Egyptian 144.24–5 The Arabian Bures ~ Vessels, which] inserted 144.25 were also] above del. This form was 144.27 judiciously] after del. an judicious use of new technical and use] after del. conception of the 144.30 tell] repl. del. have

145.3 **esspecial**] *altered from* special *after del*. pecul 145.6 without out *inserted* 145.8 festivals.] before del. on fols. IIV-I2r They were in the Earlier centuries of Christianity constantly ornamented with | precious stones. 145.14 whole *altered from* ~, of the thing] of *inserted* 145.16 caracteristic] after del. significance o[f] 145.21 Ancient] altered from Ancients mouveable things] *inserted* 145.24 **standing upon**] *repl. del.* whose feet are which] before del. themselv 145.26 reinforcement] *after del*. increaseme idea] after del. 145.29 **The handles**] *after del*. The tripod vases 145.31 **hands**] s over full stop intented 145.32 **A composite Vessel**, *] after del.* A Vessel of the composite *and before del.* such as most of the artistical forms A Vessel of the composite] *after del.* Every Vessel [h] 145.40

**upwarts.**] altered from ~, before del. on fol. 13r but the Middlepart of the body can be considered as a neutral [G] (for 'Ground') Middlepart] after del. Center

146.1 other] after del. many 146.1–2 for the stripes] after del. for this is a sort of 146.4 **Ground**; *altered from* ~, *before del*. where the acting forces ar 146.5 **a** inserted repre**sentation**] *altered from* representations the] inserted before del. which have their of which has nothing inserted in common with] above del. not in 146.6 **body**; *before* del. but o[n] 146.7 **to show that**] *above del.* as if **are**] *above del*. were Attributions] *repl. undel.* applications applications] after del. embroyderies fastened (fastened after del. fixed) 146.8 Vase itself.] before inserted and del. The same is the case with the Attributions inside of the Assyrian 146.10 **center**; *before del*. The lower Part works downwarts, works] *after del*. develop 146.12 **and it**] *after del*. generally it 146.13 seems to be] *repl*. 146.17 may be considered as] *repl. del.* is 146.19-20 should be] repl. del. is del. is 146.23-4 a hyperboloid formed funnel.] *repl. del.* it is equally it] inserted after del. The hyperboloidal form of a funnel is] *undel. before del.* the most

## **On Vessel Parts**

## TEXTUAL RECORD

MS 149	gta, 20-Ms-149, fol. 25r–v (25v blank), in Semper's hand
MS 134	gta, 20-Ms-134, fols. 1r–7v (6r variant of MS 149; 7r–v see 472, Alterations
	in the Manuscript 154.6), in Semper's hand, <i>copy-text</i>
Semper 1884	'Ueber die Gefässteile', 35-42, German trans. of MS 134, fols. 1r-7r; for
	details of this translation, see Herrmann 1981, 157–8

**BIBLIOGRAPHY** Herrmann 1981, 33, 111–12, 157–8; Herrmann 1984, 145–6; Gnehm 2004, 141–3; Poerschke 2016, 61–3, 66–7, 83–5; Chestnova 2021, 125–6, 131–3

## **EXPLANATORY NOTES**

In his second lecture on ceramic art, Semper delves into the topic he already touched on at the end of the first lecture (145.9–146.24): the ornamentation of the individual parts of the vessel. Following a few introductory remarks, some of which refer to the first and third lectures (146.25–147.7), he draws a distinction between two principles of ornamentation, which he also applies to the other industrial arts and to architecture (147.8–148.7). He calls the first one 'the *dynamical* principle' (147.11), and here – in contrast to the mechanical considerations he discussed earlier (112.1–8) – he ignores static force relationships. This principle consists of the artist using 'ornaments ... in the first sense of the word', ornaments proper, to clearly express the dynamic mode of action of the work of art and its parts (147.14–20). Semper does not describe the second principle directly but expresses it as the principle of applying ornaments whose expression does 'not immediately' affect – one might add: or does not affect at all – the dynamic mode of action of the work of art (147.22–5). With reference to James Fergusson, he calls ornaments of this type, which can be executed in free sculpture or painting, 'phonetical ornaments' (148.24–8; see 463, Explanatory Notes 148.27–8). Semper regards the extent to which these two principles are distinguished as being a measure of the development of the artistic sense (147.28–32), and he illustrates this by comparing Egyptian and Greek monuments. He does not recognize any ornaments proper among the Egyptian ones, only phonetic ornaments, whereas in Greek monuments he finds that phonetic ornaments are restricted to areas that are scarcely effective dynamically (147.33–5, 147.38–148.2). He regards this restriction as representing one of the most important rules of ornamentation and also recommends it to his contemporaries (148.2–3). Applied to vessels, it means that phonetic ornaments may be applied only to the body and, to a small extent, to the neutral fields of the stand (148.8–9, 148.24–6, 149.1–3).

Semper discusses the body, stand, neck, spout and handles of a vessel, taking into account the mechanical preconditions for them and explaining not only the ornamentation but also the relationships and proportions of the parts to one other (148.10–151.18). He concludes the discussion of handles in the form of keywords in the manuscript (151.19–27); and one of the vessel parts that he mentions, the cover (145.36, 146.34), is not discussed at all. Wolfgang Herrmann concluded from this that the manuscript of the second lecture on ceramics (MS 134) was fragmentary (Herrmann 1981, 111). This conclusion is incorrect, at least in the material sense, since the manuscript does not break off after the keywords for handles but continues – under the title 'Influence of the Material upon Style. in Ceramic art' – to the beginning of the third ceramics lecture (472, Alterations in the Manuscript 154.6).

146.31–2 **3) the Neck 4 the spoud**] 'spoud': *spout* (see also 151.2, 151.11–12). Following on from the manuscript of the first lecture on ceramics (145.35), Semper initially wrote '3) the Neck with the Lip and the spoud' (see 464, Alterations in the Manuscript 146.31, 146.32). It is possible that he only divided this number 3 into numbers 3 and 4 in the Zurich period, when he was drafting the 'Kunstformenlehre' (Theory of Art Forms). Indications at least suggesting this are the facts that he used the title '3<sup>o</sup>) *The Neck and the Spout*' in the second half of the lecture (150.4) and that he distinguished the neck and the spout as numbers 3 and 4 in his 'Theory of Art Forms' (Vieweg Archives, V3:1.1.3.32, sect. 'Ceramics', 66) – as in *Style* as well (Semper 1860/63, 2:78).

147.4 upon this I shall call Your attention hereafter] This remark refers to the corresponding section of the lecture 'Influence of the Materials and Their Treatments upon the Development of Ceramic Types and Style' (153.16–27). 147.5–6 l am now only speaking of principles ~ which are independent upon the materials] In contrast to Wolfgang Herrmann's assertion (Herrmann 1981, 33), the discussion of these principles, which occupies the whole of the remaining lecture, does not show any clear influence of Karl Bötticher's Tektonik der Hellenen. 147.22 **variating**] *varying* 147.24 thinks] In Kleine Schriften, the word is translated as 'Gedanken' (thoughts; Semper 1884, 36). However, three alterations in the manuscript of the lecture confirm that Semper must have meant things here (464, 466, Alterations in the Manuscript 147.13, 147.15-16, 149.14). 147.25 structiv *structural* (see also 148.2, 148.5, 149.4) 147.37 like it was allways in oriental art] This phrase is inserted beside the text column without any mark indicating its position in the text (see 464-5, Alterations in the Manuscript 147.37). In Kleine Schriften, the corresponding phrase follows the word 'Prosodie' (prosody) and thus twists the sense of the whole sentence

by saying that Oriental art was also composed prosodically (Semper 1884, 37). In *The Four Elements of Architecture*, Semper himself declares the opposite (Semper 185tb, 78): 'Just as the forms of Egyptian art were arrested as hieroglyphic characters, the colour music of its polychromy was not allowed to become more than a colour language, and had to assume a measured and distinct colour prosody instead of the melodic oriental colour play.'

148.7 **Frieses**] *friezes* 148.17 **othe**] *other* rifled] derived from German riffeln: grooved 148.18 direction of the Channels from downwards, to upwards] cf. Bötticher 1844/52, 1:43 148.27–8 This name has been introduced ~ by Mr. Fergusson ~ in his work on Architecture.] In the book indicated, An Historical Inquiry into the True Principles of Beauty in Art, More Especially with Reference to Architecture, James Fergusson does not use the expression 'phonetical ornaments'. He divides the 'Anthropic Arts' into 'Technic Arts' (mechanical), 'Æsthetic Arts' (sensory) and 'Phonetic Arts' (intellectual) and assigns ranks to these three classes in ascending order (Fergusson 1849, 72-124). 148.36-8 These two activ forces ~ Ground.] accompanied in the left column by a trigonometric equation with figures 148.37-8 representativ] representative. Poerschke 2016, 62, has 'representation'. 149.7 **insinuating** *sinuate* 149.14 **Ripps**] ribs 149.20 rips ribs 149.21 **Romain** French for Roman

150.9 **one side**] derived from German *einerseits: on the one hand*. Poerschke 2016, 62, has '[on] one side'. **give it out**] Poerschke 2016, 62, has 'give it [out]'. **other side**] derived from German *anderseits: on the other hand*. Poerschke 2016, 62, has 'on the other side'. 150.14–16 **The height of the neck ~ high neck**.] These sentences are inserted beside the text column without any mark indicating their position in the text (see 466, Alterations in the Manuscript 150.14–16). In *Kleine Schriften*, the corresponding sentences follow the remarks on the fulcrum and an ornament with upward and downward effects (Semper 1884, 41). 150.27 **report**] *relation* 150.28 **pendant**] French for *counterpart* (see also 151.11)

 151.15 handls] handles
 branches, ears] cf. Bötticher 1844/52, 1:50
 151.17 forns] forms

 151.21 cubs] cups

### EDITORIAL EMENDATIONS

150.14 **increases**] increa | es (first s missing due to upper fourth of left margin torn off)

## ALTERATIONS IN THE MANUSCRIPT

146.25 On Friday last] after two del. variant beginnings:

On last Friday ad<sup>1</sup> the End of my lecture I was demonstrating<sup>2</sup> some of the principles of ornamentation applied on Ceramic art, when I

On Friday last the time was passd, when I began to demonstrate some principles of ornamentation applied on Ceramic art;<sup>3</sup> It will be allowed to recommence this matter to day from the beginning

1 ad] Latin for 'at'; over I 2 demonstrating] after del. mentionning 3 art;] altered from ~, before del. arising from the arising] after del. as far as they

146.25 **I had commenced**] *after del.* the time was passd, when the] *undel. after del.* I interrupted 146.26 **ceramic Art;**] *before del.* It may be allowed, for the sake of connection and clearness, to recommence this matter from the beginning to day. clearness] *before del.* in what I proposed to explain 146.27 **I mentionned**,] *inserted* **the**] t over T **to be**] *repl. del.* are, as we have seen, 146.31 **Neck**] *before del.* with the Lip and 146.32 **4**] *inserted* 146.33 **5**°] 5 *repl. del.* 4 146.34 **6**] 6 *repl. del.* 5

147.1 function.] altered from ~~ before del. andand] after del. and the appearances of eachTheir] T over t147.2 attending] repl. del. depending147.3 they] repl. del. their formsand ornamentstheir forms and ornaments] above del. they147.4 hereafter,] alteredfrom ~.147.5 while l am now only] inserted before four del. beginnings of variant on fol. 1r-v:

Before specifying  $^{\scriptscriptstyle I}$  each of the 5 uppermentioned constituent parts of a Vessel  $^{\scriptscriptstyle 2}$  with respect to the

Before specifying the 5 constituent parts of a vessel for themselves and for their proportions<sup>3</sup> to each other, I must ¦

I speak now only from their forms and ornaments in as much they are results of th I speak<sup>4</sup> now independently of the material so that the following may find its application for Earthenware as well as for Metalwork; – but before specifiing the above mentionned 5 constituent parts of a Vase under this point of vue<sup>5</sup>, I must give a general introductory notice about the two different principles of ornamentation which come in

I specifiing] above del. taking2 each of the 5 uppermentioned constituent parts ofa Vessel] repl. del. each part aside, and explaining3 proportions] repl. del. relations4 I speak] after del. I must introduce the specification5 vue] French for 'view'; after del.sight

147.5 **speaking**] *after del*. I am now 147.6 **finds**] *altered from* find *after del*. may 147.8 **on** above del. about 147.9 principles of ornamentation] before del. which come in applicacome] after del. I find in application] *above del.* into question tion wherever we may be wherever] *after del.* at nearly *after del.* every industrial] *above del.* ornamental 147.10 one of the *interl*. **principles**] s added 147.11–12 construction] after del. word 147.12–13 while its *above del*. but the 147.13 **function**] *before del*. of a think think] 'thing' **remains**] after del. is independent u[p] 147.14 **part**] after del. for[m] **tell**] *after del*. be what] before del. destination dynamical] above inserted and del. or 147.15 function to fullfill] *interl*. ornaments] s *above del.* ation 147.15–16 When the last] inserted after del. The last can speak out the destination of the think or of a part of it by a sort of 147.16 **significations**] *altered from* signification think] *'thing'* signification] *repl. del.* symbols] before del. or Analogies 147.17 with the sole intention *after* significance *del. on fol. rv* with the intention to support and to strenghthen the f[u] with the intention] after del. to strenghthen the impression of what the 147.18 **a clear**] *after del.* a strong 147.20 **word.**] *after del.* work. 147.23 **outlines**] out *added* 147.24 **representing**] *above del.* symbolizing thinks, actions] *above del.* relations 147.25 **connected**] *after del.* depend after del. attending 147.27 **the destinations**] *after del*. their persons to which they were **Vases**] *after del*. object 147.28 **observe**] *after del*. find the 147.29 strong] after del. sharp 147.33 **shows**] *above del.* knows 147.35 topographical] after del. geogra 147.36–7 with colours] *after del.* with colours, which it is 147.37 like it was allways in oriental art] inserted in opposite column without insertion mark, starting alongside the manuscript line is not a musik at 147.36 **allways**] interl. before del. the case (cf. 462–3, Explanatory Notes 147.37) **prosody.–**] before eight del. beginnings of variant:

It would be easy to find <sup>1</sup> other parallels for this<sup>2</sup> in mediaeval and recent art, but we shall not be able to follow them here for want of time.

It would be easy to find other parallels to this in mediaeval and recent ages<sup>3</sup>, but we shall be obliged to confind ourselves here with

It would be easy to find other parallels to this in mediaeval and recent art to show the difference of the two ornamental principles. but I must confine myself

I must confine myself to this

I would be a interesting matter of seaking<sup>4</sup> other parallels to this in mediaeval and recent – But

It is<sup>5</sup> easy to find parallels to this in mediaeval and recent ages, and<sup>6</sup>

It<sup>7</sup> would be a interesting matter of seaking<sup>4</sup> the bounderies -

I ltwould be easy to find] repl. del. We find We] after del. But this asides 2 for this] repl. del. of the kind 3 ages] after del. ti (for 'times') 4 seaking] 'seeking' 5 is] above del. would be 6 and] after del. but I 7 it] I over i

147.38 **Greec art**] *after del*. The Greecs, as I sayd before were less rich of 147.40 **the Enrichment of**] *interl. in ink and* Enrichment *accompanied in opposite column by probably Wolf-gang Herrmann's note in pencil* enrichment

148.2 activ] after del. acting 148.4–7 Instances ~ Frieses, etc.] inserted before two del. variants on fol. 3r:

I hope to be able to explain<sup>1</sup> this by some more instances in the next following. but it will be better<sup>2</sup> to explain this at once at instances given.

1 to explain] after del. in the next following 2 it will be better] above del. I shall be able

148.5 temple] above del. building the] repl. del. one of [t] 148.8 The body] after del.

The body of a Vase is another<sup>1</sup> such a neutral Ground on which the higher conceptions of art may find their application.

The body of a Vase has the function to contain a fluid; The hydrodynamic action<sup>2</sup> of the fluid which it contains neutralizes itself; Thus<sup>3</sup> The structiv<sup>5</sup> Idea<sup>4</sup> which<sup>6</sup> a well shaped Body of a Vessel is a complete Equilibrium of action and reaction of forces from

I another] interl. 2 The hydrodynamic action] inserted before del. The Equilibrium 3 Thus] inserted 4 The structiv Idea ~ Vessel] inserted before del. there there] after del. there is no other direction of forces but from the center of 5 structiv] 'structural'; del. after del. dyn and both above del. dynamical 6 which] 'of'

148.13 upon] above del. of148.15 impression produced by] above del. feeling of148.16impression] after del. feeling148.17 pumkins] altered from pumpkins148.20 or] abovedel. and148.22-3 perfectly smooth] after del. smooth148.23 ln] after del. The after del.

We do allways well to adopt 148.24 **plain**] *after del*. smooth 148.25 ornaments] repl. 148.27 introduced in England for *repl. del.* given to 148.28 Idea of apdel. objects **plying**] *above del*. Application of Application] *underl*. **applying**] *after del.* fixing and 148.30-I This we see ~ Etruria.] repl. del. This was allways or at least generally the Case 148.36 activ forces above del. functions with the Gree[c] 148.33 **part**] *interl*. 148.39 is generally **This fulcrum**] *after del.* This fulcrum or knobb between the two opposed repl. del. must be

149.1 it is *after del.* quasi 149.3 **ornaments**,] *altered from* ~^ 149.3–4 **or at least.**] *repl.* del. and 149.5 **Enamels etc.**] *before del*. The principle of ornamentation 149.7 **nature**. altered from ~^ before del. are the most 149.9 **the stand.**] *before del.* At other cases the stands remind those At other cases] *above del*. Very often 149.11 bolder than on the first, *repl. del.* stronger, than the first, 149.12 Gravity;] altered from ~, before del. with strong expression of **It must show**] *after del.* It must show in its appearance that it is not a dead support, dead] *above del.* mere support] repl. del. medium (medium after del. trans after del. trans) 149.13 mouveability] u interl. 149.14 **thing**] g *over* k 149.16 and phonetic *interl. and* phonetic *after del.* even 149.17 pictures] after del. or Phonetical seldom *above del.* never 149.18 **working** *repl. del.* supporting 149.19 support below del. Stand 149.22 **exhibit**] after del. sh 149.25 As to] *after del*. I shall conclude these observations about the stands with **proportions**] *after del.* relations it] after del. no general rule may hold will] above del. may 149.26 application.] before del. The center of gravity of the whole should be in all cases lower than the half of the whole elevation of center] repl. del. point But I may say] after del. I believe that the Axis. 149.26-7 **must be**] *before del*. one of the two, 149.27 **subordinated**] *after del.* unimpor 149.28-9 **But this** ~ for when] *inserted after del*. When 149.34 **ornamenting**] *above del.* colouring 150.1 **Stand**] *above del*. foot 150.14-16 **The height ~ high neck.**] inserted in opposite column without insertion mark, starting alongside the manuscript line ornamentation they adopted at 150.13 150.14 The height of the neck] after del. The proportion of a neck's hight is generally 150.15 **body with a large opening** *after del.* large Vase 150.17 neck.] altered *from* ~^ *before del.* although here also there must be shown the double 150.20-9 The juncture ~ Greec Vases.] inserted in opposite column 150.20 juncture] below del. join ioin is often] above del. must be 150.21 **embraces**] *after del.* mostly above del. junctures 150.30 The spouts] after del. The Spouts are for 150.26 **descending**.] *above del*. vegetable **very**] *above del.* most the Vases what the faces are for the **the wase**] *after del.* the wh after del. the whole vase after del. a Ceramic 151.1 limitation;] *altered from* ~, *before del*. but 151.5 **The lips**] after del. on fol. 6r–v

The symbols employed for the lips or spouts of the Vessels are often taken from animal | nature.  ${}^{\rm \scriptscriptstyle I}$  The  ${}^{\rm \scriptscriptstyle 2}$  Shells show

1 nature.] undel. before del. These are the only parts where the interior of the vase is visible, 2 The] after del. Such natural forms like shells for Such] altered from such after undel. and

151.6 This gives] after del. Excellent types and Symbols for these parts of the Vases are theShellstransitions] repl. undel. contrasts151.12 Vertical] after del. line of the151.15Symbol] above del. Style151.15-16 fingers, Serpants.] inserted in opposite column without151.16 barbarians] s addedClasps, masks.] inserted in opposite column

without insertion mark before del. on fol. 7r The Greecs adopted sometimes the constructiv principle of ornamentation, Clasps, Masks, sometimes] *interl.* the] *repl. del.* a more ornamentation,] *inserted* Clasps] *underl.* 151.17 **In a great many**] *after del.* Generally such *after del.* Sometimes **forns**] *after del.* beauty was was] *after del.* consisted in the 151.25 **bands**] *after del.* laces, 151.27-8 **kind.**—.] *before variant beginning of lecture 'Influence of the Materials and Their Treatments upon the Development of Ceramic Types and Style'; see* 472, Alterations in the Manuscript 154.6

## MANUSCRIPT VARIANTS MS 149

We have here on the neck also a neutral part towards the center, but there is no fulcrum wanted; Therefore we see, with the Greecs at least here an other principle of ornamentation adopted, such as this, which partakes of the two senses, in which the neck may be taken,

3

 467.1 We] after del. But here the force after del. The Centerpart of the neck belongs no

 towards] above del. in
 center] after del. neck

 467.2 see, with the Greecs at least]

 repl. del. want
 467.3 senses,] after del. sensens. after del. directions.

 funnel
 taken,] before del. as a recipient or as a

# Influence of the Materials and Their Treatments upon the Development of Ceramic Types and Style

#### TEXTUAL RECORD

MS 135gta, 20-Ms-135, fols. 11-13v (11-2v variant of MS 134, fol. 71-v), in Semper's<br/>hand, copy-textSemper 1884'Einfluss der Materialien und ihrer Behandlung auf die Entwickelung ke-<br/>ramischer Typen und Stile', 43-57, German trans. of MS 135; for details of<br/>this translation, see Herrmann 1981, 158-9

BIBLIOGRAPHY Herrmann 1981, 112, 158-9; Chestnova 2021, 125-6, 134-7

#### **EXPLANATORY NOTES**

Semper starts the third lecture on ceramics with a critique of the contemporary European industrial arts in general and ceramic art in particular, drawn largely from *Science, Industry, and Art* or from an English translation of the book (151.32–152.28; cf. Semper 1852, 7–8, 11–12; gta, 20-Ms-89). He notes a discrepancy between the dearth of truly artistic works and the

fol. 25r

wealth of technological and scientific resources. In the latter, however, he recognizes a second deficiency (he had described a first one in two earlier lectures; see 105.32–7, 118.23–8): 'we are wanting of a manual, which teaches the principles of beauty and style as applied to the new inventions of science and manufacture' (152.24–6). A manual of this type was probably what he had in mind when he wrote the 'Kunstformenlehre' (Theory of Art Forms) and *Style in the Technical and Tectonic Arts* a few years later.

Semper introduces the main part of the lecture with a few remarks on ceramic materials and a list of the most important methods of processing them. He discusses the first process, 'the mixture of the past[e]s' (153.3), only in relation to the pastes themselves and, 'for want of time', only briefly (153.16-27). He discusses the second process in detail - the method of shaping designated by the French word *faconnage*, referring here frequently to a work he had mentioned in the first ceramics lecture: the Traité des arts céramiques ou des poteries by Alexandre Brongniart, the former director of the porcelain manufactory in Sèvres (Brongniart 1844; see 138.2). Following Brongniart, Semper distinguishes three types of shaping: turning, pressing and casting. He does not name turning explicitly but describes it by explaining the use of the potter's wheel and the lathe (153.29–155.4); and he only hints at an explanation of the difference between pressing, which he calls 'moulding', and casting (155.5-156.5). However, the process of 'moulding' is not self-evident. It involves filling a paste into a mould and then pressing it manually or mechanically into a finished shape. Semper also includes the mounting of the stand, handles, spout and cover as part of the shaping process (156.29-157.3), as well as the painting and gilding of the finished form (156.9-28, 157.4-28), diverging here from Brongniart (cf. Brongniart 1844, 1:118–170). With regard to the artistic mastery of painting and gilding, he praises his friend Jules Dieterle, 'the arts superintendant' of the porcelain manufactory in Sèvres (156.22-8, 157.27-8). Semper discusses the process of glazing in almost as much detail as he does the process of shaping (157.34–160.24), again drawing on Brongniart for technical matters. In the only surviving manuscript of the third lecture on ceramics (MS 135), he does not keep his promise that he will discuss the process of firing (157.3I-2) – he ends the draft with a few keywords and sentences that do not refer directly to ceramic art but rather to metal vases and statues and possibly to the topic announced in the 'Prospectuses of the Lectures on Art': 'On the Connexion of Ceramic Art with the art of Metal casting' (96.18).

152.8 recollections] *replications* 152.13 herself] referring to female German noun *Industrie* (industry): *itself* her] *its*; see previous note 152.18–19 Bernhard Palissy] cf. Brongniart 1844, 2:61–9 152.22 the old] ~ ~ *ones* 152.23 news] *new ones* 152.31 whishes] *wishes* 

153.3–9 1°) The first process ~ potters industry.] This division corresponds to chapters 2–5 in the first volume of Alexandre Brongniart's Traité des arts céramiques ou des poteries, which Semper draws on many times in the main part of the lecture. The titles of chapters 2-5 in Brongniart's Traité are: 'Formation des pâtes céramiques', 'Façonnage des pièces', 'Des glaçures ou enduits vitreux' and 'Cuisson des pâtes céramiques' (Brongniart 1844, 1:33, 118, 153.3 pasts] pastes (see also 153.18, 153.21, 153.23-4, 155.35, 155.37, 158.8, 159.2, 159.7, 171, 184). 159.20) 153.5 Façonage] façonnage: French for shaping (see also 156.6, 157.5, 157.30) 153.8 153.15 Böttcher's] Böttger's 153.19 proprieties] properties burning] firing 153.24-5 The Portland Vase ~ is not to be imitated in Stoneware] In Science, Industry, and Art, Semper claims that the Portland Vase consists of 'hard stone' (Semper 1852, 52-3). This ancient Roman glass vase entered the British Museum in 1810 as a loan from William Henry Bentinck, 4th Duke of Portland. 153.25 **cisel**] merged from French *ciseau* and English *chisel* 153.26 **selfunderstanding**] *self-explaining* 153.30 **horizontal potters wheel**] cf. Brongniart 1844, 1:119–24; 3:36–7, pl. VIII figs. 1, 3–4, pl. IX figs. 2, 4

154.3-5 But for this reason ~ or what he has been drilled for himself.] The corresponding sentence in the 'Theory of Art Forms' reads (Vieweg Archives, V3:1.1.3.32, sect. 'Ceramics', 101): 'But precisely for this reason, it [i.e. the wheel] should everywhere be operated by intelligent hands and not by other, less tractable machines which can only turn after templates for which they are drilled.' This suggests that the male pronouns 'he' and 'himself' refer to 'an other machine' (154.4) and thus should read it and itself; cf. 472, Alterations in the Manuscript 154.4-5<sup>2</sup>. 154.6 potters wheels represented in the Tombs of Beni hassan and Thebes] cf. Brongniart 1844, 1:507; 3:34, pl. III figs. 4-5 154.10 one of their great philosophers] i.e. the Scythian Anacharsis; see 473, Alterations in the Manuscript 154.7-11<sup>2</sup>; cf. Brongniart 1844, 1:20 154.13 lath] lathe (see also 154.22, 154.36, 155.10) 154.16 terre] *terra*: Latin for *earth* 154.21 rifles] derived from German Riffel: grooves 154.24 à la barbotine] Alexandre Brongniart refers to this type of ornamentation as 'Relief en trochisque ou Pastillage' and describes it as follows (Brongniart 1844, 1:24; cf. 1:425; italics in original): 'Il consiste à faire des ornements en relief au moyen d'une barbotine épaisse déposée sur la surface des Poteries, comme les confiseurs font les pastilles.' Brongniart defines the material called 'barbotine' as a 'pâte délayée en consistance de bouillie épaisse' (Brongniart 1844, 1:169). 154.25 **brosh**] *brush* (see also 157.13) 154.30 new] knew 154.31 Germans] Germanic peoples; cf. Semper 1884, 47: 'Germanen' process calld Colombin Brongniart describes this process as 'le procédé du Colombin et du façonnage à la main sur le plateau' (Brongniart 1844, 1:21; italics in original). It consists of shaping 'au moyen de colombins ou boudins, c'est-à-dire de longs cylindres de pâte que l'ouvrier place successivement l'un sur l'autre et qu'il lie ensemble avec les mains' (Brongniart 1844, 1:124; italics in original). 154.32-3 here it is not the piece ~ but the potter who turns round the pot cf. Brongniart 1844, 1:21 154.34 Jarres of France] cf. Brongniart 1844, 1:391: 'Jarres et Cuviers, en France' Tinacas of Spane] ~ ~ Spain; cf. Brongniart 1844, 1:391: 'Tinajas, qu'on prononce *tinacas*, en Espagne' 154.34-5 Camucis of Bresilia] ~ ~ Brazil; cf. Brongniart 1844, 1:391: 'Camucis, au Brésil' 154.36 lath or horizontal wheel lathe ~ vertical ~. If the tool in question shall be called a wheel, it must be called a vertical wheel since its axle is horizontal. It is used for finishing the raw shape made with the horizontal wheel; cf. Brongniart 1844, 1:120, 159-60; 3:36, pl. VIII fig. 2. Hans Semper added the note '? vedi p. 5' to the word 'lath' in the manuscript of the lecture (see 474, Alterations in the Manuscript 154.36) to refer to the passage in which 'the horizontal potters wheel' is discussed (153.29-154.39 wedd] wet 154.40 Calibrage] cf. Brongniart 1844, 1:125-6 154.15). 155.5 **2° Process, the Moulding** cf. Brongniart 1844, 1:126–47 155.13 evoid avoid 155.22 doe] do 155.24 **Evaded**] derived from French *évaser*: *expanded*. Expansion probably relates to one specific vessel part, the rim. 155.25 smoth smooth undercutts] In *Kleine* Schriften, the word is translated as 'Unterscheidungen' (distinctions; Semper 1884, 49), but Wolfgang Herrmann correctly recognizes it as a 'Druckfehler für "Unterschneidungen" (printing error for 'undercuttings'; Herrmann 1981, 159). 155.29 burnt] fired (see also 157.32,

159.29) 155.34 **The process of Casting Coulage**] cf. Brongniart 1844, 1:147–58. Semper may also have based his remarks on this process on handwritten 'Notes sur le procédé du Coulage appliqué au Façonnage des pièces de Porcelaine dure' dated 29 April 1850 (gta, 20-Ms-49a), which Wolfgang Herrmann believes he received from a member of staff in the porcelain manufactory in Sèvres 'as documentation for his essay on porcelain painting' (Herrmann 1981, 85). 155.35 propriety] property 155.36 versed] derived from French verser: poured

156.9 Potteries painting] In June 1850, while in exile in Paris, Semper wrote the first of three parts of an essay on porcelain and enamel painting addressed to his daughter Elisabeth (gta, 20-Ms-47; cf. Semper 1884, 58-75). In it, he made use of insights obtained during visits to the porcelain manufactory in Sèvres, arranged by Jules Dieterle. 156.11 **owr**] *our* (see also 156.19) 156.16 depassed] derived from French dépasser: overstepped (see also 156.20) 156.17 **Eameling**] *enamelling* 156.28 depassed] derived from French dépasser: surpassed 156.29 Garniture] cf. Brongniart 1844, 1:165-70 156.30 outerworks] outer parts 156.31 **spouds**] *spouts* (see also 156.39) 156.35 reconduces reconducts 156.38 Stonewases stone vases

157.4 guilding] gilding (see also 157.6, 157.17–18, 157.25–7) 157.20 Venitian] merged from French vénitien and English Venetian 157.24 Faenca] Faenza 157.33 potteriesworks] potters' works or works of pottery 157.34–158.1 The glazing ~ stanniferous.] cf. Brongniart 1844, 1:171

158.7 **Engobe**] cf. Brongniart 1844, 2:627–32 158.8 overthe] over the 158.12–14 But the discovery reached its highest degree of development ~ at Faenza, Pesaro Gubbio and Tlorence.] cf. Brongniart 1844, 2:58-9 158.13 **Duc**] *duc*: French for *duke* 158.14 Pesaro , Gubbio] ~, ~ **Tiorence** *Florence* 158.24 **pitterresque**] derived from French pittoresque: picturesque 158.29 **pipeware**] *pipeclay ware* 158.30 **apposite**] opposite 158.39 **instanes** *instances* 158.40 Fayence fine] faïence fine: French for fine earthenware; cf. Marryat 1850, 49

159.10–11 Mr. Brogniard gives ~ a very good description ~ now.] see Brongniart 1844, 2:175–9; cf. Marryat 1850, 49–55 159.13–16 A third glazing process ~ hard China.] cf. Brongniart 1844, 1:171 159.14 smelts] *melts* 159.17 gypse] French for *gypsum* 159.20 Caoline] *kaolin* 159.23 translucide] French for *translucid*. Herrmann 1981, 159, has 'translucent'. 159.32–3 difine] *define* 

160.2 Chinawase] uncertain reading, *china vase*. Herrmann 1981, 159, has 'Chinoisan'. 160.5 renomated] *renowned* 160.20 ancient German] *old German*; cf. Semper 1884, 57: 'altdeutschen' Canns] derived from German *Kanne: jugs* Cannettes] *canettes*: French for *small jugs* 

#### EDITORIAL EMENDATIONS

153.27 has] ha (s missing due to upper sixth of right margin torn off) manufacturers] man (ufacturers missing due to upper sixth of right margin torn off; cf. Semper 1884, 46: Industriellen') 156.22 China-manufacture] China- | manufacture 159.4 the same paste] the | the same paste

#### ALTERATIONS IN THE MANUSCRIPT

151.32 We are infinitely more advanced] *accompanied in opposite column by del*. We considered on last Friday the 151.33 any other nation] *after del*. those nations, whose productions in pottery as well as in other branches of Art we still admire and can not desist of copiing; not] *undel*.

152.1 **see**] *after del*. look 152.3 little.] altered from ~^ before del. with respect to 152.18 **knowledge**] *above del.* mastery 152.19 **Enamel**] *after del*. opaque 152.20 **how**] *after del*. 152.22 **before**] *after del*. and had time] after del. are ready with the old better 152.24 We have] after del. it would be Under such circumstances of the greatest utility to have Under such circumstances] *transposed by guide line from before* it would be **but**] *after del*. it would be a very usefull one 152.25 **the principles**] *after del.* the artistical application of style] repl. del. art as applied] inserted 152.27 applicable] above del. the] undel. respect] *above del.* applicable true with respect ceramic art] *before del.* and furniture. 152.28 which ~ view.] *inserted after inserted and del*. whose techni to day] *interl*. point 152.30 **plasticity**,] *before del*. what of view.] *after del.* side. 152.36 Ceramic art] after *del*. the entire domain of 152.37 to You.] inserted 152.38 Although] after del. Every piece of Ceramic art appears] above del. is nevertheless] before del. every piece 152.30 plainest] *above del.* simplest **pottery**] *repl. del.* ceramic Art **passes**] *altered from* pass after del. must

153.1-2 respecting their] after del. with respect to their 153.6 formation] after del. general 153.10 theoretically] after del. artistically 153.16 l° On the materials] inserted 153.17-21 I shall ~ For every speciality] inserted in left column of fols. 2v-3r after del. on fol. 2v

As for the Nature<sup>1</sup> of the materials, I will not be permitted to enter here into the specification of their differences and special applications as I wished to be able to do; for<sup>2</sup>

I **As for the Nature** ~ do; for] *inserted after del*. As for the materials and their nature I can not here as I desired, enter into the specification of the different pasts of ancient and modern potteries; Perhaps shall I find the t[i]

pasts] *pastes*' Perhaps] *after del*. I only shall point out for the moment that one great distinction between potteries properly speaking and Ceramic

2 for] intended to be continued by 'Every Speciality' (see note 153.21)

153.18 plastic] below del. other153.19 speak] above del. insert one or the other observa-tionsinfluences] after del. stylistic153.21 every speciality] before undel. etcofpasts] after undel. Every Speciality (cf. note 153.17-21²)153.23 Fayence] above del. Parian153.25 Stoneware,] altered from Stone after del. Gr after del. Wedgewood153.26 prin-ciple] repl. del. remark153.27 at present.] before del.

I regret that it will not be permitted<sup>1</sup> by want of time to enter into a detaild specification of the different pasts<sup>2</sup> and materials of old and modern potteries, at least shall I for the moment leave this object and spare<sup>3</sup> some remarks respecting to the Stylistic influences of the different pasts<sup>2</sup> which were employed in Ceramic art, for the following.

I permitted] above del. allowed 2 pasts] 'pastes' 3 spare] 'save'

153.29 frequently] after del. usual 153.31 for the development of the forms] accompanied in opposite column by del. folgende Seite (referring to 'Here' on fol. 4r and 'Here' on fol. 4v; see notes  $154.6^{28}$ ,  $154.6^{34}$ ) Engines] after del. mashines and 153.32 hand] after del. feeling 154.3 everwhere] repl. del. only 154.4-5 which knows ~ for himself.] repl. del. which knows<sup>1</sup> nothing but what he<sup>2</sup> was teached by his master and to turn<sup>3</sup> his objects after templets.

1 knows] after del. lerned 2 he] above del. it 3 to turn] after del. what th

154.6 We find potters wheels] after undel. on MS 134, fol. 7r-v, and del. on MS 135, fol. 4r-v (cf. 467, Alterations in the Manuscript 151.27–8)

Influence of the Material upon Style. in Ceramic art. -

The<sup>1</sup> proper materials for the Ceramic works are the plastic masses; We call plasticity the quality, which have certain soft materials, to take under the hand of the workman all the forms which he whishes<sup>2</sup> to produce. The common clay is a very plastic material | and<sup>3</sup> that which since the earliest times was found to be the most convenient for the production of vessels. The<sup>4</sup> qualities of this material and the processes and manipulations necessary for it, had therefore a great part<sup>5</sup> in the first development of the traditional forms which are accepted in that branch of industrial art, which I understood under the general expression of Ceramic art. We are infinitely more advanced in the practical sciences and the knowledge of utilising the materials, than it was the case with those nations, whose productions in pottery we Still admire and can not desist of copiing; but still our knowledge is very deficient with respect to that great secret of utilising all our means artistically.

Every piece<sup>6</sup> of Ceramic art must pass through a great number of different processes, before its completion.<sup>7</sup>

First the *mixture and formation of the pasts*<sup>8</sup>, presupposing the knowledge of the natural<sup>9</sup> materials and their qualities.

2°) the *Façonnage*.

3°) *the* covering and glazing.

4°) the firing and all preparatory and accessory manipulations,<sup>10</sup> connected with this important process.

All<sup>11</sup> of them should be known practically as well as theoretically by those who undertake to make designs for manifacturers of potteries, which unhappily is not allways the case. Practical knowledge<sup>12</sup> and artistical skill and feeling are not more so often combined in one person as it was<sup>13</sup> | once the case, at Palissy's and Cellini's time.<sup>14</sup>

As for the materials and their nature I can not enter here as I desired,<sup>15</sup> into the specification of the different pasts<sup>16</sup> which were and are employd for potteries; I only shall point out<sup>17</sup> that<sup>18</sup> one great distinction between potteries<sup>19</sup> properly speaking and Ceramic<sup>20</sup> products executed in other materials principally in *Metal*.

But I must at least give this general observation,<sup>21</sup> that every speciality of pasts<sup>8</sup> necessitates<sup>22</sup> its own treatement and style,<sup>23</sup> and that for instance the antique urns and Etrurian Vases, consisting of a very soft, slighly tempered clay,<sup>24</sup> are not fit for being executed in our modern China- or Gray-pasts<sup>25</sup>, nor<sup>26</sup> in metal.

Some remarks, respecting to<sup>27</sup> the stylistic influences of the different pasts<sup>8</sup>, may perhaps occasionally find their place.

The<sup>29</sup> façonnage.<sup>28</sup>

a) The *Wheel* and the *lath*.<sup>30</sup>

The tool which is the most ancient and still now the most usual,<sup>31</sup> in pottery<sup>32</sup> that which is<sup>33</sup> the most important for the development of the forms,  $\frac{1}{1}$  is the potters wheel;<sup>34</sup>

I The] after four del. beginnings of variant:

We shall first o The Forms which belon The productions of Ceramic Art The proper material of the productions of Ceramic art is that plastic mass which is called clay. The well known properties of this material were

productions of Ceramic Art] after del. Ceramic

3 and after del. which quality has been after del. and therefore it has 2 whishes] 'wishes' been taken 4 The *after del*. The specialities of the manipulation of the clay 5 a great part ~ artistically.] inserted before del. vice versa a great influence on the forms of the vessels; although the last may originate and derive from natural or other forms. -6 Every piece ~ completion.] repl. del. There is a great number of different processes wanted through which every piece of Ceramic art must pass before it is complete; complete] after del. becomes. fit for being 7 completion.] after del. completedness. 8 pasts 'pastes' 9 natural] after del. elements 10 preparatory and accessory manipulations,] *repl. del.* the processes II AII] after del. All these different processes 12 Practical knowledge ~ as it was] *inserted after del*. It is very very seldom It] after del. Those who have artistical skill 13 was] before del. in 14 once the case, at Palissy's and Cellini's time.] repl. del. the case of old, at the time when Palissy, the French potter wrote his book on Potteries at the time] after del. The Bernhard Palissy's and Cellinis 15 as I desired, *inserted* 16 pasts *pastes*; after del. earth 17 shall point out *repl. del.* 18 that] after del. the general di 19 potteries] above del. Ceramic works make 20 Ceramic] after del. between Metalwases and such other 21 at least give this general observation,] above del. remind you 22 necessitates] after del. necessary must 23 and style, *inserted* 24 consisting of a very soft, slighly tempered clay, have inserted 25 Gray-pasts] Gray-pasts: 'grey pastes'; after del. Eart 26 nor] after del. or 27 respecting to] after del. belonging to 28 The façonnage.] accompanied by Hier (cf. notes 153.31,  $154.6^{34}$ ) 29 The] after del. We shall 30 a) The Wheel and the lath.] lath. 'lathe'; inserted 31 usual, ] altered from ~^ before del. in plastic art, and 32 in pottery] interl. 33 that which is] inserted 34 is the potters wheel;] accompanied by doubly underl. Hier (cf. notes 153.31, 154.6<sup>28</sup>)

#### 154.7-11 So the Greeks ~ wheel.] repl. del.

So the Greeks in attributing<sup>1</sup> this invention to one of their countrimen, Thales, who lived 1200 Years before Christ;<sup>2</sup> were certainly wrong, but although they<sup>3</sup> were<sup>4</sup> not the inventors of the wheel they at least knew to take from it the best possible advantages.

I So the Greeks in attributing] repl. del. The Greeks attributed 2 Christ;] before del. and the Scythian Philosopher Anacharsis is told to be the inventor of a new wheel;
3 were certainly wrong, but although they] inserted 4 were] after del. If the Greec If] altered from if after del. But

154.9 certainly] *interl.* 154.10 sayd] *after del.* even 154.10–11 being the inventor] *after del.* the introd[u] 154.14 for] *above del.* but 154.15 of being finished that way.] *after del.* of the last. 154.16–17 The Romans ~ treatment.] *repl. del.* 

The Roman Potteries<sup>1</sup> are of an other paste than the more ancient vases are, <sup>2</sup> which is able to be burnished and to take a lustre, which last is given with the aid of <sup>3</sup> the lath<sup>4</sup>.

The Roman Potteries] *undel. before del.* have been made on the Wheel; but stamped and finished afterwards with the aid of other processes. – The Roman vases **2 than the more ancient vases are,**] *interl.* **3 is given with the aid of**] *repl. del.* they received on **4 lath**] '*lathe*'

154.16 made of *interl*. 154.17 **which**] *after del*. which is able to be burnished which] required] above del. wanted mode of] repl. del. kind of undel. 154.26 a curious fact, that] *after del.* curious that 154.27 **aid**] *repl. del.* application 154.28-9 The Style ~ circumstance.] inserted 154.32 **potter**] *above del.* man 154.33 the pot.] after del. it. 154.33-5 **Sometimes** ~ hand.] *inserted before del.* Other instrument was the turning table; 154.36 lath] accompanied by Hans Semper's note in pencil? vedi p. 5. (cf. 469, Explanatory Notes 154.37 rather] *above del.* very 154.39 **templets**] *repl. del.* paterns paterns] *after* 154.36) 154.40-155.4 By employing ~ execution.] inserted 154.40 may] over del. forms cutt o 154.41 give to the forms] *above del*. obtain can obtain] *interl*.

155.3 paterns] above del. objects, 155.6-7 **important**] *before del.* for artistical producti 155.8 **submit**] *below del*. obei 155.9 and remember] and *interl. after del.* and he must hel *after del*. observe the 155.11 **ought to be**] *repl. del.* should always be not circular after del. more ornamented with reliefs and not spheri or angular *interl*. 155.12 A form after del. An interrupted and imperfect Spheroid makes interrupted] before del. Spheroid **Circular**] *after del.* regular 155.14-17 These ofsets ~ potteries.] inserted 155.14 regular interl. which] above del. of have] *after del*. never 155.15 they may be hidden after del. at least at least] before del. hidden 155.18–19 frequently] above del. often 155.20 more above del. a **application**] *altered from* applications 155.21 potteries, when] after del. forms, w 155.22 **turned**] *before del.* or cast 155.24 intended] after del. who are destined **China**] *after del.* generally in 155.25 high] after del. haut 155.26 for 155.28 **must**] *above del.* want to after del. for being cast and 155.29 **burnt**] *after underl*. and del. executed 155.30 great above del. much work] *after del*. vase, and every vase above del. pottery work 155.32 generally] repl. del. always accepted] after del. felt 155.33 who pay very little for the models.] repl. del. which often are afraid of the costs for models, and find it more convenient to copy which] after del. which are afraid to spend 155.34 **Coulage.**] in opposite column money for their models, 155.37 mould] above del. cast

156.1 On this] after del. These circumstances have given rise pottery] after del. cast 156.2 pieces of earthenware, as columns, Water-pipes, inserted partly *interl*. **Vases**] before del. and for others 156.2-3 partly ~ Eggshells,] inserted before del. which in the contrary are very thin and fragile 156.4 Ancients. It] after del. Grecs; it executed] repl. del. applied 156.9 **Potteries painting.**] *in opposite column* 156.10 **applied**] *above* del. emploied 156.11 the ancients and owr ancestors] *inserted* **knew**] *above del*. have 156.11–12 **than we do.**] *above del*. known by known by] *before del*. the ancients and been our own forefathers than by us. 156.12 I shall ~ which] inserted before del. This matter 156.14 **some principles**] some *above del*. those 156.18 less] *after del*. evidently done ad**vanced**] *altered from* advant 156.19 The wide boundaries] after four del. beginnings of variant:

And we try even to depass<sup>1</sup> the wide boundaries<sup>2</sup> of modern We are even not satisfied o[ ] Although the means are very great, we Although the fabrication<sup>3</sup> of standing colours. 1 depass] derived from French 'dépasser': 'overstep' 2 boundaries] after del. field 3 fabrication] after del. knowledge of

156.19 wide *after del*. limit 156.20 depass after del. must 156.23 to the strict observation] *after del.* to the influence of my 156.23-4 of the stylistic limits] after del. on fol. 7r-vof the limits prescribed by the materials and processes | as well as by the fundamental forms and ideas, which 156.24 and *inserted before del.* and China ornamenting, and 156.24-6 as well as ~ purpose.] *inserted* 156.24 moderated style] after del. moderation in the 156.29 **counts**] *after del*. there is one which I employement of colours **Garniture**] *after* 156.31 piece;] altered from ~, before del. but are parts del. Garnissage 156.31-3 as 156.33 art;] altered from ~, before del. for instance handles ~ happens to be] inserted Metal ornaments, precious stones pearls and smalts. 156.34 mounting] repl. del. decor-156.35 **our manufacturers**] *inserted after del.* we may be **pay**] *after del.* able to ating 156.36 **dangerous**] *before del.* and abusiv 156.38 precious potteries] after del. beautiful Vases in glasses] interl. 156.39 **has**] *before del*. not only frequently inserted before *del*. in the most []

157.1 It was dominant also] *after del*. It has been also adopted or is] before del. a sucpracticed] repl. del. mode of treating Chinavases cessfully y added 157.4 guilding, altered from  $\sim \land$  before del. and silvering and platinizing] below inserted and del. applying metallic 157.5 façonage.] before del. They are employed with the brosh or in powder or in chemical dissolutions brosh] 'brush' 157.6 The guilding] after del. The guilding should be employed only for 157.7 **extremities**] *after del*. outer 157.9 junctures] before del. or mouldings which indi 157.9–10 **decorations**] over orna 157.10 **vases.**] *before del*. There is a distinction to be made between the metallic lustre and the There] after del. It seems 157.11 **Gold**] *after del.* metal 157.13 glazing] before del. and 157.14 **shows a**] *repl. del.* n becomes a **very agreable natural luster**] *after del.* mat luster 157.16 Greecs before del. and it is the same now it is the same now] *inserted before del*. which gave only a polish to **Earthenwares**] *after del*. Stonewa some 157.17 **knew**] *repl. del.* employd 157.17-18 157.17 followed] above del. had **But they** ~ **Vessels**.] *inserted* 157.19-20 it will be ad**visable to**] *inserted after del*. we must we must] *repl. del.* we should 157.20 follow the *after del*. reserve t[h] Venitian Painters] after del. good distribution] after del. light 157.21 **for**] *inserted* 157.21-2 brillancies] repl. del. brillant parts in the pictures, and 157.22 **only**] *after del.* only for brillant parts] repl. del. polish 157.34 followes some-157.39 transparent] inserted times] after del. is given in some cases **coating**] *after del.* Glazing or varnish

158.1 glazing,] after del. covering, generally stanniferous.] after del.

generally stanniferous. The opaque Pottery-Enamel<sup>1</sup>

I **The opaque Pottery-Enamel**] *inserted and undel. after del.* These Enamels were known to the Arabian potters in the II<sup>th</sup> Century and afterwards adopted by Luca della Robbia, ot the beginning of the fifteenth century. It obtained its

Robbia,] before del. the Faenza potters and ot] 'at'; repl. inserted and del. in

**forming**] *repl. del.* and formed 158.8 past, altered from ~^ 158.14 Enamelig] ig added 158.15 **paste**, *altered from* ~∧ *after del*. grosse pottery or a composition ~ marl, *inserted* 158.17 the Faenza potteries] *after del.* decorat 158.18 its opaque cover;] before del. The plastic element is not prevailing for this s The] after del. The painter is after del. It borrowes its greatest beauty 158.19-21 The façonnage ~ These circumstances] inserted before del. Both of them Both] after del. Both are not very favorable 158.20 Enamel after del. liquid wants] after del. covers 158.22 but most convenient for painting] after del. the painter has the greatest part of the decoration 158.22-4 It was ~ ornamentation. *inserted* 158.26 China.] before del.

A third process<sup>2</sup> of glazing<sup>1</sup> is that which is technically calld the *cover*. la *couverte*. It is a vitrifiable and earthy Substance, which smelts<sup>3</sup> only at a very high temperature, equal to that which is wanted for the burning of the paste. It is that which is employed for hard China and some Stonewares.

Many of the<sup>5</sup> Specialities<sup>4</sup> which show the fine old<sup>6</sup> Gray<sup>7</sup> or Stonewares, for instance the old Flamish and German drinking vessels, as well as those of the better Chinas are evidently consequences

I A third process of glazing ~ some Stonewares.] cf. 159.13-162 process] after del.class is3 smelts] 'melts'4 Many of the Specialities ~ consequences] cf. 160.13-18;notes 160.9, 160.165 Many of the] inserted before del. The difficulties whichThe]altered from the after del. It is evident that6 fine old] inserted after del. better7 Gray]after del. productions of6

158.27-36 **The Frensch ~ group.**] *in opposite column* 158.28 **treated**] *after del.* this last being less thick and 158.29 **like pipeware**] *after del.* fin 158.34 **belong**] *after del.* relate 158.36 **group.**] *altered from ~∧ before del.* which

159.3 **moulding**] *altered from* moulds **cover**] *after del*. lining of 159.4 **ornaments**] before *del.* were placed 159.5 The Engobe] after del. Mr Brogn 159.6 made] interl. with 159.7 **pasts.**] *altered from* ~\_ *before del.* of different The whole *after del*. repl. del. in The style is not only Arabian in the **Oriental feeling**] *repl. del.* Arabian feeling 159.8 which] before del. feeling 159.11 **40**] 4 over 2 159.19 This glazing] after del. The paste of the China's is short and effor 159.20 less] after del. much pasts] after del. clays, 159.24-5 agreable for the] after del. precious for the 159.25-6 application] above del. 159.27 But] after del. The white China's are engaging after del. The practical exhibition difficulties which after del. But 159.29 heigh] above del. great degree of Tempera-159.30 **necessitates**] *after del*. makes precautions] after del. observatures s added 159.34 **pottery** *interl*. 159.36 **wares**.] *altered from* ~, *before del*. and we shall perhaps tion in China pottery] in *above del*. of will] before del. depend **be allways** *after del.* allways 159.37 **and I** *after del.* and these are not the less happ a little from the am excusing] repl. del. see no wrong in 159.38 industry, *altered from ~. before del.* Perhaps it is a better way than that 159.40 own inserted

160.1 well] after del. although 160.2 a good model of] inserted before del. a Greec Style applied on China Style] above del. Character China] underl. 160.5 renomated] accompanied in opposite column by Hans Semper's note in ink renomated 160.6 more fusible] after del. softer in fire China] after del. Po[r] 160.9 Some other] after del. Among the Gla. after del. on fol. 12v

Among the other potteries are to be mentionned as artistically interesting the Stonewares, which have sometimes<sup>1</sup> no glazing<sup>2</sup> and at other times<sup>3</sup> are glazed only by the process of *smearing* but <sup>4</sup> are impermeable<sup>5</sup> by themselfes. Those who have the best developd this sort of pottery, technically as well as artistically are the Flamish and the Germans. beautiful Stonewares also in Italia in China Japon

I sometimes] *interl.* 2 glazing] *before del.* at all but form a very hard 3 and at other times ~ smearing] *interl.* 4 but] *after undel.* all 5 impermeable] im-| permeable; im *altered from* in *and* permeable *after del.* penetrable by them

160.9 **important**] *interl.* 160.14 **It was**] *after del.* The forms of the German *after del.* They are 160.16 **They are rich**] *after del.* 

They show generally their<sup>1</sup> gray natural ground surfaces<sup>2</sup> ornemented with <sup>3</sup> deep and quiet colours,<sup>4</sup>

I They show generally their] *inserted after del*. This Style of the old Stonewares with their 2 ground surfaces] *repl. del*. grounds 3 ornemented with] *above del*. and the 4 colours,] *inserted before del*. Style of colouring on this ground ground] *undel*.

160.16 forms] above del. colours 160.18 sustain] repl. del. pass throw throw] 'through' fire.] altered from  $\sim h$  before del. and h 160.22 mention] above del. remember 160.24 composed.] before del. The 160.25–7 Assyrische Vasen ~ Reichthum an] in left column 160.27 Grosser Reichthum an] inserted after del. Style Style] after underl. and del. Griechisce Metallvasen (Griechisce: 'Griechische') 160.28–33 (Aegypter ~ Griechenlands.] in right column, starting alongside the manuscript line Bleche Embleme. – . at 160.26 160.28 der] after del. of 160.30–1 Die Archaischen] repl. del. Die

# On Timber Construction, and Its Influence upon the Development of Architectural Forms

## **TEXTUAL RECORD**

MS 137	gta, 20-Ms-137, fols. 1r–4v (1r–v, 4v blank), in Semper's hand
MS 136	gta, 20-Ms-136, fols. 11–8v (2v–5r variant of MS 137), in Semper's hand, copy-
	text

BIBLIOGRAPHY Herrmann 1981, 112

#### **EXPLANATORY NOTES**

Only a fragment of the manuscript of this lecture (MS 136) is preserved: it lacks the original beginning and the original end, as can be seen from the fact that both the start and the end are in the middle of sentences. Thematically, the fragment is divided into four parts. The first part (161.2–162.23) is concerned with concavely and convexly curving roof forms, on the one hand, and on the other with a field that is not directly related to wooden construction, namely the external covering of the roof. In the second part (162.24-166.9), Semper uses sketches, which he probably transferred to a blackboard in the auditorium, to explain – by means of specific examples - the three elementary and six most common combined static systems for spanning horizontal distances. In the process, he makes use of his own practical experience as a professional architect, as well as the knowledge of bridge construction that he had taught his students in Dresden in the 1840s (see 479, Explanatory Notes 162.24). Yet he describes one of the most important combined systems from an architectural point of view - the extension system 'with an accessory system of compression' - in an incorrect way (166.5–9), since in a roof construction corresponding to the sketch the main system consists of rafters that resist compression and carry a vertical accessory extension system, a king-post (which in turn carries a horizontal accessory extension system; cf. 165.8–13).

On the basis of this combined system, Semper in the third part (166.10–167.8) discusses the ancient and medieval use of wooden gabled roof construction in Europe, focusing only on the structure visible from the interior, without a ceiling cover. He justifies this construction – which is actually against his own preference for concealing the supporting structure and the symbolic translation of the spatial enclosure – by the fact that it was used to cover public spaces, which due to their origin were not regarded as interiors but rather as exteriors, as courtyards. In the fourth part (167.9–168.28), Semper deals firstly with what represented the opposite of Roman wall and vault architecture, namely the constructively varied wooden architecture encompassing walls and roof in northern and central Europe, and its earliest Mediterranean antecedents, which can be deduced only from illustrations and descriptions. Secondly, he touches on three areas peripheral to wooden construction: ships, funeral piles, which he examines more closely in Style in the Technical and Tectonic Arts (Semper 1860/63, 1:314–17), and carpentry products. In the fifth part (168.29–169.18), which is concerned with the secondary theme announced in the 'Prospectuses of the Lectures on Art' - 'Metal works as belonging to timber construction, in opposition to other modes which belong to the t[u]bular construction, or to ceramic art' (96.22-4) – Semper concludes by considering the elements of the various roof constructions for which cast or forged metal could be used. Here he makes no secret of the difficulty for him of overcoming the conflict between adapting to the specific properties of materials, on the one hand, and following traditional types of wooden construction on the other.

Semper had long been sceptical about the use of iron in architecture. In 1842, in an expert opinion provided for a church project in Saxony, his view was that previous attempts to give iron 'a significant and leading role in serious, great architecture' had failed because 'iron, due to its peculiar lack of volume, eludes the gaze even from a short distance, when it appears in its legitimate strength and shape' (gta, 20-Ms-7, fols. 4v-5r; cf. 485, Alterations in the Manuscript 169.15). In 1849, in his essay 'Der Wintergarten zu Paris' (The Winter Garden in Paris), Semper did not take a more favourable view of the contemporary use of iron but did mention one way of overcoming the conflict involved – namely, tubular formation of all construction elements that are exposed to deflection or compression (Semper 1849h, 521–2). A second, shorter manuscript for the lecture 'On Timber Construction, and Its Influence upon the Development of Architectural Forms' is preserved, with the title 'On the Modes of resistance of the materials' (MS 137). It corresponds approximately to the second part of MS 136, the longer manuscript (162.24–166.16), and deals with the same elementary and combined static systems but describes three of them more succinctly than MS 136. Only the 'System of compression with an accessory system of extension', which is described as 'the most interesting in architecture as an art', is illustrated in greater detail. It concludes with the remark that Semper will return to this system 'hereafter' (486.8–16; cf. 165.8–13). In his last lecture in the autumn series of 1853, Semper did touch on the system concerned, on which the gabled roof is based, but only in passing (173.31–2, 176.24–5). He discussed it in more detail in the lecture 'On Architectural Symbols' in the autumn term of 1854 (180.15– 181.4).

 $_{161.2-4}$  The Chinese adopted the same anomaly ~ not ~ in imitation of the tents of their ancestors] The words 'anomaly' and 'ancestors' refer to the concave curvature of the roof shape and the Mongols, respectively (cf. 482, Alterations in the Manuscript 161.3-4). In the essay 'On the Origin of Polychromy in Architecture', which was published in the appendix of An Apology for the Colouring of the Greek Court in the Crystal Palace (Jones 1854a), Semper did not contradict the view that the shape of the Chinese roof was derived from the shape of the Mongolian tent (61.27-8), whereas in Style he made a more critical assessment of it again (Semper 1860/63, 1:2). 161.15-16 Two kinds of coverings ~ scales ~ skin.] The same distinction appears in the 'Outline of a Cultural-Historical Exhibition' (42.25-31, 301.28-35, 304.21-5, 307.25-9). 161.23 **let**] *led* 161.25 **burnt**] baked 161.28 guilt] gilt 162.3 **board**] *eaves* (see also 162.8) 162.5 in clined *inclined* 162.6 **corniche**] French for *cornice* (see also 164.13) 162.8 Watercourses] gutters 162.9 gutters] gargoyles lyon-162.11 Wienna] merged from German Wien and English Vienna heads lions' heads 162.20 M' Minton at Staffortshire] On 8 April 1852, during a three-week visit to Herbert Minton's ceramics factory (see 329), Semper wrote to Henry Cole (Herrmann 1978, 129): 'The glazed roof tiles of Mr. Minton are less perfect with regard to practical service than his floortiles, and it will perhaps be difficult to overwhelm all the obstacles which our clime opposes to their emploiment.' In Science, Industry, and Art, Semper mentions 'Minton's beautiful faiences' (Semper 1852, 52), and in Style he refers to Minton's 'imitations of the Arabian glazed tiles' with which Owen Jones coated his Alhambra Court at Sydenham 162.2I-2 The Chinese ~ tyle construction is ~ that of Palace (Semper 1860/63, 2:123). the Ancients.] Semper is here apparently assuming fired and glazed clay tiles, whereas in the lecture 'On the Relation of Architectural Systems with the General Cultural Conditions' he refers to 'stoned [i.e. stone] tiles of different colours' whose style of shaping and joining reminds him of ancient Greek and Roman roofs (196.33-5). 162.24 **I shell now** ~ consider the constructiv part of the question.] 'shell': *shall*. Two lecture notebooks preserved in Zurich show that in 1841 and 1842 Semper lectured on ancient and modern bridge-building at the Academy of Arts in Dresden (gta, 20-Ms-26, 237-86; 20-Ms-28, 33-41, 43-4). Shortly before his flight from Dresden, he was also intensively concerned with the construction of the iron roof framework of the Gemäldegalerie in Dresden. 162.29 **Resistance by Rigidity**] This expression is not analogous to the expressions assigned to the second and third types of load, 'Resistence to compression' (162.32) and 'Resistence to Extension' (163.2), since it does not designate the potential deformation (namely deflection) but rather the property of the system that reduces or prevents it.

163.17–19 Diodor calls the Rooms ~ pipes ~ adding that they were highly ornamented 163.19 **allongated**] derived from French *allonger*: *elongated* cf. Semper 1851b, 82 163.24-5 Greec Architecture was, as we shall see in the next lecture of a very compount caracter.] In the two surviving manuscripts for the lecture 'The Combined Action of the Four Preceding Branches of Industry in Architecture' (MS 138, MS 139), Semper does not fulfil his promise to explain the 'compount caracter' of Greek architecture (see 169-77, 496). 163.28-9 bridge over the James Rivver ~ in Virginia] This wooden bridge for the Richmond and Petersburg Railroad was built in 1836–38 under the direction of Moncure Robin-163.30–1 tubular System ~ employed in England (Victoria bridge)] The use of a son. purely tubular system is seen only in Wales and Canada and not in England. Three famous iron railway bridges were constructed using this system, under the direction of Robert Stephenson: the Conway Bridge over the River Conway in Wales (1846-49), the Britannia Bridge across the Menai Straits in Wales (1846-50) and a bridge over the St Lawrence River near Montreal in Canada (1854–59), which at the time of Semper's lecture was already being called the Victoria Bridge. As the latter bridge was only in planning at the time, it can be assumed that Semper was referring to the larger bridge in Wales, the Britannia Bridge. 164.2 weider] merged from German *weiter* and English *wider* 164.8-9 book intitled the Open timber Roof of the middle Ages cet. London 1849] 'cet.': etc.; Brandon/Brandon 1849 164.11-12 Roman mode of covering the large theaters with Velas suspended on stringes with the aid of high Mates] 'stringes': strings; 'Mates': masts (see also 164.26). Semper himself used the ancient motif of a suspended velum in 1858 in his design for 164.15 Hippodromes at Paris ~ by Mr Hittorf] cf. Semper a theatre in Rio de Janeiro. 1853, 296. This refers to Jacques Ignace Hittorff's Cirque d'Été (1841–43) and Cirque d'Hiver (1852), although their roofs were not constructed according to 'the rigid system with an accessory system of extension' (164.10). Hittorff used this combined system only in the Panorama building (1838–39) on the Champs-Élysées in Paris. 164.24 waulding vaulting  $_{
m I65.IO-II}$  This is the most important ~ by its having been the types for the sacred edifices.] Semper explains the significance of this roof system more precisely in the lecture 'On Architectural Symbols' when he discusses 'The gabled roof' (180.15-181.7). 165.12–13 in combination with an other system, which will follow on its turn This refers to the vertical extension system, the combination of which with a horizontal extension system and an oblique compression system Semper discusses under the title 'Extension with an accessory 165.18 wayfaring trees] These are bushes of the genus system of compression' (166.5–9).

165.24 **Pompea**] *Pompeii* (see also 167.35) 166.3 frightfull accidents] For example, two smaller suspension bridges in England and two larger ones in France collapsed due to structural flaws: one over the River Irwell near Broughton, north-west of Manchester, in 1831 (opened in 1826); one over the River Bure near Great Yarmouth, east of Norwich, in 1845 (opened in 1829); one over the River Maine in Angers in 1850 (opened in 1838); and one over the River Vilaine near La Roche-Bernard, north of Saint-Nazaire, in 1852 (opened in 1839). Over 300 people died in the disasters. 166.12–14 It was introduced with the ancients ~ Basilicas] cf. Semper 1851b, 74–8, 95 n. \* 166.18-19 the above mentionned Odeon of Pericles see 164.25-165.3 166.25–6 **the** richly already bespoken ornamented roofs in the English Gothic style] 'bespoken' derived from German besprechen: discussed. Semper hints at this type of roof only in the second section of the first class of static systems (164.5–6). Perhaps he discussed it in front of the audience, using examples from the book The Open Timber Roofs of the Middle Ages (164.7-9;

Viburnum, but Semper probably means vines growing from one brook bank or gorge slope

to the other.

Brandon/Brandon 1849). 166.26–7 Westminster hall, Hampton court, Windsor] Semper apparently refers to the Great Hall at Westminster Palace (usually called Westminster Hall), the Great Hall at Hampton Court Palace and St George's Hall at Windsor Castle. Their gable roofs are examples of the varied constructions gathered together under the term 'Hammer-Beam Roofs' in the book by the Brandon brothers (Brandon/Brandon 1849, 20–5). In an initial, abandoned approach, Semper incorrectly places them in the second section of the first class of static systems, i.e. under 'the Rigid system with an accessory system of compression' (164.1; see 482, Alterations in the Manuscript 164.3–9). 166.27 an] and 166.27–30 They take their Ornaments from the ~ construction itself, while the German and Frensh Gothic Roofs are ~ much richer in ~ ornamental details.] In two initial, abandoned approaches, Semper adds a similar remark to the second section of the first class of static systems (see 482–3, Alterations in the Manuscript 164.3–9, 164.4).

167.4 Tacitus in his Germania] Semper's private reference library in Dresden included a copy of Tacitus's Germania (see 211.12, 215.34). 167.6–8 instances ~ Norvegian Churches, (9<sup>th</sup> or 10<sup>th</sup> Century)] This probably refers to plates in Johan Christian Clausen Dahl's book Denkmale einer sehr ausgebildeten Holzbaukunst (Dahl 1837), which Semper mentioned in the 167.11-12 The Gothic architecture inherited of this northern next lecture (171.26). style of ornamenting the wood constructions.] This is followed in the manuscript by two deleted sentences referring to unnamed books on Gothic wood constructions and to drawings that Semper himself had made 'at Rouens and elsewhere in Normandy' (see 483, Alterations in the Manuscript 167.12). Another deleted passage referring to the second section of the first class of static systems mentions 'Engravings and drawings' of 'Beautifull roofs at Rouen, (town house) Nurnberg, Italy' (see 483, Alterations in the Manuscript 164.3-9). Semper illustrates two corresponding 'gabled houses in Rouen' in Style (Semper 1860/63, 2:305), where he also mentions a book of plates that may have been one of those unnamed books on Gothic wood constructions: Augustus Welby Northmore Pugin's Details of Antient Timber Houses of the 15th & 16th Centuries, published in London in 1837 (Pugin 1837). 167.15 ad] Latin for at (see also 168.38) 167.16 blockhouses] log houses 167.22-3 Such were the old Colchian houses ~ such are still now the houses of the **Tyrolians and Switzer peasants**] cf. Semper 1860/63, 2:306–16. In *Style*, Semper classifies Tyrolean houses not as log houses, but as timber-framed houses. 167.24 **Sueden**] merged from French Suède and English Sweden **Norvegia**] Italian for *Norway* 167.25 collection of Switzer Edifices] This refers to the plates in Adolf von Graffenried and Ludwig Stürler's book Architecture suisse (Graffenried/Stürler 1844). Stürler, a former fellow student of Semper's in the studio of Franz Christian Gau in Paris (see 250), presented the book to Semper in 1850 (Stürler to Semper, 11 May 1850, 23 June 1850, 7 July 1850, gta, 20-K-1850-05-11, 20-K-1850-06-23:1, 20-K-1850-07-07:1). 167.28 maçonry] merged from French macon*nerie* and English *masonry* 167.29–30 beautiful exemples ~ by Mr Bötticher in Berlin 167.31-2 drawings, from buildings ~ in Normandy] see note 167.11see Bötticher 1842 12; 483, Alterations in the Manuscript 167.12 167.39 massif] massive

168.1 tablatures] *wall panels* 168.6–7 Rogi or funeral piles ~ represented on some Roman medals] cf. Semper 1860/63, 1:314–17 168.9–12 I have the Idea that the Lycian monuments ~ are nothing but the stone Copies of the original funeral piles ~ erected.] cf. Semper 1860/63, 1:229–30, 430–1 168.20 leining] *lining* 168.26 Niello] see 440, Explanatory Notes 133.18 168.27 Venitian] merged from French *vénitien* and English *Venetian* 168.30 these diagramms] the nine diagrams illustrating the individual sections of the three classes of static systems; see 163–6 169.10-15 It is evident, that a new Material ~ requires many alterations ~ On the other side we are bount to observe some traditional types ~ borrowed from timber-construction.] cf. Semper 1849h, 521-2; Semper 1860/63, 2:263-6

#### EDITORIAL EMENDATIONS

162.7 palmets,] palme (ts, *on fol. 3r*) 162.8 ornamented] ornamente (d *on fol. 3r*) 162.13 drapery-like] drapery- | like 167.6-7 wood-constructions] wood- | constructions 167.12 wood constructions] wood | constructions

#### ALTERATIONS IN THE MANUSCRIPT

161.2 **less**] *after del*. more roofs,] *before del.* perhaps in imitation of the old buildings of 161.3-4 tents of their ancestors] *after del*. Mon (for 'Mongol') 161.4 Wooden] after del. holy edifices 161.6–7 **hydrodynamical** *repl. del.* mechanical 161.12 The covering after del. One important 161.18 **also**] *above del.* secondly 161.19 **opportunity**] *repl. del.* 161.20–1 **appropriate**] *after del*. happy for or[n] 161.22 **The**] *altered from* the occasion after underl. and del. Instances **the Hellenic buildings**] *repl. del.* the Greecs, is] above 161.29 **usual**] *after del.* very 161.30 **constructed**<sub>A</sub>] altered from ~, before *del.* a happy inserted and del. so as to form a sort of inclined wall, one stone covering the other and securing the joints against the introduction of water. The 161.31 (see the drawing) after del. here are parts [0]

162.1 were] *above del.* was was] *after del*. layer 162.2 row of *interl*. 162.3 Channelformed tyles] *repl. del.* tyles in form of a Channel tyles] s added 162.3-4 The last ridge was finally protected with] repl. del. On the Ridge was 162.4 ridge] interl. 162.5 **Saddletyles**] *after del*. Channel-tyles 162.8 roofs] after del. Sides of the 162.14 **new** 162.15 executed in imitation] *after del.* in the Oriental Style or in im[i] interl. Sara**cenesk roofs**] *after del*. oriental roofs 162.18 tyles] after del. roofs 162.19 **good**] *after del.* resuscitation of a 162.19–20 ornamental inserted 162.21 **tyle**] *after del.* mode of 163.4 **cases**] *after del*. circumsta 163.6 with the view of *above del*. to counteracting] ing added 163.7 of above del. to **forming**] ing *added* 163.11 three] after del. 1°) 163.13–14 a multiplication] after del. narrow 163.15 diagramm).] after del. figure). 163.16 **some parts of** *interl*. 163.18 **protected** *after del.* underneath 163.19 adding 163.22 **the Construction**] *after del.* temple 163.24 **formgiving**] *after repl. del.* and says 163.26 **newly**] *after del*. in the new 163.27 bridges, below del. System, *del*. they were 163.28 supported by pillars. *inserted* **Example.**] *repl. del.* see 163.30 a rigid tube after del. also forming rigid tubes invented] after del. adopted

164.2 weider distances between the pillars,] *inserted before* columns of wider columns of wider] *after del.* wider distanced columns and *and before del.* distanced 164.3–9 Generally adopted ~ London 1849.] *inserted before del.* 

The Gothic ceilings, mainly in<sup>1</sup> England, more simple in the constructiv principles but richer in ornamental details in Germany and France. Westminster, Hampton court – Windsor.

Beautifull roofs at Rouen, (town house) Nurnberg, Italy. (Engravings and drawings.)

1 mainly in] repl. del. very developed in

164.3 Generally] above del. Sometimes 164.4 in England.] before del.

The constructiv principle<sup>1</sup> of the English Roof is much richer than in Germany and France, in<sup>2</sup> the later<sup>3</sup> countries they are very simple in construction but much more<sup>4</sup> decorated by ornamental details

> I principle] before interl. and del. of ornamentation 2 in] after del. but 3 later] 'latter' 4 more] after del. richer

164.11 Roman] interl.164.12 with the aid] after del. attached and164.12-13 toweringabove] after del. surrounding and over164.14 circular] inserted164.22 instances]after del. Celtic164.23 the principle] after del. the principle of stone vaults164.25-165.3The Periclean Odeon ~ building.] inserted164.26 Persian] interl.

165.4 **another**] *repl. del.* an 165.12 **It seldom**] *after del.* it only 165.25 **which will find a leader**] *after del.* which will not be embarrassed *after del.* which will not fail if they remind this origine 165.26 **if they remember**] *repl. del.* in

166.2 **applied** *after del.* the best the] undel. first and best] *interl*. 166.11 **all**] above del. many **most**] *above del*. many 166.12 introduced above del. taken 166.13 courtyards] *after del*. usual **formed**] *above del*. were usual] interl. 166.15 abroad.] after *del*. the barbarians. inside] *interl*. 166.17 independently] ly added 166.20 likewise first] *before del*. like 166.23 **roofs**] *after del*. basilica 166.25-30 Some ~ deinterl. 166.25 **Some of the richly ~ ornamented**] *repl. del.* The tails. inserted The] after del. The English Churches and the roofed halls remi already bespoken *interl*. roofs altered from roofed before del. halls

167.1-3 of northern woodconstruction ~ countries,] repl. del. of roofs was different from this in the northern countries, where of] undel. after del. was altered in the time and before del. Gothic architecture, when the wood sculpture was for such 167.3 cutting and in-167.4 timbers] after del. wood and serted 167.9-11 In these northern countries ~ dominant; *inserted* 167.11 The Gothic architecture] after del. In this book is a collection of 167.12 wood constructions.] before del. Here are several books, containing such Gothic woodconstructions. These drawings I made at Rouens and elsewhere in Normandy. 167.13 We must make a distinction] after del. Two distinct styles of wooden house constructions are visible after del. But I must speak here a little more systemati after del. Two sor 167.14 **pieces**] *after del*. beams 167.14–15 **disposed**] *above del.* laid 167.15 **joined**] *repl*. del. engrafted 167.17 are used for] *repl. del.* form the 167.18 beautifully] after del. 167.20 **Ensemble.**] *repl. del.* effect. 167.22 Such were the old Colchian simply and houses] after del. Such houses are commonly seen in Switzerland 167.25 **collection**] after 167.26 house.] after del. building. *del*. book containing 167.29 Germany,] before del. 167.31 drawings] after del. on fol. 6r Buildings drawn by Buildings] after del. N where actually existing] interl. without insertion mark 167.32-3 You furtherly see ~ arranged.] 167.32 You furtherly see in this collection here] above del. In this collection you inserted will see collection] *after del*. book 167.36 wood and metal] repl. del. such light light] above del. mouveable 167.36–168.2 This diagramm ~ authors.] inserted 167.37 support**ers**] *after del. in pencil* columns which form the **phantastic**] *after del.* lofty combinations **constructions**] *in pencil above del. in pencil* buildings 167.39 **notwithstanding**] *repl. del.* had on the side of

168.1 Assyrians,] before del. which had only wooden columns and whose houses had hadl 168.1-2 are mentionned] *above del.* as we after del. were ornamented **Their** *interl*. 168.4 and detaild *interl. in pencil* 168.5 some of them *before del. in pencil* which know I whished to be permitted to communcate here whished] 'wished' 168.7 The funeral **piles**] *after del*. Alexanders 168.9 I have the Idea] after del. The woodconstructions had a high relig 168.11 original] inserted **piles**] *before del.* which the dead who w[e] 168.12 erected. – .] before del. in ink over pencil

I shall finally have to spend  $^{\rm I}$  only some few minutes to  $^{\rm 2}$  metal-construction as typically connected with the first. –

I have to spend] *repl. del.* spend 2 to] *after del.* to the application of this constructiv principle of] *undel. before del.* the timbercons

168.13 **monuments**,] *before del*. comp[a] 168.14 **striking**; *before del.* and thus the singular idea, of a ra 168.15 of] above del. telling some **giving**] *altered from* give *after del.* to 168.18 am obliged] after del. must after del. shall **The art of the joiners**] *after del.* The joiners art belongs more or less to surface decoration 168.20 **a wall or**] *after del*. pannelled bolal 168.24 has] after del. belongs to the same Class and 168.26 Marquetry] after del. Inlaid wood. 168.26-7 Aegyptian] after del. Inventio 168.29 Metal] after del. other Materials, **Roofconstruction**] *after del.* timber 168.30 If we look at these diagramms] after del.

If we look at these Diagramms, we observe some parts of the constructions, which belong more to the domain of  ${}^{\rm \scriptscriptstyle I}$ 

I belong more to the domain of] *repl. del.* claim for an other material claim] *after del.* seem to demand

168.30 affected] above del. acted upon 168.31 which seems ~ rather] *repl. del.* as to be better of Metal as] *above del*. so stone and] *interl*. 168.32 **Wood**] over St (for 'Stone') **Wood.**] altered from ~^ before del. or any other Material. or any other Material.] before inserted and del. Others are best executed of Stone or any other rigid substance. 168.33 for instance] after del. This is evident 168.34 we] *after del*. Here may] interl. 168.34-5 Stone or Bronze or cast Iron] after del. cast Iron or 168.36 At c, in turn] after del.

*at c* we want<sup>1</sup> the extension or suspension strings being<sup>2</sup> of wrought<sup>3</sup> metal,<sup>4</sup> rather than of any other material

I want] above del. whish in tur[n] whish] 'wish' 2 being] interl. 3 wrought] above del. metal, 4 metal,] inserted after inserted and del. cast or w

168.37 chains] after del. pieces after del. str 168.38 feel] before del. it to be better application] after del. aptetute aptetute] 'aptitude' 169.1 **this is also**] *after underl. and del.* at e may best be] after del. we observe 169.3 **Metal**] *after del.* thin 169.5 This leads] repl. del. The Architects were therefore soon let let] 'led' **roof**] *repl. del.* ceiling 169.7 **The**] above del. A A] after del. The Theory 169.10 **adopted** *repl. del.* employed employed] *after del*. must not 169.11 **one**] *above del*. requires] repl. del. will afford 169.13 On the other material **many**] *after del*. other side] after del. and nevertheless we are bount to old nevertheless] before del. I trad**itional**] *before del.* and typical 169.15 timber-construction.] before del.

Meantime it is evident that Metal<sup>1</sup> chains or wrought and cast Metal constructions have<sup>2</sup> the inconveniance of being rather an invisible Meterial for elevations<sup>3</sup> like the inner Roofs of Churches, halls, etc,

I Metal] after del. the application of thin 2 have] ve over s 3 elevations] repl. del. such distances

## MANUSCRIPT VARIANTS MS 137

On the Modes of resistance of the materials.

The Meterial which can be employed in constructions can resist in three different manners: I) To a force, which is directed perpendicularly on the length of the piece of construction, and which tends to break it transversally. (*Resistance by Rigidity*)

5 2°) To a force, which is directed in the sens of de length of the piece of construction, and which tends to *crush* it. (*Resistance to compression*)

3°) To a force directed in the sens of the length and which tends to dilate it (Resistance to Extension).

Every timber construction, is composed of parts, which are affected in one or the other of these three different manners; and at many circumstance one part is affected by a combined action of two of the three manifestations of forces; The modes in which the materials are employed to counteract these forces and to form a solid system of resistance are very manifold, but they may be classified as followes:

I. Class. (The rigid principle prevailing)

a) The rigid system without any accessory system.

The tubular system Pantheon, baths of Caracalla.

*Egyptian roofs.* The narrow Standing and multiplied supporters and columns are natural consequences of the adoption of this system of protecting edifices.).

b) The rigid system with an accessory system of compression.

20 *Indian roofs.* (Gothic ceilings. The columns and supports may be placed in wider distances. (see the Indian temples.).

c) The rigid system with an accessory system of extension. |

A kind of instance of this system employed by the ancients are the vela employed for the Amphitheaters and Theaters of the *Romans*.. Suspension of the Vela on Strings which were

25 sustained by mates or poles standing round the upper story of the Edifice. Modern imitation of this idea by Mr Hittorf, who employed it for supporting the roofs of his large hippodromes.. fol. 2r

fol. 2v

fol. 3r

## II. Class.

486

The principle of compression is prevailing.

1°) a System of compression without any accessory system

The old Etruscan Tombs, the doors in the Cyclopean valls, the roofs of the inner roorms of the Pyranids. Origine of the vaults. - . Celtic buildings.

<sup>2</sup>) System of compression with an accessory system of compression.

Gothic ceilings.

3°) System of compression with an accessory system of extension.

This system is the most interesting in architecture as an art, not only by the artistical development of it in the different periods of architecture but also and principally by its having been the type for the sacred edifices of all nations. The Egyptian Sekos or Sanctuaries, The Assyrian temples standing on the tops of the moles or Pyramids (Tower of Babel) Herodot gives us the description of the Tempel of Belus which stood on the top of that edifice which probably was identic with ¦ the Babel tower of the bible. The Caaba at Mecca the holy sanctuary of the Moslem is a roofed building. This roof the caracteristicon of Greec temples and 15 Grec style in general. but I shall come back to this hereafter.

## III. System.

I The principle of Extension is prevailing.

1°) The system of Extension without any accessory system.

The natural suspension bridges, formed by wayfaring trees, in South America. Bridges usual in China, the Original suspension bridges. The Vela of the Greecs and ancients, being the types for ceiling decoration, the inner ceilings of the Greec temples stood in no constructiv rapport with the Roof, which was only formgiving for the outer architecture. (Importance of this remark for ornamental art. The velum the type for flat ceilings.

The names of the single parts of the Greec ceilings, the stone beams, the plates pierced by 25 holes, which were coverd with other stones all taken from textile art, and ornamented consequently with textile ornaments.

2°) The system of Extension with another accessory system of Extension.

A modern invention which has been most happily developd by the English Engeneers – but still imperfect, chiefly for the artistical question.

 $3^{\circ}$ ) The system of Extension with an accessory system of compression.

The full development of the Roof construction. Antique Roof introduced when the wide courts of the buildings became to be covered. Basilicas. This is also one of the important circumstances in history of art, all the wide rooms typically are uncovered courts, and have maintained the appearances of outer architecture through the whole history of architecture. Antique Roof, about a third of the amplitude.

485.1 On the Modes] after Hans Semper's note on fol. 1r:

II. e. On the modes of resistance of the materials

4 Seiten. Englisch.

fol. 30

10

20

30

35

485.4 tends] *after del*. works transversally] after del. hor (Resistance by Rigidity)] before sketch resembling one in MS 136, fol. 2v (162, upper sketch) 485.5 in the sens] after del. perpendicularly de] 'the' 485.6 crush it] *after del.* break it (Resistance to compression)] before sketch resembling one in MS 136, fol. 2v (162, lower sketch) 485.7-8 (Resistance to Extension).] before sketch resembling one in MS 136, fol. 2v (163, upper sketch) 485.9 is composed of] after del. or construction composed out of 485.11 manifestations] after del. different modes of forces;] before del. The different combinations which arise from the static equilibrium of 485.12 **these**] se *added* forces] before del. in question form] *after del*. maintain 485.14 I. Class.] after del. on fol. 2r-v

#### I Class,"

The mode of protecting edifices with The Aegyptians, only by large horizontal layers of stone plates. (*narrow*<sup>2</sup> (system of supports and Columns). |

#### IId Class

 $1^{\rm o})$  The  $^4$  system  $^3$  resisting to compression without  $^5$  an additional or accessory system of resistance  $^6$ 

The old Etruscan Tombs, the Doors in the Cyclopean Walls, the Pelasgic or old Hellenic Edifices, The Pyramids; The elemantary principle of arches and vaults. –

2°)<sup>7</sup> The system<sup>8</sup> resisting to compression, with an accessory system resisting to

**I Class**,] inserted after del. (The rigid system without suspension.) and before sketch resembling one in MS 136, fol. 3r (163, lower sketch) (The rigid system without suspension.)] after del.  $1^{\circ}$  2 (narrow] inserted 3 1°) The system ~ resistance] before sketch resembling one in MS 136, fol. 4r (164, lower sketch) 4 The] above del. Suspension 5 without] above del. with 6 of resistance] above del. of suspension 7 2°] after del. 2°) The system resisting to compression with an accessory system of suspension, or extension and del. sketch resembling one in MS 136, fol. 4r (165, middle sketch), and del. sketch of suspended beam 8 system] after del. principal

485.14 principle] above underl. and del. system 485.15 a) The rigid system without any accessory system.] before sketch resembling one in MS 136, fol. 3r (163, lower sketch) 485.17 Egyptian roofs] after del. Egyptian roofs.. Old Galic monuments, (This system necessitates arrangements of supporting the roofs, which are characteristiques for styles which Egyptian roofs] *underl*. Standing] interl. 485.19 b) The rigid system with an accessory system of compression.] before sketch resembling one in MS 136, fol. 3v (164, upper 485.22 c) The rigid system with an accessory system of extension.] before sketch) sketch resembling one in MS 136, fol. 3v (164, middle sketch) 485.23 A kind] after del. We have no notices of this system having been known to the ancients. Modern examples of bridges executed in this system. Adopted by Mr Hittorf Architect for two Hippodromes executed in Paris 485.25 mates] 'masts' 485.25-7 Modern imitation ~ by Mr Hittorf ~ hippodromes] see 480, Explanatory Notes 164.15 485.26-7 hippodromes..] before del. 3°) A Rigid system with an accessory system of exte[n]

486.3 1°) a System of compression without any accessory system] before sketch resembling one in MS 136, fol. 4r (164, lower sketch) 486.4 roots] after del. inner roorms] 'rooms' 486.6 2°) System of compression with an accessory system of compression.] before sketch resembling one in MS 136, fol. 4r (165, upper sketch) 486.8 3°) System of compression with an accessory system of extension.] before sketch of tied arch and sketch resembling one in MS 136, fol. 4r (165, middle sketch) 486.12 moles] below del. tombs 486.14 identic] altered from identical bible] after del. holy 486.17 III. System.] after del. 4° 486.19 1°) The system of Extension without any accessory system.] before sketch resembling one in MS 136, fol. 4r (165, lower sketch) 486.20 wayfaring trees] 'vinee'

486.22 **stood in**] *above del.* had (see 480, Explanatory Notes 165.18) no] after del. noth-486.23 rapport] 'connection' **Roof**] *before del.* architecture ing 486.23-4 (Importance ~ ceilings.] *inserted* 486.24 ceilings] *above del.* roofs) 486.25 **The**] *after del.*  $2^{\circ}$ ) names of the] *interl*. [] 486.28 2°) The system of Extension with another accessory system of Extension.] before sketch resembling one in MS 136, fol. 4v (166, upper sketch) 486.31 3°) The system of Extension with an accessory system of compression.] before sketch resembling one in MS 136, fol. 4v (166, lower sketch) 486.34 all] after del. that 486.36 **Antique**] *after del.* Even the inner of inner] *after del.* Gothic Cathed[r] **amplitude**] after del. width

# The Combined Action of the Four Preceding Branches of Industry in Architecture

#### **TEXTUAL RECORD**

MS 139	gta, 20-Ms-139, fols. 11–2v (21–v blank), in Semper's hand
MS 138	gta, 20-Ms-138, fols. 11-16v (12v-16v blank; 11 calculations and sketch of
	superposed triangles; 8r-v variant of MS 139), in Semper's hand, <i>copy-text</i>
MS 140	gta, 20-Ms-140, fols. 1r–8v (3v, 4v G. Völckers's letter probably to Manfred
	Semper, 1 October 1880), in Manfred Semper's hand, early 1880s, copy of
	MS 138
Semper 1884	'Ueber den Ursprung einiger Architekturstile', 369–82, German trans. of
	MS 138; for details of this translation, see Herrmann 1981, 172–4
Semper 1985a	'London Lecture of December 1853', 53–60, here 53, 55–60, Mallgrave's ed. of MS 138
	01 1015 138

**BIBLIOGRAPHY** Herrmann 1981, 112–13, 172–4; Mallgrave 1985a, 74, 76–7; Luttmann 2008, 145–7; Gnehm 2020, 36

#### **EXPLANATORY NOTES**

This concluding lecture of Semper's 1853 public course 'On Architecture, Practical Construction, and Plastic Art Generally' provides – as Semper announces in its first paragraph – 'some remarks on the different Styles of architecture' (169.20–1) in their relation to various combinations of the four architectural elements of the hearth (fireplace), the roof, the enclosure (wall) and the terrace. According to the prospectus, this would have included 'Assyrian, Egyptian, and Grecian architecture, as examples of three different principles of monumental art, being expressions of the political and religious differences between the three nations' – all of which would have been concluded with 'Modern parallels to these examples' (96.30–97.2). However, after having dealt with Egyptian architecture, the lecture breaks off with the Assyrian pyramid; Greek architecture is mentioned only in passing comparisons. Instead, Semper starts his discussion of architectural styles with an excursus on the Germanic farmhouse and multistorey constructions from fortificatory towers and castles to urban residential buildings. These constructions and their irregular grouping in settlements form instances of an architecture determined by the architectural type of the hut with the roof and the terrace as its dominating elements. Opposed to this is the 'courtstyle' (172.13) – that is, an architectural type dominated by the element of the wall enclosing a courtvard – which Semper discusses on the basis of the architecture of Egypt and Assyria. His aim is to define different architectural developments in terms of the genesis of social and political orders. On the one hand, there are the individual and the domestic family related to the hut and to Germanic peoples, and on the other hand the two different sociopolitically collective organizations of Assyria and Egypt: the first characterized by conquests and revolutions and architecturally expressed in the regular military camp (combined with terrace works) and its monotone (mechanical) multiplication of units under the rule of despotism, the other by an autochthonous society architecturally expressed in a hierarchical but organic development built around a kernel connected to the idea of priesthood. The lecture reproduces essentially the ideas developed in The Four Elements of Architecture, sometimes in literal translations (Semper 1851b, 54-5, 69-83).

169.23–170.3 The earliest and highest symbol ~ other combinations.] cf. Semper 1851b,
169.29 indefined] *infinite* 169.31 clime] *climate* (see also 170.5, 172.34)

170.4-29 It wants no proof ~ fortifications.] cf. Semper 1851b, 69-70 and n. \* 170.5 thee] the 170.15 **sattlers**] *settlers* (see also 171.32) 170.40 allongated] derived from 170.41 rightangular] rectangular French allonger: elongated 170.41–171.3 diagramm ~ which gives a farmers house  $\sim$  in the old saxon countries, in Westphalia, Friesland, Holstein and Schleswig ~ England] In 1849, Semper had Oswald Winkler from Altona make drawings of the plan, section and perspective of 'a Holstein farmhouse in the old Saxon style' for his 'Comparative Architecture' (Winkler to Eduard Vieweg, 17 November 1849, gta, 20-K[DD]-1849-11-17). The three drawings are extant in the gta Archives (20-0163-387, 20-0163-388), and the plan and section are reproduced in Semper 1884, 371. In The Four Elements of Architecture, Semper associates 'the Saxon settlements' with those 'in Northern Germany, Holland, Belgium, England and North America' (Semper 1851a, 70-1). 171.8 thrashing] threshing; cf. 492, Alterations in the Manuscript 171.8 171.6 sutt] soot 171.13-17 the first is to juxtapose one roof to the other ~ unsymmetrical group of roofs ~ Each mainpart ~ having its own roof] cf. Semper 1851b, 70: 'The roofs are actually joined to one another in free and asymmetrical groups, where each main part keeps its own 171.18-26 The same principle ~ (Dahl's Churches.)] 'Dahl's churches' refers to roof'. Norwegian churches described and illustrated in Johan Christian Clausen Dahl's Denkmale einer sehr ausgebildeten Holzbaukunst (Dahl 1837). In a manuscript on 'Comparative Architecture', Semper had compared the roof construction of Norwegian wooden churches and imperial Chinese garden pavilions, known as tai (gta, 20-Ms-66, 89, ed. in Luttmann 2008, 488): 'The picturesque roof combination in this tai shows the greatest possible similarity to the assembled roofs of the Norwegian wooden churches published by Dahl. The wooden architecture of the North also shows strong affinity with Chinese motifs in other parts. Is this sufficiently explained by the generally applicable laws of wood construction, or does it indicate early relations between the Aesir, the oldest inhabitants of Scandinavia, and the East Asians? I cannot venture to judge.' 171.23 congenious congenial 171.27 The second mode of increasing a Saxon house is the Story construction.] cf. Semper 1851b, 70: 'secondly, multistorey building emerges' 171.29–30 Switzerhouses which I have shown in the last lecture] see 167.25; 481, Explanatory Notes 167.25 171.35 prise] *prize* 

172.13 **court-style**] at another point called 'Court principle' (176.24); cf. Semper 1851b, 71: 'constructions which, as the opposite of hut building, may be called court building' 172.19 **repetion**] *repetition* (see also 176.17) 172.22 **variated**] *varied* 172.33-6 **This other principle of architecture ~ national enterprises.**] cf. Semper 1851b, 71 172.34 **favorised**] derived from French *favoriser: favoured* 

173.4-5 the sole form of society under which such combined action of forces] The German translation in *Kleine Schriften* emends the incomplete sentence by adding 'denkbar ist' (is conceivable; Semper 1884, 375). 173.11-176.3 The prosperity of the fertil plains of Mesopotamia ~ later styles.] cf. Semper 1851b, 71-6 173.22 pray] *prey* (see also 176.14) 173.36 one side] derived from German *einerseits: on the one hand* 173.37-8 despotism, otherside^ the same difference] ~^~, ~ ~ ~; cf. 493, Alterations in the Manuscript 173.37 otherside] derived from German *anderseits: on the other hand* 

174.1-2 The Wealth and power of the Satrap and feodary  $\sim$  is a gift  $\sim$  and suddenly overcome] 'suddenly overcome': probably arises suddenly. In The Four Elements of Architecture, the corresponding sentence reads (Semper 1851b, 72): 'The power of the satrap and the vassal, on the contrary, is a gift of favour and arises suddenly.' 174.5 **outerly** outer 174.14-15 China ~ has been arrested by a sudden torpidity, while the military principle was in its vigour] cf. Semper 1851b, 73 174.16–17 The Chinese Architecture, is, with the exception of this Caraib Hutt, the most elementary of all.] 'Caraib' derived from French caraibe: Caribbean. In this translation of the corresponding passage in The Four Elements of Architecture (Semper 1851b, 73), 'Caraib Hutt' replaces 'Hütte des Wilden' (hut of the savage). 174.20-1 It remained unaltered the same] Mallgrave has 'It remained unaltered the house' (Semper 1985a, 58). For Chinese architecture as remaining unaltered through history – and therein comparable to the Caribbean hut – see the lecture 'The Ancient Practice of Wall Coating and Tubular Construction' (127.18–20): 'The Architecture of the Chinese remains unaltered through the ages. their imperial pallases and temples show in principle no difference from this Caraib Cottage.' Semper also states in 'On the Origin of Polychromy in Architecture', in a passage similarly adapted from The Four Elements of Architecture, that Chinese architecture 'has remained stationary from its early birth, and, consequently, the elementary motives of it are most distinctly preserved' (68.15-17). 174.27 **cast of inborn priests**] *caste ~ native ~*. In *The Four Elements of Architecture*, Semper speaks with respect to Egypt of the 'system of a native aristocracy' (Semper 1851b, 78). foundators] merged from Italian fondatori and English founders

175.8 cutt of *[cut off* 175.12 wholy] *wholly* 175.24 thirth] *third* 175.27 than] *then* 175.34 Canope *[canopy* (see also 175.36) 175.39 axe] French for *axis* 

176.11 planes] plains176.12 under many reports] derived from French sous plusieurs rap-ports: in many respects176.13–177.9 The starting point ~ Enrichments.] cf. Semper 1851b,78–83176.40 jouth] youth

177.1–3 large intrance Gates, after which this whole part ~ had its name the high port, the seat of the government] 'high port': *High Porte*. In *The Four Elements of Architecture*, Semper speaks of 'significant gates guarded by mystical colossal beasts', adding in a footnote (Semper 1851b, 81 and n. \*): ' $ai \pi i \lambda au$ , the gates, had the same meaning as now with the Turks. They meant the ruler's residence and seat of government.' In relation to Turkey, the French term *Sublime Porte* was usual at Semper's time.

### EDITORIAL EMENDATIONS

172.12 day-light] day- | light 172.13 court-style] court- | style 172.21 town-dwellings] town- | dwellings 173.40 house-hold] house- | hold 174.35 Wall-enclosure] Wall- | enclosure

## ALTERATIONS IN THE MANUSCRIPT

169.20 I shall terminate] *after del*.

I shall terminate to day the<sup>1</sup> cours of my lectures with some<sup>2</sup> remarks on the combined action of the different manifestations of industrial art in architecture, and

I **I shall terminate to day the**] *repl. del.* I promised to terminate the I promised] *after del.* I promised to speak at the End of the cours of my lectures *after del.* This my last lecture shall be devoted to 2 **some**] *repl. del.* general

169.21 architecture,] altered from ~ hefore del. as an art which last we take as the] repl. del. which art is the result] after del. combin 169.23 The earliest and highest symbol] after five del. beginnings of variant:

The kindling of the nurrishing We have seen The earliest<sup>1</sup> symbol of sattlement The highest<sup>2</sup> earliest symbol of civilisation is the fireplace, it is the first<sup>3</sup> and most important element and as it were<sup>4</sup> the soul of The high

I earliest] *above del.* first 2 The highest] *repl. del.* The center of every settlement and the 3 the first] *after del.* in the same time 4 and as it were] *repl. del.* and so to speak

169.23 human culture] *after del.* cult 169.24 **element**] *before del.* of archite 169.25 as the protecting Negations] *after del.* as I endeavoured to show, the three other elements, 169.28 The number of possibilities] *after two del. beginnings of variant:* 

The combinations of these four elements There is an infinity of possibilities how

169.28 parts] *before del.* of every edifice 169.29 or] *repl. del.* and 169.30 natural genius,] *after del.* specialities, natural genius, 169.31 political and religious tendency and development,] *inserted after del.* education

170.4 **It wants no proof**] *after del*. It wants no proof, that where man lives in isolated groups or families, and the sattlements have no other Ennemies than 170.7 has grown out of] *inserted after del*. since the beginning 170.8–9 similar to these] *inserted* 170.9 The roof **must**] *after del*. *in opposite column* the Roof must obtain the dominant Element of architecture obtain] *above del*. be 170.11 first] *interl*. an] n *added* excavation] *after del*. excavated *after del*. hole or a Ground,] *altered from* ~. 170.11–12 and afterwards ~

**basement.**] *inserted and* basement *after del*. Eart 170.16–17 life in free nature] after del. 170.19 **holes**] *before interl. and del.* and windows free 170.20 are single standing *after* 170.26 **form of rows**] *after del*. long rows del. stand 170.28 **concentric forms**] *after del*. their or square or round *inserted* Marketplaces of regular disposition] after del. 170.30 It is evident] after del. But the original forms are soon altered by circumregular 170.32-3 the introduction of foreign customs] after del. to that of external stances 170.33 principle] after del. full 170.33-4 inhabited by the descendants of the German races] after del. of German 170.34 races;] altered from ~, before del. which is chiefly evident and **The best mode**] *after del*. This principle appears in contrast in] *after del*. in cons *after del*. in its cons differences *repl. del.* character 170.35 **between**] *above del.* of 170.36 laws] after del. laws according to which each of them is the 170.40 **The first**] *after* del. When such after del. The

171.1-2 in Westphalia, Friesland, Holstein and Schleswig, inserted 171.2-3 **The** farmers houses of the Anglo Saxons] after del. The houses of the Saxon Conquerors 171.4 is a low brickconstruction *inserted after undel.* is 171.4-5 or flue, and *inserted* 171.5 **the turfsmoke**] *after del*. the smoke goes its 171.6 coated like the walls with *above* del. brillant of a brillant black coating of sutt,] repl. del. Sutt and coating after del. colour 171.8 thrashing] a over e 171.10 has only at later periods been] above del. is by glazed walls.] inserted partitions] after interl. and del. glazed 171.12 **mode**] after del. only 171.13 is only twofold; the first is *repl. del.* is 171.17 it tells] after del. and 171.19 **showing** *repl. del.* which shows **being**] *above del.* are 171.22 show this *repl. del.* 171.23 Gothic] after del. pointed are distinguishd by the 171.24 the ornaments *after del.* the principle followed by followed by] *after del*. observed by 171.27 The second mode] after del. Another mode of growing became introducted mode] *above del.* way increasing] after del. passing 171.28 elevation] after del. higher 171.31 This mode after del. It has been more 171.32 **become**] o *over* a **necessary**,] *altered from* ~ *hefore* 171.33 quarrels] after del. subsequent 171.34 **times**] *after del.* later *del.* at the time, 171.36 **This**] *after del*. So the loafty towers 171.37 **top.**] altered from ~^ 171.37-8 generally ~ marsh.] inserted naturally fortified place] after del. place fortified by nature 171.38 The tower is] *interl*. 171.40 **combined** *above del.* arranged irregular] after del. cercle and before del. fortification

172.1 The most important] after del. Among the surrounding parts was the pallace the principal 172.3 **and having**] *repl. del.* and under this 172.6 **castle**] *above del.* building 172.7 **hill**] *before interl. and del.* or rock edifices] before del. on fol. 4v for 172.9 feodal after del. allodial 172.10 caracterised by] above del. showing that specific caracter, of showing] before del. the irregular combination of single roofed houses, of (irregular after del. particularities of and single after del. different) 172.11 one] below del. of which is of which is] above del. being and taking the] above del. and by the intrance of 172.12 windows] above del. holes 172.14 I should now give] after del. I should outer] *interl*. complete this chapter with the this chapter] repl. del. this description of a ]] undel. Northern house 172.16 **by**] *above del.* for 172.19 **stories**,] *before del*. devided only in the devided] 'divided' 172.21 **The**] *before del.* variety interior arrangements opper interl. after interl. and undel. in the 172.22 are above del. is more variated] after del. greater, although they are not less and before del. than here 172.23 individuality.] altered from ~, before del. because they are generally the possession of 172.24 are aranged *after del*. have a very fine 172.27 In the Southern] after del. But I must finish here 172.28 are **more mingled with**] *repl. del.* has been influenced greatly by 172.29 **motifs**] *repl. del.* 

influences influenced inserted 172.31 conclude] before del. this important chapter this chapter] *interl*. an other] before del. principle of architecture, most] st over re 172.33 This other principle] after del. In such lands, which can only be conquered for which] *above del*. whose richness 172.34 **southern**] *after del*. Climes of Climes of] after del. more favorised (favorised derived from French 'favoriser': 'favoured') by clime and 172.35 **activity**] *before del.* of national before del. position. national] *after del*. natural great] interl. 172.37 **Such lands**] *after del*. The richness of the country wanted to 172.38 inhabited by] above del. of the richest countries] after del. rich by agriculture and 172.39 **labor** *Altered from* ~, *before del.* and of hands, 172.40 **nearly** *interl*. commerce 173.3 **These countries**] after del. In these countries, the seats of thick populations, and the after del. They were gained from the water an after del. For these countries, rich and fertile as they are wanted to be conquered populations, and the] the *inserted before del*. the craddles of the *(*the craddles *after del.* of*)* strong] repl. del. centralising strongly certain centralising strongly] *inserted after del.* the protecting system of politics 173.4 society *after del*. human 173.6 **here**] *interl*. 173.7 **This explains**] *after del*. This observation *after* del. This remark is after del. In these countries 173.11 prosperity above interl. and del. richness of the *interl*. 173.12 from nature *interl*. a stupendous system *after del.* **soon**] *interl*. 173.15 constructions] after interl. and del. defensiv asthonishing works 173.16 must have been] after del. had 173.16-17 of the oldest Assyrians] repl. del. adopted in the country 173.18 while] after del. But after del. But As long as the first founders of the Assyrian civilisation were successfull against their warlike and But As] But above del. But and As altered from as 173.18–19 could not alter] *after del.* could not be 173.20 **develop**] *after del*. follow their original of a subversing 173.24 Now an other principle] after del. Now a second principle was prevailing over the first, but so as to comprevailing] *undel. after del.* added and mingled [] 173.26 sons of the desert bine itself or mountaneers,] *before del.* and both people, 173.27 **They built**] *after del*. While they ranged themselves round [t] 173.28 northern] *interl*. 173.29 **to a new**] *repl. del.* to an to an] *after del*. with first] *after del*. funda[m] exigeancies] repl. del. rules 173.31 **The roof** *after del*. Thus the Roof remains the Symbol only for the *after del*. The roofed ho[u] **remembrance**] *repl. del.* reminiscence 173.33 generally prevailing] after del. prevailing for the mass of the building mass] after del. other 173.34 Egyptians] altered from Egyptian *before del.* architecture **That**] *repl. del.* The same 173.34-5 a nativ and originally national Monarchy,] repl. del. a rich national Monarchical institution national 173.35 **nativ** and *interl*. interl. and powerfull *interl*. 173.37 **Conquest**, *altered from* ~^ *before del.* and a feodal System feodality inserted **otherside** *inserted* 173.38 styles of *after del.* productions of Styles of the two nations.] before three del. beginnings of variant on fols. 6v-7r:

This difference is chiefly evident in the | laws<sup>1</sup> of increasing their edifices particular to each of them.

This difference is also here the most evident in the transitions of one The power and

> I laws ~ each of them.] *after del. on fol. 6v* laws, how the two styles, which I am comparing laws ~ comparing] *repl. del. on fol. 7r* mode, how the Assyrian (mode *after del. on fol. 6v* mode how each of the two Styles)

173.41 from inside] after del. of the formerly existing after del. of the interior parts.174.1 hand] above del. sidegift] after del. gracefull174.5 the way] after del. additionafter del. additional parts174.7-8 of the Small] ll over ler174.10 The military principle] after two del. beginnings of variant on fol. 7r:

But where not, like it was the case in China, a sudden torpidity But<sup>1</sup> it happened some-times<sup>2</sup>, that by superannuation the<sup>3</sup> military principle became to be overpowered after having had the time of depositing<sup>4</sup> some

1 But] after del. When 2 some-times] some- | times 3 the] interl. after del. this generally unfavorable generally] above del. utterly 4 depositing] repl. del. giving

## 174.10–22 in architecture ~ Motivs.] repl. del. in opposite column

is generally<sup>1</sup> a very sterile one<sup>2</sup> for the arts<sup>3</sup>, but where it was overpowered by superannuation after having had the time of depositing some of its better elements, like it was the case in Assyria, there it is of great importance for the history of art.

This was not the case in China, which has been arrested by a sudden torpidity in the florishing<sup>4</sup> of that unfavorable period of military and feodal construction.

The Chinese style of <sup>5</sup> Architecture is, with the exception of this Caraib<sup>6</sup> Hutt, the most primitive of all. Each of <sup>7</sup> The three Elements of architecture is<sup>8</sup> quite independently working for itself,<sup>9</sup> the fireplace, in its higher qualification as Altar, is allmost wanting <sup>10</sup> and with it the center of relation between the other elements.

Grown out of the Tartar camp, this style had no opportunity of <sup>11</sup> being <sup>12</sup> fructified with foreign motivs; It stands since 5 or 6000 years at the same state. Description<sup>13</sup> of an Chinese house

I generally] before del. speaking 2 sterile one] after del. unfavorable one 3 arts] after del. deve 4 florishing] above del. middle 5 style of] interl. 6 Caraib] derived from French 'caraïbe': 'Caribbean' 7 Each of] interl. 8 is] above del. are are] after del. are standing in the strongest separation from one another 9 itself,] altered from  $\sim hefore$ del. and not bound 10 is allmost wanting] after del. forms no centr[] and before del. and gives no point of 11 of] above del. to to] before del. mingle itself with other 12 being] ing added 13 Description] after del. Large Courts surrounded with Galleries, and Large Courts] before del. on the End and] undel.

174.10 **arts**] *after del*. development 174.12 It sometimes] after del. Under circumstances after del. In some **overpowered**] *before del*. by natura natura] after del. more 174.13 soil;] before del. in the same manner, as the political form of feodality had had] *after del*. looses its 174.15 **torpidity**,] *altered from* ~^ *before del.* in the middle of the domination and was in its vigour] *after del*. was behel 174.17 qualification] after del. signivigou[r] 174.20 **The Tartar Camp**] *after del.* Grown and 174.18 in it] interl. **Pallace**.] *altered* 174.21 of older] after from ~, before del. and it had no opportunity of being fructified and *del*. of new Motivs and by a 174.23 **But I must**] *after del*. But I leave the Chinese style here returning to the Egyptians and Assyrians. *after del*. But I hasten now to the m[o] returning] *above del*. and hasten here *interl*. 174.26 **nativ** *inserted* 174.27 **a cast of** *above* del. the **priests**] *altered from* priesthood 174.29 They judiciously observed] after del. They were the judicious observators of popular and natural motivs, and not less s[k] judicious] *above del.* skillfull motivs] *before del.* which they exploited 174.35 **embankement**] *after del.* hig 174.36 **stood**] s *over* a *(for 'altar') after del.* a stone 174.40 **greater**] *after del.* increas

175.1 is wanted] *above del*. was made, 175.3 some essential alterations] after del. the construction undergoes also and before del. inside of it 175.6 **now**] *after del.* now they executed the linnen ceilings in wood and made woo Ceiling made of temporary drapperies becomes] *repl. del.* drapery Ceiling becomes becomes] undel. 175.7 wood.] altered from ~^ before del. and supported by wooden columns. or stone.] *inserted* tempel**room**] *after del*. inner 175.8 **walls**] *after del*. compartments for the temple treasure, for inserted **documents**] *after del.* for stores, treasures and other 175.10 Sanctuary *after del*. temple 175.11 increasing] after del. highe 175.12 wall] interl. exterior before del. wall 175.13 gradually] interl. 175.16 **stands**] *final* s *added* **getting**] *after del*. 175.17 **the real temple.**] *after del*. or tempel. tempel] *underl*. 175.18 covered,] soon *before del*. like the first, 175.19 **was not**] *after del.* could not be 175.21 This Court] after *del*. While this alteration is going on in the Second court, an other arrangement an other] an other arrangement] *after del*. one was 175.22-3 district] after del. village 175.23 which] after del. where the Sanctuary first was erected. and before del. erected 175.24 after **some time**] *after del.* soo[n] *and both above del.* often 175.29 a Portico] after del. There is and Portico after del. higher of higher proportions] *interl*. is formed *inserted* before del. established 175.30 door of the Pronaos] after del. inner out of the] after del. to the 175.31 later] after del. at and before del. times 175.32 These columns] after del. You See 175.32–3 at Carnac] *interl*. 175.33 never had the destination of being *repl. del.* they are supporters] ers over ing columns which never were of a ceiling.] *repl. del.* any roofs. 175.33-4 They only were the pillars] after del. They were supporters of Lyonsphinxes, which in their turn were the holders of draperies. Lyonsphinxes] '*lion sphinxes*' 175.34-5 the Images] after del. the passing and the] undel. before del. Procession 175.35 on the **shoulders**] *after del.* by high **Processions**] P over C (for 'Ceremonies') 175.38-9 with or without a higher passage through the axe. *inserted* 175.40 combinations] after del. inside

176.1 **architecture**;] *before del*. It seems to be quite as necessary and pehaps more necessary, for the understanting of history of architecture, to study the general for the understanting of] *del. separately* 176.1–3 **and whose knowledge ~ styles. – .**] *inserted and* whose knowledge *above del.* which 176.4 **I shall not**] *after del.* 

I shall not speak here of any details of the Eg.<sup>1</sup> buildings, except of the Pilones<sup>2</sup>, at the Entrances. which are<sup>3</sup> repetitions of the form of the Sekos,<sup>4</sup> and in the older Combinations very simple and have been only made double

I Eg.] Egyptian'2 Pilones] 'pylons'; after del. Pilones which form the flanks of the3 are] del. separately4 Sekos,] before del. which is the trueis] after del. is invisible

176.4 **speak to day**] *repl. del.* give any more details architectural details] above del. arch. 176.5 arrangement] *above del.* decoration of the intrances, known] below del. of the doors, known under] del. 176.10 **tablet**] *after del*. monumental 176.11 **became**] *repl*. *del*. fate hat the hat] 'had' 176.12 **similar** *after del.* nearly 176.13 starting point for architecture] *above del*. beginning or very similar *interl*. 176.14 allways] after del. 176.18 **colonial**] *repl. del.* political since the oldest ti **country** *above del.* people 176.21 Embryo and fundamental form] repl. del. fundamental Idea Architecture altered from Architectural before del. form 176.23 a combination] after del. with a very developd system of terraces with  $\sim$  terraces] accompanied in opposite column by del. the The Gabled roof] after del. But the Roof principle of Courtstyle 176.24 **but**] inserted was only a symbol for the holy 176.25 **divinity** *altered from* divine 176.26 The terrace *after del*. The Assyrian Pyramids, were th[e] were] after del. standing on the principle *after del*. System 176.28 substructions *repl. del.* Bases **Small**] *after del*. very 176.29 **similar**] *after del*. which last was in form 176.30 But inserted **pyramidal** altered from pyramide after del. Terrace **Terrace**, *inserted* only] *interl*. 176.31 still] below del. an extremely an] *undel*. a wider system] *above del*. complication complication] *altered from* complex Yards,] *before del.* succeeding each other. 176.32 and] above del. and the 176.34 **Oblong**] *repl. del.* Rightangel Rightangel] 'rectangle' point of 176.35 **towers**, details.] altered from ~^ before del. and accessible on beautifully ornabefore del. groves mented bridges and staircases. and accessible] after del. as pinacles and bea 176.36 **a** sort of above del. the with tents for the *repl. del.* for 176.37 guards and soldiers] after del. and soldiers servants, and the followers of the the followers] after del. low 177.1 **fortified terrace**] *after del*. terrace with walls and 177.3 **states**] *final* s *added* 177.5 **Belus Pyramid**] *after del.* Pyramidal 177.7 **connected**] *before del.* and woven with 177.7-8 paradises, before del. hunting woo (for 'woods') repl. del. by

## MANUSCRIPT VARIANTS **MS 139**

fol. Ir It is only possible to give more importance of one pallace before the others by the addition of new courts, of new terraces, and of new pavillons, each of these parts being repetitions of one uniform motif.

> But this besides – we better pay now a little more attention to the Egyptian Style and that of Assvria.

> The Egyptian style is the only which grew undisturbed on the nativ ground. It has been fixd not by foreigners, but by a cast of inborn priests, the skillfull exploiters of popular and natural motivs, of which they were the judicious observators.

> The sacred cage, with the holy bird or Serpant, the representative of the God of the nomos or district was standing with the Altar, in a very simple Wall-enclosure. on the bank of the Nile.. it was the starting point and the end of the procession, to which the pilgrims of the neighbouring districts assembled.

The fame of the Sanctuary was growing, and the Mass of the Pilgrims increasing. | An new Court or enclosure was made, in addition to the first, for containing the pious assembly and for the use of preparing the procession.

> At the same time the service of the God, with the increesing of his dignity, required new arrangements inside of the enclosures.

> Principally the inner court was covered for the occasion of a holy day and divine service only with drapperies or tended sails; hereafter it received a solid roof and partitions were made for the stores and treasures of the Sanctuary;

> > 496.1 It is only possible to give accompanied by note in pencil ad 8. (referring to MS 138, fol. 8r with page number 8; 174.23-38) ad 8.] ad: Latin for 'to'; after underl. and del. ad 7.

fol. IV

то

5

15

20

give more] repl. del. elevate the 496.4 But] after del. But we shall now give a little more [0] give] above del. speak a] undel. pay] repl. del. give 496.6 The Egyptian style] after two del. beginnings of variant:

The Egyptian Style is that, which shows the organic development of The Egyptian style is the only, which has grown<sup>1</sup> undisturbed out of the nativ ground, and monumentally arranged

I grown] above del. developd itself

496.6 fixd] before del. under the judicious legislation of 496.7 not by foreigners, but] inserted **cast**] 'caste' inborn] 'native' the skillfull] after del. the observators and artfull exploiters of the natural motivs tenderd by popular and natural 496.8 of inserted were] after del. judiciously observated and maintained. 496.10 in a] *after del*. first Wall-enclosure] Wall- inserted first] before interl. and del. surrounded with bank after del. dike of the ter 496.11 it] above del. Here starting point] above del. commencement 496.13 An] after del. on fol. 1r-v It became necessary | to make new above del. additional 496.14 pious] after del. devoti 496.16 increesing] 'increase' 496.17 inside] below del. in the interior 496.18 inner] interl. covered] before del. only 496.19 tended] 'tensed' and] after del. and the suchwise covered part was devided devided] 'divided' 496.20 Sanctuary; ] before undel. [ ]

# **On Architectural Symbols**

## **First Version**

## **TEXTUAL RECORD**

MS 143 <sup>1</sup>	gta, 20-Ms-143, fols. 11–2v (21–v blank), in Semper's hand
MS 161	gta, 20-Ms-161 (Konv. 7), *fol. 157r–v (157v calculations possibly for Semper
	1859; in a manuscript relating to Semper 1859), in Semper's hand, continu-
	ation of MS 143 <sup>1</sup> , fol. IV
MS 143 <sup>2</sup>	gta, 20-Ms-143, fol. 6r–v (6v blank; variant of MS 143 <sup>1</sup> , fol. 1v, and MS 161,
	*fol. 157r), in Semper's hand
MS 143 <sup>3</sup>	gta, 20-Ms-143, fols. 3r–5v (5v blank; 3r, 4r variant of MS 143 <sup>2</sup> ), in Semper's
	hand
MS 141	gta, 20-Ms-141, fols. 11–12v (10v–11v, 12v blank; 12r sketch of human head,
	possibly by Hans Semper; 1r-v variant of MS 143 <sup>1</sup> , fol. 1r-v; 2v-5r variant of
	MS 143 <sup>3</sup> ), in Semper's hand, <i>copy-text</i>
MS 141a	gta, 20-Ms-141a, fol. 1r-v (1v blank), in Hans Semper's hand, early 1880s,
	Hans Semper's German trans. of MS 141, fols. 7v–8r; see Herrmann 1981, 113
Semper 1884	'Ueber architektonische Symbole', 292–303, German trans. of MS 141; for
	details of this translation, see Herrmann 1981, 166–8
Wingler 1966	'Architektur', 104, ed. of Semper 1884, 292

Semper 1985b 'London Lecture of Autumn 1854', 61–7, here 61–2, 66–7 (additional sections: ed. of MS 142; see 511), Mallgrave's ed. of MS 141, fols. 2r–v, 5r–6v (177.28–178.19, 180.6–181.26)

**BIBLIOGRAPHY** Herrmann 1981, 27, 32–3, 38, 50–1, 58–60, 113, 166–8; Herrmann 1984, 140, 145, 150, 163, 169, 171–2; Waenerberg 1992, 64–5, 144–5; Mallgrave 1996, 217; Gnehm 2003, 318–19; Gnehm 2004, 210–17; Mallgrave 2004, 40; Arburg 2008, 271–3; Poerschke 2016, 68, 77; Gnehm 2020, 36

### **EXPLANATORY NOTES**

This is the first of two drafts of the same lecture that was apparently the opening one in Semper's five-part course of public lectures 'on the different styles of ancient architecture, their distinctions and connexions' (93.7–8), held on 22 November 1854 (see 394). The second version (184–9), though incomplete – it refers for its missing concluding part to a section of the first version – provides linguistic improvements, some rearrangement of material and a few omissions and additions. Apart from that, both versions address the same broad range of topics, which is only partially (though to a large part) covered by the title 'On Architectural Symbols', taken from the German translation of the first version in *Kleine Schriften* (Semper 1884, 292). Both versions, which begin with the programmatic juxtaposition of an inventiveness of architecture independent of the imitation of nature and its simultaneous dependence on the 'laws of nature' and 'matter', refer to later lectures with respect to the comparison of different architectural styles.

In the first version, Semper promises elucidations of his revolutionary, anti-evolutionist understanding of the history of architectural styles and his contention that Greek architecture formed a certain exception among these (178.18–19). The respective section (177.28– 178.17) is omitted in the second version but inserted by Harry Francis Mallgrave in his edition of the latter (Semper 1985b, 61–2). Semper then puts off until later 'a more orderly explanation of the forms ... used in the different styles of architecture' (179.40–1) and, finally, 'the explanation of the parts of Greec architecture in their Ensemble and separately' (183.38–9). Greek architecture in particular is only a marginal topic in the remaining drafts of the two following lectures (189–201, 201–3); it is therefore plausible that Semper planned to discuss it in another two lectures in December 1854, thus completing his course of five lectures.

Architectural symbols are generally important in Semper's argumentation in so far as they belong to his assertion that architectural components 'tell their history', etc. (179.4, 185.30). This 'language' of architecture leads to the two sections on 'traditional Symbols reminding old constructions' (Semper's four elements of architecture) and 'On natural symbols'. The latter section, which concludes the first version (it is transferred to another place in the second version, there headed 'On Structural Symbols'), discusses architectural symbolism by means of variations of one ornamental element in Greek architecture, the cyma. This frieze-like moulding with abstractly rendered leaves serves as an illustration of the Greeks' way of dealing symbolically with the conflict between free development and the (gravitational) 'laws of nature'. The somewhat surprising attention paid to one moulding is consistent with the fact that Semper was not simply supposed to deal with architectural styles in general but especially with 'Architecture and Plastic Decoration', as the departmental

announcements of his 1854 public lectures stated. Semper's characterizations of the Greek cyma closely follow Karl Bötticher's *Tektonik der Hellenen* in an often paraphrasing, sometimes literal, translation of passages from the section 'Symbolik des Tragens und Stützens im Konflikte' (Bötticher 1844/52, 1:28–37) – albeit without acknowledging the source. Semper, who had studied the book for the first time in the British Museum Library in 1852 (225.27–32), had previously translated into English excerpts from the same section under the heading of its German title (gta, 20-Ms-150b, ed. in Gnehm 2004, 210–15), there accompanied by sketches after Bötticher's plates with which his references to figures in this lecture can also be identified.

177.10-13 Architecture is a pure inventiv art ~ the freest among the different arts of design] Architecture, which is 'not an imitativ' art, as a deleted insertion says (502, Alterations in the Manuscript 177.10), is here seen as 'an art of invention' - as the draft of the second version reformulates it (184.1) - because it is not subject to the doctrine of imitation of nature to the same extent as painting and sculpture – in the words of the second version (184.1-2): 'it has not, like the other arts of design, the immediate imitation of nature for its object.' This ties in with positions in German idealism. In England, John Soane similarly described architecture as 'an Art purely of Invention' in the seventh of his Royal Academy lectures, first held in 1815 (Soane 1929, 119). Together with Semper's following contention that architecture is, despite its independence from nature, dependent on the 'laws of nature', this has a parallel in a fragmentary manuscript from the context of his 'Letters on the Great Exhibition' (gta, 20-Ms-95, fol. 12r): 'Architecture, and with it a considerable part of the technical arts, also produces original creations that are not absolutely determined by models in nature, although in accordance with the same incontrovertible laws that the latter follows in its works; they are called organic if they are the expression of a true idea and bear the impression of an inner lawfulness and necessity, like those of nature. Such natural creativity is very common among the technical arts in their infancy; hence the great importance of these beginnings of industry – which are, as it were, still fused together with nature like coral – for the [history of civilization]'. A similar passage appears in Semper's 'Comparative Architecture', preceded by the following sentences (gta, 20-Ms-55, 9-11, trans. in Herrmann 1984, 193-4): 'Although architecture produces original formations and is not an imitative art like painting and sculpture, it has over the centuries created its own store of forms from which it borrows the types for new creations; by using these types, architecture remains legible and comprehensible for everyone.' 177.16 **rosen**] *risen* 177.17 clime] climate 177.25-7 The works of architecture ~ once inhabited them.] Semper here applies his reference to Georges Cuvier and the study of 'fossil Remains' in the drafts of his inaugural lecture in 1853 (100.23, 105.3); cf. the parallel passage in the second version of the lecture 'On Architectural Symbols' (184.26-9), the comparison of 'The Terra Cotta vases' with 'the fossil remains of plants and animals' in the lecture 'Classification of Vessels' (136.41-137.2) and Semper's elaboration on 'the ancient monuments as the fossil shells of extinct social organisms' in Ueber Baustyle (On Architectural Styles; Semper 1869, 10). 177.26 **Coraltrees**] These are bushes of the genus *Erythrina*, but Semper obviously means *coral skeletons* formed like trees. 177.30-178.19 1°) There is no state of childhood ~ I shall trie in the curse of my lectures, to give the evidences of these assertions.] Semper omits this section in the second version. However, in the following lecture 'On the Relation of Architectural Systems with the General Cultural Conditions', he uses Chinese architecture to exemplify his contention that 'There is no state of childhood and gradual development observable for any independant style of architecture': It presents 'no organic development, no growing up of an individual out of a more incomplete state of Childhood into adultness' (195.40-196.1). In 'Comparative Architecture', Semper similarly says of Assyrian-Chaldean architecture that 'it had to come into the world fully armed, finished and closed in itself' (gta, 20-Ms-58, 80, ed. in Luttmann 2008, 399). Similarly, he says in another chapter of 'Comparative Architecture' that 'the first great centres of civilization in Asia and Egypt ... were shaken together by floods and earthquakes. Not in slow development, but like Athena in full armour, they were born to the world violently by the iron hammer of distress' (gta, 20-Ms-66, 163, ed. in Luttmann 2008, 463). In contrast, when speaking in 'Comparative Architecture' not generally of Egyptian civilization but of its architecture, he contends that 'the composition of the parts of an Egyptian sanctuary can impossibly have been born in full equipment, like Minerva, from the head of a legislative priest', since it bears 'the clearest signs of a gradual emergence and expansion' (gta, 20-Ms-68, 15, ed. in Luttmann 2008, 528). However, in his 'Kunstformenlehre' (Theory of Art Forms) – a manuscript which directly preceded his work on Style – he generally suggests again that 'We cannot help but assume that the Egyptian temple palace, the Assyrian royal castle, the Hindu rock temple, the Doric gable-crowned building so to say suddenly emerged as finished types and, like Pallas Athena, fully armed' (Vieweg Archives, V3:1.1.3.32, sect. 'Prologue', 3). In *Style*, Semper refutes theories that the 'Hellenic columnar style' had as its 'model' the 'wooden utilitarian construction' or - criticizing Bötticher's Tektonik der Hellenen - that it 'emerged from stone construction finished and armed like Athena from the head of Zeus' and contends instead that it had elementary antecedents in the Asiatic 'pegma' - in carpentry work, which architecture has in common with furnishings and implements, i.e. with the industrial arts (Semper 1860/63, 1:436; cf. 2:210).

178.2-3 suddenly sudden 178.8 **separed** *separated* 178.18 curse course 178.22-3 We see nations ~ who have no history of architecture at all.] In the second version, Semper places the Chinese and Arabian peoples close to such nations (184.36–185.4), thus implying that their buildings are related to the Caribbean hut in principle. For the comparison of the Caribbean hut with Chinese architecture, which remained 'unaltered' through history, see the lectures 'The Ancient Practice of Wall Coating and Tubular Construction' (127.18-20) and 'The Combined Action of the Four Preceding Branches of Industry in Architecture' 178.24 Caraib] derived from French *caraïbe*: *Caribbean* (174.16 - 22).178.29 **matts** *mats* 178.31 **sheme**] *scheme* (see also 178.32, 182.13, 182.15, 183.16) 178.33-6 It would appear that the next step  $\sim$  would be  $\sim$  forms, such as are prescribed by  $\sim$  conditions, which each part of the whole has to perform, and their combination to a structure.] This confusing sentence, which also occurs in the second version (185.17-20), results from Semper writing 'conditions' instead of 'functions' as in another draft (509.6). In Kleine Schriften, the corresponding sentence resolves the confusion by translating 'perform' as 'berücksichtigen' (take into account) and by relating 'their' to 'each part' (Semper 1884, 295).

179.1 blocs] blocks 179.26 foundator] merged from Italian fondatore and English founder 179.30 lorrel-leaves] laurel leaves 179.31 Mirth] derived from German Myrthe: myrtle 179.35 valeable] valuable, here misused for valid

180.1–2 traditional Symbols reminding old constructions] The elements of 'old constructions' mentioned in the following – fireplace, roof and wall – correspond to three of the four elements which Semper elaborates on in *The Four Elements of Architecture* (Semper 1851b, 54–6) and which he recapitulates in the first and last lectures of the autumn term 1853 (123.6– 32, 169.23–7). Now, the 'terrace' as the fourth element is mentioned only in passing (180.26, 180.34). 180.5–6 **The fireplace ~ the first Embryo of social settlement**] In a draft of ment & embryo of society; 305.5).

following instance of the Kaaba, it is unlikely that Semper had in mind any source which actually describes the Ark of the Covenant as 'gabled'. 180.29 The holy Caaba or grave of Mahomet, is gabled] Mallgrave has 'The holy Graba' (Semper 1985b, 67; italics in original). The sentence contains two confusions: On the one hand, Muhammad's grave is in Medina, not in the Kaaba in Mecca; on the other hand, the Kaaba does not have a gable. Semper may have misinterpreted, or overinterpreted, descriptions such as in Edward Gibbon's History of the Decline and Fall of the Roman Empire, according to which the Kaaba was 'a square chapel' with a 'double roof ... supported by three pillars of wood' (Gibbon 1776/88, 5:191). In any case, Semper repeatedly conflated 'gabled' and 'roofed' in relation to the Kaaba from his time in London onwards. In The Four Elements of Architecture, he relates 'the gable roof of the hut' with 'the holy Kaaba' (Semper 1851b, 73 and n. \*). In a draft of one of his lectures given in 1853, 'On Timber Construction, and Its Influence upon the Development of Architectural Forms', he vaguely calls the Kaaba 'a roofed building' but does so below the sketch of a gable corresponding to the roof of 'Greec temples' mentioned just after the Kaaba (486.14–16). In Style, 'the Kaaba of the Mussulmans' is referred to as 'a hut with a roof' and subsumed, together with the Temple of Solomon and the Greek temple, under the 'type' of 'the gable roof with its supports' as the 'symbol of the sanctuary', which was adopted by the 'Christian church' (Semper 1860/63, 2:209 and n. 1; italics in original). Even in the early 1870s, in the draft of the introduction to the planned third volume of Style, he still places the 'Arabian Kaaba' in a series with the 'timbered roof' of the Israelite and Christian tabernacles (gta, 20-Ms-283, 21-2, ed. in Herrmann 1981, 255; cf. Semper 1869, 13). 180.37 defended] derived from French défendre: prohibited

181.13–14 selfunderstanding] self-explaining 181.19 **tye**] *tie* attache] French for attachment 181.21 soils and floors] *exterior and interior floors* 181.22-183.39 On natural symbols ~ separately.] see the parallel section headed 'On Structural Symbols' in the second version (186.36–189.19) 181.35-6 Instance foot of a chair, but an foot sense upright and mouveable. Vase of Dieterle. not clear easing. Coping round.] 'but an', 'easing' and 'Coping round' uncertain readings. Herrmann 1981, 167, has 'hat and', 'eating' and 'loping round'; cf. the emending translation in Kleine Schriften (Semper 1884, 299) and the parallel passage in the second version of the lecture 'On Architectural Symbols' (189.4 - 5).

182.8 **leave**] *leaf* (see also 182.13–14) 182.10-12 One of the most important symbols ~ is the Cyma ~ which includes the ideas of ending ~ and ~ of a conflict between two forces.] From here to the end of the draft, Semper relies without acknowledgement on the section 'Symbolik des Tragens und Stützens im Konflikte' in Karl Bötticher's Tektonik der Hellenen with partly literal translations, as in the case of this paragraph (cf. Bötticher 1844/52, 1:28). Semper's 'ideas ... of a conflict between two forces' reads in Bötticher 'Begriff ... des Konfliktes zwischen Existenz gebenden und Existenz gewinnenden Theilen' (italics in original). The German translation here acknowledges in a note the parallels to Bötticher in the case of the cyma (Semper 1884, 300 n. \*) and cites Semper's critique from another manuscript, headed 'Ueber Böttichers Tektonik. etc' (gta, 20-Ms-150a, ed. in Gnehm 2004, 206-9). In the final draft of his 1853 inaugural lecture 'On the Relations of the Different Branches of Industrial Art to Each Other and to Architecture', Semper notes on behalf of 'the power of animal and vegetable Life' (113.15-16; italics in original) that 'the more the works of our hands have the appearance of being results of such living forces, which act against gravity and substance, the higher they stand upon the scale of artistical accomplish-182.13-17 Take (fig 1) ~ free finishing] This is another quite literal ment' (113.19–21). translation from Bötticher (Bötticher 1844/52, 1:28). The reference to 'fig I' as well as the following references to figures and other mouldings that are only described can be identified with plates from Bötticher's Tektonik der Hellenen; for 'fig I', see Bötticher 1844/52, 3: pl. I fig. 1. 182.14 **board**] derived from French *bord*: *edge* (see also 182.15) 182.15 free laing free-lying, derived from German freiliegen: exposed 182.17 free finishing] *free-ending*; cf. Bötticher 1844/52, 1:28: 'a symbol for the concept of an ... unladen end' 182.20 Coronation of the roof of a Doric tempel] the *sima* running along the eaves and the gables; cf. Bötticher 1844/52, 1:28; 3: pl. 1 fig. 2 182.21–6 when we lay  $\sim$  and so on.] another quite literal translation from Bötticher; cf. Bötticher 1844/52, 1:29; 3: pl. 1 figs. 3-5 182.25 **an** 182.27-8 Sometimes two leaves ~ forming a double row] cf. Bötticher 1844/52, and 182.36 ebauche] derived from French *ébauche: raw shape* (see also 183.28, 1:29; 3: pl. 2 fig. 1 183.35). Semper uses 'ebauche' in place of Bötticher's 'Realisation' or 'Darstellung' (Bötticher 1844/52, 1:29-30). In Kleine Schriften, 'ebauche' is translated as 'Ausbildung' (formation; Semper 1884, 301).

183.6 leaveband] *leaf band* 183.9 forehanging] *overhanging* 183.10–11 which is curved outward in a certain elastic line of great resisting power] accompanied in the right column by a tiny, rather undefined, sketch of a curved leaf tip in ink 183.12 ripped] *ribbed* 183.14 edificies] uncertain reading, *edifices* 183.16 egg and tong] ~ ~ *tongue*; cf. Bötticher 1844/52, 1:32; 3: pl. 2 figs. 3–7 183.18 Echinos] cf. Bötticher 1844/52, 1:33; 3: pl. 4 figs. 1, 3 183.19 too] *two* 183.25 Lesbian Cyma] cf. Bötticher 1844/52, 1:34; 3: pl. 2 figs. 8–9 183.35 of curse] ~ *course* 183.38 spare] *save* 

#### EDITORIAL EMENDATIONS

178.21 house-building] house- | building 179.24 house-furniture] house- | furniture 180.13 altar-formed] altar- | formed

### ALTERATIONS IN THE MANUSCRIPT

177.10 inventiv] before inserted in ink and del. in pencil and not an imitativ ready made] in prototypes] after del. in pencil models or pencil repl. del. in pencil direct nature] before 177.11 for its forms, they are] in pencil repl. del. in pencil its forms are *del.* for imitation, **imagination**] *after del.* genius genius] *repl. del.* inventiv power 177.12 would in pencil above del. in pencil may 177.13 **design**,] altered in pencil from ~. if it was not] in pencil repl. del. in pencil But othersides it is, 177.14 **object**] *after del.* special 177.19-20 **for** those constructions] *inserted* 177.20 **observance**] *after del*. obedience principles 177.21 on natural laws and conditions *inserted after del*. laws of the last natural laws and] *above del*. everlasting 177.21-2 which remain ~ at all times] inserted 177.22 architecture] after del. nat 177.23 necessity and *inserted before del.* homogeneity which 177.23–4 natural works,] *repl. del.* works of nature itself, 177.24 creates s over d 177.25 freely acting] above del. perfectible and freely altered in pencil from free **or**] r *in pencil* over f 177.27 them.] before three del. beginnings of variant in opposite columns:

Notwithstanding this,<sup>1</sup> there is<sup>2</sup> a caracter of individuality<sup>3</sup> and independency visible even on the most elementary works of man, for instance on this Caraib<sup>4</sup> Hut, erected out of Bambu trees and Palm leaves.<sup>5</sup>

Every part of it does well its function and speaks it out in a very intelligent <sup>6</sup> manner.<sup>7</sup> but it evidently works<sup>8</sup> only accidentally, it has not been made for the function it performes, and much less is it a self speaking <sup>9</sup> vivid personification of those functions.<sup>10</sup>

The junctures between the different members

There is only this difference that the monuments<sup>11</sup> speak their own history in an articulated language invented by the men who built them, they<sup>12</sup> live historically as long as they last, while the shells are dead impressions

This is the difference between the

I Notwithstanding this, *above del*. Nevertheless 2 is] after del. exists 3 individuality] repl. del. free action 4 Caraib] derived from French 'caraïbe': 'Caribbean' 5 leaves.] altered from  $\sim_{\wedge}$  before del. on a low didge of earth. didge] 'mound' 6 intelligent] before *del.* though unartistical 7 manner.] before del. The same caracter of independency from independency] *before del.* which prevailes in this 8 but it evidently works repl. del. It 9 self speaking] after del. living personification of 10 functions.] altered from works ~^ *before del.* as are the same parts in their artistical investments on the Greec monuments. 11 monuments] above del. works of man 12 they] after del. while the shells and coralcoraltrees] 'coral skeletons' (see 499, Explanatory notes 177.26) trees are

177.28 these] altered from the works and of the] above del. remains of archite 177.29 very striking facts] after del. two this art] after del. architec[t] 177.30 state of childhood] after del. childhood and gradual development] inserted

178.1 in its first period.] inserted **period**] *altered from* periods 178.2 represented,] altered in pencil from represents, represents,] altered from ~^ before del. in the beginning **2°) most of them**] *inserted and* 2°) *above inserted and del.* and 178.5 seems to make] *repl*. exception] *before del.* among 178.7 **solution**] *after del*. co[m] del. makes of reconciliating] after del. of combining of] *undel*. 178.8 for a long time stood] after del. prevailed at the same time at] *after del.* since 178.9 **tribes**] *above del.* races race.] accompanied by probably Hans Semper's T-shaped sign in pencil 178.9–10 every one ~ lonic **style**] *repl. del.* every style 178.10 **each**] *above del.* as 178.12 commencement of after *del.* beginning of 178.13 an exception *after del*. in a certain 178.14–15 in its principles repl. del. entirely its] *after del.* some of 178.15 nature] before del. because they are of general and everlasting truth; and comprehensible by themselves 178.15–16 are of general and absolute truth,] *repl. del.* are absolutely true 178.16 **speak to**] *after del*. therefore spe and before del. every 178.18 **shall**] *before del*. perhaps 178.20 it must be remembered,] repl. del. it is a fact, 178.22 **We see nations**] *after del*. There were nations perfection 178.23 at all.] accompanied by probably Hans Semper's slash in pencil, after del. accomplish referring to beginning of MS 143<sup>2</sup> (508; cf. 508, note 508.1) 178.24 cottage] above del. hut 178.29 The wall partitions ~ trees.] *inserted* 178.34 modelling] *after del.* working out of 178.36 and their combination to a] after del. and the assembling of them to a assembling] *after del.* scientific 178.37 **Style of construction**] *after del.* constr

179.1 marble] after del. tim179.10 naked shematical parts] repl. del. shematical formsforms] after del. bodies179.11 found] inserted after del. also179.23 productions] afterdel. industrial179.25 A third class of Symbols] repl. del. There are thirdly symbolsThere are thirdly symbolsThere are thirdly symbols] after del. There were thirdly symbols employed which had their

key not in the constructiv functions of the parts nor (constructiv after del. structur and parts **employed**] *before del*. of a mere hieratic caracter a mere] *after del*. an *after del*. house) **refers only**] *repl. del.* referring only 179.26 **building**, *altered from*  $\sim \wedge$  *before* externa *del.* the keys of which were the keys] *after del.* and not of general of it.] inserted 179.27 **generally** *interl*. 179.28-9 they had ~ signification] inserted 179.28 at the same time a *above del.* a 179.31-2 the statical signification *after del.* but 179.35 the **duration**] *after del.* the time of *and before del.* of the existence the existence] the *above del*. their special social *interl*. 179.37 **a few**] *repl. del.* some 179.40-1 in the different **styles**] *after del*. and characteristic for the d 179.41 **comming** *after del.* next 180.1 **examples of traditional** *repl. del.* the 180.1–2 reminding old constructions] repl. *del.* taken from reminiscencies of the first stages of social establishment of the] *after del*. **constructions**] *altered from* constructiv *before del*. parts, 180.2-3 had the greatest but influence ~ monuments] repl. del. do mostly refer to the whole feature of the buildings 180.8 **to**] *repl. del.* round 180.9–10 parts and divisions] *repl. del.* members 180.12 the **symbol**] *after del*. therefore **object**, *altered from*  $\sim \wedge$  *before del*. will be the symbol of an holy place in general. will be] undel. before del. symbolised as an holy object 180.12–14 will be symbolised ~ temple.] inserted after inserted and del. employed as [a]180.15 **gabled roof**] *after del*. Gableroof. 180.16 **The Roof with gables is** *before del.* for every style of architecture 180.16–19 **the universal Symbol** ~ honours.] *repl. del.* the Symbol the Symbol] undel. before del. of a divine house. (house. altered from ~, before of divinity. *del.* probably because tribes, which in their/ of divinity] after del. of the im 180.16 universal] *above del*. general 180.17 divine dwellings.] *after del*. the houses of God. also 180.21 **God;**] *altered from* ~, *before del*. the Serpent, the hawk or any other interl. while the] repl. del. The 180.22 **being**] *repl. del.* are 180.23–4 were covered with flatt roofs.] inserted before del. the only gabled part of the whole was the house of the god. part of the whole] *repl. del.* sanctuary house] *after del*. temple 180.25 **The same is the case** *after* three del. beginnings of variant in opposite columns:

The same form is visible in a diminute state in proportion to the who The same Symbol crowns the highest terrace of the Assyrian The same is the case in Assyria. A Small chapel with a gable stands on the top of the tower

180.26 Assyrian palace] after del. immense 180.27 It was] after del. The gabled ark of the covenant was symbolically carried out in the great 180.29 Caaba] C over g (C resembling 'G' due to undel. descender of g) 180.29–30 It is the only temple of the Islams] inserted 180.30 Mosquees] before del. of the Islams 180.33 like in Egypt] inserted 180.34–5 like in Assyria] inserted 180.35 it governs] after del. but the principal] after del. a striking 180.36 ordinance] i over 0 180.37 of Greecian history] inserted

181.1 **Gabled**] d *added* part of its] repl. del. its whole 181.3-7 **Some ~ forms.**] *inserted* 181.3 **constructiv**] *after del.* struct in Greec architecture are] *repl. del.* employed for the Greec entablatures are 181.4 gabled] interl. 181.5–7 as quasi natural objects ~ plants and animal forms.] repl. del. quasi as natural symbols because seized from antearchitecforms.] before del. They had the principle not. tural forms. 181.6 and treated them] after del. and did not hesitate to take them as prototypes or analogies for further symbolical 181.6–7 **and animal**] *after del*. and organic 181.9 has derived from *repl. del.* has been taken from **making partitions**] *after del.* wall 181.10 **sails**] *after del.* te[x] 181.16-17

and every other ornament ~ none at all.] *inserted* 181.16 meaning] *above del.* significance 181.18 signifing] *after del.* ornamenting 181.19 an attache] *after del.* a member one part to another] *after del.* two differ 181.19–20 as a symbol ~ structural part.] *inserted* 181.22–6 On natural symbols ~ nature.] *after del.* 

## instances. –

I shall now give an example of a symbol taken from natural analogies, one of those which the Greecs so frequently and successfully

181.22 **On natural symbols.**] accompanied by possibly Hans Semper's note in pencil × 181.25 **have**] before interl. and del. been 181.27–8 **What principles ~ such symbols?**] repl. del. How did they employ natural forms for such artistical symbols? after del. on fol. 6v The principal law which prevailed in the 181.31 **was not necessary for**] after del. did not belong t[0] **its**] repl. del. the **explanation**.] altered from ~^ before del. of the Idea which was to be symbolised; 181.32 **2°**]] after del.

they<sup>1</sup> gave on purpose<sup>2</sup> conventional colours to their leaves and flowers when<sup>3</sup> the natural colours of the original was<sup>4</sup> out of question and<sup>5</sup> not that

I they] *after del.* for they had for their artistical creations 2 on purpose] *inserted* 3 when] *above del.* because 4 was] *after del.* were no 5 and] *after del.* and not necessary to

181.33 **Symbol**,] *altered from* ~. 181.32 **altered** *after del.* even 181.33-6 and put ~ (Coffemill) *inserted* 181.38 colours] *after del*. for[m] 181.39 **searched for.**] *after del.* wanted. admitted] *after del*. left doubts 182.1–2 **permitted**] *repl. del.* admitted 182.3 made before del. also **originals**] s added 182.3-4 of the building] after del. of the material ofl undel. 182.5 for this abstraction] after del. on fol. 7r It was only by this abstract view of the view] above del. mode of 182.6 forces,] before del. and give, through the elastic curve which the leaves performed by the supposed pression, 182.8 **degree**] *above del.* form 182.9 painter. -] before del. The simple blocs in their pure static forms would never have given to the eyes even of practical men blocs] 'blocks' given to] *after del*. permitted to eyes] *before del.* a clearear 182.10 **Cyma**] *after del*. symbol 182.13 of any] after del. after any real and before del. real sectional inserted 182.14 rib.] *repl. del.* ripp in] del. take] above del. Imagine 182.18 as an upright] after del. as a crowning upright crown-182.25 When] above ing] before del. piece. 182.21 when] above del. if if] after del. Now del. If the *inserted* **leaves**] *after del*. the wreath or row of the] undel. before del. leave threa 182.26 **on.**] *altered from* ~, *before del*. until they take a 182.27 **standing**] *above del*. laying] 'lying' **before**] *after del*. over 182.30 You will understand after del. laving on fol. 8r You will easily understand how it was possible to establish a very accurate scale to the dynamical and artistical feeling to the dynamical] *after del*. for 182.31 an ideal but in the same time *inserted* **accurate**] *after del.* significant 182.32-3 **the same**] *after del.* 182.34 of altering and *inserted after del.* of strenghtening or moderating the an upright for any intended musical mode] *inserted* any] *above del.* every 182.35 parts.] altered from  $\sim_{\wedge}$  before del. so as to answer to any special answer] after del. respond 182.37 **speaking** *inserted before inserted and undel.* and and] before del. expressiv 182.38 expressing] repl. del. which express 182.40 in general.] inserted

183.5 **admissible**.] *before del*. They had no established shemes and rules vale [] established] after del. rules but that of their (that after del. their es) shemes] 'schemes' 183.9 183.10 **below**] *repl. del.* part which is below, 183.10-11 resisting] after they will *interl*. del. inner 183.11 leaves] after del. plan (for 'plants') after del. vegetable 183.15 ornamented with] after del. painted or sculptured and then painted w that] above del. the same tong,] altered from ~^ 183.16 very unartistically *inserted* 183.16-18 whose first **sheme** ~ **sectional curve.**] *repl. del.* and in its first sheme reminds of a broken leave. first] *undel*. sheme] 'scheme'; after del. for (for 'form') after del. signif reminds] before del. the analogy of a broken leave.] leave: 'leaf'; undel. and leave. altered from ~^ before del. which turns 183.21 **periods**] *after del.* stage 183.23 symbol.] after del. for[m] 183.24 symbol.] *before del.* of 183.26 whose] after del. covering with 183.28 results from the repl. del. gives the from] *above del*. of 183.29 architects; altered from ~, before del. who employed it sometimes It is] after del. We shall see 183.30 leaves] *after del*. ornament which w orna-] undel. 183.33 true] repl. del. the case 183.34 upside down,] before del. as for instance at the bottom of the wall of the Cella of the temple of Theseos, 183.34-5 a form which we call the cyma recta, *inserted* 183.36 meaning.] altered from ~∧ *before del*. and **only** *after del.* here *and before del.* to to day, to inserted illus**trate**] *after del.* give an example of the mode how the Greec knew [t] 183.36-7 by some examples inserted 183.38 lectures inserted 183.38-9 of the parts of Greec Architecture] repl. del. of the Greec ornamental forms 183.39 separately] after del. in the

## MANUSCRIPT VARIANTS MS 143<sup>1</sup> MS 161

*fol. rr* Architecture is a pure inventiv art, for it has no prototypes in nature for imitation and its forms are free productions of human intellect and inventiv power. With respect to this, it may appear to be the freest among all the arts who speek to us through the medium of sight. But on the other hand it is the most dependant upon the laws of nature in general, and the mechanical laws of matter especially, for, whatever special object of this art we may consider, we will find that its first and original conception has arisen from the want of providing for some necessity of private or social life, essentially that of protection and shelter against the injuries of the elements or of other hostile powers. – and as we can obtain this protection only by combination of dead natural materials to strong systems of construction we are constrained to the strict observation of the statical and mechanical laws of nature.

Thus the monuments of the different ages of human civilisation | are as it were works of nature itself, but works which nature had created through the medium of mankind, in that position of its social development, on which it stood at the time when these works were erected; in a certain degree comparable to the shells and corail trees, which give us an account of the nature of the organizations which once inhabited them.

Notwithstanding this dependency from necessity and mechanical laws of nature there is a caracter of independency and free action visible even in the most elementary works of man, which makes it to a work of his own. Such for instance as this Caraib hut, erected out of trees of bambou and palmleaves on a low didge of ground. Every part of it does well its function and speaks it out in a very intelligent manner, there is even some element of decoration visible on the matts, which form the walls and partitions between the pillars. and the whole forms an Ensemble which is not wanting of unity and proportion. | But still it is far

10

15

20

\*fol. 157r

fol. IV

from being a work of architectural art and can not give any further occasion to us for observations.

We shall start from a point, where we allready see a higher intention acting and influencing upon the constructions of

506.1 Architecture is a pure inventiv] accompanied by note in pencil ad. 1. (referring to MS 141, fol. 1r with page number 1; 177.10-23) ad] Latin for 'to' 506.2 With] above del. In this to this,] inserted 506.2-3 it may appear to be] repl. del. it is 506.3 among] repl. del. of 506.4 But] after del.

But on the other side it is more dependant than any other on nature in general and matter<sup>1</sup> for its objects are, in their first conceptions at least,

I matter] before del. especially.

4

506.4 dependant] before del. among all the sister-arts the laws of] interl. in general,] before del. and human condition of life 506.4-5 and the mechanical laws of] inserted before del. and 506.7 necessity] after del. essential essentially] repl. del. 506.8 injuries of the] inserted of other hostile powers] of repl. del. against generally 506.9 **dead** *interl*. to strong *repl. del.* to some systems] final s added we] after del. we must form form] above del. follow in the mechanical cheme of our work the cheme] 'scheme' 506.10 the statical and mechanical laws] the above del. those of **nature.**] *repl. del.* which govern the universal material world. 506.11 **Thus**] *above del.* So we may consider are] after del. as works of nature 506.12 mankind kind added 506.14 comparable] above del. similar corail trees] 'coral skeletons' (see 499, Explanatory 506.15 the nature of the] repl. del. that 506.16 Notwithstanding ~ laws Notes 177.26) 506.17 visible] inserted man] after del. arch (for 'architect') of nature] *repl. del.* But 506.18 **Caraib**] derived from French 'caraïbe': 'Caribbean' erected] above del. made 506.19 didge] 'mound' 506.21 matts] altered from mats 506.21-2 and the whole forms] after del. but this is not 506.22-507.4 But still it is ~ constructions of] in right column of MS 161, \*fol. 157r, after four del. variants in left column of MS 143<sup>1</sup>, fol. 1v, in left column of MS 161, \*fol. 157r, and in right column of MS 143<sup>1</sup>, fol. 1v:

But this is not yet a work of architecture. This art begins only, where we see the dead cheme<sup>1</sup> of mecanical construction first becoming animated through the genius of art, where the different parts of the construction | are personifications of the functions<sup>2</sup> which they fullfill in the whole combination<sup>3</sup>

But this is not yet a work of architecture. This art begins first with the poetical idea or intention of the builder to personify his work

But the man of higher organization becomes soon dissatisfied with this mere technical sheme<sup>4</sup> |

But still it is far from being a work of architectural art. This art begins only with the intention of the builder of <sup>5</sup> giving <sup>6</sup> higher expression and meaning to his work, of <sup>7</sup> animating <sup>8</sup> its parts and to elevate <sup>9</sup> the dead sheme <sup>4</sup> of construction<sup>10</sup>

I cheme] 'scheme' 2 functions] after del. natural forces, 3 combination] before del. of the activ and passiv 4 sheme] 'scheme' 5 of] inserted after del. to 6 giving] altered from give 7 of] inserted after del. to 8 animating] altered from animate 9 elevate] above del. transform 10 construction] before del. into a

507.3 a point] after del. a higher allready] interl. a higher] after del. the activ influence of 507.4 of] before mathematical calculations

## MS 143<sup>2</sup>

*fol. 6r* This cottage considered as a whole does well its function and every part of it speeks it out clearly enough but evidently works only accidentally it has not been made and modelled on pourpose for the function it performes, and much less is it a self speaking and living personification of the last, as are the very same parts with their artistical investments on the Greec monuments.

Art only begins 1°) where we perceive the material worked out to artificial forms, which are prescribed only by the statical and other material functions which each part has to perform and 2°) where the material shemes which are obtained by this way, become to be still more expressive through a poetical and ornamental

508.1 **This cottage considered as a whole**] *inserted after del*. The whole cottage and Every part of it, The whole cottage and] *inserted* Every part of it,] it, *repl. del*. this cottage *and* Every part *after two del. variant continuations of missing manuscript part:* 

are nothing but material ties, there is not the slightest indication<sup>I</sup> of those<sup>2</sup> swelling forms or contractions with the aid of which nature prepares and indicates<sup>3</sup> its articulations and which the Greecs

are nothing but common strings there is not the slightest indication visible of the wish for preparing and mediating the transition from the part which supports to that which is supported, nothing of those swelling forms or contractions with the aid of which nature prepares the articulations of

I not the slightest indication] above del. no idea2 those] inserted before del. thatarticulation with which nature symbolises its3 indicates] before inserted andundel. of its creatures the placesplaces] del.

508.1 This cottage] accompanied by note in pencil Ad 4. (referring to MS 141, fol. 2v with page number 4; 178.14-30; cf. 503, Alterations in the Manuscript 178.23) Ad] 'ad': Latin for 'to' 508.2 evidently] after del. it and every part of it] inserted after del. and 508.2-3 **on** 508.4 with] above del. in on] n (o missing due to lower left margin pourpose inserted 508.6-9 we perceive ~ poetical and ornamental] inserted torn off) 508.6 **1º)** interl. before undel. the material shemes of construction apparent in the general form as well as on each part of the building shemes] 'schemes' in the] the (in missing due to lower left the building] well] 11 (we missing due to lower left margin torn off) margin torn off) building (the missing due to lower left margin torn off) 508.6 perceive] after del. see to artificial forms] repl. del. in such a manner are above del. is 508.7 only] interl. material *interl*. 508.8 shemes] 'schemes'

#### MS 1433

fol. 3r

The history of architecture begins not at the same point with the history of housebuilding and Engineering; they are more two different things there is a wide distance between the two and there are nations who have no history of architecture at all.

This Caraib cottage for instance, in its ensemble as well as every part of it, does well its function, but each member of it works only accidentally, it has not been modelled on purpose for the function it performs;

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It therefore has nothing in common with architecture as an art and can only occupy our attention as a most elementary scheme for Roof construction. combined with matting as the elementary sheme of vertical partitions.

The first step to architecture as an art would appear to be the working out of the materials to artificial regular forms such as are prescribed only by the statical and other material functions which each part has to perform.

But we find no example of an art standing and resting on this point of development except perhaps in our own times of merely practical and commercial tendency. ||

- Of old people had probably less practical but certainly much more poetical qualifications They could not help giving a sort of plastical life to the blocs of timber, of marble and granite, in preparing and modelling them into cylinders and prismatic beams for the use of their temples and other architectural works. They made them tell the reasons for their existance, the direction and power of their action, the part which they would take in the whole work, and how their relation would be to each other.
- These tales were made in a linguage consisting of symbols and caracteristic forms which were partly to be painted only, partly to be carried out plastically, and then painted; on the surface of the Schemes; This symbolical language was found almost ready prepared for this purpose by the other branches of industry which, it must be known had reached to a high degree of technical and artistical perfection long ere the building of monuments was thought of.

So this language was already prepared for general understanding, | and so much the more as most of its symbols are taken or at least derived from analogies in nature, and selfunderstanding for every man who has the slightest feeling for natural forms and their dynamical significations.

But there are others, (and some of them are very important as relating to the general features and dispositions of the monuments) which are not taken from nature directly but from reminiscences out of the first stages of society and social establishment, from old traditional types of construction or from processes formerly prevailing in some branch of industry connected with the housebuilding or housefurniture. –

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Before going farther, I want to give you some examples of symbols used in architecture to show their tendencies. their expressiv power and their application. I shall do this with the only view of explaining the containt of the foregoing, referring for a more systematical development of the forms used in the different styles of architecture, to the comming lectures.

1°) Symbols taken from reminiscences out of the first stages of social establishment. The *fireplace* 

> 508.10 begins] after del. begins not with the 508.10–12 The history ~ at all.] inserted beginning and first has 508.11 they are *above del.* not **more**] *before del.* than history two different things] interl. before interl. and del. which of painting 508.12 nations] *after del*. many 508.13 Caraib] derived from French 'caraïbe': 'Caribbean'; interl. for in-508.15 performs;] altered from ~, before del. and there is much less any stance] interl. 509.1 in common] repl. del. to do **only**] *repl. del.* not further 509.3 sheme] 'scheme' 509.4 The first step] after del.

> The first indications of art appear only where<sup>1</sup> the materials are<sup>2</sup> worked out to artificial regular forms such as are prescribed only by the statical and other material functions which each part has to perform.<sup>3</sup>

fol. 4r

I where] before del. we perceive 2 are] inserted 3 each part has to perform.] undel.

509.4 first] above del. next appear to] inserted 509.7 and resting] interl. 509.7-8 except perhaps in our own times] repl. del. except in the times and under conditions similar to ours 509.8 perhaps] interl. of] after del. where practical science has entirely absorbed artistical feeling 509.9-11 Of old ~ preparing and] accompanied in opposite column by Hans Semper's note in pencil Wiederholg v. 5 unten, u 6 - (referring to MS 141, fol. 3r-v with page numbers 5 and 6; 178.39-179.16) 509.9 Of old] after undel. on fol. 3v The symbolic language in architecture after three del. beginnings of variant on fol. 3r-v:

#### In the times<sup>1</sup> of the first development of architecture

Of old<sup>2</sup> mankind had a more vivid imagination |

Of old people had<sup>3</sup> perhaps less practical but certainly much more poetical qualifications.<sup>4</sup> They could not model their blocs<sup>5</sup> of granite and marble which they employed for building,<sup>6</sup> into cylinders and prismatic beams without giving to them a sort of plastical life. They personified them and<sup>7</sup> made them tell the reasons for their existence, the direction and measure of their action,<sup>8</sup> in what manner they make part of the whole to which they were destined,<sup>9</sup> and how they would relate to each other, when on their places.<sup>10</sup> For this they wanted a language – a symbolic language<sup>11</sup> consisting of certain caracteristic forms partly painted only partly plastically executed and then painted which they found almost ready prepared by the other branches of practical industry and art, which, it most<sup>12</sup> be known, had reached to a high degree of technical as well as artistical perfection long before the building of monumental works was thought of.

In the times] accompanied in opposite column by Hans Semper's note in pencil Wiederholung von 4 u 5. (referring to MS 141, fols. 2v-3r with page numbers 4 and 5; 178.14-2 Of old ] repl. del. In those times in which fell the development of archi-179.3) tectural forms 3 Of old people had] *repl. del.* Formerly people had Formerly after del. it was much less practical perhaps than people had] inserted before del. it 4 qualifications.] *inserted before del.* than we are now. 5 blocs 'blocks' was 6 which they employed for building, *inserted* 7 They personified them and repl. del. They They] after del. and making them parts of after del. and personifiing their future functions in them by giving to them certain 8 the direction and measure of their action,] inserted after del. and 9 they were destined,] repl. 10 each other, when on their places.] repl. del. their neighdel. they belong, bours. II a symbolic language ~ plastically executed and then painted inserted 12 most] 'must'

509.9 probably] repl. del. perhaps 509.10 blocs] 'blocks' 509.12 They made them] accompanied in opposite column by Hans Semper's note in pencil 6 - (referring to MS 141, fol. 30 509.13 would take] *repl. del.* took 509.16–17 on the with page number 6; 179.4–16) surface of the Schemes; This] inserted after del. which 509.17 was] repl. del. they 509.22 So this language ~ understanding,] repl. del. on fol. 4r-v By this reason this language was generally | understood reason] *above del.* circumstance and so much] accompanied in opposite column by Hans Semper's note in pencil zu 6. u 7 (referring to MS 141, fols. 3v-4r with page numbers 6 and 7; 179.4-29) 509.23 or at least derived] inserted and after del. which every one who has the slightest degree of feeling for natural 509.23-4 selfunderstanding] 'self-explaining' 509.26 (and] altered from ∧~ 509.26-7 general features and dispositions of the monuments)] repl. del. Edifice as an Ensem-509.28-9 reminiscences ~ or from] repl. del. old traditional types of houseconble. struction and 509.28 **of society**] *after del*. of the formation 509.29-30 processes ~

**housefurniture.** –] *repl. del.* processes of some branch of industrial art related to architecture and from 509.29 **prevailing**] *after del.* used 509.31 **Before going farther, I want to give you**] *repl. del.* I shall give **some**] *after del.* for an explanation of the foregoing *and before del.* few 509.33 **containt**] *'content'* 509.34 **development**] *after del.* explanation **the comming**] *after del.* my 509.37 **The fireplace**] *after underl. and del.* The altar.

## Second Version

### TEXTUAL RECORD

MS 142gta, 20-Ms-142, fols. Ir-IOV (IOV blank), in Semper's hand, copy-textSemper 1985b'London Lecture of Autumn 1854', 61-7, here 61-6 (additional sections: ed.<br/>of MS 141; see 498), Mallgrave's ed. of MS 142

**BIBLIOGRAPHY** Herrmann 1981, 33, 113, 166–7; Herrmann 1984, 145; Mallgrave 1996, 221; Gnehm 2004, 113, 210–17

### **EXPLANATORY NOTES**

The second version of the lecture 'On Architectural Symbols', which reformulates the programmatic first sentence as 'Architecture is an art of invention', generally revises the first version in terms of language, arrangement of the material and clarification of content. On the one hand, the section on natural symbols – now headed 'On Structural Symbols' (186.36), again with the Greek cyma as an example adapted without acknowledgement from Bötticher's Tektonik der Hellenen - does not conclude the draft, as in the first version, but precedes the section on 'symbols of the traditional kind', which forms the new conclusion (189.18–20). However, instead of writing out the latter, the second version refers to the 'other paper' (189.20) - that is, to the corresponding section of the first version on traditional symbols with its discussion of the fireplace, the roof and the walls (180.5-181.21). On the other hand, the second version contains clarifying additions. A first, longer one is provided with the third paragraph and the distinction between the 'Structural forms in general' and the 'ornamental parts', with the latter as the 'symbolical investments of the bare structure' of architecture (184.5-9). A second addition, associated with this, concerns 'nations ... who have no history of architecture': their buildings - Semper now refers to China and the 'Arabian tribes' - consist of 'bare structures' with only externally applied enrichments derived from the 'industrial arts' (184.36-185.4). Finally, the second version omits the developmental assertions on the fully fledged emergence and violent death of most independent architectural styles, with the exception of those of the Greeks (177.30-178.17). While the reference to later lectures for elucidations of these assertions is also omitted (178.18-19), the other two references in the first version (179.40-1, 183.37-9) are retained with some modifications, here announcing 'a more complete and systematical explanation of the symbolical forms in architecture' (186.34–5) and the explanation of the 'Cyma recta' and 'other symbols' in Greek architecture (188.32–5).

184.1–11 Architecture is an art of invention  $\sim$  the freest among the different arts of design] see 499, Explanatory Notes 177.10-13 184.13 **rosen** *risen* 184.15 **clime**] *climate* 184.26–9 The monuments of former ages ~ once inhabited them.] see 499, Explanatory Notes 177.25-7 184.28 corall-trees] coral skeletons; see 499, Explanatory Notes 177.26 185.5 **Caraib**] derived from French *caraïbe*: *Caribbean* 185.12 matts *mats* 185.14 **sheme** scheme (see also 185.15, 187.14–15, 187.39, 188.16) 185.17-20 The first step ~ would appear to be ~ forms, such as are prescribed by ~ conditions, which each part of the whole has to perform, and their combination to a well calculated structure.] see 500, Explanatory Notes 178.33-6 185.21-3 But we find no exemple of a style ~ resting on this point ~ except in our own days of merely practical ~ tendency.] In a deleted passage, however, 'the Chinese style' is described as such an example; see 513, Alterations in the Manuscript 185.21. 185.26 blocs blocks 185.36 **nacked**] merged from German *nackt* and English *naked* (see also 188.2)

186.7 self understanding] *self-explaining* 186.11 foundators] merged from Italian *fondatori* and English *founders* 186.18 espacial] *especial* 186.24 lorrel] *laurel* 186.24–5 Mirth-leaves] *myrtle leaves*; see 500, Explanatory Notes 179.31 186.36–189.17 On Structural Symbols ~ curvature. –] see parallel section headed 'On natural symbols' in the first version (181.22–183.36)

 $_{187.I-188.3I}$  One of the most important symbols ~ the so called Cyma ~ Greec buildings of all periods.] As in the first version, Semper here adapts corresponding passages from Karl Bötticher's Tektonik der Hellenen; see 501-2, Explanatory Notes 182.10-12, and for the subsequent parallel passages – the explanations thereafter. 187.5 **boards**] derived from French *bord*: *edges* (see also 187.6) 187.6 **free laiing**] *free-lying*, derived from German freiliegen: exposed 187.8 free finishing] free-ending; see 502, Explanatory Notes 182.17 187.14 **sheme**] *scheme* (see also 187.15, 187.39, 188.16) 187.15 reddition] rendition. Mallgrave has 'reduction' (Semper 1985b, 64). 187.30 **on**] one 187.36 **ebauche**] derived from French ébauche: raw shape (see also 187.40, 188.18, 188.26, 188.33); cf. 502, Explanatory Notes 182.36 188.6 leaveband *leaf band* 188.8 leave] *leaf* (see also 188.2–3 **pepresented**] *represented* 188.13 ripped ribbed 188.10) 188.15 **tong** *tongue* 188.17 **tye**] *tie* 188.33 of curse ~ course 188.34 **spare** *save* 188.35-7 adding ~ some general remarks on the principles ~ of their structural symbols] Beside the end of this passage, Hans Semper noted in pencil 'Bis hierher Manuscr. A.', referring to the first version of the lecture (177-83), which is translated in *Kleine Schriften* (Semper 1884, 292–303). The passage provides a transition to the last formulated part of the second version (188.38-189.19) - a part which is a reformulation of a passage in the first version (181.29–182.9), serving there as an introduction to the discussion of the Greek cyma.

189.7 **thee**] *the* 189.20 **1° The fireplace. see other paper**.] The reference to the 'other paper' means the section on traditional symbols in the first version of the lecture, which begins with '1°) The fireplace' and ends with 'Symbols taken from textile art' (180.5–181.21).

### EDITORIAL EMENDATIONS

184.28 corall-trees] corall- | trees 186.24-5 Mirth-leaves] Mirth- | leaves

## ALTERATIONS IN THE MANUSCRIPT

184.1 Architecture is an art of invention] after del.

Architecture is an art  $^{r}$  of pure invention – not finding  $^{2}$  any adaequate prototypes or paragons in the natural forms

I art A] altered from ~, before del. which 2 finding] after del. having

184.2 **design**, *before del.* to its disposition the world of real natural forms, which it may take for models, for expressing its ideas and conceptions. to its disposition] after del. for the expression of its conceptions the immediate imitation of nature for its object.] insert-184.3 Works of architecture have] *repl. del.* The architects have ed The architects have] *repl. del.* The last have 184.3-4 **no prototypes** ~ **science**.] *repl. del.* no prototypes in nature for immediate imitation they are entirely the results of human imagination and 184.3 **nature**,] *altered from* ~^ *before del.* for their ideas and conceptions, which intellect. 184.4 experience,] altered from ~. after del. and combination they inserted 184.6 Structural al over e forms] *interl*. 184.8 bare] above del. naked significance.] altered from  $\sim \land$  before del. to our works and artistical inserted 184.10-12 Architecture ~ consider.] repl. del. The first conception of every object of architecture, 184.11-12 material *interl*. 184.13 its first conception will have rosen above del. arises 184.15 elements *interl*. 184.18 **principles**] *after del.* laws 184.19 itselfs inserted 184.25 **The history** *after del.* The study of *after del.* As long as we forms] above del. is a very **important**] *above del.* an essential 184.26 of mankind] *after del*. of nature 184.27 generations] before del. of mankind fossil] inserted 184.30 But in turn] after del. But in turn, we want the knowledge of human nature as it still **remnants**] *after del*. historical 184.31 human culture] *after del.* culture 184.32 these works,] before del. whose remains 184.33 general] *interl*. 184.34 important] *interl*. 184.37 whose] after del. or at least, architectural] al over e works are] inserted before del. is bare structures] after del. nothing but ornamented structures of the simplest ornamented] after del. an structures *final* s added 184.38 **furnitures**] *altered from* furniture *before del.* works implements,] after del. outer works,

185.1 works themselves,] repl. del. work itself, 185.2 textile art] after del. weaving 185.3 and with] after del. as we shall 185.7 in its construction] interl. 185.8–9 There is ~ partitions.] inserted 185.8 an] n added element] above del. beginning in the mattings] after del. in the application of variated 185.9 partitions] after del. w (for 'walls') 185.10 this Ensemble] above del. it 185.12 wall partitions are] after del. walls are 185.21 But we find] after del.

But we find no<sup>1</sup> example of a style of construction resting on this point of development, excepting perhaps the Chinese style, although it is not entirely devoid<sup>2</sup> of symbols.

I no] *above del.* only one 2 devoid] *after del.* without

185.27-8 in order to] after del. for the use of their 185.35 types] above del. forms 186.5 types,] before del. which perform the elements of the 186.7 not] after del. partly 186.7-8 reminiscencies of] above del. from 186.8 elements] repl. del. types of processes] of above del. from 186.9 housefurniture.] altered from ~, before del. or finally being mystical symbols of a mere conventional kind, as for instance most of the symbols] above del. types 186.10-14 A third class ~ religion. -] repl. del.

A third class of symbols refers finally to the special destination of the building, to the God of the temple and the religion of the worshippers and foundators<sup>1</sup>, which last class of symbols is generally of a mystical<sup>2</sup> character, which<sup>3</sup> never were intended to be of general understanding

**I foundators**] *merged from Italian 'fondatori' and English 'founders'* **2 mystical**] *after inserted and del.* voluntary and **3 which**] *after del.* the understanding of which was always the privilege of, was] *after del.* is only possible with the aid of a key

186.12–13 and composed] *after del*. but purposely 186.16–17 as the Assyrians and Egyptians, *interl*. 186.17 **such**] *interl*. 186.19 they were at the same time] *after del.* they answered in the same time a certain staticcal or dynamical answered] *above del*. fulfilled 186.21 For instance] after del. For instance, they ornamented the moulding, which represents a tie or a band, and which which represents] *after del.* whose statical function is the 186.22 **often**] *above del.* generally binding together of two 186.23 **according** *after del.* 186.25 The caracters of the leaves were different, *inserted* for the different Gods 186.26 **unaltered**; altered from  $\sim \wedge$  before del. by the special applications which were given to 186.27-8 whose monuments] after del. wherefore their symbolisme is not of general it. but only of special 186.32-3 and in showing ~ application;] *inserted* 186.33 **I shall** after del. only with the intention of expl[a] 186.33-4 the foregoing assertions] after del. the meaning *after del*. what I 186.36 **Structural** *above del.* natural 186.38-9 analogical forms in nature.] before del. on fol. 5r-v

What principles did they | observe in the choice of such natural forms and how did they apply them?

1°) they did not transfer the copy of the natural object which gave the analogy to the Idea which was to be represented in all its accidental details, they left out all what was not necessary for its explanation.

2°) they altered the originals in those

187.2-3 (Κύμα, Κυμάτιον)] inserted before del. which includes the ideas of ending or crowning, that of receiving, and that of a conflict between two forces. 187.4 **Take**] *after del.* Take (fig 1.) as the sheme of sheme] 'scheme' 187.11 coronations] after del. antique 187.18 **on**] *above del*. to structural] altered from structure before del. on fol. 6v and so on, until the heads of the leaves will entirely cover the lower part of it, and their points touch the band. 187.19 part. inserted 187.27 **By this way we shall** *repl. del.* We 187.34 in architecture] after del. every where 187.35 **place**.] *altered from* ~^ *before del*. between two 187.37 **speaking** *repl. del.* expressiv 187.40 **moulding**, *altered from* ~. 187.40–188.1 **or** painted, or sculptured and then painted.] inserted

188.2 architecture;] altered from ~, before del. which contained the 188.6 leaveband] altered from leave band leave] 'leaf' 188.18 curve] before del. of powerfull resisting expression 188.21 variation] after del. conflict 188.23 Echinos] above del. first waterleaves] before del. of another caracter 188.35 following,] altered from ~. adding only here] after del. What principles did the after del. and 188.36 observed] after del. seem to 188.36-7 of their structural symbols.] accompanied in opposite column by Hans Semper's note in pencil Bis hierher Manuscr. A. (cf. 512, Explanatory Notes 188.35-7)

189.3 sufficient] before del. and wanted only leaving out the other parts and] inserted 189.4 to represent the whole thing.] repl. del. to take the whole complexe of the natural object. whole] after del. real 189.9 troubled] after del. permitted a double sense of the Symbol after inserted and del. left a doubt, if it was 189.17 their curvature. -] repl. del. curvature which the hand of the sculptor gave to a moulding which which the hand] after del. which the elastic line of a tender leave wreath received leave] 'leaf' 189.18 which had] after del. because they are

# On the Relation of Architectural Systems with the General Cultural Conditions

### **TEXTUAL RECORD**

MS 145 <i>MS 144</i> <sup>1</sup>	gta, 20-Ms-145, fols. 11–6v (41–6v blank), in Semper's hand gta, 20-Ms-144, fols. 11–18r, in Semper's hand, <i>copy-text</i>
MS 146 <sup>1</sup>	gta, 20-Ms-146, fols. 1r–12r, in H. T. Wegener's hand (emendations in Man-
MS 147 <sup>2</sup>	fred Semper's hand), 1880 or 1881, copy of MS 144 <sup>1</sup> gta, 20-Ms-147, fols. 11–13r, 14r, 151–22v (1v, 2v, 3v, 6v, 9v, 10v, 17v, 18v, 19v, 20v, 22v blank; 4v, 5v, 7v, 8v, 11v, 12v, 21v del. notes relating to Manfred
	Semper's architectural works, among them 'a new stable building for Mr
	Theodor Wegener in Ottensen'; 13v, 14v see 409, MS 147 <sup>1</sup> ), 'Über den Zu- sammenhang der architektonischen Systeme mit allgemeinen Kulturzu-
	ständen', partly in unknown hand (11–41, 51, 61–71, 81, 91–111, 121, 131, 141, 151–211, 221; emendations in Hans and Manfred Semper's hands), partly in
	Manfred Semper's hand (8r), early 1880s, Manfred Semper's German trans. of MS 144 <sup>1</sup> , fols. 1r–16v, published in Semper 1884; see Herrmann 1981, 114
Semper 1884	'Ueber den Zusammenhang der architektonischen Systeme mit allgemei- nen Kulturzuständen', 351–68, German trans. of MS 144 <sup>I</sup> , fols. 11–177; for
	details of this translation, see Herrmann 1981, 170–2
Semper 1986b	'London Lecture of November 29, 1854', 43–53, here 43–51 (additional sec- tions: ed. of MS 144 <sup>2</sup> ; see 530), Mallgrave's ed. of MS 144 <sup>1</sup>

BIBLIOGRAPHY Herrmann 1981, 113–14, 170–2; Luttmann 2008, 147–9

### **EXPLANATORY NOTES**

This lecture, which can be dated 29 November 1854, discusses - as announced in the first two paragraphs - 'architectural styles' as 'the artistical expressions of ... social political and religious institutions'. Semper's main example is the architecture of China, followed by a shorter section on that of Assyria and Chaldea and brief notes on Egyptian architecture. He alludes to his responsibility for teaching 'Architecture, and Plastic Decoration' (see 91.22, 91.25) when pointing out that 'the ordinances and mouldings of a style' can be understood only in the broader historical and social context of the architectural monuments to which they belong (189.29-190.2). After referring back to the embryonic role of the fireplace as discussed in the preceding lecture 'On Architectural Symbols' (190.13–14; cf. 180.6), Semper applies the cultural-historical approach of his 'Comparative Architecture', in which the much more extensive discussion of China, Assyria and Chaldea provides the basis for his present account (for the chapters on China in 'Comparative Architecture', see gta, 20-Ms-66, 149-97, ed. in Luttmann 2008, 455-90; for those on Assyria and Chaldea, see gta, 20-Ms-58, 38-121, ed. in Luttmann 2008, 372-417). The importance Semper attributes to China is due to his identification of primeval architectural elements in an advanced yet politically 'petrified Chinese civilisation' corresponding to a mechanistic, material-bound architecture that was 'never elevated from its common reality to higher symbolism and to the field of art' (as Greek architecture was), so that 'we may recognize in the buildings of the Chinese the wooden architecture of primeval times': 'The roof is an umbrella for the rain, the columns are supports, the supports are vertically standing trees, planed and painted' (gta, 20-Ms-66, after 189, ed. in Luttmann 2008, 604). This likens the Chinese house to Semper's Caribbean hut, in which – as he says in the previous lecture – 'The columns are trees and nothing else' (178.28). However, despite his contention, advanced in 1853, that Chinese architecture was 'arrested by a sudden torpidity' and thus became 'most elementary', comparable to the Caribbean hut (174.14-17), it is precisely this elementary perspective that leads him to say in 'Comparative Architecture' that 'the Chinese still remain our teachers in many things closely related to architecture, even when it comes to its formal aspects' (gta, 20-Ms-66, 152, ed. in Luttmann 2008, 456).

The exact sources for Semper's discussion of the relation between Chinese society and architecture are difficult to establish. He relies particularly on Guillaume Pauthier's *Chine* (Pauthier 1839) and William Chambers's *Designs of Chinese Buildings* (Chambers 1757), to both of which he refers in 'Comparative Architecture' and in the lecture (198.2–3). Further information is taken from other sources, some of which were included in a second volume by Pauthier, his *Chine moderne* (Pauthier 1853). As it would be speculative to try to identify these sources, we broadly refrain from mentioning possible works. All in all, Semper apparently proceeded directly from the draft of his 'Comparative Architecture', as some passages in the lecture that are translated literally from it suggest. Misspellings in the naming of persons and places also suggest that Semper used a fair copy (gta, 20-Ms-72) of his original manuscript (gta, 20-Ms-66), which he had received from Germany in 1851 and which contains the same misspellings. The notes on Egypt with which the draft lecture breaks off cover only part of the lecture as apparently intended to be held, since at the beginning of the next lecture Semper writes that he had 'explained in the last lecture the general idea laid down in the disposition of the Egyptian temples' (201.20–1).

190.3 were] we 190.11 lays] *lies* (see also 197.19) 190.13–14 l considered in my last lecture the fireplace as the Embryo of social forms ~ and the Symbol of ~ united vol-

ition.] see 180.5–14 190.13 social] uncertain reading 190.29 creddles] *cradles* 190.30 onesides] derived from German *einerseits*: *on the one hand* 190.31 othersides] derived from German *anderseits*: *on the other hand* 

191.2 foundators] merged from Italian fondatori and English founders (see also 191.13) 191.5 **priniple**] *principle* 191.8–9 **resorting**] *resulting* 191.15 **seasing**] seizing 191.19-20 **Bactrans**] *Bactrians* 191.26 inimities] derived from French inimitié: enmities 191.31 **merveillously**] merged from French *merveilleusement* and English *marvellously* 191.32 hundert] German for *hundred* 191.33 evenement] derived from French événement: event. Mallgrave has a blank and notes the word as illegible (Semper 1986b, 44 and n. 1). In Kleine Schriften, 'of such an evenement' is translated as 'eines derartigen Alleinherrschers' (of such an autocrat; Semper 1884, 354). 191.34-5 electiv imperor ~ Jao] Pauthier 1839, 35: 'Yao' 191.38 Sii] Pauthier 1839, 42, 45, 47, 52: 'Yu' (cf. 192.18: 'Ju') 191.40 Roc named Hong-**Chan**] 'Roc' derived from French *roc: rock*; actually a rock of the mountain 'Heng-chan' (Pauthier 1839, 53)

192.2-17 **O** our assistant ~ peace.] cf. Pauthier 1839, 53-4, and Semper's German translation in 'Comparative Architecture' (gta, 20-Ms-66, 165, ed. in Luttmann 2008, 465-6) 192.5 didges] dykes; cf. Pauthier 1839, 53: 'digues'. Mallgrave has 'ridges' (Semper 1986b, 45). On a later occasion in this lecture, Semper uses 'didges' for *ditches* (199.31). 192.7 **Tho-lou** Pauthier 1839, 53: 'Yo-lou' 192.10 **Tho**] Pauthier 1839, 53: 'Yo' **Thai**] Pauthier 1839, 53: 'Taï' 192.13 but my sorrows have not ended] In Semper's source, the sorrows have ended (Pauthier 1839, 53): '(Mon) affliction a cessé', translated by Semper into German in his 'Comparative Architecture' as 'Betrübniss hat aufgehört' (gta, 20-Ms-66, 165, ed. in Lutt-192.14 disturbances of natural forces Semper first had 'revolution' mann 2008, 465). instead of 'disturbances' (522, Alterations in the Manuscript 192.14). This corresponds to his contention that 'the Asiatic nations ... felt induced ... to regain by great national constructions the t[e]rritory which by the great revolution of nature, they had been obliged to abandon' (191.21–8). This 'revolution of nature' is counterbalanced by a social revolution in China, where 'Every revolution ... is made under the pretext of reviving the old institutions' 192.16 **seads**] *seeds* 192.17 **peace**.] The deleted continuation of this sentence, (192.21-2).'and can enjoy' (see 522, Alterations in the Manuscript 192.17), is the beginning of the translation of 'et pourront se livrer éternellement à la joie' (Pauthier 1839, 54). 192.32-193.6 Description of the Pallace ~ sunshine.] cf. Pauthier 1839, 54 n. \*, and Semper's German translation in 'Comparative Architecture' (gta, 20-Ms-66, 168, ed. in Luttmann 2008, 467) 192.35 port] portal laying lying

193.1 curt] court (see also 196.4) 193.19 Mongol] Mongols 193.20 Marco Polo's travels] Semper owned the German translation by August Bürck (Polo 1845); see 211.2, 215.23. 193.31 thre] three

194.2 **separed**] *separated* (see also 194.9) 194.12 **one**] own The] They lay lie 194.12–13 intrane] entrance 194.16 **suit**] *suite* (see also 194.26) 194.24 cannels] canals 194.27 Van-Sie] 'Van-Sui' in Semper's 'Comparative Architecture' (gta, 20-Ms-66, 173, ed. 194.28 indescriptible] French for *indescribable* 194.32 Confutin Luttmann 2008, 471) sie Confucius 194.34 guorderobes] garderobes. Mallgrave has 'barracks' (Semper 1986b, Offices for the different Courtcharges] This is Semper's translation of 'Intendanz 46). des Hofes' and 'Hofintendanz' (gta, 20-Ms-66, 174, ed. in Luttmann 2008, 472), which he translated first as 'Court intendances' (see 523, Alterations in the Manuscript 194.34). 194.37-8 marmorbridges] joined from German Marmor (here with minuscule) and English bridges: marble bridges 194.38 On a high hill is a buddha temple in form of a bottle.] In his 'Comparative Architecture', Semper similarly describes a monument on an island in a lake of Beijing (gta, 20-Ms-66, 175, ed. in Luttmann 2008, 473): 'A white obelisk in the shape of a bottle, called Pai-tha, stands on the summit.' This corresponds – with the exception of the words 'in the shape of a bottle' – to a passage in Pauthier's *Chine moderne*: 'le sommet est couronné par un obélisque blanc appelé *pai-tha*' (Pauthier 1853, 21; italics in original). Semper apparently identified the 'buddha temple' with a 'Ta' as described and depicted in the anonymous 'Essai sur l'architecture chinoise' – an eighteenth-century manuscript held in the Bibliothèque nationale in Paris, to which he refers in his 'Comparative Architecture' and later in *Style* (gta, 20-Ms-66, 176, 189, 192, ed. in Luttmann 2008, 474, 484, 487; Semper 1860/63, 1:244). In that manuscript, the 'Ta' are described as 'les espêces de Piramides dediées à Foë & aux Esprits'; the form particularly of the first of the visualized 'Ta' can be interpreted as that of a bottle (BnF, RESERVE OE-13-PET FOL, 1: unpag., pl. 125).

195.2 Tshin Chi Houang Ti] 'Thsin-chi-hoang-Ti' or 'Thsin-Chi-Hoang-Ti' in Semper's 'Comparative Architecture' (gta, 20-Ms-66, 160, 179, ed. in Luttmann 2008, 461, 476), 'Thsin-chi-hoang-ti' in Pauthier's Chine (Pauthier 1839, especially 213-15) 195.4 dis**solved**] Mallgrave has 'dispersed' (Semper 1986b, 46). 195.6 **Yu**] Zhou reconquished reconquered 195.10 Hien Yong] 'Hien-Yang' in Semper's 'Comparative Architecture' (gta, 20-Ms-66, 180, ed. in Luttmann 2008, 477), 'Hien-yang' in Pauthier's Chine (Pauthier 1839, especially 215–16) 195.12 rebuild] rebuilt 195.20 **board**] derived from French *bord*: *bank* 195.24 **created**] Mallgrave has 'erected' (Semper 1986b, 47). transplated transplanted 195.28 frensh] French lieux] lieues: French for leagues; cf. Pauthier 1839, 10 195.31 innerest] innermost

196.1 adultness] adulthood 196.1-2 **E contrary**] derived from Latin *e contrario*: on the contrary. Mallgrave has 'and contrary' (Semper 1986b, 47). 196.16 **nacked**] merged from German *nackt* and English *naked* **Stonemaçon**] joined from English *stone* (here with majuscule) and French macon: stonemason 196.20 **corniches**] French for *cornices* (see also 196.36) 196.25 mouveable shrines] *movable screens*; cf. Semper 1986b, 48 n. 5. In the essay 'On the Origin of Polychromy in Architecture', Semper says of Chinese architecture that 'The wall is only a screen' (68.21-2). In 'Comparative Architecture', he calls the walls in question at one point 'jene beweglichen Tapetenwände' (those movable paper walls) - he first wrote 'jene Charnierwände' (those hinged walls) - and at another point 'bewegliche Scheidewände' (movable partitions; gta, 20-Ms-66, 187, 191, ed. in Luttmann 2008, 482, 486). In the lecture 'The Ancient Practice of Wall Coating and Tubular Construction', he also describes the walls of the Caribbean hut as 'mouveable shrines' (127.21). 196.33 196.37 Dragonteeth] In 'Comparative Architecture', Semper mentions 'an stoned stone ornament difficult to understand, comparable to dragons' teeth' (gta, 20-Ms-66, 190, ed. in Luttmann 2008, 485; cf. Semper 1860/63, 1:254–5). sparheads] rafter heads; cf. 'Comparative Architecture' and Style (gta, 20-Ms-66, 189-90, ed. in Luttmann 2008, 485; Semper 1860/63, 1:254): 'Sparrenköpfe'

197.2 angels] angles 197.5 polygon] polygonal 197.6 sparrheads] rafter heads; see note 196.37 197.15–30 Chambers describes the house of a Chinese merchant at Canton as follows ~ hall. etc.] Semper here refers to the section 'Of the houses of the Chinese' in William Chambers's Designs of Chinese Buildings with its corresponding plates (Chambers 1757, 7–11, pls. 8–11) but retranslates into English most of his German digest from his 'Comparative Architecture' (gta, 20–Ms-66, 191–2, ed. in Luttmann 2008, 486–7). 197.15 describes] Mallgrave has 'depicts' (Semper 1986b, 48). 197.18 bad room] bedroom Elavation] elevation 197.21 et.] etc.

198.11 step] steppe 198.17-18 The nation ~ belonged to the 198.9 marchy marshy Semitic race] In 'Comparative Architecture', Semper differentiates the racial attribution of this first 'nation' of Mesopotamia as a 'people' belonging to the 'Syrian Semitic tribe', which was 'certainly mixed with other tribes from early on'. In a later revision, he replaced 'other tribes' with 'Arian and even Turanian (Mongol) and Cushitic (Ethiopian) elements' (gta, 20-Ms-58, 41-2, ed. in Luttmann 2008, 373). 198.21-4 Behold the land of the **Chaldaeans** ~ pallaces of the land.] In a first variant of this quotation of Isaiah, 23:13, Semper cites the English translation, which is also found in Layard's Nineveh and its Remains: 'Behold the land of the Chaldeans, says Isaiah, this people was not, till the Assyrians founded it for them that dwelt in the wilderness, They set up the towers thereof, they raised up towers thereof' (529, note 528.9-11; the second 'towers' is written erroneously instead of 'the palaces'; cf. Layard 1849, 2:238 n. ||). However, he subsequently adapted this translation for consistency with the German translation by Johann David Michaelis, which he also cites in his 'Comparative Architecture' (gta, 20-Ms-58, 43, ed. in Luttmann 2008, 374) and in The Four Elements of Architecture (Semper 1851b, 71 n. \*). He most likely knew Michaelis's translation through Arnold Heeren's Ideen über die Politik, den Verkehr und den Handel der vornehmsten Völker der alten Welt (Heeren 1824/26, 2:157; see 212.30-1). 198.32 subjets] subjects 199.16-22 The camp of Cyrus ~ Xenophon ~ heavy infantry.] 199.6 **devided** *divided* cf. Xenophon, Cyropaedia, 8.5.2-14, and 'Comparative Architecture' (gta, 20-Ms-58, 32-3; 20-Ms-62, 80, ed. in Luttmann 2008, 310, 577). 199.20 **Charotiers**] charioteers 199.22 **Oplites** *hoplites* 199.27-8 new discoveries made by Mrs Layard and Botta on the ground where ~ Ninive stood] 'Mrs': Messrs; for the respective publications, see 318, Ex-199.31 **480 Stadiums each side**] *120 stadiums* ~ ~ (see also 199.33); planatory Notes 51.29 cf. Herodotus on Babylon in Histories, 1.178, quoted by Semper in 'Comparative Architecture' (gta, 20-Ms-58, 45, ed. in Luttmann 2008, 375): 'The city ... has 120 stades on each side. For it is square. Therefore, it has a circumference of 480 stades.' unburnt] unbaked (see also 201.6) didges] ditches; cf. Herodotus on Babylon in Histories, 1.178, quoted by Semper in 'Comparative Architecture' (gta, 20-Ms-58, 45, ed. in Luttmann 2008, 375): 'In the first place, a deep and wide ditch flows around it, which is always full of water.' 200.10 **castels** *castle* 200.16 **terrae**] *terrace* 200.22 **kame**] *came* 200.24 pinnakels

pinnacles. Mallgrave has 'periwinkles' (Semper 1986b, 50). 200.26 terraced gardens or paradises] Mallgrave has 'Terraced garden. Paradises' (Semper 1986b, 50). Semper deleted 'or' by mistake in a sequence of alterations of the sentence which first read 'The hanging gardens or paradises were terrace works' (see 527, Alterations in the Manuscript 200.26). In the last lecture of the autumn term 1853, he similarly says of the Assyrian pyramid that it 'was connected with beautiful gardens, the so calld paradises' (177.7–8). 200.40–1 discoveries of Mr. Layard and Botta ~ on the ground of ancient Ninive] see note 199.27–8 201.14 sane] same 201.16–17 splendour military aristocray] ~ of ~ aristocracy. Mallgrave has 'splendrous military aristocracy' (Semper 1986b, 51).

### EDITORIAL EMENDATIONS

191.3 hieratical-linguage] hieratical- | linguage 191.25–6 family-alliances] family- | alliances 191.32 years] years | years 194.3 court-yards] court- | yards 195.21 double storied] double | storied 195.26 well known] well | known 197.18 bad room] bad | room 197.27 **bambu treillis**] bambu | treillis 199.20 **an other**] an | other 201.10 **mouveable**.] *before one-quarter page blank* 201.18 **two**] *before one-balf page blank* 

### ALTERATIONS IN THE MANUSCRIPT

189.21 We shall not be able] after two del. variant beginnings in opposite columns:

As every style of architecture is the artistical expression of the social<sup>1</sup>, political and religious condition of that nation or that age which invented the same style, We will not be able to conceive<sup>2</sup> any clear idea<sup>3</sup> about the individual character by which the different styles of architecture

I **social**] *after del.* whole 2 **conceive**] *repl. del.* make us make us] *above del.* have 3 **idea**] *above del.* notice

189.21 shall] above del. willunderstand the] in pencil repl. del. in pencil conceive the ideaandcharacters] s added in pencil189.22 systems] in pencil repl. del. in pencil styleshaving first gained] repl. del. havinghaving] after del. knowing189.23-4 to whom thesayd architectural styles were] after del. by whom those architectural forms were189.25For architectural monuments] after del.

For architectural monuments,<sup>1</sup> are in reality nothing but the artistical expressions of <sup>2</sup> the same Idea which was underlaiing<sup>3</sup> to those social political and religious institutions

I **architectural monuments**,] *after del*. all the *and before del*. which are so which are so *after del*. of which we know 2 **of**] *after del*. of the idea out of which resulted a certain out of which] *repl. del*. on which every society 3 **underlaing**] *'underlying*'

189.26 **same social**] *above inserted and del*. state of a nation institutions;] altered from ~\_ 189.26–8 **both** ~ older than both.] *repl. del.* and both together the *before del*. of a nation Idea.] *altered from* ~^ *before del*. based upon results of some social Idea. 189.27 **some absolute**] *above del.* some principle principle] before inserted in pencil and undel. of social order. (of social order. repl. del. in pencil which under certain conditions of higher necessity was just governing.) 189.29 **any**] *above del.* some 189.30-1 ordinances] after del. proportions of 189.31 of a style, *repl. del.* of the different architectural styles, 189.31-190.1 notions about the] repl. del. idea of the

190.2 principle] above del. Idea 190.3 But we are unhappily yet in a very great uncertainty] repl. del. But we are alltogether the learned as well as the unlearned, in a very great darkness] *undel*. 190.3-4 just about the most essential of these general darkness **notions**] *repl. del.* just about this most important subject just about] *undel*. 190.4-5 of whom very few remains] after del. who belong to the remote antiquity and antiquity 190.5 and historical evidences inserted repl. del. ages **existing**] *after del.* still 190.6 **precisely**] *interl*. also] *above del*. even 190.7 present] *interl*. 190.8-9 However ~ architecture.] repl. del. Nevertheless we must start from that point, and shall endeavour to explain the parts out of the whole feature of an Ensemble. 190.8 However this may be, I shall feel] *repl. del.* However this may be, I feel However this may be,] undel. I feel] above del. we are 190.9 the different forms] after del. some of the forms after del. the caracters of the 190.10–12 I give ~ some of them.] inserted after inserted and del. My conceptions about this subject after inserted and del. Even a fealure after del. on fols. 1v-2r

The following general conceptions about the different barbarian Styles of antiquity | are of my own and somewhat different from the views usually given about the same Subjects. –

190.10 **in every case**] *repl. del.* even where they fail, **some hold**] *after del*. at least 190.11 immense] interl. happen] above del. be 190.13 considered] above del. mentionned social] accompanied by H. T. Wegener's note in pencil social (cf. 517, Explanatory Notes 190.13) 190.15 The first social form] after del. The simple familiar constitution after del. The first social form was the family under partriarchical aggregating itselfs round this focus of humanity] *interl*. 190.18 existing.] after del. to be found. 190.19-20 it may allow some degree of progress in] inserted 190.20 ornamental arts] altered from  $\sim \sim$ , after del. there may be a certain development of ar[t] a] *after del*. great luxury and luxury, ] inserted 190.23 **suffered no essential** *repl. del.* was undergoing no 190.24 the different inserted 190.26-8 This political form ~ everywhere] repl. del. This political form of confederation, although it is the most natural and the most reasonable of states, we find it of states  $\sim$  everywhere] *undel*. 190.28 overthrown] after del. extinguished everywhere or *after del*. abolished and at a very early stage of history 190.29 **are the**] *after del*. form the 190.33 the large centers] *after del.* all civilization] *after del*. human 190.35 **very**] in-190.36 These principles] after del. The hierarchical principle serted our] *interl*. 190.37–9 The two mentionned principles ~ out of them.] inserted 190.40 **old**] *after del*. the and before del. feder 190.41 conservation] before del. of certain traditional forms of society 190.42 comprehensible enough, *repl. del.* the easiest to understand were **not**] *after del.* were not stamped and partly invested] repl. del. invested invested] before del. with

191.1 which has been] after del. which was a pure invention of the priests and [0] 191.2 **by** the priesterly foundators of this political system *inserted* 191.5 renders] above del. the explanation of *inserted* 191.6 rather inserted **douptfull**] *after del*. very makes aenigmatical] *after del*. difficult for explaining f[] aenigmatical although] after del. 191.6-7 the remainders] repl. del. we have more testiout of the ruined remains of the testimonies] after del. remainders (remainders altered from remaining) monies 191.7 are more important] inserted 191.8-9 The Egyptian monuments ~ India.] inserted 191.10 the despotical one] *interl*. 191.11 therefore] *interl*. its] repl. del. several **point;**] *altered from* points. 191.11-12 The old forms ~ different one.] inserted before inserted and del. But this last is easy to be understood by itselfs and the 191.12 entirely 191.12-13 but the dynastical] after del. but it is less inventi after del. on *above del.* whole fol. 3r Othersides it is less inventiv and therefore it comes that, although it retained but little of those general forms [ ] general] *repl. del.* social 191.13 of the new political form of **society**] *repl. del.* of it 191.14 circumstance] *interl*. 191.15-17 the meaning ~ principle of society.] repl. del. it.. it..] altered from ~^^ before del. and in the same time we find the oldest traditions of elements of architecture put together in a 191.17 architec-191.19 **Chinese, of the**] *inserted* 191.21 **traditions** *altered from* tradition tural inserted 191.22-3 agree together and concur in mentioning a] repl. del. begin with *after del*. old the remembrance of some 191.24 drove together] after del. shaked 191.24–5 in consequence of their common distress] below del. forcibly 191.25-6 family-alliances] after del. hostilities an 191.26 inimities] before del. and submitt to one man's command after del. order to stop] repl. del. to face 191.28 by the great revolution of nature,] inserted 191.29 submitting to one man's command;] inserted after del. great order 191.30 subordination] before del. which became] above del. was 191.31-4 The history of China ~ nation.] after five del. beginnings of variant in opposite columns:

But instead of developing farther

The<sup>1</sup> state of things which<sup>2</sup> an general revolution

I shall give You an example out of the old history of China which is authentically wittnessed by contemporary documents since more than three thousand Years before Christ,

The result of such a revolution for

In order to show<sup>3</sup> the result which must follow out of such a revolution for the form of society I shall give You an exemple out of the history of China, which last, most merveillously<sup>4</sup>, is ascertained

**The**] T over t 2 which] before del. must result out of such 3 show] before del. by an exemple 4 merveillously] merged from French 'merveilleusement' and English 'marvellously'

191.34 It] above del. andreign] repl. del. narrative191.35 Jao] repl. del. Hoang Tegeneral] above del. great191.36 overflown the whole China] repl. del. invaded Chinaand overflown above del. submerged191.39-40 an inscription] after del. There is still191.40 executed] after del. existingwas hewn into a Roc] repl. del. on the Rocinterl.Hong-Chan] before del. was remembering his workswas] inserted

192.2-17 O our assistant ~ peace.] inserted in right column of fol. 4v and in left column of fol. 192.4 **overflown**] *above del.* submerged everywhere] after del. as far as our 5r 192.5 **back**] *altered from* backward 192.10 restless] after del. The 192.14 disturbances *after* 192.17 **peace**.] *altered from* ~  $\land$  *before del*. and can enjoy [] del. revolution 192.18 Chun 192.19 **imperial crown**] *after del.* government and Ju] interl. 192.20 of the Dinasty Hia] *interl*. a golden age] *interl*. 192.21 Every] after del. All the institutions which were introduced at that time revolution] after del. restaurat 192.22 Jao.] before del. We must confess, that never greater things have been undertaken and fullfilled than by those three imperors. But the high Genius of these great Lawgivers has for all 192.23 These antiguarian reactions] *after del*. These endless reactions and antiguarian 192.24 one of **the**] *above del.* the **reasons**] *final* s *added* 192.25 So for instance has the above del. The **Jao**, *before del*. whose description we have, 192.26 **become** *repl. del.* is fundamental motif] before del. of every building in its 192.27 style] after del. arch arranged] repl. del. fixed 192.28 invariable] inserted 192.30-1 We are ~ following:] 192.32 **Yao**,] *before underl. and del*. the model Palace inserted 192.30 **an old**] *repl. del.* the for all the later works of house building in China. 192.33–4 the rains  $\sim$  coat of gras.] accompanied in opposite column by note in cursive script Ursprung der gebogenen Form der Chin Dächer Grün die Farbe des Kaiserdaches. Chin] 'Chinesischen' 192.35 triumphal 192.36–7 **opposite side**] *repl. del.* western End 192.37 hall, surrounded *after del*. arch with a wall, containing the public] repl. del. building or Saloon, where they held the 193.1 **balances** *repl. del.* wages wages] derived from German 'Waage': 'balances'; after del. weights 193.2 hall] above del. Saloon northern side of *repl. del.* western side of 193.5–6 **an audience**] *after del.* attend[a] 193.7 model of a pallace] repl. del. pallace

193.8-15 This is true ~ tiles.] inserted 193.10-11 we are told that] interl. 193.12 antiquity] *after del.* state of 193.13–14 shingle] *interl.* 193.14 of Jao's hall *interl*. 193.16 A striking contrast] *after del*. The form of makes] after del. is given 193.18–19 of the 193.19 13th 13 over 10 Mongol Cublai Chan] after del. Mongol Chan 193.20 travels.] after del. boo (for 'book') and before del. he says: he says:] before del. This pallace is the largest which has ever been seen, The roofs are exceedingly high. (roofs after del. ceil) 193.21 the Ensemble] after del. its arran 193.28 transverse] inserted 193.29 to above del. on 193.30 The City] after del. It has a large street in the center conducing from the outer Door to the Gates of the City. the outer] *above del.* one Gates] after del. inner 193.36 It is the residence ~ men] inserted 193.39 4] after del. 1 **City**] over in 194.4 **built**] *interl. after interl. and del.* made 194.8 parquets *after del*. floo 194.9 **again**] 194.12 from] after del. increasing gradually in hight by terraces from interl. in] undel. 194.14 **many**] *after del*. square 194.15 **halls**.] *altered from* ~, *before del*. for different different] *after del*. government. 194.16 **an immense**] *repl. del.* a Gateways or inserted 194.17 **terraces**, altered from ~^ after del. standing on high and before del. of white marble. ballustrades, bridges etc.] inserted 194.17–18 It contains] after del. The effect 194.18 northern] over eas (for 'eastern') on an elevated terrace] interl. **13**] over 11 194.20 last pavillon, after del. on fol. 7v end, 194.21 **all**] above del. the whole apartment *after del*. hab 194.23-4 Each lady has her own house *inserted after del*. These buildings These] after del. In 194.24 flowers] after del. and garden arrangements after del. are flower 194.26 But on the northern Side *after del*.

The Pallace for the mother of the imperor is in the western main division.<sup>1</sup> the Eastern division<sup>2</sup> contains<sup>3</sup> the pallaces for the princes.

Behind the private appartments of the Imperor is a forteenth division with a very large hall and then comes the last, over the northern Gateway of the Pallace. The houses<sup>4</sup> On the other Side of the Street belong to the imperial town and not more to the Pallace. but there is a large bridge of marble communicating with the pallace and the imperial Garden outside the wall. of the Imperial town.

I division.] altered from  $\sim h$  before del. which 2 the Eastern division] interl. 3 contains] before del. also 4 The houses] interl.

194.28 private] interl. 194.27 **pavillon**] *after del.* main edifice richness<sub>A</sub>] altered from 194.29 forming a large square surrounded with a wall. *inserted* 194.30 **east**] after ~. Pallace] before interl. and del. are quite of 194.33 theaters;] after del. pallaces *del*. right belonging to the imperial Service. and *after del*. Each of these singel parts is enclosed by walls and before del. surrounded with fine gardens. 194.34 Offices for the different 194.34-5 the Chancery etc.] inserted before **Courtcharges**] *after del*. Court intendances 194.35 Westside,] altered from ~~ before inserted and del. corresponding to the del. etc etc. eastern division of the pallace *repl. del.* of this waste ensemble waste *'vast'* [arge] interl. 194.38–9 **bottle.** —] *before del*.

Very great monotony exterior military order.

Existing laws<sup>1</sup> for three things, the number of courts, the height, depth and length of the dwellings, the form of the walls and roofs. Every Stand<sup>2</sup> and grade has to observe the rule prescribed for him<sup>3</sup>

Tchao-Ting<sup>4</sup> shreen<sup>5</sup>.

I Existing laws ~ Tchao-Ting shreen.] cf. Semper's 'Comparative Architecture' (gta, 20-Ms-66, 176, ed. in Luttmann 2008, 474–5): 'The laws distinguish between three things in the dwellings: the number of courtyards, the height, length and depth of the buildings, and the shape and colour of the roofs and walls. The hierarchy of the classes is combined and arranged in accordance with these, from the citizen to the scholar, from the scholar to the mandarin, through all of the grades up to the Emperor. This gradation is so clearly expressed that one can see from a building who lives in it. However, since degradations, promotions and the awarding of new degrees of rank would make the observance of this law very difficult ... an attempt has been made to circumvent it by devising the so-called Tchao-Ping or Tchao-Hiang. These are isolated screen walls that are erected at a certain distance in front of the main entrance door.' 2 Stand] German for 'class' 3 him] referring to male German nouns 'Stand' (class) and 'Grad' (grade): 'it' 4 Tchao-Ting] 'Tchao-Ping' 5 shreen] 'screen'

195.1 **constructions**, *after del.* architec *and before del*. which were 195.5 under the above last feable] *repl. del.* feable 195.11 He made] after del. This Pallace was *del*. of the composed out of as many made] repl. del. ordered to make drawings] above del. cop-195.12 **rebuild** *after del.* to 195.13 **furnishing them**] *after del.* to furnish them with ies all the richnesses which they contained and all ~ and] *undel*. 195.14 forcing] *above del*. ordering 195.16 **courts**] *after del*. court-arrangement 195.17 **as**] *interl. after del.* how we have seen are *interl*. 195.20 **on**] *after del.* along 195.22 He] after del. The same Imperor ordered his 195.23 principle.] before del. The plan which he followed was an imitation of the constellation of heaven; Each Pallace was a Star 195.25 into after del. to 195.27 which after del. an undertaking from the Gulf after del. on fols. 9v-10r round the frontier | of China the yellow sea] after del. Liao-Tung 195.29 This was only *after* del. This was only an extension of the same principle of despotic architecture, which we have of the Idea] after del. of an Idea owed to one of the first of the same principle] of *undel*. imperors, of the Year bef. Chr. 2200, who divided to one ~ who divided] undel. 195.31 **concentric squares.**] *after del.* circles. or 195.32 imperial] after del. Roy 195.33 between the second and] accompanied by possibly Hans Semper's note in ink + **for**] *after del*. 195.35 **outlaws**] *after del*. Exi 195.37 One and the same Idea prevails filled up by after del. The same principle is **Chinese**] *repl. del.* manifestations of Chinese 195.39 **bands**.] *altered from* ~^ *before del*. without any organic and [] 195.39-40 the military 195.40 **development**,] *altered from* ~^ *before* and despotic system of order. *inserted* del. of the greater individuals out of the smaler and simpler unites; unites] *'units'* 195.40–196.1 no growing up ~ adultness; *inserted* 

196.1 of Childhood] after del. into that of completedness196.2 simpler] repl. del. simplestsimplest] st over rspecimens] after del. unitsof architecture] interl.196.3 pallaces;] altered from  $\sim h$  before del. and follow the196.3-4 The houses  $\sim$  scale, with]inserted196.6 If we look at] after del.

If 'we look to the constructiv parts and the details of Chinese architecture, we find the same individualising <sup>2</sup> principle <sup>3</sup>, bound together by exterior <sup>4</sup> order and

I If *after del.* But there is one great principle of individuali *after del.* Vice versa are the 2 individualising *interl.* 3 principle *before del.* of indivi- | duals duals] *undel.*4 exterior] *after del.* outer

196.7 **again encounter.**] repl. del. find **principle.** –] altered from  $\sim \land \land$  before del. of individua of] after del. again 196.9 **primitiv and material sense.**] accompanied in opposite column by inserted and del. But the whole forms an aggregation of 196.10 **roof;**] altered from

~, *before del*. which has nothing in common wit[h] 196.10–11 without capitals or bases. and without Entasis. *inserted* 196.12 The terraces] after del. The walls are mostly mouveable partitions or at least do they represent such partitions; Stone which is generally hollow. - . and before del. only partitions;] *altered from* ~, *before del*. even where they are constructed out of brickwork. these constructions] *after del*. the woo stand] repl. del. are placed **sometimes**] *repl. del.* generally 196.13 mouldings^] altered from ~, and rusticated work, *inserted* 196.13–14 very much different] after del. d[i] 196.14 Greec and Roman] after del. Roman 196.16 nacked stone and the inserted 196.17 itselfs;] altered from ~^ before del. which never **shows itselfs.**] *repl. del.* showed itselfs; 196.18 are] *before del.* made 196.19 hollow brick] after del. bric[k] construction, **covered with Stucco**, *repl. del.* and covered with painted ornaments imitating painted] 196.21 are real or painted *repl. del.* are 196.21-2 bambutreillis after del. coloured **work**] *after del.* treillis work of bambu 196.23 **and**] *above del.* or draperies, altered *from* ~^ *before del.* with Embroideries. or like inserted 196.24 embroidered carpets] 196.27-30 The outer walls ~ pavillons.] inserted after del. and 196.29 placed betveen] after del. fixed between the walls 196.30 for small pavillons] after del. which takes takes] after del. is the case 196.31 **The roof**] *before del*. shows the 196.33 The **covering is of**] *after del*. The tyles are of rather *interl*. 196.34 colours; altered from ~, *before del*. which are **The form of**] *after del*. The mode of co *after del*. Every condition of 196.35 Ancient Greecs and Romans.] *after del*. Greecs. 196.36 corniches are] life has 196.37 at other cases.] inserted *after del*. columns have

197.4 on stone] *repl. del.* on 197.5 terraces.] *altered from* ~∧ *before del.* of the building. 197.7 The thickness] *after three del. beginnings of variant:* 

Every Story has its own system of columns and f<sup>1</sup> When there are different Stories A<sup>2</sup> house which has more<sup>3</sup> than one story,

1 f] undel. after del. nat[] 2 A] over a after del. In 3 more] after del. different

197.8 policy] after del. laws A] above del. Every 197.13 Thus, in this country] after del. on fol. 12r

Thus all is settled by law,<sup>1</sup> in this country<sup>2</sup> where the maintenance of <sup>3</sup> the principles of beauty and aesthetics is <sup>4</sup> overwatched by<sup>5</sup> police-men<sup>6</sup> and constablers

1 law,] before del. for every sort of construction has its own proportions; the aesthetical laws of the 2 in this country ~ constablers] inserted 3 the maintenance of] inserted
4 is] above del. are 5 overwatched by] del. separately after del. prescribed by w[] after del. prescribed by policemen 6 police-men] police- | men

197.13 the principles] after del. all is 197.16–17 on each side] after del. into 197.19 staircase.] altered from ~ before del. for the ups 197.20–1 bambuplants] after del. and 197.21 vases,] inserted 197.24 Grondfloor] after del. lower floor 197.26 walls] before del. are 197.32 buildings.] altered from ~ before del. which lay 197.34 tradesmans] final s added house] interl. columns] before del. allowed for his house. he 197.35 professional] after del. learned 197.36–7 of giving] repl. del. of 198.2 **pittoresque**.] *altered from* ~^ *before del.* tome 198.9 in before del. sum (for 'summer') **spring**] *after del.* early time of the 198.10 ground *interl*. for the neighbouring tribes *after del.* of the 198.13 **energetic**] *before del*. preparatory 198.15 **It**] altered from it after del. Besides its richness of ground of old] interl. after interl. and del. before the 108.16 lands.] before inserted and del. Being 198.27 **know**] *repl. del.* see of history *interl*. 198.28 conquest, altered from ~. altered from ~. by a above del. A A] over a after del. and 198.29 military and *inserted* 198.32 language, dresses and habits] repl. del. languages and manners languages] *interl*. 198.33 was the cause] *after del*. had brought their 198.38 **period**, *altered from*  $\sim \wedge$  *before del*. of the history

199.1 conquest of after del. Persian and before del. the Assyrian plane plane] 'plain' Assyria by the Persians *inserted* 199.10 families of the old *inserted* vainguished **race**] *after del.* inhabitants of the con[q] 199.14 of vassals,] repl. del. of curtisans, curtisans] derived from French 'courtisan': 'courtiers' 199.16-17 The camp of Cyrus ~ follows.] repl. del. on fol. 15r-v To this we must at once add the description which the same Greec writer, Xenophon, | gives of the Camp of Cyrus. It was, according to him, 199.17 **arranged as**] *after del*. ordered as staff] before del. and the silver armed guards were erected] after del. formed an elevated Square 199.18 terrace inserted 199.19 life guards] after del. silver armed 199.20 men] inserted 199.21 last] before del. and st 199.23 **Thus**] *after del*. And the architectural principle, altered from ~^ 199.23-4 that of subordination order and strength *inserted* 199.25 Architecture.] altered from ~^ before four del. beginnings of variant:

only with that difference [b]

with<sup>1</sup> the p[]

But the Assyrians; being more exposed to invasions than the isolated Chinese, were induced to make fortresses<sup>2</sup> of great strength out of their houses.

But the inhabitants of Assyria were more warelike<sup>3</sup> than the Chinese and []

r with] before del. the difference that 2 fortresses ~ houses.] repl. del. stronghold out
of their houses 3 warelike] 'warlike'

199.27 **new discoveries**] *after del.* newly discovered remains of some of] *undel. after del.* confirm 199.29 **Herodotus on Babylone.**] *after del.* Herodotus on Babylone. 199.31 **unburnt**] un *interl.* 

200.I-3 The walls ~ bronze.] inserted in opposite column without insertion mark, starting alongside the manuscript line Asphalt. didges round. at 199.31 200.1 were] *repl. del.* had 400 feet] after del. 200 Yar (for 'Yards') tops of *interl*. 200.2 town gates above del. doors 200.3 and frameworks of the door *interl*. 200.7 **Behind**] *above del*. Between an other wall] *before del*. of less hight. 200.8 occupied with the tents of the *above del*. for **caravans**,] *before del*. foreigners. and tents 200.10 **castels**] *final* s added 200.11-12 on a very elevated terrace  $\sim$  dominated by it – *inserted in opposite column after del.* very elevated over the very elevated over the] inserted in opposite column without insertion mark beside the manuscript line town was a royal castels. at 200.10 200.11 town] *after del*. nev nev] 'new'; above del. whole 200.12 **ancient**] *above del*. old Belus] after del. old con-200.13 Sanctuary of Belus] before del. (tower of Babylone). tains] above del. with 200.14 tower of Belus] *before del*. (known 200.14–15 square ~ terraces.] *repl. del.* one stadium high and one each side of the square 200.16 top of. the] after del. highest and *before del.* terrace **the statue**] *repl. del.* the coloss 200.18 The royal Castel] after del.

Ninive was build<sup>1</sup> in the same system and nearly of the same extent<sup>2</sup>.

It was built by Ninus, who called the richest inhabitants of the country together to live therein.

His queen<sup>3</sup> build<sup>1</sup> the tomb of the king at the end of the pallace, which was of the same form with that at Babylone.

I build] 'built' 2 extent] before del. with Babylone 3 queen] 'widow'; i.e. Semiramis

200.19 The second wall] after del. 60 Stadium200.25 moved] after del. op200.26terraced gardens] repl. del. hanging gardenshanging gardens] after del. Theor] del.paradises] after del. paradysoswere] before del. terrace works200.30 70] above del. 100200.31 Each terrace] after del. The substructions of after del. The whole was like an amphi-theater32 feet] after del. only200.33-5200.36 The spaces] after del. The light200.40 plans] after del. very

201.4 with isolated buildings] *after del.* of sma of] *above del.* with 201.12 Egyptian institutions] *after del.* The same difference [] before] *after del.* long *after del.* Pri 201.12–14 the monarchical power ~ Christ.] *inserted* 201.12–13 monarchical] *interl.* 201.13 power] *before del.* of the kings 5 or] *inserted* 201.16 splendour] *interl.* 201.18 The difference] *after del.* The same difference is visible in the development of styles. is] *undel.* 

## MANUSCRIPT VARIANTS MS 145

want of invention; no organic life

5

The same in the constructiv parts. No symbols but realities. Symbols only relating to the caracter of the inhabitant, not to the function of the parts of the construction. details of a house, the different elements not working together. Each for itself no columns but only supports. Antique mode of covering the roof.

- Great Restaurator of the Monarchy of China, Tshin Chi-Houang Ti. (249 bef. Christ.). The land had been dissolved into many independent states, He vainquished all the independant Vassals of the Empire and destroied the aristocratical power of the learned men a sort of priesthood, which made opposition to his system. He gave an architectural expres-
- sion to his Idea, in the foundation of a new capital or Pallace Hien-Yong. He ordered to make copies of the pallaces of all the independent vassals of the Empire which he had vainquished and killed and to rebuild them on the place of his Residence, and to furnish them with all the furnitures and richnesses they contained. and to unite them in a general place with Galleries and courts. In one of these courts was place for 10000 Soldiers. He
- destroied the old town to give place for his new work, (like Nero did after him,) so the whole became one immense pallace. |
   The land whose monumental remains will occupy us now is that vast alluvial plain, watered

by the Tygris and Euphrates, which extends from the Persian Gulf to the foot of the Armenian hills, unbroken by any single eminence.

20 It was once, what it is to day, a marshy prairie, being for a short time the common pasture ground for the tribes of the neighbouring montains and for Arabs, but for the rest of the year a morass, or a dry desert without water. fol. IV

It is the most fertile ground in the world but its richnesses must be gained from nature by energetic preparatory works, which can not be carried out except by great national Enterprises.

Besides its great fertility it is, or it was the great commercial Overland way between India and the western seats of ancient culture, the two rivvers affording the means of easy and expeditious. communication. – The nation, which, as far as we know, first had taken possession of this land and gained it from nature, belonged to the Semitic Race; It appears in the oldest records as an enterprising luxurious and somewhat overbearing nation.

Behold the land of the Chaldaeans, this people was not till the Assyrians dammed up the land for them, that dwelt in the wilderness; They transformed the tents of the nomads into solid settlements and raised the pallaces of the land.

The first records of this nation are again, like in China, speaking of a great deluge which gave the Occasion for the great work of civilization; they mention a certain Xithurus and his followers as the foundators of the Assyrian Empire, whose history closely ressembles to that of Noah.  $-\frac{1}{2}$ 

*fol. 20* This may be as it will, we see the land since the beginning as one governed by military institutions founded on the right of conquest.

Its history is the continual repetition of the same political event, the submission of a highly cultivated but luxurious and enervated nation by uncivilised but energetic invaders, who take possession of the land, adopt a great part of the institutions of their new subjects, and soon fall into the same state of political and moral relaxation, which | them.

There is a certain periodical regularity perceptible in the succession of such events for the history of the contries in question, like in that of certain natural phaenomena; and they fullfill their regular curse in the same manner. What applies to one period of the history of the land holds also good for the precedent periods as well as for the followig

The Persian conquest for instance is one of the later revolutions of the country, but the instructions, which Cyrus, the Persian conqueror gave to his satraps, contain in a few words the essence of the political state of the land as it was ¦ before him under former despots and as he restored it to the advantage of his own conquering race.

He devides the provinces between his generals and relations; to govern the subjects, to collect the taxes, to pay the Garrisons etc.

He recommends them to follow his exemple, and to create a military nobility with their friends and the first inhabitants of the province;

To establish a rigid court-ceremonial, to give regular audiences to the great proprietors and houseowners, to invite them to large dinner- and hunting parties – a. s. on. and so on. – Who in proportion to his fortune, he continues, entertains te greatest number of courtisans, horsemen and charioteers, will be my best friend and the boldest support of my empire.

527.1 want of invention; no organic life] accompanied by note in pencil ad. 9. (referring to MS 144<sup>1</sup>, fol. or with page number 9; 195.1–16) ad] Latin for 'to' want] after del. conglomeration of the same elements wi 527.2 but] after del. except such as have no relation to the ornamented part but. ornamented] after del. structural 527.3 caracter] after del. function] *after del*. structural dignity details] after del. Description of the 527.4 the different elements not working together] cf. 127.20-3 527.4-5 no columns but only supports] cf. 127.27-9 527.5 Antique mode of covering the roof] cf. 162.21-2 527.6 Restaurator] German for 'restorer' Tshin Chi-Houang Ti] see 518, Explanatory 527.7 many] above del. feudal He] after del. each in consequence of the Notes 195.2 527.8 Empire] after del. kinddom abno in] *undel*. kinddom] 'kingdom' 527.9

fol. 2r

fol. 3r

fol. 30

5

10

15

20

25

30

35

made] above del. was in He] after del. He was a g[] 527.10 Hien-Yong] see 518, Explanatory Notes 195.10; after del. at 527.12–13 and to furnish them] interl. 527.13–14 a general place] before del. extending to an immense d[] 527.14 Soldiers] after del. men 527.17 The land] after del. W after del. The land, whose monumental antiquities will occupy us to day, is an immense after del. Assyri after one-eighth page blank 527.18 Persian Gulf] after del. road Sca road] 'Red' 527.20 It was once] after del.

It was once what it is to day, a marchy<sup>1</sup> prairie, being covered wholeover for a short time of the Year with luxuriant grass, then being the common pasture ground for the mountaineer and Arabian tribes of the neighbourhood, but for the rest of the Year

#### 1 marchy] 'marshy'

527.20 time] before del. of the Year 527.21 montains] 'mountains'

528.1 most fertile] after del. richest and but] after del. but nature wants to be 528.2 except] after del. by single families hand and afford a great national 528.4 is, or it was] inserted before del. is very favorably situated for commerce, being commercial] inserted India] after del. Eastern Asi[a] 528.5 ancient] after del. civil culture,] repl. del. civilisation, 528.6 communication.–] altered from  $\sim \land \wedge$  before del. between 528.7 gained] after del. founded nature] before del. by its energy its energy] after del. great canalization and great 528.7–8 It appears ~ nation.] inserted 528.9–11 Behold ~ land.] inserted after one undel. variant and two inserted and del. beginnings of variant:

Behold the land of the Chaldeans, says Isaiah, this people was not, till the Assyrians founded it for them that dwelt in the wilderness, They set up the towers thereof, they raised up towers thereof. –

Behold the land of the Chaldaeans, this nation<sup>I</sup>, which not long ago was not a nation, Behold the land of the Chaldaeans, this people was not, till the Assyrians dammed up<sup>2</sup> the land,<sup>3</sup>

I nation] *above del.* people 2 dammed up] *after del.* secured the 3 land,] *before del.* and gave it to the inhabitants of the

528.12 The first records ~ speaking] del. and then underl. with dots cancelling deletion The first records] after interl. and del. It is remarkable after interl. and del. Here, like in China, 528.13 great] after del. people who 528.13–15 they mention a certain Xithurus ~ whose history closely ressembles to that of Noah] cf. Layard 1857, 342 n. +528.13 Xithurus] usually spelled Xisuthrus' 528.14 foundators] merged from Italian 'fondatori' and English 'founders' 528.16 This] after del. on fol. 2r To whatever origine th after del. Whatever origine after del. This land has been the after del. Whatever beginning] before del. of history 528.18 Its history is the] inserted after seven del. beginnings of variant:

The history<sup>1</sup> of it is a continual repetition<sup>2</sup> of conquests Its favorabl Its position and high culture [] Its fertility high culture and happy position as the main commercial road maid<sup>3</sup> it the aim for the uncivilised tribes which dwelt around it, and its history is a continual record of

for the uncivilised tribes which dwelt around it, and its history is a continual record of conquests which last had their regular It allways was the aim for

One conques The history of it<sup>4</sup> is a I history] after del. whole 2 a continual repetition] after del. nothing but the Chronicle of c[o] 3 maid] 'made' 4 it] over A (for 'Assyria')

528.18 political] after del. occur 528.20 land,] altered from ~~ before del. and having no elements of **adopt**] altered from adopted after del. adopted most of the institutions adopted most of the institutions] repl. del. adopted the institutions. the language and the vices 528.21 which] 'with'; before del. had 528.22 There] after del. The succession of such political events is a regular as certain natural phanomena, which The] repl. del. The regularity in the a] 'as' 528.24 fullfill] above del. make curse] 'course' 528.26 The Persian conquest] after del.

The Persian Conquest for instance was one of the later revolutions<sup>1</sup> of the country<sup>2</sup> – nevertheless the constitution<sup>3</sup> which Cyrus, the Persian Conqueror, gave to his empire, and which the Greec author Xenophon

I was one of the later revolutions] repl. del. was one of the later periods2 of thecountry] after del. of the history3 constitution] after del. principle of Cyrus inconstituting

528.26-7 instructions] after del. order after del. following 528.27 contain] after del. is the true [ ] 528.28 essence of the] above del. whole 528.29 conquering race.] after del. is the true [ ] 528.28 essence of the] above del. whole 528.29 conquering race.] after del. race. 528.30 devides] 'divides' provinces] after del. land between his] after del. among his 528.32 create] above del. form a military nobility with] repl. del. a cortege out of 528.39 province] after del. country 528.34 To] after del. To call the first of the p rigid] repl. del. regular 528.35 a. s. on.] interl. and so on] after del. to after del. in a word to 528.36-7 Who ~ empire.] accompanied in opposite column by del. I shall consider that of my servants the 528.36 te] 'the' courtisans] French for 'courtiers' 528.37 will] above del. may

# Explanation of the Expression of Spatial Arrangements in Architecture

### **TEXTUAL RECORD**

$MS_{I44}^2$	gta, 20-Ms-144, fols. 18v–30v (20v–30r blank; 30v sketches of plan of Baby-
	lon and of elevations and sections of Belus pyramid in pencil, calculations
	in pencil), in Semper's hand, dated 6 December 1854, <i>copy-text</i>
MS 146 <sup>2</sup>	gta, 20-Ms-146, fols. 12r-14v (14r-v blank), in H. T. Wegener's hand
	(emendations in Manfred Semper's hand), 1880 or 1881, copy of MS 144 <sup>2</sup>
Semper 1986b	'London Lecture of November 29, 1854', 43–53, here 51, 53 (additional sec-
	tions: ed. of MS 144 <sup>1</sup> ; see 515), Mallgrave's ed. of MS 144 <sup>2</sup>

BIBLIOGRAPHY Herrmann 1981, 38, 113–14, 172; Herrmann 1984, 150

### EXPLANATORY NOTES

Dated 6 December 1854, this draft lecture provides the reference point for the dates of Semper's lectures in the autumn term of 1854. It refers to the previous lecture in relation to 'the general idea ... of the Egyptian temples' (201.20-1), and it starts on the same manuscript sheet on which the draft of that lecture ends. Our lecture title is derived from a misleading phrase in the draft: 'Explanation of the Expression of local arrangements' (202.3). The context reveals that the word 'local' should read spatial here. Semper's overview of Egyptian temple types - from the simple, uncovered courtyard enclosure to the many-layered basilica - is concerned with a developmental quality in Egyptian architecture which he mentions in the last of the lectures given in 1853 (174.34–176.10) – borrowing from his discussion in The Four Elements of Architecture (Semper 1851b, 74-8) and in 'Comparative Architecture' (gta, 20-Ms-68, 15-28, ed. in Luttmann 2008, 528-35). In the latter, he contends that 'an Egyptian sanctuary' bears 'the clearest signs of a gradual emergence and expansion' (gta, 20-Ms-68, 15; see 499-500, Explanatory Notes 177.30-178.19). This leads up to a declaration of the importance of the last of the Egyptian temple types, the basilica, as 'the actual key for the entire history of architecture' (gta, 20-Ms-68, 28; cf. Semper 1851b, 103): 'Almost no new internal combination is possible since the Egyptian hypostyle basilica became the richest architectural form. Only it could take shape more freely, where the material and the external constraints no longer set the same narrow limits. This happened under the Greeks and Romans, but especially in the Christian basilica. Later on we will have to say what is necessary about the striking kinship between the fully developed Gothic basilica and the Egyptian temple complexes in terms of the idea and its general expressions.'

201.21 kernet] *kernel*, here misused for *core* 201.22–3 **erected**] Mallgrave has 'created' (Semper 1986b, 51). 201.26 **local**] *spatial* (see also 202.3, 202.14) 201.28 **foundators**] merged from Italian *fondatori* and English *founders* **policy**^**religion**] ~, ~. Mallgrave has 'policy in religion' (Semper 1986b, 51). 201.30 **adapted**] Mallgrave has 'adopted' (Semper 1986b, 51).

202.4 precinction] for Semper's understanding of 'precinction' as enclosure, see 202.5 ('mere precinctions'), 202.13 ('precinctions or fenced open courts'), 202.17–19 (a series of synonyms: 'precinctio', 'presaepium', 'fence'); cf. Semper 1986b, 51 n. 9 architure] uncertain reading, architecture; cf. 533, Alterations in the Manuscript 202.4 202.5 solid] Mallgrave has 'Jewish' (Semper 1986b, 51). **eastern**] *Eastern* (see also 202.6) mere] Mallgrave has 'new' (Semper 1986b, 51). 202.6 protection on terraces] 'on' uncertain reading. Mallgrave has 'protection or terraces' (Semper 1986b, 51). The phrase can be seen in relation to a preceding alteration in which Semper first wrote 'mere precinctions of terr' (for 'terraces') and then deleted 'of terr' (see 533, Alterations in the Manuscript 202.5). In his theory, the protective enclosure and the terrace are two of four distinct architectural elements - the enclosure is not built as a terrace but on a terrace (Semper 1851b, 54-5, 55 n. \*). 202.7 yet] Mallgrave has 'get' (Semper 1986b, 51). 202.9 floggs] flocks 202.11 obtained] Mallgrave has 'attained' (Semper 1986b, 51). 202.12 canevas] French for canvases 202.13 such] Mallgrave has 'each' (Semper 1986b, 51). 202.15 architectural architecture. Mallgrave has 'architectural (planning)' (Semper 1986b, 51). 202.17 **precinctio**] *precinct*; cf. note 202.4. In Vitruvius, De architectura, 5.3.4, 5.6.2, 5.7.2, the Latin word praecinctio denotes a diazoma a horizontal, semicircular gangway that separates an upper from a lower block of seats in a 202.18 presaepium] praesaepium: Latin for enclosure 202.20 wholy wholly theatre.

202.21 οἰκημα] οἰκημα (oikema): Greek for room or house, here used in the first sense. Mallgrave has 'oiazns' (Semper 1986b, 53). 202.22 cubiculum] Latin for room or chamber 202.25 peristyle] H. T. Wegener, who copied MS 144 for Manfred Semper (see 515, 530), noted 'Webster' below the word 'peristyle' (see 533, Alterations in the Manuscript 202.25). In a letter dated 13 December 1880 (gta, 21-K-1880-12-13), he wrote to Manfred Semper: 'I would like to draw your attention to the fact that some words in the manuscript are not spelt as prescribed by "Webster's Dictionary" (recognized as the standard dictionary in England and America), and I have therefore taken the liberty of making a few changes in this respect, e.g. temple for tempel, tabernacle for tabernacel, constructive for constructiv, lions for lyons, through for throu, etc.'

203.I-2 combination of 4 and 5. tempel of. Lucsor] 'Lucsor': Luxor. Semper's sketch suggests a combination of the types 3 and 4 in one spatial unit. However, the plates in the multivolume work Description de l'Égypte, which Semper knew – he listed it in 'Practical Art in Metals and hard Materials' (Semper 2007a, 77; cf. Semper 1860/63, 2:187) - show, starting from the entrance, a sequence of the types 3, 4, 3, 2b, 1 and, in the rearmost area, a dense cluster of the types 2a and 2b (Description de l'Égypte 1809/22, sect. 'Antiquités' 7: pls. 5, 7–10). 203.7 **heving** *having* 203.11 large writing tables. formig a kind of lock] Mallgrave has 'A large writing tablet, forming a kind of book' (Semper 1986b, 53). Semper first wrote 'A large writing table' and altered it to 'large writing tables' (see 533, Alterations in the Manuscript 203.11). Treating Egyptian architecture in the last lecture of the autumn term 1853, he says that the two pylons framing the entrance formed 'like a lock of a bracelet the End and the beginning of the Enclosure' and were 'intended ... to be a tablet for inscrip-203.15 trochleus pulley] The Latin word trochlea means winch or, as tions' (176.4–10). translated by Semper, pulley.

### ALTERATIONS IN THE MANUSCRIPT

### 201.20 lexplained] after two variant beginnings del. in ink and pencil, respectively:

I explained in the last lecture how<sup>1</sup> the Egyptian temples affected in their general disposition to be works grown

I explained in the last lecture the idea<sup>2</sup> laid down in the general<sup>3</sup> disposition of the Egyptian temples by their foundators<sup>4</sup>, who affected to make their work<sup>5</sup> appear like aglomerations<sup>6</sup> round an invisible cernet<sup>7</sup> gradually grown up on the ground<sup>8</sup> itself where it stood and <sup>9</sup> as being still capable of indefinite ingrandisment<sup>10</sup>;

But<sup>11</sup> it remains now for us<sup>12</sup> to show how they succeeded in the same time to give a high degree of organic deve

**<sup>1</sup> how**] after del. how the disposition of the Groundplan of a disposition] after del. Egyptian temples affected in their **2 idea**] after del. general disposition and idea followed by the **3 general**] interl. **4 foundators**] merged from Italian 'fondatori' and English 'founders' **5 their work**] above del. them **6 like aglomerations ~ cernet**] repl. del. as a work as] undel. 7 **cernet**] 'kernel', here misused for 'core' **8 on the ground**] after del. out of a small and after del. round an after del. gro **9 and**] after del. and quasi like a

peace of Aegyptian nature. peace] 'piece' 10 ingrandisment] merged from French 'agrandissement' and Italian 'ingrandimento': 'enlargement' 11 But] after del. While after del. It remains now to give an explanati[0] 12 for us] interl.

201.20 general] interl. **disposition**] *after underl. and del.* general 201.21 **who**] *interl. in* pencil after del. in pencil whose foundators made them foundators] merged from Italian 'fondatori' and English 'founders' them] *above del*. their works 201.22 **sanctuaries**] ies above del. v **Gods**] *altered from* God *after del*. Divinity to the honour] *after del*. which were *after del.* to whose honour it was e 201.23 **the Aegyptians**] in pencil repl. del. in pen*cil on fol. 18v* they succeeded] after del. on fol. 18v succeeded in the same time in giving to them a highly developped in giving] after del. in giving a truly organic inner development to these works, and in (to *undel*.) 201.24 giving to these agglomerations *after del*. of walls *interl.* in pencil **an**] n added in pencil organizing them organic] after del. 201.25 first inventors of *after del.* inventors of *almost interl. in pencil* more 201.26 201.27 having] in pencil repl. del. in pencil and which have which still *after del.* and **augmented**] *after del.* since the time of the Aegyptians 201.28 architecture.] before del. And we must add that they have only been de that] before del. the made Explanation of the expression lecal arrangement (lecal arrangement: 'spatial arrangement'; underl.) 201.30 who adapted] after del. how had not the same richnesses how] 'who'; after del. who knew not and

202.1 arrangements, before del. which were grown in the temple architecture of this n[a]which] *after del.* and called them wit[h] the] *undel*. 202.I-2 the greec templestyle after del. the Greec temple architecture being much less rich in such 202.4 **for**] over in architure] altered from architer 202.5 precinctions] before del. of terr 202.6 The eastern countries are] after del. The countries of Morea a after del. Still now the 202.8 for 202.10 **the**] *after del*. Seco[n] which] after del. which they did protection] above del. Cover is only] after interl. and del. the roofing afterthought,] before del. with the exception of the Sanctuary which we shall now not consider. 202.11 **obtained**] *after del*. carri *after del.* mouveable and provisional 202.12 or wooden ceilings] *after del.* blanckets blanckets] *before del.* supported by wooden columns, 202.13 **The** *inserted* 202.14 **gave** *after del*. with 202.21 hypostyle] second y in pencil over i 202.24 protected] after del. 202.25 peristyle] accompanied by H. T. Wegener's note in pencil Webster (cf. covered with 532, *Explanatory Notes* 202.25) 202.26 **a roof**] *after del.* an allee or a

203.1 the combination] after del. the courtyard protected both by.203.6 Stone Style]after del. the twoBeginnig.] before del. the203.8 steeples] after del. Church203.9stations] after del. places or203.11 large] after del. Atables] s added203.12 Entiredependency] after del. General caracter of theensemble no individuality] above del.general idea

Press Mark. Title of the Work wanted. Size. Place. Date. 263.0 (Signature). (Date) / Please to restore each volume of the Catalogue to its place, as soon as done with. Press Mark. Title of the Work wanted. Size. Place. Date. 19 (Date) empe (Signature). Please to restore each volume of the Catalogue to its place, as soon as done with. Title of the Work wanted. Size. Place. Date. Press Mark. (Signature). (Date) BAR Please to restore each volume of the Catalogue to its place, as soon as done with.

Pl. 12: British Museum Library call slips, 1852 (SLUB, Mscr. Dresd. t 3584)

# SUPPLEMENTARY TEXTS

### Introduction

This section assembles various additional pieces from the context of Semper's exile in London. On the one hand, it includes three newspaper articles from March 1851, written by friends of Semper's to support his attempts to make a living in London: either regarding his plans for a private school of architecture, for which Lothar Bucher, the London correspondent of the Berlin National-Zeitung, placed an announcement in that newspaper (206-8) and Richard Wagner, the composer and conductor, published a recommendation in the Zurich *Eidgenössische Zeitung* (208–9); or in connection with Semper's work for the Great Exhibition - namely an advertisement by the Hamburg architect Franz Georg Stammann, saying that Semper would accept further commissions for arranging exhibitions from private or official clients in the Crystal Palace (209–10). On the other hand, there are two sets of manuscript texts by Semper: two lists of books in his private Dresden reference library, written in 1852 for British customs after the library had been returned from New York, where he had had it sent in view of his planned emigration to North America (210–17), and his call slips from the British Museum Library for the period from March to December 1852 (217–25). Two other supplementary texts belong to Semper's early period at the Department of Practical Art: the letter of appointment (226-7) and the official description of the first course he gave there (228).

# London

### Lothar Bucher

### TEXTUAL RECORD

NZ 'Grossbritannien. London, 15. März', *National-Zeitung* (Berlin) 4, no. 132 (19 March 1851, evening issue), [3] (ULB Bonn, Ztg 219), *copy-text* 

BIBLIOGRAPHY Studt 1992, 105 n. 9; Hildebrand 2020a, 109

### **EXPLANATORY NOTES**

Lothar Bucher – another German political refugee in London – included an announcement of Semper's plan for a private school of architecture in his newspaper article on British events (206-8), published in the liberal Berlin National-Zeitung. Bucher was asked by Rudolph Schramm - a German journalist exiled in London - to report on Semper's school plans, as Schramm wrote to Semper on 25 February 1851 (see 245). Bucher became the 'dear friend' to whom Semper addressed his 'Letters on the Great Exhibition' some weeks later (27-31, 260-1, 280-9). We publish Bucher's entire report here, as it makes it possible to situate Semper's school plans within the British political climate of the day, particularly among German emigrants and political refugees. Among the individuals whose speeches on the occasion of the third anniversary of the Vienna Revolution of March 1848 Bucher refers to, special mention should be made of the German Gottfried Kinkel. He was one of the founders of a short-lived refugee committee, to the board of which Semper was elected in summer 1851 (Bucher was another member of the board). Kinkel was also to become a colleague of Semper's at the Swiss Federal Polytechnic School in Zurich in 1866 as professor of archaeology and art history. Bucher's article abruptly switches from politics to Semper's school plans (207.36–208.13) but gives a politically tinged biographical sketch, including a characterization of Semper – in relation to the reasons for him becoming a refugee – as 'one of the few artists who did not seek out the favour of the nobility, but instead let their favour seek him out, and turned his back on it when the Fatherland called' (207.37-9).

206.2 Jahrestag der Wiener Revolution] The Vienna Revolution broke out on 13 March 1848. It led to the resignation of Klemens von Metternich as foreign minister and state chancellor of Austria on the same day and ultimately also to the abdication of the Austrian Emperor Ferdinand I on 2 December 1848. 206.27 Roley] *Rónay* (see also 206.30–1) 207.40–208.1 Erbauer des neuen Theaters, des Museums, der Synagoge, des Maternihospitals] Semper's first Hoftheater (Court Theatre) at Dresden, built in 1838–41, was destroyed by fire in 1869 and rebuilt following a different design in 1871–78. The second building in turn was bombed in 1945 and restored as the 'Semperoper' in 1977–85. The Dresden Gemäldegalerie (Picture Gallery), which Semper had been designing since 1838, was constructed in 1847–55, i.e. partly during his London exile. It opened in the autumn of 1855, shortly after he moved to Zurich. The Dresden Synagogue – the only religious building by Semper that was completed – was built in 1838–40 and burnt down during the Reichskristallnacht in 1938. The Maternihospital, constructed in 1836–38, was completely destroyed during the bombing of Dresden in 1945.

208.2 errichtete – Barrikaden] Semper's participation in the Dresden Uprising of May 1849 on the side of the democrats was given particular mention in a contemporary Prussian report that noted the possibly unprecedented solidity of the barricades he had erected. 208.3 Nachdem Dresden gerettet war] an ironic comment on the suppression of the Dresden Uprising on 9 May 1849 by Saxon government troops supported by Prussian units 208.4–6 als das hiesige Gesundheitsamt ihn einlud, den Bau der Leichenhäuser zu übernehmen, die in der neuen Begräbnissbill vorgeschrieben sind] It was not the General Board of Health in London but rather Emil Braun who prevented Semper from emigrating to America (see 233). He explained to him on 22 September 1850 (gta, 20-K-1850-09-22): 'The Board of Health has just pushed through a major regulation and decided on the construction of several large graveyards, which you might be able to transform into classical necropolises.' Semper received more information about the Board's decision on 29 September 1850, one day after his arrival in London, from Braun and Edwin Chadwick, commissioners of the Board of Health. At their suggestion, he immediately started to design a Reception House (a building in which the dead and the mourners were to be received prior to interments) for the planned national cemetery in Abbey Wood near Erith, south-east of London, on the south bank of the River Thames (pl. 7). The Board of Health received Semper's design, which also included a chapel, in the second half of May 1851 but rejected it on 16 June 1851.

# German Studio for Architects and Engineers in London Richard Wagner

### **TEXTUAL RECORD**

Spyri	Spyri Archives, without shelf mark, fol. IV, supportive note for Sem- per's advertisement 'Deutsches Attelier für Architekten und Inge-
	nieurs in London' (see 249), in Richard Wagner's hand, dated 25 March
	1851
EZ	supportive note for Semper's advertisement 'Deutsches Atelier für Ar-
	chitekten und Ingenieurs in London' (see 13, 249), Eidgenössische Zei-
	tung (Zurich) 7, no. 87 (28 March 1851, morning issue), 348 (ZB Zurich,
	WB 87; another copy gta, 20-DOK-1851:8), <i>copy-text</i>
Kirchmeyer 1985	supportive note for Semper's advertisement 'Deutsches Atelier für Ar- chitekten und Ingenieurs in London' (see 249), 58–9, ed. of EZ

**BIBLIOGRAPHY** Knoepfli 1976, 264–5, 271–2; Mallgrave 1996, 191–2; Lütteken 2008, 43 fig. 107, 188; Weidmann 2010, 290–1, 293 n. 163

### **EXPLANATORY NOTES**

Richard Wagner was the most prominent personality to support Semper in his plans to establish a private school of architecture in London. He had been a long-standing friend of Semper's since their time together in Dresden. Wagner had staged his musical works in Semper's Royal Court Theatre at Dresden, completed in 1841, and Semper had attended preparatory meetings for the 1849 May Uprising in Wagner's Dresden home. During his exile in Zurich, Wagner arranged for the publication of Semper's advertising text for his 'Deutsches Atelier für Architekten und Ingenieurs in London' (German Studio for Architects and Engineers in London; 13) in the *Eidgenössische Zeitung* – a Zurich daily newspaper edited by Wagner's friend Johann Bernhard Spyri, later the husband of Johanna Spyri, who gained fame with her Heidi books. Wagner's recommendation for the school - actually a brief essay on Semper's view of architecture – was published in the same issue as a supportive note (without a title of its own) for Semper's advertisement (for the context of Wagner's involvement, see 249-50). Wagner later tried – albeit unsuccessfully – to recruit Swiss students for Semper's private tuition, as he wrote to him on 24 February 1853 (Wagner 1993, 203): 'I can't help you with any "young Swiss" at the moment: no one has shown up since the first inquiry; but I shall certainly think of advertising.' In the end, Semper's plans for a private school never materialized. However, Wagner also played a mediating role in getting Semper from London to Zurich: On 14 August 1854, he wrote to Semper that he had been asked 'whether you would accept the position of Professor of Architecture at the new Federal Polytechnic School that is to be established' (ETH Library, University Archives, HS 09:6). Further networks of politicians, academics and architects finally led to Semper's appointment to the chair in Zurich by the Swiss Federal Council on 7 February 1855.

209.2-4 in unnützen Bauwerken ~ auf Anordnung des Königs Ludwig von Baiern] These 'useless buildings' must include those by the two most important architects in Munich during the reign of Ludwig I of Bavaria: Leo von Klenze, the court architect, and Friedrich von Gärtner. 209.13-14 aus ~ dem Schauspielhause und dem ~ Museum zu Dresden] see 536-7, Explanatory Notes 207.40-208.1

#### MANUSCRIPT VARIANTS

Spyri

208.26 unserm] unsrem 208.28 Schrift: ∧] ~∧ – 208.29 Altona∧] ~, 1834∧] ~. 209.4 Baiern] Bayern 209.7 unsern] unsren 209.8 hat∧] ~, 209.10 unserm] unsrem 209.16 Athens] Athen's 209.21 Freundes,] *altered from ~∧ before del.* und Schicksalsgenossen, schätze,] ~∧ wärmste] Wärmste 209.23 Näheres] N over n 209.24 25.] ~∧

# Submissions for the Great Exhibition

Franz Georg Stammann

### TEXTUAL RECORD

K(DD)-1851	gta, 20-K(DD)-1851-03-20, fol. 1r–v, 'Nachricht in Betreff der Einsendun-
	gen aus Deutschland, zur allgemeinen Industrie Ausstellung in London',
	in Franz Georg Stammann's hand, dated 20 March 1851
HN	'Tagesbericht. Hamburg, den 22sten März', <i>Hamburger Nachrichten</i> , no. 70
	(22 March 1851), [3] (CB Hamburg, Safe Holdings, S/934), copy-text
KöZ	'Nachricht in Betreff der Einsendungen zur allgemeinen Industrie-Aus-
	stellung in London', Kölnische Zeitung, no. 71 (23 March 1851, morning
	issue), [6]
MüB	'Miszellen. Hamburg, 20. März', Münchener Blätter für Handel, Industrie,
	Gewerbe und Landwirthschaft, no. 26 (30 March 1851), 102

**BIBLIOGRAPHY** Lankheit 1976, 34; Herrmann 1978, 50 n. 163; Herrmann 1984, 272 n. 159

### **EXPLANATORY NOTES**

Semper's Hamburg connections were behind the advertisement recommending him for services involving submissions for the Great Exhibition. A letter written on 20 March 1851 by the Hamburg architect Franz Georg Stammann - with whom Semper had been friends since their studies together in Franz Christian Gau's studio in Paris - contains the draft of the published announcement (540-1). Semper's brother Wilhelm, who ran a pharmacy in Hamburg, can be inferred as the addressee of the letter through his mediation between Semper and Stammann on another occasion, as evidenced by two letters of 8 and 9 March 1851 concerning Semper's plans for a private architectural school (gta, 20-K-1851-03-08, 20-K[DD]-1851-03-09:2). It is therefore plausible that Wilhelm, on Semper's behalf, discussed with Stammann the possibility of advertising Semper's availability for services in the Crystal Palace in a newspaper and that Stammann then drafted an advertisement that he published, with Wilhelm's consent, in the Hamburger Nachrichten on 22 March. With minor differences, the advertisement also appeared in the Kölnische Zeitung on 23 March and in the Münchener Blätter für Handel, Industrie, Gewerbe und Landwirthschaft on 30 March. The only known direct response to it came from a certain George William Lüders of Hamburg, who applied for 'a minor post' as a bookkeeper on 30 March 1851 (gta, 20-K-1851-03-30:2). Another inquiry possibly prompted by the advertisement followed from Hamburg on 25 April 1851: The lawyer Wilhelm August Kramer, the secretary of the Hamburg Society for the Promotion of the Arts and Useful Industries, which was coordinating contributions from the North German states to the Great Exhibition, asked his friend Semper whether he - along with two others - would like to represent these states in the official juries for the prizes to be awarded (gta, 20-K-1851-04-25). Although Semper accepted and was indeed appointed a juror, he did not receive the promised certificate of appointment by 12 May, when the juries started their work. This is evidenced by a letter he sent to his brother Johann Carl Semper on 5 May and by another letter his sister Elise Semper sent to him on 9 June (gta, 20-K-1851-05-05[S]:1, 20-K-1851-06-09).

209.27-8 ist ~ mit dem Arrangement der englischen Coloniewaaren beschäftigt] This is an overstatement, as Semper was responsible for the arrangement of exhibits only for some of the British colonies, namely Canada and the Cape of Good Hope. He was possibly also involved in the sections for Newfoundland, New Brunswick and Nova Scotia (see 258-60). 209.29-30 hat unter Anderm auch für Schweden die Aufstellung ~ zu besorgen] see 259

### PRINT VARIANTS

209.25 Hamburg, den 22sten März. ] omitted KöZ ~, 20. März. MüB 209.26 Der Architect,] ~ ~ $\land$  no paragraph  $M\ddot{u}B$ 209.26-7 welcher sich gegenwärtig in London aufhält] gegenwärtig in London KöZ MüB 209.27 **Executiv-Commission**] Executivkommission MüB 209.27–8 im Ausstellungsgebäude] ~ Aufstellungsgebäude KöZ der grossen Industrieausstellung MüB 209.28 englischen Coloniewaaren] Waaren aus den englischen Colonieen KöZ MüB 209.29 Anderm] Andern KöZ 209.30 **besorgen. –**] ~. ^ KöZ MüB **Es**] paragraph KöZ 209.31 Comité] Comite KöZ 210.1 diesen bekannten,] einen ~, KöZ einen ~^ MüB 210.3 kennt<sub>A</sub>] ~, MüB 210.4 Decorirung &c.] ~ und darauf bezüglichen Auskunft KöZ Dekorirung und darauf bezügliche Auskunft MüB 210.4-5 Einzelnen, als ganzen Landestheilen, Städten, Provinzialabtheilungen] für Einzelne, wie auch für ganze Landestheile, Städte u. s. w. KöZ MüB 210.5–6 seine Bekanntschaften] Bekanntschaften KöZ MüB

### MANUSCRIPT VARIANTS K(DD)-1851

Nachricht in Betreff der Einsendungen aus Deutschland, zur allgemeinen Industrie Ausstellung in London.

Der Architect, Professor Semper aus Dresden, gegenwärtig in London, ist, im Auftrage der Executiv-Commission, im Ausstellungsgebäude mit dem Arrangement der englischen Coloniewaaren beschäftigt & hat, unter Andern, auch für Schweden die Aufstellung der von dort eingesandten Sachen zu besorgen.

Es wird noch jetzt für manche deutsche Behörde, Comite od. Privaten von Interesse sein zu erfahren, dass sich dieselben in London an einen bekannten, zuverlässigen Landsmann wenden können, der im Gebäude selbst schon mit Arrangements beschäftigt ist, daselbst seinen steten Aufenthalt hat, die dortigen Behörden & Arbeiter kennt & also bei der Einrichtung, Decorirung & darauf bezüglicher Auskunft, sowohl für Einzelne, wie für ganze Landestheile, Städte, Provinzialabtheilungen u. s. w., durch seine Befähigung & Bekanntschaften von wesentlichem Nutzen sein kann. ¦

10

5

Vorstehend den Entwurf.

Correspondent, Allg. Augs. Zeitung, Bremer, Berliner, Winerblätter etc scheinen mir, wenn es bekannt werden soll, zweckmässig. Für Hamb. Nachricht werde ich, wenn Sie es wollen? sorgen.

### 5 20 März 51

FGeoStammann

540.3 allgemeinen] a over A 540.7 Professor] interl. gegenwärtig] after del. welcher sich in London] beföre del. aufhält 540.15 & darauf bezüglicher Auskunft] above del. etc. 541.2 Allg.] Allgemeine' Augs.] Augsburger' Winerblätter] 'Wiener Blätter' 541.3

Hamb.] 'Hamburger' Sie] i.e. Wilhelm Semper

### List of Books for Customs

Gottfried Semper

### **First Version**

### TEXTUAL RECORD

*MS 148<sup>t</sup>* gta, 20-Ms-148, fol. 5r-v, in Semper's hand, *copy-text* 

BIBLIOGRAPHY Herrmann 1981, 114; Laudel 1991, 42; Weidmann 2021, 88-9

### **EXPLANATORY NOTES**

The two lists edited here under the title 'List of Books for Customs' represent a partial inventory of Semper's private Dresden reference library. The first list, which is very fragmentary, records the books without any order, while the second, which is more detailed, arranges them according to four subject areas: art and architecture, general history, classical philology and modern philology (including miscellaneous writings). Semper's numbering indicates that the second list is also a fragment: it is probably lacking one sheet with 51 book titles from the field of art and architecture (see 213.11–12). The fact that the lists are written in English and Semper's note on the only two English-language books, published in London, that they were duty-free (210.7, 210.12, 214.30–2) indicate that the lists were intended for British customs. With his planned emigration to North America in mind, Semper had his library sent by his wife from Dresden to Altona in August 1850 to his brother Johann Carl, who then had it shipped from Hamburg to New York in September 1850. In February 1851, when Semper was sending Rudolph Schramm a draft programme for his private architectural school (see 8–11, Second Version; 245), he mentioned that 'my whole library and my collection of drawings is in New York. I am leaving the boxes there until I know for certain fol. IV

whether I will be staying here' (II.26–8). Although he was still not certain about this three months later, he had the boxes sent from New York to London by his brother Johann Carl in May 1851 (gta, 20-K[DD]-1851-05-13). However, the books were still in storage in a bonded warehouse in London in August 1852, as can be seen from a letter to his wife Bertha in which Semper writes that 'My box of books ... is still at the warehouse and has not been cleared through customs. I've only managed to get my drawings out, by special concession' (gta, 20-K-1852-08[S]). The first version of the list contains only two works that do not also appear in the second version: one by Einhard – almost certainly his *Life of Charlemagne* – and one by Arnold Heeren (210.26, 211.22). Apart from these two works, the titles are listed here only from the second version, with additional details in the first version being consulted for further identification. With a few exceptions – for example, if the format or number of volumes indicates a later edition – the works are listed only in their first editions. If it is unclear whether the reference is to a German translation, the edition in the original language is given. Titles that cannot be identified with a high degree of probability are generally not annotated.

210.7 **On Dorways**] ~ doorways; cf. 214.30-1 210.8 Greec Dictionary cf. 214.27 210.9 Latin d°] cf. 214.28 210.10 **d° d°**] cf. 214.29 210.11 Some numbers of the R. Institute of Br. Architects] cf. 214.33 210.12 on Steam Engineering cf. 214.32 210.13 The Analysis] cf. 214.34 210.14 Mathem. in their application to art and architecture] cf. 210.16 Analysis] cf. 214.37 210.17 pure Mathematiks] cf. 214.37 214.35-6 210.18 differential Calculus] cf. 214.38 210.19 Algebra with ~ Solutions] cf. 214.39-40210.21 Physiks] cf. 215.1 210.22 Logarithmik tables] 210.20 Methematiks] cf. 214.41 cf. 215.2 210.23 Log. tables] cf. 215.3 210.24 Mathem.] cf. 215.4 210.25 Cours de Mathematiques pures] cf. 215.5 210.26 Historical works] probably the first three volumes, published as Vermischte historische Schriften (Heeren 1821), of Arnold Heeren's collected Historische Werke 210.27 **Travels**] cf. 215.8 210.28 History] cf. 215.11 210.29 History of Mexico] cf. 215.13 210.30 The old World] cf. 215.14 210.31 Universal History] cf. 215.15

211.1 Storia di Firenze] cf. 215.22 211.2 Marco Polo] cf. 215.23 211.3 Homeri Ilias and Odyssea, and Prolegomena] cf. 215.25 Wolff] Wolf 211.4 Euripidis Tragoediae] cf. 211.5 Pindari Carmina] cf. 215.27 211.6 Aristophanis Opera] cf. 215.28 215.26 211.7 211.8 **Sophocles**] cf. 215.30 211.9 Aeschylus] cf. 215.31 Herodotus] cf. 215.29 211.10 Plinius, letters] cf. 216.14 211.11 **Tacitus**] cf. 215.33 211.12 Taciti Germania] cf. 215.34 211.13 **Cicero**] cf. 216.1 211.14 Cicero de amicitia] cf. 216.2 211.15 Sueton] cf. 216.3 211.16 Persius & Juvenalis] cf. 216.4 211.17 Horatius] cf. 216.5 211.18 Livius] cf. 216.6 211.19 Virgilius] cf. 216.7 211.20 **Cornelius Nepos**] cf. 216.8 211.21 **History** cf. 216.9 211.22 Eginhartus] Semper cites Einhard's Vita Caroli Magni in his lecture 'The Ancient Practice of Wall Coating and Tubular Construction' (134.13). 211.23 Vellejus Pater**culus**] cf. 216.10 211.24 **Seneca**] cf. 216.12 211.25 Julius Caesar] cf. 216.13 211.26 Catullus, Tibullus, Propertius] cf. 216.11 211.27 **Justinus**] cf. 216.15 211.28 Plautus cf. 216.16 211.29 Sallustius] cf. 216.17 211.30 Vigerus] cf. 216.18 211.31 Seneca Hercules furens] cf. 216.19 211.32 Homerus and Hesiodus] cf. 216.20 211.33 Latin Grammar] cf. 216.21 211.34 d° Grammar] cf. 216.22 211.35 notes to Homerus] cf. 216.23 211.36 Orationes Salustii Livii & other] cf. 216.24 211.37 Artis Latine Scribendi prin**cipia**] cf. 216.26 211.38 Wolf's Philosophy] cf. 216.27

### ALTERATIONS IN THE MANUSCRIPT

210.8 **2**] over 3 210.16 **101**)] 01 over 11 210.21 **Mayer**] after del. Loren 210.26 **Historical**] after del. Statis 211.1 **118**)] after del. 117) The war of 1809 by Valentini 1. Vol. 8. 211.3 **120**.] inserted after del. on fol. 5r

120) On Saxe

121) The Battle of Leipzig

211.5 **122.**] inserted 211.4 **121** *inserted* 211.6 **123** *inserted* 211.7 **124**] inserted 211.8 **125.**] inserted 211.9 **126.**] inserted **12°**] 1 over 8 211.10 **127.**] inserted 211.11 **128.**] in-**8**°] 8 over 1 serted 211.12 **129.**] inserted 211.13 **130.** *inserted* 211.14 131.] inserted 211.15 **132.**] inserted 211.16 **133.**] inserted 211.17 **134.**] inserted 211.18 **135.**] inserted 211.19 **136.**] inserted **Vol.**] underl. in pencil by unknown hand 211.20 **137**.] inserted 211.21 **138.**] inserted 211.22 **139.**] inserted 211.23 **140**.] inserted 211.24 **141**.] inserted 211.25 142. inserted 211.26 **143.**] inserted **Tibullus**] *after del*. I Vo[1] 211.27 **144.**] inserted 211.28 **145.**] inserted 211.29 **146.**] inserted 211.30 **147.**] inserted 211.31 148. inserted 211.32 **149.**] inserted **Hesiodus in German**] underl. in pencil by unknown hand 211.33 **150.** *inserted* Latin *interl*. 211.34 **151.**] *inserted* **d**°] *interl*. 211.35 **152.**] inserted 211.36 153.] inserted 211.37 154.] inserted 211.38 155.] inserted Wolf's] after del. Inscriptiones

# Second Version

### **TEXTUAL RECORD**

MS 148<sup>2</sup> gta, 20-Ms-148, fols. 1r-4v (4v blank), in Semper's hand, *copy-text* 

**BIBLIOGRAPHY** Herrmann 1981, 114; Laudel 1991, 42; Gnehm 2004, 32, 37 n. 30, 47 n. 73, 119 n. 72; Weidmann 2021, 88–9

### **EXPLANATORY NOTES**

212.3 Magazin for Engineers]Böhm/Hauf 1777/95212.4 Hydrotechnics] probably allfour fascicles of Gilly/Eytelwein 1802/08, bound in one volume212.5 Manuel of Hydro-statics]Eytelwein 1826212.6 Antiquities of Athens] the third volume of Stuart/Revett1829/33Cckerell] 'c' uncertain reading, Cockerell212.8 Manuel of Mechanics] Eytelwein 1801vein 1801212.9 The Engeneer]Weisbach 1848212.10 On Roofs] probably Linke1840, the second, enlarged edition of Gustav Linke's Bau der Dorn'schen Lehmdächer (1837)

212.11 Art of building] Rondelet 1833/36 212.12 Statics Evtelwein 1808 212.13 Architecture] the first and third volumes of Milizia 1781 212.14 geometrical Drawing] probably the first volume of Burg 1822, which is about 'General Geometric Drawing' (the second volume is about 'Drawing and Recording Artillery Objects') 212.15 on Private dwell-212.16 on beaty in Art, (Laocoon)] 'beaty': Lessing 1766 ings] Gärtner 1837 212.17 Archaeologia of Art] Müller 1830, divided into two volumes 212.18 History of Architecture | Hirt 1821/27 212.19 Italian Researches] the first and third volumes of Rumohr 1827/31. The part here listed as 'wanting' must be the volume Semper had lent to Friedrich Wilhelm Meinert, his Dresden lawyer. In 1849, he asked his wife, Bertha Semper, twice to claim it back (gta, 20-K-1849-07[S], 20-K-1849-12-09[S]). 212.21 On Vaults and their Statiks] Knochenhauer 1842 212.22 on heating with hot air] Meissner 1821 212.23. History of the Hellenic tribes] Müller 1820/24, its second and third volumes divided into two volumes each 212.24 On the Art of Wallpainting with the Ancients] Wieg-212.25 Manual of Engineering and Mechaniks] probably three different mann 1836 works: Weisbach 1835/36, Weisbach 1845/46 and Weisbach 1849 (though the third work does not discuss mechanics but its mathematical basis). On 21 September 1849, Semper advised his wife, Bertha Semper, to sell 'various expensive books that I've never even read yet ... e.g., von Humboldt's Cosmos 2 parts and an incomplete work on mechanics by the professor in Freiberg, I've forgotten his name' (gta, 20-K-1849-09-21[S]). The professor concerned, Julius Weisbach, did not complete his Lehrbuch der Ingenieur- und Maschinen-Mechanik, begun in 212.26 Vademecum, (Manual) for Civil-Engeneers and architects 1845, until 1860. possibly Delaistre 1825a or Pernot 1844, the third, enlarged edition of Louis-Théodore Pernot's Dictionnaire du bâtiment (1826). A third book with a similar title - Vademecum für den praktischen Ingenieur und Baumeister (Schubert et al. 1850) – appeared in the year after Semper's flight from Dresden and is therefore not a candidate. 212.27 Manuel for rural architecture] Gilly 1805 212.28 The Greec Theaters] Geppert 1843 212.29 Aesthetiks of the Architecture] Wagner 1838 212.30-I Ideas on the State of the arts ~ with the old Nations] five volumes of Heeren 1824/26; cf. note 215.7 212.32 Cosmus. and letters on the same] the first two volumes of Humboldt 1845/62 and Cotta 1848; cf. note 212.25 212.33 Aesthetiks of Arch.] Wolff 1834 212.34 **On Perspective**] Hetsch 1840 212.35 Archaeologia] probably Schaaff 1806/08 212.36 Architecture] probably Heine 1842, the second, enlarged edition of Gustav Heine's Kurzer Unterricht in der bürgerlichen und Land-Baukunst (1836), though it is in large octavo. Heine's Handbuch der landwirthschaftlichen Baukunde (Heine 1838) is in quarto but does not discuss what Semper understood by architecture. Heine, professor for architectural drawing at the Academy of Fine Arts in Dresden, was a former colleague of Semper's.

213.1 Architectural laws] Heine 1846 213.2 **33)** nearly written as '37)'; hence the erratic number '38)' at 213.3 213.3 **Tables**] Reimer 1782 213.4 Archeologia Böttiger 1837/38 213.5 On Theaters] Weinbrenner 1809 213.6 On fascineering] Eytelwein 1800 213.7 Theater at Münich] Meiser 1840 213.8 Models of old German Architecture] probably 213.10 **the** Heideloff 1838/43 213.9 Historical development of the arts] Cavallari 1847 Orders of Architecture] Normand 1819 213.11 Art of the Carpenter] Romberg 1831/33 213.12 Magazin for Italian Art] one volume of Magazin 1780/85 213.13 Lexicon of the artists (Künstlerlexicon)] probably the first fifteen fascicles of Nagler 1835/52 213.14 The Railway of the lower Danube] Kreuter 1848; cf. 216.34, where Semper lists '6 Copies'. The Bavarian architect and engineer Franz Kreuter wrote to Semper in 1842 about the use of asphalt for roofs, and Semper was in contact with him during his period in London between

213.15 Instruction for Engineers] Tielcke 1769 213.16 On art and 1850 and 1852. artists] probably Koch 1834. Semper owned a portrait of (or a reproduction of a work by) the Austrian landscape painter Joseph Anton Koch, which he mentioned in 1857, in a letter to Carolyne Sayn-Wittgenstein, as hanging in his Zurich study with portraits of (or reproductions of works by) Bertel Thorvaldsen, Friedrich Overbeck, Peter Cornelius and Johann Christian Reinhart (gta, 20-K-1857-12-08[S]). 213.17 On Architecture] Wolff 1831 213.18 Old-Christian Art at Ravenna] Quast 1842 213.19 Stereotomia] Strobel 1819 213.20 Perspective] Quaglio 1811 213.21 Carpenters art] Mitterer 1817 213.22 Monuments of German Style] probably some fascicles of Moller/Gladbach 1815-51 213.27 Description of Rome] Fèa 1820 213.28-9 Annals and Bulletins of the Roman Institute of archeological Correspondence] some numbers of Annali 1829/85 and Bullettino 1829/85. Semper had his article on the polychromy of Trajan's column published in the Bullettino dell'Instituto di corrispondenza archeologica (Semper 1833). 213.31 The Florentine Observer] Lastri 1797/99 (the first edition, published in 1776-78, has only six volumes) 213.33 **The Cathedral of Florence** possibly Richa 1757 or Molini 1820 213.34 **Perspective** Thibault 1827 213.35 L'art de bâtir] probably Briseux 1743 213.36 History of Frensh 213.37 on Greece] probably two fascicles of Thiersch 1816/25, Architecture Ramée 1846 though they are in quarto. The second edition, published in 1829, is in octavo but did not appear in fascicles. Friedrich Thiersch's De l'état actuel de la Grèce et des moyens d'arriver à sa restauration (Thiersch 1833), a two-volume work in octavo, discusses politics only. 213.38 Traité de la Science du Dessin Vallée 1821 213.39 Memoires sur le pont de Jarnac] Quénot 1828

214.1 Traité des couleurs pour la peinture en Email] Arclais de Montamy 1765 214.2 Le Vignole de Poche Thierry 1823 214.3 Traité de Geometrie descriptive] Hachette 1822 214.4 Monumens Antiques] probably Millin 1802/06 214.6 Dictionnaire d'Architecture Vagnat 1827 214.7 La Science de l'ingenieur] Delaistre 1825b 214.8 La science des Ingenieurs] Belidor 1729 214.9 Architectonographie des Theatres] one volume of Donnet/Kaufmann 1837/40. Semper had known the native Cologne architect Jacques-Auguste Kaufmann since his student years in Paris. In 1839, he used his acquaintance with him to get in touch 'with the most skilled peintres en batimens, mouleurs, etc.' in Paris, in view of the decoration of the Dresden Court Theatre (gta, 20-K-1839-01-02[S]). 214.10 Perspective] Isabeau 1827 214.11 Revue Generale d'architecture] some numbers of Revue générale 1840/90, bound in one volume 214.13 Lettres d'un antiquaire à un Artiste 214.14 Polychromy] Kugler 1835 Letronne 1835 214.15 Polychromy] Semper 1834; cf. 216.33, where Semper lists '24 Copies' 214.16 Nouvelle architecture pratique] the second volume of Miché 1825 (the first edition, published in 1812, has only one volume) 214.17 **Etudes de Constructions**] one volume of Bruyère 1823/28 214.18 **On colours**] Chevreul 1840 214.19 Annals of Antiq. Society at Dresden] one volume of Mittheilungen 1835/63 214.20 Architecture] probably Stieglitz 1834 214.21] Description of Amsterdam] Zesen 214.22 German Antiquities] probably Wagner 1833 214.23 On Mineral and 1664 214.25 Vitruvius] probably Daniele Barbaro's Latin vegetable forms Metzger 1835 214.27 Greec Dictionary] Schneider 1805/06 (the first quarto edition (Vitruvius 1567) edition, published in 1797–98, is in octavo) 214.28 Lat. dto] Scheller 1788 (the first edition, published in 1783, has only one volume) 214.29 d° d°] the first two volumes of Weber 1770 (the first and second editions, published in 1734 and 1745, have only one volume each). In the first version, Semper lists three volumes instead of two (210.10), possibly including the German-Latin dictionary mentioned on the title page of the first volume. 214.30 a Collection of the most approved doorways] probably the first volume of Donaldson 1833/36. In the first version, Semper lists one volume (210.7). He refers to the first volume, which presents examples from antiquity, in Style (Semper 1860/63, 2:277 n. 2, 281 n. 2). 214.32 **on** Steam Engineering] Alderson 1834 214.33 Some numbers of the R. Institute of Britt. Architects] probably some papers read between late 1841 and early 1849, when RIBA did not publish any transactions in volumes 214.34 On Analysis] Fischer 1808 214.35 Mathematics in their applications to Art etc.] probably three volumes of Vieth 1796/1821 214.37 Analysis. and pure Mathematics] Thibaut 1809 and Thibaut 1801. Semper attended Bernhard Friedrich Thibaut's 'Lectures on ... Analysis, Differential and Integral Calculation, Introduction to Practical Geometry, ... Applied Mathematics' at the University of Göttingen in 1823–25 (gta, 20-DOK-1825:1). 214.38 differential Calculus] Euler 1790/93 and Grüson 1798. Semper bought the second and third volumes of Leonhard Euler's work and its supplement from the Göttingen bookshop of Vandenhoeck & Ruprecht in January 1825, as two receipts prove (gta, 20-DOK-1824:4, 20-DOK-1825:5). 214.39 Algebra with ~ Solutions of the problems] Hirsch 1804 and Sachs 1810 214.41 Mathematics] one volume of Lorenz 1785/86

215.2 Logarithmes] In the first version, Semper lists Georg 215.1 Physiks] Maver 1801 von Vega's work as 'Logarithmik tables' (210.22), which might indicate the two-volume work Logarithmisch-trigonometrische Tafeln (Vega 1812) – the work he requested from the British Museum Library on 28 May 1852 (see 219.25-31), while his own book was still being held back by British customs. In the first and second versions, however, he lists a one-volume work, probably Logarithmisch-trigonometrisches Handbuch (Vega 1793), which also consists mainly of logarithmic tables. 215.3 Logarithmes] Lalande 1802 215.4 Mathematics probably an incomplete collection of two works: the six-volume work Cours de mathématiques, à l'usage des gardes du pavillon et de la marine (Bézout 1764/69) and the fourvolume work Cours de mathématiques, à l'usage du corps royal de l'artillerie (Bézout 1770/72) 215.5 Cours de Math. pures] Francœur 1809. Semper bought the two volumes of Louis-Benjamin Francœur's work from the Göttingen bookshop of Vandenhoeck & Ruprecht in January 1825, as two receipts prove (gta, 20-DOK-1824:3, 20-DOK-1825:5). 215.7 Statistiks] probably one volume of Heeren 1824/26, listed as 'wanting' at 212.31. Semper attended Arnold Heeren's 'Lectures on ... Ancient History, History of the European State System, Statistics' at the University of Göttingen in 1823-25 (gta, 20-DOK-1825:1). Heeren gave lectures on statistics in each autumn term between 1805/06 and 1839/40 (Becker-Schaum 1993, 227), but he never published them. However, his Ideen über die Politik, den Verkehr und den Handel der vornehmsten Völker der alten Welt, which Semper incorrectly lists as 'Ideas on the State of the arts, sciences, commerce etc with the old Nations' in the first group of books (212.30–1), contain many statistical elements. 215.8 Travels] probably the first two volumes of Volney 1788/1800. In the first version, Semper lists only one volume (210.27). 215.9 215.11 History] probably Pölitz 1808 Old History] Heeren 1799; cf. note 215.7 215.12 System of the Eur. Empires] Heeren 1809; cf. note 215.7 215.14 **The old world**] Bürck 215.15 Universal History] probably two volumes of Rotteck 1835, the eleventh, 1844 three-volume edition of Carl von Rotteck's Allgemeine Geschichte vom Anfang der historischen Kenntniss bis auf unsere Zeiten (all earlier editions have nine volumes) 215.16 The war of 1809] Valentini 1812 215.17 **Saxe**] French for *Saxony* 215.21 Histoire de Napoleon] the first volume of Ségur 1825 (all earlier editions are in octavo) 215.22 Storia di Firenze Nardi 1582 215.23 Marco Polo] Polo 1845 215.25 Homeri Ilias and Odyssea] probably Homer 1784 (divided into two volumes), Homer 1785 (divided into two volumes) and Wolf 1795. In the first version, Semper lists five volumes comprising the *Iliad*, *Odyssey* and Friedrich August Wolf's *Prolegomena ad Homerum* (211.3). Hence, he probably owned Wolf's editions of Homer's *Iliad* and *Odyssey*. 215.33 **Tacitus**] Tacitus 1752. In the first version, Semper lists Johann August Ernesti's edition of Tacitus's works (211.11).

216.1 Cicero with clavis Ciceroniana] Cicero 1737 and Ernesti 1739 216.9 Historiae Olaus Magnus's Historia de gentibus septentrionalibus was first published in folio (Magnus 1555), but Semper lists an octavo edition in the second version and a duodecimo edition in the first version (211.21), respectively. This points to a small octavo edition, for example the Antwerp edition of 1558 or the Frankfurt edition of 1618. 216.11 Catullus] In the first version, Semper lists a duodecimo volume containing works of Catullus, Tibullus and Propertius (211.26). 216.18 **Vigerus**] Viger 1802 216.21 Latin, Grammar] probably Bröder 216.22 dito] probably Grotefend 1822 216.23 Notes to Homer] probably three 1787 volumes of Köppen 1787/92 216.25 Apparatus Eloquentiae] Schönsleder 1630 216.26 Artis latine scribendi Principia] probably Beck 1801 216.27 Institutiones Philosoph possibly Friedrich Christian Baumeister's or Johann Heinrich Winckler's adaptations of Christian Wolff's philosophy (Baumeister 1735, Winckler 1735) 216.28 Introductiones in lingua latina] possibly Reimmann 1718 or Harless 1764 216.29 **Lexilogus**] one volume of 216.31 Classic litterature] Eschenburg 1783 Buttmann 1818/25 216.33 Polychromy see note 214.15 216.34 Pamphlet on Railways in Ungaria see note 213.14 216.35 Italian Dictionary] the first volume of Jagemann 1790/91 216.36 **d° d°**] the second volume of Jagemann 1790/91

217.1 Synonymics] Quandt 1838 217.2 English-German Grammar] Fick 1793 217.4 Sketches] Detmold 1844 217.6 Bellona a Military Yournal] 36 fascicles of Bellona 1781/87 217.7 Ben Johnson] Baudissin 1836. In late 1835 or early 1836, Semper had reconstructed one elevation, two sections and one plan of the Elizabethan Fortune Playhouse to illustrate the description of this edifice in the first volume of Wolf von Baudissin's *Ben Jonson und seine Schule* (Baudissin 1836, 1:XXXVII–XXXVIII and pl.; cf. Nerdinger/Oechslin 2003, 135 and fig., 171–2). 217.8 Topiks or the Art to invent] Kästner 1816 217.9 Works] some volumes of Börne 1829/34

### ALTERATIONS IN THE MANUSCRIPT

212.1 **[.]** inserted 212.2 architecture.] *altered from* ~, *before del*. Mathematical etc. 212.9 **1**] before del. 5 212.11 Art] after del. Architec **5**] before del. 5 5] over [4] 212.13 1st *after del*. first and third third] *after del*. sec **3**<sup>d</sup>] 3 over 2 212.14 **1 Vol.**] 1 over 2 212.17 2. 2 over 1 212.23 **5.**] 5 over 1 212.24 **20)**] after del. Eros 212.26 Manual above del. Handbook 212.27 Manuel] after del. Handb 212.28 Theaters] s added 212.30 State] after del. arts of inserted 212.35 2 Vol. inserted before del. 1 v. 212.36 Architecture after del. on

213.8 33)] after del. 33) Homer in German 2 – 8. Homer] after del. Homer and Models] after del. Old Germ 213.13 Lexicon] after del. Artists dict Cahiers] above del. Vol. 213.31–2 of art] after del. and 213.33 Cathedral] after del. Do 213.37 108)] 10 inserted and 8 over 7 213.38 109)] 10 inserted and 9 over 8 213.39 110)] 11 inserted and 0 over 9

214.1 111)] first 1 inserted and third 1 over 0 214.5 builders] b over a 214.11 Some numbers] after del. 1 Number 214.14 4°] 4 over 8 214.16 Nouvelle architecture] after del. Lettres d'un Antiquaire à un artiste 214.19 Annals] after del. Ant 214.20 Stieglitz's

Architecture 2 Vol. 8°] inserted 214.21 **129**] inserted 214.24 **Plinii**] P over [H] after del. Schaller] Sc over [Br] The 214.28 Scheller] above del. Schaller 214.29 **d° d° by** Weber 2 Vol. 8° inserted 214.30 **doorways**] second 0 over r 214.31 dutifree] i above 214.32 dutyfree] y over i 214.34 On Analysis] after del. Old Hist del. v 214.35 applications] s added 214.37 and pure Mathematics. 2 Vol.] inserted 214.39 Solutions after del. 145)

215.1 146) 4 over 0 215.5 **Cours**] after del. M 215.6 **II.**] over inserted 2) Archeology after underl. and del. and **Travels.**] *after underl. and del.* etc 215.11 **by**] over of 215.12 7)] after del. 6) Archeologia by Schaaf. 2 vol. 8. 215.15 8. over 1 1] over [2.] 215.16 ×] inserted 215.17 × inserted **Saxe**] S over [t] 215.18 × inserted 1 Cahier.] below del. 2 Vol. with 2] over 1 215.19 × inserted 215.20 × inserted **12.**] 1 over [8] 215.21 ×] inserted 215.23 18) Marco Polo ~ 8°] inserted 215.24 ancient] above del. Modern lin**guages**] *above del*. Authors 215.28 Aristophanis opera] after del. Euripidis Tragoediae 215.29 **not complete.**] *inserted* **8.**] *after del.* 8 8] over 1[2]

216.10 **Vellejus**] *above del*. Valerius 216.16 **Plautus**] *after del*. Herodotus. 3 Vol. not complete 8° 8°] *undel*. 216.24 **Orationes**] *after del*. Selected 216.30 **Observationes**] *after del*. Vigerus

217.6 fascicles] after del. parts 217.9 incomplete] after del. very

# **British Museum Library Call Slips**

Gottfried Semper

### TEXTUAL RECORD

*Mscr. Dresd.* SLUB, Mscr. Dresd. t 3584, fifty slips with printed text (edited in bold) and with orders in Semper's hand, all but two slips dated between 8 March and 11 December 1852, *copy-text* 

**BIBLIOGRAPHY** Herrmann 1978, 68 and n. 239; Herrmann 1981, 27 and n. 12; Herrmann 1984, 62, 140, 276 n. 226, 290 n. 12; Hildebrand 2021, 107–8, 114–15

### **EXPLANATORY NOTES**

Fifty call slips, preserved in Dresden, which Semper completed to request books in the British Museum Library between March and December 1852 provide evidence for the wide range of his reading in the same year in which he successfully applied for a post in the Department of Practical Art. The great majority of the books ordered are connected with his work on the metals catalogue, which he compiled at the request of Henry Cole from mid-April to mid-August 1852 (see 329). Work on the catalogue brought him into contact with leading figures at the British Museum and other institutions. On 16 April, Samuel Birch,

the assistant keeper of the Department of Antiquities at the British Museum, assisted him in obtaining access to 'any works upon the Moyen age' in the holdings of the Archaeological Institute. Birch also asked the Institute's secretary, Albert Way, to help Semper in his research (gta, 20-K[DD]-1852-04-16). On 22 May, Semper himself asked Antonio Panizzi, the keeper of the Department of Printed Books at the British Museum Library, for permission 'to make some tracings of several ingravings; for instance of some, contained in the works of Agincourt and of Willemin', which he was intending to use for his 'illustrated catalogue for a projected collection of metalworks' (gta, 20-K-1852-05-22[S]). The day before, he had borrowed Histoire de l'art par les monumens by Louis Georges Séroux d'Agincourt and Monuments français inédits, illustrated by Nicolas-Xavier Willemin, and he borrowed them again on 24 May, when his request was granted (see 219.1-24). Probably intending to make a tracing of the 'drawing of the bronze roof truss of the vestibule of the Pantheon in Serlio', to which Emil Braun had drawn his attention (gta, 20-K-1852-05-04), he consulted Sebastiano Serlio's books on architecture in various editions (220.6–12). Semper's mirror-inverted copy of the relevant woodcut (Serlio 1619, 52 verso) was ultimately included in Style in the Technical and Tectonic Arts (Semper 1860/63, 1:369). Again for the metals catalogue - out of interest in museology and its connections with ethnology - Semper also borrowed books by Gustav Klemm (221.11-20), a Dresden historian of culture, while he used several other works for his book project on 'Vergleichende Baulehre' (Comparative Architecture) - for example, the first book requested, Charles Texier's Description de l'Asie Mineure (217.11-17). The final call slip deserves particular attention. Semper used it on 11 December 1852 to order Karl Bötticher's Tektonik der Hellenen (225.27-32), to study it probably for the first time. Wolfgang Herrmann was the first to draw attention to the existence of these call slips.

When we consulted them in 2014, they were stored in a folder with the inscription 'Wolfgang Herrmann, London 9. 11. 1972' and were affixed to five sheets of paper using adhesive tape, without any recognizable order. We present them here in chronological sequence and have placed the only two undated slips (217.18–21, 222.22–5) alongside others to which they are related either by topic or by author. Works for which today's library shelf marks can be traced to the pressmarks used by Semper are indicated in the holdings of the British Library, the successor of the British Museum Library.

The following is printed at the bottom of each call slip:

Please to restore each volume of the Catalogue to its place, as soon as done with.

The following is printed on the back of each call slip:

READERS ARE PARTICULARLY REQUESTED

1. Not to ask for more than *one work* on the same ticket.

2. To transcribe *literally* from the Catalogues the title of the Work wanted.

3. To write in a plain clear hand, in order to avoid delay and mistakes.

4. Before leaving the Room, to return the books to an attendant, and to obtain the corresponding ticket, the *Reader being responsible for the Books so long as the Ticket remains uncancelled.* 

N.B. Readers are, under no circumstances, to take any Book or MS. out of the Reading Rooms.

217.12–13 **Description de l'Asie Mineure**] two volumes of Texier 1839/49. Semper excerpted passages from the first volume of the work in French on eight manuscript pages, the first of

which is headed 'Brittish Museum 8<sup>th.</sup> Mars. 1852' – the date when he requested the book from the library (gta, 20-Ms-149, fols. 8–13; covering parts of Texier 1839/49, 1:I–III, XI–XII, XIV, 11 n. 2, 23, 82, 209, 211). 217.12 **1839**] *1839–49* 217.19–20 **Atlas von Vorder Asien**] a map series, published in individual fascicles, accompanying Carl Ritter's *Erdkunde im Verhältniss zur Natur und zur Geschichte des Menschen* (Ritter 1817/52) 217.25–7 **Ueber den protestantischen Geist aller wahrhaften Kunst**] Toelken 1839 (BL, 1401.k.37)

218.2 1827 1827-31 218.3 Italienische Forschungen] Rumohr 1827/31 (BL, 786.h.23). Semper's own – incomplete – copy of the work (see 212.19–20) was held back by British customs. 218.8 **Drei Reisen nach Italien**] Rumohr 1832 (BL, 791.b.17) 218.13-14 Sammlung fur Kunst und Historie] Rumohr 1816/23 (BL, P.P.1898) 218.19-20 Scriptores rerum Brunswicarum] Leibniz 1707/11 218.24 1813 1813-18 218.25 Storia della Scultura Cicognara 1813/18 218.29 1813] The engraved title page has the year 1813, whereas the imprint below it says: 'London. Published by Cadell & Davies. June 1<sup>st</sup> 1815.' 218.30-1 the Arabian Antiquities of Spain] Murphy 1815 (BL, Tab.487.a)

219.3–4 Monumens Francais inédits] Willemin/Pottier 1839 (BL, 74/558\*.g.2); cf. 219.14–18 219.9–11 Histoire de l'art par les monumens] probably the second to sixth volumes of Agincourt 1823 (the first volume is only concerned with architecture); cf. 219.19–24 219.15–16 Monumens Francais inedits] see note 219.3–4 219.20 **1811**] 1811-23 219.21–2 histoire de l'Art par les monumens] Agincourt 1823 (BL, 130.h.2–7); cf. 219.8–13 219.24 M.] probably May 219.27 Tabulae Logarithmicae] Vega 1812 (BL, 1394.h.2). Semper owned a similar book by Georg von Vega (see 210.22, 215.2), which was held back by British customs.

220.3-4 Lecons sur le calcul des fonctions] Lagrange 1806 (BL, 529.e.8) 220.7 Architettura] Serlio 1559/62 (BL, 559\*.e.2). The other date mentioned, 1537, refers to Sebastiano Serlio's Regole generali di architetura (Serlio 1537), the first of his books on architecture to be published, which finally became the fourth book. 220.11 Architettura] Serlio 1619 (BL, 559\*.c.8) **Vicenza**] This corresponds to the place of publication to be found on the title pages of most of the individual books assembled in this edition, while the main title page has 'Venetia'. 220.12 M probably May 220.14–15 Phil. naturalis principia Newton 1822 (BL, 535.g.10–11) 220.21-2 De Minervae Poliadis Sacra et aede] Müller 1820 (BL, 787.i.15) 220.26-7 Die Alterthumer v. Athen] Müller 1831 220.31 Εφημερις αρχαιολογικη] probably the first 27 numbers, published from October 1837 to June 1843, of Ephemeris archaiologike

221.2 **Revue Archeologique**] the second and third volumes of *Revue archéologique* (BL, P.P.1926) 221.6 **1818**] t8t8-2t 221.7 **Briefe in die Heimat**] Hagen t818/2t (BL, t049.f.22,2t) 221.12-15 **Zur Geschichte der Sammlungen ~ in Deutschland**] Klemm t837 (BL, 619.g.II) 221.18-19 **Allgemeine Culturgeschchte der Menschheit**] 'Culturgeschchte': *Culturgeschichte*; probably the first nine volumes of Klemm t843/52 (BL, t310.e.t2-t6). The tenth volume was published after 28 June t852 (its preface is dated 15 September t852). 221.18 **1843**] probably t843-5t 221.22-4 les monumens de la Monarchie Francaise] Montfaucon t729/33 221.28-30 a **Critical inquiry into ancient Armour**] Meyrick t824 (BL,  $562^*.f.3-5$ )

222.2–3 **Specimens of ancient furniture**] Shaw/Meyrick 1836 (BL, 562\*.f.8) 222.10 **de architectura opus**] Androuet du Cerceau 1559 (BL, 60.h.5.[2]) 222.14 **Architectura**] the first volume of Dietterlin 1593/94 (BL, 559\*.e.5) 222.18–19 **Die Ornamentik des Mittel-alters**] the first three volumes of Heideloff 1843/52 (BL, 1268.g.5) 222.23 **Oeuvres**] Marot 1731 (BL, 85.h.I–4). Semper may have filled in this call slip erroneously, confusing the father

of the poet Clément Marot, Jean Marot, with the architect of the same name (see next note). 222.28-30 Recueil des plans ~ des plusieurs palais ~ à Paris] Marot 1659 (BL, 61.d.5) 223.2-3 vetera monumenta] Ciampini 1690/99 (BL, 142.f.11, 142.f.12) 223.8-9 De sacris aedificiis a C. M. constructis] Ciampini 1693 (BL, 143.f.21) 223.13 1573 1573 223.14 Chronica] Leo Marsicanus 1513 (BL, 1367.f.13) 223.17-18 Instituto di corrispondenza archeologica] the first four volumes of Monumenti inediti 1829/85 223.19 2 July] The year, omitted by Semper, is almost certainly 1852, as with the other call slips. 223.21 Archeologia] the 28th to 32nd volumes of Archaeologia 223.25 Index to Archeologia Carlisle 1844

224.2-3 Indian Archipelago Exhibition of 1851] Indian Archipelago 1851 (BL, D-7955.c.34. [3]) 224.9 Nurmberg] Nuremberg 224.10-11 Merkwürdigkeiten der Stadt Bamberg] Murr 1799 (BL, 573.e.18) 224.15-18 Beschreibung der ~ Konigl. Kronungszierden] Murr 1801 (BL, 619.e.23.[6]) 224.21-5 A true description ~ Harlejan Miscellany] Anonymous 1811 (BL, 1326.g.1-12) 224.30-2 Historische Nachrich von den Nurnberger Mathematicis] 'Nachrich': Nachricht; Doppelmayr 1730 (BL, 819.m.2)

225.2–4 Nuovissima Guida dei viaggiatori in Italia] Nuovissima guida 1842 (BL, 1300.a.3) 225.7 Museo Borbonico] the first fourteen fascicles, published in 1824-27, or the first fourteen volumes, published in 1824–52, of Real Museo Borbonico 1824/57. An advertisement in the Augsburg Allgemeine Zeitung, no. 223 (10 August 1852), 3568, indicates that the 56th fascicle, which concluded the fourteenth volume of the work, had just been published. Whether Semper would have been able to consult this volume on 3 August 1852 is uncertain. **1824.–37.**] *1824–27* or *1824–52* 225.11-13 Ueber die Theorie der Musik] Forkel 1777 (BL, 556.c.14) 225.16 1846] 1845-46 225.17 Sec. Opera Cufica] Lanci 1845/46 (BL, J/7707.f.20) 225.23-4 Traité de la Chaleur] Péclet 1844. Semper excerpted passages from the second chapter of the work in French on two manuscript pages, headed 'Auszug aus Peclet: über Kamine' (Excerpt from Peclet: on chimneys) and concerned with the air needed for and the gas caused by the combustion of different fuels (gta, 20-Ms-149, fols. 14-15; covering parts of Péclet 1844, 52–4 [par. 10: arts. 242, 244, 246–54, 256, 258–60]). 225.29-30 Die Tektonik der Hellenen] Bötticher 1844/52. Semper excerpted passages from the preface and the introduction of the work in English and German (gta, 20-Ms-150, ed. in Gnehm 2004, 202–3, 206–21; cf. Herrmann 1981, 114–15). 225.32 11 Dec.] The year, omitted by Semper, is almost certainly 1852, as with the other call slips.

### ALTERATIONS IN THE MANUSCRIPT

### 217.28 (Date)] after in pencil by unknown hand 127 12<sup>t</sup>] 2 over 1

218.1 **Title**] after in pencil by unknown hand 48 218.5 **27**] above del. 29 218.6 **Press Mark**] after in pencil by unknown hand <sup>21</sup>/8 218.11 **27**<sup>4</sup>] 7 over 9 218.12 **Press Mark**] above in pencil by unknown hand 40 218.29 **T.487.a.**] altered in pencil by unknown hand to Tab487.a. Tab487.a.] above in pencil by unknown hand Table

 219.1 Title] below in pencil by unknown hand 140
 219.8 wanted] below in pencil by unknown hand 32

 hand 45
 219.15 fol.] below del. Par.
 219.25 Title] below in pencil by unknown hand 32

 220.1 wanted] below in pencil by unknown hand 189
 220.7 Architettura] above del. 5 Lib.

 []
 fol.] below del. 155[9]
 220.10 Work wanted] below in pencil by unknown hand 190

 220.13 Press Mark] below in pencil by unknown hand 10[9]
 220.18 Jun.] altered from M[]

 220.19 Press Mark] after in pencil by unknown hand 2<sup>[1]</sup>/79
 220.20 787.i.] before in pencil by

unknown hand 15 220.24 **Title**] below in pencil by unknown hand 7 220.25 **1829**] after undel. in 'Place' column I[] 220.30 **wanted**] below in pencil by unknown hand 10[7] 221.4 (**Date**)] above in pencil by unknown hand 29 **June**] altered from Juin 221.11 **Press**] below in pencil by unknown hand <sup>2</sup>/155 221.12 **619.9**.] above in pencil by unknown hand 11 221.17 **Press Mark**] before in pencil by unknown hand <sup>11</sup>/<sub>1717</sub> 221.26 **Title**] below in pencil by unknown hand 16 221.27 **4°**] above del. fol.

222.1 Title] below in pencil by unknown hand 17 222.3 with] before del. des 222.5 M.] before del. f 222.7 Date] below in pencil by unknown hand 9[2] 222.11 July] after del. M[a] 222.12 Date] below in pencil by unknown hand 93 222.16 Date] below in pencil by unknown hand 107 222.31 Paris.] before del. etc.

223.1 Date] below in pencil by unknown hand 152223.6 Date] below in pencil by unknownhand 15[3]223.12 Press] after in pencil by unknown hand 39223.16 Press] below in pencil by unknown hand 39cil by unknown hand 91223.17 552.g.7.] below del. 742.d.223.21 8°] 8 over 1

224.1 Press Mark] below in pencil by unknown hand 44 224.8 Mark. Title] below in pencil by unknown hand 117 224.13 Size] below in pencil by unknown hand 159 224.14 619.e] above del. 6 224.20 Place. Date] below in pencil by unknown hand 1[2] 224.26 Volume 12.] above del. Vol12. 224.28 Place. Date] below in pencil by unknown hand 180

225.1 Date] below in pencil by unknown hand 11 225.10 Title] below in pencil by unknown hand <sup>11/152</sup> 225.11 1777] second 7 over 1 225.15 Press Mark] below in pencil by unknown hand <sup>24/33</sup> 225.22 Date] below in pencil by unknown hand 22[9] 225.27 Mark] below in pencil by unknown hand 159

# Appointment Letter from the Department of Practical Art Walter Ruding Deverell

### **TEXTUAL RECORD**

*K-1852* gta, 20-K-1852-09-11, fols. 11-2V, one folded sheet with printed letterhead (edited in bold) and with letter in Walter Ruding Deverell's hand, dated 11 September 1852, *copy-text* 

BIBLIOGRAPHY Herrmann 1978, 70-1; Herrmann 1984, 64

### **EXPLANATORY NOTES**

As Henry Cole, the general superintendent of the Department of Practical Art, noted in his diary, he reached verbal agreements with Semper and with the textile designer Octavius Hudson on 10 September 1852 on their professorial appointments: 'Semper & Hudson approved of the conditions of their appointment.' The same evening, Cole was busy 'writing appointments to them', and the Department's secretary, Walter Ruding Deverell, confirmed Semper's appointment in an official letter on 11 September. Together with Joseph Warner Henley, the president of the Board of Trade, Cole had already agreed on the 'Class book in Metals for Semper' on 2 July 1852 (Cole Diary). During their discussion, he had also mentioned Semper's status as a foreigner and a refugee, but Henley did not regard this as any disadvantage, as Cole's diary shows: 'He did not object to his being a foreigner, if he were fit, not ... his being a political refugee, not if he had "hoofs & horns"'. Henley and Cole had finally settled the 'professorships of Metal & Printed fabrics' for Semper and Hudson on 8 September (Cole Diary). The 'Superintendents' mentioned in the letter of appointment (226.30, 226.32–3) – Cole and Richard Redgrave, the 'Superintendent of Art' – were to become Semper's most important contacts in the Department. A particularly notable point is what is explicitly referred to in the letter as a 'new experiment to afford practical instruction in Art for industrial purposes' (227.2–3) – a venture in which the Department was relying on Semper's teaching experience in Dresden, although with some reservations (see 330–1, 370–1; 377, Explanatory Notes 89.14).

#### EDITORIAL EMENDATIONS

226.18 principle,] principle  $\land$  principle, (catchword on fol. 1r repeating first word of fol. 1v) 227.16 on] on  $\mid$  on (catchword on fol. 2r repeating first word of fol. 2v)

### ALTERATIONS IN THE MANUSCRIPT

227.3 dependent] third e over a

# Principles and Practice of Ornamental Art Applied to Furniture, Metals, Jewellery, and Enamels

Henry Cole

### TEXTUAL RECORD

Prospectus	'II. Principles and Practice of Ornamental Art Applied to Metals, Jewel-
	lery, and Enamels. III. Pottery and Other Manufactures', in Department of
	Practical Art: 1. A Brief Statement of the Contents of the Museum. 2. Prospectus
	of the Department (separately paginated appendix to CatM <sup>3</sup> ), London: Eyre
	& Spottiswoode for Her Majesty's Stationery Office, 1852, 13
DPA <sup>I</sup>	'II. Principles and Practice of Ornamental Art Applied to Metals, Jewel-
	lery, and Enamels. III. Pottery, Furniture, and Other Manufactures', in
	First Report of the Department of Practical Art, London: Eyre & Spottis-
	woode for Her Majesty's Stationery Office, 1853, 380–1

 CatM<sup>5</sup>
 'II. Principles and Practice of Ornamental Art Applied to Furniture, Metals, Jewellery, and Enamels. III. Pottery, and Other Manufactures', in A Catalogue of the Museum of Ornamental Art, at Marlborough House, Pall Mall, 5th ed. (May 1853), London: Eyre & Spottiswoode for Her Majesty's Stationery Office, 1853, 126-7 (NAL, V.1853.003), copy-text

BIBLIOGRAPHY Herrmann 1978, 131-2

### **EXPLANATORY NOTES**

After Semper had been appointed professor for 'the principles and practice of Ornamental Art applied to Metal Manufactures' (226.7), Henry Cole drafted the programme of Semper's first class, to be included in the prospectus of the Department of Practical Art as part of the information about all the special classes meeting at Marlborough House. He had the programme delivered to Semper by John Matthias Dodd, the clerk of the Department's Museum of Ornamental Art. Semper returned it to Cole on 27 September 1852 with the following comment, included in the letter with which he sent Cole the 'Report on the Private Collection of Arms at Windsor Castle' (76–80), and told him about 'Berlin Metal works etc.' offered for purchase (NAL, 55.BB Box 10; cf. 80–2):

Mr. Dodd has communicated to me the Prospectus of my special Class which I return with the sole remark, that perhaps at the first article it will appear sufficient to set: 'A Class of Students meet daily to practice ornamental art in metal. They have the advantage of attending demonstrations of actual processes, and of their expedients, value and means for ornamental art.' –

It will be the most important to instruct the Students in those specialities of Style which arise from the different processes and to introduce them in the full possession of the 'resources' of each Process. This must be indicated in a few words. –

It is probable that Cole hardly changed his draft following these proposals. In particular, he did not adopt Semper's suggestion regarding the 'specialities of Style'. In relation to metals, Semper already addresses this point, which was very important to him, in his 'Report on the Private Collection of Arms at Windsor Castle' (see 76.14–23), and he more generally discusses the consequences of 'the different processes in treating [materials]' for 'the question of Style' in his inaugural lecture of 20 May 1853 (see 114.24–115.33).

The different printings of the prospectus reflect changes in the areas of teaching for which Semper was responsible. The first printing of 1852 mentions 'Principles and Practice of Ornamental Art applied to Metals, Jewellery, and Enamels' and adds in the next section 'Pottery and other Manufactures' as belonging to his provisional areas (for Cole's first apparent intention to employ Semper for ceramics, see 329). The second printing, published in April 1853 in the Department's *First Report*, adds 'Furniture' to the latter section, while the third printing of May 1853, included in *A Catalogue of the Museum of Ornamental Art*, moves 'Furniture' to be part of Semper's regular special class. In fact, furniture – to which Semper refers in his 'Plan of Instruction' (see 85.18) – became one of his teaching areas starting in January 1853 at the latest and remained so until his last term of teaching at the Department in the autumn of 1854 (see 328, 331).

### PRINT VARIANTS

228.1 Furniture, Metals,] Metals, Prospectus  $DPA^{T}$  228.2 Enamels. –] ~.  $\land$  Prospectus Conducted] paragraph Prospectus 228.3 student,]  $\land$  Prospectus 228.6 Professor] paragraph Prospectus daily]  $\sim$  at Marlborough House (except Saturdays) Prospectus 228.9 may have] have Prospectus  $DPA^{T}$  228.11 Designers] designers Prospectus  $DPA^{T}$  & 228.21 Fees] fees no italics Prospectus 228.24 class),]  $\land$  Prospectus  $DPA^{T}$  228.29 Designs] Design Prospectus 228.31 Pottery,]  $\land$  Prospectus  $\sim$ , Furniture,  $DPA^{T}$ 

# **APPENDIX**

# **ABBREVIATIONS OF HOLDING SITES**

BL	British Library, London
BnF	Bibliothèque nationale de France, Paris
CB Hamburg	Commerzbibliothek, Stiftung Hanseatisches Wirtschaftsarchiv, Hamburg
ETH Library	Library of the Eidgenössische Technische Hochschule, Zurich
gta	gta Archives, Institute for the History and Theory of Architecture, Eidgenössische Technische Hochschule, Zurich
HfBK Dresden	Hochschule für Bildende Künste, Dresden
Spyri Archives	Johanna Spyri Archives, Zentralbibliothek, Zurich
NAL	National Art Library, Victoria and Albert Museum, London
RCIN	Royal Collection Inventory Number, Royal Collection Trust, London
RIBA Library	Library of the Royal Institute of British Architects, London
SLUB	Sächsische Landesbibliothek – Staats- und Universitätsbibliothek, Dresden
ULB Bonn	Universitäts- und Landesbibliothek, Bonn
V&A	Victoria and Albert Museum, London
Vieweg Archives	Vieweg Archives, University Library, Technische Universität, Brunswick
ZB Zurich	Zentralbibliothek, Zurich

# BIBLIOGRAPHY

The three-part bibliography, starting with Semper's writings, lists all titles referred to in the editorial material. Texts edited in this volume are not listed here. Manuscripts referred to but not edited in this volume are specified only in the editorial material, together with their archival places. Writings cited by Semper are grouped in the second section. Writings whose use by Semper cannot be ascertained completely are listed among the third section, the secondary sources. Ancient authors are omitted from the bibliography in cases where they can be cited independently from a particular edition or where the use of a particular edition by Semper cannot be inferred.

# Writings by Gottfried Semper

Semper 1833 'Scoprimento d'antichi colori sulla colonna di Trajano: Al dott. Kellermann' (10 July 1833), *Bullettino dell'Instituto di corrispondenza archeologica*, no. 7 (July 1833), 92-3.

Semper 1834 Vorläufige Bemerkungen über bemalte Architectur und Plastik bei den Alten, Altona: Hammerich, 1834.

Semper 1836 Die Anwendung der Farben in der Architectur und Plastik: In einer Sammlung von Beispielen aus den Zeiten des Alterthums und des Mittelalters, Dresden: Auf Kosten des Herausgebers, 1836. (Only 1 fasc. with 6 pls. on 'Dorisch-Griechische Kunst' published.)

Semper 1845 Ueber den Bau evangelischer Kirchen: Mit besonderer Beziehung auf die gegenwärtige Frage über die Art des Neubaues der Nikolaikirche in Hamburg und auf ein dafür entworfenes Project, Leipzig: Teubner, 1845.

Semper 1849a Das königliche Hoftheater zu Dresden, Brunswick: Vieweg, 1849. Semper 1849b 'Thor in Harlem', Zeitschrift für praktische Baukunst 9 (1849), 457–8, pl. 40.

Semper 1849c 'Die Kunst unter der französischen Republik', Zeitschrift für praktische Baukunst 9 (1849), 481-4.

Semper 1849d 'Reise nach Belgien im Monat October 1849', Zeitschrift für praktische Baukunst 9 (1849), 501–6, pl. 50. (With an editorial addendum on Amiens Cathedral, 506–14.)

Semper 1849e 'Gebäude der alten Münze zu Caen', *Zeitschrift für praktische Baukunst* 9 (1849), 513–14, pls. 48–50.

Semper 1849f 'Glockenthurm in Brügge', Zeitschrift für praktische Baukunst 9 (1849), 515–16, pls. 51–2.

Semper 1849g 'Thor in Brügge', Zeitschrift für praktische Baukunst 9 (1849), 515–16, pl. 53.

Semper 1849h 'Der Wintergarten zu Paris', Zeitschrift für praktische Baukunst 9 (1849), 515–26, pl. 54.

Semper 1849i 'Farbiges Erdpech', Zeitschrift für praktische Baukunst 9 (1849), 525-8, pl. 54.

Semper 1850a 'Wohnhaus in Paris in der Rue St. George', *Zeitschrift für praktische Baukunst* 10 (1850), 9–10, pls. 1–3.

Semper 1850b 'Hof eines alten Holzhauses in Rouen', Zeitschrift für praktische Baukunst 10 (1850), 9–10, pl. 4.

Semper 1850c 'Wasserzuleitung für Locomotiven auf der Station zu Gent', *Zeitschrift für praktische Baukunst* 10 (1850), 23–4, pl. 7.

Semper 1851a Ueber Polychromie und ihren Ursprung: Ein Beitrag zur vergleichenden Baukunde, Brunswick: Vieweg, 1851. (Pre-edition of Semper 1851b with different title.)

Semper 1851b Die vier Elemente der Baukunst: Ein Beitrag zur vergleichenden Baukunde, Brunswick: Vieweg, 1851.

Semper 1852 Wissenschaft, Industrie und Kunst: Vorschläge zur Anregung nationalen Kunstgefühles, bei dem Schlusse der Londoner Industrie-Ausstellung, Brunswick: Vieweg, 1852.

Semper 1853 'Die neuesten pariser Bauten', Unterhaltungen am häuslichen Herd 1, no. 19 ([Feb.] 1853), 296-8.

Semper 1854 'Von der Form der Körper, die mit geringster Resistenz in widerstehenden Mitteln sich bewegen', ed. Benjamin Witzschel, *Annalen der Physik und Chemie* 93, no. 10 ([18 Sept.] 1854), 297–305, pl. 3 figs. 17–18.

Semper 1855a 'Die Restauration des Tuskischen Tempels', *Deutsches Kunstblatt: Zeitschrift für bildende Kunst, Baukunst und Kunstgewerbe* 6, no. 9 (I March 1855), 75–9 and pl.

Semper 1855b 'Briefe aus der Schweiz: Die neben den Propyläen aufgefundenen Inschrifttafeln (geschrieben in London, Ende 1852)', *Deutsches Kunstblatt: Zeitschrift für bildende Kunst, Baukunst und Kunstgewerbe* 6, nos. 38, 42–6 (20 Sept.; 18 and 25 Oct.; 1, 8 and 15 Nov. 1855), 332–3, 370–1, 377–81, 388–90, 397–8, 404–7.

Semper 1856 Über die formelle Gesetzmässigkeit des Schmuckes und dessen Bedeutung als Kunstsymbol, Zurich: Meyer & Zeller, 1856. (Offprint from Monatsschrift des Wissenschaftlichen Vereins in Zürich 1 [1856], 101-30.)

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Gottfried Semper spent close to five years exiled in London in the wake of his revolutionary participation in the Dresden Uprising of May 1849. The present volume offers the first comprehensive selection of his writings on architectural theory and the applied arts from this period in a critical and commented edition.

