

Giedion
and America

Reto Geiser

This open access publication is also available as a printed book
at bookstores or at <https://verlag.gta.arch.ethz.ch>.

Giedion and America

Reto Geiser

Giedion and
America

Repositioning
the History
of Modern
Architecture

gta Verlag

To Noëmi, Sofi,
and Tilda

In memory of
my mother, Katrin
(1948–2013)

- 7 Introduction
- 15 Protagonists

23 Prologue

- 29 First American Contacts
- 38 New World: The Harvard Libraries
- 41 Toward a Bible of Modern Architecture

49 In Between Languages

- 50 Rebuilding Babel: On Language and Translation in Giedion's Oeuvre
 - 51 The Enigma of Translation
 - 57 Tyrwhitt Takes Command
 - 67 Twofold Marginalization
 - 70 The Beginnings of Visual Literacy
- 72 Communicating Architectural History: Photography and the Role of the Artist
 - 73 Visual Language: Giedion and the Comparison of Images
 - 78 The "New Vision": Giedion the Photographer
- 90 Visual Thinking
 - 91 Giedion, the Bauhaus, and the "Hurried Reader"
 - 106 Establishing a Graphic Voice: Giedion and Herbert Bayer
 - 129 A Universal Language

137 In Between Approaches

- 138 American Historiography
 - 139 The Manifestation of a Network
 - 151 Growth of a New Tradition
 - 157 Style versus Evolution
 - 160 The Discovery of American Developments
 - 170 Binocular Visions

- 186 From the Functional City to the Urban Core
- 190 Anonymous History: *Mechanization Takes Command*
- 192 An Unfinished Project: "Die Entstehung des heutigen Menschen"
- 203 A Book Between Two Cultures
- 217 Suicide of History
- 228 Wartime Laboratories: New York and Chicago
 - 229 War Travels: Giedion's Second Journey to the United States
 - 233 New York: The Vanguard's Wartime Epicenter
 - 240 Chicago: László Moholy-Nagy and the New Bauhaus

251 In Between Academies

- 252 *Nemo Propheta in Patria*: Giedion and the ETH
- 253 Building Bridgeheads: Preparing the Return from America
- 257 An Inconvenient Faculty Member
- 273 The Effect of the Historian
- 290 CIAM in America
 - 291 A Network Transplanted
 - 303 The Human Scale: Reintroducing Architectural History at Harvard
 - 314 The Emergence of the Discipline of Urban Design
 - 317 Constancy and Change
- 320 Big Sig in the Roman Underground
 - 321 Through the Needle Eye of Modern Art
 - 323 From Bollingen to the CIA: A Network of American Research Funding
 - 333 Translating Modernist Mythology into Prehistoric Research Practice

349 In Between Disciplines

- 350 Transgressing Boundaries
 - 351 Steps toward a Contemporary History
 - 361 Chicago Initiatives: Engaging with John U. Nef, Alexander Dorner, and Deweyan Pragmatism
 - 369 Postwar Initiatives: Military Science and Research
- 372 Understanding the World of the Everyday: Encounters with Marshall McLuhan
- 373 Visual World: From *Space, Time and Architecture* to *The Mechanical Bride*
- 380 Changing Patterns: Explorations in Communication
- 389 Exploring Acoustic Space
- 406 Emerging Multidisciplinarity
 - 407 Centre for Culture and Technology
 - 409 The Visual Arts Center at Harvard
- 416 *Vision + Value*: György Kepes and the Center for Advanced Visual Studies
- 426 A Last Synthesis: *Lineastruttura*

439 Epilogue

- 447 List of Archives
- 448 Bibliography
- 457 Illustration Credits
- 458 Index
- 461 Acknowledgments

“There are several ways for a foreigner to meet the problem of America. The simplest way is to deny his own nature and his own past. Every technical novelty, every built-in car radio rouses his enthusiasm, and within a couple of years he is speaking of America as ‘our country’ and declaring that ‘our country comes of age.’ A second way is to criticize anything that crosses one’s path, to measure all things with a European yardstick, to contrast America with a Europe that exists only in one’s dreams. It is often the way of those whose creativeness has weakened, and who in Europe would have lived on their past accomplishments. The result is without fruit of any kind. The third way of meeting America is to face American reality, to seek neither artificial assimilation nor artificial insulation. A man is aroused by the very difference between his own past and the American world. In a land holding such responsibility for the future, he cannot remain detached from its dynamic life as on a remote Greek island. The clash between European scale and American dimensions excites him to new vigor, drawn from a cross-fertilization of viewpoints. The presupposition is only that he shall have kept himself in a state of creativeness, and not have become frozen in his own accomplishments as an artist, scientist or scholar.”—Sigfried Giedion

When Swiss art historian and architecture critic Sigfried Giedion attempted to characterize a European’s relationship to the United States with these words from his 1944 essay on the artist Fernand Léger, he was undoubtedly not only describing his friend’s position but also his own.¹ Frequently called one of the most influential twentieth-century proponents of modern architecture, and recognized for writing one of the first and most widely read histories on the subject, Giedion curiously achieved this reputation far from his homeland—in America. Despite the formative nature of his extended stays in the United States, the effect of that cultural environment on his work and the American reception of his endeavors have received scant attention within the extensive body of scholarship on Giedion’s contributions to modern architecture and the construction of its history.²

From his appointment as Charles Eliot Norton Professor in Poetry at Harvard University in 1938 to his death in 1968, the United States served as an inspiration for the critic’s work. Although his English was poor, Giedion published nearly all of his books written after his initial stay in the United States in English, long before they became available in his native German.³ In the postwar period, teaching opportunities at Harvard and a part-time position at the Swiss Federal Institute of Technology (Eidgenössische Technische Hochschule, or ETH) in Zurich not only nurtured the influence of two different cultural contexts on Giedion’s work but also fostered an exchange of ideas between the architectural cultures on either side

of the Atlantic. Prolonged periods of time spent in the United States allowed Giedion, a commuting academic rather than an émigré, to assume a remarkable position bridging North America and Europe. This exchange between cultural contexts forms the foundation of the present book. Giedion's work is explored through the lens of cultural transformation and modernization processes; the mutual influence and interchange between the Swiss art historian and his North American peers is considered to give insight into the ways in which emigration and exile can facilitate the transfer of ideas.

In Between

The deliberate choice of the conjunction *and* rather than the preposition *in* for the title of this book underscores my interest in Giedion's peculiar relationship with America. While the majority of the art historian's colleagues and friends were forced to leave Europe as a result of the political conditions on the eve of the Second World War, Giedion, a Swiss citizen of Jewish decent, never permanently settled in the United States, and his partial emigration was predominantly motivated by the relocation of his personal network, rather than the immediate threat of the war. While he praised America as a place of innovation, a place that held promise for the future, Giedion always maintained strong ties to Europe. This is evident in "Switzerland or the Forming of an Idea," his introduction to G. E. Kidder Smith's *Switzerland Builds* (1950), which at most hints that its author spent a decisive part of his career in the United States.⁴ On the contrary, the text reads like a declaration of love to Switzerland, its particular cultural diversity and political system, and it illuminates why Giedion tirelessly continued to try to establish himself as an academic in Switzerland.

Giedion's position "in between" could be mistaken for a state of suspension and thereby a position of weakness and hesitation. It is instead my contention that Giedion's work in between two cultural and academic contexts not only caused ruptures and contradictions in that work but also productively informed it. The four "in between" situations that structure this book reflect the ways in which the art historian strategically shaped his own approach and position precisely *because of* his operations at the intersection of different entities and forces. Giedion's transatlantic existence was molded by opportunities that resulted from challenging passages between cultures, currents, and people.

The first chapter, "In Between Languages," discusses the role of language and translation in the creation of Giedion's major publications and the reception of the Swiss critic's ideas over the course of generations and across different cultural contexts. Language barriers

forced Giedion to argue visually. In close collaboration with artists, graphic designers, and photographers, he perfected the coordination of illustrations and written arguments and established a universally understandable visual rhetoric.

Giedion's position within architectural discourse is then contrasted with two leading contemporary American voices—the architectural historian Henry-Russell Hitchcock and the public intellectual Lewis Mumford. The second chapter, “In Between Approaches,” traces Giedion's shift from the propagation of modern architecture toward the examination of artifacts of mass culture and the repercussions of industrialization on everyday life as integral parts of modernization.

In the postwar period, Giedion proposed establishing “bridge-heads” on both sides of the Atlantic to foster intellectual exchange between the United States and Europe. “In Between Academies,” the third chapter, follows Giedion's concurrent teaching assignments at Harvard University and the ETH in Zurich. While Giedion struggled against an unwelcoming intellectual climate at the ETH, his presence there set the stage for broad transformations of the curriculum in later years, and at Harvard he succeeded in reintroducing architectural history into modernist design education. This transition, from early Bauhaus pedagogy to a postwar academic professionalism, had a lasting impact and can still be traced in architecture schools today.

After the Second World War, cross-disciplinary work gained wider acceptance among public and private interests. The concluding chapter, “In Between Disciplines,” focuses on Giedion's ambition to create awareness of cross-disciplinary scholarship and teaching to overcome the increasing tendency toward specialization, and to cultivate a universal language with which to describe the modern condition. Although the direct success of his efforts was limited, the exchange across disciplines that Giedion relentlessly pursued led to fertile intellectual encounters throughout his career and offered a set of methodological tools that inspired academics in both North America and Europe.

Giedion's role as a mediator between different architectural cultures played a seminal role in the intellectual production and development of modern architecture on the European and North American continents. By framing Giedion as a figure fundamentally “in between,” I propose the emergence of a new type of art historian, one whose work greatly profited from crossing boundaries between cultural, disciplinary, and academic contexts, and through whom there developed a new model for art and cultural history geared toward architects.

As a historian and critic, a commentator on and witness to modernity, a true architectural impresario like Giedion cannot be regarded in an isolated manner or measured only by his own achievements and writings. As secretary-general of the Congrès Internationaux d'Archi-

ecture Moderne (CIAM) from its founding in 1928 to its dissolution in 1959, and through his affiliations with academic institutions in the United States and Europe, Giedion was in close contact with many leading architects and intellectuals of his time. As such, he was a figure well suited to transmit something of the cultural climate of a time shaped by a devastating war, major technological progress, rapidly increasing mobility, and marked advances in communication. A closer look at the wealth of archival sources—some of which have surfaced recently—and literature related to Giedion extends our understanding of several key protagonists of the modern movement. Conversely, their exchanges also offer us important perspectives on Giedion's own work and persona and raise the issue of the extent to which the art historian's position is a consequence of his personal contacts and network. By focusing on Giedion's engagement in a dialogue across cultures and disciplines, and reflecting on its impact on the postwar generation of architects, architectural historians, and other intellectuals, this book offers a reevaluation of the work that Giedion accomplished, with particular attention to the intellectual and cultural environment of his time.

Cultural Transfer

The aspiration of modern architects to disseminate their ideas and ideals across the globe can be grasped in a world map published in *L'Esprit Nouveau* that locates subscribers to Le Corbusier and Amédée Ozenfant's journal in 1922.⁵ Two decades later, in *Can Our Cities Survive?* (1942), Josep Lluís Sert pinpointed in a graphic how, as a result of ocean liners, the distance between Europe and the United States was shrinking, and that it was now possible to cross the Atlantic in five days. Air travel, which increased exponentially in the postwar era, would eventually cut the same journey to less than a day.⁶ Giedion's position as a bidirectional transatlantic messenger, and his key role in disseminating the principles of modern architecture across the European and American continents, would have been unthinkable without this increased mobility as well as the rapid development of advanced means of communication.

This new connectivity so evident in Giedion's career is an essential factor in considering the effect of the art historian's teaching activities and his extended stays in the United States, the reception of his writings published in multiple languages, and the less well-understood and primarily interdisciplinary facets of his career. The present book therefore does not frame Giedion exclusively as a historian, but attempts to understand him equally as a contemporary witness in whose works historical analysis is coupled with personal experience. Precisely fifty years after Giedion's death, and three de-

cedes since the last comprehensive investigations of his work, this book reconsiders significant aspects of the life and work of one of the most seminal figures in the history of modern architecture, and it critically assesses his contributions to the cultural discourse. While foundational studies by Dorothee Huber, Sokratis Georgiadis, and Werner Oechslin facilitated the positioning of Giedion as a champion of modern architecture and as the movement's public voice, the impact of his extended stays in the United States on the direction of his work and the reception of his writings have so far only been selectively investigated.⁷ Among these investigations, the essays on Giedion and Mumford and the afterword to the German edition of *Mechanization Takes Command* by Stanislaus von Moos, as well as *Scenes of the World to Come* by Jean-Louis Cohen, have been particularly instrumental to the present study.⁸ This book has also profited from a number of thematic studies and conferences that have addressed cross-cultural relations and mutual exchange between different cultural contexts in the work of individual architects or the history of institutions.⁹

With this interest in exchange, I hope to unite transatlantic history with recent endeavors in architectural history. A key focus of this book is to trace lines of research in transatlantic history and to transfer them to a common and comparative perspective. Advances in architectural history have been paralleled by an enduring interest in transatlantic reciprocities and related assessments of intellectual migration and cultural transformation in the field of history.¹⁰ The framing of Giedion as a protagonist in an architectural dialogue across the Atlantic therefore represents both a shift of attention to intermediate spaces that resist easy categorization, and the objective of considering the achievements of different individuals in relation to wider networks. To evaluate the effect of a migratory process on the body of work of an individual, it is inevitable to speculate about what might have happened without this cultural transition. For this reason, the present study is not devoted only to the biographical question of how Giedion succeeded in continuing his work in America; rather, it also considers how this new cultural environment affected his teaching, thinking, and writing, and finally how his own work and ideas were adopted and adapted in America. In some traditional models of cultural reception, influences that originate in a particular environment are shown to balance deficits in the receiving cultural context. Instead, this book examines Giedion's complex experiences and explores a reciprocal cultural exchange in an area in which architecture, art history, media, and the academic sphere overlap.

The present examination of a particular period of Giedion's career (1938–1968) and its evaluation and integration within a larger context of art, architectural, and cultural history is based on a myriad of primary archival sources—many of which have not been considered

previously—as well as secondary accounts of the time frame under investigation. Taking a step back with the goal of creating a foundation for a reconsideration of Giedion's persona and oeuvre, the study deliberately privileges original sources over the critical receptions of Giedion's work as documented in the historiography of modern architecture and in earlier scholarship. This reconstruction of Giedion's exchanges allows the present book to document the multifaceted attempts to disseminate the ideals of modern architecture in North America. In doing so, it seeks to trace the migratory paths of a group of individuals and through them the transformation of modern architecture and its reimportation to Europe after the Second World War.

Repositioning the History of Modern Architecture

Giedion's move across the Atlantic also marks the beginning of a more decisive effort to engage with architectural education, or what might be described as an emigration from the historian's own discipline of art history into the field of architecture. During the postwar period, the teaching engagements at Harvard that Giedion secured, which followed his initial visiting position at the school, as well as his eventual part-time engagement at the ETH in Zurich, not only nurtured the influence of two different cultural contexts on his work but also fostered an exchange of ideas between the architectural cultures on either side of the Atlantic. At fifty years of age, arriving in the promising cultural and technological climate of the United States, Giedion was exposed to opportunities he never would have had in Switzerland.

More than a decade after his initial contacts with Walter Gropius and Le Corbusier, Giedion finally had the chance to formulate a theory of modern architecture in an academic context. This occurred at an important moment of transition within the history of modern architecture. Giedion, like many other émigrés, was motivated to reassess the values that had been established in Europe over the course of the first decades of the twentieth century, when the core group of modern architects entered a (forced) phase of transformation upon gaining ground in the United States during the Second World War. The avant-garde, as Giedion himself already declared in the early 1930s, was over.¹¹ An emerging generation of modern architects set out to continue the uncompromising work of the founders, but now under changed conditions, in a new cultural environment, and with diverging motivations.¹²

Once again, it becomes clear that Giedion took on more varied roles than solely that of doyen of the modern movement, which is

how he typically has been portrayed. His experiences in the American academic context led to a revised approach to teaching history as a dynamic discipline with the potential to breach the boundaries between different faculties and fields. The role of history in architectural education became a dominant theme in Giedion's writings after the war. Many of these texts and unpublished conference papers are directly associated with the changing role of history at the Graduate School of Design at Harvard. Appointed by Dean Josep Lluís Sert, Giedion had the opportunity to reinstate history courses for architecture students—they had been banned under Walter Gropius's tenure to counter established Beaux-Arts pedagogy—and eventually also to create a new urban design program to revive the legacy of CIAM.¹³

To an emerging generation of architecture students, the name Sigfried Giedion at best resonates vaguely. The days when *Space, Time and Architecture*, his magnum opus, served as mandatory reading for students and registered architects alike are long past. And yet, through his personal and intellectual persistence, a recurring theme in this story, Giedion reminds us that the role of architectural history and theory—despite its ever-changing manifestation and reception—is as critical and timely a subject in architectural education as it ever was. Giedion's academic advances in the postwar years suggest a desire to close the widening gap between architectural history and practice in America, a condition that would intensify further as theoretical speculation increased toward the end of the 1960s.¹⁴ With a changing of the guard about to take place, Giedion, along with the other protagonists of this book, began to reassess modernity by crossing the boundaries of architecture as a historian who engages with disciplines, including cultural history, industrial archaeology, and media studies.¹⁵ Through his unrealized project for an "Institute for Contemporary History," and the related disciplinary translations of methodological approaches in conjunction with a number of collective research endeavors, Giedion prepared the ground for a repositioning of architectural history, and simultaneously for a renewed conception of what it means to be an architectural historian.

- 1 Giedion, "Léger and America," unpaginated.
- 2 Sokratis Georgiadis's 1989 monograph *Sigfried Giedion: Eine intellektuelle Biographie* (published in English as *Sigfried Giedion: An Intellectual Biography* in 1994) is the only biographical survey on Giedion to this day; however, it does not closely address Giedion's formative period in the United States.
- 3 Exceptions are *Architektur und Gemeinschaft* (1956), published in English as *Architecture, You and Me* (1958), and the posthumously published *Architektur und das Phänomen des Wandels* (1969), which was eventually released as *Architecture and the Phenomena of Transition* (1971). In both cases, however, there was little delay between the initial publication in German and the English translation.
- 4 Giedion, "Switzerland or the Forming of an Idea."
- 5 Le Corbusier and Ozenfant, *L'Esprit Nouveau*, 17 (June 1922), back cover.
- 6 Sert, *Can Our Cities Survive?*, 157.
- 7 Georgiadis, *Sigfried Giedion*; Huber, *Sigfried Giedion*. In 1989, a retrospective exhibition on Sigfried Giedion was held at the Museum für Gestaltung in Zurich. A catalogue was published in conjunction with this show. See Oechsli, *Sigfried Giedion, 1888-1968*.
- 8 Stanislaus von Moos wrote a number of essays on Giedion's relationship to Lewis Mumford (see Stanislaus von Moos in the Bibliography in this book). His afterword to the German translation of *Mechanization Takes Command* was only recently made available in English. See Moos, "The Second Discovery of America." Jean-Louis Cohen and Hubert Damisch were among the first to investigate the role of America in European discourse. See Cohen and Damisch, *Américanisme et modernité*; and Cohen, *Scenes of the World to Come*, an excellent book published in conjunction with the exhibition *Scenes of the World to Come: European Architecture and the American Challenge, 1893-1960*, held at the Canadian Centre for Architecture (CCA) in Montreal in 1995.
- 9 Banham, *A Concrete Atlantis*; Hubert and Stamm Shapiro, *William Lescaze, Architecte*; Bacon, *Le Corbusier in America*; Lambert and Oechsli, *Mies in America*; Grawe, *Call for Action*; Nicolai, *Architektur und Exil*; Grewe and Neumann, "From Manhattan to Mainhattan"; Köth, Minta, and Schwarting, *Building America: Die Erschaffung einer neuen Welt*; Köth, Krauskopf, and Schwarting, *Building America: Migration der Bilder*; Fraser and Kerr, *Architecture and the "Special Relationship"*; Köth, Krauskopf, and Schwarting, *Building America: Eine große Erzählung*; Scrivano, *Building Transatlantic Italy*. Over the course of my research, a number of related advances took shape both in Europe and North America. The crossings of the Atlantic with a focus on cultural transfer, emigration, and exile have been the theme of panel discussions at conferences and were the subject of international symposia, among them the 2005 German Historical Institute Young Scholars Forum entitled "Crossing the Atlantic: European Dimensions of American History" at the University of Texas at Arlington. In addition, Paolo Scrivano chaired

the conference "The Americanization of Postwar Architecture" at the University of Toronto in 2005; Joan Ockman and Hilde Heynen hosted a session called "Modern Architecture's Mutations in Crossing the Ocean from Europe to the United States" at the 59th Annual Meeting of the Society of Architectural Historians (SAH) in Savannah in 2006; the author hosted a session entitled "Uncle Sam's Traces: American Models and their Cultural Transformation" at the 60th Annual Meeting of the Society of Architectural Historians (SAH) in Pittsburgh in 2007; Andreas Tönnemann, Dietrich Neumann, and the author co-organized a conference held in Zurich entitled "Transfer and Metamorphosis: Architectural Modernity between Europe and the Americas 1870-1970" on behalf of the Swiss Federal Institute of Technology (ETH) in Zurich, the Society of Architectural Historians (SAH), and the European Architectural History Network (EAHN) in 2008.

10 See, for example, Timms and Hughes, *Intellectual Migration and Cultural Transformation*; Rodgers, *Atlantic Crossings*.

11 Giedion, "Mode oder Zeiteinstellung," 9.

12 Ibid.; Jordy, "The Aftermath of the Bauhaus in America: Gropius, Mies, and Breuer."

13 Ockman, *Architecture School*, 91-159.

14 See, for example, Harwood, "How Useful?," 109-29.

15 See Ockman, "Looking Back at the 1960s Looking Back," 21.

Herbert Bayer
(1900–1985)



was an Austrian-born graphic designer, typographer, painter, photographer, sculptor, and designer. After initial training in Linz, he enrolled as a student at Walter Gropius's Bauhaus where his teachers included László Moholy-Nagy and Wassily Kandinsky. In 1925, Bayer was appointed to run the newly founded Werkstatt für Druck und Reklame (Workshop for Printing and Advertising). Three years later, he left the Bauhaus to become creative director of Studio Dorland, an agency for advertising and exhibition design. Despite some projects Bayer pursued on behalf of the Nazi regime, his art was eventually featured in the exhibition *Entartete Kunst* (Degenerate Art) in 1937. With Gropius's help, he managed to escape Germany a year later and settled in New York. Bayer was in charge of the graphic design for almost all of Sigfried Giedion's books published after the Swiss historian's first stay at Harvard University in 1938–39. Motivated by the industrialist and philanthropist Walter P. Paepcke, Bayer moved to Aspen, Colorado, in 1946 and began to work on architectural commissions, including the Aspen Institute. He was involved in the International Design Conference in Aspen, which promoted close collaboration between industry, modern art, and design.

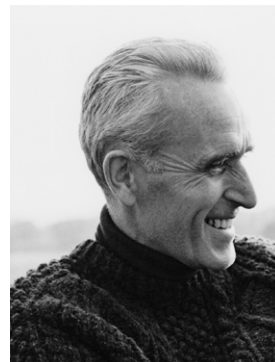
Marcel Breuer
(1902–1981)



was a Hungarian-born architect who studied at the Bauhaus in Dessau — before the school's introduction of an architecture curriculum—and later

taught at the Bauhaus. Breuer was an active member of the Congrès Internationaux d'Architecture Moderne (CIAM) in its early days and, after Gropius, served as the second delegate of the German group. Breuer and Giedion worked together on a number of projects: Breuer designed the showroom for the furniture company Wohnbedarf and was commissioned by Giedion to design two modern apartment buildings on a tract of land behind his own house. In 1937, Walter Gropius invited Breuer, who had emigrated to London by that time, to join him at Harvard University's Graduate School of Design, where Breuer taught for nine years. After dissolving the collaborative practice with Gropius, he moved to New York City and opened his own office in 1946. While the commission to design the UNESCO Headquarters in Paris in 1953 initiated Breuer's return to Europe, he continued working on projects in the United States, among them the Whitney Museum of American Art and several buildings for the federal government in Washington, D.C.

Edmund Snow Carpenter
(1922–2011)

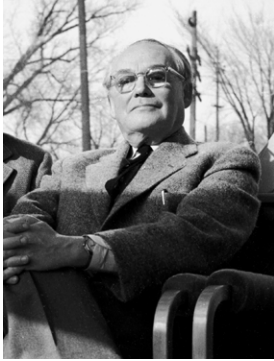


was trained as an anthropologist and was an assistant professor at the University of Toronto from 1948 to 1958. He was a founder and editor of the interdisciplinary journal *Explorations*, which was published between

1953 and 1959. Giedion and Carpenter first met in the mid-1950s during the course of the Ford Foundation research project "Changing the Patterns of Language and Behavior and the New Media of Communication" at the University of Toronto. In 1959, Carpenter became a professor of anthropology, and three years later department chairman, at what is now California State University, Northridge,

where he founded an experimental, interdisciplinary program of anthropology and art. In 1968, he was appointed Carnegie Chair in Anthropology at the University of California at Santa Cruz, where he focused on the work of anthropologist Carl Schuster, whose complete writings he edited during a stay at the University of Basel, Switzerland.

Sigfried Giedion
(1888–1968)



was born in Prague on April 14, 1888, a son of Swiss textile entrepreneurs. At the behest of his parents, he studied mechanical engineering in Vienna before switching to art history. In 1921, he obtained his doctorate

under the Swiss art historian Heinrich Wölfflin in Munich. Instead of pursuing a typical academic career, and with the encouragement of Walter Gropius and Le Corbusier, Giedion soon after embarked on his journey to promote the ideals of modern architecture. He served as secretary-general of the Congrès Internationaux d'Architecture Moderne (CIAM)—from the organization's foundation in 1928 until its dissolution in 1959. Giedion was appointed Charles Eliot Norton Professor in Poetry at Harvard University for the academic year 1938–39. With transatlantic travel coming to a halt upon the United States' declaration of war, Giedion was forced to spend most of the Second World War in the United States, and it was only afterward that he returned to his wife, Carola Giedion-Welcker, and their children, Andres and Verena, who had remained at their Doldertal home in Zurich. Throughout the second half of the 1950s, Giedion alternately taught at the Swiss Federal Institute of Technology (Eidgenössische Technische Hochschule, or ETH) in Zurich and the Graduate School of Design at Har-

vard. On April 9, 1968, just after submitting the manuscript for *Architecture and the Phenomena of Transition*, his last book, to the publisher (he was the author of more than ten monographs in a half-dozen languages), Giedion died in Zurich, a few days before his eightieth birthday.

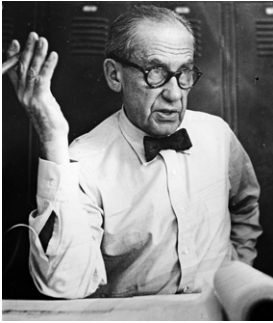
Carola Giedion-Welcker
(1893–1979)



was an art historian and independent art critic. Born in Germany, she studied with Heinrich Wölfflin in Munich, where she met her future husband, Sigfried Giedion. In 1921, Giedion-Welcker received her doctorate

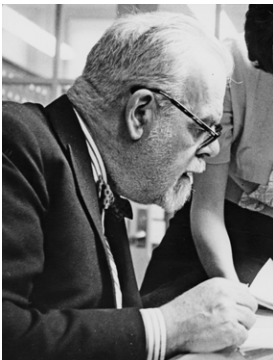
from the University of Bonn. She was in close contact with the French-German artist Hans (Jean) Arp, who introduced her to a number of his peers, including Robert Delaunay, Max Ernst, Piet Mondrian, Antoine Pevsner, and Constantin Brancusi. Giedion-Welcker developed a career that was related to but independent of Sigfried Giedion's pursuits. She published some of the first comprehensive and fully illustrated books on modern sculpture, among them *Moderne Plastik* (1937). Her investigations crossed disciplinary boundaries, and along with the achievements of artists, she also explored the work of literary figures, including James Joyce and Alfred Jarry. Her broad intellectual perspective, as well as her open-minded outlook, formed the foundation of an intense and challenging exchange with Giedion.

Walter Gropius
(1883–1969)



was trained as an architect in Munich and Berlin and worked for Peter Behrens from 1908 to 1910. A member of the Deutscher Werkbund, Gropius was appointed in 1919 to direct the newly founded Bauhaus, first in Weimar and later in Dessau. Throughout the 1930s, Gropius played a central role in the Congrès Internationaux d'Architecture Moderne (CIAM), not only representing the German group but also serving as one of the organization's vice presidents. In 1934, he moved to England. After three years of collaboration with the English architect Maxwell Fry, Gropius was appointed chairman of the architecture faculty at Harvard University. From 1937 to 1941, Gropius and Marcel Breuer worked together as partners, and in 1945, Gropius co-founded The Architects Collaborative (TAC), an architectural office of eight partners producing residential projects in the region and a number of buildings for academic institutions around the globe. Giedion wrote two books on Gropius's work.

Henry-Russell Hitchcock
(1903–1987)



was an American architectural historian who was educated at Harvard University. Before moving to New York, where he was a professor at New York University's Institute of Fine Arts, he taught at Vassar College, Wesleyan University, and Smith College, where he directed the school's Museum of Art from 1949 to 1955. In 1932, he co-curated *Modern*

Architecture: International Exhibition at the Museum of Modern Art (MoMA) in New York. This exhibition was the beginning of Hitchcock's long-lasting friendship and collaboration with both Alfred Barr, MoMA's director, and the architect Philip Johnson. Despite occasional convergences and a general interest in each other's work, Giedion and Hitchcock maintained a distant relationship throughout their lives.

Hans Hofmann
(1897–1957)



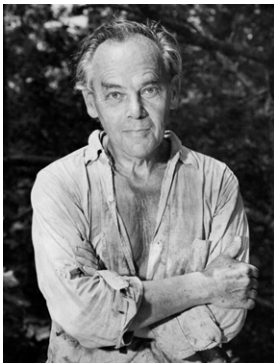
was a Swiss architect and educator who was trained at the Swiss Federal Institute of Technology (Eidgenössische Technische Hochschule, or ETH) in Zurich. In addition to recognition for his residential projects, Hofmann established himself as an exhibition designer, in charge of the Swiss pavilions for the international expositions in Barcelona (1929), Liège (1930), and Brussels (1935). In 1937, Hofmann was appointed chief architect for the Swiss National Exhibition (*Schweizerische Landesausstellung*), known as *Landi 39*, under the directorship of the architect Armin Meili. Hofmann was later appointed professor of architecture at the ETH, where he served as dean of the school of architecture. The architect was one of Giedion's adversaries in Swiss academia.

Joseph F. Hudnut
(1886–1968)



was an American architect and educator trained in the Beaux-Arts tradition at the University of Michigan, Harvard University, and Columbia University, from which he received a master's degree in 1917. In the mid-1920s, Hudnut gave up his architectural practice to focus on teaching. In 1933, he was appointed dean of the School of Architecture at Columbia University. There, he reformed the existing educational system and established his reputation as a promoter of modern architecture. The successful reorganization of the school led to Hudnut's appointment as dean of the faculty of architecture at Harvard University, which consisted of three independent entities at the time: architecture, landscape architecture, and city planning. Hudnut reformed the curriculum and amalgamated the three schools into the Graduate School of Design (GSD).

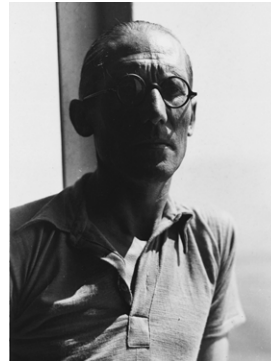
György Kepes
(1906–2001)



was a Hungarian-born painter, designer, and educator. After studying at the Royal Academy of Fine Arts in Budapest, Kepes moved to Berlin where he embarked on a long-term collaboration with László Moholy-Nagy. He eventually followed Moholy-Nagy to London, and in 1937 to Chicago to teach at the New Bauhaus. In 1946, Kepes was appointed associate professor at the Massachusetts Institute of Technology (MIT), where he taught visual design until 1980. Between 1965 and

1972, he published a seven-volume series under the title *Vision + Value*. Following a visiting appointment at the newly founded Visual Arts Center (VAC) at Harvard, Kepes established the Center for Advanced Visual Studies (CAVS) at MIT, which he directed from 1967 to 1974.

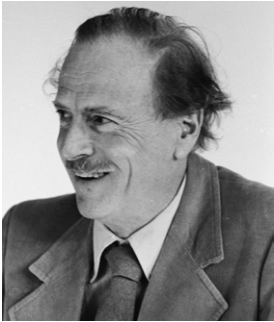
Le Corbusier
[Charles-Édouard Jeanneret]
(1887–1965)



was a Franco-Swiss architect, urbanist, publicist, writer, and painter. In 1923, the year Le Corbusier and Giedion first met, the architect published his seminal treatise *Vers une architecture*. Together with Giedion

and patron Hélène de Mandrot, Le Corbusier was one of the initiators and driving forces behind the Congrès Internationaux d'Architecture Moderne (CIAM). Le Corbusier's encouragement in the process of the making of Giedion's first book, *Bauen in Frankreich, Eisen, Eisenbeton*, was instrumental for the launch of the art historian's career, and the architect's oeuvre always occupied a special position in Giedion's writing. The two like-minded exponents of modern architecture developed a lasting friendship, which is reflected in their vast exchanges and frequent correspondence. As opposed to Giedion, Le Corbusier never developed much affinity for the United States.

Herbert Marshall McLuhan
(1911–1980)



was a Canadian media theorist, trained in English literature at the University of Manitoba. After graduating in 1934, he moved to Cambridge University to study under I. A. Richards, and F. R. Leavis, prominent exponents of New Criticism, a predominant stream within Anglo-American literary criticism at the time. After his return to North America in 1936, McLuhan taught for a year at the University of Wisconsin, and subsequently, following his conversion to Catholicism, joined the Jesuit faculty at Saint Louis University. In 1946, McLuhan was appointed to the faculty of the Department of English at the University of Toronto, where he became a full professor in 1952 and was to spend the rest of his career. Giedion corresponded regularly with McLuhan, and was a frequent guest in Toronto in the late 1950s.

Peter Meyer
(1894–1984)



was a Swiss architect, art historian, and architectural critic who was trained under Theodor Fischer at the Technische Hochschule in Munich. From 1930 to 1942, he was editor in chief of the Swiss architecture journal *Das Werk*. Toward the end of the Second World War, Meyer was appointed a lecturer at the University of Zurich. A year later, shortly before turning fifty-two, he received his doctorate from the same institution. Soon after, his colleague Hans Hofmann appointed him to teach architectural history at the Eid-

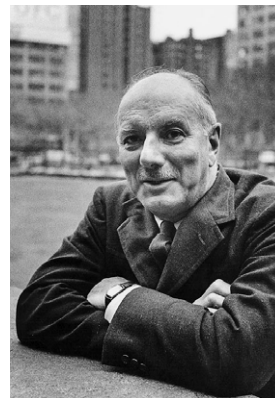
genössische Technische Hochschule (ETH) Zurich. In competition with Giedion, Meyer became a tenured professor at the school in 1951.

László Moholy-Nagy
(1895–1946)



was a Hungarian-born painter, photographer, sculptor, designer, and educator. He was appointed by Walter Gropius to teach as a master at the Bauhaus in 1923. The five-year Bauhaus period was formative for Moholy-Nagy, who established his pedagogical principles during that time. After Gropius's resignation as director of the Bauhaus, Moholy-Nagy returned to Berlin to work as an independent designer. In 1934, Moholy-Nagy moved to Amsterdam, setting up a design studio with György Kepes in London the following year. Upon Gropius's recommendation, Moholy-Nagy was called to establish a new school in Chicago based on the educational principles of the Bauhaus. Moholy-Nagy and Giedion spent much time together in Chicago during the Second World War. Their collaboration continued until Moholy-Nagy died of leukemia in 1946.

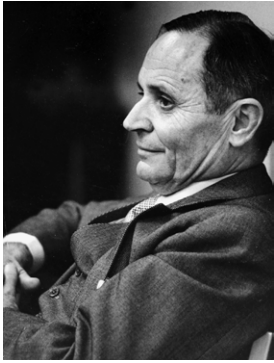
Lewis Mumford
(1895–1990)



was an American architectural critic, cultural historian, and urban planner. Following his evening studies at City College of New York—he never obtained a degree—Mumford pursued a career as a writer and critic. He is well known

for his legendary “Sky Line” columns published in *The New Yorker* between 1931 and 1963. Mumford was a co-founder of the Regional Planning Association of America (RPAA). In 1932, Mumford and Giedion met for the first time in Zurich. Their exchanges increased during Giedion’s stays in the United States and continued as regular correspondence until the end of their careers. Despite different approaches, Mumford and Giedion established a friendship based on frank criticism, common interests, and mutual respect.

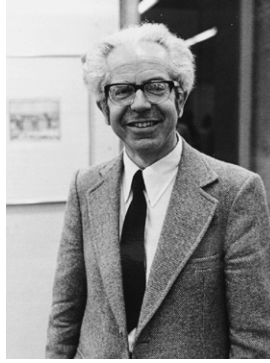
John U. Nef
(1899–1988)



was an American economic historian with Swiss roots. Trained at Harvard University and the Robert Brookings Graduate School in Washington, D. C., he joined the University of Chicago as an assistant professor of

economics in 1929, and a professor of economic history in 1936. With economic history a still-emerging field, Nef was liberated from typical disciplinary constraints, which allowed him to pursue scholarship from perspectives that included philosophy, the arts, and ethics. A philanthropist and patron of the arts, Nef co-founded the Committee on Social Thought at the University of Chicago along with Frank Knight, Robert Redfield, and Robert M. Hutchins, the university’s president. From 1945, he served as the Committee’s chairman for almost two decades. After the war, Nef briefly taught at the Institut d’études politiques in Paris and the Collège de France.

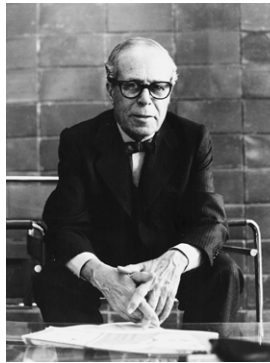
Eduard Sekler
(1920–2017)



was an Austrian-born architect and architectural historian. He was educated at the Technische Hochschule in Vienna. In 1948, he earned his PhD under Rudolf Wittkower at the Warburg Institute in London. Sekler

attended the CIAM Summer School and was the Congrès Internationaux d’Architecture Moderne’s Austrian delegate from 1948 to 1959. He joined the Graduate School of Design at Harvard as a Fulbright Scholar in 1953 and was appointed a faculty member two years later. Sekler served as Coordinator of Studies at the Carpenter Center for the Visual Arts when it opened in 1963, and as the Center’s first director, from 1966 to 1976. In 1968, he co-founded Harvard’s Visual and Environmental Studies (VES) department.

Josep Lluís Sert [also José Luis Sert]
(1902–1983)



was trained as an architect in Barcelona before working with Le Corbusier and Pierre Jeanneret in Paris in 1929. Sert was an active member of GATE-PAC (Grupo de Arquitectos y Técnicos Españoles para el Progreso

de la Arquitectura Contemporánea) and CIAM (Congrès Internationaux d’Architecture Moderne), serving as CIAM’s president from 1947 to 1959. Sert left Spain in 1939 to settle in the United States, where he eventually succeeded the dean of the Graduate School of Design (GSD) at Harvard University, Joseph F. Hudnut, and chairman, Walter Gropius, to single-handedly direct the

school. It was during Sert's tenure as dean that Sigfried Giedion was regularly appointed to teach at the GSD. Along with his academic work, Sert also established his own practice in Cambridge, working on commissions worldwide.

Mary Jaqueline Tyrwhitt
(1905–1983)



was a South African-born urban planner, editor, and educator who emigrated to England, where she was first trained as a horticulturist and landscape architect at the Architectural Association. After initial studies in town planning at the Technische Hochschule in Berlin, she continued her education at the School of Planning for Regional Development in London. Tyrwhitt was a member of the Modern Architectural Research (MARS) Group, and she played a leading role in the Congrès Internationaux d'Architecture Moderne (CIAM) starting with the postwar CIAM meetings. After the Second World War, she taught at the New School for Social Research in New York and was appointed at the University of Toronto to establish a graduate program in city and regional planning. In 1955, Josep Lluís Sert invited her to Harvard University to create an urban design program. During her active engagement on behalf of the United Nations, Tyrwhitt collaborated with Greek architect Constantinos Apostolos Doxiadis.

Prologue

When an illustrious group of architects, artists, historians, scientists, and writers gathered at the Trocadero in London on March 9, 1937, for a farewell dinner party in honor of Walter Gropius, who was about to take on the position of chair at Harvard University's Graduate School of Design, Sigfried Giedion, visiting from Switzerland, was also among the guests.¹ During the second half of the 1930s, the art historian had been a frequent visitor at the Lawn Road Flats, probably the first apartment building in London designed according to modernist principles, and home to his close friends Gropius, László Moholy-Nagy, and Marcel Breuer.² Between 1935 and 1938, Giedion repeatedly traveled to London to conduct research for a new book and attend meetings on behalf of the Congrès Internationaux d'Architecture Moderne (CIAM).³ While the activities of the organization began to slow down on the continent around the mid-1930s, a group of energetic British architects eventually formed a band of like-minded professionals with the aim of propelling the ideals of modern architecture in the rather conservative cultural climate of Great Britain. It is therefore no coincidence that many of the founding members of the Modern Architectural Research (MARS) Group were actively involved with the community of former Bauhaus faculty members who had fled to English exile from political and economic pressures in Germany.⁴

The climax of the architectural vanguard's influence on the British scene was the 1938 MARS Group exhibition at London's New Burlington Galleries, which demonstrated "the practical advantages" of modern architecture to an intrigued public.⁵ By then, however, most émigrés had already left London to establish their permanent exile in the United States. With this displacement of his inner circle from Europe to the other side of the Atlantic, and the resulting lack of support that the network had given him, Giedion found that his activities—especially back in his home country—gradually were becoming more challenging.

In Switzerland, a considerable number of architectural projects along the lines of the Neues Bauen were under construction or even completed by the beginning of the 1930s. Giedion and his peers successfully promoted a "symbiosis of art and technology," and managed to merge art, architecture, photography, graphic design, and furniture design into a larger cultural production, an effort culminating in the foundation of Wohnbedarf AG, a furniture company that initiated collaborations with architects and designers to shape the modern living environment.⁶ At the time, the art and architecture scene of the country was still characterized by an internationalist spirit with a particular focus on Paris and Berlin. However, when the political situation began to change in the mid-1930s, and intellectuals from different political backgrounds began to oppose the growing threat of the authoritarian regimes in neighboring Germany and Italy,

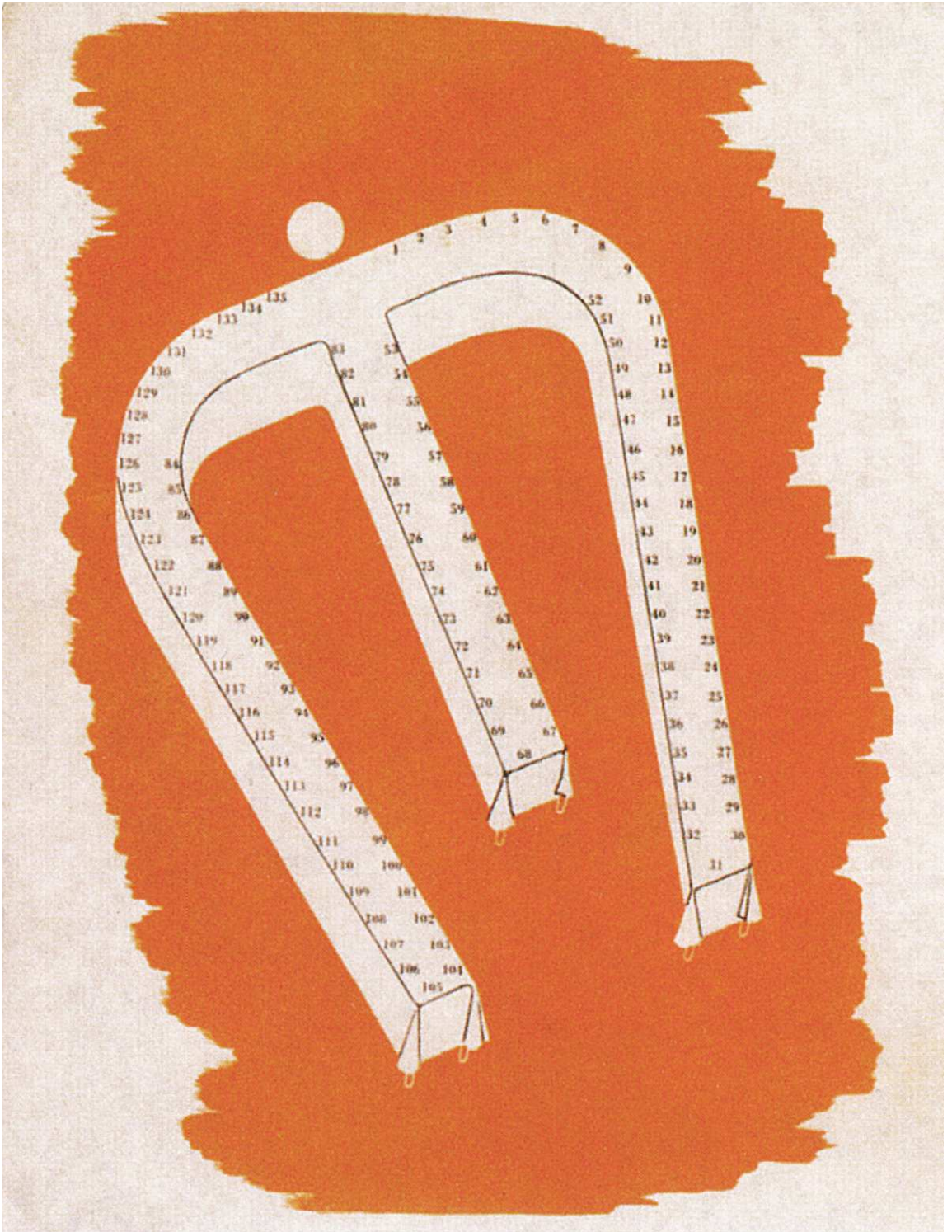
1.01–1.02

Menu card for dinner in honor of Walter Gropius, March 9, 1937, Trocadero Restaurant, Piccadilly, London, listing Sigfried Giedion among the distinguished guests.

1.03–1.04

Installation view of the Modern Architecture Research (MARS) Group exhibition at the New Burlington Galleries, London, January 1938.

The show featured the work of a number of vanguard architects associated with Giedion.



ALPHABETICAL LIST OF GUESTS

A	Professor Abercrombie	6	F	Mr. Ernst L. Freud	46	M	Mrs. J. Duncan Miller	71
	Mrs. Patrick Abercrombie	106		Mrs. Ernst Freud	5		Professor L. Moholy-Nagy	72
	Dr. Thomas Adams	127		Mr. E. Maxwell Fry	83		Mrs. Moholy-Nagy	132
	Mrs. Mary Adams	67		Mrs. E. Maxwell Fry	88		Mr. Henry Moore	47
	Mr. E. W. Armstrong	84					Mr. Henry Morris	70
	Mrs. E. W. Armstrong	102	G	Dr. Siegfried Giedion	66		Mr. H. G. Murphy	87
	Mr. Ove Arup	25		Mr. John Gloag	17	N	Mr. Christopher Nicholson	38
	Mrs. Ove Arup	124		Mrs. John Gloag	78		Mr. Max Nicholson	12
	Mr. D. Ascoli	109		Mr. V. H. Goldsmith	79		Mr. Clifford Norton	13
	Mr. Ray Atherton	133		Mrs. Isc Gropius	1		Mrs. Clifford Norton	104
				Dr. Walter Gropius	135			
B	Mr. D. Batts	95	H	Mr. Val Harding	15	P	Dr. N. Pevsner	61
	Mrs. De-Donato-guano	96		Mrs. Val Harding	58		Miss M. E. Phoysey	126
	Mr. Eric L. Bird	18		Dr. R. Hargreaves	24		Dr. Arthur Upham Pope	16
	Mr. D. L. Bridgewater	93		Mrs. Hargreaves	37		Mr. Fleetwood C. Pritchard	89
	Mrs. D. L. Bridgewater	22		Mrs. Gillian Harrison	7		Mrs. Fleetwood C. Pritchard	41
	Professor Lionel Budden	125		Mr. Ashley Haxinden	39		Mr. J. Craven Pritchard	26
				Mrs. Ashley Haxinden	82		Mrs. J. Craven Pritchard	69
C	Mr. William Cahn	94		Mr. G. Brian Herbert	111	Q	Mr. Hugh Quigley	90
	Mr. Noel Carrington	123		Professor W. G. Holford	29			
	Mr. Edward Carter	37		Mrs. W. G. Holford	9	R	Dr. M. Rachlis	86
	Mrs. Edward Carter	51		Dr. Julian Huxley	3		Mr. A. B. Read	40
	Mr. Cyril Carter	42	I	Mr. Gilbert Inglesfield	20		Mr. Herbert Read	68
	Mr. F. Charles	112		Mrs. Gilbert Inglesfield	115		Professor C. H. Reilly	44
	Mr. Serge Chermayeff	53					Mr. Paul Reilly	60
	Mrs. Serge Chermayeff	28	J	Mr. R. T. James	92		Mr. J. M. Richards	11
	Mr. Wells Coates	64		Mrs. R. T. James	19		Mr. Michael Ross	50
	Mr. J. M. Cohen	62	K	Mr. H. Kallenbach	21	S	Mr. Gordon Russell	52
	Mrs. J. M. Cohen	65		Mr. B. Katz	120		<i>Sir Ronald Sainsbury</i>	48
	Mr. Willard Connely	53		Mr. C. J. Kaysonagh	101		Mr. Godfrey Samuel	8
	Professor W. G. Constable	105		Miss Gertrude Kolman	56		Mr. P. Morton Shand	26
	Mr. George Cooke	59	L	<i>Mrs. H. S. Landauer</i>	33		Mrs. P. Morton Shand	26
	Mrs. George Cooke	122		Miss Judith Ledboore	80		Dr. S. Singheim	76
	Mr. Graham Cunningham	97		Miss Jane Lidderdale	13		Mr. J. Dixon Spain	118
	Mrs. Graham Cunningham	119	M	Sir Ian MacAlister	31		Mr. C. D. Spragg	98
	Mrs. E. Curtis	117		Lady MacAlister	134		Mrs. Cunninghams Strutt	110
	Mr. D. Curtis	116		Mrs. Edward Manfe	43		Mr. John Sumnerston	27
	<i>MA Anjas Connell</i>			Mr. J. E. R. McDonagh	100		Mr. Cyril Sweett	113
D	Mrs. Hugh Dalton	32		Mrs. J. E. R. McDonagh	100	V	Mr. R. Vaughan	114
	Mr. W. Davies	121		Mr. Charles Marriott	131		Mrs. Dorothea Ventriss	75
	Mr. Richard de la Mare	10		Mr. Charles Marriott	30	W	Mr. C. H. Waddington	49
	Miss Elizabeth Derby	128		Mr. Basil Marriott	99		Mrs. C. H. Waddington	73
	Mr. T. Denman	103		Mrs. Hortley Mason	45		Sir Alexander Walker	107
	Mrs. T. Denman	108		Mr. J. Duncan Miller	23		Lady Walston	120
	Mr. E. M. O'R. Dickey	129					Mr. Richard Weisinger	85
	Mrs. E. M. O'R. Dickey	54					Mr. H. G. Wells	2
	Mr. J. G. F. Donaldson	74					Mr. Clough Williams-Ellis	81
	Mrs. J. G. F. Donaldson	63						
E	Mr. Geoffrey Faber	4						
	Mr. Alexander Farquharson	77						
	Miss Ellen Frank	35						



1.03



1.04



1.05

the cultural climate in Switzerland took a significant turn.⁷ While Giedion had tried to counter the “decadent and reactionary currents of contemporary culture” a few years earlier in his position as co-editor of the anti-fascist journal *information*, it became increasingly difficult for him to cope with the rising forces of what eventually became known as *Geistige Landesverteidigung* (spiritual national defense).⁸

Giedion’s relationship to his immediate context in Switzerland progressively worsened. In January of 1935, he quit his position at Wohnbedarf due to frictions with his co-founders, and in September of the following year he left the editorial board of the journal *weiterbauen*, the Swiss CIAM group’s official publication.⁹ Not long after, Giedion formally resigned from the local CIAM section, though he retained his position as secretary-general of the organization. In addition, the unavoidable breakdown of the German section of CIAM—many of its key members had left the country or were unable to practice in Nazi Germany—significantly weakened Giedion’s position within the organization and eventually forced him into intellectual isolation.¹⁰ An exhibition dedicated to Le Corbusier’s *oeuvre plastique*, presented at Kunsthhaus Zürich in early 1938, was Giedion’s last activity on behalf of modern art and architecture in his hometown. “This is for the time being my last exploit,” he reported to Gropius, who by then had settled in the United States: “I hereby conclude my local activity for a time.”¹¹

First American Contacts

- 1.05 Giedion was part of a well-established and wide-ranging network of architects, art historians, critics, and artists working throughout Europe; Arrival in New York, 1938. however, due to the diasporic crossings of the Atlantic, many of his closest allies and friends settled in the United States. In the continually deteriorating political and cultural climate on the eve of the Second World War, Giedion rarely engaged in public activities, and withdrew from his official roles to pursue research for his book project “Die Entstehung des heutigen Menschen” (The Origin of Modern Man).¹²
- 1.06 Correspondence with Walter Gropius and László Moholy-Nagy suggests that Giedion increasingly felt abandoned, even by his closest friends. He therefore received Moholy’s invitation to join the faculty at the New Bauhaus—American School of Design in Chicago as a pleasant surprise: “And now, out of the blue, there is proof that there are still people who advocate on one’s behalf. For I believe that so far, I championed others more than others stood up for me. You must have had similar experiences.”¹³ The situation is not as simple as the art historian would have us believe, however. Giedion was somewhat torn. On the one hand, he was eager to leave his home country to

Telegramm — Télégramme — Telegramma

Heure
Ora

55054 CHICAGOILL WU451 23 13/10 WESTUNION RS =

54

Erhalten - <i>Reçu</i> - Ricevuto		Befördert - <i>Transmis</i> - Trasmesso	
von - <i>de</i> - <i>da</i>	Stunde- <i>Heure</i> -Ora	nach - <i>à</i> - <i>a</i>	Stunde- <i>Heure</i> -Ora
R.S.	Name - <i>Nom</i> - <i>Nome</i>		Name - <i>Nom</i> - <i>Nome</i>

Brieftelegramm 14 X. 37c 0007Zü50

= nlt = giedion 7 doldertal zurich
went Briefk. Per Boten

= your start first semester belated hoping collaboration next
year further negotiations by mail when received your flugpost
= moholynagy

+ 7 ++

seek better work opportunities in America, where a rapidly growing group of his colleagues were establishing their new practices; on the other hand, he still hoped for the situation in Europe to improve and the possibility to finish his work in progress without interruption.¹⁴ Giedion eventually rejected Moholy's proposal, but kept the door open by offering his immediate help if needed. At the same time, he stressed that he would certainly have to return to Europe.

It seems that Giedion had something else in mind. Most likely, Moholy-Nagy's newly founded school did not give him the impression of stability. Faculty was only hired part-time, and it was generally known that the financial condition of the institution was extremely fragile. Harvard, where Gropius had been in charge of the architecture program since 1937, was more prestigious and financially powerful; in addition, the political circumstances in Switzerland were still stable enough not to warrant a rushed decision.¹⁵ As architectural historian Eduard Sekler pointed out, Giedion astutely used Moholy's positive interest in him as a hint to his friends in Cambridge, and he made casual mention to them of this potential teaching opportunity in Chicago.¹⁶ Surely, this modicum of extra pressure had a positive impact on the following developments, as did Moholy-Nagy's detailed accounts of Giedion's ambitious multivolume book project.¹⁷ Giedion must have been familiar with the situation in Cambridge, which allowed him to draft his correspondence with Gropius and Breuer in such a way that his qualifications and expectations became clear without the need for Moholy-Nagy to intervene. Giedion saw Gropius's depictions of Harvard President James B. Conant's newly installed "university professorships," which were supposedly going to "burst the walls between faculties and ... balance specialization with a total equilibrium," as the chance to urge his friends to make his case for him, since he had advocated a similar position earlier.¹⁸ In a direct answer to Gropius, Giedion stressed his interest in and current examination of exactly such topics as the "emergence of our time," "the relationship between diverse disciplines," and the "fusion of life, architecture and art."¹⁹

In 1935, three years prior to Giedion's first stay in the United States, far-reaching changes came to Harvard University. Joseph F. Hudnut, the former head of Columbia University's School of Architecture, assumed the deanship of the faculty of architecture, which at the time comprised three individual schools: Architecture, Landscape Architecture, and City Planning.²⁰ Hudnut's abrupt takeover caused some agitation among the faculty. While they had asked in their address to President Conant for "collaboration between the fields of design" and a "collaborative approach to design education that would ... dispel the antagonism that existed among the professions," they did not quite anticipate changes as radical as their new dean's amalgamation of the three schools into the Graduate School

of Design (GSD), just one year after his debut in Cambridge.²¹ An educational reformer at heart, Hudnut not only reorganized the overall structure of the school but also set the ground for some fundamental changes in its design pedagogy, overhauling the existing curriculum. Under the auspices of the new dean, design became the central interest and focus of the school, one of the reasons why the GSD was to “become the leading school of architecture on [the American] continent, if not the world,” as President Conant put it. Without a doubt, Harvard’s new direction would have a lasting influence on the development of modern architecture in America.²²

The Graduate School of Design was in need of a new head for its design programs. Joseph Hudnut, whose modernist sensibility stemmed from his experiences at the office of city planner Werner Hegemann, looked toward Europe to find the right person to join him in the quest to bring a modern spirit to the school, and to consolidate the arts and sciences.²³ The educational environment at Harvard at this time was quite conservative, especially in contrast to New York, where, during his tenure at Columbia, Hudnut had established a strong network of academics and practitioners who shared his progressive ideals. Among them were Alfred H. Barr, the director of the Museum of Modern Art (MoMA), and the director of MoMA’s Department of Architecture and Design, Philip C. Johnson.²⁴ Barr and Johnson were scouting for European architects who would be willing to come over to the United States to teach and practice, and they also got involved with the search for the new chairperson at Harvard. Short-listed along with J. J. P. Oud and Ludwig Mies van der Rohe, was Walter Gropius, who eventually was hired as chair.²⁵

Despite Hudnut’s remarkable skills as an administrator and his political dexterity, the appointment of Gropius would not have been possible without the unconditional support of Conant, who was very much interested in Germanic culture and education, and who had a strong affinity for modern architecture, specifically the pedagogical approach of the Bauhaus.²⁶ Trained as a chemist, Conant developed a genuine interest in architecture and considered it one of the key disciplines in establishing his project for so-called “university professorships,” which would operate autonomously from individual faculties, encouraging scholars to transcend their disciplinary boundaries. Gropius saw in the Graduate School of Design a possibility to accomplish what he had been unable to achieve in Germany: the creation of *the* leading school of modern architecture, independent from the socioeconomic and political obstacles that had dominated the Weimar Republic. The political circumstances after Hitler’s takeover in 1933 had made Gropius’s work in Germany extremely difficult, and Great Britain, where he settled in 1934, did not prove to be a fertile environment for his academic and professional advances either.²⁷

In the first few years, the collaboration between Gropius and Hudnut was successful. Both were driven by an unflagging energy and the conviction to convert Harvard into a repository for modern thought.²⁸ In a letter to his friend Giedion, Gropius reported:

[A]t [H]arvard everything goes splendidly, the dean is a true friend and a human who combines silence and tactfulness with determination, namely the determination to support me through thick and thin and to establish a new organization according to my requests. [I] have the impression that over time things can be achieved here. even if whole geological strata of ignorance have to be cleared away first. the president of [H]arvard is also a man with the plan and resolution to give [H]arvard a modern direction.²⁹

A first step in this quest was the attempt to revitalize the faculty by bringing in individuals who would share modern ideas, rather than exacerbating the eclectic tendencies of the mainly Beaux-Arts teachers. The former head of the Bauhaus, naturally, was eager to bring over some of his closest colleagues to teach at the GSD.³⁰ Marcel Breuer quickly became Gropius's assistant at the school, and eventually his partner in their early years in Cambridge, when they formed a collaborative practice. Gropius never made a secret of his ambition to bring other representatives of the modern movement to the United States to gain more influence: "It is my intention, in order not to remain isolated in my position, to bring others from our circle over, so that our school has its representatives at multiple places in this country."³¹

Despite Giedion and Gropius's loyal friendship—they had been introduced at the *Bauhausausstellung* in 1923, where Giedion was reporting on the exhibition—the vocal proponent of modern architecture in Europe was not among the first to be drafted to go to America.³² On the contrary, Gropius consulted his colleague about possible candidates without bringing up Giedion's case or offering him a position, even though Giedion had repeatedly communicated frustration with his intellectual isolation in Switzerland.³³ A former vice president of CIAM, Gropius was interested in sustaining a strong connection to Europe and apparently perceived Giedion, the organization's secretary-general, as a prime member in the intellectual opposition to the rise of fascism.³⁴ He wrote to Giedion, "the importance of this congress lies in the fact that it is the only intellectual island upon which all of our ideas, despite the European desert that surrounds us, still fruitfully mature, and to me this seems worth preserving and expanding."³⁵ Also, since he held Swiss citizenship, there was no immediate danger for Giedion, even though he was of Jewish descent. Other close friends of Gropius's in Germany, on the other hand, were already suffering under the repressions of the National

Socialist regime and were desperate to leave the country.³⁶ But most important, Gropius had a highly ambivalent relationship to the discipline of history in the context of architectural education.³⁷ He was convinced that the knowledge of existing forms and building types would inhibit students from developing their own independent ideas, and thus was not eager to appoint another art historian. The predominant Beaux-Arts orientation at Harvard University probably led him to insist on this position all the more. The newly appointed chair of the architecture program even engaged in serious debates about the eradication of history from the curriculum with Dean Hudnut, who was teaching the subject himself.³⁸

In December 1937, Sigfried Giedion received a letter postmarked Cambridge, Massachusetts, that would change the course of his career. His friend Walter Gropius had great news to share:

After several deliberations, we have recommended you in the first place Imagine, it worked out. you are in the first place, [T]homas [M]ann ranks second. the fund is very substantial, possibly almost \$ 10,000 ... the series of your lectures will be published as a book with harvard [university] press. you are at the center of attention ... , as the whole question of architecture, with my arrival and [H]udnut's presence, is currently on everyone's mind, [I] thought that none other than you could better widen the gap and provide truly fundamental explanations for our movement.³⁹

Apparently Gropius and Breuer had been successful in lobbying for their friend's candidacy for Charles Eliot Norton Professor in Poetry.⁴⁰ Or rather, it was Hudnut—an academic administrator at heart—who ultimately had managed to convince the selection committee of Giedion's merit.⁴¹ The Norton professorship was a highly prestigious position and offered the art historian a platform he never had before.⁴² His bitterness about his continual conflicts in the academic and cultural context of Switzerland were likely well known to the circle of his closest friends. Not without reason, Gropius wrote to Giedion regarding his victory over the Swiss: "We are amused to imagine that you can blast this triumph at your ossified confederates."⁴³ The Norton professorship was not tied to a specific department and had a limited tenure of one year. Because Giedion was not hired as a faculty member at the Graduate School of Design, this meant that Gropius could bring one of the masterminds of the modern movement to the school without compromising his approach toward history. For both men, the appointment had an enormous importance, as it was another meaningful step in the dissemination of modernist ideas across North America.⁴⁴

Giedion's decision to teach at Harvard University's Division of Fine Arts was rather bold, since he did not quite belong to the same set of art historians as those teaching at this school at the time: historical scholarship was preoccupied with methods of construction and dominated by an archaeological approach to the history of design, without providing a larger historical and cultural context for the studio courses. Giedion, who until then had worked as an independent critic outside the academy, never agonized over the question of "which tradition" he was working in, but now felt that he had to declare a position within the field.⁴⁵ In order to put his fellow art historians at the college at ease, Giedion affirmed his connection to the Burckhardt-Wölfflin lineage.⁴⁶ The introduction to *Space, Time and Architecture*, the book published in conjunction with his lectures, is almost entirely dedicated to embedding his approach in that historical tradition.⁴⁷ Giedion's lectures were also intended as a counter-reaction to the eclectic tendencies of the Beaux-Arts approach and its encyclopedic treatment of architectural history, based on inventories of acknowledged masterpieces to be copied. His ambition was to write a replacement for Sir Banister Fletcher's omnipresent volume, *A History of Architecture on the Comparative Method* (1897), which Giedion criticized for its approach, but respected for the "exactness of its descriptive materials."⁴⁸

Despite the at times awkward position he occupied between the faculties of architecture and art history, Giedion was comfortable with the academic culture of the American system. He was not at all a typical academic in the European sense. Giedion received his doctorate from the University of Munich, but then decided to quit the academic field for a while and to engage as a critic in contemporary architectural discourse. He never submitted a *Habilitationsschrift* (postdoctoral thesis), which was required to obtain a *venia legendi*, the permission to teach.⁴⁹ This was certainly one of the reasons why he was not appointed to a chair in Switzerland before crossing the Atlantic. In contrast to the rather hierarchical chair system in place at most European academies, American schools were organized more loosely, as a conglomerate of individual educators. There was a stronger tendency to hire guest professors and lecturers, in order to guarantee a frequent exchange of faculty and ideas, and hence academic status seemed less important than actual competence. While access to academic activities was much more restricted in Europe, the public lectures at Harvard allowed Giedion to reach a larger group of engaged individuals than he ever had in Switzerland.

According to the art historian Erwin Panofsky—an émigré to the United States himself—the discipline of art history in America profited from the cultural and geographical distance from the Old World.⁵⁰ In Europe, he claimed, discussions of contemporary phenomena were "distorted by national and regional bias," immediately ended in



dispute, or “forced the more intelligent art historians into silence.”⁵¹ In the United States, he asserted, “such men as Alfred Barr and Henry-Russell Hitchcock, to name only two of the pioneers in this field, could look upon the contemporary scene with the same mixture of enthusiasm and detachment, and write about it with the same respect for historical method and concern for meticulous documentation, as are required of a study on fourteenth-century ivories or fifteenth-century prints. ‘Historical distance’ (we normally require from sixty to eighty years) proved to be replaceable by cultural and geographic distance.”⁵² Even if the academic environment in the United States was not only ruled by the progressive minds that Panofsky identified, the culture was one of omnipresent enthusiasm and curiosity. The regular intersection of professionals and laypeople provided a context in which unorthodox positions could be openly disputed.

In his role as secretary-general of CIAM, Giedion was operating from the very center of the contemporary architectural scene. By declaring that “even the historian stands within, not above time,” he pronouncedly distanced himself from the common German approach to *Kunstwissenschaft* (science of art).⁵³ Giedion’s interest and focus on contemporary subjects can be traced in his journalistic contributions to a variety of newspapers and periodicals, many of which appeared between 1929 and 1941—a decade-long hiatus in his book production.⁵⁴ Giedion’s well-known articles in *Cicerone*, his CIAM supplements to *Bauwelt*, and his essays on architecture in *Cahiers d’art* (1928–1934) are testament to a committed expression of opinion during that time.⁵⁵

1.07-1.09 Arriving at Harvard, Giedion had the opportunity to expose his approach to history and criticism to an academic context for the first time. No doubt, this was an opportunity to further develop his work as a contemporary critic, and to break free from the conventions that had hampered his work in Switzerland. As a visiting faculty member, Giedion was exempted from administrative tasks and could fully concentrate on his teaching and research, and dedicate time to frequent public events and social engagements. Unlike his colleagues Gropius and Breuer, Giedion resided at the core of the Harvard community, in Dunster House, one of the first dormitories built in the 1930s, from where he could actively take part in campus life. Figuring among the best-endowed American universities, Harvard attracted a great number of intellectuals from all over the world, many of whom, as Giedion later recalled, would gather informally during meals and evening hours to exchange their thoughts:

When I first was called to Harvard in 1938/39 and I felt the need for contact with some members of the society of young scholars, where they meet frequently and where each member has a silver candle-stick at his place during meals. Afterwards we sat together,

the philosopher Alfred North Whitehead and the witty former President of Harvard University [Abbott Lawrence Lowell], [Bertrand] Russell and others.⁵⁶

One of the gray eminences at Harvard who inspired the work of the architectural historian was Alfred North Whitehead.⁵⁷ During Giedion's residency as the Charles Eliot Norton Professor in Poetry, Whitehead gave the 1941 Ingersoll Lecture at Harvard on "Immortality."⁵⁸ It can be assumed that the Swiss art historian attended this lecture, but Whitehead's *Science and the Modern World* (1925) was a more critical influence.⁵⁹ This history of modern science and how cultural history has affected it could be read as a precursor to Giedion's work in the field of art and architecture and, later on, his contribution to industrial archaeology. Both scholars shared an unusual interest in "the analysis of the obvious"—Whitehead in the "Order of Nature," Giedion in the mechanization of the everyday.⁶⁰ Giedion repeatedly cited Whitehead's work, most directly at the second postwar CIAM congress in Bridgwater, England, where he drew an analogy between the philosopher's claim of an interdependence of matter and mind in modern science and his own conviction that "architecture can no longer be divorced from painting and sculpture."⁶¹

New World:

The Harvard Libraries

In addition to personal contacts and exchanges with resident academics, the aggregation of excellent libraries was invaluable for Giedion's research in Cambridge, allowing him to continue the work he had conducted at the Bibliothèque Nationale in Paris and at various institutions in London before his appointment to Harvard. The distinguished collections became a crucial instrument for the research and preparation of his Norton Lectures. Oscillating between a new arrival's insecurity and a pretentious European attitude, Giedion noted that he "brought over a load of books, because [he] thought they would not be available at Harvard."⁶² The art historian was astonished when he found an array of diverse resources so easily accessible. Well aware of European intellectual production, the Swiss historian was confronted for the first time with important works of the North American cultural sphere. The Harvard libraries opened up a whole new array of knowledge and scholarship, and allowed Giedion to access American literature of the time, which was almost impossible to find in Europe.

Harvard's collection had been significantly expanded under the stewardship of Archibald Cary Coolidge, a professor of history and the first director of the Harvard University Library. The cultural

and linguistic diversity of books had a strong impact on expanding the international scope of American education and scholarship.⁶³ Coolidge purchased thousands of books with the aim of assembling a collection of a range and quality that would attract scholars from all fields. During his presidency, he managed to position the University Library among the foremost collections worldwide. Giedion's favorite workplace, Widener Memorial Library, was built to store books on ten levels of load-bearing stacks and represented the acme of Coolidge's tenure.⁶⁴ Coinciding with Walter Gropius's arrival in Cambridge, Keyes D. Metcalf was appointed the new director of the Harvard University Libraries in 1937.⁶⁵ Under his direction, librarianship was professionalized and library specialists collaborated closely with faculty in order to guarantee the extension of the collection. Mesmerized, Giedion remarked that whenever he was looking for a book that the library did not hold, it would become available within less than a week.⁶⁶ Over the course of his stays at Harvard, the Swiss critic developed extremely productive relationships with various staff members at Widener Library and the library of the Fogg Museum, as well as at the collection of the Graduate School of Design. Giedion enjoyed privileged access to reading rooms and could count on a very exclusive service: books were regularly sent to his temporary domiciles all over the United States, and after his return to Switzerland, he even had documents delivered to his Zurich address.⁶⁷ Giedion frequently praised the libraries and archives at Harvard, and it is clear that he was voraciously gathering knowledge during his time in Cambridge. Not only did he spend most evenings at his usual desk in the Widener stacks, where the written form of his Norton Lectures gradually took shape, the libraries and their staff became his extended office:

You know how I like to work in your rooms, especially in the evening. I have this winter a course on "American Life and Architecture since 1850" [at Yale] and I have become more and more interested into the subject. But unfortunately I cannot ask: Miss Cook, do you know. I am reduced to my own notes and to the few books which are here at my disposal. I cannot continue my research work on "Americana."⁶⁸

Correspondence suggests that some librarians even gave Giedion critical advice regarding research papers and manuscripts that he forwarded to them.⁶⁹ Even after his term at the university had ended, Harvard librarians compiled registers of libraries throughout the United States to disseminate Giedion's published work and willingly prepared reading lists for the historian, which helped him to access the realm of American scholarship.⁷⁰ Next to all the essential resources for Giedion's research, the title of one book placed at



Dr. Fritz Ostertag,
Alt-Bundesrichter, seit
1926 Direktor des Inter-
nationalen Amtes für
Geistiges Eigentum in
Bern, hat seinen Rück-
tritt eingereicht.
(Photopress, Zürich)



Dr. Emil Bächler,
der weit über die Landes-
grenzen hinaus bekannte
Archäologe und Konservator
am naturwissenschaftlichen
Heimatmuseum in
St. Gallen, wurde dieser
Tage 70 Jahre alt. (Phot.
G. Mangholz, St. Gallen)



Dr. S. Giedion, Zürich,
Kunsthistoriker und Dipl.-
Ing., wurde für das akademi-
sche Jahr 1938/39 auf
den Elliot-Norton-Lehrstuhl
der Harvard Universität,
Boston, U. S. A., berufen,
eine bedeutende Ehre für
den Gelehrten.
(Phot. Finsler)



Schoellkopf, Zürich,
holte sich die schweizerische Meisterschaft im
Eisschnellauf in Davos und stellte über 1000
und 5000 Meter neue Schweizer Rekorde auf.
Einen neuen Schweizer Rekord über 3000 m
holte sich Rizzi, Davos. (Phot. ATP., Zürich)



Die große Ueberraschung an den Eiskunstlauf-Weltmeisterschaften
in Stockholm: die junge Engländerin Megan Taylor, schon an den
Europameisterschaften in St. Moritz eine scharfe Konkurrentin von
Cecilia Colledge, schlug diese und wurde neue Weltmeisterin. Für
Cecilia Colledge ist der Verlust des Titels eine sehr schmerzliche
Angelegenheit, aber auch ein großer Ansporn, ihn wieder zurück-
zuerobbern.
(Photopress)



“eye level opposite the entrance to the stacks of Widener Library, hard to be ignored by any frequent visitor,” as Eduard Sekler recalled, would leave a lasting mark on the art historian: Samuel Alexander’s *Space, Time and Deity* (1920).⁷¹

Toward a Bible
of Modern
Architecture

1.10 The call to lecture as Harvard’s Charles Eliot Norton Professor in Poetry reached Sigfried Giedion without advance notice. In the midst of an ongoing research project, and preoccupied with the daily business of CIAM, he was not prepared to deliver the series of six required lectures that eventually would be turned into a publication.⁷² In the months before the beginning of his tenure at Harvard, Giedion diligently began to collect the necessary materials, and to arrange his tremendous collection of lantern slides, many of which he had taken himself. His closest colleagues in America were full of anticipation about the prospect that the tenets of European modernism would finally be outlined to an American audience, and expanded through Giedion’s “fundamental explanations.”⁷³ Instead of presenting his ongoing research on the “origin of modern man,” Giedion began to outline the “intellectual foundations of the contemporary architectural development.”⁷⁴ This was at least in part a result of pressure from his colleagues.⁷⁵ Walter Gropius, for example, repeatedly told his friend to leave out topics related to his studies of everyday life, and to focus on architectural questions that would prepare the ground for the modern movement in the United States.⁷⁶ The final lecture program ultimately was presented as an extended version of Giedion’s architectural periodization, a first attempt at rooting modern architecture in a historical narrative that he had published in the newspaper *Neue Zürcher Zeitung* as early as 1934.⁷⁷

His approach, as he later declared in the published version of his lectures at Harvard, was reminiscent of that of Jacob Burckhardt, who “first showed how a period should be treated in its entirety, with regard not only for its painting, sculpture, and architecture but for the social institutions of its daily life as well.”⁷⁸ Giedion attributed a first phase of the development predominantly to Tony Garnier and Auguste Perret, focusing on the application of ferroconcrete in architecture rather than civil engineering; a second phase was dedicated to the optical revolution and the “creation of a new architectural vocabulary” in the work of Le Corbusier, Walter Gropius, and J. J. P. Oud; in a third phase, social issues raised at the second CIAM congress held in Frankfurt in 1930, addressing “Die Wohnung für das Existenzminimum” came into play; and a fourth phase, as Giedion described

it, addressed issues at the scale of the city.⁷⁹ The art historian must have perceived this position at Harvard as a great opportunity for both himself and his cause: altogether, Giedion delivered twice the number of lectures that had been expected, divided into two series between November 1938 and April 1939.⁸⁰

After an introductory presentation titled “The Role of History Today,” defining his position within the field of art and architectural history, establishing the previously mentioned Burckhardt-Wölfflin lineage, and justifying his position as an integral part of his own period—he claimed “the ideal historian ... is a fiction”—Giedion presented a series of lectures that reflected the evolutionary pattern he had established during the early 1930s.⁸¹ The first two sessions aimed to prepare a solid ground for the developments of modern architecture by outlining the achievements of the Renaissance and the Baroque period. In this historical context, Giedion introduced the concept of the perspective, the “undulating wall” as a precondition for the “flexible ground plan,” and finally shifted to the scale of urban squares and royal gardens. A further section was dedicated to construction technologies that emerged in the nineteenth century. From the cast iron column to the elaborate steel frame, the historian made a case for developments in the field of engineering that he considered precursors to modern architecture. Apart from citing Henri Labrouste’s Bibliothèque Nationale in Paris, Giedion made his argument almost exclusively with ephemeral structures built for the World’s Fairs between 1851 and 1889. The critic’s rhetorical technique hardly differed from what he had proclaimed precisely a decade earlier in his first book *Bauen in Frankreich, Eisen, Eisenbeton* (1928)—as a comparison of the published version of his lectures with his previous book reveals. It is curious, however, that such examples as the Eiffel Tower or the Pont Transbordeur, which, ten years before, had been the main pillars of Giedion’s argument, were not included until the second edition of *Space, Time and Architecture*.⁸² With a lecture dedicated to the use of ferroconcrete, introducing the work of Victor Horta, Hendrik Petrus Berlage, Otto Wagner, Auguste Perret, and Tony Garnier, Giedion provided the cornerstone for the account of his apparently seamless transition from the end of the nineteenth century to the early days of modern architecture.

Giedion approached the culmination of his lecture series by introducing modern art as the “key to reality” with the power to overcome the split between the “methods of thinking and feeling.”⁸³ Focusing exclusively on the structural engineer Robert Maillart, Le Corbusier, and Walter Gropius, the art historian strikingly demonstrated the development from stunning infrastructural projects to early icons of modern architecture, such as the Bauhaus in Dessau (1926), the well-known competition entry for the League of Nations in Geneva (1927), and the Villa Savoye (1929). The final lecture, delivered in April 1939,



SPACE TIME
ARCHITECTURE

J. Gieteris

was dedicated to the urban scale. It introduced Georges-Eugène Haussmann's radical transformation of Paris, and, finally, summed up the main theses formed under the auspices of CIAM.

Immediately after Giedion delivered his final lecture, he began the intensive labor of translating his notes, editing the lecture manuscripts, and composing preliminary book layouts. After criticism from his closest colleagues regarding the name of his lecture series, "Life of Architecture," he began to seek alternative options for the title of his forthcoming book.⁸⁴ "In thinking it over," he wrote to his friend Moholy-Nagy, "I came to the conclusion that my methods were eager to find the signs of new life in architecture. I propose the following title: ARCHITECTURE AS A SIGNPOST. I think this title will be good, because in this country architecture is not generally enough grasped as a spiritual force."⁸⁵

1.11
Siegfried Giedion,
*Space, Time and
Architecture*, manu-
script mock-up with
preliminary cover,
ca. 1940.

Unless otherwise noted, all English translations of quoted material are by the author.

1 Along with well-known members of the local cultural scene—including architect Edwin Maxwell Fry, Gropius's partner in England; art historian Herbert Read; James Maude Richards, the editor of *Architectural Review*; Author H. G. Wells; and ecologist Julian Huxley, the host of the evening—the guest list also included émigrés from continental Europe, most notably Nikolaus Pevsner and László Moholy-Nagy. The axonometric drawing of the seating plan printed on the invitation cards—designed by Moholy-Nagy—indicates Giedion's presence. Walter Gropius, manuscript, speech for farewell dinner at Trocadero, London, March 9, 1937, HOU bMS Ger 208 (1); see also Anker, "Biology and the Bauhaus," 48–55.

2 Walter Gropius, László Moholy-Nagy, and Marcel Breuer; also known as "The Isokon Building," the Lawn Road Flats are an experimental project of collective housing designed for Molly and Jack Pritchard by Canadian-born Wells Coates in 1934. See Burke, *Lawn Road Flats*; Pearlman, "Spies Who Came into the Modernist Fold," 358–81.

3 In 1934, a meeting of CIAM delegates was held in London.

4 While main figures like Walter Gropius, Mies van der Rohe, Marcel Breuer, and Herbert Bayer were at first still trying to find a way to work within the National Socialist system, some Jewish members of the Bauhaus and politically more articulate students and faculty risked more than the ability to work—their lives were in immediate danger.

5 <http://designmuseum.org/design/the-mars-group.html> (accessed July 4, 2016), saved as <https://archive.is/kQSk>.

6 Magnaguagno, *Dreissiger Jahre Schweiz*, 59; Rüegg, Mehlaue-Wiebling, and Tropeano, *Schweizer Typenmöbel, 1925–1935*.

7 Geiser and Stierli, "Architecture Officielle Maudite," 3–4. See also Meyer, "Situation der Architektur 1940," 241: "Dass die Welle von Nationalismus, die durch unsere Zeit geht, auch in der Architektur ihren Niederschlag finden würde, versteht sich von selbst; es war in den Zwanzigerjahren mit der Welle des Internationalismus nicht anders, und was damals über die nötige Gegenwartsbeziehung der Künste gesagt wurde, gilt ebenso heute. Und wenn die kulturelle und die davon nicht zu trennende politische Entwicklung heute zu einer neuen Betonung echter oder auch nur vermeintlicher Beziehungen zur Vergangenheit führt, so ist daran jedenfalls vom Boden der Architektur aus nichts zu ändern, denn die Architektur war niemals eine autonome Kulturprovinz, die sich auf die Dauer im Gegensatz zur öffentlichen Meinung hätte entwickeln können."

8 Sigfried Giedion, Georg Schmidt, and E. F. Burckhardt, letter to unknown addressee, March 1932, GTA 43-K-1932-03: "Wir wollen alle dekadenten und reaktionären Strömungen in der heutigen Kultur von Philosophie und Oekonomie bis Kunst und Technik feststellen und bekämpfen."

9 The pamphlet *weiterbauen* was published as a supplement to *Schweizerische Bauzeitung* (SBZ) from 1934 to 1936. The founders and

members of the editorial committee included Ernst Friedrich Burckhardt, Sigfried Giedion, Werner Jegher, Werner M. Moser, Alfred Roth, and Rudolf Steiger; see also Koch, "Weiterbauen," 826–28.

10 Sigfried Giedion, letter to László Moholy-Nagy, October 12, 1931, GTA 43-K-1931-10-12: "Hier ist eine blöde Stimmung. Man wird täglich mit immer feineren Mühlen gemahlen."

11 Sigfried Giedion, letter to Walter Gropius, January 18, 1938, GTA 43-K-1938-01-18(G): "Dies ist aber auch vorläufig der letzte Streich. Ich schliesse damit für eine Zeitlang meine lokale Tätigkeit."

12 Sigfried Giedion, letter to László Moholy-Nagy, October 8, 1937, GTA 43-K-1937-10-08(G): "... je länger je mehr denke ich über die Menschen nicht mehr nach, sondern ziehe mich in meine Arbeit zurück bei der man nur Enttäuschungen über sich selbst erfahren kann und die verzeiht man am leichtesten."

13 Ibid.: "Und nun kommt aus heiterem Himmel der Beweis, dass es doch noch Leute gibt die sich für einen einsetzen. Ich glaube nämlich ich habe mich bisher mehr für andere eingesetzt, als andere für mich. Dir wird es ähnlich ergangen sein."

14 Sigfried Giedion, letter to Walter Gropius, October 25, 1937, GTA 43-K-1937-10-25(G). In 1937, Giedion was working intensely on his "research into the origins of this entirely unknown field," pursuing studies in London and Paris for several months. In correspondence with Moholy-Nagy and Gropius he announced the approaching completion of the book.

15 In 1937 Gropius was appointed chair of architecture at Harvard University's Graduate School of Design (GSD). He was in close competition with his fellow countryman Ludwig Mies van der Rohe and Dutch architect J. J. P. Oud. While Oud, a practitioner, was not interested in the position, Mies, who was the director of the Bauhaus in Berlin until its dissolution in 1933, lost out because of his unwillingness to enter into competition for the job with Gropius. Mies van der Rohe, letter to Joseph Hudnut, September 15, 1936, as cited in McAtee, "Alien #5044325," 188, n. 55: "I am willing to accept an appointment, but not to make myself a candidate for a chair. If you stand by your intention to submit several names to the President of the University, kindly omit mine."

16 Sekler, "Sigfried Giedion at Harvard," 266; see also Sigfried Giedion, letter to Walter Gropius, October 25, 1937, GTA 43-K-1937-10-25(G): "Moholy's Antrag hat mich ausserordentlich gerührt und ich habe es als Glück empfunden, irgendwo einen Freund zu wissen, der sich voll für einen einsetzt."

17 Walter Gropius, letter to Sigfried Giedion, January 14, 1938, GTA 43-K-1938-01-14: "Er [László Moholy-Nagy] hat mir, wie ich ihn das letzte Mal sah, viel Details von Deinem Buch ['Die Entstehung des heutigen Menschen'], an dem Du arbeitest, erzählt, und das gab mir den Anlass, dass wir Dich hier vorschlugen als denjenigen Europäer, der am besten und wissenschaftlichsten die gesamten Funktionsvorgänge der Zeit darzustellen vermag, um von da aus die neue Architektur abzuleiten."

18 James B. Conant (1893–1978) was president of Harvard University from 1933 to 1953 and U.S. High

Commissioner and Ambassador to West Germany from 1951 to 1957; Walter Gropius, letter to Sigfried Giedion, June 24, 1937, GTA 43-K-1937-06-24: "Er [President Conant] hat die idee die mauer zwischen den fakultäten zu durchbrechen und das spezialistentum durch totaleren ausgleich zu balancieren. er beginnt sogenannte university-professors zu ernennen, die keiner fakultät angehören, das recht haben in jeder fakultät zu lehren und arbeitsgruppen von mitgliedern verschiedener fakultäten zur lösung besonderer aufgaben zusammenzustellen."

19 Sigfried Giedion, letter to Walter Gropius, October 25, 1937, GTA 43-K-1937-10-25(G): "Denn fruchtbar kann ich meine Tätigkeit nur denken, wenn ich die Resultate meines eigensten Forschungsgebietes den Hörern übermitteln kann: die Entstehung unserer Zeit: die Beziehung der verschiedenen Wissensdisziplinen untereinander, die Verbindung von Leben, Architektur und Kunst, sowie die Entstehung des heutigen Weltbildes."

20 Jill Pearlman has written extensively about Joseph Hudnut's role at the Graduate School of Design at Harvard University; Pearlman, "Joseph Hudnut's Other Modernism at the 'Harvard Bauhaus,'" 452–77; Pearlman, *Inventing American Modernism*, 50–84. For Joseph Hudnut's views on education, architecture, and planning, see Hudnut, *Architecture and the Spirit of Man*.

21 Hershberg, *James B. Conant*, 76–134, 391–462; Alofsin, *Struggle for Modernism*, 112.

22 James B. Conant, in the Annual Report to the Board of Overseers, as quoted by Robert A. M. Stern in Johnson, *Writings*, 62.

23 For a detailed study about the ideas and the work of Werner Hegemann (1888–1936), see Crasemann-Collins, *Werner Hegemann and the Search for Universal Urbanism*, 133–43.

24 Alfred Hamilton Barr (1902–1981) was the founding director of the Museum of Modern Art (MoMA) in New York. He served in this position until 1943. Philip Cortelyou Johnson (1906–2005) was the first director of MoMA's Department of Architecture from 1932 to 1934. He assumed this position in 1946 after graduating from Harvard University, and serving in the U. S. Army Corps of Engineers; he resigned in 1954.

25 Joseph Hudnut, letter to Walter Gropius, November 13, 1936, HOU, bMS Ger 208 (925): "I cannot tell you how happy I am at the apparently successful outcome of my plans. I hope most sincerely that you will find it possible to come to Harvard and I look forward with great pleasure to many years of collaboration with you. Your presence in Harvard University will not only be of the greatest possible value to this institution but, beyond that, I feel that the service you can render to the cause of architecture in this country is valuable beyond all calculation."

26 Many of the faculty members and alumni opposed the appointment of a foreign architect as chair of the architecture program. James B. Conant, letter to Sigfried Giedion, August 25, 1954, GTA 43-K-1954-08-25: "It is only a small and select group of people who are aware of the developments of this sort, and therefore this accomplishment of mine at Harvard will, I am sure, hardly

be recorded by any historians of the University. Nevertheless, those who realize the significance of architecture and the revolutionary role of Mr. Gropius as well as the difficulties of transforming a static cultural tradition in a university, may appreciate what I had a hand in accomplishing."

27 Joseph Hudnut, telegram to Walter Gropius, March 18, 1937, HOU, bMS Ger 208 (925): "Welcome to America where happiness and success await you."

28 See Pearlman, "Joseph Hudnut's Other Modernism at the 'Harvard Bauhaus,'" 452-77.

29 Walter Gropius, letter to Sigfried Giedion, June 24, 1937, GTA 43-K-1937-06-24: "in harvard geht alles vorzüglich, der dean ist ein wirklicher freund und ein mensch, der stille und takt mit entschlossenheit verbindet und zwar der entschlossenheit mit mir durch dick und dünn eine neue organisation nach meinen wünsch aufzubauen. ich glaube dass mit der zeit hier etwas zu machen ist. wenn auch erst ganze geologische schichten des unverständes weggeräumt werden müssen. der präsident von harvard ist gleichfalls ein mensch mit plan und entschlossenheit harvard eine moderne linie zu geben."

30 Walter Gropius, letter to Herbert Bayer, August 20, 1938, HOU, bMS Ger 208 (431): "ein ganzer kreis vom bauhaus ist jetzt beisammen in diesem land, das gibt einem das gefühl von wurzelhaftigkeit, das wir verpflanzten ja alle nötig haben."

31 Walter Gropius, letter to Sigfried Giedion, June 24, 1937, GTA 43-K-1937-06-24: "ich habe die absicht, um nicht isoliert auf meinem platz zu bleiben andere aus unserem kreis nachzuziehen, sodass unsere schule an verschiedenen plätzen dieses landes ihre vertreter hat."

32 Giedion completed his doctorate in art history at Munich in 1922 with the dissertation *Spätbarock und romanischer Klassizismus*. The *Bauhausausstellung* took place in Weimar from August 15 to September 30, 1923. Giedion's essay and the reactions it caused were published in the Swiss journal *Werk*: Giedion, "Bauhaus und Bauhauswoche," 232-34; Bühler, "Eine schweizerische Entgegnung," 259-60; Gantner, "Bauhausfrage"; Giedion, "Bauhausfrage," ca. 1924, response to Gantner's article, unpublished, rejected by the editors of *Werk*. All articles are reprinted in Hofer and Stucky, *Hommage à Giedion*, 14-24. Sokratis Georgiadis has discussed the *Bauhausausstellung* in detail: Georgiadis, *Sigfried Giedion*, 47.

33 Walter Gropius, letter to Sigfried Giedion, June 24, 1937, GTA 43-K-1937-06-24: "ferner sage mir doch bitte wer deiner ansicht nach aus unseren kreisen für lehrstühlen verschiedener art, für kunsterziehung, architektur und städtebau in frage kommt."

34 Gropius was an important member in the founding of the congresses. After he had completed his term as vice president in 1930, he continued to be one of the leading opinion makers within the organization.

35 Walter Gropius, letter to Sigfried Giedion, June 24, 1937, GTA 43-K-1937-06-24: "die wichtigkeit dieses kongresses besteht darin, dass es die einzige geistige insel ist auf der alle unsere ideen in der europäischen wüste um uns noch fruchtbar weiterreifen und das

scheint mir der erhaltung und erweiterung wert zu sein."

36 For example, in 1937, 650 artworks were presented in an exhibition entitled *Entartete Kunst* at the Haus der Kunst in Munich. The artifacts were selected from thousands of so-called degenerate artworks, which were removed from German museums by Nazi officials. Among the represented artists were Herbert Bayer, László Moholy-Nagy, Lyonel Feininger, Johannes Itten, Paul Klee, El Lissitzky, Piet Mondrian, Kurt Schwitters, and Oskar Schlemmer.

37 See also Reto Geiser, "From Constancy to Change," unpaginated.

38 Giedion had a radically opposite point of view, arguing that "history walks beside the student as a friendly guide, liberating but not inhibiting his spatial imagination." Jill Pearlman has carefully analyzed the conflict between Gropius and Hudnut and the debate about a "Harvard Bauhaus"; see Pearlman, "Joseph Hudnut's Other Modernism at the 'Harvard Bauhaus,'" 452-77.

39 Walter Gropius, letter to Sigfried Giedion, December 23, 1937, GTA 43-K-1937-12-23: "nach verschiedenen beratungen haben wir dich an erster stelle vorgeschlagen. ... denke dir, es hat geklappt. du stehst an erster stelle, thomas mann an zweiter stelle. der fond ist sehr erheblich, möglicherweise beinahe 10,000 \$. ... die serie deiner vorträge wird in buchform bei der harvard press verlegt. du stehst hier im mittelpunkt des interesses ..., da durch mein kommen und hudnut's hiersein die ganze frage der architektur in allen köpfen hier aktuell geworden ist dachte ich es könne keiner besser die bresche erweitern und wirklich fundamentale erklärungen für unsere bewegung geben als du."

40 The Charles Eliot Norton Professorship in Poetry was established in 1926 in memory of Charles Eliot Norton (1827-1908), the first professor of art history at Harvard. Previous lecturers included Laurence Binyon, A. M. Hind, Sir Eric Maclagan, Johnny Roosval, Chauncy B. Tinker, and T. S. Eliot. The main subjects were Italian Renaissance sculpture and painting and Dutch and English painting of the seventeenth and eighteenth centuries. Igor Stravinsky, Herbert Read, Pier Luigi Nervi, Jorge Luis Borges, Frank Stella, Italo Calvino, John Cage, Umberto Eco, and Nadine Gordimer are among the distinguished recipients who have followed Giedion. For the required number of six lectures, this was a significant amount of money, also considering that \$10,000 equaled Gropius's annual salary for a full-time position, chairing the architecture program.

41 Paul Sachs, letter to Sigfried Giedion, January 12, 1938, GTA 43-K-1938-01-12. The committee consisted of the professors Paul J. Sachs (chairman), Chandler R. Post, John Livingston Lowes, and Joseph Hudnut, as well as Dr. Frederick P. Keppel of the Carnegie Corporation. The committee interpreted the Norton Lectures "in the broadest sense, including, together with Verse, all poetic expression in Language, Music or the Fine Arts, under which architecture may be included."

42 Accordingly, Giedion gave twelve instead of the six required lectures. The first lecture was held on November 15, 1938, at the Fogg Art

Museum's lecture hall, with introductory remarks by Dean Hudnut.

43 Walter Gropius, letter to Sigfried Giedion, December 23, 1937, GTA 43-K-1937-12-23: "[E]s macht uns spass zu denken dass du deinen knochigen eidgenossen diesen triumph hinschmettern kannst."

44 Gropius's intention behind Giedion's appointment—the hope for Harvard's official incorporation of the ideas of the modern movement—becomes apparent in his correspondence with his colleague. Prompted by many worried notes, Giedion informs Gropius regularly in the run-up to the lectures, outlining his plans and topics of lectures.

45 Sigfried Giedion, letter to Walter Gropius, January 21, 1938, GTA 43-K-1938-01-21(G).

46 Ibid. "Das mag die Herren in Harvard vielleicht ein wenig beruhigen, dass da kein allzu ungehobelter Bolschewik antritt."

47 Giedion, *Space, Time and Architecture*, 1941, 2-4.

48 Sigfried Giedion, letter to Alexander von Muralt (president of the Swiss National Science Foundation), May 8, 1954, GTA 43-K-1954-05-08(G):1.

49 In the epilogue to his *Meaning in the Visual Arts*, Erwin Panofsky gives a detailed account of the modalities in place at German universities. The same system applied to the Swiss at the time. Panofsky, *Meaning in the Visual Arts*, 335-36, esp. nn. 5-6.

50 Erwin Panofsky (1892-1968) was a German art historian who emigrated to the United States in 1934.

51 Panofsky, *Meaning in the Visual Arts*, 328.

52 Ibid., 328-29.

53 Giedion, *Building in France*, 85; Tournikiotis, *Historiography of Modern Architecture*, 25.

54 Apart from a small volume on Walter Gropius (Giedion, *Walter Gropius*, 1931), Giedion exclusively published essays during this time.

55 See also Weiss, "Mit der Redaktion ist beauftragt," 106-25.

56 Sigfried Giedion, outline of introduction for *Linestruttura*, "The Inner Relation between Thinking and Feeling: The Faculty of Interrelation," typescript, GTA 43-T-6 (S. 18), ca. 1966.

57 Alfred North Whitehead (1861-1947) was appointed as professor of philosophy to Harvard in 1924. In 1937 he retired and lived in Cambridge until his death.

58 Whitehead, *Science and the Modern World*, 95-112.

59 Sigfried Giedion, letter to Carola Giedion-Welcker, December 19, 1938, GIE SG/CGW-1938: "Als ich hereinkam sass auf einem der Sofas ein Herr von ungefähr 80 Jahren, lebhaft, mit rundem Kopf und einer grossen Glätze und freundlichem Gesicht. Whitehead, der Vater der modernen Philosophie. Ich sagte ihm, wie sehr ich ihn verehere + dass ich meiner Frau gerade ein Buch von ihm zu Weihnachten geschickt hatte. Ich werde ihn wieder sehen."

60 Whitehead, *Science and the Modern World*, 1997, 4.

61 Giedion, *Architecture, You and Me*, 72; see also Giedion, *Decade of New Architecture*, 34.

62 Sigfried Giedion, letter to John U. Nef, August 3, 1943, GTA 43-K-1943-08-03(G).

63 Archibald Cary Coolidge studied at the University of Berlin, and the Ecole des Sciences Politiques in

- Paris, and received his PhD from the University of Freiburg in Germany. He mastered French, German, Spanish, Italian, Dutch, Swedish, and Russian.
- 64** The collection of Harry Elkins Widener, a twenty-seven-year-old collector who died when the *Titanic* struck an iceberg and sank, was donated to the university in 1912. See also Battles, *Widener*.
- 65** Keyes D. Metcalf (1899–1983) served as director of the Harvard University Library until 1955.
- 66** Dolf Schneeblü [Professor Emeritus at ETH Zurich and former research assistant of Sigfried Giedion], interview by the author, August 9, 2006, Zurich.
- 67** Sigfried Giedion, letter to Keyes D. Metcalf (Harvard University Library), July 12, 1944, GTA 43-K-1944-07-12(G).
- 68** Sigfried Giedion, letter to Ruth Cook at the Harvard Architectural Library, Robinson Hall, December 27, 1940, GTA 43-K-1940-12-27(G):1.
- 69** Ruth Cook, letter to Sigfried Giedion, January 19, 1944, GTA 43-K-1944-01-19:1.
- 70** Sigfried Giedion, letter to William Warren Smith Jr., (Harvard University Library), December 10, 1945, GTA 43-K-1945-12-10(G):2.
- 71** Sekler, "Sigfried Giedion at Harvard," 273, n.25; Alexander, *Space, Time and Deity*.
- 72** Geiser, "Transatlantische Wechselwirkungen," i–xxiv.
- 73** Walter Gropius, letter to Sigfried Giedion, December 23, 1937, GTA 43 K-1937-12-23.
- 74** Ibid.: "Geistige Grundlagen der heutigen Architekturentwicklung."
- 75** Carola Giedion-Welcker, letter to Alvar Aalto, November 10, 1940, AAA 10911.
- 76** Sigfried Giedion, letter to Walter Gropius, January 18, 1938, GTA 43-K-1938-01-18; Sigfried Giedion, letter to Walter Gropius, March 21, 1938, GTA 43-K-1938-03-21.
- 77** Giedion, "Leben und Bauen."
- 78** Giedion, *Space, Time and Architecture*, 1946, 3; Giedion's doctoral advisor, Heinrich Wölfflin, studied under Jacob Burckhardt in Basel.
- 79** Georgiadis, *Sigfried Giedion*, 85.
- 80** Sigfried Giedion, "The Life of Architecture," Charles Eliot Norton Lecture Cycle, 1938–1939, GTA 43-T-13 (S. 11/12/13). First Series: 1st lecture, November 15, 1938, "The Role of History Today"; 2nd lecture, November 21, 1938, "Architectural Inheritance: Early Renaissance and Late Baroque"; 3rd lecture, November 28, 1938, "Architectural Inheritance: The Organization of the Outer-Space"; 4th lecture, December 6, 1938, "New Potentialities: Iron the New Material"; 5th lecture, "New Potentialities: Architecture and Construction." Second Series: 6th lecture, February 14, 1939, "Construction as Forerunner of Feeling (Great Exhibitions from 1851–1900)"; 7th lecture, February 28, 1939, "The Demand for Morality (Architecture in Europe about 1900)"; 8th lecture, March 1, 1939, "America Influences Europe (The Chicago School and Frank Lloyd Wright)"; 9th lecture, March 14, 1939, "Background of Contemporary Architecture"; 10th lecture, March 21, 1939, "Contemporary Architecture"; 11th lecture, March 28, 1939, "The Organization of the Town (London in the Beginning and Paris in the Middle of the Nineteenth Century)"; 12th lecture, April 11, 1939, "The Organization Of
- The Town (Twentieth Century), Architectural Outlook."
- 81** Giedion, *Space, Time and Architecture*, 1946, 6.
- 82** A special chapter on Gustave Eiffel as well as the infamous negative print of the Pont Transbordeur that decorated the cover of *Bauen in Frankreich* were only added in 1949.
- 83** Giedion, "Malerei und Architektur," 36.
- 84** Sigfried Giedion, letter to László Moholy-Nagy, February 13, 1939, GTA 43-K-1939-02-13(G):1.
- 85** Ibid.

In Between

Languages

Rebuilding Babel:
On Language
and Translation
in Giedion's Oeuvre

The Enigma of Translation

Giedion's initial euphoria over his appointment to Harvard would not last long. Shortly after the art historian enthusiastically confirmed his acceptance of the Norton professorship, Dean Joseph Hudnut answered the faulty telegrams with the admonition that the lectures were to be given in sound English.¹ Giedion's English-language skills were extremely limited; so far, he had communicated mainly in his native German, and in French and some Italian. In fact, Giedion confessed to a young assistant that he "neither wrote, nor spoke English."² His abilities would only improve slowly over the course of his extended stays in the United States. Given his struggles with the English tongue, it is striking that the majority of Giedion's oeuvre was first published in English and that the German translations of some books were delayed more than two decades.³

Giedion's appointment as the Charles Eliot Norton Professor in Poetry elicited hilarity from the historian's friends. Gropius remarked that Giedion was now "sailing under the flag of the poets" and that he hoped his friend would be able to "reinterpret it [architecture] into poetry of language."⁴ In previous years, well-known men of letters such as T. S. Eliot had been chosen for the position, and the art historian's strongest competition came from the German writer Thomas Mann, who was also being considered for the appointment. Giedion was well aware of this situation and indicated his reserve in a letter to Hudnut: "I accepted with pleasure although I realise what it means to speak about a new theme like the complicated development of our time in a foreign language. Nevertheless, I hope to be able to interpret [*sic*] in a broad sense the term: Poetry. Poetry of our time, which we are just beginning to discover. So perhaps I shall fulfil the scope of this chair."⁵

Many passages in the correspondence between Walter Gropius and Sigfried Giedion reveal the linguistic barriers hampering the otherwise eloquent advocate of modern architecture. As chair of the architecture program, Gropius had recommended the secretary-general of the Congrès Internationaux d'Architecture Moderne (CIAM) to the Norton committee, claiming that Giedion was fluent in English. As the extent of Giedion's language difficulties became clear, Gropius urged his friend to prepare himself well, in order to efficiently spread his pioneering work in North America.⁶ A lecture series presented "in good English," Gropius wrote in a letter, would have "inestimable value for the entire [modern] movement."⁷ Based on his personal experience, the German architect encouraged the use of a deliberate



2.01

English rhetoric, and recommended that the arguments be presented as concisely, concretely, and directly as possible.⁸ Gropius openly admitted that he tended to read his lectures, and that he usually practiced by reading his talk out loud beforehand in order to find the appropriate intonation.⁹ But Giedion struggled with this somewhat formal and rehearsed approach: “I see the main difficulty to be the language. I will do my best to practice and take courses, but I am mostly concerned that I will have to stick to the manuscript instead of developing the topics freely and according to the particular atmosphere, as I would in German or French. But since I seem to be quite in the spotlight, I would like to avoid improvisation.”¹⁰

Following Gropius’s advice, Giedion set about to improve his English articulation, assisted by none other than James Joyce, who happened to be staying at the Giedion family’s home in the Dolderthal for a few weeks in 1938. Carola Giedion-Welcker teased that her husband would adopt his Irish accent.¹¹

Giedion chiefly based his Norton Lectures, which he had to prepare in haste, on the manuscript of “Die Entstehung des heutigen Menschen” (The Origin of Modern Man), an unpublished study he had worked on intensively in the prewar years.¹² *Space, Time and Architecture* as well as *Mechanization Takes Command*—Giedion’s two key publications—are partially based on this document, which the historian extended, adapted, and altered to accommodate the insights he gained during his teaching and research activities in the cultural context of the United States. Hence, his lectures and consequently also his publications had their origins in both German and English. Even in the 1950s, more than a decade after setting foot on American soil, Giedion frequently wrote in a hybrid language using fragments of English and German in his notes, sometimes even switching languages within the same sentence.¹³ If we take Vladimir Mayakovsky’s observations based on his own “discovery of America” into account, it seems that Giedion’s linguistic habits did not differ much from local custom, for “[t]he language of America [was] the imaginary language of the pandemonium of Babel, with just the one difference—that there the languages were mixed so that no one understood them, whereas here they are mixed so that everyone understands them.”¹⁴

2.01 Sigfried Giedion at work in Frauenkirch, Switzerland, ca. 1930. Browbeaten by Gropius and with some self-doubts, Giedion set about to draft the majority of his Norton Lectures the summer before his debut at Harvard.¹⁵ Given that he was fluent in more than one language, Giedion had exaggerated when he claimed complete ignorance of the English language.¹⁶ After all, he had dealt with English sources for his research over the preceding two years and was capable of reading and understanding the language.¹⁷ But it is also clear that Giedion was not able to write a coherent text at the time. For this reason he hired Royston Millmore, a young British author,

to work at his side every afternoon.¹⁸ Millmore, whom Giedion introduced as his “amanuensis,” penned the final English verbalizations. Sensitive, yet unfamiliar with art-historical and architectural terms, the Englishman acted in the beginning of their collaboration as a “correcting *vox populi*.”¹⁹ In order to avoid the typical “disturbances of meaning and detours” inherent in the translations of manuscripts, Giedion asked the president of Harvard to assign him a personal assistant to help him prepare the remaining lectures upon his arrival in Cambridge.²⁰ Shortly thereafter, however, Giedion complained that his “subsidiaries” lacked the widely diversified knowledge necessary in order to adequately translate his texts—a complaint he was always directing at his students.²¹ Giedion’s use of language was idiosyncratic and his stubborn insistence on a specific word choice, despite a misleading meaning in English, exasperated his assistants and later the professional translators of his writings. The art historian was convinced that certain verbalizations were necessary in order to ensure the scientific nature of his texts:

I certainly would like to avoid Germanisms in the manuscript. On the other hand, the repetition of a word in the next sentence, rather than calling it “it,” is often deliberate. Also, particularly in passages that seem important to me, there are choppy sentences, which I would like you not to pull together by means of relative clauses. The directness of the position is more important to me than the smoothness of the text.²²

To collect the Norton Lectures into *Space, Time and Architecture*, Harvard University Press engaged a translator who was familiar with the language of modern architecture. Philip Morton Shand, a British architecture critic, editor of *Architectural Record* in London, and a co-founder of the Modern Architectural Research (MARS) Group, was well known in the circle of Giedion’s close friends.²³ The secretary-general and Shand together formed the CIAM committee responsible for publications and the organization’s archives.²⁴ They likely met frequently in the late 1930s when Giedion was conducting research in Great Britain. Shand had previously proved his interpreting skills when working on the translation of Walter Gropius’s *The New Architecture and the Bauhaus* (1935), which had sparked American interest in Bauhaus pedagogy. Well versed in ideas of modern architecture, Shand was asked to perform the thankless task of polishing the existing English translation of Giedion’s lecture manuscripts. This text was highly inconsistent and included English affected by German syntax and fragments of both languages, as well as English-influenced German.²⁵

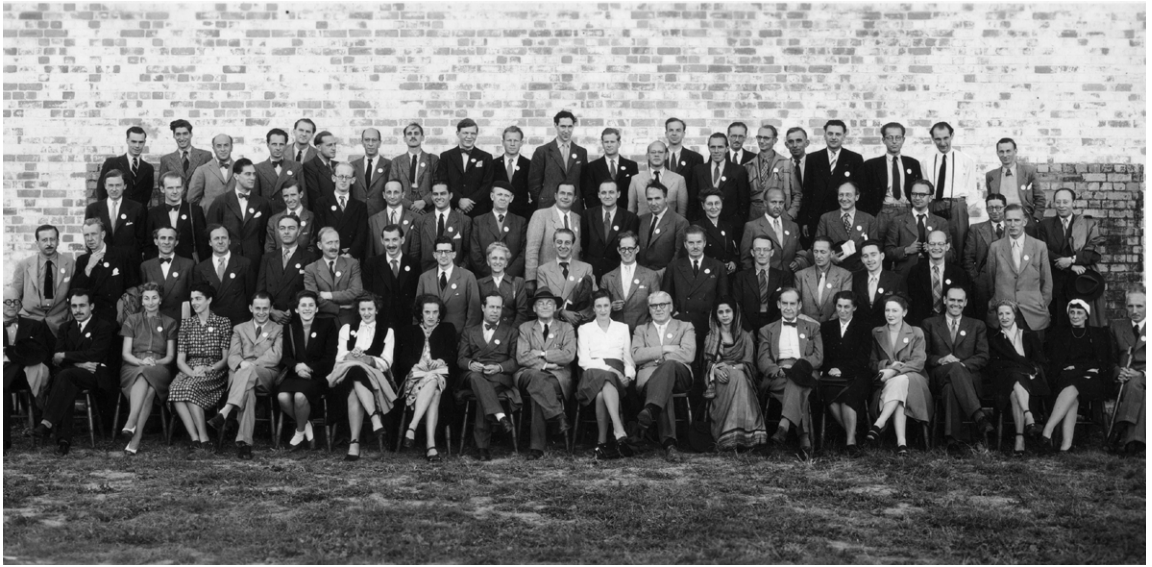
Shand sympathized with Giedion’s refusal to rewrite a thoroughly German manuscript. But he insisted that the adaptation of an exist-

ing translation involved as much or even more effort than if his work were based on an original manuscript in the author's first language.²⁶ Despite inadequate mastery of English, Giedion was not afraid to instruct the British translator on how to treat his texts. Of course, this interference hurt Shand's pride and caused him to worry about his professional reputation. Aggression and frustration gradually came to dominate the correspondence between them:

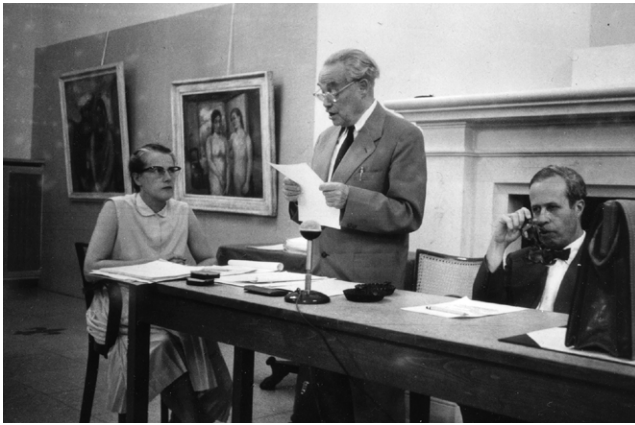
The English is exclusively my business, as I am the translator; and in this position, I am the only one who can judge what needs to be augmented Either you trust me as a translator or you don't. You must forgive me for remarking that you are far from fathoming the divide between German and English, even if you might be capable of measuring the rift between English and German—or in other words what can and what cannot be said in English. I nearly killed myself creating a worthy translation of a practically untranslatable original, and I cannot any more. How can you judge the assonance, the broken rhythms that your interference imposes on English? As I said before, I am neither a “hack writer” nor a “typewriting and translation agency.”²⁷

Giedion was trained in Germany, where the vocabulary used in art-historical literature had gradually developed into an obscure technical language, more complex and specialized than anywhere else, and likewise obscure to anybody outside of the field. According to his contemporary Erwin Panofsky, “every German-educated art historian endeavoring to make himself understood in English had to make up his own dictionary.”²⁸ This process forced many intellectuals to disentangle their train of thought and to free fairly trivial deliberations from behind a “woolen curtain of apparent profundity.”²⁹

Unlike some of his colleagues who decided to settle in America, Giedion never wrote or thought well in English and hence also resisted the concise and direct American academic writing style. Giedion felt a “personal resentment” that the First and Second World Wars had made it necessary for “scholarly books of world currency to be published in English.”³⁰ The diverging approaches to academic writing on either side of the Atlantic caused a major dilemma for Giedion and his translators. Giedion was unwilling to change certain expressions and constructions, and he perceived the act of interpreting as a “fight with the English translator” rather than as a collaborative effort.³¹ In a letter to the media theorist and philosopher Marshall McLuhan he wrote, “Now that is the trouble with translators. It is not so much that English does not possess the idioms + terms necessary, but that the busy translator takes no care or has no gift to find the many sidedness in his diction and simplifies the text in a one sided manner, called Banalization.”³²



2.02



2.03



2.07

Giedion's recalcitrance prevented him from using the translation process to clarify his ideas. In his essay *Translating*, Maurice Blanchot argues that languages considered independently are incomplete and that the difference between languages is secretly mastered by the translator.³³ The translator's goal is not to abolish the difference, but to awaken a presence of what is different in their own language, which is achieved by means of the more or less subtle changes that are imposed on the original. Giedion's refusal of such adaptations consequently hindered the deployment of the translator's mastery. The effects of translation—a "literary activity" according to Blanchot—on Giedion's language could have potentially clarified the original work, made it more rigorous, and also accessible to a larger audience. The final English version of *Space, Time and Architecture*, however, reflects the dissonance between author and translator, as well as the variety of individuals involved in the work of translation.

Tyrwhitt Takes Command

It would take another few years, and two more publications, before Giedion finally found a translator whose work he would consider a literary activity. A clear change of tone and style occurs in his last major work, *The Eternal Present*, and the subsequent parts of this trilogy. This transformation has to be credited to Mary Jaqueline Tyrwhitt, who eventually translated, transcribed, and transformed Giedion's manuscripts and made them communicate effectively to the world.

2.02 Tyrwhitt embarked on her twenty-year association with Sigfried Giedion in 1948, about one year after they had met at the sixth CIAM group photograph at the sixth congress in Bridgwater, England, 1947.

2.03 These experiences allowed her to take on a leading role in the urban discourse of the postwar CIAM during a crucial stage of its transition. Starting with the conferences in Bridgwater and Hoddesdon, Giedion reading a statement, flanked by Jaqueline Tyrwhitt and Josep Lluís Sert at CIAM 10, Dubrovnik, 1956. In collaboration with Ernesto Rogers and Josep Lluís Sert, she edited the subsequent publication, *The Heart of the City* (1952), in collaboration with Ernesto Rogers and Josep Lluís Sert. Giedion was highly impressed with her talents and promoted her to acting secretary of CIAM. Even though he remained secretary-general of the organization until its last meeting in 1959, Giedion gradually passed on many of his duties to Tyrwhitt, freeing up time to pursue his own projects.³⁶

After continuous adaptations and additional translations for several revised editions of *Space, Time and Architecture*, the releases of *A Decade of New Architecture* and the small volume *Architecture*,

You and Me, Giedion's publication project for the 1957 A. W. Mellon Lectures was his first major collaborative effort with Jaqueline Tyrwhitt outside of CIAM.³⁷ For the preparation of the Mellon Lectures, originally entitled "Constancy and Change in Early Art and Architecture," and the subsequent two-volume publication, Tyrwhitt's support was crucial. She made sure that the fragmented manuscripts would make their way into a coherent printed form. Tyrwhitt managed the projects, charting out the books "chapter by chapter on a large graph, displayed prominently, much like the bar diagrams for the work schedule of a building site."³⁸ By taking on responsibilities from administrative tasks to research for the book's theses, she established herself as a highly respected editor rather than just an assistant.

By this time, the two scholars had established a strong cooperative relationship, which even functioned well over long distance. While Tyrwhitt was teaching in North America, she maintained strong ties to Europe through her involvement in the British town planning scene, her work for the United Nations, and her family.³⁹ As a consequence of her continual traveling, Tyrwhitt not only maintained an intense exchange with Giedion but also became a vital messenger for various activities under the patronage of CIAM, whose president, Josep Lluís Sert, had relocated his practice to the United States while many of the organization's core members were still in Europe.⁴⁰ Her appointment as assistant professor at Harvard in 1955 was a logical step, considering her role as a member of CIAM's "Committee of Five," which also consisted of Sert—dean of the Harvard Graduate School of Design—along with Walter Gropius, Giedion, and Le Corbusier. The overlapping engagements of Giedion and Tyrwhitt at the Graduate School of Design prepared the ground for a deeper collaboration, which continued when they were separated. As Tyrwhitt observed, they were "fortunate in having appointments at Harvard for much of that time, but often found [themselves] on opposite sides of the Atlantic."⁴¹ During these times, "indecipherable correspondence, hand-written on ultra thin sheets of airmail paper" kept them in contact.⁴² Large parts of manuscripts, translations, and galleys from the printers were sent back and forth across the ocean in order not to slow down the projects. This intense work-related correspondence had another benefit for the Swiss critic: Tyrwhitt kept him well-informed about the developments at Harvard and could intervene, if necessary, on his behalf.⁴³

Gifted, yet humble, Tyrwhitt was the essential person in the background who would never occupy the limelight. Her responsibilities involved a wide range of different tasks: while in the beginning she primarily transcribed notes and conversations, she later became involved with the translation of the historian's notes into proper English. Later she would recall that Giedion's language was "coloured with 'Giedienese,' for [he] had an obsession that certain words he

2.04

Jaqueline Tyrwhitt's corrections of proofs for a revised edition of *Space, Time and Architecture*.

happened to like should—and finally would—mean what he wanted them to mean, rather than what they were currently considered to express.”⁴⁴ One of the reasons for their successful collaboration can be traced to the frequent and “stormy” work sessions at Harvard, which allowed Giedion to react instantly to potential dissensions.⁴⁵ As a former student remembers, “Jackie would spend hours with Giedion discussing the meaning of one word, one concept.”⁴⁶ To Giedion she became the ideal support, for she knew exactly what he would think or how he would react to certain questions or problems.

2.05 Tyrwhitt was extremely careful when compressing, restructuring, and captioning manuscripts, making them more direct, clear, and understandable. In a letter to Giedion, she writes, “This is just a first run through, but of course the text must be carefully tooth-combed ... it has to be exact.”⁴⁷ At night and over extended periods of vacation from her teaching obligations, Tyrwhitt massaged the texts over and over again. With her thorough work habits and obsession with accuracy, she successfully introduced more coherence and rigor into Giedion’s writing.⁴⁸ She also introduced detailed bibliographies and precise references, elements that were at least partially lacking in Giedion’s previous publications. *The Eternal Present* differs from *Space, Time and Architecture* in tone and academic accuracy.

Jaqueline Tyrwhitt’s edit of a manuscript page for *The Eternal Present: The Beginnings of Art*.

Over the years, Giedion’s trust and dependence on Tyrwhitt’s skills grew to the point that she became the exclusive translator of all his later works.⁴⁹ He had finally found an English voice that would reflect his German thoughts—or as the publishers of *Architectural Review* put it, Tyrwhitt provided “an English-sounding translation which at the same time remains clearly Giedion.”⁵⁰ In the introduction to his 1954 book on Walter Gropius, Giedion declared: “I am deeply indebted to Jaqueline Tyrwhitt for the English equivalent of the original text.”⁵¹ The conscious choice of the word “equivalent,” as opposed to the usual “translation,” indicates the degree of mutual understanding the two reached.

Tyrwhitt’s brilliant feel for language was expressed not only in her sensitive translations but also in her remarkable editing skills. With the latter she even managed to transform Giedion’s sometimes quite awkward German sentences into fluent English. The sharp use of a blue pen was her way of controlling Giedion’s voice.⁵² Despite his obsessive efforts to maintain full control, she managed to improve his abstruse language and style. The art of selection, which Tyrwhitt mastered over the course of the years, offered a way for her to establish a personal voice and to hone her own historiographic approach. The editing process, which always happened in close collaboration with Giedion, became a conscious act of writing history through carefully selecting and arranging facts and ideas.

Many of Giedion’s books were originally developed in the form of lectures and in seminars with his students at Harvard, Yale, MIT, and

Reset

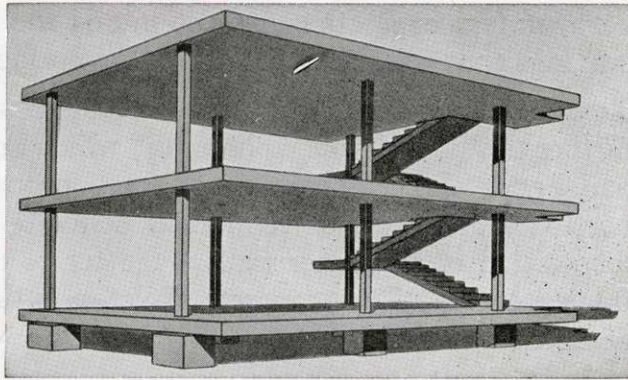
3792

R

312

X7

307. LE CORBUSIER. Ferroconcrete skeleton for a dwelling house, 1915. *Le Corbusier was able to transmute the concrete skeleton developed by the engineer into an architectural means.*



objects simultaneously. In architecture Le Corbusier developed, on the same principle, the interpenetration of inner and outer space. We have already observed gropings toward such an interpenetration in the seventeenth-century buildings of Francesco Borromini. But this interpenetration of space at large and space-particles could have further development only

Note 4, p. 515

dynamic. The concrete skeleton as an artistic means

took d

4 Thanks to the early initiative of the Zurich publisher, Dr. Hans Girsberger, and to the loyal care taken by the architect Willy Boesiger, Le Corbusier's works since 1910 have been set out in Le Corbusier, Œuvre complète, seven volumes (with slight variations in title), published in Zurich in 1929, 1934, 1938, 1949, 1953, 1957, and 1965.

one before him had been — to transmute the concrete skeleton developed by the engineer into a means of architectonic expression. He knew how to bring out the secret affinity that existed

~~* For a survey of the output of Le Corbusier and Jeanneret, cf. *Le Corbusier et Pierre Jeanneret, Œuvre complète*, three volumes published, with slight variations in title, in Zurich, 1929, 1934, 1938.~~

~~since 1929 (edited by Willy Boesiger, Girsberger, Zurich).~~

see new copy for note 4

51/5

5-22-66

— small pieces such as figurines; engraved bone fragments or pebbles, decorated lamps, weapons, etc. These are often 30

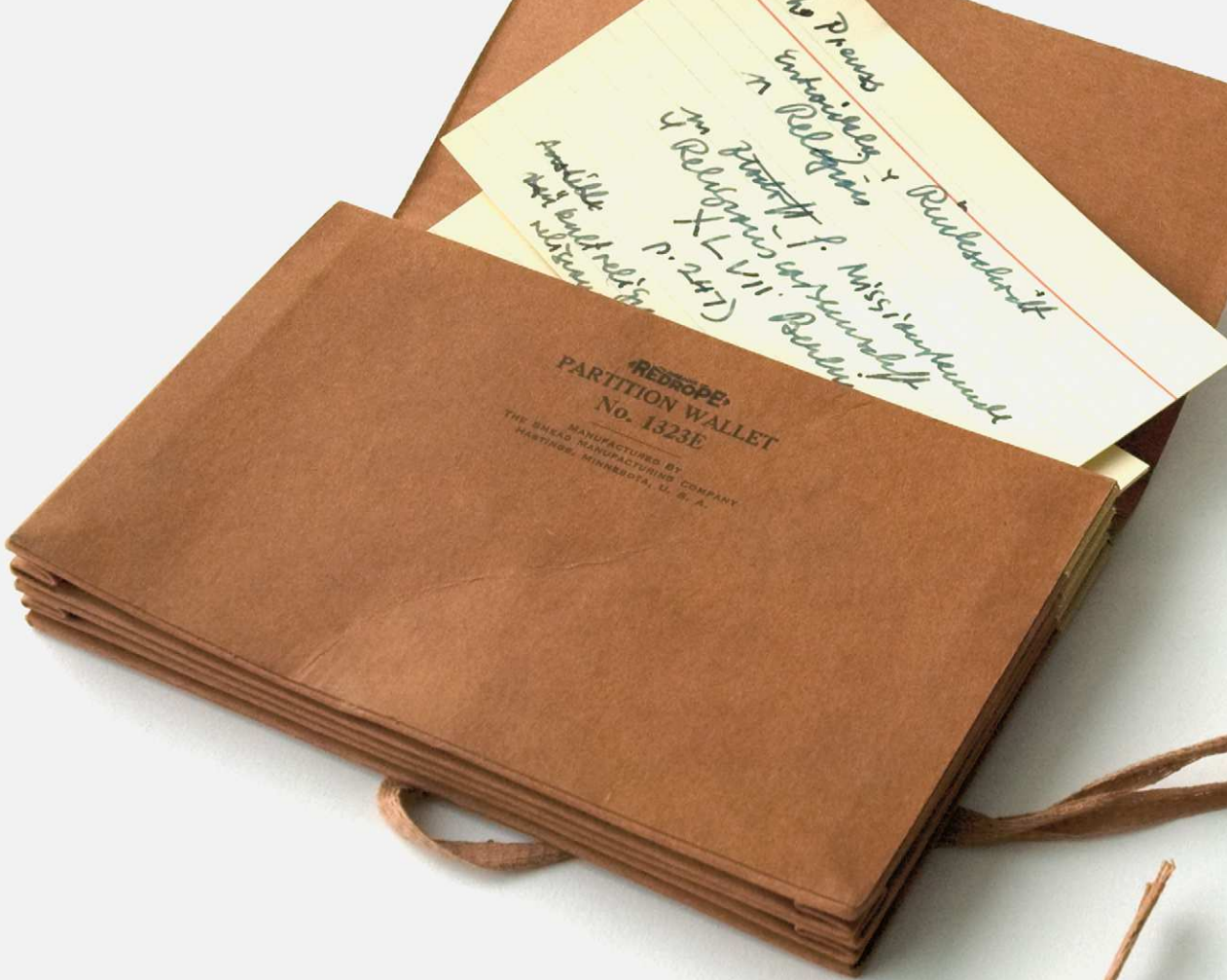
accompanied by a curve of enigmatic symbols which connects the tips of the horns. The legs are probably crossed one over the other, as is so frequent in the Aurignacian period. All is indicative of an unabated trend toward simplification.

→
42
Late Magdalenian engraving of an ibex, El Pendo: The cavern of El Pendo (Santander) is ~~very rich in fine quality~~ ^{of fine quality,} art (art mobilier) stemming from the late Magdalenian period (~~Magdalenien finale~~) when abstraction had gained the upper hand.

Fig. 10 A horn stave, now in the archaeological museum of Santander, shows how an animal's head can be reduced to a few deeply engraved lines upon a surface as small as the ⁱtyne of a stag's antler. This abstract head is ~~only~~ ^{only} identified as an ibex by two horns. Apart from these, ^{only} the ears are indicated. A long straight stroke evokes an idea of the head. Yet it can hardly be denied that a magical strength emanates from this small stave.

199
The exploration of El Pendo was mainly in charge of J. Carballo [Carballo and Larin, 1932]. Among other objects ^{that} ~~which~~ we shall encounter later, Carballo found another engraved stag's horn: unfinished, not yet polished. As before, only the horns enable the heads to be identified as ~~an~~ ^{those of} ibex. ~~Here~~ again, the ears have been indicated. The heads are defined by two strokes. The deep lines which ^{cut across} ~~then divide~~ them are sometimes found elsewhere in Magdalenian art, though, as far as we know, no clear explanation has yet been found to account for them.

42
43
Already at the beginning of this century the young Abbé 2.05



the Swiss Federal Institute of Technology (Eidgenössische Technische Hochschule, or ETH) in Zurich. With the exception of the Norton Lectures at Harvard, Giedion typically did not prepare a full-fledged manuscript to read to audiences.⁵³ He primarily structured his lectures around a meticulously selected series of slides and would develop the arguments during his presentation.⁵⁴ The disadvantage of this remarkable method can be traced in Giedion's manuscripts and typescripts, frequently consisting of a collection of loose notes and generally reflecting the more informal tone of his oral presentations, or, as he remarked in the introduction to *Space, Time and Architecture*: "The problem of its composition was to transmute the spoken word of lecture and discussion into the quite different medium of the printed page."⁵⁵

2.06 Giedion never wrote sequentially. Along with his notebook, he typically carried a deck of index cards, which he used to take notes and order his thoughts. He would eventually draw from these cards when "slowly and somewhat dramatically" dictating paragraphs of his work in progress to his secretary.⁵⁶ In the work that predated his collaboration with Jaqueline Tyrwhitt, this method of operation is clearly detectable in the final publications, particularly *Space, Time and Architecture*, which reflect the loose compilation of individual sets of topics.

Giedion's personal folder containing index cards he used for note-taking; and one of his index card boxes, organized according to subject.

Tyrwhitt was used to working with unstructured conference proceedings. Part of her work at Harvard, CIAM, and the Athens Technological Foundation in Greece (consisting of the Athens Technological Institute and Athens Center of Ekistics)⁵⁷ was to provide the proceedings of conferences and seminars, which had to be transcribed and distilled to their essence. Rather than merely repeating the discussions, she considered it her job to highlight, point out, and stress the main arguments. "Her editorial work on conferences was like a searchlight penetrating darkening mist, piercing through ambiguities, repetitions and follies to some insight, some summary, some just-right idea that would otherwise never have come in sight."⁵⁸ Her task as editor of the proceedings of the many conferences and informal meetings she kept track of was to fix the spoken word in time and place, and, as such, she significantly shaped the historiography of CIAM and influenced the creation and reception of Giedion's postwar publications.

2.07 In many conference photographs, Tyrwhitt can be seen in the background, or appearing at the side, bent over a pile of papers, taking notes on the proceedings. Her close friend Maxwell Fry later recalled that "she was the sort of person who goes to a conference only to work, and when delegates are dispersed in pleasure is making some common sense of their varied contributions."⁵⁹ Tyrwhitt's role as the editor of these interdisciplinary events also enhanced her immense knowledge of other fields beyond her own, as well as her ability to

CIAM working group with Jaqueline Tyrwhitt, Pierre-André Emery, and Cornelis van Eesteren.

grasp the significance of overall correlations. In order to make the necessary editorial decisions, she had to render the whole purpose of the conference and its potential meaning beyond the event. Highly specialized fields of knowledge had to be related to one another, contextualized in the larger framework of the discourse, and made accessible to an extended audience. The incredible background knowledge Tyrwhitt acquired over time made her a brilliant teacher and an invaluable collaborator, especially for Giedion's endeavors.

In the end, it was exclusively her decision how and if she would acknowledge her own contribution to the published documentation of the event. While she transcribed everything that was said during a conference, she only captured the essence of the discussion in her edited proceedings and thus only perpetuated what she considered a core value of the discourse. Similar to Giedion's approach to historiography as subjective—he claimed that “history cannot be touched without changing it”—the selectivity of editing was Tyrwhitt's way of writing history.⁶⁰ In a much more subtle way, her editorial choices could be as tendentious as Giedion's writing. For example, the participants in symposia co-organized by Tyrwhitt were prevented from communicating with the outside world for the duration of the event, while she assured them that edited proceedings and selected photographic documentation would make their way to the international press daily.⁶¹

The correspondence between Tyrwhitt and Giedion reveals that in many instances her role went far beyond that of an editor. Increasingly, she became involved in the research of the presented topics—digging in archives and collecting hard facts in order to ensure the accuracy of his projects. While conveying Giedion's handwritten notes into reasonable English, she was quite frequently asked to enlarge his writing according to her knowledge.⁶² By taking on this challenge of developing or even ghostwriting parts of articles and chapters of books, Tyrwhitt began to blur the boundaries between editing and authorship. In Giedion's own copy of *Mechanization Takes Command*, which contains a page full of dedications by friends including Xanti Schawinsky and Herbert Bayer, Tyrwhitt put it succinctly: “Yours—becomes mine becomes yours—Jaqueline.”⁶³

Despite her selfless and incredibly productive involvement in the work of her fellow academics, Tyrwhitt managed to benefit from overlaps and intersections between these diverging areas of interest by applying them to her independent work and teaching, and by strengthening her position as a multidisciplinary scholar with the capacity to productively join experts from various fields. Her work ethic stood out—she considered being “en charrette” a “routine part of existence,” while her self-sacrifice and renunciation in the interest of a group effort remain exceptional to this day.⁶⁴ Consequently, she never set up her own practice, but kept working with and for other

2.08

Endpaper from Giedion's personal copy of *Mechanization Takes Command*, signed by his friends and collaborators, New York, April 14, 1948.

S.G.

for April 14th, 1948.
from New York.

Best wishes and greatest admiration.
Herbert Bayer

Mechanization takes commands.... takes command
Congratulations!

Isn't it beautiful except for
the pages you argued on? (You
were right.) Slightly

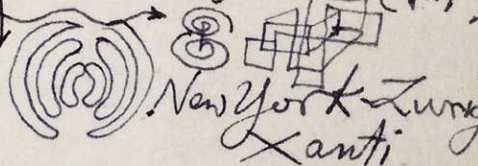
The old rocking chair's got me -
But it looks wonderful - Bye farewell

Greetings - please come back to N.Y.
and write another book - Bob Karp.

2 + π EX $Q = 2, 13747121871255513719 \dots -29$ (N-1)



$Ka4 - Q^{63}$



New York - Zurich
Xanti

Yours - becomes mine becomes yours - Jacqueline

Congratulations Herms + Sen Kuee.

May this be only the beginning of a long
cooperation! Philip Kauris

people throughout her life. She thought of herself as “a ‘catalyst’ rather than a practicing architect or town planner, who, while not herself changing, makes vital chemical changes in others.”⁶⁵

Although Tyrwhitt was never prominently credited as co-editor of any of his books, she did profit from her collaboration with Giedion. Through his omnipresent influence, she managed to step out of the circle of British planners and to gain ground in North America, where she spent some of her most committed years forging a new generation of urban designers. In a letter of condolence addressed to Carola Giedion-Welcker shortly after Giedion passed away, she even wrote: “I owe almost everything of [my life’s] colour and vitality to him. Until I knew SG I was only half alive. He opened my eyes to a whole new array of values and a new and much more positive approach to my own work. He was also a marvelous friend and companion—and I cannot yet imagine how life will be without him.”⁶⁶

Giedion was not the only one who benefited from her talents.⁶⁷ While organizing conferences and establishing the Urban Design program at Harvard’s Graduate School of Design with Dean Sert, Tyrwhitt was also conducting research for Greek architect and urban planner Constantinos Apostolos Doxiadis, whom she had first met on a UN mission in India in 1954. Her utter professionalism, her dedicated and exacting engagement in so many different projects of other scholars not only earned her a reputation for being “brisk and efficient,” and for “[omitting] all formality, going directly to the points she wants to make,” but also reinforced her reputation as the diligent and loyal collaborator in the background.⁶⁸

Considering Tyrwhitt’s countless activities, ranging from redefining the profession of planners in postwar Britain, to her professorships at Toronto, Harvard, and Yale, to her work at the United Nations, her experiences and portfolio would have been diverse enough to be recollected in her own writing. A closer look at her list of publications, however, reveals that she acted in most cases as co-author or contributing editor; her own written production was rather marginal. In her role as critical editor, Tyrwhitt directed, influenced, and guided the work of many intellectuals. It may be that this rigor and urge for excellence, the constant search for the essential, inhibited her own activities as an independent author while spurring on her colleagues’ work.

It is no coincidence that as secretary-general of CIAM, Giedion discovered his “English voice”—Jaqueline Tyrwhitt—“within the movement.” Repeatedly, he addressed language as a constituting factor for the formation and existence of the organization. As Ernest Gellner has argued, from the point of view of social anthropology, language is a key element in the constitution of a shared cultural entity.⁶⁹ A common language as well as recognition of “certain mutual rights and duties to each other” is the precondition for a membership within such a community. In the context of CIAM, this was manifested

in a shared visual language and collective strategies to defend its goals, as well as membership upon invitation:

One of the great defects of our contemporary civilization is that we have forfeited that “common language” which bound the leading spirits of all branches of art and science so closely together in previous ages. Then each knew what the others were talking about, whereas today the outstanding personalities in these fields no longer understand one another. When philosophers, architects, or historians now meet together at important congresses they find they have no underlying unity of outlook, and are cramped by a morbid dread of formulating resolutions, knowing that these will inevitably be attacked by some group or other among their professional colleagues. Perhaps the most significant aspect of CIAM is that it is not composed of haphazard adherents or representatives of official bodies. From its foundation in 1928 it has always chosen its members with a view to future developments, instead of on the usual retrospective principle based on their past merits.⁷⁰

Common language also remained an issue after the war, in the context of Giedion and Sert’s teaching activities at Harvard. Since Giedion only taught every other semester at the college, the university had to search for faculty who would carry on the method he was propagating. They needed to find someone with a “solid historical background” who had attended his lectures before. They eventually decided on Eduard Sekler, a young CIAM member trained by Tyrwhitt in London, “who has a certain knowledge and speaks our vocabulary.”⁷¹ The exclusivity of this community affected the reception of their ideas and strategies outside of their own group, as they were not understandable to a “common person.” Aware of this problem, Giedion acknowledged later on: “We now have the vocabulary but what we don’t have is the general public.”⁷²

Twofold Marginalization

While it is remarkable that the majority of the German-speaking critic’s writings were first published in English, it is much harder to fathom the reasons for the delay of two decades or more in the books’ release in their original language and culture of origin—*Mechanization Takes Command*, released in 1948, was published as *Die Herrschaft der Mechanisierung* only in 1982, fourteen years after Giedion’s death.⁷³ This is even more astounding considering the linguistic barriers the author had to overcome and the fact that parts of the manuscripts already existed in German.

The lack of a German version of his architectural history hampered his reputation and teaching opportunities in his native Switzerland. In 1947, Giedion was finally appointed as a lecturer in the Department of Architecture at the ETH in Zurich after a long effort. In the introduction to the first German edition of *Space, Time and Architecture (Raum, Zeit, Architektur)* in 1965, he wrote that “[i]n Germany, Switzerland, and Austria, *Space, Time and Architecture* has remained largely unknown” and that “[i]ts impact has only indirectly appeared in various publications, as well as numerous images that have been adopted without the author’s knowledge.”

During his time teaching at the ETH, Giedion wrote, he had “missed” the German edition of his book “greatly.”⁷⁴ Ten years before its German translation, *Space, Time and Architecture* was published in Italian and Dutch, then Spanish and Japanese. In its successful original American edition, the book reached a remarkable fourth enlarged edition. While British and American architecture students could hardly get around the mandatory reading of the “bible of modern architecture”—the book was even part of the U.S. national registration examinations for architects—Giedion’s homeland was not yet ready for his gospel.⁷⁵ Surprised at the resistance to Giedion’s work, the former Harvard president and U.S. high commissioner for western Germany, James B. Conant, observed: “I was interested in hearing of the continued success of *Space, Time and Architecture*, and also worried although a little entertained by the resistance of the German and Swiss publishers to undertaking a translation.”⁷⁶

Undoubtedly, linguistic difficulties had a significant impact on Sigfried Giedion’s work as an author. The intricate challenge of translating the historian’s hybrid language almost certainly delayed German publication of Giedion’s writings. Against general expectation, there was no full-fledged German manuscript ready for press. Understandably, Giedion intended to prepare the necessary documents himself. With the exception of the posthumously published *Die Herrschaft der Mechanisierung*, he eventually re-translated the remaining parts of his writings into his mother tongue.

Giedion’s American publications may have been too rooted in British and American culture to be disseminated successfully in the Germanic context. Early on, Walter Gropius indicated the importance of the “American mentality,” which could be only captured properly “in situ,” and offered to have a look at Giedion’s lecture manuscripts prior to his arrival in America.⁷⁷ There is consistency in Giedion’s interests, such as the development of mankind, the “split between thinking and emotion,” and the “human scale,” or, in other words, the propagation of CIAM doctrine. Yet, many of his ideas needed to be adapted due to the cultural context of the United States and the close collaboration with North American intellectuals. A significant transformation of Giedion’s concerns can also be observed starting

with his extended stays in New York and the Midwest during the war years. In conjunction with the successful American intervention in the war in Europe and its related technological advancements, the mechanization of everyday life inexorably progressed and also affected the historian's immediate field of investigation.

Mechanization Takes Command was one of the first attempts to document the anonymous history of industrialization and, as such, was very much tied to the specific cultural context of North America. Primarily researched in the archives of American corporations and the United States Patent and Trademark Office in Washington, D.C., the work may have relied on cultural tendencies too unfamiliar to a European audience. This cultural history of the United States was not overly popular with publishers in postwar Europe, especially considering that many countries were still in a state of penury and deeply affected by the "sweeping hegemony of American economics, politics, and culture" gradually transforming and modernizing the continent.⁷⁸

While this later work was critically forged in the cultural climate of the United States, cultural differences do not explain the cool reception of the historian's first "American" publication. *Space, Time and Architecture* was a treatise that exclusively served the propagation of modern architecture as theorized in a European context and as such should presumably have been received more enthusiastically. However, in contrast to such publications as *Bauen in Frankreich, Eisen, Eisenbeton, or Befreites Wohnen*, which served the same purpose, a change of tone and position occurred, in terms of its proclamations for social liberation and its appeals to the interests of the *Existenzminimum*. In *Bauen in Frankreich*, Giedion stated: "Architecture is as closely bound to the sociological structure of a country as to its climate, materials, customs," and the small, but vocal manifesto *Befreites Wohnen* in particular has to be situated in the context of the socialist writings of the mid-1920s.⁷⁹ Also, it should not be forgotten that Giedion was a leading member of the politically active student group "Block aufbauender Studierender" during his studies in Munich and also served on the editorial board of the anti-fascist magazine *information*, which was published in the 1930s in Zurich.⁸⁰

Space, Time and Architecture is the representation of a movement that developed from an avant-gardist position to an established order. This shift is closely related to the diasporic Atlantic crossings on the eve of the Second World War. Many of CIAM's core members were forced to leave the continent and eventually continued their professional careers in the United States. As opposed to comparatively small and financially limited institutions such as the Bauhaus, their new employers were potent establishments such as Harvard University or the Illinois Institute of Technology (IIT). The economic upturn after the war, as well as the manifestation of the United States' global power via its building of institutions throughout the world,

prompted an increasing number of commissions. Many of the architects who had fought idealistically for the movement in Europe now found themselves in comfortable positions at renowned academic institutions and prominent architectural firms. Most émigrés did not challenge the ideological reduction of the International Style—which by then represented “a common denominator for diverse European movements”—and were willing to adapt their own architectural agendas to “the imperatives of American capitalist society.”⁸¹ At this point, “cultural elitism, no less social radicalism, could only prove counterproductive.”⁸²

Clearly, the notion of architecture’s role in postwar Europe was diametrically different from the developments in the United States. In a state of war-related repression, especially in Germany, people were more concerned with general war relief, the lack of resources, and broad questions of shelter. The “old continent” was no longer the exporter of modern architecture, but became the receiving context of various alterations of modernist ideas.

Apart from Sigfried Giedion’s softened political tone in *Space, Time and Architecture*, it is unclear why he never critically revised his magnum opus. Over the course of its four revised editions and fifteen printings, individual chapters were added, propagating the alleged triumphal procession of modern architecture throughout the world—from Jørn Utzon in Australia, to Kunio Maekawa in Japan, to Lúcio Costa in Brazil. However, more than twenty years after its first publication, Giedion’s treatise neither addressed the changed sociopolitical and cultural conditions of the new world order, nor the drastic changes that occurred within the modern movement. The book concealed the dissolution of CIAM in 1959, as well as the formation of Team 10, a loosely organized group that emerged following generational conflict within CIAM.⁸³ Despite revisions, the book’s presentation of the modern movement was blatantly outdated. The publication had become a historical document even before the release of its first German edition.

The Beginnings of Visual Literacy

Many people witnessed Giedion’s struggle with English, from the president of Harvard, to fellow professors, to the large body of students.⁸⁴ Nevertheless, many of them regularly attended his lectures, stimulated by the aesthetic sensibility he managed to share with his audience. At the same time, Giedion’s theories and his historiographic approach baffled them. As one reviewer of *Space, Time and Architecture* wrote in 1941: “The wealth of factual material, which Dr. Giedion presented, so overwhelmed his listeners, however, that

many felt that further study on their part would clarify his ideas for them. The publication of this book has permitted this study. Unfortunately, the bewilderment remains.”⁸⁵

Despite these initial reservations, *Space, Time and Architecture* reigned as a standard work of architectural history for more than forty years. Few other architectural history books share its success.⁸⁶ As previously noted, the book was hardly read for its brilliant language, and the pervasive citation of Italian and German references, which made the necessary study of sources practically impossible for the English-speaking public, did not make Giedion’s work particularly accessible. In a letter to Franz Roh, a close friend from his studies in Munich, Giedion indicated that he was still struggling with the English language a decade after setting foot on American soil: “I have learned—after two years—to speak in English freely, but it is essentially still a mask to express oneself in another language that one knows only logically from outside, however without ever being able to grow into its secret meaning and sound.”⁸⁷

Linguistic barriers hindered Giedion’s poetic expression, but at the same time they forced him to concentrate on the core of his argument and to create a comprehensive overview, which had always been a major concern of his. He was eager to impart to his students the awareness and certainty that they were an intricate part of “a tradition,” which he disclosed in his last writings as reaching all the way back to prehistory.⁸⁸ As opposed to many of his colleagues, Giedion was not fixated on formal questions of architectural history. His observations of world and cultural history convinced him that modern architecture was the apotheosis of the discipline. In his opinion, architecture, technology, and sociology would ultimately amalgamate into one field. In the architectural sphere, Lewis Mumford was one of the few who shared Giedion’s approach—not only in terms of their work as cultural historians, but also in their visual rhetoric. In a review for the *New Republic* in 1929, Mumford wrote: “We do not need verbal outlining so much as we need pictures.”⁸⁹

In today’s media-driven context, this approach might seem quite obvious, but at the time, Giedion was probably the only architectural historian who argued visually by interweaving text and illustrations in such a complex manner. Up to this time, in art-historical publications, photographs figured predominantly as illustrations of written text. The majority of his colleagues published photographs and drawings in the appendix or at best as individual plates integrated into the layout. Even architect-historians like Henry-Russell Hitchcock—who was visually trained—strictly separated scholarly text from illustrations. Like Giedion, Mumford attempted to integrate illustrations into his arguments.⁹⁰ However, his efforts remained limited to particular sections within his books—distinguished with coated paper—and never reached the level of Giedion’s holistic treatment of image and word.

Communicating
Architectural History:
Photography and
the Role of the Artist

Visual Language:
Giedion and
the Comparison
of Images

“[A]ll communication of the contents of the mind is language, communication in words being only a particular case of human language and of the justice, poetry, or whatever underlying it or founded on it.”⁹¹—Walter Benjamin

Giedion’s striking method of visual comparison embedded architectural history into a larger cultural context. A decent photographer, a meticulous collector of news clippings, advertisements, and other printed matter, and an expert in fine arts, Giedion created a visual language that surpassed the strength and suggestion of his texts. While Giedion addressed the “hurried reader” as early as 1928, he continually explained to the audience of his most recent books that “we cannot expect that everyone will read this book from the beginning to end; I have organized the layout, therefore, as a kind of optical language to give a general idea of the line of thought followed.”⁹² Mainly writing for an audience of architects, Giedion soon realized that he needed to adapt the form of his message because “[f]riends of architecture and the visual arts are only moderate readers.”⁹³ He concluded that if he would “add two bright observations to the well-chosen image, and thus carefully connect the image with the word, they will follow me.”⁹⁴

The interplay of substance and message on the one hand, and the visual argument, the orchestration of illustrations and issues of layout, typography, and design, occupied a key role in all of Giedion’s publishing activities. Illustrations did not provide evidence for his writing, but operated as an “independent dimension of the discourse,” which marked the beginning of a reform of publications in architectural history.⁹⁵ His visual argumentation clearly facilitated the comprehension of his thoughts and helped to translate and disseminate his works across the world, independent of linguistic barriers: “I believe that ‘Space, Time and Architecture’ has become a wide spread text-book, because I tried to introduce a *pictorial language* into this kind of books [*sic*]. Most of the pictures, especially where I had to establish new valuations as in the case of Borromini, Maillart, the School of Chicago etc., I took myself.”⁹⁶ The principle of a comparative analysis of photographs based on simultaneous projection—appropriately called *vergleichendes Sehen* (comparative seeing) in German—had been established in the academic context around the last decade of

the nineteenth century.⁹⁷ Additionally, the modernization of printing allowed for a better dissemination of visual information both in academic circles and eventually in the realm of popular books.⁹⁸

Giedion first witnessed the visual rhetoric of such parallel projection as a student of art history in Munich, within the context of the lectures of his “Meister,” Heinrich Wölfflin.⁹⁹ With his *Renaissance und Barock* (1888), and more particularly his *Kunstgeschichtliche Grundbegriffe* (1915), Wölfflin introduced the dichotomic classification of artworks, which allowed a direct comparison—in the case of the former publication, a comparison of works from the Renaissance with those of the Baroque.¹⁰⁰ Rather than merely illustrating his lectures, Wölfflin used a set of twin parallel projectors as a methodological instrument to sharpen his students’ consciousness. In the contrasting world of popular, mass-produced, inexpensive picture books, Paul Schultze-Naumburg had a comparable impact on the development of a graphic comparative method with his *Kulturarbeiten*, published in a number of different editions between 1902 and 1929.¹⁰¹ Likely inspired by precedents such as Augustus Pugin’s polemical book *Contrasts* (1836), he pioneered a propagandist model that would effectively address wider audiences by means of drastic simplifications and a consistent and biased dualism demonstrated through the juxtaposition of example and counterexample.

The skillful juxtaposition of images became the primary modus operandi in Giedion’s own work—the parallel message of pictures his major argumentative technique.¹⁰² From correspondence, it is known that Giedion insisted on bringing a suitcase filled with more than 500 glass slides to Harvard.¹⁰³ Even if the art historian was by no means the only one taking advantage of twin projection, auditoriums were not necessarily equipped with two projectors even after the Second World War and therefore had to be prepared on a weekly basis especially for that purpose.¹⁰⁴ His lectures were always conducted with two projectors, allowing Giedion to create bold contrasts or evoke visual alliances and formal analogies between architecture, art, and, increasingly, anonymous objects of everyday life. Giedion’s method was reductive, breaking down scientific processes, complex systems, or particular works of art, and establishing formal correspondences that would allow him to develop social and cultural ideas.¹⁰⁵ While these displays were certainly stunning, the visual narrative did not always help to clarify the line of the argument, as Eduard Neuenschwander, Giedion’s teaching assistant at the ETH who was responsible for changing the slides, recalled: “It was like Don Quixote’s fight with the windmills. The simultaneous thinking, the settling of relationships, the arrangement according to internal laws was initially completely foreign to us, and it was manifested in this grave struggle with the continuous and incomprehensible alteration of the images.”¹⁰⁶ The teaching environment offered Giedion an

2.09–2.12

Slides from

Giedion’s library:

Joseph Paxton,

Crystal Palace,

London (1851–54),

photographed by

Giedion, 1934/35;

Pier Luigi Nervi,

Rotunda of the

Kursaal, Ostia, Italy,

1950;

Pierre Jeanneret on

the roof of Villa

Stein-de Monzie at

Garches, France,

1927;

Juxtaposition of Joan

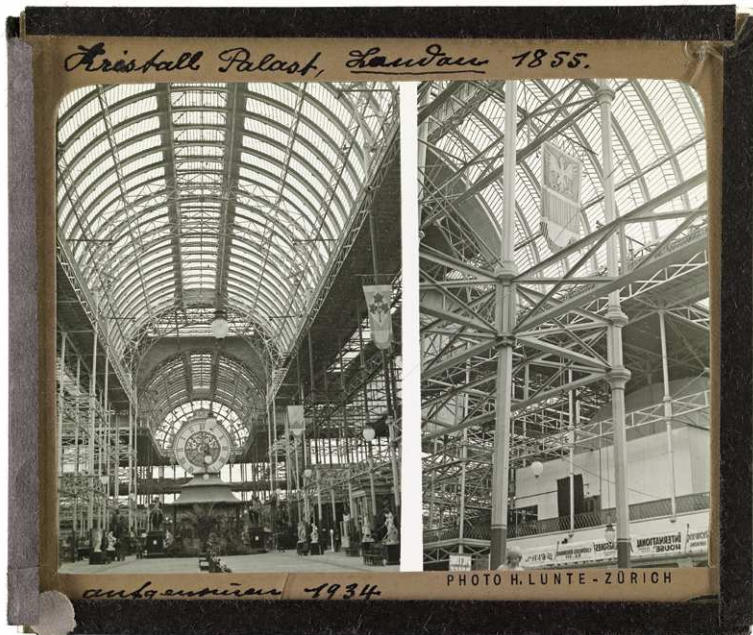
Miró’s *Composition*

(1935) with Frank

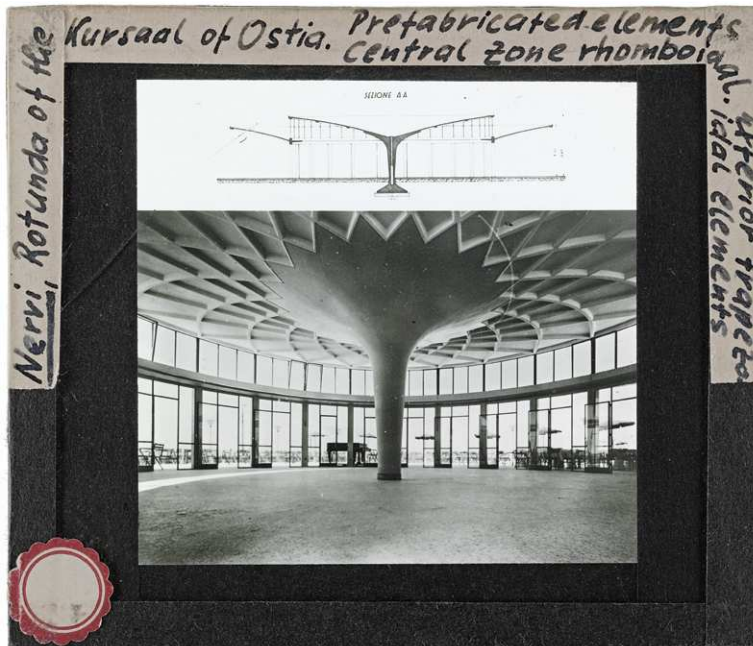
B. Gilbreth’s *Hand-*

writing Cyclegraph

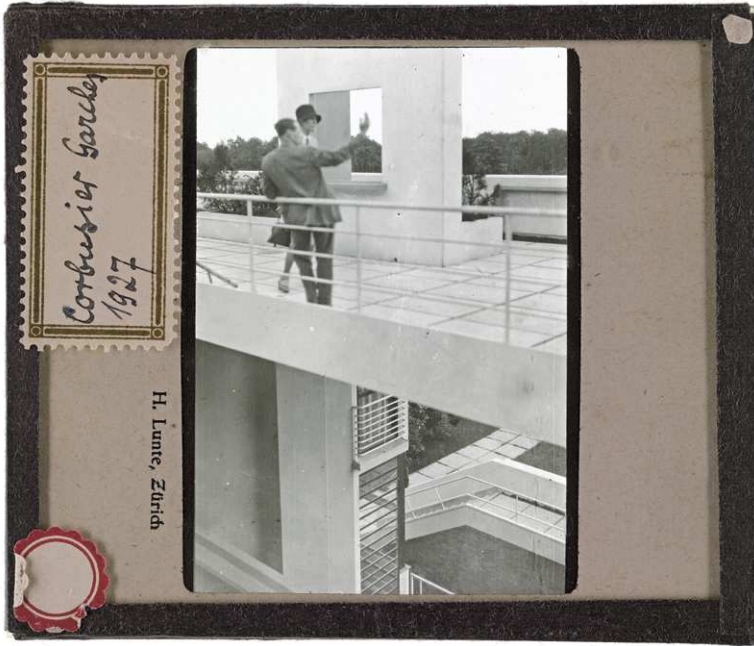
(1910s).



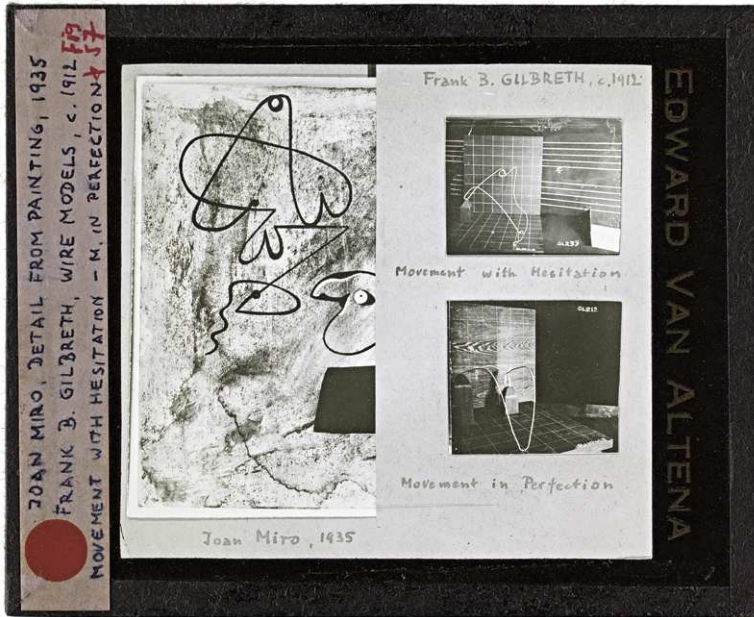
2.09



2.10



2.11



2.12

Red	Blue
1 Fork + knife	
2 Eiffel Tower	2 Braque
5 Manet	3 Corbusiere Cook
8 Léger	5 Whistler Matisse Braque
9 Mondrian	Hoesburg
10 Structure Picasso	9 (volumes)
11 Delta	10 Hoesburg
12 Picasso Cylé Siemul	11 Garage Marboeuf
12 Picasso detail	12 Gropius Fagus
15	14 "Guernica"
16 Javanassa	15 Tennis player
17 Mushroom Zurich	
18 Mushroom system	17 Mushroom. Indianapolis
19 Schwandbach detail	18 Brinckmann
	19 Schwandbach

experimental ground to test his idea of an “identity of methods,” as outlined in *Space, Time and Architecture*, “detecting elements of the general pattern which our culture will embody” in both sciences and contemporary art.¹⁰⁷ Giedion eventually translated the projections on the screen into layouts on paper, which was a logical step in this development.

Giedion’s visual thinking is decidedly rooted in the European context of the time.¹⁰⁸ His advances are comparable to the approaches of other pupils of Wölfflin’s such as Wilhelm Worringer and Adolf Behne. The latter set the context for modernist architecture polemics with *Der moderne Zweckbau* (1926). Liberating authors from the exclusive contribution of text, Behne introduced the term *Buch-Regie* (book directing), which perfectly depicts the growing guild of theorists who would engage in both textual and visual language.¹⁰⁹ The visual strategies emerging in the context of art history also had an impact on the discourse in contemporary art. To defend their own cause, Franz Marc and Wassily Kandinsky, members of *Der Blaue Reiter*, published an “Almanach” in 1912,¹¹⁰ which presented not only contemporary art but also artifacts from various cultures, including medieval woodcuts and Russian folk art, and took advantage of the comparative strategies and synopses propagated in Wölfflin’s *Die klassische Kunst* (1899) and Worringer’s *Formprobleme der Gotik* (1911).¹¹¹ In the field of architecture, finally, practitioners such as Bruno Taut with *Bauen: Der neue Wohnbau* (1927) and *Ein Wohnhaus* (1927)—both stunningly designed by Johannes Molzahn—or Le Corbusier and Amédée Ozenfant with their *Esprit Nouveau* (1920–25), contributed significant precedents for early twentieth-century architecture publications.¹¹²

The “New Vision”:
Giedion the
Photographer

“People have probably always seen things the way they wanted to see them.”¹¹³—Heinrich Wölfflin

Repeatedly, Sigfried Giedion indicated that he could not write without visual material.¹¹⁴ One of the main pillars of his unique approach to a visual language representing the modern movement was his own photography. In his 1928 book *Bauen in Frankreich*, a quarter of the photographs were drawn from his personal collection; later he closely collaborated with professional photographers and even began to experiment with color film. Up to then, photographs in books were frequently formally separated into a small appendix printed on a different paper stock.¹¹⁵ A look at many of these photographs reveals that they were usually taken without the particular argument

2.13

Giedion’s list of slides for his lecture on “American and European Industry” at Yale University, indicating the juxtaposition of images by means of two projectors (red and blue), ca. November 1941.

of the text in mind.¹¹⁶ Given that authors rarely provided their own photographs with the texts, and considering that reproduction costs were significant at the time, most publishers made use of available stock images.¹¹⁷ Well-known artifacts repeatedly surfaced in publications, presented in frontal perspective to create an “objective” point of view and mimetic representation of the subject under discussion. In accordance with his subjective approach to the historiography of architecture, Giedion literally introduced his personal point of view through his photographic production.¹¹⁸ Giedion’s photographs, from well-arranged frames to informally staged snapshots recording particular atmospheres, formed the foundation of an emerging visual argument: modern architecture to be seen through a modern eye. In various instances, the art historian unmistakably stated that it was indispensable to introduce a “new seeing” (*neues Sehen*), or “new optics” (*neue Optik*), in order to be able to grasp the specificities of contemporary culture:

Of course, it is not about showing good photos, as someone or other coincidentally succeeds in taking them. It is a matter of making comprehensible the specific way of seeing, which, in contrast to painting, is only possible to the photographic eye, to a public at the broadest international scale. ... More and more, photographic reproductions are replacing hand-drawn posters and printed matter based on graphic originals.¹¹⁹

This revelation is clearly rooted in the modern experimental photography Giedion had witnessed at the Bauhaus, and particularly indebted to the works of his friend László Moholy-Nagy.¹²⁰ In a short essay, “Die neue Typographie,” the latter declared that photography had turned into the most powerful medium to establish narratives.¹²¹ Photographs taken from a higher vantage point, the distortion of scales, and the negation of central perspectives were part of the principles that Giedion adopted from the vanguard. This is especially striking in his photographs of the Pont Transbordeur, the Eiffel Tower, and Le Corbusier’s Pessac housing published in *Bauen in Frankreich*. Giedion’s work complied with the manifestos of modern photography, and four of his photographs were included at the 1929 Werkbund exhibition *Film und Foto*—better known as *Fifo*—and other prints were subsequently published in Werner Gräff’s *Es kommt der neue Fotograf!*¹²² Giedion was initially involved in the discussions around the exhibition, and proposed an additional space that would present a theoretic-didactic approach to the topic, potentially entitled “Training in New Optics.”¹²³ As a later review of the exhibition catalogue suggests, Giedion was keen on showing that the advances in modern photography were based on a close relationship with contemporary art: “Just as in architecture, progress in this area does not stem from

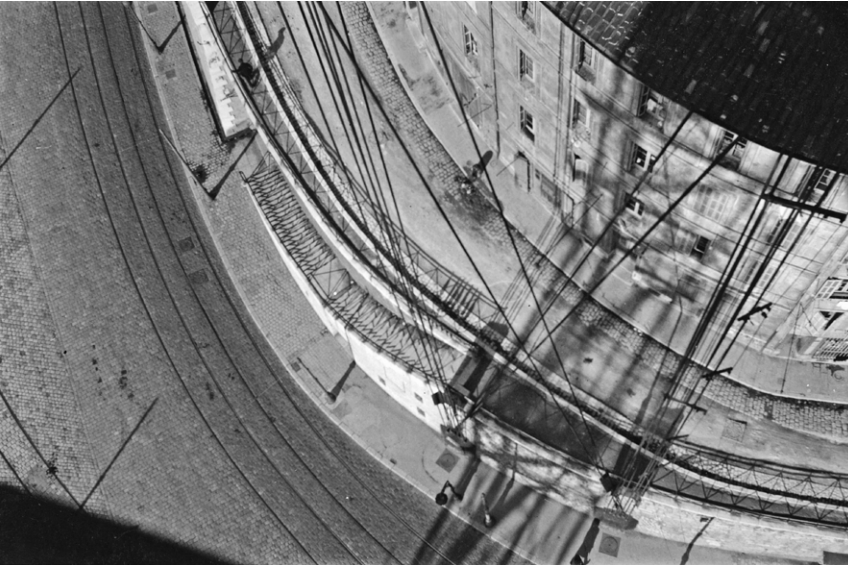
experts who followed a regular course of studies, but from outsiders, be they people who evolved autodidactically, be they painters who can see photographically, or yes, even dilettantes.”¹²⁴

Similar to his approach in his lectures and publications, for the exhibition the art historian suggested blurring the boundaries between modern art and photography, between scientific-technical and artistic productions, juxtaposing works of Paul Klee, Piet Mondrian, and El Lissitzky with aerial photographs or recent works of modern photography and film. Giedion was ultimately not involved in the organization of this exhibition, which successfully introduced a new set of visual parameters and experiential potentials to photographic practice.¹²⁵ Among those exhibited were two of Giedion’s closest friends from his studies in Munich. Like Giedion, Franz Roh and Hans Finsler were members of the politically engaged group “Kreis 1,” active toward the end of the first decade of the twentieth century. They both eventually became advocates of the “Neue Fotografie”—Roh with his publication *Foto Auge* (1929) in collaboration with typographer Jan Tschichold, and Finsler as a well-known photographer. Having collaborated with Finsler in Munich, and later on on his Wohnbedarf AG project in Zurich, Giedion was instrumental in appointing Finsler as the first teacher for the newly established photography class at the Zürcher Kunstgewerbeschule (Zurich School of Applied Arts) in 1932.¹²⁶

While his colleagues Roh and Finsler were both professionally active in the field, Giedion never claimed to be a photographer. It would be an exaggeration to include him in the group of protagonists of modern photography, even if Giedion was prominently exhibited among them.¹²⁷ The visual representation of architecture and art, however, was an integral part of his work as an art historian and architecture critic engaged with contemporary topics. Because, according to Giedion, the propagation of a new approach to building also demanded new ways of seeing, he took a great interest in photography as a satisfactory way to represent his vision. Not too long after his first visit to the Bauhaus, Giedion began to take pictures with an unwieldy folding camera that made it difficult to take pictures without a tripod.¹²⁸ The large format had the benefit of allowing him to crop and enlarge particular zones of his film, but spontaneous photographs under more demanding circumstances were almost impossible. Giedion carried this camera on his first trip to Chicago in 1939, trying to capture dozens of buildings as far away as St. Louis. Due to his tight schedule and the limitations of his equipment, the majority of Giedion’s pictures were not suitable for inclusion in *Space, Time and Architecture*, and he consequently had to commission new photographs based on his particular instructions. He wrote to Moholy-Nagy:

2.14

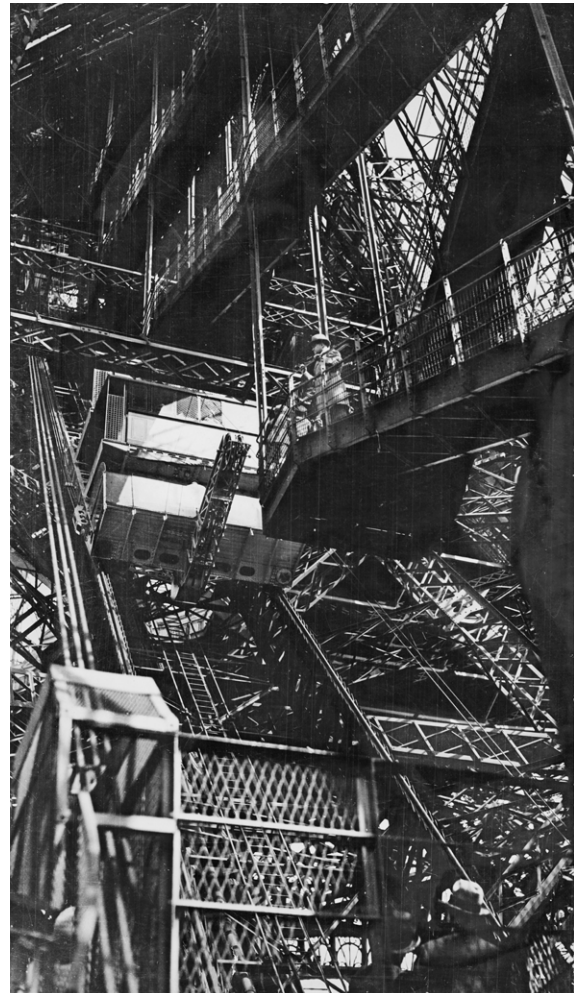
Giedion (with his folding camera) and Hans Finsler, ca. 1930.



2.15



2.14



2.16

The bad quality of my photos arose from the point of view and the weather. Would it be possible for you to send one of your students to take a partial picture of Carson Reerie [*sic*] Scott (not from below, but so that one can see the articulation of the middle row of windows and you can feel that it is not any more about a Renaissance-like separation of surfaces, and that the facade is no longer perpendicularly forced into the frame).¹²⁹

Though a significant part of the photographic material in the Giedion archives is attributable to other photographers, the scope of the collection indicates that he must have carried along his camera on most of his journeys. In the mid-1930s, Giedion began to work with a medium-format (6×6 cm) twin-lens Rolleiflex camera and roll film, which provided him with greater mobility while still allowing him to crop and enlarge certain parts of his negatives. This framing of particular areas within his pictures was a crucial technique for Giedion's method of visual comparison. He did not hesitate to mask aspects that would possibly undermine his argument, nor did he refrain from pulling artifacts out of their context in order to justify and underline a particular position.¹³⁰

The constant search for the right perspective, the perfect position, and ideal framing became an instrumental part of Giedion's photography, which represent the shifts that had taken place in the conception of architecture. Introducing sequences of still images—photographs taken from various vantage points—he approached the cinematographic style that László Moholy-Nagy had propagated in his “typofoto” essay entitled “Dynamik der Gross-Stadt,” which was published as part of the “Bauhausbuch” *Malerei, Fotografie, Film* (1925).¹³¹ That the space-time aspect of contemporary architecture and urban environments could not be grasped from a single point of view is most strikingly demonstrated in Giedion's well-known photomontage of Rockefeller Center in New York, which is captioned “Rockefeller Center. Photomontage. Expressions of the new urban scale like Rockefeller Center are forcefully conceived in space-time and cannot be embraced in a single view.”¹³² In his typical manner, Giedion contrasted his own collage with a strobe-light photograph by Harold E. Edgerton, tracing the movement of a golfer.

The art historian's vast pool of negatives and prints, as well as the photographs that were published in his books, are evidence of his search for the appropriate depiction of architecture. From his very early projects during the interwar period until his last works on the monumental architecture of Egypt and Mesopotamia toward the end of his career, Giedion attempted to record buildings from a multitude of angles and perspectives, approaching them gradually so that he could capture their essence. Aiming to grasp the world from a “modern point of view,” in photographing architectural projects that

2.15
Pont Transbordeur
(1904/05), Marseille,
photographed by
Giedion, 1927.

2.16
Eiffel Tower
(1887–89), Paris,
photographed by
Giedion, 1925–27.

2.17
Sigfried Giedion,
*Space, Time and
Architecture* (1941),
double-page spread
juxtaposing the
author's photo-
montage of New
York's Rockefeller
Center with Harold
E. Edgerton's high-
speed photography
of Bobby Jones
golfing, ca. 1938.

ranged from the works of Le Corbusier to Borromini's San Carlo alle Quattro Fontane, to the pyramids of Giza, Giedion always approached the task in the same way.¹³³ Rarely was his attention focused on the overall view of a building; he was more interested in details revealing materials, surfaces, and textures, or the elements of modern construction processes such as formworks and raw concrete slabs.

As opposed to his colleagues who worked professionally as photographers and artists, Giedion only began to take pictures with color film in the 1950s, a few years after Kodak had launched its first color negative film for the general market.¹³⁴ On his excursions to the Middle East, Giedion exposed his first color rolls. His excited yet surprised reactions to the developed prints suggest that this was an experiment without a predictable outcome.¹³⁵ Equipped with two cameras, a Leica 35 mm, and a Rolleiflex medium-format camera he had borrowed from a colleague, Giedion obsessively photographed his ancient surroundings, as Carola Giedion-Welcker observed:¹³⁶ "Pebbelstein [nickname for Sigfried Giedion] dashes around pylons, pharaohs, reliefs + temples with two cameras. In the heat of the sun, somewhat exhausting. At three in the afternoon we have now taken a siesta."¹³⁷

Despite the difficulties Giedion encountered with his equipment—both correspondence and prints indicate that he must have mounted the lens hood upside down, causing silhouetting of the corners—this first step toward color photography heralded the beginning of a new era in Giedion's teaching activities.¹³⁸ The passionate lecturer could hardly wait to see his new photographs in projection, and presented this achievement proudly with a flood of more than ninety color slides in a lecture at ETH Zurich shortly after his return from Egypt.¹³⁹

2.18 Giedion's most significant photographic contribution is his pioneering work documenting prehistoric cave paintings.¹⁴⁰ The dynamic perception of space and artwork was a central problem in capturing these works of art, painted in the flickering light of a torch. As the appearance of these drawings and reliefs continuously changed with every single step, one of the main difficulties was the choice of perspective and the ideal camera position. Giedion was convinced that only a "modern eye" could reveal the qualities of prehistoric art and therefore decided to climb down into the dark caves of southern France and northern Spain himself. He repeatedly declared the existing documentation of these works to be insufficient:

Achille B. Weider,
Siegfried Giedion, and
Hugo P. Herdeg,
taking a break on
one of their cave
expeditions, ca. 1952.

It is, of course, easy to take pictures of Lascaux, but as soon as one approaches more difficult and not so obvious works, comprehension ends and all begins from scratch. The pictures of Abbé Breuil, which are present in all art histories, are indeed appealing Japanese wood cuts, but they have nothing to do with the primordial nature of the figures and completely distort their expression.¹⁴¹

One of the copyright holders has not agreed to release this image open access.
Space, Time and Architecture: The Growth of a New Tradition, Fifth Revised
and Enlarged Edition by Sigfried Giedion, pages 576–577.

After a first attempt on his own, it soon became clear that he could not achieve the desired result without appropriate equipment and professional help.¹⁴² He soon found this support within his close circle of colleagues, from Zurich-based photographer Hugo P. Herdeg.¹⁴³ Herdeg had gained experience documenting artifacts for the Musée de l'Homme in Paris, and later on he began to photograph African sculptures for Johannes Itten, the director of the Museum Rietberg in Zurich. With Christian Zervos, the publisher of *Cahiers d'art*, he embarked on a journey to shoot bronze sculptures from Sardinia.¹⁴⁴ As opposed to a majority of students from Hans Finsler's legendary photography class at the Kunstgewerbeschule in Zurich, many of whom eventually liberated themselves from the propagated "Neue Sachlichkeit," turning to documentary photography, Hugo Herdeg's careful approach to reviving any artifact from sculptures to objects of everyday life perfectly fit Giedion's expectations.¹⁴⁵

In 1950 and 1951, Giedion, Herdeg, and his assistant Achille B. Weider set out to explore the caves of Lascaux and Pech Merle in France and Altamira in Spain, collecting visual material that would meet the art historian's expectations. Equipped with carbide lamps, they spent approximately eight hours in the loamy and dark vaults, thrusting themselves through tight crevices, and crossing subterranean waters in a rubber boat.¹⁴⁶ Along with the physical exertion, the severe humidity, which affected the shutters of the cameras and the electrical contacts of the flashlights, made the work extremely exhausting. The manipulation of the technical gear in precarious light conditions and claustrophobic constriction demanded much skill and patience. Back in the photography laboratory, Herdeg and Weider had to experiment endlessly, as it was difficult to differentiate the red, yellow, gray, and black tones because of their low contrast. While, according to Giedion, the photographers of previous publications of cave paintings traced the visible contours with a "legible brutal white border," Herdeg possessed an "internal affinity for the chemical requirements of the reproduction process which might be compared to the refined relationship the Dutch etcher of the seventeenth century had to the etching needle, plate, and etching acid."¹⁴⁷ Giedion's claim that they only presented "what the camera saw and what the human eye can see under good lighting conditions" was highly exaggerated, as Walter Binder, one of Herdeg's assistants, recalled that they retouched the photographs night after night.¹⁴⁸ Nevertheless, the photographer managed to reproduce the plasticity of the underground and the tonality of the various color pigments even in black-and-white reproductions. Herdeg contributed the actual photographs for this book, but Giedion was the driving force of the endeavor. He organized the excursions, resolved technical details, and often defined the position and perspective of Herdeg's exposures so they would support his arguments and satisfy the needs of "modern art history."¹⁴⁹

2.19

Giedion with headlamp during one of his expeditions.

2.20

Giedion's carbide lamp, used in the caves of Altamira and Lascaux.

2.21

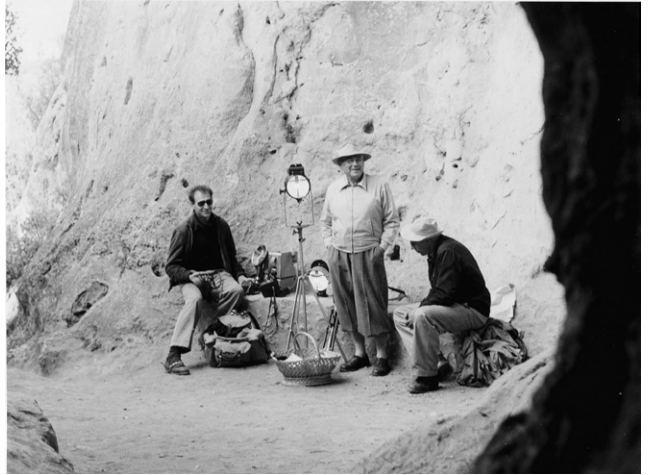
Giedion in a rubber boat and Herdeg holding a carbide lamp in the caves of Tuc d'Audoubert, near Montesquieu-Avantès, Ariège, France.

2.22

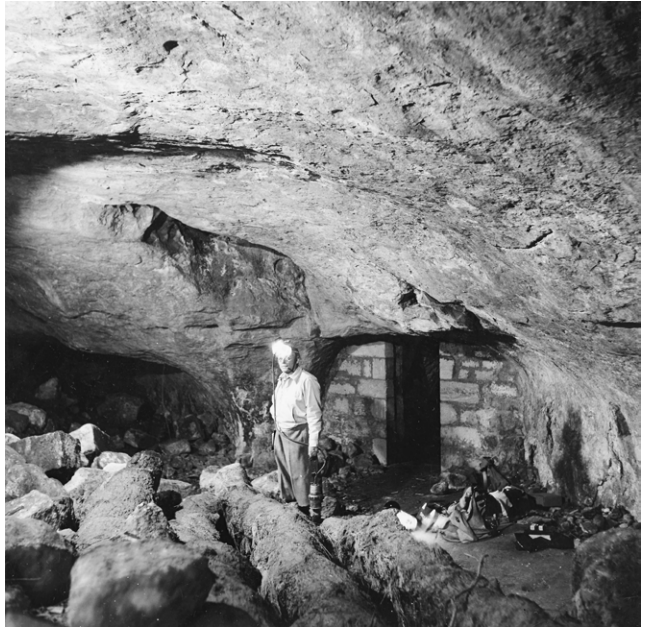
Cave painting of a bison, Altamira.

2.23

"Salle des Hiéroglyphes" with cave paintings, at the cave of Pech Merle, Cabrerets, Lot, France.



2.18



2.19





2.21



2.22



2.23

Visual Thinking

“Everybody views images—they are effective.
Nobody reads text.”¹⁵⁰—Werner Hegemann

Giedion,
the Bauhaus, and
the “Hurried Reader”

The care Giedion took in arranging the striking juxtapositions of rich and often surprising visual material, annotated with short but concise captions, helped to convey and disseminate his work over the course of generations and across diverging cultural contexts. His repeatedly interpreted and also misinterpreted writings were criticized for their “confusing lack of continuity” and their “repetitiveness of statements” by contemporary critics and seem rather tendentious from today’s perspective. Yet Giedion’s exacting collaborations with some of the best artists of the time constitute a unique contribution to architectural history and an important factor for the continued reception of his oeuvre.¹⁵¹

2.24 Interested in every aspect of the book as an object, including its physical characteristics, structure, layout, and typography, Giedion laying out the Italian edition of *Space, Time and Architecture* at the Milan office of publisher Ulrico Hoepli, 1961. was personally involved in the process of bookmaking. Photographs show the historian sitting at a desk at the office of Ulrico Hoepli, the publisher of the Italian edition of *Space, Time and Architecture*, collaging photos into a mock-up. The art historian was not only involved in the initial publication of his books but he also meticulously followed up any revised editions and translations of his work, ensuring that his visual arguments would not be weakened.

In various instances, Giedion insisted on slightly larger formats or extravagant covers, as well as on decent printing and good paper, creating generous and striking books with plenty of white space and an impeccable quality of black-and-white illustrations.¹⁵² The cover design for his book on Walter Gropius, for example, nearly jeopardized the project due to the exorbitant cost of the embossing of a blue shape that extends over half the book’s cover. In his “Sky Line” review for *The New Yorker*, Lewis Mumford emphasized the quality of the production of Giedion’s seminal volume and his amazement at the visual dimension of the book.¹⁵³ Most of his own publications were printed in a typical royal octavo format, which he also suggested for Josep Lluís Sert’s *Can Our Cities Survive?* (1944), since it would cut production costs.¹⁵⁴

The broad dissemination of Giedion’s work without his accomplished use of visual material and book production skills would have been unthinkable. Yet, the assumption that this achievement is only his would be wrong. On the contrary, over the course of the author’s career Giedion’s graphic approach was inspired and influenced by various individuals and groups. Within the close circle of his friends,



2.24

he found the necessary support to elaborate his attempts at visual explanation, creating striking effects by combining art and popular culture with architectural projects.¹⁵⁵

Giedion's visual approach developed with his first publications, especially the early architectural monograph *Bauen in Frankreich*, and it was inspired by his attendance at the 1923 Bauhauswoche in Weimar, which showcased a number of progressive publishing practices of the time. Le Corbusier's seminal manifesto *Vers une architecture*, which juxtaposed automobiles with Greek temples and grain silos with Renaissance palaces, had just been released at the time. It was the architect who prompted Giedion to engage in this book project, which would be one of the first to historicize modern architecture.¹⁵⁶

Giedion was impressed with Le Corbusier's powerful juxtapositions of seemingly unrelated motifs. While the critic and the architect shared a general attitude toward architectural questions and visual representation, their typographic approach clearly differed.¹⁵⁷ Despite his understanding of typography as an inherent part of architecture, the Franco-Swiss architect was not as adventurous in his choice of type as in his architectural approach, and tended to adopt classical typefaces such as his favorite, Didot.¹⁵⁸ This preference corresponds with the contemporary French approach to graphic design, which was dominated by typographers such as Jean Carlu and Paul Colin.¹⁵⁹ As opposed to the Bauhaus school, which was experimenting with typography, photography, and illustrations aiming at the creation of a "new vision," Carlu and Colin strictly separated the treatment of type and background.¹⁶⁰ Despite his central role in Giedion's take on modern architecture, Le Corbusier had a minimal impact on the art historian's "visual thinking" at the beginning of his career.¹⁶¹

Paradoxically, it was Le Corbusier who proclaimed the "synchrony of image and word" in his *Une maison, un palais* (1928), asserting that "the typography will put the reader of this book in a listener's place."¹⁶² Only a year later, Theo van Doesburg underlined this approach by introducing the concept of an "acoustic-optical" dimension of reading: "Books are read ... but at the same time they are viewed, the whole page at once. By means of this simultaneous process (acoustic-optical) the modern book has been enriched by a new 'plastic' dimension."¹⁶³

This postulation perfectly matched the approach developed at the Bauhaus, where László Moholy-Nagy was elaborating an analogy of typography and its visual expression to the actual voice as a new means of communication. When Hugo Ball claimed that "language is not the sole means of expression," he must have had the works of the Russian vanguard, the Dada movement, and above all the Italian Futurists' *parole in libertà*—such as the cover and layout of Filippo Tommaso Marinetti's *Zang Tumb Tuuum* (1914)—in mind.¹⁶⁴ Giedion's visual manifesto *Befreites Wohnen* was decisively influenced by

these graphic fireworks.¹⁶⁵ The distortion of type and image and the irregular use of text were supposed to instantly reveal the intention of an intellectual revolution. Among others, the work of two protagonists probably had the most decisive impact on Giedion's work: El Lissitzky and John Heartfield.¹⁶⁶

Simultaneous with Giedion's debut as an architectural critic, Lissitzky spent two years in Switzerland because of poor health. During that time, he was involved in the journal *ABC*, and edited *Kunt-Ismen* (1925) in collaboration with Hans Arp.¹⁶⁷ Journals had become an important medium for testing graphic ideas, which is reflected in Lissitzky's numerous contributions to such magazines and newspapers as *Wendingen* and *Merz*.¹⁶⁸ Given that Giedion had just approached the Bauhaus, it can be assumed that the art historian was exposed to the work of Lissitzky. He likely saw the exhibition *Russische Ausstellung* at the Kunstgewerbemuseum in 1929, which was conceived by the Russian "book engineer" (*konstruktor knigi / Buchkonstrukteur*). Lissitzky had chosen this title to credit his design of Vladimir Mayakovsky's *Dlia Gólosa* (For the Voice, 1923).¹⁶⁹ In terms of its effective macro- and micro-typography—from the page layout, in which fragments of a sentence were placed freely on a spread, to the precise cut of individual letters, to the particular use of color—all forging an unprecedented visual book, Lissitzky's masterpiece certainly provided a model for Giedion's own work.

Giedion's collages that constitute the narrative of *Befreites Wohnen*—as opposed to the historian's previous book, the sketch-like character has not been adapted into a proper layout, and even handwritten text can be found on certain pages—are a synthesis of the artistic compositions of artists such as Lissitzky, Moholy-Nagy, and Kurt Schwitters, with the didactic tendencies of John Heartfield, a protagonist of Dada in Berlin.¹⁷⁰ In the emerging tradition of tabloids, advertising leaflets, and pamphlets, which were characterized by the juxtaposition of a wide array of seemingly unrelated photographs, Giedion mounted the spreads of *Befreites Wohnen*, underscoring his polemical tone and the propagandist intention. Certainly, by that stage of his career, the critic was aware of the argumentative power of visual comparisons; however, Heartfield's anti-fascist photomontages—which from 1929 on were published exclusively in the *Arbeiter-Illustrierten-Zeitung* (AIZ)—introduced a new dimension.¹⁷¹ With respect to Heartfield's work, the journalist Kurt Tucholsky noted in a 1925 article entitled "Die Tendenzfotografie": "Photography is irrefutable. It cannot be defeated. Only someone who has tried it knows what can be achieved solely with photographic juxtaposition. The effect is ineffaceable and cannot be surpassed by any headline in the world. A short caption is enough to capture the most ordinary audience."¹⁷² It was this effect that Giedion sought to achieve in discussions of architecture, when mounting photographs, plans,

2.25

Cover of Giedion's *Befreites Wohnen* (1929), depicting the author on the balcony of Max Ernst Haefeli's 1928 Rotach Houses in Zurich.

2.26

Double-page spread from *Befreites Wohnen* (1929).

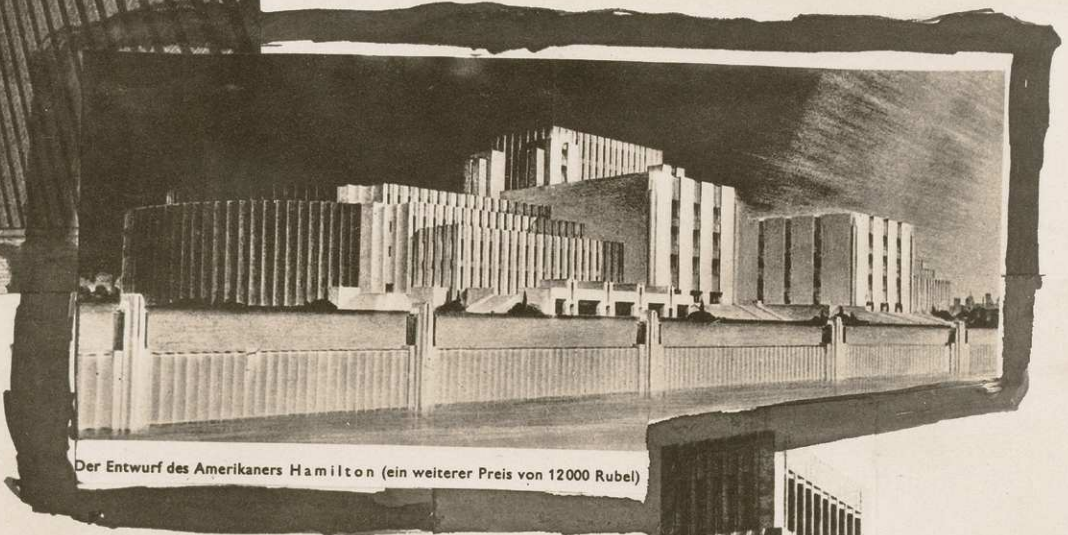
2.27

Sigfried Giedion, protest collage in opposition to Hector Hamilton's winning design for the Palace of the Soviets, 1932.

and texts, to illustrate his discontent with the competition for the Palace of the League of Nations in Geneva, or the design for the Palace of the Soviets—Cornelis van Eesteren forwarded a copy of Giedion's collage directly to Stalin.

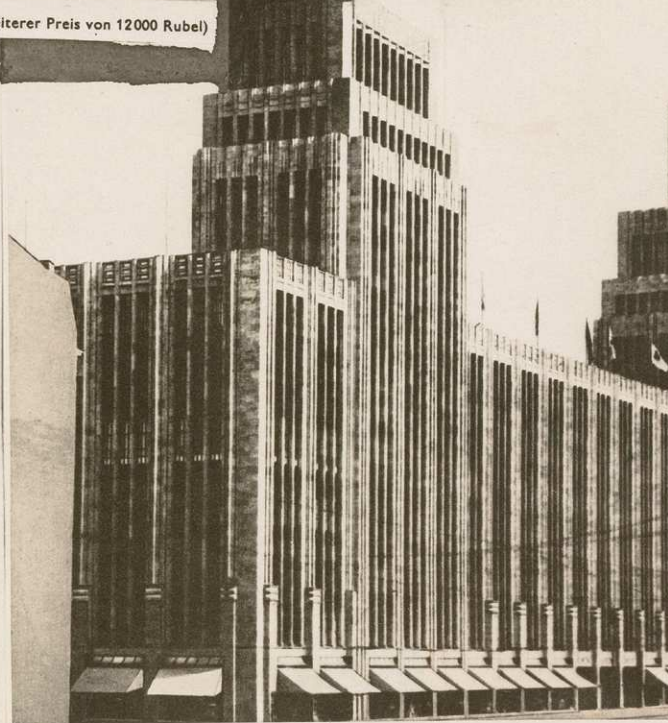
- 2.28 It is hardly a surprise that Moholy-Nagy, one of Giedion's best friends, "oversaw typography and layout," and designed the jacket for *Bauen in Frankreich, Eisen, Eisenbeton*.¹⁷³ Its resemblance to the renowned *Bauhausbücher*, which were also a product of Moholy's genius, is not only visible in the similar format, but also in the typographic composition of the cover and the photograph on the dust jacket:¹⁷⁴ boldfaced red-and-white type, set in the stereotypical red and black, was dynamically arranged over a negative print of Giedion's photograph of the Pont Transbordeur in Marseille.¹⁷⁵ The rationalization of reading through the appropriate balance of image and text, an idea that was embraced by many publications at the time, was also thematized in Giedion's volume. Illustrations and captions addressed "the hurried reader" whereas the body text would provide more precise explanations.¹⁷⁶ Moholy-Nagy's work exploited the unified and legible space of the double-page layout, within which individual images were composed to a cinematographic view, a technique he had impressively and also more radically explored in his *Malerei, Fotografie, Film*. The extent to which Giedion had absorbed this approach is revealed in *Bauen in Frankreich*: "Static exposures cannot bring any clarity here. One would have to accompany the motion of the gaze: Only film can make modern architecture comprehensible!"¹⁷⁷
- 2.29 Giedion's layout for double-page spread 48–49 of *Bauen in Frankreich*, juxtaposing Eiffel's roof construction for the main gate of the Palais du Champ-de-Mars at the 1878 World's Fair with Gropius's Bauhaus building at Dessau (1925–26), ca. 1927.
- 2.30 Giedion's layout for double-page spread 60–61 of *Bauen in Frankreich*, juxtaposing the Eiffel Tower (1889) with Mart Stam's design for the Rokin Dam (1926) in Amsterdam, ca. 1927.
- 2.31 László Moholy-Nagy, spreads from the typo-photo essay "Dynamik der Gross-Stadt," published in *Malerei, Fotografie, Film* (1927).
- Since the composition of illustrations and text were interrelated with such a degree of complexity, Giedion took charge of sketching preliminary layouts himself.¹⁷⁸ He actually wrote the captions while arranging the visual material, and added body text separately. In that sense, *Bauen in Frankreich* is practically a superposition of two individual books, which can be read either separately or together. In addition to the layer of illustrations with captions and the body of the main text, Giedion also introduced *Bemerkungen*, which are similar to footnotes, specifying particular detail information on each page. Given that this particular journey through a book was rather unusual at the time, Giedion introduced the audience to this multi-layered concept of information on the first pages. It can be assumed that he learned from the experiences of his friend Moholy, who had tested the limits of navigation and readability in the eighth volume of the *Bauhausbücher* series. Operating with a variety of arrows, boldfaced lines, and instructions set in heavy "grotesque" type, the artist guided and instructed the reader—or viewer—of his book, and concluded the last part entitled "Dynamik der Gross-Stadt" (Dynamic of the Metropolis) by exhorting the audience to re-read the piece: "THE WHOLE THING TO BE READ THROUGH AGAIN QUICKLY."¹⁷⁹

de la Hohenzollern Platz, à Berlin.
 Fritze Hogger, architecte.
 LUCIEN VOELZ



Der Entwurf des Amerikaners Hamilton (ein weiterer Preis von 12000 Rubel)

✎
DER PALAST DER
SOWJETS, der zur
 Ausführung gelangen
 soll, im Vergleich mit
pseudo-moderner
Warenhaus- und
Kirchenarchitektur.



Warenhaus Karstadt, Berlin-Neukölln (1929). Einer der Warenhausriesen der letzten Jahre.
 einen besonderen Zugang von der U-Bahn. Von dem großen Dachgartenrestaurant genießt man
 Die am Abend mit roten Neon-Röhren erleuchteten Türme sind ein Wahrzeichen des nächtlichen Berlin

BEFREITEST WOHNEN

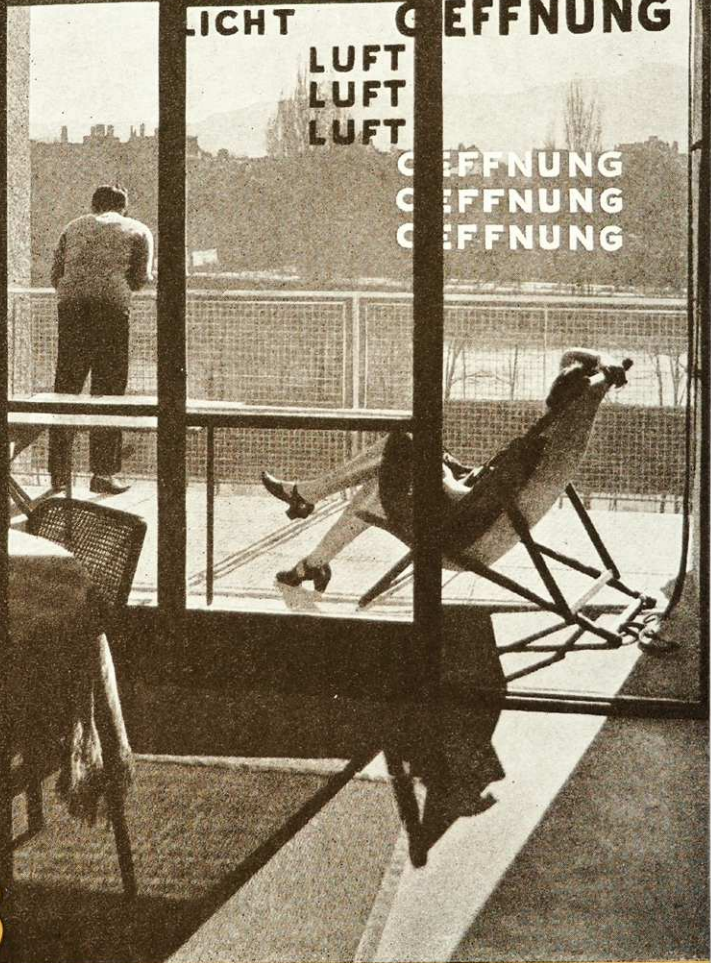
86 BILDER
EINGELEITET
VON
SIGFRIED
GIEDION

LICHT
LICHT LUFT
LICHT

ÖFFNUNG

LUFT
LUFT
LUFT

ÖFFNUNG
ÖFFNUNG
ÖFFNUNG

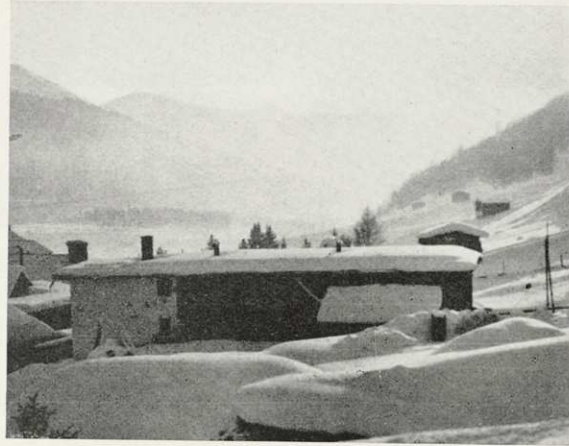


SB

ORELL FÜSSLI VERLAG ZÜRICH UND LEIPZIG



Alter Schuppen in Davos



Eisbildung bei steilem Dach

Keine Eisbildung bei flachem Dache

Am Gegenden mit hohen Schneemassen ist das STEILDACH unsachlich, denn es wird zur Lebensgefahr!

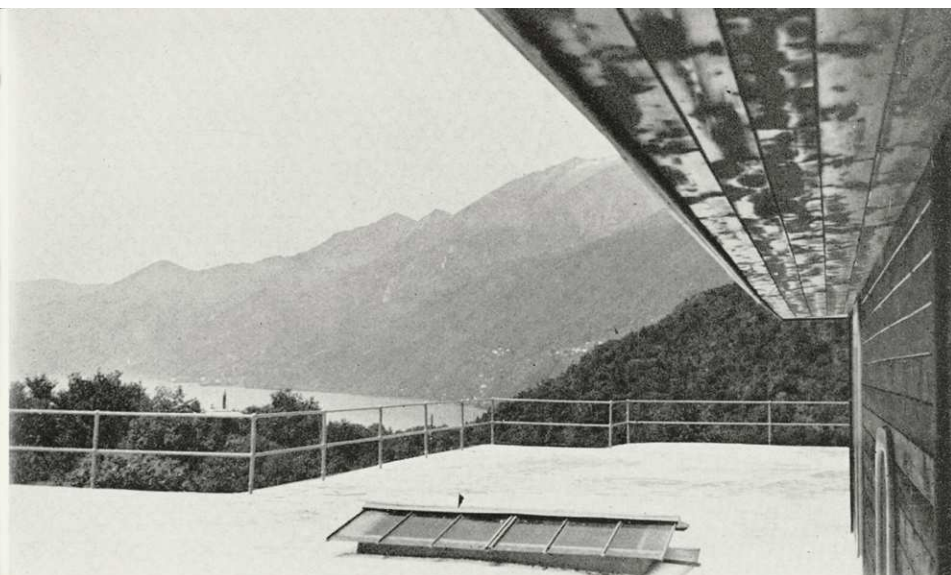
Aus der neuen Zürcher Zeitung vom 21. XII. 1928

Schwerer Unglücksfall vor einem Schulhaus.
 La Chaux-de-Fonds, 20. Dez. pt. Am Mittwochvormittag ereignete sich vor einer Schule in La Chaux-de-Fonds ein schwerer Unglücksfall. Durch den überaus starken Schneefall der letzten Tage hatten sich auf dem Dach des Schulgebäudes hohe Schneemassen aufgetürmt und große Eisklumpen gebildet, sodaß es den Schülern untersagt war, während der Pausen ins Freie zu gehen. Mittwochvormittag stürzte nun vom Dache eine große Eismasse gerade in dem Moment herab als die Schüler die Schule verließen. Drei Schüler wurden dabei erheblich verletzt und einer davon erlitt sogar einen Schädelbruch, an dessen Folgen er noch am gleichen Tag im Spital starb.



66

Mühsame Arbeit. Wenn der Bauer in der Zeit der Schneeschmelze seine Kinder nicht durch unberechenbar herabfallende Schneerutsche gefährden will, so muß er täglich aufs DACH steigen und es schaufelweise von Schnee befreien.



67

Foto: S.-G.

↑
VON OBEN

ANSICHT

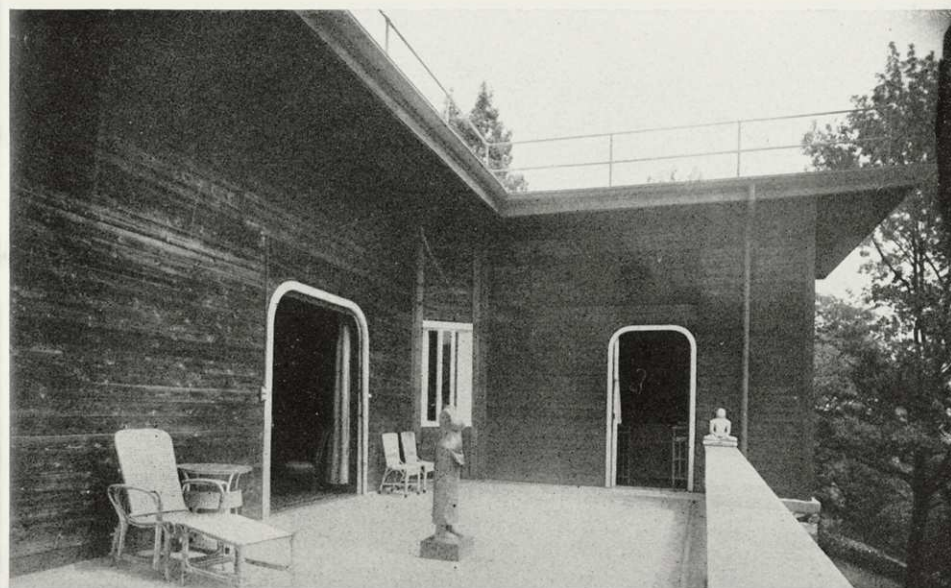
DAS DACH ALS WOHNFUNCTION: HAUS in Ascona, um 1900. Oedenkoven, Gründer einer Kolonie für naturgemässe Lebensweise kam in diesem doppelwandigen Holzhaus bereits zu einer Lösung wie wir sie heute fordern: Ausnützung des Daches!

VON UNTEN



68

Foto: S.-G



Tiefe Fliegeraufnahme über einem Platz mit

8

Straßenöffnungen.



TEMPO-O-

Die Fahrzeuge: elektrische Straßenbahn, Autos, Lastwagen, Fahrräder, Droschken, Autobus, Cyklolette, Motorräder fahren in raschem Tempo vom Mittelpunkt auswärts, dann plötzlich alle umgekehrt; in der Mitte treffen sie sich. Die Mitte öffnet sich, ALLES sinkt tief, tief, tief — ein Funkturm.



(Der Apparat wird rasch umgekehrt; das Gefühl eines Tiefstuzes entsteht.)

Untergrundbahn, Kabel, Kanäle.

TEMPO

TEMPO-O-O

Unter den Straßen zügen die ausgebauten Kloaken. Lichtglanz auf dem Wasserspiegel.



BOGENLAMPE. Funken spritzen. Autostraße spiegelglatt. Lichtpfützen. Von oben und

schräg mit weghuschenden Autos.

Parabelspiegel eines Wagens vergrößert.

5 SEKUNDEN LANG SCHWARZE LEINWAND



Lichtreklame mit verschwindender und neuerscheinender Lichtschrift

YMOHOLYMOH

Feuerwerk aus dem Lunapark MITrasen mit der Achterbahn.

Einige Sekunden lang dunkel. DUNKEL DUNKELHEIT.

Großer Kreis.

TEMPO-O-O

Zirkus von oben, fast Grundriß.



ZIRKUS Trapez. Mädchen. Beine. Clowns.

Löwen. Skiakrobat. Clowns.

ZIRKUS

CLOWN

Dressur



LÖWEN. LÖWEN!

CLOWNS.

DRESSUR

Dressur.

Wasserfall dröhnt. Der SPRECHENDE FILM. Eine Leiche schwimmt im Wasser, ganz langsam.



DAS GANZE NOCH EINMAL RASCH DURCHLESEN

Militär. Marsch-marsch.

Glas Wasser. In Bewegung.

KURZ-RASCH

Spritzt auf —

ENDE



SIGFRIED GIEDION

BAUEN in
FRANKREICH

BAUEN in
EISEN

BAUEN in
EISENBETON

1878

Bilder von Paris 1878



Abb. 43 AUSSTELLUNG PARIS 1878.

VESTIBUL, HAUPTTEINGANG gegen die Seine. KONSTRUKTEUR: EIFFEL.

Die repräsentative Blecharchitektur der Kuppeln ist nur ein Teil im Gesamtbild. Wichtig ist den der Mut mit dem hier eine funktionelle Verbindung von Glas und Eisen gegeben ist. GLAS UND EISEN
und das es sich bei durchgehender gläserner Vordach-
das diese frei und die Einheitsarbeit mit der
das gläserne Vordach vollträgt. Diese Vordächer
unterschneiden heißt es das Eisen vom Beschauer
sofort als überprüfbar geforderte Verhältnis von
Stärke und Last in einem bewährten System.

GLAS UND EISEN

TEXT

1926



W. GROP

Bitte diese Beschriftung
unter das Bild
zu legen

Abb. 44 W. GROP
BAUHAUS DESSAU 1926.

Es liegt im Gang der Kultur der
diesmaligen Menschheit
das neue Leben
den demokratischen Schülern und
den Eltern

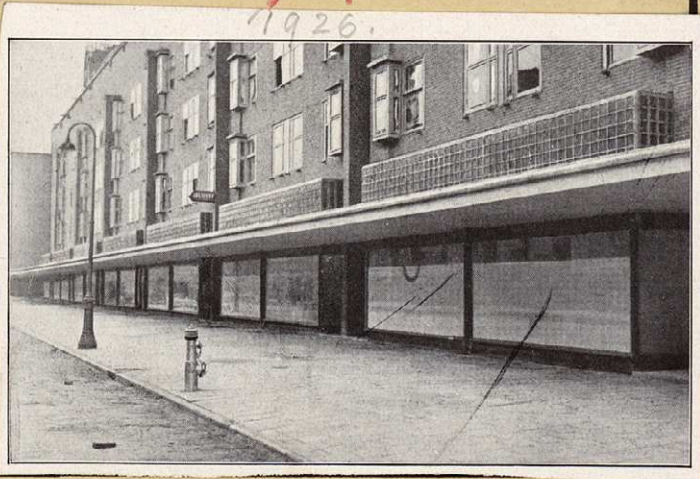
Erst nach einem halben
Jahrhundert ist man
im Stande die Spannungen
die in den Materialien
liegen wirklich heraus
zu nehmen und die dekorati-

ven Schil-
den weg-

1926

Abb. 45 STAAL
J. F. STAAL
LADENSTRASSE
(Jan Weythsteeat)
AMSTERDAM 1926

Das frei vorkragende
Schuttdach beginnt
erst jetzt mit
einer Verwendung
zu werden.



1926

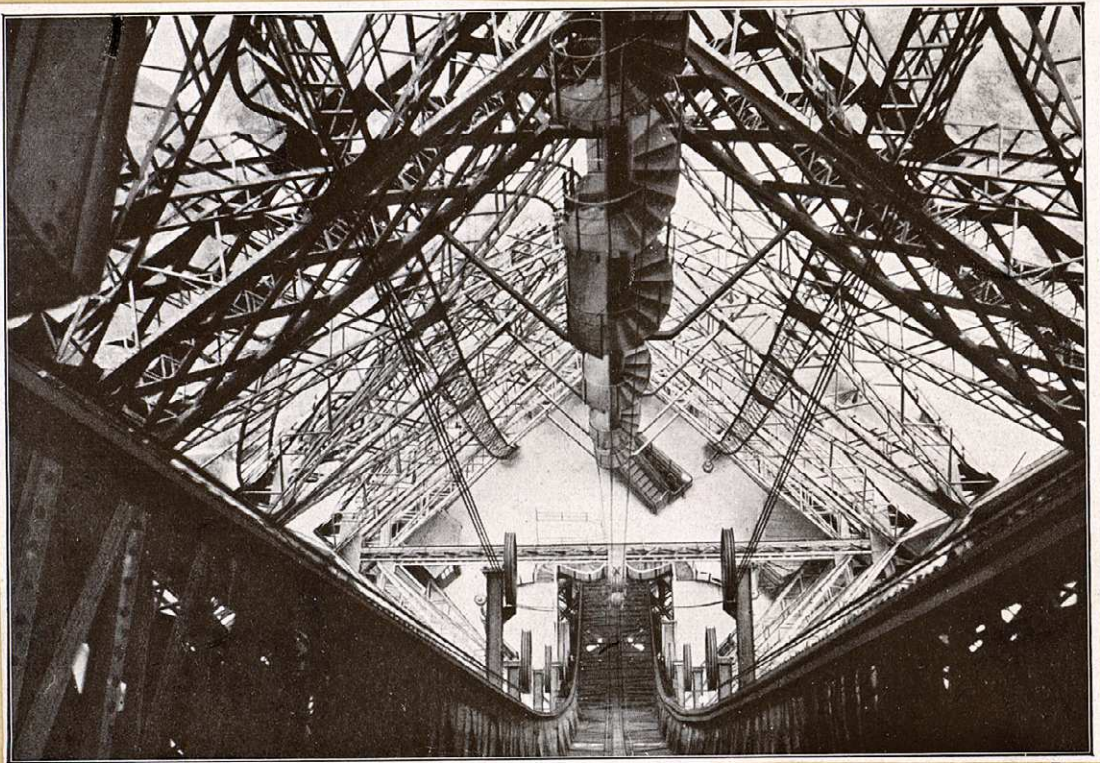


Abb. 17 EIFFELTOWER Blick 1889. Blick
 von der zweiten Plattform auf die erste. Die
 Aufnahme in der aufwärts schacht gemacht. Rechts
 und links die Kurven der Aufzugsseile, die
 bis ins Erdgeschoss durchdringen.

Text



Abb.
 Den Eiffelturm vom Dach
 des Hauses Rue Franklin
 25 bis (vgl. Abb. 7)
 im Vordergrund Auguste
 Perret.

~~1889~~

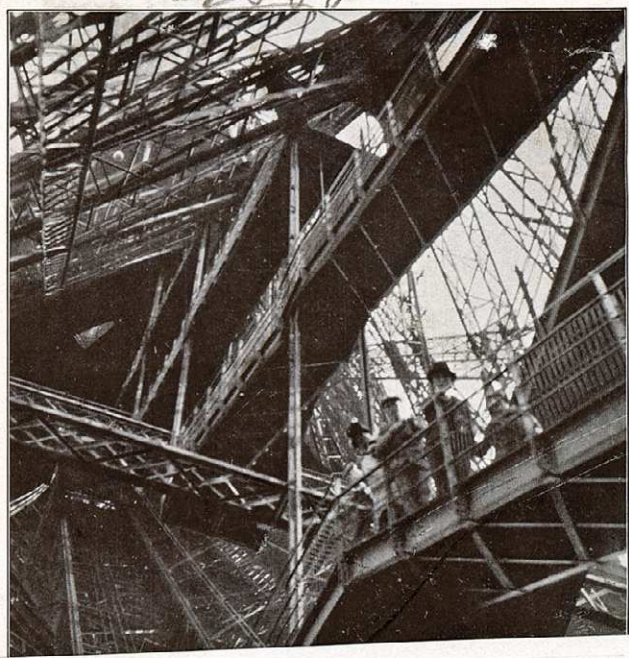


Abb. 58
HANGENDE STIEGEN im Innern des
EIFFELTURMS.

(Verbindung ~~der~~ erste
ersten Plattform.)
Man sieht neben
den Stiegen die
Fahrbühnen des Aufzuges.
Bis zu formalen Details wie
den horizontalen Geländern
der luftigen Stiegen, findet
das künftige Wolken seine
Vorgängerschaft.

1889



1926

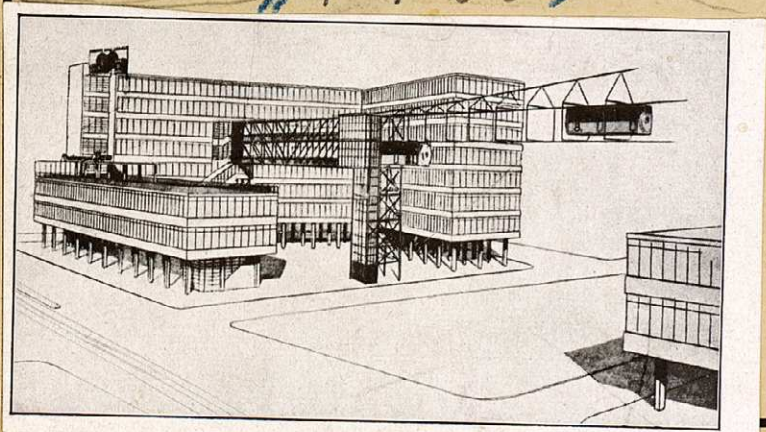


Abb. 59
MARTSIAM:

ÜBERBAUUNG DES
ROKINDAM AMSTERDAM, 1926.

Erst jetzt erfahren die
die in Bauten aus dem
Eiffelturm liegen

Eigentliche Auswertung **3**

Nicht nur in der Verbindung und Durchdringung eines
Baus mit fortwährenden Verkehrsmitteln ^{oder} freihängenden
Stationen liegt das sinnigste mit einem Bau ^{wie}

The unfamiliar visual rhetoric of the book may have exacerbated the publisher's hesitations about the project and its poor sales. Nevertheless, the design was not at issue when resentment surfaced: Georg Biermann blamed the book's "foolish" title, while Giedion was convinced that the publisher's efforts in advertising his work were not effective—according to Giedion, the volume should have been promoted "the American way."¹⁸⁰

Establishing
a Graphic Voice:
Giedion and
Herbert Bayer

Giedion's last book to be written and produced in Europe, *Befreites Wohnen*, was clearly the culmination of his explorations of the collage. Compared to the expressive and dense layouts of the late 1920s, a considerable change occurred over the next two decades of his career. To credit this diverging graphic language solely to the employment of different designers would be insufficient. This shift of visual expression must also be contextualized within the cultural and political developments in Europe and within the related diaspora of a majority of Giedion's colleagues, as well as their repositioning in the cultural environment of the United States. Among those émigrés was Herbert Bayer, a Bauhaus graduate and head of the Werkstatt für Druck und Reklame (Workshop for Printing and Advertising) until Gropius's resignation as director of the school in 1928. Bayer would eventually design a majority of Giedion's publications as well as those of Carola Giedion-Welcker.¹⁸¹ The long-term collaboration between critic and designer had already started in the early 1930s with graphic commissions such as little booklets, advertisements, and posters under the auspices of Wohnbedarf AG in Zurich.¹⁸² In the mid-1930s, Switzerland—and Zurich in particular—was the center for an emerging graphic production preparing the ground for the so-called Swiss style, which took shape in the early postwar years.¹⁸³ Working alongside progressive publishers like Hans Girsberger, who issued Le Corbusier's *Oeuvre Complète* (1929–70), was a dense network of highly talented graphic artists—among them German émigrés Jan Tschichold and Anton Stankowski, as well as Swiss exponents such as Max Bill and Richard Paul Lohse.¹⁸⁴

Barely a year before Giedion's arrival in Cambridge, Gropius invited Herbert Bayer to visit and prepare his emigration.¹⁸⁵ As correspondence between the former director of the Bauhaus and Bayer reveals, it was not too difficult to convince the latter to leave Germany. Resources were becoming scarce and advertisement, Bayer's principal income at the time, was increasingly restricted to political

2.32

Cover of *Spuren zum Kampf* (1936), designed by Herbert Bayer.



2.32



2.33

propaganda.¹⁸⁶ Despite Bayer's work for the Fascist regime—he contributed to the exhibition catalogue *Das Wunder des Lebens* (1935) and to the 1936 *Deutschland Ausstellung*, and he designed the book *Spuren zum Kampf* (1936)¹⁸⁷—his art eventually ended up in the *Entartete Kunst* (Degenerate Art) show at the Haus der Deutschen Kunst in Munich. After that, it was practically impossible for him to find new work in Germany.¹⁸⁸

Moholy-Nagy had offered Bayer a teaching position at the New Bauhaus, but the school had been closed down by the time Bayer organized his departure for the United States. Thanks to Gropius's efforts, the graphic designer was able to become involved in the installation of the exhibition *Bauhaus 1919–1928*, which was held at the Museum of Modern Art (MoMA) in 1938, immediately after his arrival in New York. Not only was Bayer in charge of the exhibition layout and design, he also served as co-curator along with Walter and Ise Gropius.

The American cultural environment had a significant impact on Bayer's practice. Despite having the support of his friends, Bayer found his first years in New York rough. Not only did he lack a professional network outside the world of art and architecture, but he also suffered the "loss of artistic freedom," which the "commercial artist or industrial designer from Europe [has to] resign [himself to] when he crosses the Atlantic."¹⁸⁹ A letter to Sigfried Giedion indicates Bayer's state of mind: "... this land and life [are] against any personal contact, the only thing that counts is success. [I] am working like a horse. ... but unfortunately everything is routine work, nothing enjoyable or good."¹⁹⁰

Typography, the layout of books, and visual communication played a much less significant role by the time of the outbreak of the Second World War in North America than they had done in the previous decades in Europe. Large advertising agencies, rather than individual graphic artists, met the needs of an emerging corporate American business culture. The cohesion among film, photography, typography, and art, which had been achieved at such institutions as the Bauhaus in the 1920s, was jettisoned in favor of highly specialized labor and an increase in efficiency. As Giedion cynically remarked, "The dictator of American taste is the salesman."¹⁹¹ Looking back, in 1967, Bayer summed up his earliest working conditions in the United States:

In New York, too, circumstances during the war years were far from ideal and despite the hospitality of this country, a newcomer first had to adapt to the living conditions and start to understand the new environment, which was often not easy. In the course of my attempts to gain ground, I had to make unfortunate concessions to the tastes of my clients, particularly when it concerned ad agencies.¹⁹²

2.33

Herbert Bayer,
exhibition view of
Road to Victory, The
Museum of Modern
Art, New York,
May 21–October 4,
1942.

Along with a host of advertisements for various magazines and companies—among them the U. S. branch of the Swiss pharmaceutical company Hoffmann-La Roche—Bayer soon acquired bigger and more challenging commissions, such as a campaign for the General Electric Company and extensive work for industrialist and philanthropist Walter P. Paepcke and his Container Corporation of America (CCA). From the ad campaign “Great Ideas of Western Man,” to the exhibition *Art and Industry*, to the interiors of the company’s Chicago headquarters, to the *World Geographic Atlas* (1953), Bayer prepared a wide range of printed matter and installations over two decades. His designs for the exhibitions *Road to Victory* in 1942 and the *Airways to Peace* in 1943, both held at MoMA, also indicate the acceptance he quickly gained within the cultural establishment. The transformative effect of Bayer’s new professional environment becomes apparent when comparing his advertising work to the typographic experiments he had conducted at the Bauhaus. The abstract language of *universalschrift* and uncompromising typographic compositions gave way to pictorial imagery and script typefaces. By the time Bayer began to work with Giedion, he had gradually translated and adapted his work to the demands of corporate America, though without abandoning the achievements of his previous work.

2.34 Throughout the war years, Bayer lived in New York and remained in close contact with his colleagues, including Sigfried Giedion, who was by then teaching at Harvard. Knowing that László Moholy-Nagy was preoccupied with the uncertain future of his design school in Chicago, Giedion tried to convince Bayer to contribute typography and layout to his first American publication. Continuing Moholy’s approach, Bayer had designed Carola Giedion-Welcker’s *Moderne Plastik* (1937), an illustrated book that convincingly juxtaposes modern and historical art, only shortly before his emigration. The amount of white space in this publication is striking. Photographs are at times placed like precious objects on the page, forming a spatial relationship across the spread, while in other instances illustrations fill an entire page, or bleed at three sides. Typography was reduced to an introductory text followed by extended captions accompanying each photograph. This volume carried the change from *buchstaben-buch* (textbook) to *bilderbuch* (picture book), as Jan Tschichold described this emerging tendency in the journal *Die Form*, to an extreme.¹⁹³ It also shared striking similarities with Le Corbusier’s “*L’avion accuse*”: *Aircraft* (1935), probably the most influenced by the Bauhaus of the architect’s books. Bayer’s tendency toward visually driven books, based on a rigid grid and precise typography, worked in Giedion’s favor. Even though the art historian had boldly experimented with type and collage in his *Befreites Wohnen*, later correspondence with publishers as well as manuscript notes indicate that he was not necessarily the most progressive voice in design.

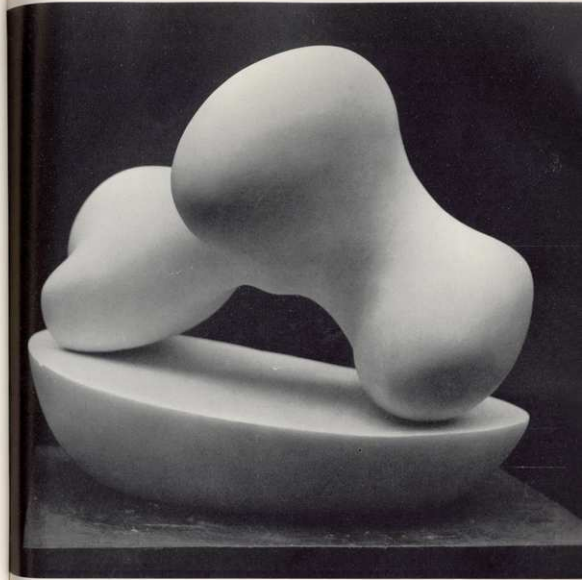
90



Plastische Schneebildungen.

Snow formation.

91



H. Arp Concrétion Humaine 1933 (pierre), Zürich, Kunsthau.

62



F. Pujet Persée et Andromède 1684 (marbre), Paris, Louvre.

63



U. Boccioni Mascoli in velocità 1911 (bronzo), Milano, Gal. del Arte Moderna.

[1940]

Lieber Bayer

Der Buchtitel ist

SPACE, TIME AND
ARCHITECTURE

der Untertitel (hat
die unterabteilung)

THE GROWTH OF A NEW TRADITION

Könntest du die Titulbl. & Ja chet "
überlegen mit zwei Farben ev. drei.
Sollte auf dem Titel jedoch
eventuell etw. von dem Grund
gedanken bildlich ausgedrückt
werden? Eine Art Symbol
des Space-time Begriffes
in Form von Plane surfaces "
Es aus parent sich durchschneiden
? Recht schwebend & einfach!

Nebenley es die ein mal
überlegt Vorworts für Einbaum (eigentlich)

Of the books that Herbert Bayer was involved with, *Space, Time and Architecture* was the only title whose design he controlled, from the establishment of its grid to the cover design, including production management. The publication was produced after Giedion's brief tenure at Harvard, a majority of it while the author was back in his native Switzerland. Throughout this difficult period, Bayer served as his ombudsman over the course of the protracted production period of the book. As transatlantic transports became time-consuming, expensive, and unreliable with the gradual spread of warfare across the globe, Giedion even authorized Bayer to proof and correct the layouts.¹⁹⁴ Giedion typically insisted on correcting the galley proofs himself, so this was an exceptional relinquishing of control. He was desperate to speed up the pace of the book's production, because his return to the United States would only be possible realistically after *Space, Time and Architecture* was released:

It seems Giedion insists on immigrating here. The invitation to come over to wrap up his book could only be effective if issued by the Norton Committee or the Harvard Press. I therefore don't understand why C[arola].W[elcker]. doesn't contact Hudnut directly, given that I cannot do much in this cause, please read the letter and let me know what could be done. His situation is, of course, a quandary. Whether it were better for the book if he were here is, however, a question. I have to admit that I still don't have more than the first few *sample pages* at hand.¹⁹⁵

Bayer took regular trips from New York City, where he had set up his studio, to Cambridge in order to oversee the work at the offices of Harvard University Press. No doubt he was well aware of Giedion's demanding temperament after his experiences with the art historian in the context of *Wohnbedarf* and from hearsay through his colleagues. Not without reason, he indicated during the very first discussions of his involvement in the design of *Space, Time and Architecture* that he would not be willing to revise his typographic layout over and over again:

[T]he question of cost is very flexible, which is why [I] try to get as much as possible and [I] am doing the work anyway. [N]ot much can be practically saved by typography. [I] won't make any *subsequent* corrections. [T]he only question is, do they want to make a cheap looking or a good looking book. [I]n any case, [I] can make my typography within the budget, if [I] can handle everything from the beginning.¹⁹⁶

Over the years, Giedion shifted his priorities almost exclusively to the orchestration of visual sources, the placement of which he wanted

2.35

Sigfried Giedion, letter to Herbert Bayer, 1940, informing the graphic designer about the title of his book and offering preliminary ideas for the cover design.

to be flexible until the very last moment. The layout was dominated by the juxtaposed images, which demanded a highly flexible grid and did not allow for elaborate typographical experiments. Along with the composition of the page, Giedion was more concerned with the navigation of the book, allowing the reader to jump easily from one aspect to another, informed by marginalia and extended captions that were “provided in such a way as to convey the broad outline independently of and simultaneously with the text.”¹⁹⁷

2.36 Giedion’s approach to book making is comparable to his work as a curator, scenographer, or dramaturgist of installations such as the copy of *Grille CIAM* 1935 exhibition *Das Bad von heute und gestern*. The show on the history of the bath and its relevance for modern architecture was skillfully arranged as a set of twenty-six panels. This visual presentation of ideas on carefully assembled panels also surfaced repeatedly in CIAM’s representational techniques.¹⁹⁸ Similar to Giedion’s understanding of visual comparison as a methodological tool, the “CIAM Grid,” initiated by Le Corbusier and created by Ascoral, became the network’s predominant “tool for planning,” not only for the analysis and synthesis of a theme, but also its reading and presentation.¹⁹⁹ This conscious and elaborate arrangement and design of complex processes on panels undoubtedly contributed to the development of the secretary-general’s visual sensibility and his graphic design skills.

Jaqueline Tyrwhitt’s *Mise en pratique de la charte d’Athènes—The Athens Charter in Practice*, also known as the “CIAM Grid,” 1948.

In almost all of Giedion’s works, the preface addresses the historian’s obsession with visual language—the “care ... taken in the choice and the layout of illustrations” in order to “facilitate the reading.”²⁰⁰ His demands for the visual coherence of the book unsurprisingly led to arguments with Herbert Bayer. Throughout the collaboration on *Space, Time and Architecture*, the graphic designer’s position was a difficult one. Negotiating between Giedion and Harvard University Press, Bayer was pressured to reduce costs, as the growing number of illustrations and the shipping of proofs across the Atlantic drastically affected the stated budget—supposedly, the press was losing more than \$5,000 on the book.²⁰¹ Bayer was constantly forced to adapt to the changing visual requirements of the author, which caused additional delays and costs.²⁰² Without understanding Bayer’s hapless position, Giedion saw himself as a victim in the process, incapable of intervening from afar. When he realized that the high demands of his visual comparisons irritated the press, he blamed the graphic designer for not following his instructions:²⁰³

I see that due to the long hiatus from February til March and probably also as a consequence of New York life, much of what we agreed upon has escaped you, above all what I repeatedly stressed, that the juxtapositions in the book had to be d-i-r-e-c-t [original emphasis]. The book precisely consists of INTERRELATIONS [original

emphasis], and if one then artificially cuts them off by adding divider pages, it hinders the readability and effectiveness.²⁰⁴

Giedion's meticulous arrangement of illustrations was the reason for extended correspondence with Herbert Bayer. From detailed descriptions of rough layouts that had been color coded to explain the required juxtapositions, to short telegrams—"for historical demonstration juxtapose directly figures 179/180, 181/182, 184/185 as we outlined before, greetings G."²⁰⁵—a flurry of letters was exchanged across the Atlantic over a period of almost a year. The topic of several letters was the famous comparison of works from the Chicago School:

The reason why I insist on an explicit comparison is that only by means of an explicit comparison—as it is by the way stressed in the text—it is possible to point out the connection of the Chicago School with the contemporary movement instantly. I can't quite understand why this was arranged differently in the book, because with the current arrangement, there are, for example, erroneous comparisons, such as the juxtaposition of Sullivan with Mies van der Rohe, in which case people will, obviously, first of all compare the tower-like design of both projects, which is precisely what shouldn't happen.²⁰⁶

While Giedion rightly viewed the appropriate placement of illustrations as essential to his argument, laying out the book was an incredibly difficult task given that "pictures had to stay near the text which referred to them," frequently "interfer[ing] with the juxtaposition and the long footnotes."²⁰⁷ The final layout of this "handbook" had to control six layers of information in a way that allowed the reader to cross-reference and grasp crucial ideas quickly, meaning that the slightest alteration had significant consequences for the following pages. Illustrations and text ran in parallel, establishing the main narrative of the book, while boldfaced captions were meant to sum up crucial arguments for the reader who would just skim the book. Infrequent footnotes placed at the bottom of each page—many of them referring to sources that had not been translated into English—provided the sense of academic credibility but hardly offered the reader information that would contextualize Giedion's academic background. Additionally, short headings and theses were placed in the margin of the layout, helping the reader who was only skimming the pages to quickly find relevant arguments and themes. To help the reading and comparison of illustrations between various pages or chapters, boldfaced numeric references were introduced within the flow of text. Given all these demands on the graphic design of *Space, Time and Architecture*, it was an enormous disadvantage that Giedion could not be in the United States during the design and production phase

2.37

Sigfried Giedion, telegram to Herbert Bayer, December 20, 1940, commenting on the design of the jacket for *Space, Time and Architecture* and the placement of illustrations.

GRILLE CIAM

D'URBANISME

MISE EN
PRATIQUE
DE LA CHARTE
D'ATHÈNES.

THE ATHEN CHARTER
IN PRACTICE.

INVITATION AU 7^e CONGRÈS

Les « Groupes C.I.A.M. » domiciliés en EUROPE, AFRIQUE, ASIE, AMERIQUE, les « Groupes en formation » ou « Invités » des C.I.A.M. sont convoqués en un « Congrès de Travail » qui se tiendra, du 11 au 19 avril 1949, en un lieu que les circonstances générales permettront de fixer à temps utile.

Le programme réalisera la mise en pratique de « La Charte d'Athènes » dans des projets concrets d'urbanisme, conformément aux décisions du 6^e Congrès C.I.A.M. de BRIDGWATER (Angleterre), septembre 1947.

G.I.A.M. Groups in EUROPE, AFRICA, ASIA, AMERICA, together with « Groups in Formation » and « Guests » of C.I.A.M. are convoked in a « Working Congress » which will be held from 11th to 19th April 1949; the place to be designated as circumstances permit.

Its program is the practical application of the Athens Charter in concrete planning projects, conforming with the decisions made at BRIDGWATER (England), during September 1947.

No.	Datum - Date - Data	Stunde - Heure - Ora
Telegramm - Télégramme - Telegramma		
Taxe - Tassa	Befördert - Expédié - Spedito	
Total - Totale	nach - à - a	Name - Nom - Nome
Bureau - Ufficio	Wörter-Mots-Parole	
<p style="text-align: center;">Adresse - Indirizzo</p> <p>BAYER 19 West 56th Street New York</p> <p>JACKET MARVELLOS PLEASE PLACE FIGURES 92/93 on page 168 Centralcasino 194 on page 363. Place Figures 107/108 on opposite pages at same height.</p> <p style="text-align: right;">[1940]</p>		

Die Telegraphenverwaltungen übernehmen keine Verantwortung für die telegraphische Korrespondenz. — Les administrations télégraphiques n'acceptent aucune responsabilité au sujet de la correspondance télégraphique. — Le amministrazioni telegrafiche non assumo alcuna responsabilità per la corrispondenza telegrafica.

Die untenstehenden Angaben werden nicht befördert. — Les indications ci-après ne sont pas transmises. — Le indicazioni che seguono non vengono trasmesse.

Adresse des Absenders }
Adresse de l'expéditeur }
Indirizzo del mittente }

of the book. But apart from one major mistake—the misleading placement of a juxtaposition of a painting by László Moholy-Nagy and a chair by Alvar Aalto—the endeavor came to a successful close.²⁰⁸

2.38
Herbert Bayer,
letter to
Sigfried Giedion,
July 12, 1940,
reporting on the
slow progress of
*Space, Time and
Architecture*.

While Bayer was involved in a majority of Giedion's publishing endeavors, he was almost never exclusively responsible for the related graphic work. Giedion would typically ask Bayer to take care of typography and to "assist" him with the composition of image and word.²⁰⁹ The level of Giedion's control becomes evident when reading his detailed reviews and commentaries addressed to Bayer—nothing, not the smallest decision, was left to chance. Giedion personally worked on advertisement brochures, including the selection of type and size and elaborated color schemes for the cover design of *Space, Time and Architecture*. He even directed Bayer with respect to typography, which was clearly not his field of expertise: "Regarding the index, I would like you not to select the small type we originally designated, but a regular size, similar to the one Mumford uses in the index of 'The Culture of the Cities.' In my book, the index is important for orientation. You can find Mumford's book in any bookstore or at Gropius's."²¹⁰

2.39
Giedion's typographic notes on proofs of the title page of *The Eternal Present: The Beginnings of Art*, ca. 1961.

Preliminary layouts of *The Eternal Present* also document Giedion's attention to typography on a detailed level. In other instances, too, his comments indicate that he was well aware of the different typefaces available and openly communicated his preferences to Bayer: "Unfortunately, Original-Futura is not available and Monotype-Futura only offers poor italics. Dr. Giedion has therefore preferred to use the monotype typeface he is well accustomed to, especially because it better corresponds with his temperament."²¹¹

Looking at Bayer's impressive graphic production, it becomes clear that he was a gifted typographer. In several of his articles on typography, he presented his thoughts about column width, legibility, and choice of typefaces, which are also reflected in his layouts for Giedion. Similar to the art historian's ranting against styles in the realm of architecture, Bayer declared a comparable position in his approach to graphic design and typography: "Formalism and the straitjacket of a style lead to a dead end. The true nature of things, with its infinite wealth of forms and modes of expression, lies in the ever-changing beat of life."²¹² Given Giedion's expectations and constraints, as well as his own standards, Bayer finally established unobtrusive layouts based on a rigid grid of text and illustrations in order to facilitate Giedion's constantly changing needs: "I tried to follow your [Bayer's] advice, setting the illustrations in recurring dimensions. ... The most typical sizes are 30 picas (type area), 15p, 36p, 38p. Very rarely 44p. (bleeding), 20p."²¹³

While the general elements within Giedion's books remained practically unchanged since his *Bauen in Frankreich*, the graphic treatment clearly became more reduced, reflecting the growing size of

his publications and the related organizational obstacles. From an American perspective, however, the design of *Space, Time and Architecture* was still extremely progressive. This is apparent on the one hand in the printer's failure to center the title pages of the book "optically," damaging the "main composition of the book," and on the other hand in Harvard University Press's proclamation of Bayer's work as the design of "one of the world's leading exponents of functional typography," which Giedion interpreted as a retreat from responsibility for its "modernist look."²¹⁴ From a European point of view, typography became more conventional and sober. All of Giedion's books produced in the United States share similarities with the publications of Le Corbusier and approached many of the ideals that Jan Tschichold began to promote from the mid-1940s onward.²¹⁵ The trim size close to the octavo format, the wide outer margins, and the column width, type size, and leading suggest an approximation of Tschichold's proposed ideal based on medieval incunables. The marginalia, footnotes, and extended captions, however, which became an integral part of all of Giedion's books designed by Bayer, negate these purist tenets and reinforce the dominance of the image, which became the ruling logic for all typographic decisions.

Bayer only used three different typefaces in his work for Giedion. Body text was always set in Bauer Bodoni, a typeface designed by Heinrich Jost in 1926, emphasizing the extreme contrast between hairline and main stroke. The title page, section titles, chapter headings, and marginalia were set in the same type, differentiated by small capitals or italics. Bayer only introduced alternative typefaces in his cover designs, possibly to give them a more "modern" look, and perhaps also because the legibility of grotesque headline typefaces was better in combination with the chosen background illustrations. For both volumes of *The Eternal Present*, Bayer chose Akzidenz Grotesk of the Bethold type foundry, probably the most common sans serif typeface at the time. The cover design of *Space, Time and Architecture*, in contrast, is decidedly rooted in Bayer's work as a commercial artist.²¹⁶ Similar to his covers for *Harper's Bazaar* and *Vogue*, or the ad campaigns for the General Electric Company and the Container Corporation of America, the typographer used a combination of serif capitals with a script type for the subtitle of the book, a recurring stylistic preference in Bayer's American graphic designs. Reminiscent of the work of El Lissitzky and John Heartfield, the cover image superimposes a photograph of New York's Randall's Island cloverleaf onto an engraving of a central perspective of the Versailles gardens. Visualizing Giedion's claim that "Versailles has a highway linking it with Paris," Bayer's montage evokes Giedion's conceptual bridge from the seventeenth century to the present.²¹⁷

Curiously, the graphic designer had employed a comparable visual strategy for presenting images of Adolf Hitler and the autobahn in a

2.40

Cover of *Raum, Zeit, Architektur* (1965), the first German edition of *Space, Time and Architecture*.

2.41

Color samples for the two-color dust jacket of the first German edition of *Space, Time and Architecture* (1965).

herbert bayer 19 w 56 street new-york telephone circle 5-4576

July 12, 1940

mr. siegfried giedion
dolderthal 7,
zurich, switzerland

dear giedion:

today i finally received the corrected proofs of the first 32 pages of the book. i have also received proofs of almost all the engravings and i am quite satisfied with them but it seems the work has again been stopped because mr. arnold is on vacation untill july 22nd.

i do whatever i can to push the work forward but i am dependent on the harvard press as you know. all the necessary designs for the typography, front, pages, cover and jacket have been done a long time ago and so it is really up to them to go ahead.

i hope you are well in spite of the terrible events in europe.
sincerely,

herbert bayer
hb:ss

liebes giedion, eben kam dein brief vom 27. juni. tut mir für dich sehr leid das die arbeit am bild gar nicht weiter vorwärts geht. bis vor 3 wochen hat harvard press mit angefangen irgend etwas zu tun, weil das manuskript immer noch nicht satz fertig war, was sie mir schreiben. ich hoffe aber

*de Carbon du 20 mai, Sawyer - très qu'il ne cloze
de Jeanneval de Charlotte Perriand ou de Lela
muelle
de lui
Nous ne savons
pas ou les en-
un mot.
Le liore fait
profès végétales,
Moins prochain
comp le la film
entièrement. Da
15 jours j'aura
le manuscrit je
pour voir un
l'édition.
Par Nelson qui
est ici nous a
su que Picasso
était à Royan
Bague et Miró fut
de Varen se velle avec les Nelson au e*

S. GIEDION *smaller type*
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
S. GIEDION *just as in S.P.T. & A*

*Type to lig, use
Type of SF*

THE ETERNAL PRESENT

Typ

a

a = a



T. & A. which is only 10 mm high
use also the same boldness
and interval as SP, T & A.

Try also ^{size and type}
as "Eternal Present"
but with caps
and small
letters

The Beginning of Art

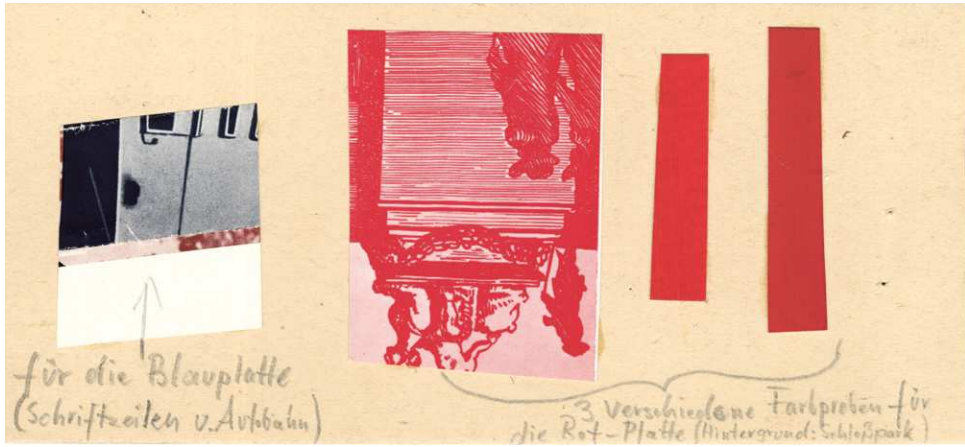
a Contribution on Constancy and Change

~~SP, T & A~~

Eric also Italics as in
SP, T & A.

New York
OXFORD UNYVERSITY PRESS
1961

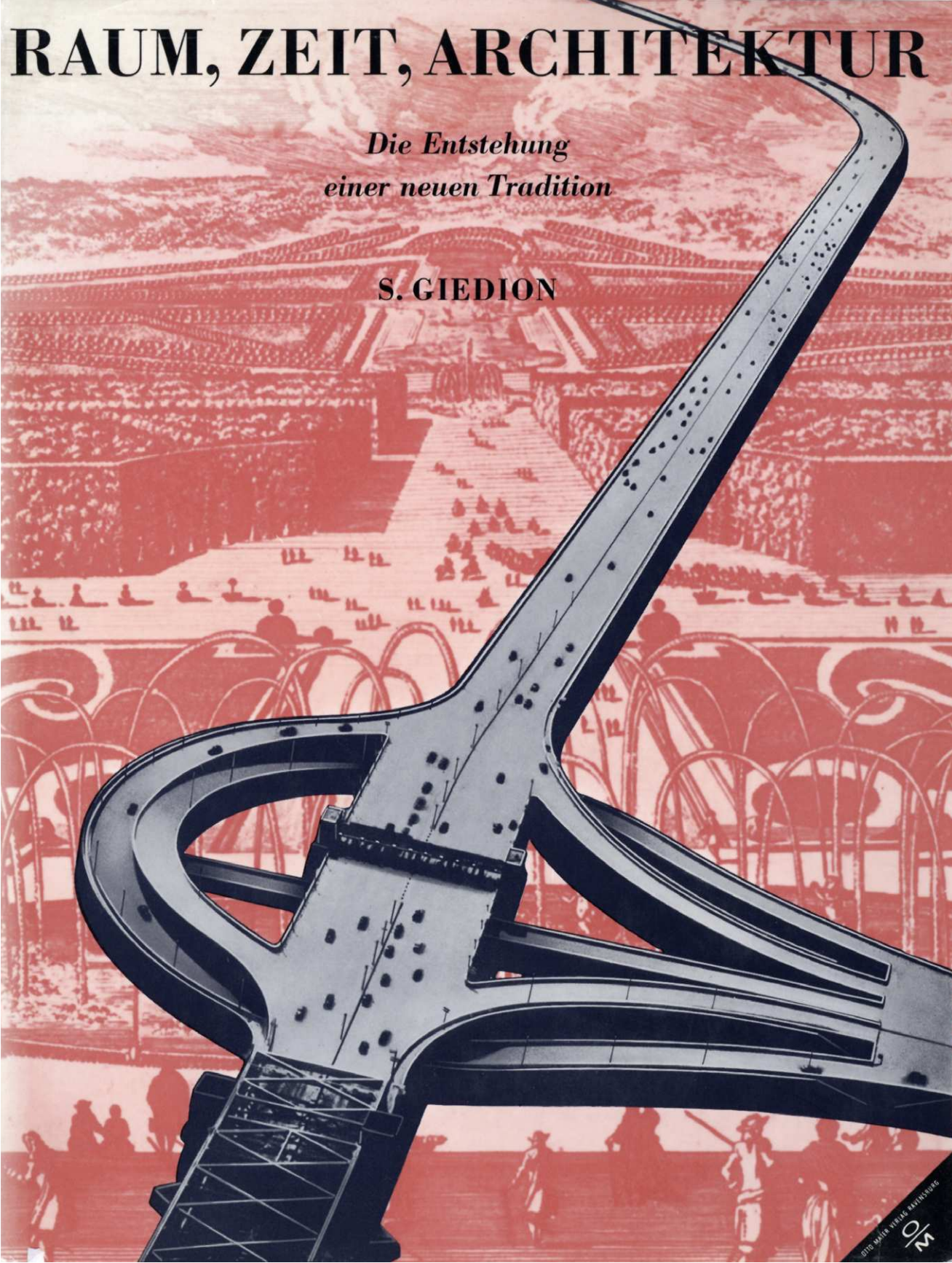
here of course
your Signature



RAUM, ZEIT, ARCHITEKTUR

*Die Entstehung
einer neuen Tradition*

S. GIEDION



catalogue for the exhibition *Das Wunder des Lebens* (The Wonder of Life), held in 1935 in Berlin.²¹⁸ The reappearance of such a charged work is rather disturbing, but also indicates the extent to which Bayer must have lost track of his own production in oscillating between propaganda and consumerism, between his European past and the American present: “I find myself at the sad end of a metamorphosis by being taken for an [A]merican in my own country. this is an insult but shows what changes must have taken place. but where am I as I don’t belong in [A]merica either.”²¹⁹ It is questionable whether the graphic designer was consciously repressing the connection to the Fascist regime. The fact that he employed a comparable graphic language in the cover design for Josep Lluís Sert’s *Can Our Cities Survive?* (1942), featuring a sardine can filled with a throng of people, mounted on a highway infrastructure, combined with a night view of a gridded North American city, suggests that his motivations were merely formal.

Highways, hands, and eyes are recurring themes in Bayer’s work. A photograph of a set of twenty glass eyes that Bayer took in 1929 marks the beginning of a lasting fascination and preoccupation. In 1930, he sketched an oversized eye atop the torso of a man to symbolize the visitor’s view of a photographic installation at the Parisian *Exposition de la Société des Artistes Décorateurs*. Under the title *Einsamer Großstädter* (The Metropolitan) the artist collaged a set of eyes onto a pair of open-palmed hands hovering in front of a typical Berlin apartment building; and a detailed depiction of a blue eye aligned with a technical diagram of a contemporary photographic apparatus was featured in the exhibition catalogue for *Das Wunder des Lebens*. Even after his emigration to the United States, the diagram of a 360-degree field of vision, which Bayer established in the 1930s, resurfaced in the exhibition design for his MoMA show *Road to Victory* twelve years later. The eye also appears in the context of Bayer’s graphic work for Sigfried Giedion’s publications.²²⁰ Recalling Moholy-Nagy and El Lissitzky’s boldfaced arrows that directed the viewer’s attention, reflecting the Constructivist rhetoric of the 1920s, Bayer used the icon of an eye to break the flow of the text and signify points of interest in Giedion’s visual argument, starting with the first volume of *The Eternal Present*. Galley proofs of the unfinished book show sketches of this idea, which was implemented in the final plates. The system was perfected in the second volume of the book and also reappeared in the first German edition of *Space, Time and Architecture* in 1965, where it replaced the previously boldfaced numbers with an abstracted version of the icon that acted as an optical reference, much like a footnote.

In later projects, Herbert Bayer gradually withdrew from a leading role in Giedion’s projects and shifted to “assisting” the art historian with the layouts, as the introduction to *The Eternal Present*

2.42

Herbert Bayer, collage published in the catalogue *Das Wunder des Lebens*, 1935.

2.43

Cover of Josep Lluís Sert’s *Can Our Cities Survive?* (1942).

2.44

Herbert Bayer, *Glasaugen*, 1929.

2.45

Herbert Bayer, diagram of a 360-degree field of vision, for the Deutscher Werkbund’s exhibition at the *Exposition de la Société des Artistes Décorateurs*.

2.46

Herbert Bayer, *Einsamer Großstädter* (The Metropolitan), photomontage, 1932.

2.47

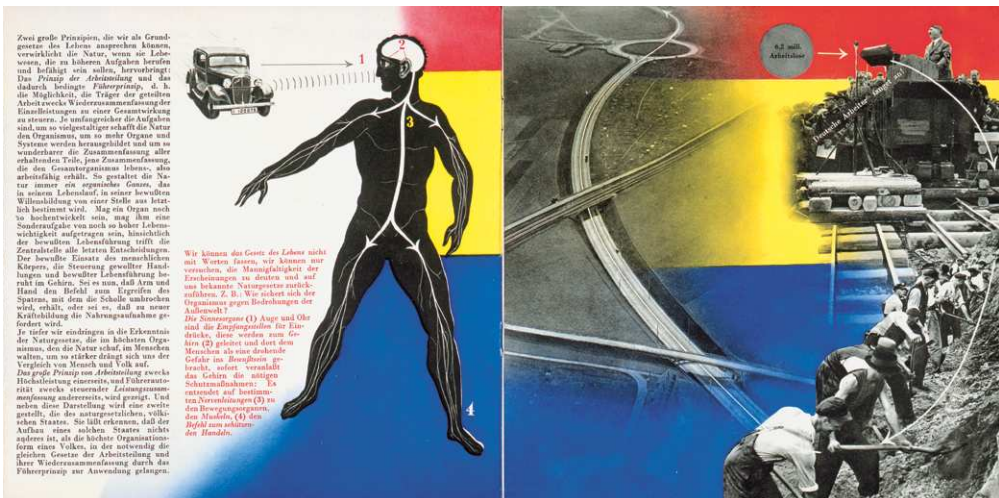
Herbert Bayer, *Das Auge* (The Eye) illustration for the exhibition catalogue *Das Wunder des Lebens*, 1935.

2.48

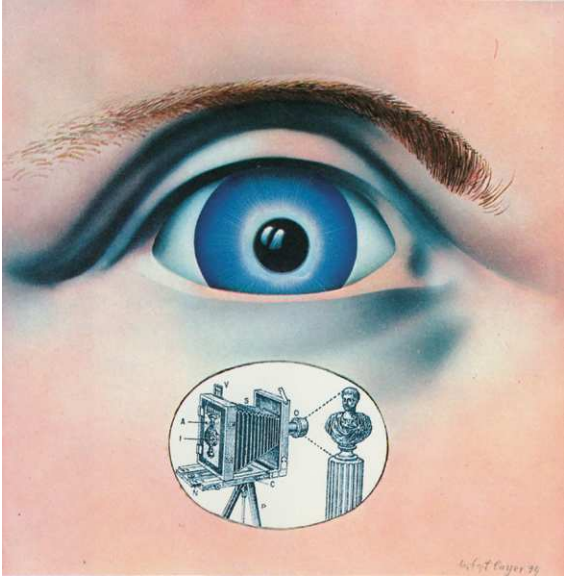
Herbert Bayer, study of eye icons on a page proof of Giedion’s *The Eternal Present*, ca. 1961.

The copyright holder has not agreed to release this image open access.

2.43



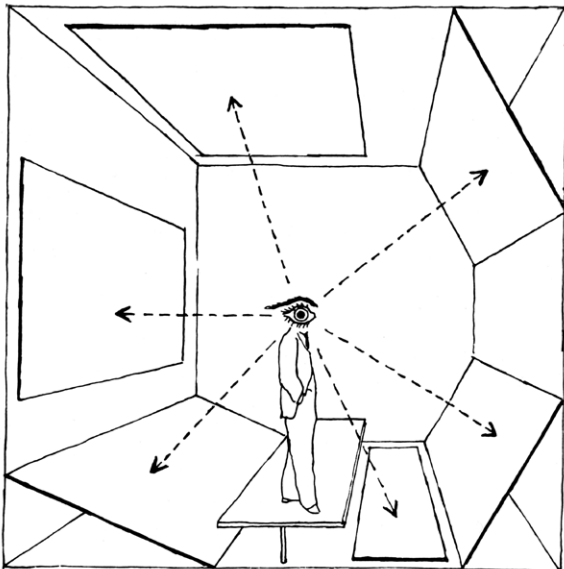
2.42



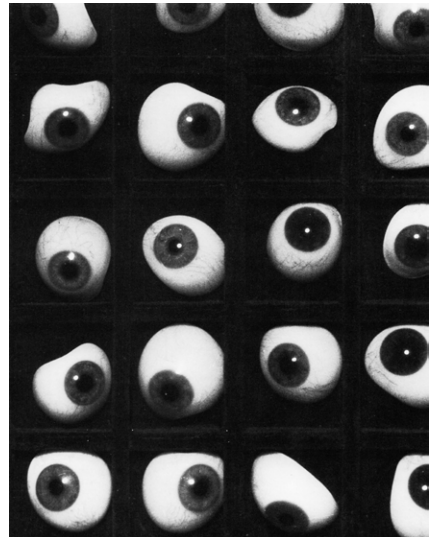
2.47



2.46



2.45



2.44

Part V The Human Figure

In his *Symbolik und Mythologie* (1810) F. Creuzer states: "The human figure was regarded as the ultimate form. By stripping all that was superfluous and individual from this noblest of all bodies, art finally reached the point of expressing its inherent divinity. This supreme purification of the human figure was described by Winckelmann as follows: 'These idealized figures [of the Greek gods] are like an ethereal spirit purified by fire'" (Creuzer, 1810, I, pp. 172-73).

The Egyptians observed the harmony of the youthful human body and saw in it a symbol of [the eternally recurring bloom of] youth. That is why in their tomb statues the figures appear in all their radiant youth no matter at what age they may have died. But, as Creuzer says, it was only with the Greeks that the human form was used as a means of "expressing its inherent divinity."

No such notions are relevant to primeval art. Sporadically the human figure appeared: usually naked; the face veiled; the head sometimes lacking altogether, sometimes bent forward like an animal's, or, most usually, depicted as the head of an animal.

In the zoomorphic period the figure of the human being appeared negligible in comparison with the beauty and strength of figures of animals. This unequal relationship can be observed in the scanty representations of human beings left by prehistoric man.

First to avoid misunderstandings in nomenclature a few comments on sculpture in relief and in the round.

SCULPTURE IN RELIEF AND IN THE ROUND

A sharp distinction must be made between sculpture in relief and sculpture in the round.

Sculpture in the round is placed freely in space, unattached to any background.

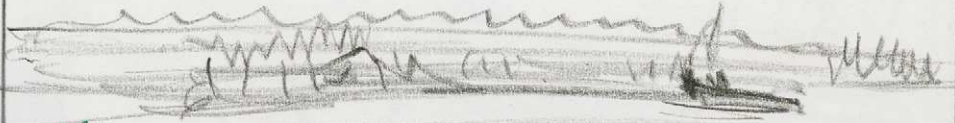
Sculpture in relief is always attached: always a part of something else. A relief, like a climbing plant, seeks support. It is a part of its background, whatever this background may be: the rock wall of a cavern or man-made architecture. A relief is never separated from the natural or the man-made surface. It expressed—at least in prehistoric times—the inseparable oneness of all that exists. Primeval art seldom attained greater heights than in its reliefs.

The Egyptians observed the harmony of the youthful human body and saw in it a symbol of [the eternally recurring bloom of] youth. That is why in

37 1/2 pieces

← 16,0 cm

40



47 1/2 cm



614 cm

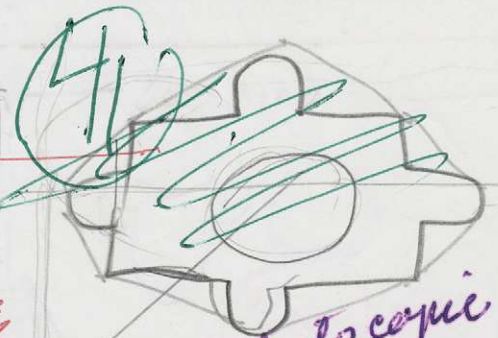
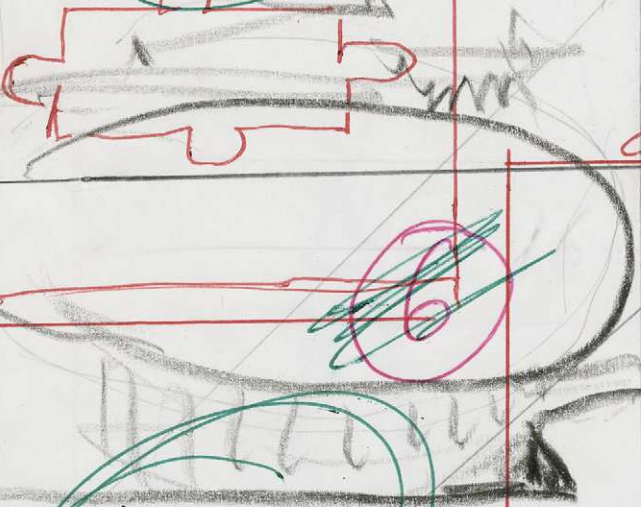


photo copie
seedlings

50

412

2.49 indicates.²²¹ With his move to Aspen, Colorado, in 1946, Bayer withdrew from his social obligations in New York, which also affected the intensity of the collaborations with his colleagues. In the case of Sigfried Giedion and Barbara Boehrs, the designer's involvement was reduced to a few crucial stages. Bayer was typically involved in the beginning to set up a formal grid and to define typographic standards; later on he—or most likely his assistants—prepared the mechanicals that would be delivered to the press and, in most cases, designed the dust jacket.²²² Over the course of Giedion's career, the concurrence of textual and visual discourse reached a degree of complexity that was difficult for anyone other than the author to handle. The process of establishing the visual narrative according to Giedion's expectations was not an easy task, as archival documents and the recollections of Barbara Boehrs, a student at the Kunstgewerbeschule in Zurich in the early 1960s suggest.²²³ Giedion hired her to prepare a set of highly specialized drawings to support the reading of the photographs published in *The Eternal Present*, but she ended up also preparing the layout sketches on his behalf, as he was gradually becoming impatient with the slow process and frustrated with the proposals arriving from the United States. Comparable to the storyboard of a film, a set of pencil drawings representing each page of the book specified the size and position of every single illustration. As there were no reproductions of the selected photographs at hand, colored paper served as a placeholder, separating halftone reproductions from drawings.²²⁴ Throughout this process, Giedion acted as the “director” of his “gallery of pictures,” as one critic called his books, controlling the visual flow and its conscious textual interruptions.²²⁵

A Universal Language

Giedion's poor command of the English language forced him to argue visually, closely linking illustrations to his arguments and treating the written word and visual material alike. It was precisely this development of a universally understandable visual rhetoric, the careful arrangement and the striking juxtapositions of rich and often surprising visual material, annotated with short but concise captions, that helped convey and disseminate his work across diverging cultural contexts. In contrast to his writings, Giedion nearly perfected his visual modes of production and communication. His level of control, from typography to the actual production processes, including lithography, selection of paper, and binding, is a unique contribution to architectural history and an important factor for the continued reception of his oeuvre.

Unless otherwise noted, all English translations of quoted material are by the author.

1 Sigfried Giedion, telegram to Joseph Hudnut, February 1, 1938, GTA 43-K-1938 (G):2; Hudnut communicated via Walter Gropius, who was part of the Norton search committee: Walter Gropius, letter to Sigfried Giedion, February 11, 1938, GTA 43-K-1938-02-11:2.

2 Millmore, "Working with Sigfried Giedion," 22.

3 *Space, Time and Architecture* (1941) appeared as *Raum, Zeit und Architektur* in 1965; *Mechanization Takes Command* (1948) followed as *Die Herrschaft der Mechanisierung* only in 1982. Only *Architektur und Gemeinschaft: Tagebuch einer Entwicklung* (1956), an anthology of previously published essays, was first released in German, before its English translation, *Architecture, You and Me: Diary of Development*, appeared in 1958.

4 Walter Gropius, letter to Sigfried Giedion, February 11, 1938, GTA 43-K-1938-02-11:2: "Jedenfalls segelst Du unter der Fahne der Dichter. Ich hoffe, Du müztest es in Poesie der Sprache um."

5 Sigfried Giedion, letter to Joseph Hudnut, February 1, 1938, GTA 43-K-1938-02-01(G):1.

6 Walter Gropius, letter to Sigfried Giedion, January 14, 1938, GTA 43-K-1938-01-14:1: "Deshalb rate ich Dir, um Deine Pionierarbeit hier wirksam zu machen, doch alles zu tun, um Dich auch sprachlich gut vorzubereiten."

7 Walter Gropius, letter to Sigfried Giedion, February 11, 1938, GTA 43-K-1938-02-11:2.

8 Walter Gropius, letter to Sigfried Giedion, January 14, 1938, GTA 43-K-1938-01-14:1; Walter Gropius, letter to Sigfried Giedion, June 1938, GTA 43-K-1938:6.

9 Walter Gropius, letter to Sigfried Giedion, January 14, 1938, GTA 43-K-1938-01-14:1. Gropius also suggested that Giedion should read aloud to his wife, Carola Giedion-Welcker, from English newspapers or books: "Versuche, jemandem, vielleicht C.W., laut englisch vorzulesen, aus Zeitung oder Buch, und Deine Aussprache zu korrigieren." Walter Gropius, letter to Sigfried Giedion, February 11, 1938, GTA 43-K-1938-02-11:2.

10 Sigfried Giedion, letter to Walter Gropius, January 18, 1938, GTA 43-T-1938-01-18(G). Note the use of both German and English in the same sentence: "Die Hauptschwierigkeit, sehe ich in der Sprache. I will do my best im Üben und Stunden nehmen, aber am meisten beunruhigt bin ich, dass ich doch am Manuskript werde kleben müssen, anstatt, wie im deutschen oder französischen, die Dinge entsprechend der jeweiligen Atmosphäre frei zu entwickeln. Da mit der Angelegenheit aber ziemliches Rampenlicht verbunden zu sein scheint, so möchte ich mich nicht aufs Improvisieren einlassen."

11 Carola Giedion-Welcker, letter to Marcel Breuer, February 28, 1938, SAA, Marcel Breuer Papers, Reel 5709, Frame 1088: "James Joyce ist gerade einige Wochen hier und gibt Dr. Pepp [Giedion] englischen Unterricht!! Pepp bekommt noch einen irländischen Akzent!!"

12 During a stay in London, he started the manuscript for a book with the working titles "Konstruktion und Chaos" and "Die Entstehung des heutigen Menschen." Many of

the topics raised in this manuscript were eventually adapted and used both in *Space, Time and Architecture* and especially *Mechanization Takes Command*. See Sigfried Giedion, outline of volumes I-IV of "Die Entstehung des heutigen Menschen," October 12, 1935, GTA 43-T-5 (S.2). Sokratis Georgiadis is currently working on a first critical edition of this unpublished manuscript.

13 Sigfried Giedion, letter to Alvar Aalto, July 17, 1947, AAA, 10863. Bilingual fragments can be found in correspondence, lecture notes, and even book manuscripts. This letter to his colleague Alvar Aalto, who was perfectly fluent in German, is just one example: "It goes without saying dass die Photos von Alvar Aalto nicht eintrafen. Ich schliesse am 19. Juli meine Vorlesungen. Unfortunately without Aalto!"

14 Mayakovsky, *My Discovery of America*, 82.

15 Giedion prepared at least the lectures for the first semester. He claimed various times that he was eager to embrace some of the "American developments" in his presentations, which naturally could only happen with a delay of several sessions.

16 It should also be kept in mind that Giedion's wife, Carola Giedion-Welcker, was raised trilingually. Her mother was American, her father German, and her governess taught her French (Andres Giedion, interview by the author, July 19, 2007, at Giedion's Doldertal home). This also reveals how the two historians have worked independently; Carola followed her own agenda and developed an independent career. On Carola Giedion-Welcker, see Bruderer-Oswald, *Das Neue Sehen*; Almut Grunewald is currently editing the volume *The Giedion World: Sigfried Giedion and Carola Giedion-Welcker in Dialogue*, forthcoming from Scheidegger & Spiess.

17 Sigfried Giedion, letter to Marcel Breuer, April 1, 1938, SAA, Marcel Breuer Papers, Reel 5709: "Es kommt mir jetzt persönlich zu gut, dass ich seit zwei Jahren fast nur englische Fachliteratur lesen musste. D. h. nicht nur lesen sondern auch exzerpieren. Und wenn ich nun meine Sachen englisch niederschreibe, so tauchen plötzlich Worte aus dem Unterbewusstsein auf, an die ich nicht dachte. Der Fehler ist vorab dass ich diese Dinge mit den Augen gelesen und nicht mit dem Mund gesprochen habe."

18 Spending the summer at the family's mountain cottage in Frauenkirch, Giedion was looking for help in nearby Davos.

19 Sigfried Giedion, letter to Walter Gropius, March 21, 1938, GTA 43-K-1938-03-21(G).

20 Ibid.: "Sinnstörungen und Umwege."

21 Sigfried Giedion uses the German term *verenglischen*, which nicely describes the process of translating German into English.

22 Sigfried Giedion, letter to Mr. Riegen (translator), April 3, 1957, GTA 43-T-10 (S.5): "Ich möchte gewiss keine Germanismen im Manuskript haben. Andererseits ist es oft willentlich, dass ich ein gleiches Wort im nächsten Satz wiederhole, anstatt es 'it' zu nennen. Auch, besonders an Stellen, die mir wichtig erscheinen, folgen abgehackte Sätze, die [Sie] womöglich bitte nicht durch Relativsätze zusammenzuziehen. Es liegt mir mehr an der Direktheit der

Aussage, wie an der smoothness des Textes."

23 Between 1934 and 1936, Walter Gropius was collaborating with Maxwell Fry, a co-founder of the MARS group. Sigfried Giedion was introduced to Morton Shand in this context.

24 CIAM, typescript, list of commissions: "6. Commission de la presse et des archives du Congrès, Giedion et Morton Shand," GTA 42-JT-5-151.

25 Except for the German edition, all translations of *Space, Time and Architecture* were based on the published English edition. See correspondence between Giedion and the Italian translator Mario Labó in the Sigfried Giedion Archive at the Archiv gta, GTA 43-1962-09-22(G):2.

26 Philip Morton Shand, letter to Sigfried Giedion, May 11, 1939, GTA 43-K-1939-05-11: "Ich verstehe ganz gut dass Sie sich dagegen wehren ein neues deutsches Manuskript herstellen zu müssen, und halte dies auch für keineswegs nötig—d. h. zugegeben dass Ihr ursprünglicher deutscher Text noch immer zu haben ist. Dagegen verlangt die Neubearbeitung einer vorhandenen Übersetzung meistens gerade so viel Arbeit—zuweilen sogar noch mehr—als eine ursprüngliche, da man muss hindurch nicht bloss [sic] ein scharfes Auge auf dem bestehenden Englisch halten, sondern satzweise [sic] auf dem Deutschoriginal [sic] zurückschauen um die Genauigkeit und ordentliche Trefflichkeit des englischen rendering zu prüfen und wägen."

27 Morton Shand, letter to Sigfried Giedion, May 28, 1951, GTA 43-T-6 (S.2): "Das Englisch [ist] rein meine Sache da ich der Übersetzer bin; und ich allein als solcher [kann ein Urteil fassen] was nötig wird zu ergänzen Entweder haben Sie Vertrauen zu mir als Übersetzer oder nicht. Sie müssen mir verzeihen wenn ich dazu bemerke dass obwohl Sie vielleicht im Stande sind die Kluft zwischen Englisch und Deutsch zu messen, so sind Sie weit davon [entfernt] die Kluft zwischen Deutsch und Englisch zu sondieren—anders gesagt was, und was nicht auf Englisch gesagt werden darf. Ich habe mich fast umgebracht um einen mindestens würdigen Text eines fast unmöglich zu übersetzenden Originals zu schaffen, und kann nicht mehr. Wie können Sie [die] Assonan[zen] beurteilen, die gebrochenen Rhythmen, die Ihre Eingreifung ins Englische mit sich bringt? Wie schon gesagt ich bin weder ein 'hack writer' noch ein[e] 'typewriting and translation agency.'" Sigfried Giedion, letter to György Kepes, June 6, 1951, SAA, György Kepes Papers, Reel 5303/GTA 43-K-1951-06-06(G): "During the last months I was desperately fighting for a new chapter in Sp. T. & A. on 'Perspective and Urban Planning' in the Renaissance. But the fight with the English translator was even worse."

28 Panofsky, *Meaning in the Visual Arts*, 321-22.

29 Ibid.

30 Hofer and Stucky, *Hommage à Giedion*, 122.

31 Sigfried Giedion, letter to György Kepes, undated, SAA, György Kepes Papers, Reel 5303.

32 Sigfried Giedion, letter to Marshall McLuhan, August 6, 1943, NAC MG 31/D156, vol. 24.

33 Blanchot, *Friendship*, 57-61.

34 They first met in spring 1945 in

- Chicago, where Tyrwhitt was on an official tour to report on the plans being made for postwar Britain and Giedion was conducting research for *Mechanization Takes Command*. László Moholy-Nagy, a mutual friend, introduced them.
- 35 Backed by the British War Office, Tyrwhitt founded and taught correspondence courses for architects and other individuals serving in the Allied Armed Forces from 1941 to 1945. During that time, more than 2,000 enrollments were registered, among them many Americans. See also Zalduendo, "Jaqueline Tyrwhitt's Correspondence Courses."
- 36 Rather than calling the sixth congress CIAM 9, it was entitled CIAM '59 in order to show the break with the old CIAM. Only a few months later, in the spring of 1960, Giedion, Sert, Gropius, and Le Corbusier prepared an open letter responding to the disbandment of the old CIAM and to be published in *Architectural Design*. They noted that they had already decided in 1953 to "hand over" CIAM to the younger generation. Sert, Gropius, Le Corbusier, and Giedion, "The Truth about CIAM."
- 37 The A. W. Mellon Lectures in the Fine Arts have been delivered annually since 1952 at the National Gallery of Art, Washington, D. C. The 1957 lectures were published subsequently in the Bollingen Series, under the collective number 35 (XXXV).
- 38 Sekler, "The Early Years—London," 423.
- 39 For a detailed account of Tyrwhitt's manifold contributions and professional life, see Shoshkes, *Jaqueline Tyrwhitt*.
- 40 Josep Lluís Sert presided over CIAM from 1947 to 1957.
- 41 Hofer and Stucky, *Hommage à Giedion*, 122.
- 42 Ibid.
- 43 Various letters prove that Giedion took advantage of this more than once (correspondence between Giedion, Gropius, Tyrwhitt, and Sekler).
- 44 Hofer and Stucky, *Hommage à Giedion*, 122.
- 45 Jaqueline Tyrwhitt, letter to Raymond Philp Esq., May 10, 1954, GTA 43-T-8 (S. 4). Tyrwhitt began to sympathize with Giedion's language to the point where she started to defend some of his linguistic peculiarities: "After all sometimes the jerk of an unusual expression will waken up the reader and enable him to take in a new idea." See also Hofer and Stucky, *Hommage à Giedion*, 124.
- 46 Memoirs of Gwen Bell, a former student of Jaqueline Tyrwhitt, in *Harvard University Graduate School of Design News*, April 1983.
- 47 Jaqueline Tyrwhitt, letter to Sigfried Giedion, May 13, 1963, GTA 43-K-1963-05-13-2(1).
- 48 Jaqueline Tyrwhitt, letter to Sigfried Giedion, December 12, 1962, GTA 43-K-1962-12-12-2(1): "... I thought I'd been careful about this kind of thing. Well, I suppose it's an excellent drilling in accuracy."
- 49 Additions to the third edition of *Space, Time and Architecture* (1942/1957), *Walter Gropius* (1954), *Architecture, You and Me* (1960), *The Beginnings of Art* (1962), *The Beginnings of Architecture* (1964), *Architecture and the Phenomena of Transition* (1971).
- 50 Raymond Philp, *The Architectural Press Ltd* (publishers of *Architectural Review*, *The Architect's Journal*, and *Specification*), letter to Jaqueline Tyrwhitt, April 30, 1954, GTA 43-T-8 (S. 4).
- 51 Sigfried Giedion, *Walter Gropius, Work and Teamwork*, 2.
- 52 Sigfried Giedion, letter to Raymond Philp, May 12, 1954, GTA 43-T-8 (S. 4). This was not always to Giedion's delight. In a letter to Mr. Philp of The Architectural Press, Giedion writes: "Do you know Pirandello's play 'Six Characters in Search of an Author'?" This is what has happened to this chapter. Maybe it is seeking its author? I don't know—but I want to be from now on out of the play."
- 53 Sigfried Giedion, letter to Walter Gropius, January 18, 1938, GTA 43-T-1938-01-18(G).
- 54 In most of his publications, Giedion notes that the hurried reader should be able to follow the argument of the book by means of the illustrations and their captions.
- 55 Giedion, *Space, Time and Architecture*, 1965, viii.
- 56 Hofer and Stucky, *Hommage à Giedion*, 124.
- 57 Kim, "The Oracle of Athens," 90.
- 58 Murphy, "The Skillful Editor," 455.59
- 59 Maxwell Fry, "A Lifetime of Service," 402.
- 60 Giedion, *Space, Time and Architecture*, 1941, 5.
- 61 Participants in the Delos Symposia were advised in advance that they would be cut off from the world for the period of the conference. While cables could be received and sent from the Information Desk, there would be no access to telephone, newspapers, or mail (C. A. Doxiadis, General Information to the participants, July 1, 1963). See Doxiadis, "Comment on the Delos Symposium," 204.
- 62 Sigfried Giedion, letter to Jaqueline Tyrwhitt, October 18, 1958, GTA 43-K-1958-10-18(G):1/3; Shoshkes, *Jaqueline Tyrwhitt*, 195.
- 63 Dedication on the endpaper of Giedion's personal copy of *Mechanization Takes Command*, Private Archive, Andres Giedion, Zurich, Switzerland.
- 64 Jaqueline Tyrwhitt, letter to Marshall McLuhan, April 16, 1968, NAC MG 31/D156, vol. 39.
- 65 Max Lock "The Early Years—London," 420.
- 66 Jaqueline Tyrwhitt, letter to Carola Giedion-Welcker, April 10, 1968, GTA 43-T-12 (S. 3).
- 67 For example, Sert and Doxiadis. See Shoshkes, *Jaqueline Tyrwhitt*, particularly chapters 14 and 15.
- 68 Fumihiko Maki, "The Harvard Years," 437.
- 69 Gellner, *Nations and Nationalism*, 57.
- 70 Giedion, typescript for the German version of "CIAM at Sea," 1949, GTA 43-T-15; see also Giedion, "CIAM at Sea," 36.
- 71 Sigfried Giedion, letter to Josep Lluís Sert, August 30, 1954, LOE, Josep Lluís Sert Collection, Folder E6: "The method we will try to introduce should be continued by someone who is capable to do it, and who should have been at Harvard when I am there ... Then, I thought of Seckler [sic], who has a certain knowledge and speaks our vocabulary. ... He [Marcus Whiffen] is certainly sophisticated and probably a good journalist, but he lacks both: a solid historical background and [original emphasis]—what is more important—he does not possess our vocabulary."
- 72 Marshall McLuhan, minutes, Culture and Communications Seminar, February 23, 1955, NAC MG 31/D156, vols. 203-31.
- 73 Giedion, *Herrschaft der Mechanisierung*. This is even more striking considering that there had been a complete German manuscript, which was used for the Italian translation in 1961; see N. Curti, letter to Mario Labó, March 7, 1961, GTA 43-K-DD-1961-03-07.
- 74 Giedion, *Raum, Zeit, Architektur*, 1965, 7: "In Deutschland, der Schweiz und Österreich ist Raum, Zeit, Architektur bis jetzt weitgehend unbekannt geblieben. Nur indirekt zeigte sich sein Einfluss in verschiedenen Publikationen, sowie der Benützung zahlreicher Abbildungen, die ohne das Wissen des Autors übernommen wurden. Nun ist es soweit, dass eine deutsche Ausgabe erscheint. Sie hat mir während meiner Lehrstätigkeit an der Eidgenössischen Technischen Hochschule in Zürich sehr gefehlt."
- 75 Sigfried Giedion, letter to Alexander von Muralt (president of the Swiss National Science Foundation), May 8, 1954, GTA 43-K-1954-05-08(G):1 "Es ist seitdem [1941, first publication] zum Lehrbuch geworden und neben Fletcher's klassischer Architekturgeschichte der Prüfungsstoff für die Architekturstudenten und für die Staatsexamen [national registered architects]."
- 76 James B. Conant, letter to Sigfried Giedion, August 25, 1954, HOU bMS Ger 208 (2155).
- 77 Walter Gropius, letter to Sigfried Giedion, 1938, GTA 43-K-1938:6; Walter Gropius, letter to Sigfried Giedion, March 2, 1938, GTA 43-K-1938-03-02.
- 78 Cohen, *Scenes of the World to Come*, 15. In his seminal study on the architectural relations between Europe and the United States, Jean-Louis Cohen distinguishes Americanism, "a set of individual and collective attitudes and representations," from Americanization, "which is the actual transformation of European societies in the American image."
- 79 Giedion, *Bauen in Frankreich*, 2000, 68; Giedion, *Building in France*, 152; Giedion, *Befreites Wohnen*. (I am currently completing the first English translation of Giedion's *Befreites Wohnen* [Liberated Dwelling] in collaboration with Rachel Julia Engler, forthcoming from Lars Müller Publishers.)
- 80 With his colleagues Franz Roh, Hans Finsler, Walter Foitzick, Otto Höver, Hans Curjel, and his future wife, Carola Welcker, Giedion formed a student group called Kreis 1. During the German Revolution of 1918-19, Giedion and other representatives of his group occupied some of the few left-wing seats in the first German student assembly. *Information* was based in Zurich and published between 1932 and 1934. Max Bill was in charge of typography and layout.
- 81 Ockman, "Toward a Theory of Normative Architecture," 126.
- 82 Ibid. See also Jordy, "Symbolic Essence," 187-224.
- 83 For a detailed account of Team 10, see Risselada and van den Heuvel, *Team 10*.
- 84 Ralph Barton Perry, Harvard Group of American Defense, letter to Sigfried Giedion, February 21, 1944, GTA 43-K-1944-02-21: "Believe it or not, I have read your typescript with some care. I know that you will

forgive me if I say that the English would have to be carefully revised before distributing this document at all widely."

85 Howard, "Review of *Space, Time and Architecture*, by Sigfried Giedion," 37-38.

86 Between 1941 and 1962 almost 65,000 copies were sold. Sales dipped in the late 1980s, but 700 to 800 copies were still sold. The book is still in print today. See Alofsin, *Struggle for Modernism*, 287.

87 Giedion, letter to Franz Roh, July 7, 1948, GTA 43-K-1948-07-07(G): "Ich habe zwar gelernt—nach zwei schweren Jahren—frei in Englisch zu sprechen, aber es ist im Grunde doch immer eine Maske, in einer anderen Sprache sich zu äussern, die man nur logisch und von aussen her kennt ohne je in ihre geheime Bedeutung und ihrem Klange einzuwachsen zu können."

88 Sigfried Giedion, letter to Walter Gropius, March 21, 1938, GTA-43-K-1938-03-21(G).

89 Moos, "Mumford versus Giedion," 25.

90 Ibid.

91 Benjamin, "On Language as Such and on the Language of Man," 62. Benjamin's original text appears in Tiedemann and Schweppenhäuser, eds., *Gesammelte Schriften: Band II*, 140: "[J]ede Mitteilung geistiger Inhalte ist Sprache, wobei die Mitteilung durch das Wort nur ein besonderer Fall, der der menschlichen, und der ihr zugrunde liegenden oder auf ihr fundierten, ist."

92 Giedion, *Eternal Present*, 1962, viii.

93 Giedion, as cited in Vogt, *Die Hunde bellen*, 268: "Der Freund der Architektur und bildenden Künste ist nur ein mässig temperierter Leser. Wenn ich aber zum gut ausgewählten Bild zwei aufgeweckte Beobachtungen setzte und so das Bild sorgsam mit dem Wort verknüpfte, dann folgte er mir."

94 Ibid.

95 Moos, "Er galt als Dilettant, weil er in Bildern dachte."

96 Sigfried Giedion, letter to Edward F. D'Arms (Rockefeller Foundation), February 18, 1952, GTA 43-K-1952-02-18(G).

97 Dilly, "Lichtbildprojektion," 153-72.

98 Conradt, "Die 'Blauen Bücher' und 'Der Eisener Hammer';" Bushart, "Logische Schlüsse des Auges," 555.

99 For a general account of Heinrich Wölfflin's approach, see Meier, "Heinrich Wölfflin," 63-78.

100 Wölfflin, *Principles of Art History*, 83-99.

101 Gutschow, "Anti-Mediterranean," 168; see also Borrman, *Paul Schultze-Naumburg*.

102 Sigfried Giedion, letter to Miss Oliver (Yale University), January 27, 1940, GTA 43-K-1940-01-27(G): "Ordinarily I use two apparatuses in my lectures where I may show lantern slides at the same time."

103 Sigfried Giedion, letter to Walter Gropius, April 9, 1954, GTA 43-K-1938-08-08(G).

104 Sigfried Giedion, letter to Mr. Custer (ETH Zurich), June 8, 1949, GTA 43-K-1949-06-08(G):2: "Ich lese nun regelmässig im 4b. Darf ich Sie bitten, dafür Sorge zu tragen, dass der zweite Lichtbildapparat jeweils Freitag von 7 bis 18 Uhr montiert ist."

105 Tournikiotis, *History of Modern Architecture*, 21-22.

106 Hofer and Stucky, *Hommage à Giedion*, 142: "Es war ein Kampf Don

Quichottes mit den Windmühlen. Das simultane Denken, das Setzen von Beziehungen, das Ordnen nach inneren Gesetzmässigkeiten war uns vorerst völlig fremd, und das zeigte sich eben in diesem schweren Kampf mit dem steten unverständlichen Wechsel der Bilder."

107 Giedion, *Space, Time and Architecture*, 1965, 11-17.

108 See, for example, Noell, "Nicht mehr Lesen! Sehen!," 143-56; Nungesser, "Skizze zur publizistischen Situation der modernen Architektur," 163-89; and Raabe, *Das Buch in den zwanziger Jahren*.

109 Behne, "Ausstellung der AHAG am Fischthalgrund," 20.

110 Kandinsky and Marc, *Der Blaue Reiter*.

111 Bushart, "Logische Schlüsse des Auges," 587; Wölfflin, *Die klassische Kunst; Worringer, Formprobleme der Gotik*.

112 See, for example, Jaeger, "Bau und Buch," 119-47; de Smet, *Le Corbusier*.

113 Wölfflin, *Principles of Art History*, 324. For the original German, see Wölfflin, *Kunstgeschichtliche Grundbegriffe*, 279: "Man hat wohl immer so gesehen, wie man sehen wollte."

114 Sigfried Giedion, letter to Alvar Aalto, March 12, 1948, AAA, 10867: "Wir haben für den Katalog [Aalto Ausstellung im Kunstgewerbemuseum Zürich] nicht eine einzige Abbildung. Deine Photosendung wird somit immer dringender. Ich kann ohne diese auch nichts schreiben. Ich habe auch nie den Katalog Deiner Jubiläumsausstellung erhalten. Hast Du eine Biographie und eine Bibliographie zur Hand? Sonst muss ich nach New York schreiben."

115 Giedion, letter to Orell Füssli Verlag, November 23, 1928, GTA 43-K-1928-11-23(G):2. In this letter to the publisher of *Befreites Wohnen*, Giedion declares the separation of images and text to be "nonsense."

116 Of course, there were contemporaries of Giedion who began to employ their own photography in order to illustrate publications as accurately as possible. Among them was the architect Paul Schultze-Naumburg (1869-1949), who aimed to create a visual confrontation by contrasting "good and bad" in his *Kulturarbeiten* (1912). Bruno Taut also made extensive use of photographs. In his book *Ein Wohnhaus* (1927) he introduced almost one photograph per page. The pictures, however, had more of a documentary character.

117 Bushart, "Logische Schlüsse des Auges," 555.

118 Georgiadis, "Übungen im 'Neuen Sehen,'" 15-21.

119 Sigfried Giedion, letter to Alfred Altherr, November 23, 1928, GTA 43-K-1928-11-23: "Es handelt sich natürlich nicht darum, gute Photos zu zeigen, wie sie dem einen oder andern zufällig gelingen. Es handelt sich darum das spezifische Sehen, das im Unterschied zur Malerei nur dem photographischen Auge möglich ist, einmal auf breitester internationaler Basis dem Publikum begreiflich zu machen. ... Immer mehr wird an Stelle des handgezeichneten Plakats und der Drucksache mit zeichnerischer Unterlage das photographische Aufnahmeverfahren treten."

120 On Moholy-Nagy and the photographic book, see Stetler, *Stop Reading! Look!*, 21-58.

121 László Moholy-Nagy, "Die neue Typographie," 140.

122 Deutscher Werkbund, ed.,

Internationale Ausstellung. For a detailed account of *Fifo* and the work of Sigfried Giedion, see Lugon, "Schulung der neuen Optik," 88-105; Lugon, "Photography and Exhibition in Germany around 1930," 366-75.

123 Sigfried Giedion, letter to László Moholy-Nagy, November 29, 1928, GTA 43-K-1928-11-29: "Schulung der neuen Optik."

124 Giedion, "Es kommt der neue Fotograf!"; "Genau wie in der Architektur kommt auch auf diesem Gebiet die eigentliche Weiterentwicklung keineswegs von den Fachleuten mit dem geordneten Lehrgang, sondern von Aussenseitern, sei es von Leuten, die sich autodidaktisch entwickelten, sei es von Malern, die photographisch sehen können, ja selbst von Dilettanten."

125 Instead he proposed a parallel show at the Kunsthaus in Zurich entitled "Neue Optik." In November 1929, this exhibition opened under the title *Abstrakte und surrealistische Malerei und Plastik*. See also Sigfried Giedion, letter to Wilhelm Wartmann (director, Kunsthaus Zürich), December 3, 1928, GTA 43-K-1928-12-3; Huber, *Sigfried Giedion*, 43-51.

126 Hans Finsler, letter to Alfred Altherr (Kunstgewerbemuseum, Zurich), October 1, 1929, including a typescript entitled "Eine Stelle für Fotografie an der Zürcher Kunstgewerbeschule" by Giedion, GTA 43-K-1929-10-01; Sigfried Giedion, letter to Hans Finsler, October 17, 1930, GTA 43-K-1930-10-17; Hofer and Stucky, *Hommage à Giedion*, 96-99; Koenig, "Hans Finsler in der Schweiz," 16-41; Finsler, "'Wohnbedarf' und ein Fotograf," 25-27.

127 Gasser, "Giedion, der selbst viel photographierte," 58-73.

128 According to Gasser, it was a folding camera with plates sized 10x15 centimeters, most likely a ZEISS-IKON Maximar, built between 1926 and 1936.

129 Sigfried Giedion, letter to László Moholy-Nagy, February 7, 1939, GTA 43-K-1939-02-07(G): "Meine Photos sind so schlecht geworden, wie es der Standpunkt und das Wetter ergab. Wäre es möglich, dass Du einem Schüler oder einem Photographen den Auftrag gibst, dass er mir eine Teilaufnahme von Carson Reerie [sic] Scott macht (nicht von unten, sondern so, dass man die klare Formulierung der mittleren Fensterreihen sieht und spürt, dass es sich in dieser Aufteilung nicht mehr um abgegrenzte, renaissance-mässige Flächen handelt und dass die Facade nicht mehr rechtwinklig in Rahmen gepresst wird.)"

130 Most striking in this respect is Giedion's comparison of William Le Baron Jenney's Leiter Building with Le Corbusier's Maison Clarté, Daniel Burnham's Reliance Building with Mies van der Rohe's project for a glass tower, and Louis Henry Sullivan's Carson, Pirie, Scott Building with Walter Gropius's project for the Chicago Tribune Tower. See Giedion, *Space, Time and Architecture*, 1965, 382-91.

131 László Moholy-Nagy, *Malerei, Fotografie, Film*, 1986, 120-39.

132 Giedion, *Space, Time and Architecture*, 1965, 754. A comparable montage of Rockefeller Center can also be found as an 8x10 cm slide used in lectures.

133 Harbusch, "Work in Text and Images," 596-620. Giedion was frequently criticized for this approach.

- See Thoenes, "Die Formen sind in Bewegung geraten," 67-68.
- 134** See Fiedler, *László Moholy-Nagy*, 35-38.
- 135** Sigfried Giedion, letter to Walter Gropius, April 9, 1954, GTA 43-K-1954-04-09(G): "Nebenbei habe ich mich fast in Farbenphotographien verloren und ich war hoch erstaunt, als ich bei meiner Rückkunft die unerwartet guten Farbphotos aus Aegypten sah."
- 136** Sigfried Giedion, letter to Mustafa Amer (director general of the Department of Egyptian Archaeology), January 11, 1954, GTA 43-K-1954-01-11.
- 137** Carola Giedion-Welcker, postcard to an unidentified recipient, Luxor, December 23, 1960, GTA, Ulrich Stucky Papers, Box V20: "Pebbelstein [Giedion] rast mit 2 Photoaparaten um Pilonen, Pharaonen, Reliefs + Tempel herum. In der Sonnhitze etwas anstrengend. Nachmittags bis 3 haben wir jetzt eine Siesta eingelegt."
- 138** Achille B. Weider, letter to Sigfried Giedion, March 2, 1954, GTA 43-K-1954-03-02.
- 139** Sigfried Giedion, letter to Edward F. D'Arms (Rockefeller Foundation), June 3, 1954, GTA 43-K-1954-06-03(G); Sigfried Giedion, letter to Walter Gropius, June 22, 1954, GTA 43-K-1954-06-22(G).
- 140** Geiser, "Erziehung zum Sehen," 142-57.
- 141** Sigfried Giedion, letter to Rudolph C. von Ripper, November 6, 1951, GTA 43-1951-11-06: "Es ist natürlich leicht, Lascaux zu photographieren, aber sobald man an kompliziertere und nicht so augenfällige Werke kommt, hört das Verständnis auf und alles ist neu zu machen. Die Abbildungen des Abbé Breuil, die durch alle Kunstgeschichten gehen, sind zwar ansprechende japanische Holzschnitte, haben aber mit der Urnatur der Gebilde nichts zu tun und verfälschen ihren Ausdruck total."
- 142** Sigfried Giedion, letter to Rockefeller Foundation, November 6, 1951, GTA 43-K-1951-11-06(G).
- 143** Hugo P. Herdeg (1909-1953). Huber Nievergelt, "Zwischen sachlicher Dokumentation und Kunst."
- 144** Kunstgewerbemuseum Zürich, *Afrikanische Kunst*; Zervos, *La civilisation de la Sardaigne*.
- 145** Giedion, "Zum Tode Hugo Paul Herdeg," 113; Geiser, "Höhlenexpeditionen," 278-81.
- 146** Sigfried Giedion, letter to Rockefeller Foundation, November 6, 1951, 43-K-1951-11-06(G).
- 147** Giedion, "Zum Tode Hugo Paul Herdeg," 113. This translation by John A. Stuart was published in Abram, *Hugo P. Herdeg*, 107.
- 148** Giedion, *Eternal Present*, 1962, viii; Maurer, "The Eternal Present I," 288-91.
- 149** Giedion, "Zum Tode Hugo Paul Herdeg," 113; Giedion, "Space Conceptions in Prehistoric Art," 38.
- 150** As quoted in Flick, *Werner Hegemann*, 753: "Die Bilder sieht jeder, sie wirken. Den Text liest kein Mensch."
- 151** Sibyl Moholy-Nagy, "Beginnings of Architecture by Sigfried Giedion," 216: "It is credit to the richness of its contents that the reader is willing to cope to the very conclusion with a confusing lack of continuity, typical for separately composed manuscripts, and with a repetitiveness of statements that is a great virtue in a lecture series but a grave vice in a book. 'Eine Rede ist keine Schreibe,' say the Germans, to which one might add that book illustrations are not lantern slides which can be thrown on the screen wherever they have to make a point."
- 152** Giedion, letter to Herbert Bayer, July 21, 1954, GTA 43-T-8 (S. 4): "Eine der Schwierigkeiten, die uns, wie der Drucker sagte, drei bis vier Tausend Schweizerfranken kostete, war der Einband – nicht das Jacket, das leicht herzustellen war. ... Und trotzdem liegt der Reiz des Buches auch im Einband, auch wenn er handwerklich nahezu unmögliches verlangte."
- 153** Mumford, "Sky Line: Architecture of Power," 58.
- 154** Lewis Mumford, letter to Josep Lluís Sert, December 28, 1940, LOE, Josep Lluís Sert Collection, Folder E1. Mumford suggests reducing *Can Our Cities Survive?* to a conventional size such as a royal octavo in order to cut production costs.
- 155** Walter Gropius, letter to Sigfried Giedion, GTA 43-K-1938;6; Walter Gropius, letter to Sigfried Giedion, March 2, 1938, GTA 43-K-1938-03-02: "Einfachheit, wie Dein kleines Buch 'Befreites Wohnen,' bildhafte Vergleiche, mit realen Beispielen gespickt, werden schlagend wirken."
- 156** For Le Corbusier's publishing activities, see de Smet, *Vers une architecture du livre*.
- 157** Smet, *Le Corbusier*, 83-84; Jubert, "Typographie & graphisme"; Jubert, "The Bauhaus Context," 66-80.
- 158** Le Corbusier, *Le Modulor*, 9. See also Le Corbusier, *The Modulor*, 9: "1. The word 'Architecture' here covers: ... The art of typography as it is used in the making of newspapers, periodicals and books."
- 159** Dismissively, Theo van Doesburg described the "yellow" French book, printed on "cheap gray paper," "barely readable," and in "miserable type," as *vacuous*. See Doesburg, "Das Buch und seine Gestaltung" (1929); reprinted in Schwarz and Gloor, "Die Form," 284.
- 160** See also Brüning, *A und O des Bauhauses*; Fleischmann, *Bauhaus: Drucksachen, Typografie, Reklame*; Noell, *Haus und sein Buch*, 27-28.
- 161** Moos, "Industriekultur und der 'eilige Leser,'" 361.
- 162** Le Corbusier, *Maison*, 1: "Il fait nuit; sur l'écran défilent les images; elles apparaissent avec précision au moment utile; le conférencier développe sa thèse; celle-ci se raccorde aux images. ... Par la typographie de ce livre, le lecteur se trouvera dans la situation de l'auditeur pour lequel cette conférence a été imaginée."
- 163** Doesburg, "Buch und seine Gestaltung"; reprinted in Schwarz and Gloor, "Die Form," 288: "Das Buch wird gelesen ... [a]ber gleichzeitig wird es gesehen, die ganze Seite auf einmal. Durch diesen gleichzeitigen Vorgang (akustisch-optisch) hat sich das moderne Buch um eine neue 'plastische' Dimension bereichert."
- 164** Ball, *Flucht aus der Zeit*, 114: "Die Sprache ist nicht das einzige Ausdrucksmittel." Bartram, *Futurist Typography*; Marinetti, *Zang Tumb Tuuum*; Schnapp, "On 'Zang Tumb Tuuum,'" 156-58.
- 165** Stanislaus von Moos provided the first account on the role of visual strategies in Sigfried Giedion's work. See Moos, "Industriekultur und der 'eilige Leser,'" 359-97. André Tavares wrote an excellent essay on the design of Giedion's *Befreites Wohnen* in his *Anatomy of the Architectural Book*, 61-105.
- 166** John Heartfield was born Helmut Herzfeld. See Zervigón, *John Heartfield*, 1.
- 167** Stam, *ABC*; Lissitzky and Arp, *Kunstismen*, 1990.
- 168** At the time, a large number of little magazines cropped up. Among them, *Wendingen* (The Netherlands), *Ver Sacrum* (Austria), *Stavba* (Czech Republic), *de Stijl* (The Netherlands), *Frühlicht* (Germany), *L'Esprit Nouveau* (France), *G* (Germany), *ABC* (Switzerland), *i 10* (Germany), *De 8 en Opbouw* (The Netherlands), and *Die Form* (Germany). See also Meyer, "Neue Welt," 221-24.
- 169** Majakowski, *Diia Gólosa*; Mayakovsky, *For the Voice*, 2.
- 170** Aspects of Giedion's approach to collage and book design have also been discussed in Geiser, "Verbi-Voco-Visual." For more background on Heartfield and other Dada exponents, see Kunsthaus Zürich, *Dada-globe Reconstructed*.
- 171** Mülhaupt, *John Heartfield*, 63.
- 172** Wrobel [Tucholsky], "Tendenz-fotografie," 637: "Die Fotografie ist unwiderlegbar. Sie ist gar nicht zu schlagen. Was allein mit fotografischen Gegenüberstellungen zu machen ist weiss nur der, der's einmal probiert hat. Die Wirkung ist unauslöschlich und durch keinen Leitartikel der Welt zu übertreffen. Eine knappe Zeile Unterschrift – und das einfachste Publikum ist gefangen."
- 173** Giedion, *Building in France*, 83. See also Huber, "Images Parlantes," 10-15.
- 174** Between 1925 and 1931, László Moholy-Nagy and Walter Gropius edited fourteen *Bauhaus Bücher*, which were published by Verlag Albert Langen in Munich. Of special interest with respect to Giedion's work are the two volumes Moholy-Nagy authored, *Malerei. Fotografie. Film*. (1925) and *Von Material zu Architektur* (1929). On the *Bauhaus Bücher* see also Wiegler, *Bauhaus*, 130-31, 342-59; Grohn, *Die Bauhaus-Idee*; Bartram, *Bauhaus*, 48-67; Brüning, "Bauhausbücher: Grafische Synthese," 281-96.
- 175** The typeface has a strong resemblance to Morris Fuller Benton's American Grottesque, which Benton adapted from *Ältere Grottesk* between 1905 and 1930. Characteristic of the particular cut used by Moholy-Nagy are the angled accentuations of the letters *E* and *F*; see <https://www.typolexikon.de/grotesk/> (accessed April 17, 2024).
- 176** Giedion, *Building in France*, 83: "This book is written and designed so that it is possible for the hurried reader to understand the developmental path from the captioned illustrations; the text furnishes closer explanation; the footnotes provide more extensive references. See also Moos, "Industriekultur und der 'eilige Leser,'" 359-97.
- 177** Sigfried Giedion, *Bauen in Frankreich*, 2000, 92: "Starre Aufnahmen bringen da keine Klarheit. Man müßte den Wandel des Blicks begleiten: Nur der Film kann neue Architektur faßbar machen!"
- 178** Sigfried Giedion, layout sketches, ca. 1927, GTA 43-T-3.
- 179** László Moholy-Nagy, *Painting, Photography, Film*, 124-37.
- 180** Sigfried Giedion, letter to Georg Biermann, December 29, 1928, GTA 43-K-1928-12-29(G); Georg Biermann, letter to Sigfried Giedion, January 5, 1929, GTA 43-K-1929-01-05.
- 181** Herbert Bayer (1900-1985) designed all of Giedion's books with

the exception of *Bauen in Frankreich* (László Moholy-Nagy), *Befreites Wohnen* (Giedion himself), *Architecture, You and Me* (György Kepes), and *A Decade of New Architecture* (Richard Paul Lohse).

182 Herbert Bayer, letter to Sigfried Giedion, January 22, 1931, GTA 43-K-1931-01-22-1; among the printed matter Bayer prepared for Wohnbedarf AG is a well-designed prospectus for furniture by Alvar Aalto. Max Bill was involved in the letterhead and exhibition projects at the same time. The first contact between Bayer and Giedion was established in January 1931. On the history of Wohnbedarf, see Mehrlau-Wiebkling, Rüegg, and Tropeano, *Schweizer Typenmöbel 1925-1935*.

183 The main characteristics of the "Swiss style" are the use of asymmetric layouts, grids, and a ragged right column, as well as sans serif typefaces. For a detailed account of the emergence of a particular Swiss style in graphic design, see Bignens, "Swiss Style," 9-12.

184 Moos, "Work Aesthetic and Mass Consumption," 8-32.

185 Walter Gropius, letter to Herbert Bayer, June 4, 1937, HOU, bMS Ger 208 (431): "hoffentlich findest du schneid, mittel und wege den sprung über den ozean zu wagen. wenn du hier anwesend bist lässt sich alles viel leichter machen. vor allen dingen lerne konzentriert englisch; ohne dessen kenntnis ist man überall gehandicapt."

186 Herbert Bayer, letter to Walter Gropius, February 17, 1937, HOU, bMS Ger 208 (431): "Wenn es bald kein holz für papier für reklame mehr gibt wird auch meine laubahn ein ende haben müssen. ich fahre im sommer bestimmt nach U. S. A. vielleicht ist dort ein platz für mich."

187 The text in *Spuren zum Kampf* is set in a strange combination of Bodoni and Fraktur, the typeface endorsed as truly Germanic by the Fascist regime.

188 For a complete list of artists and works of art, see the "Degenerate Art Database" assembled at Freie Universität Berlin: https://www.geschkult.fu-berlin.de/en/e/db_entart_kunst/index.html (accessed April 17, 2024).

189 Giedion, "Herbert Bayer and Advertising in the U.S.A.," 348.

190 Herbert Bayer, letter to Sigfried Giedion, December 19, 1940, GTA 43-K-1940-12-19: "... dieses land und leben ist gegen jeden persönlichen kontakt, man braucht ja nur success. ich arbeite wie ein pferd... aber leider ist alles nur routine-arbeit, nichts was freude machen oder gut sein kann."

191 Giedion, "Herbert Bayer and Advertising in the U.S.A.," 356.

192 Bayer, *Herbert Bayer*, 11: "Auch in New York waren die Verhältnisse während der Kriegsjahre nicht gerade die besten und trotz der Gastfreundschaft dieses Landes musste ein Neuankommling sich erst an die Lebensumstände anpassen und seine neue Umwelt verstehen lernen, was oft nicht leicht war. Bei meinen Bemühungen erst mal festen Boden zu gewinnen war ich bisweilen zu bedauerlichen Zugeständnissen an den Geschmack meiner Auftraggeber gezwungen, besonders wenn es sich um Werbemaßnahmen handelte."

193 Tschichold, "Zeitgemäße Buchgestaltung," 117; Noell, *Haus und sein Buch*, 11. For Tschichold's approach to typography, see Tschichold, *New Typography*.

194 Sigfried Giedion, letter to

Herbert Bayer, January 3, 1941, GTA 43-K-1941-01-03(G): "Die Verbindungen sind jetzt so schlecht geworden, dass die Clippersendungen über vier Wochen brauchen. Das sind nun die Folgen des langen Hinziehens von Seiten der Press. Im Sommer kamen die Sendungen innerhalb von 5-8 Tagen."

195 Herbert Bayer, letter to Walter Gropius, July 26, 1940, HOU, bMS Ger 208 (431): "es scheint giedion legt wert darauf hier einzuwandern. die aufforderung hierherzukommen um sein buch zu beenden könnte nur vom norton-comitee oder der harvard-press wirksam sein. ich verstehe daher nicht, warum sich C. W. nicht direkt an hudnut wendet, da ich ja nicht viel in der sache tun kann, bitte lese den brief und gib mir bescheid was geschehen könnte. seine situation ist natürlich ziemlich verfahren. ob es für das buch besser ist wenn er hier ist ist allerdings eine frage. freilich muss ich gestehen, dass ich noch immer nicht mehr als die ersten probeseiten satz in händen habe."

196 Herbert Bayer, letter to Sigfried Giedion, December (around Christmas) 1938, GTA-43-K-1938-12-2: "die kostenfrage ist eine sehr dehnbare, daher versuche ich soviel wie möglich zu bekommen und ich mache die arbeit sowieso. praktisch gesparrt werden kann durch typography nicht viel. nachträgliche korrekturen werde ich nicht machen. die frage ist nur, wollen die ein billig oder gut aussehendes buch machen. in jedem fall kann ich meine typographie innerhalb des budgets machen, wenn ich von anfang an alles bearbeiten kann."

197 Giedion, *Mechanization Takes Command*, vii.

198 Avermaete, *Another Modern*, 58-70; Domhardt, *Heart of the City*, 321-29.

199 Pamphlet, *Grille CIAM d'urbanisme: Mise en pratique de la charte d'Athènes—The Athens Charter in Practice*, 1948, personal copy belonging to Jaqueline Tyrwhitt, GTA 42-JT-X-19.

200 Giedion, *Mechanization Takes Command*, vii.

201 Herbert Bayer, letter to Sigfried Giedion, February 17, 1941, GTA 43-K-1941-02-17; Joseph Hudnut, letter to Sigfried Giedion, May 20, 1941, GTA 43-K-1941-05-20. The production cost of approximately \$9,000 was roughly six times the cost of a comparable publication by Harvard University Press.

202 Sigfried Giedion, letter to Herbert Bayer, February 14, 1941, GTA 43-K-1941-02-14(G):3.

203 Sigfried Giedion, letter to Herbert Bayer, December 24, 1940, GTA 43-K-1940-12-24 (G) 1/6.

204 Sigfried Giedion, letter to Herbert Bayer, January 3, 1941, GTA 43-K-1941-01-03(G): "Ich sah dass infolge der langen Zwischenszeit von Februar bis März und wahrscheinlich auch infolge des New Yorker Lebens Dir vieles entschwinden ist, was wir abmachen vor allem, was ich immer wieder betonte, dass die Gegenüberstellungen des Buches d-i-r-r-e-k-t sein müssten. Das Buch besteht doch gerade aus INTERRELATIONS und wenn man diese durch Einschaltung von Zwischenseiten künstlich unterbindet, dann erschwert man die Lesbarkeit und die Wirksamkeit."

205 Sigfried Giedion, letter to Herbert Bayer, December 24, 1940, GTA 43-K-1940-12-24 (G) 1/6.

206 *Ibid.*: "Der Grund warum ich

auf einer klaren Gegenüberstellung bestehe, liegt darin, dass nur durch klare Gegenüberstellung—wie dies übrigens im Text betont wird—auf den ersten Blick der Zusammenhang der Chicago School mit der heutigen Bewegung klar gemacht werden kann. Ich kann nicht recht verstehen warum dies im Buch anders angeordnet wurde, denn bei der jetzigen Anordnung kommen z. B. irrtümliche Vergleiche zustande, wie die Gegenüberstellung von Sullivan mit Mies van der Rohe, wobei die Leute natürlich zu allererst die turmähnliche Ausbildung bei beiden vergleichen werden, also gerade das was nicht geschehen soll."

207 Herbert Bayer, letter to Giedion, February 17, 1941, GTA 43-K-1941-02-17.

208 Next to Herbert Bayer, who wrote many letters to the press insisting on the correction of misplacements, Giedion's copyeditor in the United States, Constance Purcell, and Ise Gropius successfully intervened with the press, so that any other grave mistakes could be avoided. Constance Purcell, letter to Sigfried Giedion, January 14, 1941, GTA 43-K-1941-01-14.

209 Sigfried Giedion, *Eternal Present*, 1962, xii: "Typography and layout are by Herbert Bayer, based on a preliminary dummy by the author."

210 Sigfried Giedion, letter to Herbert Bayer, June 27, 1940, GTA 43-K-1940-06-27(G):1: "Bezüglich des Indexes bitte ich Dich nicht die kleine Type zu wählen, die wir ursprünglich bestimmt haben, sondern eine normale Grösse, etwa wie sie Mumford in seinem Index von 'The Culture of the Cities' verwendet. Der Index wird in meinem Buch der Orientierung wegen wichtig sein. Du kannst in jeder Buchhandlung oder bei Gropius Mumfords Buch finden."

211 Sigfried Giedion (by his typist), letter to Herbert Bayer, October 21, 1953, referring to the book *Walter Gropius: Work and Teamwork* (1954), GTA 43-T-8 (S. 4): "Leider steht die Original-Futura nicht zur Verfügung und die Monotype-Futura besitzt eine sehr schlechte Schrift in kursiv. Herr Dr. Giedion hat deshalb vorgezogen, die ihm gewohnte Monotype-Schrift zu wählen, insbesondere auch deshalb, weil sie mehr seinem Temperament entspricht."

212 Bayer, *Herbert Bayer*, 77: "Formalismus und die Zwangsjacke eines Stils führen in eine Sackgasse. Im stets wechselnden Pulsschlag des Lebens liegt die wahre Natur der Dinge mit ihrem unbegrenzten Reichtum an Formen und Ausdrucksmöglichkeiten."

213 Sigfried Giedion, letter to Herbert Bayer, November 27, 1961, RIBA TYJ/51/2: "Ich versuchte Deinen [H. B.'s] Ratschlag zu folgen, die Illustrationen in immer wiederkehrenden Dimensionen festzulegen. ... Die üblichsten Grössen sind 30 picas (Satzspiegel), 15p, 36p, 38p. Sehr selten 44p. (bleeding), 20p."

214 Herbert Bayer, letter to Mr. H. L. Arnold, Harvard University Press, March 5, 1941, GTA 43-K-1941-03-05; Sigfried Giedion, letter to Herbert Bayer, April 7, 1941, GTA 43-K-1941-04-07(G):1.

215 See for example: Tschichold, "Massverhältnisse der Buchseite," 294-305; Tschichold, *Willkürfreie Massverhältnisse der Buchseite*.

216 For a detailed analysis on the design of *Space, Time and Architecture*, see Harbusch, "Work in Text and Images," 596-620.

217 Giedion, *Space, Time and Architecture*, 1965, 140.

218 Joan Ockman has pointed out this relationship between the two works of Bayer. Ockman, "Road Not Taken," 111. See also Moos, "Modern Art Gets Down to Business," 101-2.

219 Herbert Bayer, letter to Ise Gropius, October 12, 1960, HOU, bMS Ger 208 (431).

220 "The 'eye' in the margins of the text refers to an illustration on the page indicated." Giedion, *Eternal Present*, 1962, x.

221 Giedion, *Eternal Present*, 1964, xii: "Typography and layout are by Herbert Bayer, based on a preliminary dummy by the author."

222 Sigfried Giedion, letter to Herbert Bayer, November 27, 1961, RIBA TYJ/51/2. The dust jacket for *The Eternal Present*, volume 1 was designed by Mirko Basaldella.

223 Barbara Stucky-Boehrs, interview by the author and Bruno Maurer, April 29, 2009, Muri, Switzerland.

224 Sigfried Giedion, draft letter entitled "DUMMY," presumably to Herbert Bayer, August 6, 1961, GTA 43-T-10 (S. 2).

225 Hughes, *Letters of Lewis Mumford and Frederic J. Osborn*, 31-32.

In Between

Approaches

American
Historiography

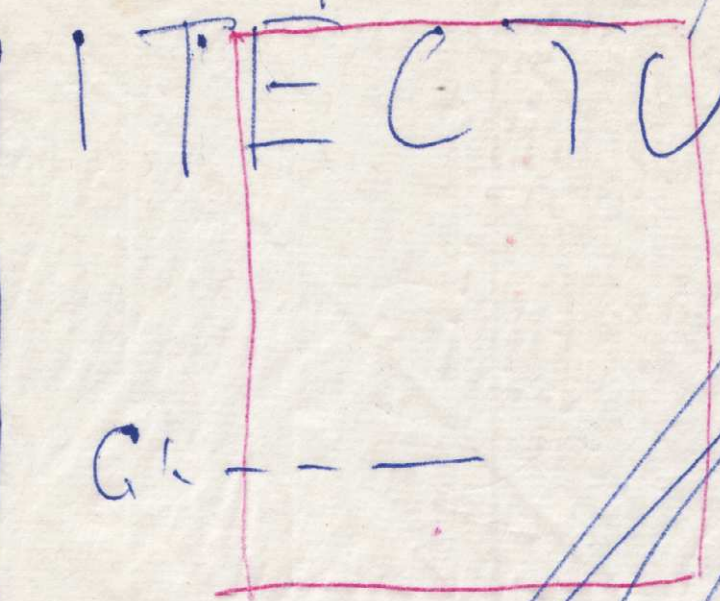
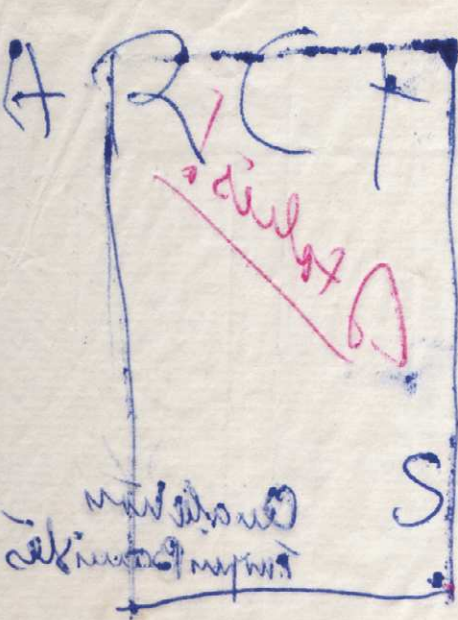
The Manifestation of a Network

“What a curious hybrid Giedion is. As if [Rudolf] Wittkower and [Vincent] Scully had mated (a lovely sight ...) and had produced an art historical monster: pure conjecture sustained by pure scholarship.”¹—Sibyl Moholy-Nagy

3.01 When Sigfried Giedion arrived in the United States, he had a clear agenda in mind: the dissemination of modern architecture, and especially the principles of the Congrès Internationaux d’Architecture Moderne (CIAM), in North America. As secretary-general of CIAM, Giedion was the main node in a vast network of architects committed to the ideals of modern architecture. During the last decade before the diasporic crossings of the Atlantic—the heyday of CIAM—alliances were forged, friendships established, and animosities incited. These debates, conflicts, and negotiations passed through Giedion’s Dolderthal home in the form of telegrams, letters, minutes, questionnaires, and many visitors. Personal inclinations and obligations, as well as opinions within the close circle of his friends inevitably affected Giedion’s historical account. This becomes even more evident when comparing the changes and supplements to *Space, Time and Architecture* over the course of its five editions. Between 1941 and 1967, Giedion significantly expanded the book with various chapters and a great number of images, from approximately six hundred to nine hundred pages, in order to give “insight into a moving process of life.”² Giedion’s account of the emergence of modern architecture was probably the first survey of its kind, and the publication was able to maintain its status as one of the best-selling architecture books over a long period of time as a result of constant revision. The book’s main thesis consequently evolved over the course of more than two decades, and inevitably reflects the author’s changing perspective.³ It is also the case that the book lost part of its initial clarity, as some of the additions should have required rewriting certain aspects of the argument.⁴ A number of Giedion’s reviewers seem to have perceived *Space, Time and Architecture* as an “objective” piece of architectural historiography, even though its author openly acknowledged that he was an inherent part of his time—declaring early on that “history cannot be touched without changing it”⁵—while other voices have considered exactly this approach to be the origin of a latent misreading of his work later on.⁶

Despite its canonic character, *Space, Time and Architecture* did not include the roots of some of the most decisive impulses in the

SPACE WITH ME AM
ARTISTECTURE



Handwritten notes in red ink on the right side of the page, including the words 'page' and 'fill' written vertically.

development of modern architecture, from Art Nouveau, to the Werkbund, to Functionalism. The English Arts and Crafts movement, including prominent names such as William Morris, Charles Voysey, and William Lethaby, as well as key figures of the Deutscher Werkbund, most notably Hermann Muthesius, are at most mentioned in marginal notes.⁷ The same holds true for those architects involved with organic, expressionist architecture, most notably Hugo Häring, Hans Poelzig, Bruno Taut, and Erich Mendelsohn, all of whom, like Mies and Gropius, were members of the Berlin vanguard group Der Ring. Almost more significant than this exclusion of important currents of architectural culture was the way Giedion commented on the works of certain contemporary architects of whose practice he did not approve. Railing against expressionist tendencies, for example, Giedion disparaged two German contemporaries:

The expressionist influence could not be a healthy one or perform any service for architecture. Nevertheless it touched almost every German worker in the arts. Men who were later to do grimly serious work in housing developments abandoned themselves to a romantic mysticism, dreamed of fairy castles to stand on the peak of Monte Rosa. Others built towers as flaccid as jellyfish.⁸

In just one sentence and without ever mentioning their names, Giedion managed to discredit both Taut and Mendelsohn, and was yet surprised that their (indirect) response was not overly friendly.⁹

Arguments and conflicts with members of Der Ring surfaced long before the release of *Space, Time and Architecture*. The treatment of Mies and his former office mate Häring is closely related to one of the incidents that took place in connection with CIAM.¹⁰ From the very first gathering at La Sarraz in 1928, Le Corbusier, one of the leading voices within the group, and Häring, a delegate for the German group, did not get along with each other.¹¹ In a letter to Giedion, Le Corbusier acknowledged that the growth of the organization might affect control over its direction, and suggested avoiding diverging tendencies in order to keep the group's vanguard character.¹² On the occasion of the third congress at Brussels in 1931, the core members of the organization eventually "silenced" Häring by forcing him out of the organization.¹³ At the request of Le Corbusier, Mies van der Rohe was elected to replace Häring as second delegate of the German group. In a manipulative next step—most members of the German delegation were off site, on a tour in town—Marcel Breuer, a close friend of both Gropius and Giedion, substituted Mies in order to guarantee a "reliable and comfortable collaboration." In a letter to Finnish CIAM delegate Alvar Aalto, Giedion downplayed the situation: "Of course, there was also some dissension this time, but—and this gives us comfort—always from the same position. Maybe you heard that we had

to handle Hugo Häring very ungently, but I hope, this will clear the atmosphere for the time being. In any case we have instantly sensed a better cohesion among the members as an effect of our action."¹⁴ That this incident made an indelible mark on Häring becomes evident in his fierce reaction to the publication of *Space, Time and Architecture* more than fifteen years later:

CIAM is Le Corbusier and Giedion. Le Corbusier is the supporter of Geometry. He is right as far as he is concerned, but this is not valid for us. Giedion is a Jew, a propaganda man, completely without conscience. Not long ago Hilberseimer wrote me that Giedion has published a book on Neues Bauen [*Space, Time and Architecture*], which represents the greatest forgery in history. The other CIAM members are nothing more than satellites orbiting around these two, or shadows.¹⁵

Many more examples of this view of Giedion's "historiographical deformations," as Manfredo Tafuri has called them, exist.¹⁶ Above all, they underline the art historian's central role in a global network of modern architects. The writing of *Space, Time and Architecture* was strongly dependent on personal commitments, and reflects the politics within the network. Giedion opened himself to charges of obscurantism, favoritism, and dogmatism by basing his selection of works and his critical judgment of them on distinctions, which, in many cases, lacked objective criteria, blurring the boundaries between historiography and propaganda.¹⁷ With *Space, Time and Architecture*, which almost exclusively served the propagation of modern architecture, Giedion created a "polemic for modernity and for a particular modern mode of beholding" in which he did not hesitate to suppress regional differences and variations within modernity or to conceal the conflicts that emerged within the movement.¹⁸

Giedion based his account of the evolution of modern architecture on a highly personal selection of architects, who, according to him, were shaping contemporary architectural practice. In an almost Vasarian manner, he prominently positioned the work of two of his most important allies in the field of architecture, Walter Gropius and Le Corbusier, in part six of *Space, Time and Architecture*. Both of them had been close affiliates of the art historian since the mid-1920s. Gropius was not only one of the driving forces behind Giedion's first appointment in the United States but was also involved in Giedion's initial encounter with the architectural vanguard on the occasion of the Swiss critic's visit to the Bauhauswoche in 1923. From that moment on, the architect and the historian were in regular contact, especially in connection with CIAM, where Gropius served as vice president beginning in 1930. As early as 1931, Giedion published, in France, the first monograph ever written on his colleague's work,

3.02
Space, Time and Architecture (1941, layout of the fourth enlarged edition, fifteenth printing, November 1965). Juxtaposition of Pablo Picasso's *L'Arlésienne* (1911–12) and the corner of the workshop wing of Walter Gropius's Bauhaus Dessau (1926).

and two decades later, he authored a complete survey of Gropius's oeuvre.¹⁹ The depiction of the German architect's work in Giedion's account of modern architecture follows a similar pattern. The critic highlighted Gropius's early work in the first edition of *Space, Time and Architecture*, subsequently adding a chapter entitled "Gropius in America" in the third edition of the book, parallel to the publication of his *Gropius: Work and Teamwork* (1954). Comparing the glassed-in corner of the workshop wing of Gropius's Bauhaus in Dessau with Picasso's *L'Arlésienne*—a visual argument that was the subject of many interpretations and debates about transparency in modern architecture²⁰—Giedion presented Gropius as a representative of "absolute modernity."²¹ In the additional chapter introduced in the 1950s, Giedion reflected on aspects of the European emigration to the United States and how it affected the "American Scene." Despite the vague suggestion of reciprocal influences between both cultural spheres, Giedion framed his view through a European lens, describing the "exodus of many of the best European minds" as the beginning of a "new spiritual orientation" of America.²² In this analysis, which could very well have included an account of Giedion's own experiences crossing the ocean, Gropius's work was compared to the functional approach inherent in American developments; his entry in the Chicago Tribune Tower competition was a "continuation of the Chicago School."²³ Giedion also pointed out Gropius's ability to work collaboratively and lauded him as one of the most important educators of his time, attributes he also addressed in his monograph on Gropius's work.

3.03

Sigfried Giedion, *Bauen in Frankreich*, detail of press proof with instructions for retouching images.

Clockwise:
Eiffel Tower, Paris (1887–89);
Victor Baltard, Halles Centrales, Paris (1854–74);
Le Corbusier and Pierre Jeanneret, Villa Stein-de Monzie, Garches (1927–28).

3.04–3.05

Le Corbusier, Unité d'Habitation, Marseille (1945–52), photographed by Giedion, ca. 1953.

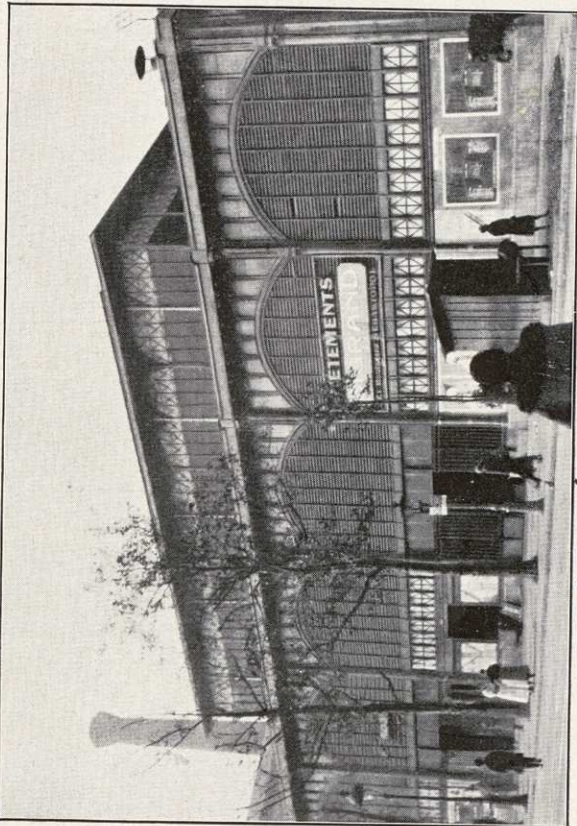
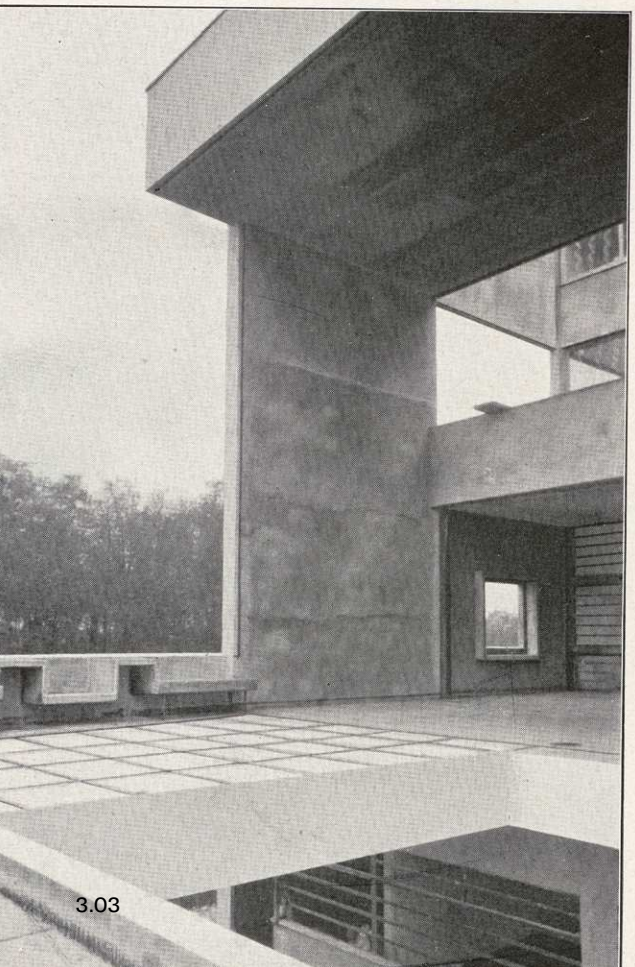
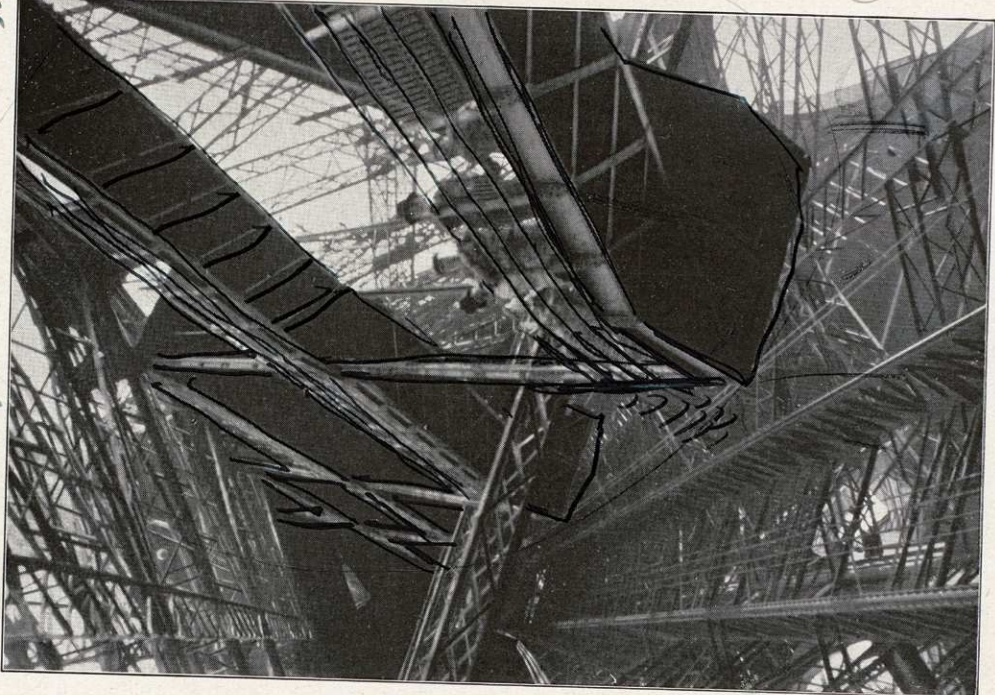
In his 1928 book *Bauen in Frankreich, Eisen, Eisenbeton (Building in France, Iron, Ferroconcrete)*, Giedion had singled out Le Corbusier as a leader of the modern developments in architecture in a chapter entitled "Le Corbusier und der Nachwuchs."²⁴ Along with a series of residential projects presented in plans, axonometric drawings, and photographs, Giedion also discussed his colleague's 1927 entry for the League of Nations. The chapter on Le Corbusier in *Space, Time and Architecture* reads like a continuation of Giedion's earlier treatise. While the first edition included essentially the same work Giedion had published a decade before his travels to America, he continuously added new projects to the chapter on Le Corbusier over the course of the book's various printings. Under the heading "Le Corbusier's Development between 1938 and 1952," Giedion introduced the civic center of Saint-Dié, the Unité d'Habitation in Marseille, and the Capitol Complex in Chandigarh, all of which he considered "landmarks." In the fifth English edition of *Space, Time and Architecture* (1967), published after Le Corbusier's death, the architect's first and only project in the United States—Harvard's Carpenter Center—was presented along with a reflection on the "legacy" of this master of modern architecture.²⁵

One of the copyright holders has not agreed to release this image open access.
Space, Time and Architecture: The Growth of a New Tradition, Fifth Revised
and Enlarged Edition by Sigfried Giedion, pages 402–403.

↳ kommt hin auf den Hängenden Steigen
 an und
 das
 Wirtshaus
 Gelände

formal
 funktionell
 verhalten
 etc

Seite 1
 Die Seite



Wunder funktionell machen, Werk. Photo.

Handwritten notes in blue ink at the bottom of the page, including the word 'Hand' and some illegible scribbles.



3.04



3.05



3.06



3.07



3.08



3.09

Along with Gropius and Le Corbusier, the dominant figures in *Space, Time and Architecture*, Giedion introduced another set of architects in later additions to the book, including most notably the Finnish architect Alvar Aalto and the Danish architect Jørn Utzon as representatives of the “Third Generation” of modern architects.²⁶ As Aalto, one of Giedion’s close colleagues, would write much later in his obituary for Giedion in 1968, the “personal commitment to the designers who *liberated* architecture and to the whole group they formed [CIAM]” was a decisive factor in Giedion’s historiography:

His personal relations with them [the architects] were particularly distinguished by the combination of generous friendship with fearless criticism, the most valuable and at the same time most vulnerable form of friendship. Only this attitude, taking both persons and the things they represent with equal seriousness, can produce results with lasting value while continuing to act as a source of inspiration to a wide creative field.²⁷

Despite Giedion’s reputation as a fearless critic, his position was not at all as impartial as Aalto claimed. Even those professionals who were a part of Giedion’s canon viewed his writings critically. As correspondence documents, CIAM’s secretary-general also had to face regular dissatisfaction from within the group. When he included a long chapter on Aalto in the first postwar printing in 1949, Giedion told his friend that the text had turned out too long in comparison to the sections on Gropius and Le Corbusier—he had initially allotted precisely the same number of pages to both of them—and that he was afraid of indignant reactions.²⁸ Hardly any of Giedion’s texts about the exponents of modern architecture escaped the group’s comment. Trying to maintain control over the reception of their work, various architects complained to the movement’s historiographer about the particular presentation and contextualization of their work, as one of Giedion’s responses to Aalto exemplifies: “From your letter ... I understand that you did not fully agree with my essay, i.e., my tone. I am sorry about this. Everybody knows that we are friendly. ... If I don’t insist on your influence in the U. S. A., it is not due to our friendship, but because as a historian, I prefer a more distanced tone. I think it is not only more just, but also more effective.”²⁹

While Giedion promoted the work of some exponents of the modern movement, he ignored others and inexorably eliminated diverging voices from the discourse. As secretary-general of CIAM, Giedion collaborated with, and was influenced by, the very architects he eventually set apart in his narrative, and therefore also avoided the tendencies that rivaled the general plot. Various critics have noted that *Space, Time and Architecture* stands out not only for its generous presentation of modern architecture but also for its striking omis-

3.06–3.09
Alvar Aalto, Baker House dormitory, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1947–49, photographed by Giedion.

sions, many of which can be explained by the same personal motivations behind the roster of names that were included in his account.³⁰

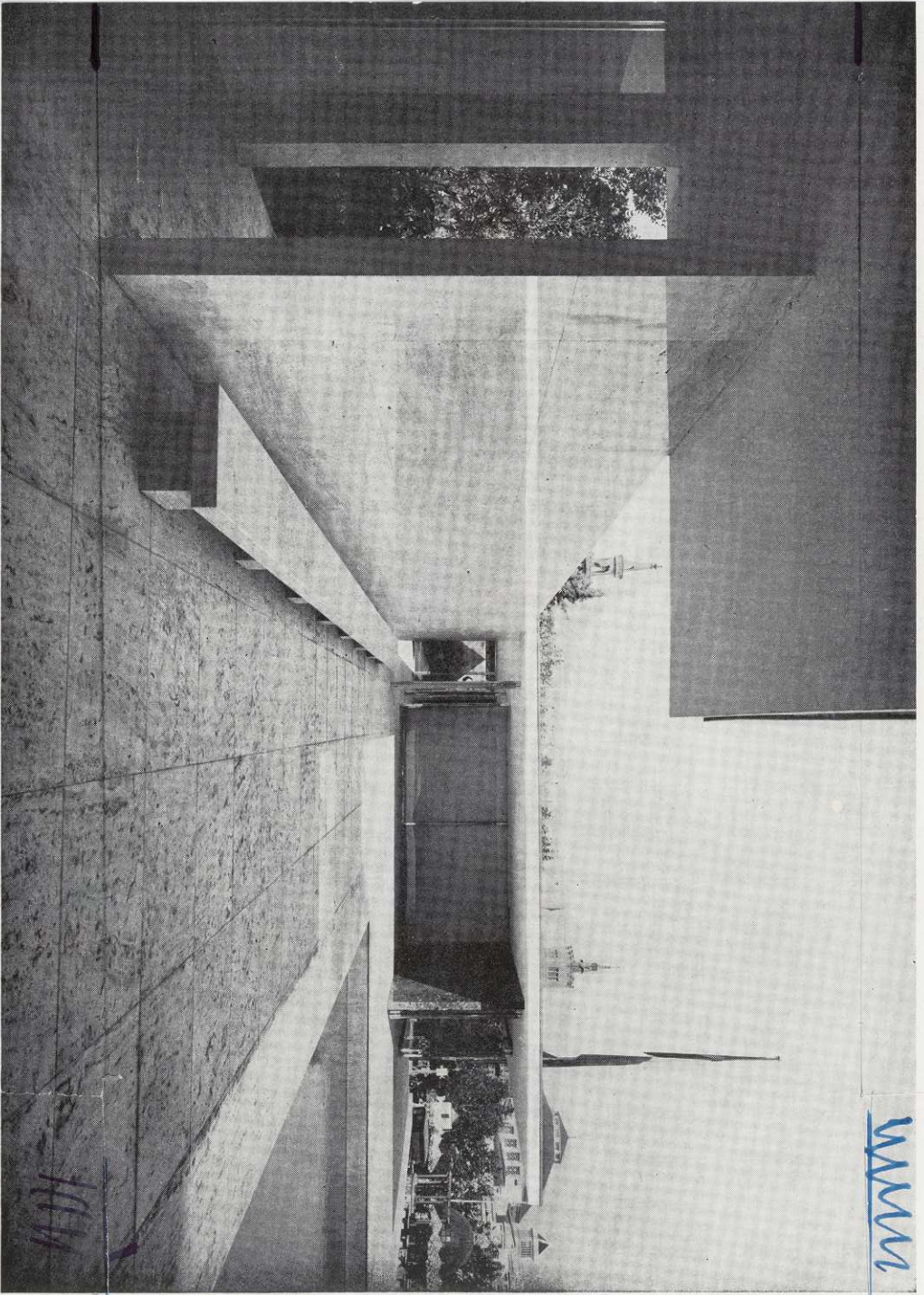
In the first edition of Giedion's gospel, the exclusion of Ludwig Mies van der Rohe is most striking. There is no doubt that Giedion was well informed about the activities of the German architect, who had left Europe just a year before his own departure to direct the Chicago-based Armour Institute (later known as the Illinois Institute of Technology, IIT). Mies was invited by Gropius to be a patron of the first CIAM congress, and served as director of the Bauhaus in Dessau, and in Berlin until its dissolution in 1933. In addition, he was a prominent member of the Deutscher Werkbund, such vanguard organizations as the Novembergruppe and Zehner-Ring, a founder of Der Ring, and a co-editor of the journal *G: Material zur elementaren Gestaltung*.³¹ Gropius may have had a role in the omission of Mies's oeuvre from Giedion's book. For the 1938 Bauhaus exhibition at the Museum of Modern Art, for example, Gropius reframed the history of the school so that it would support his own purposes, ignoring the years under the direction of Hannes Meyer and Mies, and "downplaying the school's early 'expressionist' phase."³² Giedion's position in turn was certainly influenced by Gropius's opinion, but given the extent to which Gropius and Mies intersected, it remains to be investigated how their relationship eventually affected Giedion's historiography. Another of Giedion's confidants, László Moholy-Nagy, was on less friendly terms with Mies. The architect Serge Chermayeff later recalled that he "went so far to make peace between Moholy and Mies van der Rohe who in the years they had been there [in Chicago] had never talked to each other."³³ Undoubtedly, Moholy-Nagy was one of the opinion makers in Giedion's circle, and his negative predisposition toward Mies might well have distorted Giedion's perspective.

3.10

Ludwig Mies van der Rohe, Barcelona Pavilion (1928–29), shown on page from Philip Johnson's catalogue accompanying the 1947 Mies exhibition at the Museum of Modern Art, New York, with Sigfried Giedion's annotations for inclusion in *Space, Time and Architecture*.

The omission of Mies might also be interpreted as a decisive break from the dominant currents of the North American architectural discourse. In 1947, Philip Johnson curated the first comprehensive exhibition on Mies van der Rohe, whom he declared to be the "least known" of "all the great modern architects."³⁴ With this growing public presence of Mies, who was naturalized as an American citizen three years earlier, it became gradually unavoidable for Giedion to include him in the third edition of *Space, Time and Architecture* in 1954. Under the heading "Mies van der Rohe and the Integrity of Form," he eventually introduced a full chapter on the architect, equal to those on Le Corbusier and Gropius. A letter to Philip Johnson suggests Giedion's ambivalence about his treatment of Mies:

When I was silent about Mies van der Rohe, it was not, as it is normally the case when I am silent, that I would not estimate him or that I would misinterpret the modern discoverer of the pathos of the material, but rather the fact that I never wrote a history of



Barcelona Pavilion



2442

Walt Disney p. 68

© 1968 Disney



www

contemporary architecture. Maybe because I always wanted to have insight before I do this into other disciplines, may it be mechanization or painting. I am all the more interested therefore to see how you tackle the intricate problem of Mies van der Rohe.³⁵

Giedion was conflicted about the inclusion of Mies as part of the triumvirate of modern masters. At the end of the chapter, he compares the Lake Shore Drive Apartments to the Unité d'Habitation without hiding his preference for Le Corbusier's "plastic forms" and "rough concrete surfaces" over Mies's "strict discipline that has had deep moral influence upon contemporary American architecture."³⁶

Growth of a New Tradition

Despite Giedion's initial resistance to the local architectural discourse, American scholarship is reflected throughout the Swiss art historian's work published after 1938. Instead of directly referring to his American peers, however, he frequently acknowledged their work by taking up counterpositions, as is suggested in the case of the architectural historian Henry-Russell Hitchcock, who was probably not only Giedion's greatest rival in the American sphere but also a key figure in the network that took shape in the context of the Museum of Modern Art in New York, and began to dominate the discourse on the U.S. East Coast by the early 1930s.

It is unclear exactly when Giedion initially encountered Hitchcock's writings. While correspondence between these seminal figures of twentieth-century architectural discourse is scant, there is no doubt that Giedion was in possession of Hitchcock's *Modern Architecture: Romanticism and Reintegration* (1929)³⁷—the first American account of a new architecture—before his first stay in the United States.³⁸ "The Growth of a New Tradition," the subtitle of Giedion's *Space, Time and Architecture*, can be traced back to Hitchcock's first book. Since Giedion's publication carried the working title "Life of Architecture" as late as the spring of 1939, his final choice could very well have been inspired by Hitchcock's *Modern Architecture*, in which the great discovery of a "New Tradition" in architecture was introduced.³⁹ In a spirit similar to Giedion's "European" writings (*Bauen in Frankreich* and *Befreites Wohnen*), which located the precursors of modern architecture in the Industrial Revolution around 1830 and advocated the abolition of the split between architecture, engineering, and the arts, Hitchcock confirmed, "one of the greatest triumphs of the New Tradition [is] that in its reintegration of architecture it has combined again engineering and building with architecture."⁴⁰ Both Giedion and Hitchcock were "beating against the tides of time," starting their

career with writings about their own epoch while only later dealing with earlier periods. Their mere presence on the scene, or the “rhetoric of presence,” as critic Reyner Banham noted, gave these “observational” historians the right to speak.⁴¹ However, as much as the positions of Hitchcock and Giedion overlap, their respective concepts of a “New Tradition” reveal fundamental differences.

In his *Modern Architecture*, Hitchcock proposed a genealogy for the foundation of the modern movement by relating it to the entire history of European and American architecture from 1750 to 1929. The twenty-six-year-old architectural historian’s seriousness about mastering this past in its entirety in order to understand the architecture of his contemporaries becomes apparent in the vast bibliography at the end of the book, which included many works that were relatively unknown at the time.⁴² Hitchcock aspired to present facts based on direct field research, avoiding captious reductionism. Giedion, on the other hand, proclaimed in his introduction to *Bauen in Frankreich* that he was not trying to write history in a neutral and academic way.⁴³ He saw the historian’s contribution as the selection and extraction of specific elements in the past that would be the point of departure for the future. “[Our] task,” Giedion claimed, “is first to recognize the seeds and to indicate—across all layers of debris—the continuity of development.”⁴⁴ While Giedion reinterpreted history from the perspective and spirit of his own age, Hitchcock agonized over the difficulty of remaining neutral, and struggled between the objectivity of the historian and the subjectivity of the critic.

Hitchcock locates the beginning of the New Tradition with the disintegration of architecture at the end of the Romantic era, and in the work of Henry Hobson Richardson, whom he considered the precursor of the New Traditionalists. According to Hitchcock, the “New Tradition in architecture appeared as soon as architects turned from the eclecticism of taste to the eclecticism of style with the intention of founding a rational and integrated manner.”⁴⁵ The “eclecticism of taste” refers to the revivalism in Romantic architecture and its aspiration to design each individual building in a single style from the past, while the “eclecticism of style,” common among the architects of the New Tradition, refers to the use of many different styles freely composed into a new form of architecture.

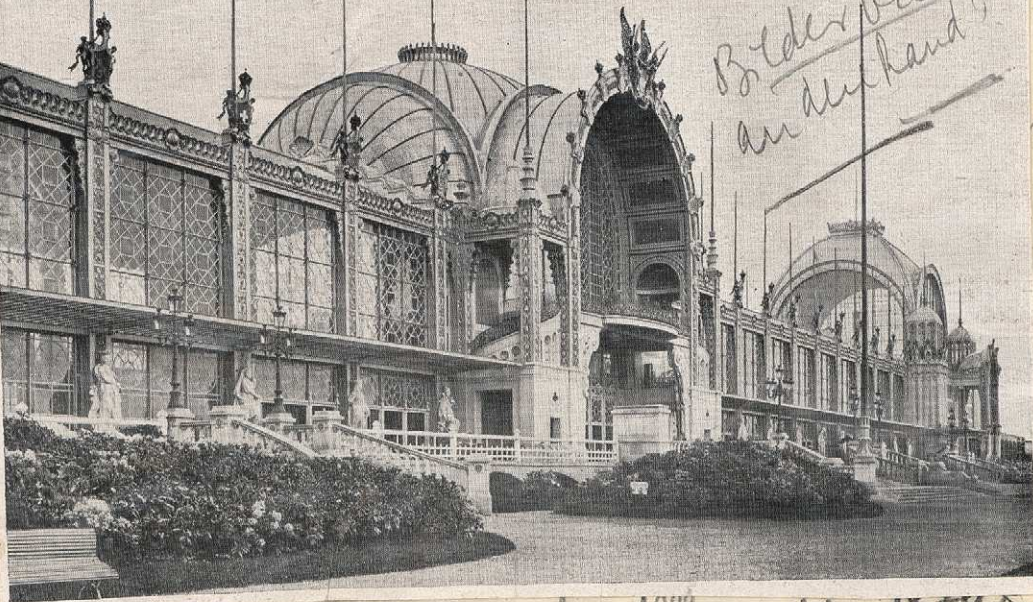
The protagonists of Hitchcock’s first generation of New Traditionalists are defined as a humanistic camp that reaches back to the 1880s, particularly the scene in Chicago, including American architect-engineers such as Louis Henry Sullivan and Europeans such as Gustave Eiffel and Pierre Cuyppers. Hitchcock further differentiated between an “unconscious” New Tradition attributed to Richardson and his generation and its further development as a “conscious” New Tradition, which was propelled by the second generation formed by Auguste Perret, Hendrik Petrus Berlage, and Josef Hoffmann. He de-

clared Chicago the birthplace of the New Tradition in America, with the work of Frank Lloyd Wright as its primary contribution.⁴⁶ With respect to developments in France, Hitchcock consequently warned that “the danger already evident in New York is that America will copy this special and not very desirable form of the New Traditionalism, forgetting that in Frank Lloyd Wright we already possess a far greater architect than even Perret.”⁴⁷

In Hitchcock’s account, the New Tradition reached its maturity in 1910, the year Giedion considered the end of an American influence on Europe. For Hitchcock, this moment marked the point in time when his New Tradition finally reached out to Europe, more precisely to the Netherlands, Austria, Germany, France, and Scandinavia—“all else,” he wrote, “is provincial and imitative, parallel and subsidiary, or merely a continuation of the transitional architecture of craftsmanship.”⁴⁸ Hitchcock considered the 1925 *Exposition Internationale des Arts Décoratifs et Industriels Modernes* to be both the conquest of Europe by the New Traditionalists and the beginning of what he labeled “New Pioneers,” a group of younger men including architects such as J. J. P. Oud, Walter Gropius, and Le Corbusier, working according to principles that “have not been taken into account in the theory of American contemporary architecture although well known in the practice of contemporary engineering.” Shortly after submitting the manuscript for his book on the emergence of modern architecture, Hitchcock began to shift his interest to the “New Pioneers.” In the following years, Hitchcock began to focus almost exclusively on the Dutch scene, particularly on Oud, whom he visited at his Rotterdam office in 1930.⁴⁹ Giedion, on the other hand, was inclined toward the new tendencies in France, above all the works of Le Corbusier.

While Hitchcock tried to group the various architectural movements according to specific styles, Giedion was interested in the notion of history as an ongoing “process,” a “pattern of living,” and therefore aimed to draw a picture of a larger development, to synthesize the multifaceted progressions of the past into a contemporary viewpoint.⁵⁰ In all of Giedion’s publications, modern architecture was correspondingly framed within a wider context of traditions—the Renaissance and Baroque periods, as well as nineteenth-century engineering—and as such was positioned as a significant part of a larger cultural epoch.

While Hitchcock’s elaborations on the New Tradition must have been of interest to Giedion, the Swiss historian already had been exposed to a discussion about the role of tradition in architecture in his native country. In 1923, Dutch architect Mart Stam, who was living in Switzerland at the time, published an essay entitled “Holland und die Baukunst unserer Zeit,” which appeared over the course of four issues of *Schweizerische Bauzeitung*.⁵¹ In this piece, Stam proposed that tradition was subconsciously integrated in the work of



Bilder von
an der Hand

ISTA
NEOE
BAUE
EINE
MO

Fig. 1: Glastempel der Pariser Ausstellung von 1878

LEBEN WIR TRADITIONEN
TRADITIONENLOS

AUFKLÄRUNG
ÜBER DIE GANZE
ENTSTEHUNG
DES NEUEN
BAUENS BRINGT



Erasmus, Bauhaus

any architect, and for that reason he condemned any conscious revival of the past. In a spirit similar to Giedion's later campaign against the eclectic tendencies of nineteenth-century architecture, Stam was convinced that a strong traditional bias would lead to a mechanical reproduction of previous building styles. Through the vanguard publication *ABC*, Stam disseminated similar arguments only a year later.⁵² In the various published reactions to this article, revisionist tendencies promoting a vernacular approach and the formation of a regional identity became evident.⁵³

3.11 As early as 1928—before the publication of Hitchcock's first treatise—Giedion published *Bauen in Frankreich, Eisen, Eisenbeton*, his first attempt to anchor modern architecture in a historical narrative. Handwritten mock-ups for a leaflet to promote Giedion's initial manifesto on behalf of the modern movement suggest his perception of tradition as an inherent part of contemporary architecture: "IS MODERN ARCHITECTURE A FASHION? ARE WE LIVING WITHOUT TRADITION? EXPLANATIONS ABOUT THE WHOLE DEVELOPMENT OF MODERN ARCHITECTURE IS BROUGHT TO YOU BY: SIGFRIED GIEDION, BUILDING IN FRANCE · IRON · FERROCONCRETE"; and from a review by Adolf Behne, he cited that the book "covers the *particular tradition* of our time."⁵⁴

Sigfried Giedion, mock-up of advertisement leaflet for *Bauen in Frankreich* (1928), ca. 1928.

Approximately a year before the publication of *Bauen in Frankreich*, Peter Meyer, an architect and critic who eventually served as editor in chief of the influential journal *Das Werk*, released a book entitled *Moderne Architektur und Tradition* (1927). Meyer—whom Hitchcock recognized along with Giedion as one of Switzerland's "two excellent critics"⁵⁵—approached the question of tradition not primarily as an aesthetic problem but rather as a sociological issue. He claimed that each generation had to reposition itself relative to the previous generation, especially with regard to its way of life.⁵⁶ Distinguishing between *lebendige Tradition* (living tradition) and *leere Konvention* (empty convention), Meyer introduced an understanding of tradition that allowed him to absorb the architectural tendencies of which he approved, and to eliminate those traditions that did not fit into his larger picture.⁵⁷ Meyer and Giedion, who would become rivals only about a decade later, shared a comparable view at this time—an understanding of tradition based on Hegelian thought, which suspended the dialectic regarding the contradiction of tradition and progress, as the term "New Tradition," adopted by Giedion, reflects.⁵⁸

With a background in mechanical engineering and strong roots in German art-historical tradition,⁵⁹ Giedion followed the principle of a subjective understanding of past developments to fix on a lineage that included the Renaissance and Baroque periods as well as the "engineer's aesthetic" of the late nineteenth century.⁶⁰ In the introduction to *Space, Time and Architecture*, he noted:

We intend to see how our period has come to consciousness of itself in one field, architecture. To do this we must understand the architectural inheritance of our period, the knowledge, which had been continuously evolved in the preceding periods. These periods do not have to be examined in their entirety. It will be enough to see how a new space conception appears in the early Renaissance with the revival of the direct and disinterested study of nature. Two and a half centuries afterward in late baroque times, this conception is given a new boldness and flexibility.⁶¹

Giedion's interpretation of the term "new tradition" implies that some qualities and factors remain valid throughout different time periods. The word "new" was therefore not implemented to designate a concept without ties to the past. Rather than the propagation of something essentially new, Giedion aspired to rediscover the "most primitive things" that had been discovered by man, establishing an alternative to the "ruling taste" (*herrschender Geschmack*) of the nineteenth century and its "devaluated symbols." In the course of adopting Hitchcock's term, still lacking a memorable subtitle for his book, Giedion simultaneously reinterpreted his rival's definition of the New Tradition, simplifying Hitchcock's fairly complex construction. In order to do so, he introduced the concept of "constituent" and "transitory facts." While transitory facts lack permanence and tend to disappear, "constituent facts are those tendencies which, when they are suppressed, inevitably reappear. Their recurrence makes us aware that these are elements which, all together, are producing a *new tradition*."⁶²

The subtitle of Giedion's book also includes the word "growth," implying a framework that allows for further evolution. Arguing that history is not a repository of unchanging facts, but instead a process of changing attitudes and interpretations,⁶³ Giedion emphasized that "history is not static, but dynamic," lamenting that "the historian has often used his office to proclaim the eternal right of a static past. He has gone further and has used arguments based on past happenings to restrict and distort the future."⁶⁴ Repeatedly, Giedion stressed that individual time periods need not be investigated in detail. In his opinion, the larger developments and ideas were sufficient for defining his New Tradition. He was convinced that architectural history had to be written with contemporary conceptions in mind, to uncover the hidden facts that previous generations had overlooked.

Style versus
Evolution

“Giedion was the great theoretician who was most believed and wrote the biggest book in this country—because Hitchcock was hard reading, Hitchcock was complicated and interested only in forms—and Giedion tied it up to world history and social upheaval. He believed that modern architecture was the end of architecture because that was the first time in history that architecture and technology and sociology all met in one place, which Hitchcock and I didn’t believe at all.”⁶⁵—Philip Johnson

Aided by the architect and curator Philip Johnson, Henry-Russell Hitchcock helped to force modern architecture into a stylistic strait-jacket that reduced the fragmentary and contradictory production of the first generation of modern architects to a single stylistic designation that ignored social components. Johnson used the term “modern style” as a synonym for what was known as “modern architecture” or also the “modern movement” in Europe.⁶⁶ The expression was eventually transformed by Johnson, Hitchcock, and Alfred Barr, director of New York’s Museum of Modern Art (MoMA), into the “International Style”—as the accompanying publication of a now famous 1932 exhibition was titled—a term that remains in currency today.⁶⁷ While MoMA’s *Modern Architecture: International Exhibition* and its catalogue still contained sketches and projects that only marked the beginning of a modern development, a subsequently published book, *The International Style: Architecture since 1922*, fully realized Hitchcock and Johnson’s intention.⁶⁸ Philip Johnson described their approach in a letter to J. J. P. Oud, who was positioned as one of the leading architects in the exhibition: “Hitchcock is naturally writing most of the text. We are tackling it not from the historical side, but from the angle of the problems that face the style now. Of course, the criticism will be purely aesthetic much to the distress of our German sachlich friends who think of nothing but sociology.”⁶⁹ Johnson’s attitude also comes across in an unflattering note about Giedion, in which he characterizes the art historian as “a rather dried-up functionalist critic,” who is “better on housing and standardization than on architecture,” and “more important for his contacts than for himself.”⁷⁰ Apart from the revelation of his personal opinion about Giedion, this short comment clearly indicates Johnson’s lack of interest in the far-reaching cultural implications of architecture, and an exclusive focus on form. While Hitchcock’s position was still ambivalent in his *Modern Architecture*, he was pushed toward a classification of architecture into styles, based on formal qualities, under the influence of his colleagues.⁷¹ In the book, each project was reduced to a representational photograph, at times combined with a simple line drawing of a plan.⁷²

Even though Giedion was not at all political, and hardly advocated the social currents running through CIAM, Hitchcock and Johnson's attitude did not correspond with his own orientation to modern architecture. His conception of space was much more in accord with the general approach of the Bauhaus, including Gropius's ideas. Anticipating the developments in the United States, Gropius observed in his 1935 treatise *The New Architecture and the Bauhaus* that "'modern' architecture became fashionable in several countries; with the result that formalistic imitation and snobbery distorted the fundamental truth and simplicity on which this re-nascence was based."⁷³ In addition to Gropius, Giedion would find further reinforcement for his views in the writings of his Franco-Swiss colleague Le Corbusier. In his 1930 publication *Précisions sur un état présent de l'architecture et de l'urbanisme*, Le Corbusier attacked the eclectic principles predominant in the architecture of previous periods. His argument was accompanied with a sketch of six different orders of columns, crossed out with a bold red "x," and annotated with the following unapologetic lines: "Ceci n'est pas l'architecture, ce sont les styles" (This is not architecture, these are styles).⁷⁴

Giedion's historiographic project, which banned the term "style" in favor of an evolutionary history, was strongly rooted in the approaches of his teacher Heinrich Wölfflin and the Swiss art historian and Renaissance scholar Jacob Burckhardt.⁷⁵ In the nineteenth century, the notion of style was largely defined by external characteristics. Burckhardt's *Formgeschichte*, however, "assumed an internal coherence—not only in the plastic arts and philosophical developments, but also in manners, political activity, and military tactics."⁷⁶ Wölfflin further developed these principles by visually comparing artworks of consecutive time periods in order to refine their stylistic description. Of course, Giedion was also influenced by other theories of style that emerged in the nineteenth century, most notably in Gottfried Semper's *Der Stil in den technischen und tektonischen Künsten* (1860) and Alois Riegl's *Stilfragen: Grundlagen zu einer Geschichte der Ornamentik* (1893). The debate over the term "style" surfaced in European architectural discourse beginning in the early twentieth century and revolved around such figures as Hermann Muthesius in Germany and Peter Meyer in Switzerland.⁷⁷

Regarding the concept of an "international style," Giedion observed that "in architecture the word 'style' has often been combined with the epithet 'international,' though this epithet has never been accepted in Europe." He further claimed that "the term 'international style' quickly became harmful, implying something hovering in mid-air, with no roots anywhere: cardboard architecture. Contemporary architecture worthy of the name sees its main task as the interpretation of a way of life equivalent to our period."⁷⁸ Giedion was concerned that delimiting architecture within a notion of style would

foster a formalistic approach to design. He was not by any means the only critic of Hitchcock and Johnson's approach. Rudolf Schindler's reaction to the premise of the MoMA exhibition is representative of the view shared by many European émigrés:

It seems to me that instead of showing late attempts of creative architecture, it tends towards concentrating on the so called 'International Style.' If this is the case, my work has no place in it. I am not a stylist, not a functionalist, nor any other sloganist. Each of my buildings deals with a different *architectural* [original emphasis] problem, the existence of which has been entirely forgotten in this period of rational mechanization. The question of whether a house is really a house is more important to me than the fact that it is made of steel, glass, putty or hot air.⁷⁹

But even within the group that organized the exhibition at MoMA, critical voices were raised. Philip Johnson had invited the social historian Lewis Mumford to contribute to the housing section of the show in 1931, even though the curators were in fact countering Mumford's sociocultural approach. Over the course of the preparations for the event, Mumford found himself in an increasingly problematic situation, as his approach to architecture did not allow him to agree with many of the decisions made by Johnson and Hitchcock. "Architecture," the American critic argued, "[is] a social art [and] cannot depend upon the existence of men of genius."⁸⁰ In a letter to Johnson, Mumford eventually suggested that he should "give a section of the show to the history of modern architecture so that no one would think it was invented by Norman Bel Geddes and the Bowman Brothers ... the day before yesterday."⁸¹ Otherwise, he was afraid, it would be "a typical Museum of Modern Art modern exhibition—and that's pretty, pretty bad—barbarous in fact."⁸²

Giedion and Mumford's fierce criticism of Hitchcock's conception of a linear progression of styles did nothing to lessen the effect of the phenomenon that was initiated by the MoMA exhibition or its related publication. European modernism was reduced to a discussion of style and turned into an "object for consumption," a fact Hitchcock was well aware of—something he admitted to Giedion years later.⁸³

Giedion never came to an agreement with Hitchcock, as he made clear on various occasions throughout his life. In his opinion, the "label 'International Style' reveal[ed] something rather clearly: contemporary architecture seen with the eye of the nineteenth century. Contemporary architecture was seen as a heap of forms and never as formative of a way of life. Contemporary architecture regarded as a kind of fashion, which must shift gears every few years."⁸⁴ In that sense, the approach put forth by Hitchcock and Johnson represented precisely the issues Giedion had argued against since the beginning of his

advocacy of modern architecture. Over the years, he continued to voice his criticism, most notably in the foreword of the fourth, enlarged edition of *Space, Time and Architecture*, published in January 1962.⁸⁵ Referring pointedly to New York's Lincoln Center (Philip Johnson was one of its architects), Giedion held the International Style responsible for the fashionable approach to modern architecture, which ended in a "romantic orgy," the results of which could be seen "in smallbreasted, gothic-styled colleges, in a lacework of glittering details inside and outside, in the toothpick stilts and assembly of isolated buildings of the largest cultural center," a "kind of playboy-architecture," as he concluded.⁸⁶

The discussion of style makes clear that Giedion and Hitchcock were influenced by different traditions of academic training and architectural discourse from their respective sides of the Atlantic. Nevertheless, it is probable that both historians followed each other's work—admittedly or not. While they had different positions "on the essence of architecture," they knew that they could "help each other much," as Johnson admitted in a letter to his colleague.⁸⁷ There were several attempts from either side to meet personally in the late 1930s and the early 1940s, but over time their mutual interests grew into mutual alienation, and their exchanges ceased during the postwar period.⁸⁸

Architectural historians and critics inevitably cannot escape larger cultural and social spheres. Similar to Giedion's tight professional network in Europe and his support within the academic setting on the East Coast, Hitchcock was well integrated into the New York scene and closely affiliated with a group of cultural leaders. The institutional setting of the Museum of Modern Art, for which Hitchcock prepared no less than ten exhibitions, constituted a parallel world to Giedion's tight group of European émigrés.⁸⁹

The Discovery of American Developments

In the United States, there was much discussion about the origins of modern architecture during the interwar years. It was perceived as an "unwelcome European import" on the one hand, and as a "product of ... native genius" on the other.⁹⁰ Like other American voices, Hitchcock traced the roots of modern architecture to Chicago and its development at the turn of the century. The architectural historian was particularly interested in smaller-scale work, such as Frank Lloyd Wright's residential projects in Chicago and its suburbs. In the design of the Robie House (1908–1910), Hitchcock saw the possibilities of the New Tradition brought to perfection, and in some

ways even outdone.⁹¹ Hitchcock repeatedly positioned Wright as a successor to Louis Sullivan, but warned that the inherited influences “weaken ... his intellectual and logical command of his problems” and support “his cult of ornament and embellishment as essential to architecture.”⁹²

Hitchcock’s ambivalent treatment of Frank Lloyd Wright was carried to an extreme in MoMA’s *Modern Architecture: International Exhibition*. Even though Hitchcock and Johnson agreed that Wright could not be integrated as one of the “New Pioneers”—in their opinion he was part of the old guard, a survivor of the Chicago School, or a “half-modern” architect⁹³—the exclusion of this respected figure would have seriously weakened the American section of the show. Ironically, Lewis Mumford, who was regularly involved in heated debates with Wright, ended up as a negotiator between the hardheaded architect (who himself was skeptical about the presentation of his projects alongside the work of his European colleagues) and the curators.⁹⁴ When the show finally opened, Mumford praised it as “a great triumph for Mr. Frank Lloyd Wright” in his *Sky Line* column for *The New Yorker*.⁹⁵ The exhibition catalogue and the subsequent book *The International Style* each presented a slightly different picture of modern architecture. While Wright’s oeuvre was treated as equal to the work of Le Corbusier, Mies van der Rohe, and others in the catalogue, it was completely omitted from the collection of approximately eighty projects presented in the book. In this second account, Wright was moved into the introductory passage on history as a transitory figure, framed as an “eternally young spirit [who] rebels against the new style as vigorously as he rebelled against the “styles” of the nineteenth century.”⁹⁶

In *Space, Time and Architecture*, Giedion also faced a problem with the inclusion of Frank Lloyd Wright. Giedion’s narrative, bridging directly from the early protagonists of the Chicago School to the leading figures of the European vanguard, left no place for Wright. Even back in Europe, the architectural historian had been ambivalent about the work of the most reputable American architect of the time. In an article entitled “Die architektonische Front,” written in 1931 and published in the Dutch journal *de 8 Opbouw* one year later, Giedion mocked Wright, and claimed that the “forging [of] his concrete blocks with an ornamental stamp, is not the dawn, but most likely the aftermath of romantic childhood memories,” though he also credited the American architect with the thorough investigation of fundamental questions of housing.⁹⁷ Giedion was fascinated with Wright’s early residential projects; however, he did not approve of the ornamental exuberance present in the architect’s work after his return from Europe, particularly the houses he constructed in California.⁹⁸ Ornamentation was an expression of the nineteenth century’s “ruling taste,” which Giedion so resolutely opposed.

The initial influences on Giedion's understanding of Chicago's significance for the development of modern architecture are all rooted in Europe. Frank Lloyd Wright's early work was made available to a European audience through the publication *Ausgeführte Bauten und Entwürfe*—more commonly known as the Wasmuth Portfolio—as early as 1910.⁹⁹ In a lecture he gave in Zurich in 1912, Hendrik Petrus Berlage reported to a number of architects and engineers that a new architecture, which “could already offer some significant results,” was emerging in America.¹⁰⁰ As a result of the lecture and its publication in three consecutive issues of *Schweizerische Bauzeitung*, Giedion was most likely aware of Berlage's thinking. Giedion was also a close friend of Werner Moser, who spent approximately two years in Wright's office before returning to Switzerland in 1924 to establish an independent practice. It can be assumed that there was an intense exchange of ideas between the two proponents of the Swiss avant-garde, as they both lived and worked in Zurich during the late 1920s and early 1930s. Considering their common projects, Moser certainly directed Giedion's attention to the oeuvre of his “Meister,” Frank Lloyd Wright.¹⁰¹ Lewis Mumford provided an alternative reading of Chicago's architecture culture, which turned out to be influential for Giedion's own account of the rise of the Chicago School. While acknowledging Wright and Sullivan—the two major North American architectural icons Giedion knew before his first crossing of the Atlantic—he repeatedly stressed that he could not comprehend their significance only from books and needed to see their work.

A turning point in Giedion's approach to Frank Lloyd Wright occurred in the late 1930s. After almost a decade of disuse, Wright had begun to experiment with reinforced concrete construction in several commissions, among them the Kaufmann Residence in Pennsylvania and the S. C. Johnson Headquarters (Johnson Wax Building) in Racine, Wisconsin.¹⁰² This revised structural and material approach, much closer to the ideals Giedion promoted, prompted him to advocate a more abstract, industrial form of ornamentation to enrich architecture. Aware that it would be difficult “to bring to life the term luxury in architecture in a new and currently feasible way,” Giedion tried to translate the idea of indulgence into the context of contemporary architecture—he specifically declined to call it modern—and argued that the adoption of industrial products, mechanically manufactured and serially produced, could achieve special effects and create a new form of luxury.¹⁰³ After visiting the construction site of Wright's Johnson Wax Building on his first trip to the Chicago area in 1939, Giedion enthusiastically reported that Wright achieved this luxury by means of “silver light and plasticity of form,” materialized in the sculptural columns and the luminous ceiling made of industrial glass tubes.¹⁰⁴

3.12

Frank Lloyd Wright, Larkin Building, Buffalo, NY (1903–06), photographed by Giedion, 1939.

3.13

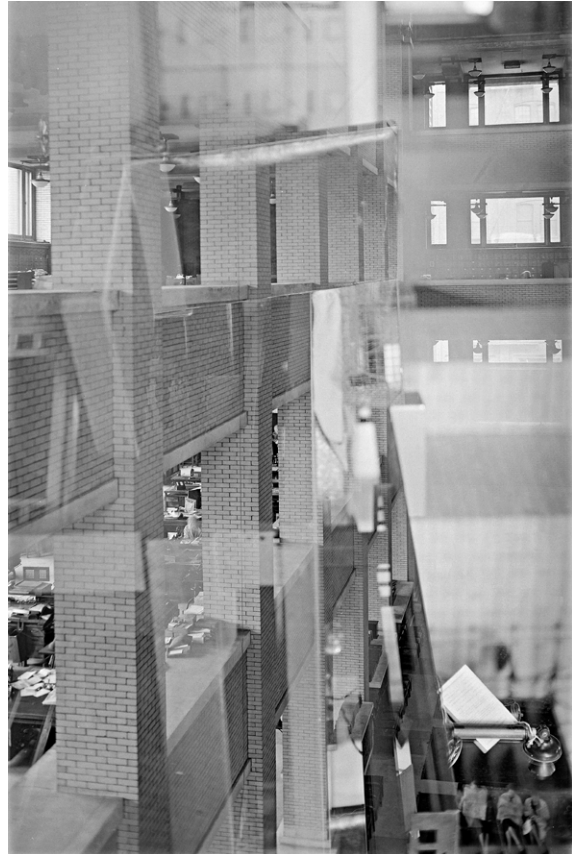
Frank Lloyd Wright, Darwin Martin House, Buffalo, NY (1903–05), photographed by Giedion, 1939.

3.14–3.15

Frank Lloyd Wright, Johnson Wax Building, Racine, Wisconsin (1936–39), photographed by Giedion, 1939.

3.16

Frank Lloyd Wright, Johnson Wax Building, Racine, Wisconsin (1936–39), detail of skylights made of industrial Pyrex glass tubes.



3.12



3.13



3.14



3.15



3.16



3.17



3.18

This shifting approach to Frank Lloyd Wright's work left its traces in Giedion's *Space, Time and Architecture*. Wright remained one of the few protagonists on Giedion's stage who could never be tamed and classified according to one of his categories. The American architect occupied a special position in Giedion's writing, or as the critic himself put it: "What is to be grasped, what can be observed of [Wright's] direct influence, is often only superficial and leads to misunderstanding. Whoever as an architect has tried to imitate or even to follow him, whether in Europe or America, has misused his work and misinterpreted his spirit."¹⁰⁵ With Wright's cultural significance in mind, Giedion finally devoted a self-contained chapter exclusively to the American master, who, according to Giedion, "had less debris to clear away than the Europeans," and was fortunate to have "the anonymous American tradition" at his disposal.¹⁰⁶

Four years after Mumford released *Sticks and Stones*, his first investigation of the architectural developments in the late nineteenth century, Giedion published *Bauen in Frankreich, Eisen, Eisenbeton*, in 1928. It marked the beginning of a systematic effort to root modern architecture in the accomplishments of the nineteenth century, and simultaneously translated the functional qualities of steel and ferroconcrete engineering into the realm of architecture. While Giedion's unrestrained admiration for the great iron constructions of the World's Fairs between 1851 and 1889 becomes apparent in the book, there is, with the exception of one footnote, no mention of developments in North America.¹⁰⁷ In contrast, Mumford declared the United States—specifically during the period from 1880 to 1895—the birthplace of modern architecture in his 1931 book *The Brown Decades*. In this self-proclaimed "reevaluation of American architectural history," he argues that architects like Henry Hobson Richardson, Louis Sullivan, Daniel Burnham, John Wellborn Root, and Frank Lloyd Wright created a body of significant and innovative work predating European modernism by a decade.¹⁰⁸ Mumford established an American lineage starting with Richardson—whom he considered the last in the great medieval line of master masons, and simultaneously the initiator of the modern movement that brought order to American architecture¹⁰⁹—followed by Sullivan—whom he lauded as the "the first mind in American architecture that had come to know itself with any fullness in relation to its soil, its period, its civilization, and had been able to absorb fully all the many lessons of the century."¹¹⁰ The culmination of this succession was Frank Lloyd Wright, an architect whom Mumford considered ahead of his time and as such the bridge to the modern movement in Europe.¹¹¹ In a 1927 article, he wrote: "The Americans who look to-day at the work of Gropius and Mendelsohn and Taut in Germany, of Oudt [*sic*] in Holland, or Garnier and Le Corbusier and Mallet-Stevens in France do not perhaps realize that the inspiration of this work came largely from America, and in particular from

3.17

Daniel H. Burnham,
Reliance Building,
Chicago (1890–94).

Chicago.”¹¹² Like Giedion, Mumford aimed to create a continuous line of development. For this reason, Sullivan and Wright figured as “vital links between the nineteenth century and the younger generation of American architects,” whereas in Hitchcock’s *Modern Architecture*, as has previously been outlined, these two architects marked the end of the New Tradition.¹¹³

Until he delivered his Norton Lectures, Giedion’s observations were inclined to be Eurocentric, and lacked any mention of North American precursors who might have influenced the emergence of modern architecture.¹¹⁴ Undeniably, he had a clear agenda to follow: the promotion of the European vanguard. On the other hand, Giedion always insisted on seeing a building before writing about it. This also held true for his investigation of American architecture. “It is imperative to determine the American influence on Europe,” Giedion wrote in a letter to his friend Moholy-Nagy, “[e]ven if I can get an idea of it after all I’ve read and the pictures I’ve seen; but without the study of the Midwest, I would never dare to write a single line about it.”¹¹⁵

3.18
Parking lot, Chicago,
photographed by
Giedion, ca. 1939.

As a consequence of this attitude, his lecture “America Influences Europe,” including works by Frank Lloyd Wright and an initial mention of the Chicago School, only took place toward the end of the lecture series, not long after his first visit to Chicago at the beginning of 1939. This was the only time Giedion openly discussed an American influence on Europe, rather than an accumulation of independent architectural developments, as *Space, Time and Architecture* suggests. After this short foray into the “local” architectural context, Giedion moved on to the primary objective of his presentations, the propagation and legitimization of a particular approach to modern architecture, as it had been established within the framework of CIAM over the past decade. In retrospect, he attributed great importance to his firsthand experiences in the United States, that “only now it [was] possible [for him] to gain full insight into his own domain.”¹¹⁶

The direct access to works that Giedion had known only from descriptions and publications, as well as the exposure to the American discourse on architecture, had a significant impact on his perception and appreciation of this cultural context. Giedion’s knowledge of American architectural developments was drawn from a six-volume publication entitled *Industrial Chicago* (1891–1896), which he referred to as the “Vasari of the Chicago school,” suggesting that the city was a modern equivalent of Florence.¹¹⁷

Even if Giedion had already been aware of the importance of the triumvirate of Richardson, Sullivan, and Wright through early accounts of European architects, including Karl Moser and Hendrik Berlage, it was most likely Mumford who first offered him a broader perspective on Chicago architecture embedded in its entire cultural milieu. Mumford’s accounts certainly provided Giedion with a particular outlook on American architecture, which would eventually blend

with his own interest in an anonymous tradition. Mumford was one of the first critics to retrace the emergence of a modern American architecture and to highlight many of the buildings that would later become recognized as masterpieces of the Chicago School; in this sense, he anticipated the path taken by Giedion.¹¹⁸ In Mumford's view, architecture operated as an indicator of a society's vitality—buildings reflected not only the mastery of their architect but also the sympathy and understanding of the clients and the competence of the craftsmen involved. A strong relation between architecture and a specific local culture was important to Mumford, as the debates related to MoMA's *Modern Architecture: International Exhibition* proved. "[T]he first buildings in the United States that could properly be called either original or truly contemporary or consciously wedded to their soil," he claimed, were a result of "the movement toward utilizing the indigenous, the natural, the regional, in the dwelling house."¹¹⁹ Giedion, at the time, was less drawn to regional aspects of building, and more absorbed with an enthusiasm for emerging technologies in the aftermath of the machine age as well as its related anonymous industrial culture. His interest in the Chicago School was therefore predominantly based on a fascination for new construction methods and technical innovations inherent in American culture. Balloon frame construction, the detailed history of which is attributed to Giedion, as well as its logical continuation in steel, which formed the precondition of the first skyscrapers and the crystallization of a new architectural expression, were at the center of his attention.¹²⁰

The architectural developments in the Midwest provided Giedion with an ideal precedent to reinforce his argument that modern architecture was a continuous development beginning with a nineteenth-century engineer's aesthetic. In *Space, Time and Architecture*, this became evident when he proposed selected Chicago architects as precursors of European rationalism and stated that "with surprising boldness, the Chicago school tried to break through to pure forms."¹²¹ As much as Giedion stressed the importance of America for the architecture of the late nineteenth and early twentieth centuries, the propagator of European modern architecture dated the end of American superiority to 1910, when Europe, he claimed, took over the leading role. The Chicago School "was one of the happy moments in American architecture."¹²² In contrast to his American colleagues who tended to advance the familiar Richardson-Sullivan-Wright genealogy, Giedion's coup was the reduction of a complex and multifaceted architectural movement to a simplified triumvirate consisting of William Le Baron Jenney, Daniel Burnham, and Louis Henry Sullivan, while ignoring many other important figures. By means of his extremely effective and at times highly manipulative method of visual comparison, Giedion traced a direct connection between the Chicago School and his protégés of the modern movement in Europe:

3.19

The Chicago School and modern architecture. "Towards Pure Form," outline (ca. 1939).

Towards Pure Form

1) William Le Baron Jenney. Leiter Bldg
Detail. - 1889

a) Same - same cut - view

2.) Le Corbusier - Maison "Clarté"
Geneva 1930-

3. Reliance Building - Burnham + Co
Chicago 1894

4. Glass Tower - Mies Van der Roë
MIES

5. Sullivan - Small Office
Carson. Perie Scott - Chicago. 18

6.) Same; detail

he praised Jenney's Leiter Building for the "purity of its constructional methods" and the use of "great and simple units," and discovered its further development in Le Corbusier's *Maison Clarté* in Geneva; Burnham's Reliance Building is described as an "architectonic anticipation of the future" and presented as the inspiration for Mies van der Rohe's 1922 Glass Skyscraper project for Berlin; finally, Giedion compares Sullivan's Carson, Pirie, Scott Building to Gropius's proposal for the Chicago Tribune Tower competition, describing them as "two stages in the development of the same set of ideas."¹²³ Since mention of the ornamented base of Sullivan's building would have weakened his argument, Giedion selected a detail of the upper floors for publication.

While he did not make any groundbreaking revelations, his encounters with American scholarship had deep implications for his future work. In Giedion's opinion, the separation of skills between engineers and architects caused a growing uncertainty in architectural problems of the time.¹²⁴ He was probably the first historian to recognize that works associated with the Chicago School in its development between 1883 and 1893 were for the most part anonymous, many of them abolishing the disciplinary boundaries between architecture and engineering.¹²⁵ The Swiss visitor was met with astonishment when he presented the crucial role of the United States in the development of modern architecture to a local audience, and became rather concerned when he realized that there was a "widespread indifference to the immediate past."¹²⁶ By sharing his insights with the Chicago public, Giedion aimed to create awareness and trigger the recording of "much information, which might otherwise have been lost."¹²⁷

The discovery of an anonymous American tradition, the accentuation of the Chicago School, as well as the treatment of Frank Lloyd Wright indicate that Giedion's residence in the United States had a lasting influence on his work in general, and the disposition of *Space, Time and Architecture* in particular. Even though large parts of the book were conceived and assembled in Europe, Giedion's exposure to the actual works under discussion, as well as his encounters with leading American architects and critics, left a significant mark on his narrative.

Binocular Visions

In a 1949 review of both *Space, Time and Architecture* and *Mechanization Takes Command*, the architectural historian Nikolaus Pevsner declared that "[a]mongst all architectural critics writing in America or for America Lewis Mumford and Sigfried Giedion are the two most powerful."¹²⁸ Although they disagreed on certain fundamental

3.20–3.22

Final spreads of *Space, Time and Architecture* (1941, layout of the fourth enlarged edition, fifteenth printing, November 1965). Visual comparisons of William Le Baron Jenney's Leiter Building, Chicago (1877–79) with Le Corbusier's *Maison Clarté*, Geneva (1928–30); Daniel H. Burnham's Reliance Building, Chicago (1890–94) with Ludwig Mies van der Rohe's Glass Skyscraper Project (1922); and Louis Sullivan's Carson, Pirie, Scott Building (1899–1904) with Walter Gropius's competition entry for the Chicago Tribune Tower competition (1922).

points, the methodological intersections of these two influential voices in twentieth-century architecture and urban planning exemplify the cultural exchanges taking place between the United States and Europe.

Mumford's first and probably also most formative exposure to European discourse dates back to his college education, when he studied the theories of Sir Patrick Geddes.¹²⁹ The Scottish botanist and geographer's evolutionary approach to planning, which involved "decipher[ing] the origins of cities in the past, and unravel[ing] their life-processes in the present," would provide the foundation for Mumford's own intellectual project, which resulted in a substantial production of more than twenty books.¹³⁰ From his mentor, whom he only met twice in his life, Mumford inherited a fascination with a wide range of fields of knowledge and the conviction to reject specialization according to academic disciplines in favor of a broad study of "civilization."¹³¹ While at first uncomfortable without any formal training, and hovering between roles—in a letter to Geddes, the young American wrote: "What *am* I? A journalist? a novelist? a literary critic? an art critic? a scholar? a sociologist? ... MUST I TAKE A DEFINITIVE LINE?"¹³²—Mumford became confident in his role as a generalist later on in his career. *Cities in Evolution* (1915), Geddes's most comprehensive book on the city, drew Mumford's attention to Camillo Sitte's urban studies as well as Ebenezer Howard and Raymond Unwin's thoughts on the garden city, which had a lasting effect on Mumford's writings on urbanism in his home country.¹³³

Mumford's first direct contacts with currents of contemporary European architecture can be traced back to Erich Mendelsohn's visit to the American Midwest in 1924, the outcome of which became widely known through his impressively illustrated book *Amerika: Bilderbuch eines Architekten* (1926).¹³⁴ With a copy of Mumford's *Sticks and Stones: A Study of American Architecture and Civilization* (1924) in his luggage, Mendelsohn in turn became a transatlantic messenger, preparing the ground for the American critic on the old continent.¹³⁵

The German expressionist eventually introduced Lewis Mumford's oeuvre to Hendricus Theodorus Wijdeveld, editor of the Dutch avant-garde journal *Wendingen*, who directed both Walter Gropius and the city planner Ernst May to the American scholar on their respective journeys to United States.¹³⁶ May helped spread the gospel by publishing an extract of *Sticks and Stones*, convinced "that many people should get acquainted with [this] description of the development of American architecture,"¹³⁷ and shortly thereafter, Walter Curt Behrendt, editor of the Werkbund-affiliated journal *Die Form*, also recognized the potential of Mumford's writings.¹³⁸ Behrendt initiated such publications as *Vom Blockhaus zum Wolkenkratzer* (1925), the German translation of *Sticks and Stones*, as well as a series of contributions to a variety of German-language periodicals,

One of the copyright holders has not agreed to release this image open access.
Space, Time and Architecture: The Growth of a New Tradition, Fifth Revised
and Enlarged Edition by Sigfried Giedion, pages 306–307.

One of the copyright holders has not agreed to release this image open access.
Space, Time and Architecture: The Growth of a New Tradition, Fifth Revised
and Enlarged Edition by Sigfried Giedion, pages 308–309.

One of the copyright holders has not agreed to release this image open access.
Space, Time and Architecture: The Growth of a New Tradition, Fifth Revised
and Enlarged Edition by Sigfried Giedion, pages 312–313.

which greatly helped to disseminate Mumford's work.¹³⁹ Conversely, through Behrendt, Mumford was exposed to the ideas of the *Deutscher Werkbund*—although without a thorough introduction to its intellectual origins, or much contact with its leading architects other than Erich Mendelsohn, Bruno Taut, and Hans Poelzig.¹⁴⁰ Mumford valued the organization for its attention to issues of standardization, as well as its responsibility toward the environment. Behrendt and Mumford—Behrendt's "*New Yorker Mitarbeiter*" (New York-based collaborator), as the German editor described him in an editorial in *Die Form*—teamed up to oppose the dominant functionalist streams supporting mechanization, standardization, and urbanization, such as Ludwig Hilberseimer's 1924 *Hochhausstadt* project or Le Corbusier's 1922 *Ville Contemporaine*. That an American should raise criticism of the machine ethos and mass culture was even more effective in light of growing skepticism toward a blind "Americanization" of European culture.¹⁴¹ This intense engagement with German thinking was formative for Mumford, as he "was influenced in [his] own definition of the modern by German ideas and German examples."¹⁴²

In the summer of 1925, Mumford embarked on his first trip to Europe. He was invited to teach at Alfred Zimmern's new School of International Studies in Geneva.¹⁴³ For Mumford, Switzerland was a place to take a break from the pressure to write for newspapers, magazines, and journals; it provided him with time to reflect. Mumford did not travel much during that time, and it is uncertain if he was already aware of Giedion, who just recently had begun to raise his voice as a proponent of modern architecture. Although Giedion's earliest knowledge of Mumford coincided with the German translation of *Sticks and Stones* in 1925, it would be another seven years before Mumford and Giedion met in person for the first time in Zurich.¹⁴⁴

The contacts with the European vanguard in the early 1920s were formative for both Mumford and Giedion, yet in different ways. While the American scholar was immediately drawn to architects engaged in the *Werkbund*, who frequently had ties to the English Arts and Crafts movement or followed expressionist ideals, the Swiss art historian committed himself to the approach of the Bauhaus and the tenets Le Corbusier had recently described in *Vers une architecture* (1923). Both critics probably visited the *Exposition Internationale des Arts Décoratifs et Industriels Modernes* in Paris sometime during that first summer Mumford spent in Europe. The exposure to Le Corbusier's *Pavillon de l'Esprit Nouveau*, which proposed a radically new way of living, was surely an important moment in both careers.¹⁴⁵ For Giedion it meant the beginning of his almost unconditional support of Le Corbusier; for Mumford it reinforced his conviction to oppose the take on modern architecture that would soon be manifested by the CIAM.¹⁴⁶ An American at heart, he was of the opinion that "no European came close to Frank Lloyd Wright in adapting

the machine to humane purposes,” an argument he reinforced in his genealogy of modern architecture in the United States.¹⁴⁷

Encouraged by the positive reception of *Story of Utopias* (1922), an exploration of what he would subsequently call “usable past,” Mumford began to direct his focus to American culture, and dedicated much of his time to revealing the creative achievements of the nineteenth century, and to addressing an increasing fragmentation of scientific knowledge, which eventually would lead to overspecialization—topics that also preoccupied Giedion. The product of this effort is a series of four publications: *Sticks and Stones: A Study of American Architecture and Civilization* (1924); *The Golden Day: A Study in American Experience and Culture* (1926); *Herman Melville* (1929); and *The Brown Decades: A Study of the Arts in America, 1865–1895* (1931). Connecting his historico-cultural account with contemporary architectural practice, Mumford argued that the “historian might use this rediscovered past to impel his contemporaries to greater achievements.”¹⁴⁸ Despite his lack of formal training as an architectural historian, Mumford contributed significantly to the study of American architecture. Like Hitchcock, Mumford first investigated the birth of American civilization in the seventeenth century before moving on to the nineteenth century and America’s cultural emancipation from Europe.

In 1925, Mumford decided to dedicate his work to describing “what has happened to the Western European mind since the breakdown of the medieval synthesis, and to trace out the effects of this in America.”¹⁴⁹ In his publications throughout the late 1920s, he attempted to bring the repercussions of technical and scientific progress in line with traditional values. This practically impossible quest would also be a defining factor for his series *The Renewal of Life*, a set of four volumes that he authored over the course of almost two decades.¹⁵⁰ As opposed to Mumford’s earlier writings, this multivolume work, written in a time of economic depression and spreading totalitarianism, reflects pessimism about the possibilities of human renewal. In the first volume, entitled *Technics and Civilization* (1934), a book that enjoyed considerable public success, Mumford described the consequences of technological forces on man’s daily life, pointing his finger at the socio-technological “ills” of Western civilization. Reflecting the British penchant for general surveys, as well as the Geddesian theory of a “progressive assimilation of cultures,” Mumford set out to trace a three-phase history of the machine, concluding with the prospect of overcoming the dominance of mechanization by “assimilating” and taking advantage of its potentials.¹⁵¹ In 1938, Mumford published the second volume, entitled *The Culture of Cities*, which traces the conflicts of modern civilization with a particular focus on urban and regional environments, thus attempting to write a “history of the city.” The book’s far-reaching success, which reinforced Mumford’s

position as one of the leading voices in the field of urban history and planning, also confirmed his previous notion that “the history of the city still has to be written,” since the eighteenth and nineteenth centuries had neglected it “as an object of thought.”¹⁵² In the spirit of the previous volume in the series, Mumford rooted his historical analysis of Western cities—spanning the Middle Ages to the nineteenth century, and culminating in a commendation of the contemporary garden city. Influenced by the approach of French philosopher Henri Bergson, Mumford treated the past, present, and future as one seamless continuum.¹⁵³ As *The Renewal of Life* series makes clear, the cultural historian aimed to achieve a synthesis not only between past and present, but also between the human and the technological, the rural and the urban.

During the years Mumford was working on these two seminal books, Giedion was conducting research for his unfinished cultural history of industrialization entitled “Die Entstehung des heutigen Menschen” (*The Origin of Modern Man*), in which he aimed to trace the “biological foundations of the nineteenth century,” such as shelter, food, labor, and recreation.¹⁵⁴ In this far-reaching and ambitious publication project, which—similar to Lewis Mumford’s *The Renewal of Life* series—was intended to be published in four volumes, Giedion sought to uncover the “problems of the worker, the woman, eroticism, education, feeling, and thinking,” as an outline of the project indicates.¹⁵⁵

With the goal of restoring a global perspective, a view that according to both historians had been progressively lost over the course of the nineteenth century, Giedion and Mumford set out to overcome the flaws of specialization and the lack of participation in collective life. This “bird’s eye view of every feature of town planning, the social, the technical and most of all the biological,” the delineation of larger historical complexes, as well as the goal to tightly link their scholarship to problems of contemporary society and culture, led the two scholars to independently pursue parallel interests on either side of the Atlantic.¹⁵⁶

Correspondence between Giedion and Mumford, however, can only be traced from 1940 onward, and remains sparse.¹⁵⁷ Nevertheless, exchanges between Walter Gropius and Sigfried Giedion reveal that the latter must have been well aware of Mumford’s writings, even if he never openly admitted it. It was the former director of the Bauhaus who provided Giedion with a copy of *The Culture of Cities* and suggested the importance of the American scholar for his colleague’s future work in the United States. Gropius’s claim that Mumford’s writings were essential to grasp “the American mentality” was reinforced when the critic’s photograph was featured on a 1938 cover of *Time* magazine, framing the American as a leading public intellectual.¹⁵⁸ While Gropius tried to get Mumford to teach at Harvard University, it is known that László Moholy-Nagy, whose influence on Giedion cannot

Mr. Lewis Mumford,
393 Bleecker Street
New York City.

Dear Mr. Mumford,

When things turned badly in Europe, I left the USA suddenly. I was very sorry indeed that for this reason I never had the chance for a longer talk with you in New York on problems in which we are both interested. I also had to leave my book behind me in the hands of the Harvard University Press who has to publish it. Since, I have corrected all galleys which were sent to me by clipper. But, nevertheless, there is a great lack of contact and I do not know if the book is being printed now or when it will be published.

Press

I am afraid that the Harvard University/by all their goodwill has not the right touch with the public which could be interested in modern history.

I hope I do not disturb you too much by asking you to forward kindly the enclosed letter and the copy of the text of the prospectus to Miss Catherine Bauer. I do not know her exact address. I do not know either if you do any reviews of books at all, but I would esteem it very much if you could agree that a copy of "Space, Time and Architecture" is forwarded to you as soon as it is printed. It would interest me very much to know your point of view concerning the methods of approach to our common field.

We have had six months behind us and I think that Switzerland is in danger till to the present day and even more endangered. Concentration for any kind of work is very difficult and yet, till now, nearly nothing is lacking in daily life. However things may turn out, Europe will not be able to continue the cultural work. All people have lost contact with one another. We know that Corbusier is in a small peasant house in the Haute Pyrénées, but nobody knows i.e. where Picasso is living. As far as I can see, the whole cultural weight will fall to the USA and this from one day to the other, without giving time for the people to be prepared for it. But if our cultural life should not fall in pieces, there is no other choice and it is inevitable that the USA will take over this burden.

With kindest regards to you and Mrs. Mumford, I remain,

Very sincerely yours,

J. Gierain
3.23

THE SKY LINE

The Architecture of Power

NEW architecture, bold as the engineering from which it springs, is rising in the valley.

at it, and be proud that you American." Those fine words by phase stand at the entrance of tion of TVA architecture at eum of Modern Art (it closes ay), and they sum up admirably feeling about the work view. In these dams er stations the largely ous precedents of our evators and storage es and coalbins reach mark of a conscious expression. The pho-

and models are excellent, but l buildings, as I saw them re- their natural setting of hill and and quarry and boat basin and even more breathtaking than graphs indicate. These struc- as close to perfection as our come.

is something in the mere cant , when seen from below, that ne think of the Pyramids of oth pyramid and dam represent ecture of power. But the differ- table, too, and should make one f being an American. The first t of slavery and celebrated urs was produced by free labor energy and life for the people nited States. Thanks to these e colossal forces of the Ten- river are held back or released easily as one turns the water ff at one's private faucet, and f wasted water, there is an ce of electricity. Aren't we en- a little collective strutting and

Though the whole staff of gets credit for the architectural f these buildings, Mr. Roland e chief architect, deserves to be ut of his seat to take a bow. He serve it if only for the masterful hich he has used concrete.

ers and architects have used for a long time without think- ything better to do with it than e it in stone, as the Romans se to rub away every last ves- ture in the surface. Wank r a new effect; instead of ob- the delicate pattern impressed oncrete by the grain of the

horizontal with vertical patterns. The result is handsome, comparable to what Eliel and Ero Saarinen achieved in the new Buffalo Music Hall by using a facing of stone, and, needless to say, it is the most economic treatment possible.

While the Hiwassee Dam is perhaps the most striking work of pure engineering that the TVA has done, the generator building at Guntersville, Alabama, looks extremely good. The interior is finished in tile, both walls and floor, and the outside of the main structure is done in brick, with a great



rectangular panel of glass set off in a simple brick frame, above which the name "Guntersville" appears in bold letters. There is not a superfluous touch in this whole structure, and the architect's high achievement with tile and brick shows that the success of the other buildings is no mere fluke of engineering and is not due only to a happy trick in employing certain materials.

The only criticism I have to make of this show is that it was too modestly conceived. Lack of space, if nothing else, confined it to the main structures in the Tennessee Valley and made it impossible sufficiently to indicate the architectonic treatment of the whole landscape. In modern architecture, not merely are the interior and the exterior equally important but the individual unit and the plan of the whole must be conceived as one. I can think of no better example of this partnership than the structures of the TVA. Here is modern architecture at its mightiest and its best. The Pharaohs did not do any better.

THE most important things that have happened in American architecture during the last month or so are three books. This is an event even rarer than the building of a skyscraper, for our architectural history and criticism have lagged a long way behind practice. Because of that, our practice has been more smug and provincial than it need have been.

Siegfried Giedion's "Space, Time, and Architecture: The Growth of a New Tradition" has been put out in a most sumptuous format, and it is a very exciting piece of work. The book de-

illustrations and some exceedingly interesting data, however, came out of research in the history of American architecture which Giedion did after he came over here, and there is no one, no matter how well informed about the modern movement, who will not be stimulated and occasionally made rather starry-eyed by the pictures of a developing world, creating new symbols for a new consciousness of nature and man, that Giedion presents.

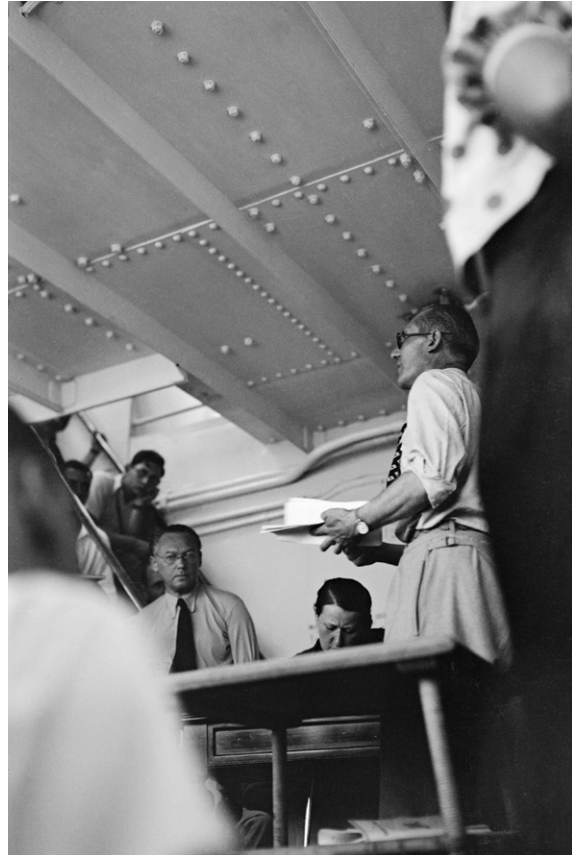
The weakest part of Giedion's book is his handling of modern city development, particularly his failure to understand the historic significance or the future importance of Ebenezer Howard's conception of the garden city. In a book that stresses the social side of modern architecture, this is a serious blind spot. But apart from this, Giedion has done a good job. His emphasis on the social, the personal, and the human makes it as decisive a departure from the standpoint of Le Corbusier's "Vers une Architecture" as that in turn was a departure from the commonplaces of the traditionalists. Giedion sees that our main problem is "to humanize—that is, to reabsorb emotionally—what has been created by the spirit. All talk about organizing and planning is vain when it is not possible to create again the whole man, unfractured in his methods of thinking and feeling."

THE doctrine that underlies Giedion's book is one that Frank Lloyd Wright has been preaching and practicing his entire life, and never more vocally, never more visibly, than during the last decade. But Wright's pronouncements on architecture had never been brought together and many of them have long been inaccessible, so we owe a special debt to Frederick Gutheim for collecting and collating them in an admirable book, "Frank Lloyd Wright on Architecture: Selected Writings, 1894-1940."

The book begins with a speech by Wright on architecture and the machine given in 1894 and ends with a dinner talk at Hull House. The very first words are characteristic and could not be improved: "The more true culture a man has, the more significant his environment becomes to him." The color of Wright's personality, the wide range of his mind, his healthy aplomb, his deeply moral feeling about life and art are all visible in these pages. These pronouncements and challenges, these



3.25



3.26

be underestimated, also admired Mumford's writing, and hoped to meet him in person after his emigration to Chicago.¹⁵⁹ Despite his colleagues' enthusiastic reception of Mumford's "weighty" work, Giedion took his time responding to Gropius's gift, and his reaction was rather restrained.¹⁶⁰ At the time, Giedion was preoccupied with the preparations for his Norton Lectures. While he would have liked to present his own cultural study at Harvard, Giedion was pressured by his colleagues to make a case for the modern movement in Europe. Giedion's hesitant tone as he comments on Mumford's work, praising the "lexicographical knowledge" at the same time as he faults the "condensation of too much knowledge into a book," may reflect defensiveness over his own territory rather than disdain for his American colleague.¹⁶¹

In contrast to his colleagues who gave increasing attention to Mumford's work, Giedion kept a marked distance from his American peer. The two critics differed ideologically, especially with respect to modern architectural practice and its relationship to art. Mumford's regular columns for *The New Yorker*, entitled "The Sky Line," document his clear opposition to CIAM's version of modernism.¹⁶² Beginning with his involvement in MoMA's *Modern Architecture: International Exhibition*, Mumford positioned himself as a fierce critic of Le Corbusier's view of the machine aesthetic.¹⁶³ In a letter to Frank Lloyd Wright, Mumford indicated that he "never thought seriously of Le Corbusier's talents as an architect, for his designs are weak as his soul itself is arid," and even decades after the first contacts with the architect, he declared that they had been "predestined enemies" ever since he first read *Vers une architecture*.¹⁶⁴ Considering the close relationship between Giedion and Le Corbusier, the very different evaluation of this key figure of twentieth-century architecture caused irreconcilable friction between the critics. Their problematic relationship also reveals itself in Mumford's reaction to the publication of *Space, Time and Architecture*. Following his first stay in the United States, Giedion contacted a series of American intellectuals and opinion makers to ensure that the book would be reviewed and disseminated immediately after its release. In a "pathetic letter," as Mumford called it, Giedion expressed his regrets at having missed the opportunity to meet Mumford while in the United States, and asked him to have a closer look at his forthcoming book, hoping for a review in *The New Yorker*.¹⁶⁵ Mumford responded in a seemingly friendly manner, although without agreeing to Giedion's request.¹⁶⁶ The American critic's dismissive notes to several of his colleagues suggest that he might have preferred not to pay tribute to Giedion's work, but as *Space, Time and Architecture* was the first comprehensive historiography of modern architecture available in English, and mindful of a growing public interest in the subject, he eventually reviewed the book in his "Sky Line" column.¹⁶⁷

3.23
Sigfried Giedion, letter to Lewis Mumford, September 20, 1940, describing his struggles in war-torn Europe, and asking the critic to review *Space, Time and Architecture* once it was published.

3.24
Sigfried Giedion's marked copy of Lewis Mumford's column "The Sky Line," published in *The New Yorker*, and featuring a review of *Space, Time and Architecture*.

Mumford mainly focused his comments on the graphic appearance of the book, its “sumptuous format” and the “pictures of a developing world,” and acknowledged Giedion’s talent in making an argument visually. He himself had asked as early as 1929 for “pictures” instead of “verbal outlining,” which is reflected in his attempts to sum up *Technics and Civilization* and *The Culture of Cities* by means of a series of plates dispersed throughout each of the books, furnished with commentary in short captions.¹⁶⁸ In contrast to Giedion’s “picture books,” primarily based on a visual narrative, even Mumford’s later publications, which include extended photographic sections, appeared as text-heavy, scholarly works. On the one hand, Mumford praised Giedion as a book maker. On the other hand, he also raised serious doubts about his “handling of modern city development, particularly his failure to understand the historic significance or the future importance of Ebenezer Howard’s conception of the garden city.”¹⁶⁹ Mumford’s review was balanced. He left the harsh attack to others, namely his colleague Frederic Osborn, a British town planner and follower of Howard, who “put [the book] in its place” in a review that was “a little more violent than usual.”¹⁷⁰ Mumford’s response to Osborn’s advance reveals not only his reservations about Giedion’s position but, even more, his resentment toward the manifestations of CIAM, which would be the subject of a lasting dispute between the two scholars.¹⁷¹

- 3.25 Mumford likely wrote his review with a particular episode in mind. Plenary session at the fourth CIAM congress aboard the *SS Patris II*, July 1933. The Spanish architect Josep Lluís Sert, like Gropius an enthusiastic follower of Mumford’s work (*Technics and Civilization* was one of the only books he carried along on his journey across the Atlantic in 1939), hoped to have the acclaimed American critic write an introduction to *Can Our Cities Survive?* (1942), a book that was supposed to encompass the conclusions of the fourth CIAM congress (1933) and address the “four functions” of urbanism (dwelling, work, transportation, and recreation).¹⁷² With Mumford’s growing public success that included feature articles in various popular magazines and the screening of his film *The City* as part of the 1939 New York World’s Fair, CIAM advocates likely realized that the critic’s blessing of their cause would greatly advance their acceptance in the United States.¹⁷³ Despite his cordial exchanges with Sert, Mumford resolutely turned down this request after closely reviewing the manuscript, which contained no “reference to the civic and social functions of the city,” other than aspects of recreation.¹⁷⁴ In Mumford’s view, the city was “the primary setting for human intercourse,” and his own convictions, inspired by Patrick Geddes’s theoretical framework and Howard’s formal approach, could not have been more opposed to the principles promoted by CIAM.
- 3.26 Le Corbusier explains the urban analysis of Paris during CIAM 4, July 1933.

From the
Functional City to
the Urban Core

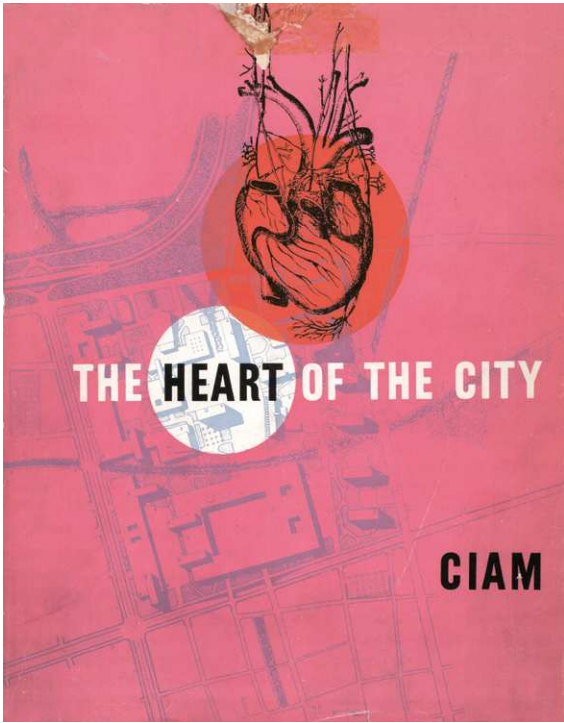
“Even our disagreements are valuable to me, for they provoke fresh thoughts.”¹⁷⁵—Lewis Mumford

Mumford drew his perspectives on the contemporary city from his engagement with the Regional Planning Association of America (RPAA), which he co-founded in 1924 with architects Clarence Stein and Henry Wright, together with a group of housing reformers, economists, and writers, in order to promote the ideals of Ebenezer Howard’s garden cities in North America.¹⁷⁶ Concerned with the massive growth of cities as well as the ecological repercussions of urban expansion, the RPAA set out to propose the construction of smaller towns at the periphery in order to reduce congestion. Soon after its inception, the organization became one of the leading forces not only in American architecture and planning circles but also on the level of politics and policy making. Over the course of almost a decade, the RPAA worked on state-sponsored housing projects and the construction of new communities, developing two major projects—Sunnyside Gardens (New York), where Mumford lived, and Radburn (New Jersey). Key figures became actively involved in various branches of the Roosevelt administration, until the Depression caused the association to dissolve in the late 1930s.

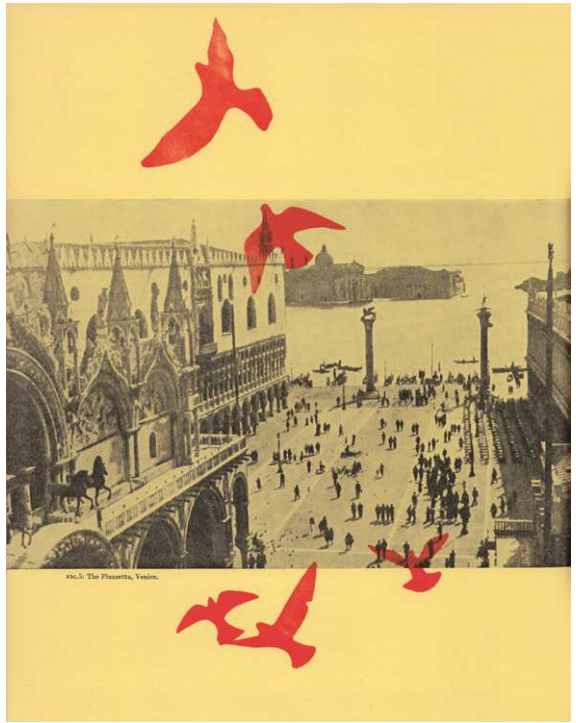
As a result of his involvement in the housing section of MoMA’s *Modern Architecture: International Exhibition* in 1932, along with a variety of books and articles collectively published with other RPAA members to promote regionalism across the United States, and his own contributions focused on the urban environment, Mumford gradually achieved considerable scholarly attention.¹⁷⁷ With the reorganization of the architecture faculty at Harvard, Gropius hired Martin Wagner to teach urban planning and also tried to involve Mumford as a lecturer in order to tackle the question of planning on a grand scale, as he reported to Giedion.¹⁷⁸ In contrast to other members of CIAM, Gropius undoubtedly realized early on that it was inevitable that the principles of the functional city as it was promoted in Europe would need to be adapted to the cultural context of the United States, not only in order to participate in the local discourse but also to contribute actively to the American built environment.¹⁷⁹ In tracing an emerging transfer of ideas between members of the RPAA and exponents of CIAM, it is interesting to observe that during the wartime, housing projects often referred to the American ideal of garden cities and greenbelt towns, while for the first time following modern design principles. From George Howe and Oscar Stonorov to Richard Neutra, Marcel Breuer, and Walter Gropius, a variety of CIAM

members eventually engaged in the development of large-scale housing projects based on the idea of a “neighborhood unit.”¹⁸⁰ Gropius began to adopt the American approach to planning to the extent that he advised his colleague Sert to invite a number of American architects, urban planners, and even sociologists to the postwar CIAM meetings, hoping to introduce new perspectives to what he called “Corb’s world.”¹⁸¹ In addition to his new office partners at The Architects Collaborative (TAC) and Harvard affiliates such as I. M. Pei and Paul Rudolph, Gropius proposed engaging some of the leading figures who had previously been involved with the RPAA: Catherine Bauer, Clarence Stein, and Lewis Mumford.

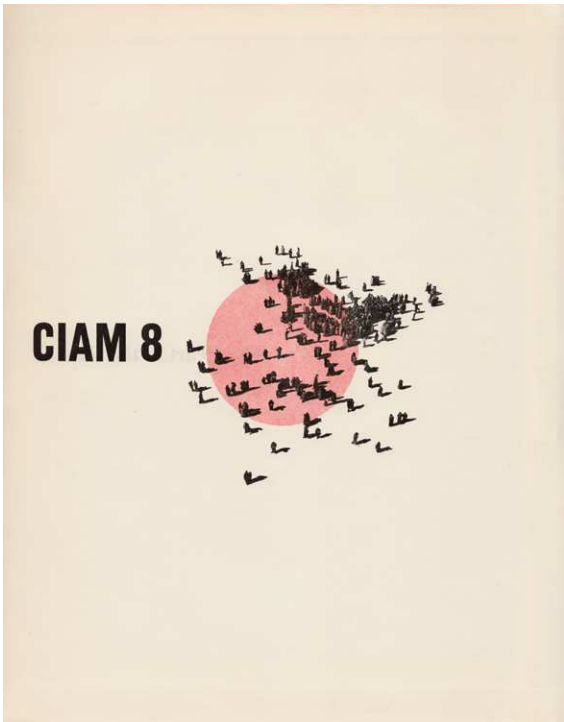
3.27–3.29 In this rapprochement between RPAA and CIAM it was once again Jaqueline Tyrwhitt, Jaqueline Tyrwhitt who was of central importance. A director of research for the Association for Planning and Regional Reconstruction as well as director of studies at the London School of Planning and Research for Regional Development, Tyrwhitt was exposed to the ideas of the British garden city movement and was familiar with the writings of Geddes, whose texts about his work in India she had edited.¹⁸² After the Second World War, Tyrwhitt, a member of the MARS group, was promoted to acting secretary of CIAM and began to collaborate closely with Giedion. In the 1945 issue of *The Architect’s Yearbook*, Tyrwhitt expressed her synthetic approach to the principles of CIAM and a Geddesian take on the city.¹⁸³ Tyrwhitt managed to bring together exponents from both camps, and to facilitate the reception of Anglo-American planning principles in the postwar activities of CIAM. In correspondence with Giedion, Mumford eventually suggested that “nothing ... would be more fatal to the modern movement than to remain in a state of rigidity as a result of following formulae and solutions first arrived at in the nineteen-twenties,” and that “nothing, by contrast, indicates its healthy development more surely than the fact that certain elements left out of that original formulation—for [Giedion] the problem of monumentality, for [Mumford himself] the problem of symbolism—should come into the picture once more.”¹⁸⁴ At the eighth CIAM congress, held in Hoddesdon, England, in 1951, the group finally aimed to reassess the four urban functions, supplementing them with a fifth function, “The Heart of the City,” to address the “political, educational, and cultural functions of the city,” according to Mumford.¹⁸⁵ The critic was supposed to speak at the congress, but documentation as well as the published proceedings, entitled *The Heart of the City: Towards the Humanisation of Urban Life* (1952), indicate that he did not participate in this event.¹⁸⁶ Despite the lack of a direct contribution, there is no doubt that Mumford’s thinking strongly influenced “the humanization of urban life,” as it was discussed throughout the postwar CIAM debates, and eventually also in the context of the formation of urban design as a discipline at Harvard.¹⁸⁷



3.27



3.28



3.29

As Giedion shifted away from the propagation of modern architecture to the investigation of aspects of cultural history and, later on, his passionate engagement with prehistoric art and ancient architecture, the rather distant relationship between Lewis Mumford and his Swiss colleague began to change. Both scholars always shared mutual respect, even if they could not always approve each other's positions. "The ways of approach may be different," Giedion observed, "but not what we want to achieve," and Mumford similarly observed that their "philosophic difference" did not affect his esteem for the art historian's work, nor his "statement of the problem."¹⁸⁸ Even if both Gropius and Giedion considered Mumford an "old-fashioned conservative, [who] has no eye for art and architecture," they respected him for his "moral straightness," and as one of the leading architecture critics.¹⁸⁹ Until the mid-1960s, Giedion and Mumford corresponded and occasionally met. Giedion was occupied with the publication of *The Eternal Present*, a richly illustrated two-volume production outlining the history of art and architecture from prehistory to the present, while Mumford was preparing *The City in History* (1961), a text-heavy volume projecting his history of urbanism extending back to the Paleolithic cave. A reflection of the relationship between the critics, the two books could have not been more similar, yet at the same time more different, as Mumford acknowledged with these words: "I have always been conscious of our parallel interests and objectives: our divergences are like the differences between two eyes in a binocular vision—or, sometimes between 'near' and 'distance' lenses in bi-focal glasses!"¹⁹⁰

Anonymous History:
Mechanization
Takes Command

After his short-term engagement at Harvard University, Giedion began to shift his focus back to the studies he had initiated before his Norton Lectures, yet with significant new inspirations from a land that had embraced industrialization on another level than Europe. From this perspective, *Space, Time and Architecture* could be interpreted as the conclusive statement of a significant phase within Giedion's oeuvre. Nevertheless, the book marks a turning point rather than the climax of the historian's career. The preliminary outlook it provides on America's industrial production in the late nineteenth century and the industrialization of craft, resulting in such achievements as balloon frame construction, the Yale lock, and movable patent furniture, are first indicators of a redirection of Giedion's engagement with industrial archaeology.¹⁹¹ Even back in Europe, working on his project for a history of the development of modern civilization, the propagator of modern architecture had declared already in 1932 that the time of vanguard movements was over, that "few 'experimental cells' are necessary," and that the "beginnings of a worldview were created."¹⁹²

While *Mechanization Takes Command*, published in 1948, never shared the same public and commercial success as *Space, Time and Architecture*, it occupies a key position within Giedion's work, consolidating many of the writer's diverse interests and approaches that only came to fruition during the last third of his career. Giedion's obsessive engagement with a wide array of different sources and inputs also marked the beginning of his reflections concerning the field of "anonymous history," which later on would decisively shape his study of the mechanization of the everyday. Despite the evident similarity of the term "anonymous history" with Heinrich Wölfflin's "Kunstgeschichte ohne Namen" (art history without names), an art-historical approach that would shift the focus away from the individual artist toward a greater development of periods and styles, Giedion's conception was substantially different.¹⁹³ A revealing description of this position, written as early as 1936, can be found in the introduction to the first part of the initial volume of "The Origin of Modern Man":

It is the task of our time to more effectively uncover the correlations between individual spheres of life. As important as the big explosions are, we are equally interested today in another question: How people led their daily life in a time period? How did they master tasks they had to organize? What difficulties came up? How did we try to master them? We are interested in biological matters: The process of life and its amalgamation with reality. In this context, daily events, small announcements, the books of contemporaries without glamor, provide indispensable insight. Anonymous history provides the substrate for our account.¹⁹⁴

An Unfinished
Project:
“Die Entstehung des
heutigen Menschen”

The foundations for *Mechanization Takes Command* lie in Giedion’s research project “The Origin of Modern Man,” which emerged over the course of the 1930s. Following the publication of *Befreites Wohnen* in 1929 and the formative phase of CIAM, from its foundation at La Sarraz in 1928 to the fourth congress in 1933, Giedion embarked on this new study. By 1932, as an article published in the anti-fascist journal *information* suggests, Giedion considered the initial phase in the propagation of modern architecture to have been accomplished.¹⁹⁵ As the movement gradually shifted into a consolidation period, the secretary-general of CIAM eventually found time to develop his interest in contemporary history.¹⁹⁶ As part of his explorations of daily life, Giedion prepared an exhibition on the history of the bath in collaboration with Werner M. Moser, Max Ernst Haefeli, Rudolf Steiger, and Georg Schmidt. *Das Bad von heute und gestern*, installed at the Zurich Kunstgewerbemuseum in 1935, traced the bath’s development from Minoan culture to the present day in more than two dozen panels.¹⁹⁷

Similarly, Giedion also proposed dedicating a section at the Swiss National Exhibition in 1939 to a critical account of essential daily activities.¹⁹⁸ A series of diagrams shows his attempts to organize human actions in daily or yearly cycles, as the title of the exhibition project, *Der Tag des heutigen Menschen* (The Day of Today’s Man) suggests. At the center of Giedion’s interest was the specification of recreation and regeneration, two aspects that decisively affected modern man and indirectly shaped his environment. In the context of an accelerating industrial production of everyday goods, the related mechanization and rationalization of work processes, as well as a growing demand for recreation, the relationship between machine and man (“Maschine + Mensch”) and the correlation between production and organic matter (“Produktion + Organik”) were formative aspects of Giedion’s study, as he searched for the subconscious, and at times hidden, processes that constituted contemporary society. Giedion aimed to trace the cultural developments of the nineteenth century, in particular the repercussions of industrialization on everyday life, in order to describe the circumstances “out of which our period [the early twentieth century] grows and derives the basic elements for its own life.”¹⁹⁹

Alongside regular publishing activities for journals and newspapers, and various efforts initiating and arranging exhibitions, Giedion dedicated a majority of his time to this project. He found it necessary to extend the scope of his investigations beyond the borders of Switzerland to those European countries that were involved in the early

3.30
Sigfried Giedion, proposal outlining the main themes for his research project “Die Entstehung des heutigen Menschen” (The Origin of Modern Man). He developed this outline in Paris, in October 1935, and in Val Piora, Switzerland, in February 1936: I. The Formation of Our Time; II. Projects of Social Construction; III. The Optical Expansion of the World View (Visual Arts); IV. The Origin of Contemporary Architecture, Construction and Chaos; V. Relaxation, Regeneration.

3.31
Weiterbauen, No. 3 and No. 4, thematic issues, “Das Bad von heute und gestern,” supplement to *Schweizer Bauzeitung*, July and September 1935.

3.32 stages of industrialization and the related social changes. Having Henri Labrousse, closely traced aspects of modernization in France for his first attempt to root modern architecture in a larger historical narrative, Giedion chose the Bibliothèque Nationale in Paris as one of the first institutions to visit as he tackled this new publication project. Some of the topics that turned out to be of central interest to his new study had already surfaced in *Bauen in Frankreich*, such as a strong focus on exhibitions (in particular the Universal Expositions in Paris from 1855 to 1889) that were praised as the “creative exponents of building production.”²⁰⁰ While an entire chapter in the projected third volume of the study was to be dedicated to the reconsideration of exhibitions as vehicles for reflecting “human problems” and the relation of man to industrial production, rather than the mere accumulation of its manufacture, Giedion dedicated most of his time at the Parisian library to uncovering the history of social housing and welfare.²⁰¹ Despite the remarkable lack of sociopolitical references in his published work, Giedion was still determined to compile the historical roots of the minimum subsistence dwelling (*Wohnung für das Existenzminimum*). Although this subject was discussed at the second CIAM congress in Frankfurt, most European architects abandoned the issue after their emigration to the United States. As the vast amount of collected writings related to his research documents, Giedion aimed to examine the relationship between politics, science, culture, and emotion, in order to diagnose what he described as a “split between thinking and emotion.” The intellectual environment of Paris proved to be a good place to work on these issues. Giedion was in contact with Gottfried Salomon, a German sociologist who was teaching in the French capital at the time, and who shared similar interests in overcoming the growing specialization of disciplines. At the time when Giedion embarked on his second journey to the United States, Salomon fled from the occupying forces and settled in New York, where he must have resumed frequent contact with Giedion.²⁰² Giedion must have also encountered the philosopher Walter Benjamin in the reading room of the Bibliothèque Nationale.²⁰³ Apart from one letter praising Giedion’s *Bauen in Frankreich*, there is, however, not much evidence of their exchanges.²⁰⁴ Taking the similarities of their methodological considerations and the focus on the sociocultural dimensions of the nineteenth century into account, it can be assumed that the two scholars must have exchanged thoughts when their paths crossed in Paris.²⁰⁵ From topics such as iron construction, photography, automatons, exhibitions, advertisements, or electricity and illumination, Benjamin’s and Giedion’s notes were devoted to very similar objects of investigation.²⁰⁶ Both Giedion and Benjamin aimed to tackle the foundations of nineteenth-century culture by compiling a broad range of information and creating relations between things that did not seem to relate to one another at first sight.

1934.
1936

Vorschläge
für

ENTSTEHUNG DES HEUTIGEN MENSCHEN

Es ist zu sehen:

I. DIE FORMUNG UNSERER ZEIT
Opti *Die Entstehung unseres Blickfeldes.* (19. Jahrhundert)

II. SOZIALE BAUAUFGABEN

III. DIE OPTIK DER ERWEITERUNG DES WELTBILDES
(koloniale Kunst)

IV. DIE ENTSTEHUNG DER HEUTIGEN ARCHITEKTUR
Konstruktion + Chaos

V. ENTSPANNUNG
REGENERATION

EINTEILUNG DES STOFFES

juli
1935
heft

3

zusammengestellt durch die schweizergruppe der
INTERNATIONALEN KONGRESSE FÜR NEUES BAUEN
erscheint als beiblatt der schweizer bauzeitung
und in deren verlag, zürich,
dianastrasse 5, telephon 34507, postscheck VIII 6110
für abonnenten der schweizer bauzeitung gratis
„weiterbauen“ allein 5 fr., ausland 6 fr. einzelheft 1 fr.

weiterbauen...

DISKUSSIONSBLATT FÜR DIE PROBLEME DES NEUEN BAUENS UND VERWANDTER GEBIETE

SONDERNUMMER:

DAS BAD VON HEUTE UND GESTERN

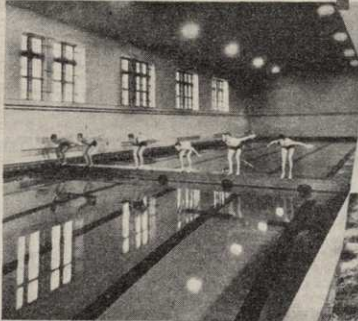
I. T

DAS ÖFFENTLICHE

HALLENBAD

NICHT

zur Verbesserung der
Rekordzeit um einige
Bruchteile von Sekunden



SONDERN

ZUR GESUNDHEITLICHE

REGENERATION

Nicht für Sport und Rekord ist das
Hallenbad da, sondern zur täglichen
Regeneration für Jedermann.

„DAS BAD VON HEUTE UND GESTERN“ ist
Ausstellung, die das Zürcher Kunstgewerbemuseum
und Mai 1935 veranstaltete und die bestimmt ist,
Überschau in der Schweiz und im Ausland auf heute
Probleme aufmerksam zu machen.

Auf grossen, systematisch zusammengestellten Tafeln
steht die Ausstellung vorab drei Abteilungen:

- DAS BAD IM KULTURGANZEN,
- DAS OEFFENTLICHE BAD,
- DAS WOHNUNGSBAD.

Dazu kommen als Einleitung einerseits die ELE

Alfred Altherr, der Plan gefasst, eine Badeausstel
veranstalten. Die Direktion unternahm die Bildu
kleinen Arbeitskommission, die in gemeinsamen
gen und langwieriger Einzelarbeit die Gesichtspun
Auswahl und Darstellung festlegte, das Material se
und sichtete, schliesslich die Anordnung besorgte.
Kommission gehörten ausser den Direktoren un
stenten der beiden Museen (Basel und Zürich)
Zürcher Architekten M. E. Haefeli, W. M. Moser, R.
sowie Dr. S. Giedion.

3.31

Die „Elemente und Funktionen“ des Bades
in Zusammenarbeit mit der Kommission der CIE



3.32

FOR THE UNITY
OF SCIENCE
ART
AND LIFE

FOR THE (UNITY) IDENTITY
OF METHODS IN
THINKING AND FEELING

FOR THE UNITY
OF
CULTURE

Deploring the growing “split between thinking and emotion,” as well as the specialization of knowledge that would lead to neglecting seemingly minor events, such as the “origins of everyday life,” Giedion proposed establishing a unifying scientific method that would serve as a common language and help bridge the gap between the increasingly diverse fields of interest that constituted the cultural backbone of the period.²⁰⁷ In a 1937 note, Giedion summed up this methodological framework as, “For the unity of science, art and life. For the (unity) identity of methods in thinking and feeling. For the unity of culture.”²⁰⁸ Both scholars shared a strikingly similar understanding of historiography. In his *Passagen-Werk (Arcades Project)*, Benjamin compared the impact of the present on a historian to a “text written in sympathetic ink,”²⁰⁹ and in *Bauen in Frankreich, Eisen, Eisenbeton*, Giedion independently noted that “even the historian stands within, not above time,”²¹⁰ concluding, “History is a magical mirror. Who peers into it sees his own image in the shape of events and developments. It is never stilled. It is ever in movement, like the generation observing it. Its totality cannot be embraced: History bares itself only in facets, which fluctuate with the vantage point of the observer.”²¹¹

Following the methodological framework of “literary montage,” Benjamin claimed, “history breaks down into images, not into stories.”²¹² This perception not only applies to Giedion’s work but also seems to describe yet another incisive project developed at this time. From 1924 until his death, the art historian and bibliophile Aby Warburg worked on *Mnemosyne Atlas*, a project rejecting the formal methods predominantly applied in the art-historical discourse at the turn of the century, and instead focusing on literary sources and cultural tradition so as to shift the focal point of research “to the programmatic and iconographic aspects of the artwork.”²¹³ On panels holding between three and more than thirty photographs of comparable size, Warburg assembled ever-changing combinations and associations of images. Like Giedion’s extended collection of fragments, notes, collages, photographs, and news clippings, Warburg’s infinite archive of visual resources offered unlimited comparative possibilities. It is curious that none of the three projects was ever completed. Even if different circumstances brought the respective projects to a halt, the ambitious aspiration to grasp a complex time period in its cultural entirety was certainly one of the main reasons why all three projects struggled to compress the materials into an all-embracing yet conclusive statement. In the case of the *Mnemosyne Atlas*, for example, the intricacy of the subject matter and the flood of information made it impossible for Warburg’s followers to bring this perpetually changing assemblage of photographs into a definitive form.

During this time, Giedion’s activities on behalf of CIAM took the Swiss historian to England, where he had opportunity to study the

3.33

Sigfried Giedion, notes on the methodology of the project “Die Entstehung des heutigen Menschen,” London, November 7-10, 1937.

- 3.34 repercussions of industrialization at the core of its development. Sigfried Giedion, London was not only the location of the CIAM meeting in 1934, but it also became a temporary refuge for many of the continental vanguard's key figures who were escaping Germany's fascist regime. Between 1935 and 1938, Giedion traveled at least four times to Great Britain, to complement his studies with firsthand observation of workers' housing described in Henry Roberts's *The Dwellings of the Labouring Classes* (1853).²¹⁴ Giedion stayed with Marcel Breuer at the Lawn Road Flats, an icon of British modern architecture—for a while also the home of Gropius and Moholy-Nagy—and spent considerable time at the Victoria and Albert Museum, investigating the production and design of glass and ceramics, the interiors of English clubs, the anonymous production of furniture, as well as the development of the empire's textile industry, including cotton mills and industrial weaving.²¹⁵ The journalist Philip Morton Shand (Giedion's later translator) and Edward J. Carter, the head librarian of the Royal Institute of British Architects (RIBA), helped Giedion to access sources of interest and put him in touch with the cotton mills in Manchester, the Wedgwood ceramics factory, and the steam-engine manufacturer Boulton and Watt near Birmingham.
- 3.35 Ceramic kilns, possibly Wedgwood in Stoke-on-Trent, Staffordshire, England, photographed by Giedion, ca. 1937.
- 3.36 Industrial area, possibly Manchester, England, photographed by Giedion, ca. 1937.
- Not long before Giedion's first visit to Britain, the eminent critic of art and literature Herbert Read published *Art and Industry* (1934), an aesthetic judgment of mechanically fabricated products and an outline of general principles of design.²¹⁶ Since they had common friends (among them Walter Gropius), Giedion and Read were likely to have met occasionally in London at the time. In terms of the scope and scale of the materials included, *Art and Industry* could be seen as a precursor to Giedion's *Mechanization Takes Command*. In Read's work, however, much of the emphasis is on pure aesthetics, without an explanatory background of industrial developments, or construction drawings and diagrams of the objects presented.²¹⁷ Roughly a decade later, Read began to revise this position, questioning the separation of "form" from "society," and finally engaging with the practical realm of design. Undoubtedly, Giedion's work in England was a valuable preparation for the continuation of his studies in America. Not only was he exposed to relevant studies in his field, but the British cultural context also foreshadowed a path that he would eventually follow in the United States.

With a view to the study of *Soziale Bauaufgaben* (social construction projects), Giedion took extended walks through working-class neighborhoods in the greater London area and in northern England. The insights gathered on these excursions were meticulously registered and additionally documented with photographs. Even after Gropius and Moholy left London, Giedion once more returned to collect additional documents, photographs, and other materials. For a time, Giedion worked obsessively on his project on the "The Origin

Leits 1515

Erwidlung

Ein großer Raum. im Erdgeschoss

enthalt einen großen Wandkranz
für Verstärkung der Betten der
jungen Leute.





3.35



3.36



HOTEL GREAT NORTHERN

118 WEST 57TH STREET
111 WEST 56TH STREET
NEW YORK CITY

TELEPHONE CIRCLE 7-1900

Introduction
THE Fundamental of form
SPACE America

TIME Europe

THE Religious & social Background

The Burge of the Barock

PART I

(A) THE RULING POWERS

Catholicism & Absolutism
of the XVIIth century

THE UR RISING POWERS

of Rationalism in religion
and science

~~IN Religious intolerance~~ The Reformation
THE FIRST STAGE of government
IN of Reform and religion

THE SECOND STAGE of Separation of
of Reformation

The RATIONALISM IN Thought

Human mind
Free thought - Beyle - Tolérance.

of Modern Man,” but eventually recognized that the scope was too ambitious for him to address adequately.²¹⁸ As much as Giedion understood the limitations of his contribution, his colleagues, especially Walter Gropius and László Moholy-Nagy, were determined to publish his study. As director of the New Bauhaus, Moholy hoped to resume the *Bauhausbücher* series after a hiatus of roughly seven years. Together with Gropius, the co-editor of the original series, he signed a contract with the New York publisher W. W. Norton.²¹⁹ Two potential volumes by Giedion figured in the revived series: *Recreation and Leisure* and *Chaos and Construction*, both based on his manuscript for “The Origin of Modern Man,” which was in progress.²²⁰ Moholy’s seriousness about this endeavor is also reflected in his intention to obtain a Rockefeller Foundation grant for Giedion to complete the books.²²¹ Moholy-Nagy was fascinated with the study Giedion had conducted back in Europe, and he was determined to adapt Giedion’s methodology to the cultural context of America. He began investigations related to “The Roots of American Culture,” and hoped to establish a “culture working center,” an institution dedicated to the study of contemporary history.²²²

A Book Between Two Cultures

3.37 The period before Giedion was invited to teach at Harvard formed Sigfried Giedion, the conceptual, methodological, and to an extent the material foundation for his project on the work he would accomplish in the United States during the war years.²²³ After dedicating the first months of his appointment at Harvard to the presentation of the Norton Lectures and the cultural developments of the nineteenth century and its impact on contemporary everyday life. This table of contents is an early stage (ca. 1939) of what would eventually take shape as *Mechanization Takes Command*. The dissemination of CIAM ideals in North America, Giedion eventually began to reconsider and revive the study he had initiated in Europe. America proved to be a productive laboratory for Giedion’s work from the late 1930s until the publication of *Mechanization Takes Command* in 1948. He gained his first formative insights into the effects of industrialization on everyday life in America as early as the first year of his stay. Although the scant documentation of his visit to the 1939 New York World’s Fair mainly refers to the CIAM meetings that took place in this context, Giedion was likely inspired by what he saw at the fair. In the same year, Giedion also embarked on his first trip from Cambridge to Chicago. The industrial landscape on the route between Chicago and Detroit, shaped by modern factories and large-scale facilities dedicated to mass-produced consumer products, impressed Giedion.²²⁴ His first visit in February 1939 was mostly focused on architectural achievements in the area, but at the same time, Giedion became aware of the leading role of the application of modern technology to materials used in everyday objects.

Over the course of the next few years, Giedion traveled to Chicago to see his friend Moholy-Nagy at least twice a year.²²⁵ These exchanges and discussions were highly productive, as Moholy shared Giedion's interest in the intersection of "social conditions, the arts, sciences, the development of an industrial technology with prefabrication, new materials, and new processes," which he eventually would describe in *Vision in Motion* (1947).²²⁶ With their extended excursions through the industrial backyards of Great Britain in mind, Giedion was looking forward to intensifying his dialogue with Moholy-Nagy and soon realized that his colleague's connections to local entrepreneurs and industrialists would be helpful for his studies of the mechanization of everyday life.²²⁷

Over the course of this exploration of "American studies," Giedion regularly lectured, promoting his idea for an "Institute for Contemporary History" and an intensification of cross-disciplinary research.²²⁸ His lectures and writings were particularly appreciated by exponents of disciplines other than his own, including two scholars of Swiss descent: John U. Nef, a historian of technology at the University of Chicago, and Arnold Wolfers, a professor of international relations at Yale University. Similar to Giedion, Nef first studied industrialization in Great Britain (*The Rise of the British Coal Industry*), and his conclusions, published as "The Industrial Revolution Reconsidered," served as a set of ideas that Giedion would build on in *Mechanization Takes Command*.²²⁹ Wolfers underlined the importance of the study of the American outlook and way of life, as Giedion reported back to his friend Gropius.²³⁰ He soon realized that the "process leading up to the present role of mechanization can nowhere be observed better than in the United States, where the new methods of production were first applied, and where mechanization was inextricably woven into the pattern of thought and customs."²³¹

Many of the case histories discussed in *Mechanization Takes Command* might suggest that the book was exclusively rooted in the American cultural sphere. While this largely holds true in terms of the selection of individual products and inventions under discussion, a large number of the themes Giedion compiled over the course of his extended stays in America were prompted by examples he had studied previously in Great Britain, France, Switzerland, and other European countries.²³² Various topics that Giedion studied before his travels to the United States are—directly or indirectly—also represented in *Mechanization Takes Command*. An entire chapter of his European research was dedicated to the invention of machines such as mechanical looms, fountains, or sophisticated automatons capable of imitating the chirping of birds. Giedion most likely had the eighteenth-century Swiss watchmaker Pierre Jaquet-Droz and his automated writing dolls in mind—a reference he eventually introduced in *Space, Time and Architecture* as a precursor to the "modern

3.38

Sigfried Giedion's briefcase with materials, ca. 1942–46, for *Mechanization Takes Command* (1948).

automatic telephone.”²³³ Even though there is no mention of these particular developments in *Mechanization Takes Command*, aspects of automation and movement formed the central argument for the “Springs of Mechanization,” discussed in chapter two of the book. In a first outline of his book, entitled “Documents on Mechanized Life,” Giedion initially intended to root his analysis of the “spirit of American invention” in a discussion of the shift from an absolutist order in eighteenth-century Europe, to a rationalist approach providing greater tolerance, to the “influence of free thought.”²³⁴ During a short-term tenure at Yale University in 1941, Giedion had begun to investigate aspects of American technological achievements, among them Linus Yale’s “Infallible Bank Lock,” which would provide a formative case study for his forthcoming book. Noting the parallel to the products of the watchmaker’s guild in his home country, Giedion introduced this complex invention as a prototype for the mass production of demanding mechanisms. As the article “A Complicated Craft Is Mechanized” suggests, Giedion began to distinguish between European and American mechanization in the second half of the eighteenth century.²³⁵ Having studied the cotton and weaving mills in England, and closely followed the transformation of the craft of the locksmith in the United States, he realized at this early stage of his research that in Europe, “simple crafts” such as mining, weaving, or spinning were mechanized, while in America such “complicated crafts” as milling, and eventually even housekeeping, were mechanized. “In between,” Giedion stated, “all those concerned to a certain extent with our intimate life had undergone the same process of mechanization: the tailor, the shoemaker, the farmer, the locksmith, the baker, the butcher. In Europe, most of these complicated crafts still form important strata of society. That they have nearly disappeared from American life has had enormous influence on habits and thoughts.”²³⁶ Giedion identified this “rupture with the ‘mysteries’ and monopoly of know-how by the guilds” as a precursor to the rapid advances of automation. He considered America, and especially the Midwest, the laboratory for these developments.²³⁷

The dimensions of the land, its sparse population, the lack of trained labor and correspondingly high wages, explain well enough why America mechanized the complicated craft from the outset. Yet an essential reason may lie elsewhere. The settlers brought over their European mode of living, their European experience. But from the organization of the complicated craft and the whole culture in which such institutions had grown, they were suddenly cut off. They had to start from scratch. Imagination was given scope to shape reality.²³⁸

Following this trail, Giedion began to investigate the history of the assembly line, probably the most central aspect of American indus-

1954
BY AIR MAIL
PER LUGPOS
JIR VOICES
5-11-46-15:10
D



SECRETARY
CONGRES INTERNATIONAL AUX
D'ARCHITECTURE
S. I. A. M.)
DOLDERTAL,
URICH.
SWITZERLAND.

Giedion
Laves - Prof.
L. Huber



NAME S. Giedion
STREET 850 7th Ave N.Y.
CITY _____
STATE _____ TEL. _____
IN C. 3.88 OF ACCIDENT OR SERIOUS ILLNESS PLEASE NOTIFY:
NAME _____

PICTURES
AND
SOURCE
MATERIAL
WOOD
AND OTHERS

5 Kosterneff
(with development -
204) The brain is utterly different
middle course life of a man working
of a strategy (Sub

the brain of
New. exists
the brain of
regards firm
to produce
muscle
the
with
muscle
make
to across a
order or
patterns have
before
On account
of the
muscles
order or
repeating
so that they
order or
longer
quarters
necessary
been
before

trialization. From Étienne-Jules Marey's visualization of movement in space by means of photography in the second half of the nineteenth century, to Frank and Lillian Gilbreth's motion studies, to related developments in philosophy, literature, and the arts, Giedion traced the role of motion as a precursor of this fundamental precondition of scientific management.²³⁹ Starting with the introduction of a continuous assembly line based on the invention of the "endless belt" and different conveyors, leading up to Frederick Winslow Taylor's scientific management, Giedion eventually described the different stages of industrialization—or "Etappen der Industrialisierung," as he had entitled a full chapter of his previous study.²⁴⁰

On field trips to Chicago and various stays at Fernand Léger's cottage in upstate New York, Giedion was exposed to the mechanization of American agriculture. Undoubtedly, he was aware of the progress of agricultural tools, since advertisements for hardware and machines imported from the United States cropped up frequently in Swiss newspapers from 1875 on.²⁴¹ However, as opposed to the small scale of Switzerland's cultivated land, the extensive landscape of the Midwest provided a more spectacular scene, or "a grand laboratory" for observing the encounter of "mechanization and the organic."²⁴² A consequence of the 1841 Homestead Act and its related westward migration, the industrialization of agricultural processes formed a "constituent feature of American culture."²⁴³ Through a detailed outline of the improvement of American tools, including refined scythes, mechanical reapers, and harvesting machines, and the impact of balloon tire tractors in fueling continuous agricultural production, Giedion laid out the structural changes occurring in farming. Interestingly, he not only described mechanical and technological inventions related to farmwork but also presented the effects of this agricultural revolution on food production for consumers.

Giedion studied the advances of the American food industry at the 1939 New York World's Fair. The pavilion dedicated to the "Dairy World of Tomorrow," where 150 cows were mechanically milked on a revolving platform, and the automated packaging of milk and ice cream as part of the exhibition of the National Dairy Products Corporation (Sealtest and Kraft Foods), as well as the industrial fabrication of bread in the fair's "Wonderbread Bakery," surely made a lasting impression on Giedion. In *Mechanization Takes Command*, he eventually outlined a detailed history of "the mechanization of bread making" and the emergence of "frozen foods."²⁴⁴ Giedion also compared the central slaughterhouse of La Villette in Paris to Chicago's Union Stock Yard, the greatest cattle market in the world, and birthplace of the "mechanization of death."²⁴⁵ Along with the example of the meat industry, Giedion described the perfect logic of the assembly line, from slaughtering, to mechanical skinning, to meat processing and packing; yet he also began to question the extent and purpose

3.39

Sigfried Giedion (left) and Fernand Léger (right), Rouses Point on Lake Champlain, New York, August 1945.

3.40

Sigfried Giedion, Rouses Point, August 1945.

3.41

Stamo Papadaki, cover sketch for *Mechanization Takes Command*, May 1947.



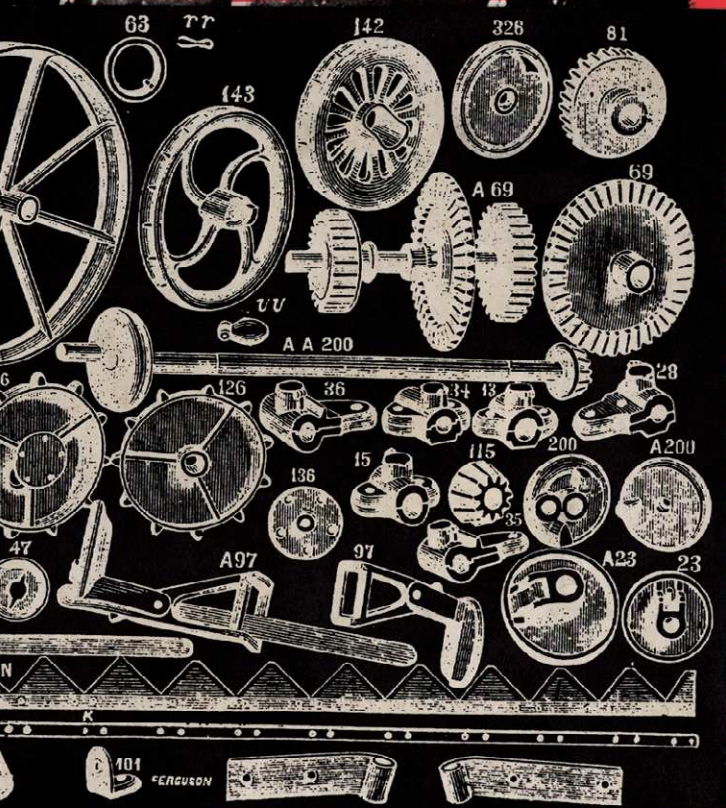
3.39



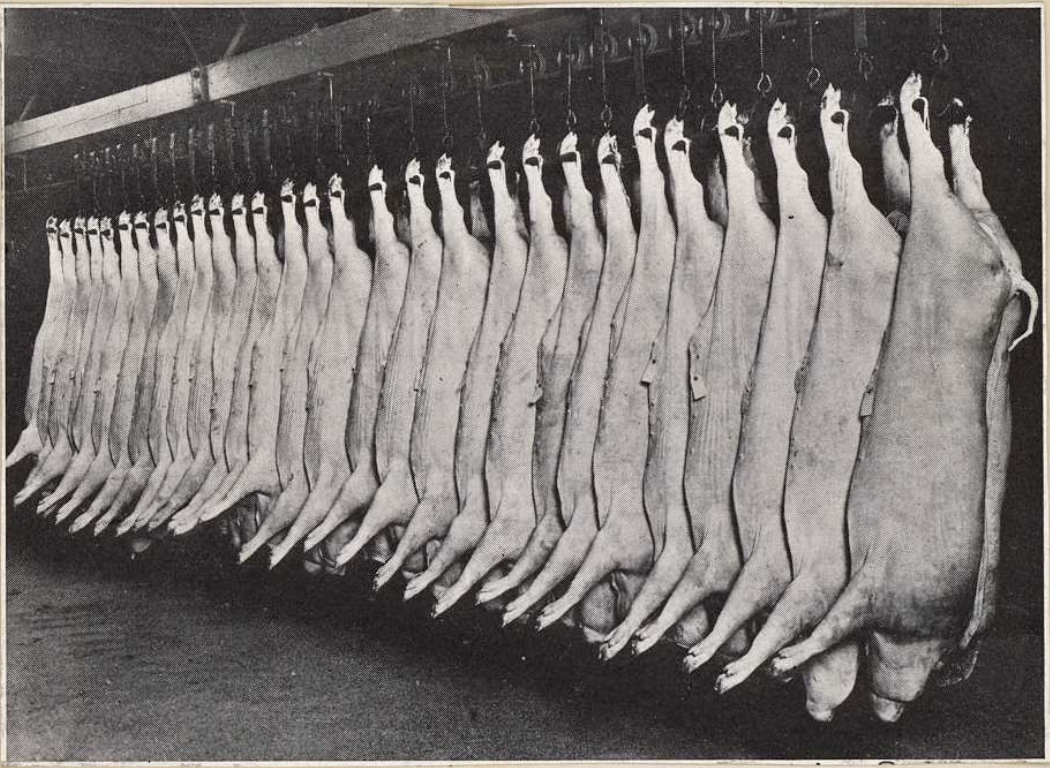
3.40

Author's
name
& Title
in WHITE

SKETCH
1



Stano Papadakis
May 1967



⁶⁵
Fig. 65

of mechanization, as well as its threat to the dignity and “purpose of life.”²⁴⁶ Considering that the book was written during the Second World War, it is surprising that Giedion omitted any explicit mention of the links between the rationalization of industrial processes and mass destruction. His choice of images, however, such as the brutal juxtaposition of a fully automatic assembly line with hanging sides of pork in a Chicago slaughterhouse, is far more suggestive than any words could describe.

After the mechanization of agriculture and the standardization of food production, Giedion shifted his focus to the daily routines of the domestic sphere. In the chapter entitled “Mechanization Encounters the Household,” the organization of the work process was further developed at the level of the individual home. What Giedion listed as the equipment of the house (*Ausrüstung des Hauses*) in his study would eventually turn into a history of the mechanical conquest of the domestic environment.²⁴⁷ While the treatment of the kitchen as a single unit to improve the organization of work processes had been a subject of spirited discussions among modern architects, especially within CIAM, in the late 1920s—for example Margarete Schütte-Lihotzky’s Frankfurt Kitchen and J. J. P. Oud’s L-Shaped Kitchen at Weißenhof—the American aspiration was to use “all the resources of modern science to improve home life.”²⁴⁸ Such appliances as electric ranges and irons, dishwashers, vacuum cleaners, washing machines, refrigerators, and freezers were introduced to improve the efficiency of domestic work.

Another subject that Giedion almost seamlessly extended from his work in Europe to his studies in America eventually formed nearly one-third of *Mechanization Takes Command*: the transformation of the interior in terms of livability, including furnishings. “If we wish to gain a more general insight into the origin of our comforts, our customary methods of relaxation, our whole mode of life,” he observed, “we everywhere come upon gaps and unanswered questions.”²⁴⁹ In relation to this interest in leisure and the associated change in the interior living environment, Giedion began to study anonymous English gentlemen’s club architecture during his London visits in the late 1930s.²⁵⁰ His account of the development of modern furniture and household equipment continued Le Corbusier’s belief in the primacy of the anonymous object, and he consequently left out figures such as William Morris, Charles Rennie Mackintosh, Peter Behrens, Hermann Muthesius, Henry van de Velde, and even Adolf Loos, who had directly influenced Le Corbusier’s anti-decorative polemic *L’art décoratif d’aujourd’hui* (1925).²⁵¹ A co-founder of Wohnbedarf AG, which aimed to establish a productive synthesis between industry and modern furniture design, Giedion was drawn to the industrial fabrication of furniture.²⁵² Apart from providing the appropriate “equipment” for the spaces promoted by emerging modern architects, one of the main in-

3.42

Sigfried Giedion, mock-up of layout for *Mechanization Takes Command*, page 123, “Carcasses in Chicago Slaughter House,” ca. 1947.

3.43

Herbert Bayer, drawing for the cover of a Wohnbedarf AG sales catalogue, ink and gouache on paper, ca. 1935.

- 3.44 interests of Giedion and his colleagues was to advance manufacturing processes in order to make their products affordable for a broader clientele.
- Sigfried Giedion, design for a Christmas wish list advertisement for Wohnbedarf AG, ca. 1933. Giedion's investigation of nineteenth-century American patent furniture accordingly reads like a continuation of these activities. As opposed to the "influx of European ruling taste" that "flooded America" at the turn of the nineteenth century, Giedion considered the patent furniture of the time to be the embodiment of "inventive fantasy" and a "creative urge" without "room for reflection."²⁵³ As his selection of patent drawings suggests, Giedion was particularly interested in the furnishings of the American office. He marveled at "how the desk-chair behaves beneath [the American] with almost organic flexibility, and how he unconsciously varies his posture without end. The American," he concluded, "seems to have become one creature with his chair, as the Arab with his horse."²⁵⁴ In the anonymous American inventor of patent furniture, Giedion discovered the greatest potential to overcome what he referred to as the "ruling taste" of the nineteenth century:
- 3.45 List of patents from the U.S. Patent Office in Washington, D.C., with handwritten annotations by Giedion.

I am in the process of concluding a rather weighty chapter on the furniture of the nineteenth century. Not salon furniture, *but undiscovered American patent furniture* [original emphasis] from 1850 to 1893. In America the truly original furniture of the nineteenth century was constructed. You will be surprised how modern they were and what excellent solutions they provided—an immeasurable number.²⁵⁵

While other parts of *Mechanization Takes Command* anticipate methodological changes in Giedion's work, the study of "human surroundings" seems to be more closely related to his previous publications advocating modern architecture. Similar to the way he had approached the achievements of nineteenth-century engineering in *Bauen in Frankreich*, Giedion traced a continuous development from anonymous patent furniture to modern furniture design, including Le Corbusier, Pierre Jeanneret, and Charlotte Perriand's chaise longue and Marcel Breuer's cantilevered steel-tube chairs. Giedion did not hesitate to proclaim the end of the decorator, who "has lost all prestige as a designer of furniture" for "almost every important inspiration comes from architects now setting standards for the future."²⁵⁶


Giedion's study of the private domain was oddly and narrowly limited to furniture. Indeed, Reyner Banham criticized Giedion for omitting a study of electrical illumination in his book.²⁵⁷ In contrast, Giedion's earlier manuscript, "Die Entstehung des heutigen Menschen," included a great number of references to the topic. From "electricity and domestic lighting" to "electric phenomena," to portraits of Luigi Galvani





vorschlag
"weihnachts"




was wünschen
sie sich vom **wonbedarf** ?

einen **fauteuil**  zu fr.


eine **indik-leuchte**  zu fr. 37.50

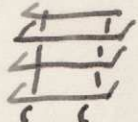
vier **satz-tischen**  zu fr. 160.-

ein **servier-boy**  zu fr. 60.-

ein **schreibtisch**  zu fr. 240.-

eine **rollbar**  zu fr. 195.-

~~ein **toiletentischen**  zu fr. 45.-~~

ein **büchergesell**  zu fr. 75.-

alles bei

talstrasse 11
meve bötse

wonbedarf

8 an
mit rasteren

Washington, Patent-Office

1843, June 1	# 3124	✓ Street sweeping machine,	Jos. Whitworth
1859, Jan. 4,	# 22,488	✓ Carpet sweeper	
1908, June 2	# 880, 823	Carpet sweeper	J. M. Spangler
1915, Aug. 31	# 1,151,731	✓ " "	"
1903, Sept. 15	# 739,263	✓ Vacuum cleaner	D. T. Kenney
1904, May 28	# 781, 532	✓ " "	"

(Is it right that Kenney's application was filed for about six years until he was granted the patent?)

* * *

<i>1858</i>	<i>21,870</i>	✓ <i>Convertible Car Seats</i>	
1854, Sept. 19	11,699	✓ Convertible Car Seats	H. B. Mye
1858, Apr. 13	19,910	✓ " " "	D. Buzzel
1856, Dec. 2	16,159	✓ " " "	Th. T. Wo
1858, Aug. 31	21,352	✓ " " "	C. M. Man
1869, Apr. 27	89,537	✓ Railway Dining-Car	Pullman
1869, Apr. 27	89,538	✓ Railway Hotel Car	"
1858, Nov. 2	21,985	✓ Convertible Car Seats	
	21,985	✓	

* * *

<i>1857, July 27</i>	<i>21,452</i>	✓	
<i>1858, Aug. 27</i>	<i>21,178</i>	✓	
1856, Sept. 2	15,675	✓ Selfwaiting table	A. Wat s
1858, March 30	19,773	✓ " "	G.W.Hag
1854, Apr. 4	10,740	✓ Combined Table and Chair	St. Hed
1856, Oct. 21	15,943	✓ Combined Table & Beadsted	Ch. Baum

1838, June 12, (No. 775) ✓

<i>1851, Apr. 22</i>	<i>8059</i>	✓ <i>Car seats</i>	
<i>1857, Nov. 11</i>	<i>8508</i>	✓ " ✓	
<i>1865, Aug. 21,</i>	<i>13464</i>	✓ " ✓	

and Alessandro Volta, to notes on “public illumination” concerning illumination on an urban scale, Giedion had compiled a wealth of information that he inexplicably did not pursue in the United States, where electrical light reached far beyond the private sphere, shaping public spaces by means of illuminated billboards.²⁵⁸ Even though he had reflected on the telephone and television back in Europe, long before they were adopted by consumers, Giedion left out any mention of the Bell Telephone, the first patented electric telephone and the beginning of mass communication, which would impel the unstoppable rise of television.²⁵⁹

3.46–3.48
Sigfried Giedion,
*Mechanization
Takes Command*
(1948), sketch of the
typographic compo-
sition for the cover,
ca. 1947; first edition
with dust jacket,
1948; promotional
leaflet, 1948.

Mechanization Takes Command is the outcome of Giedion’s five-year stay in North America, while the Second World War was raging in Europe.²⁶⁰ The writer had certainly already been engaged with some of the larger ideas reflected in this book back in Europe, but considering the vast body of archived materials, from advertisements, to leaflets, to patent specifications and models of patent furniture, the publication is also deeply anchored in the American sphere. A majority of the research was conducted at the archives of American corporations such as the General Electric Company, Apex Electrical Manufacturing Company, and the Westinghouse Electric Corporation, and was complemented with documentation from the United States Patent Office in Washington.²⁶¹ While Giedion established the methodological framework and many of the core interests and ideas working on his book project “The Origin of Modern Man,” he had absolutely no doubt that he was “writing now a book, the sources of which can only be found in this country.”²⁶² In that sense, the work represents a piece of American history of technology, viewed through the lens of a European art historian engaging with cultural history. The work is therefore not only positioned in between two cultural contexts but also negotiates different disciplines, and a revised focus within Giedion’s own oeuvre.

Suicide of History

“The sun is mirrored even in a coffee spoon.”²⁶³ — Sigfried Giedion

In his research on the mechanization of everyday life, as in his first major works, Giedion decided to root the current state of industrialization several centuries earlier in order to trace a “line of development.” This approach was appropriate for a publication in the United States, where one of his major concerns was to foster a general sense of history. “The first condition, of course, and the most difficult one to fulfill,” Giedion observed, “is that the people in general should understand how their work and their invention—whether they know it or not—are continually shaping and reshaping the patterns of life.

Once historical consciousness is awakened, self-respect will awaken too, a self-respect that inspires every true culture. This renewed awareness will find means of preserving the key sources to American history."²⁶⁴ These words, published in *Mechanization Takes Command*, can be traced back to some incisive moments Giedion experienced during his stay in the United States. A major lack of proper documentation and materials was the greatest challenge he had to face during the making of the book. "The work is going on," he reported to John U. Nef, "but much too slowly; the reason therefore is, that research into the sources of the nineteenth century cannot be done only by library-work. You have to dig into unknown facts on which nothing has been written."²⁶⁵ On various occasions, Giedion noticed a "crisis in art history," caused by the inability of the discipline to develop "historical tools and methods that fit research into the broader patterns of life."²⁶⁶ Throughout 1942, Giedion gave lectures across the United States. He was frequently invited to present his recently published *Space, Time and Architecture*, but also took advantage of this opportunity to introduce "anonymous history" as a way to reform the discipline.²⁶⁷

In the shaping of American life from which [illegible insertion] the key trends of our epoch—anonymous history is especially important. Documents are necessary if an American anonymous history is to be built up. But an amazing historical blindness has blocked the way to their preservation. The country which studies bygone cultures of every continent, financing research and excavations, has neglected the witnesses to its own anonymous history. Not the industrialists who dumped into the river his own archives and those of his predecessor, one of the most interesting innovators of American agricultural machinery is to blame. The Patent Office is not to blame for ridding itself of the original patent models. The historian is to blame. A Romanesque church, its every stone numbered and single packed for transit to America would have been regarded as junk too—had not three or four generations of art historians proclaimed the splendour of medieval art. The industrialist is, with few exceptions, to be regarded as a tool of production unconscious of any further meaning in his wares. How his production should be evaluated in the broader pattern of life it is for the historian to tell.²⁶⁸

Mechanization Takes Command reads as an appeal for the rescue of an important part of American popular culture, and as an attempt to create an enhanced awareness of this cultural heritage among a larger public. In this context of unlimited scientific and technological progress, there was not much appreciation for the rather unspectacular artifacts of the everyday, as well as widespread ignorance of

MECHANIZATION
TAKES
COMMAND

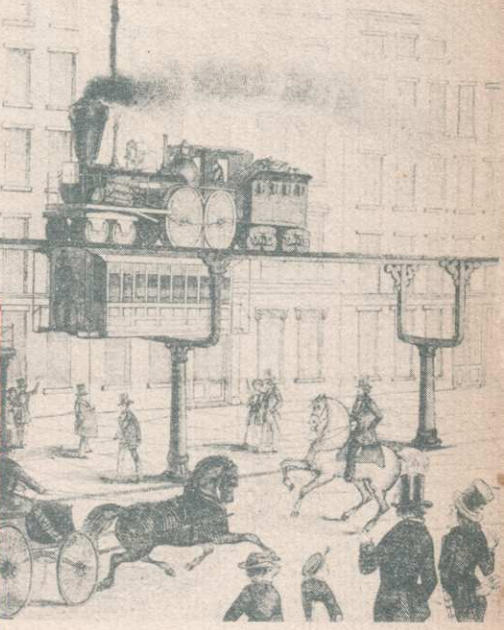
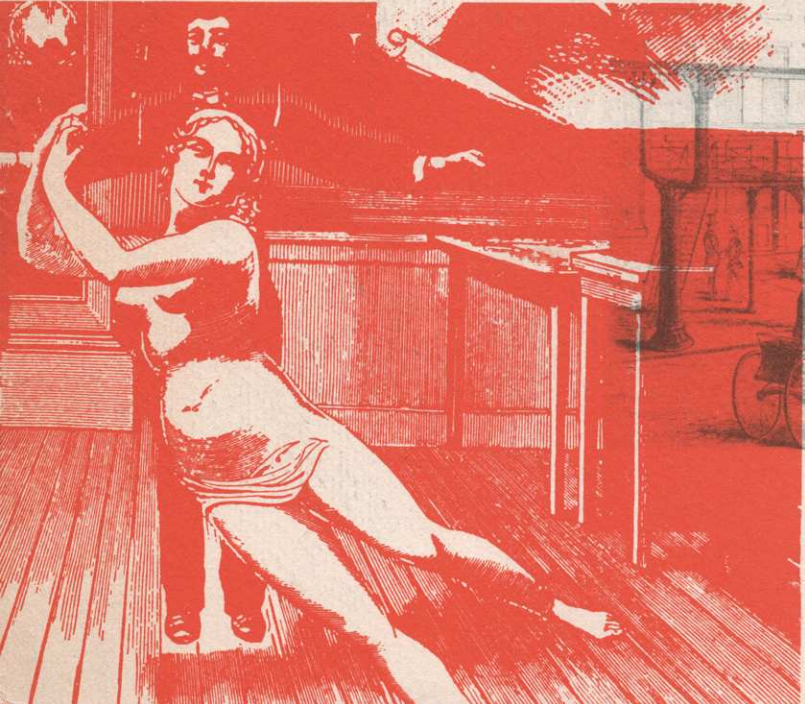
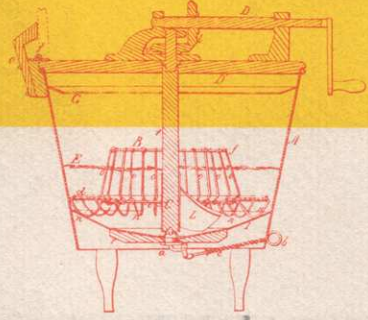
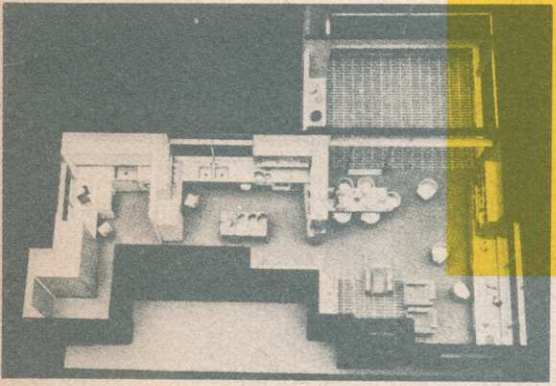
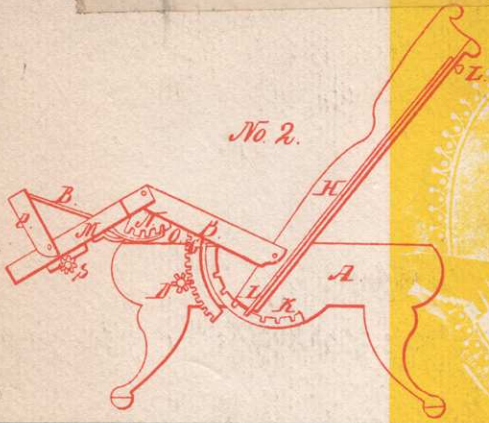
BY S GIEDION

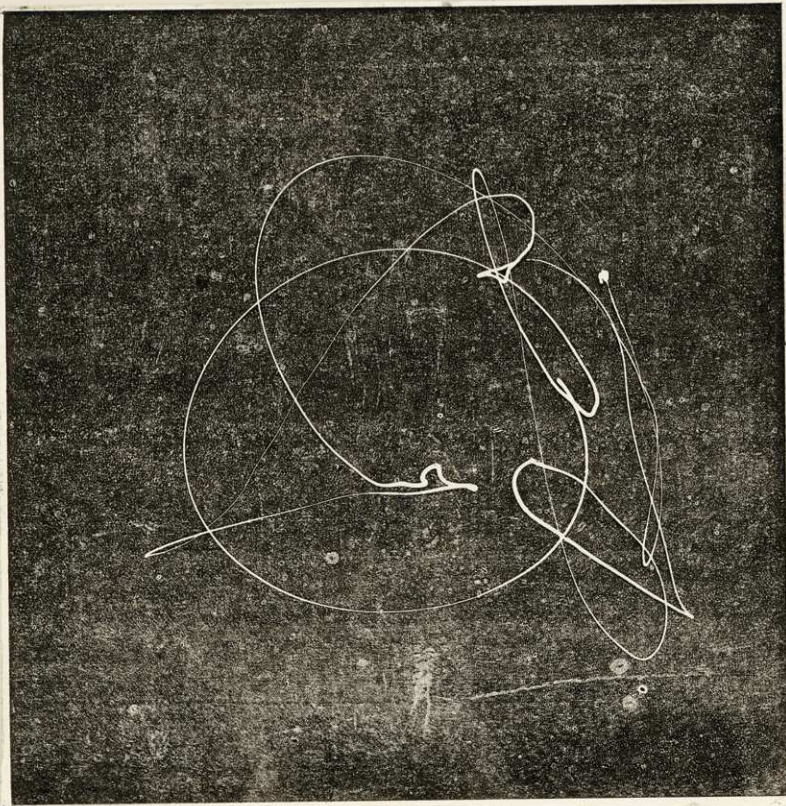
BY S 1 1

mechanization takes command

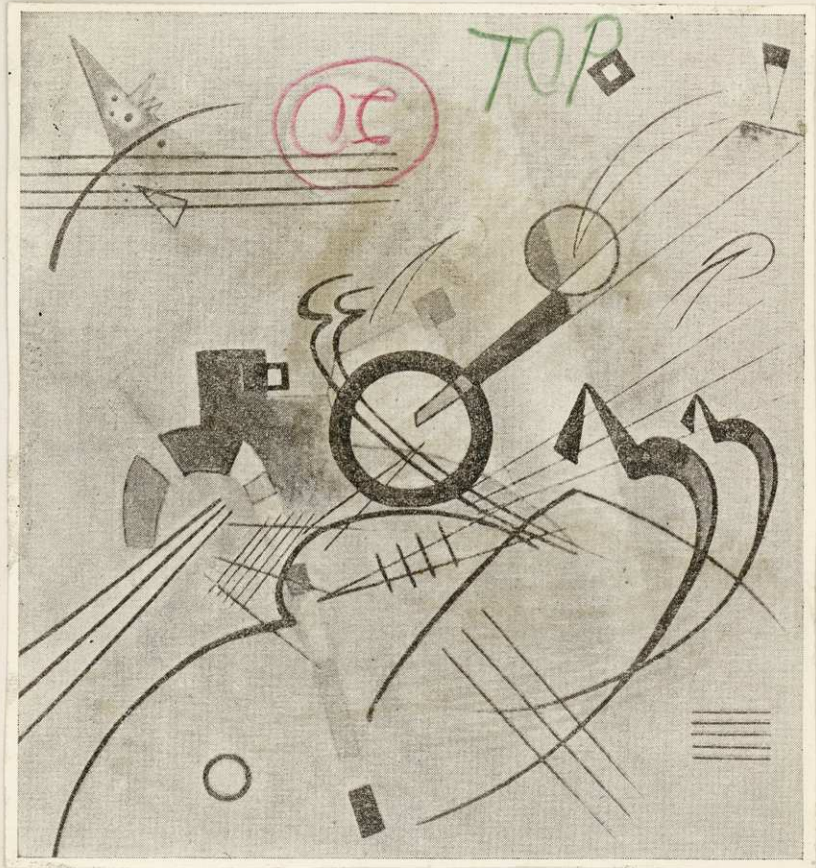
S. GIEDION

author of **SPACE, TIME AND ARCHITECTURE**





19



20

inventions dating to the past few decades. In a letter to Nef, Giedion observed, “the American industrialists are exclusively concerned with the business side of their work, so that our [the historian’s] point of view seems to them completely irrelevant.”²⁶⁹ A manuscript entitled “Suicide of History,” prepared in 1943 and submitted to an American newspaper for publication, rebukes his fellow historians “who did not succeed in awakening a feeling for the continuity of history.”²⁷⁰ Giedion was convinced that “[o]ur present-day blindness and lack of instinct for the real important historical values, will certainly be judged accordingly by the next generation and this act of self-destruction of the symbols of the American spirit of invention will be considered as completely incomprehensible.”²⁷¹

3.49 As a son of entrepreneurs in the textile industry, and trained as Sigfried Giedion, both a mechanical engineer and an art historian, Giedion was certainly primed to interrelate industrially fabricated objects with a larger historical narrative, but it is also evident that Giedion’s interest in the “origins of everyday life, the origins of our own mode of life” was strongly rooted in the practice of modern art.²⁷² As early as 1937, Giedion concluded in a letter to László Moholy-Nagy that artists had prepared the ground for future study, for they created “the optics” so that “the historian only had to align the telescope to the world.”²⁷³ From Max Ernst’s Dadaist collages composed with visual material taken from popular manufacturers’ catalogues, to Marcel Duchamp’s use of everyday objects as readymades, to such publications as *L’Esprit Nouveau* (initiated by Le Corbusier, among others), published between 1920 and 1925 in Paris, or Amédée Ozenfant’s *Art* (1927), developments in the contemporaneous art world anticipated the ideas found in Giedion’s book.²⁷⁴ Giedion’s strong focus on American patent furniture and the mechanization of the household likely had its roots in the historian’s visit to the 1925 *Exposition Internationale des Arts Décoratifs et Industriels Modernes* in Paris, and especially Le Corbusier’s *Pavillon de l’Esprit Nouveau*, which was equipped with industrially produced furniture and a variety of remnants of industrial products presented as homely knick-knacks.²⁷⁵ In an early outline of the book, entitled “The Study of Anonymous History,” Giedion attributed the discovery of “things of everyday usage” to modern painters, who “have presented us with a picture of our modern conception of the world by the use of these fragments: bottles, pipes, cards, pieces of wallpaper, or grained wood, scraps of the plaster decorations of a café.”²⁷⁶

With Le Corbusier’s vast collection of news clippings and advertisements for chairs, couches, and other furniture in mind, Giedion could hardly believe that a majority of the original patent models, documenting development from 1830 to 1880, had been destroyed or sold during a 1926 clearing out of the United States Patent Office. “An amazing historical blindness,” Giedion observed, “has prevented

the preservation of important historical documents, of models, manufacturer's records, catalogues, advertising leaflets, and so on."²⁷⁷ In 1943, during his wartime stay in America, about two thousand miniature models of furniture, previously held by an English industrialist who originally intended to build a museum to display them, were offered at an "unrestricted auction sale" in New York.²⁷⁸ An auction catalogue marked up with comments and preferences, as well as five scale models held by Giedion's archives, suggest that he attended this event and acquired selected pieces, despite his conviction that "this is altogether wrong [as] these models should not be scattered around."²⁷⁹

The Patent Office is only one example of the predominant indifference toward the industrial past. Giedion directly approached a large number of manufacturers and fabricators from furniture making to meatpacking, hoping to obtain documents from company archives. "Unfortunately," Giedion concluded in a letter to Edsel Ford, the president of the Ford Motor Company, "I often found that documents of the most decisive industrial events are lost for ever [*sic*]."²⁸⁰ As a reaction to this lack of "proper archives," Giedion proposed the installation of a "Museum of the American Way of Living," which would collect "samples and documents" recording the development of anonymous history.²⁸¹ While Giedion's idea of systematically collecting remnants of industrialization in America was certainly an unprecedented precursor to the field of industrial archaeology, the Smithsonian Museum established a collection of Arts and Industries in the late nineteenth century. As early as 1929, the magnate Henry Ford founded the Edison Institute, initially a private museum for his personal collection, which eventually would become the largest collection of Americana, documenting the development of agriculture, manufacturing, and transportation—many of the topics that were also touched on in Giedion's account of the mechanization of the everyday. Giedion was well aware of Ford's initiative, but highly suspicious of the way the institution was organized and how it administered the collection, for he "could practically find nothing" in this museum worth "many million dollars."²⁸² The tone of his message to Walter Gropius suggests that Giedion was at once frustrated about the lack of useful documents in Ford's collection and envious of the seemingly inexhaustible resources available. This is not surprising, since Giedion's own idea was to found not only a museum dedicated to the American way of life but also an "Institute for Contemporary History and Research," which would establish a similar perspective and methodological approach in an academic context.

Acknowledging Giedion's efforts to create awareness for the preservation of industrial achievements—the documentation of what later would be called popular culture—and the investigation of local construction methods, Lewis Mumford praised the art historian's

3.50

Scale model of convertible chair (ca. 1870–90) Giedion bought at auction from the U.S. Patent Office in April 1943.



contributions as “the legitimate envy of every American scholar who has even touched the field [he] worked so much better than [they] have.”²⁸³ In a 1947 “Sky Line” column, Mumford wrote:

Siegfried [*sic*] Giedion’s new book, “Mechanization Takes Command” (Oxford), should cause American architectural scholars again to blush, for their lack of curiosity and zeal has once more forced this European critic to explore a rich store of material that lay at their feet, waiting for a prospector to stub his toe in it. ... Giedion’s study of mechanization is not a single treatise, dominated by one thesis; it is a series of related monographs on the way in which mechanization has transformed the human environment and, naturally, the human soul in the last century and a half. Much of the data for this “anonymous history,” as Giedion calls it, has already been obliterated; in making inquiries of American manufacturers, he was astounded to find how little sense of history, how little respect for their own early achievements, how little interest in tradition or a sense of continuity even our major pioneers in mechanization had. Not recognizing that a new kind of chair or washbasin might be a cultural achievement, they for the most part burned their records. There have been a few happy exceptions, and with great pertinacity Giedion has salvaged and appraised some extraordinarily interesting material. ... A most important fact about his book is that, for all his patient research and audacious conclusions, he does not, like Le Corbusier, assume an attitude of pious adoration before the machine; as Henry Adams would put it, he is on the side of the Virgin as well as of the Dynamo. Refusing to swallow mechanization whole, yet certainly not rejecting it whole, he tries always to relate it (he relates it best of all, perhaps, in his chapter on the bath) to the human need for equilibrium and growth. No one has done this particular job before, and no one should have to do it again in our generation. Giedion ... has himself created a monument.²⁸⁴

In this review of *Mechanization Takes Command*, Mumford particularly admired that Giedion did not adopt the modernist tendency to worship the machine, for “nothing ... would be more fatal to the modern movement than to remain in a state of rigidity as a result of following formulae and solutions first arrived at in the nineteen-twenties; and nothing, by contrast, indicates its healthy development more surely than the fact that certain elements left out of that original formulation ... should come into the picture once more.”²⁸⁵

Despite the broad reception of *Mechanization Takes Command*—*Life* magazine featured an article on the “Evolution of the Bath” in August 1948, introducing Giedion as a “historian of technology”²⁸⁶—the book lacked “a context of appreciation,” as historian Arthur Molella

has observed.²⁸⁷ A majority of reviews were extremely skeptical of this work, and in architectural circles there was little appreciation for Giedion's novel approach, by which he positioned himself as an industrial archaeologist *avant la lettre*. As a critic writing for *Architectural Forum* noted, despite Giedion's "inspired research" and his "intuitive knowledge of where to look for facts," it seems the art historian's visual rhetoric, his "real genius at juxtaposing them [images] for maximum illuminations," had a much stronger impact than his exceptional perspective on what would be described as "popular culture" today.²⁸⁸ The skillful orchestration of industrial artifacts, advertisements, and modern art created a remarkable atmosphere that had not lost its fascination more than thirty years after the book's initial publication, when the work was finally released in Giedion's mother tongue.²⁸⁹

Wartime
Laboratories:
New York
and Chicago

War Travels:
Giedion's Second
Journey to the
United States

3.51 After delivering the Norton Lectures, Sigfried Giedion remained for almost a full additional year in the United States. Not only was he busy preparing the final manuscript for *Space, Time and Architecture* but he was also involved in the establishment of potential CIAM chapters in the American West and Southwest.²⁹⁰ In addition to various short field trips in the area and a tour of New England, he also planned a longer journey, traversing the country all the way to California and New Mexico, in the course of which he would visit delegates, deliver lectures, and explore the vast country. Giedion's wife, Carola Giedion-Welcker, had already indicated that she would like to join him in her mother's homeland when he was appointed to Harvard in 1938, but since their two children, Andres and Verena, were still in school, they decided not to move with the whole family. Despite the miserable circumstances at the eve of the Second World War, and the denied visa requests for the two children, Giedion-Welcker decided to cross the Atlantic to visit her husband in March 1939. Their close friend and neighbor Lita Finsler, wife of the photographer Hans Finsler, had offered to look after the children while she was away.²⁹¹ The Giedions eventually spent the whole summer together traveling and catching up with many of their friends in exile. Carola Giedion-Welcker embarked on her voyage back to Switzerland at the end of August 1939, barely a week before Germany's invasion of Poland.²⁹² Roughly eight months later, Sigfried Giedion would follow her, hoping to find an atmosphere that would allow him to continue the work he had pursued in the United States. As accounts from members of Giedion's close circle indicate, transatlantic travels became gradually more difficult and perilous due to warfare.²⁹³

Although the details of Giedion's trip back to Switzerland are unclear, it is certain that the situation in Switzerland on his arrival proved to be challenging. Most of his colleagues, among them Werner Moser, Alfred Roth, Max Ernst Haefeli, and Rudolf Steiger, were drafted into the army. Giedion himself was exempted from military service due to his bad eyesight, but was determined to join the administrative forces in the Swiss capital to engage in "foreign propaganda" for the country.²⁹⁴ With the general mobilization of the Swiss army in September 1939, academic and cultural activities were put on hold, and conservative voices within architectural circles gained even more approval and presence, particularly as a result of the enthusiastic



3.51

reception of *Landi 39* (as the *Schweizerische Landesausstellung*, or Swiss National Exhibition was commonly known), held from May to October. Gradually surrounded by fascist regimes, Switzerland was in a state of national seclusion: the borders were closed, international exchange was limited, and it became increasingly difficult to obtain access to foreign publications. During these early war years, the Doldertal home of Carola and Sigfried Giedion turned into the meeting place of such figures as Hans Arp, James Joyce, Alvar Aalto, Hans Finsler, and Hélène de Mandrot. Throughout the war, the Giedions were undoubtedly extremely isolated within the cultural context of Zurich, which—according to Carola Giedion-Welcker—was dominated by “fusty architects + bourgeois women, who are more upset if their kids suffer from measles, than when whole worlds come tumbling down.”²⁹⁵

In response to political developments, the mobilization of the Swiss army in September 1939, and the growing danger, which became immediately palpable after the bombing of Zurich a year later, Giedion began to inquire about possible teaching appointments in the United States.²⁹⁶ A first offer reached him from his close friend László Moholy-Nagy, offering to involve him in his School of Design in Chicago; Lewis Mumford indicated that he “wish[ed] very much that [Giedion were] back in America,” and also offered his help.²⁹⁷ Inquiries to American officials in Switzerland, however, soon made clear that the United States was beginning to close its borders, and while travel was still possible for merchants and industrialists, it was practically impossible for intellectuals to enter the country.²⁹⁸ An official invitation, ideally from a recognized institution, was the precondition to apply for a visa. From this perspective, Giedion’s main problem was the delayed publication of his Norton Lectures. If the book had been available and in distribution at that moment, chances would have been much better for his being considered for a teaching position.²⁹⁹ Giedion’s sphere of influence was limited to Harvard, Moholy’s school in Chicago, and a few individuals at Yale and the Massachusetts Institute of Technology. Throughout his time in America, he predominantly collaborated and socialized with other European immigrants and therefore lacked the institutional support necessary to secure a position. Giedion’s case was frequently mentioned in correspondence among his group of friends. Some of them were seriously worried about his situation in Switzerland, as a letter from Herbert Bayer to Walter Gropius suggests:

Louise Koppel, now Mrs. Stadler, arrived last week by Clipper from Switzerland with tales about the dangerous situation which the Giedions are now facing with the impending German anschluss of Switzerland and that they feel kind of forgotten by all their friends in America who could do something to bring them over here.

Giedion seems to want to come here very much. The only way to get a visa is to get a teaching job. ... He also refers to Ralph Perry, the dean of Philosophy at Harvard, I bring the question up to you again only because I dare to do so after the success of his book. (I don't know actually what the impression of the book has been on the Harvard Press). ... I know your position concerning this but it seems to me that Boston is, in spite of the minor success of his lectures, the only place where one can do something for him.³⁰⁰

It was likely clear to all those involved at the Graduate School of Design at Harvard that Gropius, in charge of the architecture program, would not hire Giedion as part of his faculty. In a time of crisis, when schools were pressured to involve naturalized citizens, it would have taken a great effort to make that step.

It was evident that emigration was impossible without official papers from the United States. Giedion knew well that it was inevitable “that influential people cable to the American Consulate that [his] activity is wanted in America.”³⁰¹ He began writing to colleagues at various universities and other institutions on the East Coast and in the Midwest. Finally, in January 1941, a first informal inquiry reached the art historian. It was Maynard Meyer of the Yale School of Architecture, who was contacting him about a potential lecture series and help with an exhibition on Swiss modern architecture.³⁰² They had previously met on the occasion of a lecture on “The Interrelation of Art, Architecture and Construction,” which Giedion delivered at Yale shortly before leaving for Switzerland.³⁰³ Meyer's advance was followed by an official proposition from Dean Everett Victor Meeks, who offered Giedion the series of three “Trowbridge Lectures” at the School of Fine Arts in the fall.³⁰⁴ Despite minimal pay—while he was paid \$10,000 for the six Norton Lectures at Harvard, Yale only offered one hundred dollars per talk plus residence for the duration of the lecture period—he proposed to teach a seminar in conjunction with the lectures. As altruistic as this might seem, Giedion's proposition was clearly geared toward the dissemination of his ideas and the research for his new book project.³⁰⁵ A first lecture, entitled “The Changing Aspects of Our Culture,” would elaborate the collaboration between faculties; the second lecture would discuss “Lines of Research in Contemporary History”; in his third presentation Giedion was to speak about “American Development”; and the weekly seminar was to investigate “Gothic Urbanism from the XI to the XIV Century with Relation to the Problems of Today.”³⁰⁶ The willingness of an established scholar to teach under such circumstances also sheds light on the increasingly restricted possibilities for travel and work abroad, and the continuously uncertain political situation in Switzerland.

The official invitation from Yale University, however, was only the beginning of Giedion's longer administrative struggle before embark-

ing on his second journey to the United States. By 1941, the only feasible way to reach North America from continental Europe was by a Pan American Clipper plane, a Boeing B-314 that was essentially a flying boat with three weekly connections between Lisbon and New York.³⁰⁷ In order to reach Portugal, a neutral country under the dictatorship of António de Oliveira Salazar, Giedion needed to travel through southern France, which was controlled by the Vichy regime, and neutral Spain, which was in the hands of dictator Francisco Franco. As a Swiss citizen of Jewish descent, Giedion undoubtedly viewed the possession of a passport issued by a neutral country as imperative. He initially intended to embark on his journey in July 1941, in order to reach the United States about six weeks before the beginning of classes at Yale. While the invitation from the American university helped him to obtain a visa, he still needed various permissions for his travels within the European continent. Considering the large number of refugees and the decelerated flow of information, it proved extremely difficult to get in touch with the local authorities in Lisbon, and Giedion's efforts to expedite the matter via channels of Swiss diplomacy ended in talk.³⁰⁸ Thanks to his well-established network, however, which extended to architecture circles in Belgium and the Netherlands, Giedion had a direct connection to the Dutch legation in Portugal: the architect Hanneke Schröder, daughter of Gerrit Thomas Rietveld's client and partner Truus Schröder, worked as a secretary in Lisbon. She helped to accomplish the necessary paperwork with the authorities, and personally intervened with the airline so that Giedion could cross the Atlantic on August 21, 1941.³⁰⁹

New York:
The Vanguard's
Wartime Epicenter

"New York was a gigantic radio set capable of receiving and transmitting to a great number of stations which were unable to reach each other."³¹⁰ — Erwin Panofsky

3.52 Giedion was not the first to escape war-torn Europe and reach the American shore.³¹¹ Already two years earlier, when he was first appointed to Harvard, many artists of the international avant-garde were settling in New York and on the East Coast, some by choice, others due to political circumstances.³¹² The December 1941 issue of *Fortune Magazine* featured the presence of European artists in the United States, in an article, "The Great Flight of Culture," with twelve reproductions of works by Mondrian, Ozenfant, Chagall, and Dalí, and a cover by Fernand Léger.³¹³ Giedion was immediately tied into this well-established social network, which included many former friends

View from the Singer Building toward the Woolworth Building, New York, photographed by Giedion, ca. 1942.



3.52



3.53



3.54



3.55



3.56

and colleagues from Europe. Léger had reached the United States already in November 1940, traveling the same route Giedion followed, and setting up a studio in midtown Manhattan, and eventually also at Rouses Point on Lake Champlain, near the Canadian border. Piet Mondrian, Max Ernst, Yves Tanguy, Amédée Ozenfant, Hans Richter, Marc Chagall, André Breton, Marcel Duchamp, and many other cultural figures also settled in New York City. During his first stay in the United States, Giedion observed the city's "optimistic," vibrant climate, and the growing community of European vanguards with "more friends ... gathered together than ever in Paris or Zurich."³¹⁴

Giedion's pied-à-terre in Manhattan was the apartment of Stamo Papadaki—a former Greek CIAM delegate—at 850 Seventh Avenue, between 54th and 55th Streets.³¹⁵ The letterheads of correspondence throughout the war years suggest that Giedion regularly lived and worked at this location, which was in walking distance to the house of his friend Josep Lluís Sert, who resided at 15 East 59th Street, the very building where Piet Mondrian stayed until his death in 1944. The studio of their mutual friend Léger was located not too far away, near Fifth Avenue on 40th Street. Between 1942 and 1943, Giedion spent most of his time in New York. As a result of the difficult economic situation, which forced many architects, especially immigrants, to close down their offices, it was impossible for Giedion to find a teaching position following his engagement at Yale: "I have been living in New York for a year. I am lecturing and am in contact with young people, but just like in architecture, the universities—at least the humanities (history, philosophy, etc.)—are operating in a very, very reduced manner. At the moment, it does not make sense to teach."³¹⁶ Despite financial and professional challenges, life among the group of European immigrants in New York was "by most accounts ebullient."³¹⁷ Artists and architects regularly met at restaurants and coffee places such as the Jumble Shop near Washington Square Park, where they revived discussions that they had previously started in Europe, and exchanged news about those who had to stay behind. Giedion later recalled that they "created there a kind of Parisian atmosphere, expounding plans and commenting upon the American scene."³¹⁸

This climate of open intellectual exchange and critical observation of the immediate environment and its cultural peculiarities provided Giedion with the ideal setting to embark on a new book project, which he described as an investigation of "the impact of mechanization on the intimate life, thoughts and habits."³¹⁹ With the second printing of *Space, Time and Architecture* underway, the writer's mind was free to tackle a set of issues Giedion had already approached before his travels to the United States.

The cultural landscape of the United States in general, and New York in particular, provided a fertile environment to build on, extend,

3.53–3.54
Rockefeller Center, New York, worm's-eye view, photographed by Giedion, ca. 1942.

3.55–3.56
Chess players in a public park, New York, photographed by Giedion, ca. 1943.

3.57 and alter the conceptual framework that the historian had established before his appointment to the other side of the Atlantic. László Moholy-Nagy, letter to Carola Giedion-Welcker, undated (ca. 1943), and intercepted by the authorities as it was “intended for an enemy or enemy-occupied country.” Moholy is filling in Carola about the success of

Space, Time and Architecture, that Giedion is working hard on his new book (*Mechanization Takes Command*), and on his friend’s poor health and homesickness.

While New York provided a vibrant setting to work, study, and socialize, Giedion suffered from the hot and humid climate of the New York summer, and he repeatedly indicated that he needed to breathe “Schweizer Luft” (Swiss air).³²⁰ The closest thing to Alpine air he found was on his skiing trips with Herbert Bayer and Marcel Breuer in Vermont—a nice spot, but “kein Davos” (not Davos) as he noted.³²¹ As much as Giedion complained about the narrow-mindedness of his countrymen, whenever he was in the United States, his Swiss patriotism surfaced—reflected in his introduction to G. E. Kidder Smith’s *Switzerland Builds*, a declaration of love for his home country and published in the early postwar years.³²²

3.58 Sigfried Giedion on a ski trip with friends, Mount Mansfield, Vermont, 1943.

Following their discovery of Manhattan, “the most colossal spectacle in the world,” Fernand Léger, Josep Lluís Sert, and other émigrés discovered Long Island, a “horizontal New York,” which offered a retreat not far from the hectic metropolis.³²³ The architect Wallace K. Harrison owned a large property in West Hills, near Huntington, Long Island, where a group of modern architects and artists including

3.59 Railroad line and rollercoaster. Coney Island, New York, photographed by Giedion, ca. 1942.

Alvar Aalto, Constantin Brancusi, and Sigfried Giedion met informally during the New York World’s Fair in the summer of 1939.³²⁴ Harrison was also a close friend of Léger, whom he met through Mary Callery, a young American sculptor and collector who was also involved with Christian Zervos’s circle at *Cahiers d’art* in Paris.³²⁵ Undoubtedly, Harrison was Léger’s most important supporter in the United States. Harrison arranged commissions for Léger, such as two large murals for Nelson Rockefeller’s apartment in Manhattan, and Léger’s 1942 painting *Les plongeurs* (The Divers) was mounted on a curved wall in the architect’s Long Island home in 1943. Throughout the war years, the Harrison’s Estate offered a place for artists and intellectuals to gather and exchange ideas—among them such architects, artists, and intellectuals as Nelson Rockefeller, Robert Moses, Marc Chagall, Herbert Matter, Stamo Papadaki, Oscar Nitzschké, and James Johnson Sweeney. Around the same time, Herbert Bayer and Josep Lluís Sert rented a house in Long Island, where they en-

Dear Carola:

We have not seen each other
I think that I feel that
with great the reason
thinking about

What I hear other day in
funeral. I in these days
Their appreciation one can have
to us both, the feeling of
and woman. here. This
occasionally

as he will do next month when he has a number of lectures to give
at different colleges and universities. You cannot imagine how
popular his book has become in this country. Everyone knows
"Space, Time and Architecture"; it was a real "hit".
But funny enough he does not appreciate it, perhaps because it is
a past performance for him. He is working with the greatest
concentration on his new book, which I believe will be wonderful -
a documentation of the sources of our mechanized life, giving to
the intelligent reader at the same time a clarity about the aims and
principles of life too.

When I was with him he was already recovering from his illness,
which was I guess partly physical and partly perhaps homesickness,
but severe enough that it made us worry.

Our school is going on better and better in spite of the war.
We have found an industrialist who is deeply interested in the
school's development and I believe that this will settle some acute
needs of the school concerning its budget and faculty.

I have been working for two years now on my book, the temporary
title of which is "The Task of our Generation". This has retarded
my painting somewhat in the last year, though I still have the greatest
pleasure in it and hate to have to give it up for other things.

257 East Ontario Street Chicago, Illinois • Telephone DELaware 5775 and 5779

THIS COMMUNICATION, RETURNED TO
SENDER BECAUSE IT IS ^{intended for} ADDRESSED TO AN
ENEMY OR ENEMY-OCCUPIED COUNTRY.
PERSONAL MESSAGES OF NOT MORE THAN
25 WORDS MAY BE SENT THROUGH THE
AMERICAN RED CROSS. INFORMATION
MAY BE OBTAINED FROM THE NEAREST
RED CROSS OFFICE.

FORM OC-12

GPO 16-27979-1

53288

53113

sometimes
p. Also
each a letter
really
have been

whom I saw the
Mondrian's
nds are needed
we are doing.
uable asset
ems interesting
try. One misses
l between man
exist yet
to New York



3.58



3.59

tertained a close circle of modern architects and fellow émigrés, including Sigfried Giedion, Frederick Kiesler, Fernand Léger, and Alexander Calder. According to Sert, “We had a wonderful time in a little cottage we rented on Long Island. We had weekends with just gallons of California wine which were very fine. Some very interesting discussions came to pass there. It was a continuation, strange as it may seem, of things that had happened before.”³²⁶

Chicago:
László Moholy-Nagy
and the New Bauhaus

After his first visit to Chicago in 1939, Giedion concluded that “it isn’t enough just to land in New York and go up and down the streets of Manhattan, for, though the height [of the buildings] might be impressive and the technique magnificent, the really vital American architecture is found inland; in the Middle West; in Chicago.”³²⁷ He had embarked on his first trip to the Midwest upon the completion of his inaugural semester at Harvard, in January 1939.³²⁸ Giedion planned to spend a week’s time in Chicago to visit his close friend László Moholy-Nagy and to see a great number of architectural sites spread out as far as St. Louis.³²⁹ Much of the success of this trip Giedion owed to Moholy-Nagy, his generous host and a close friend since they first met at the Bauhaus in the mid-1920s.³³⁰ The art historian and the artist spent a great deal of time together in London, debating and elaborating Giedion’s study on the “Origin of Modern Man,” before Moholy-Nagy’s emigration to the United States.

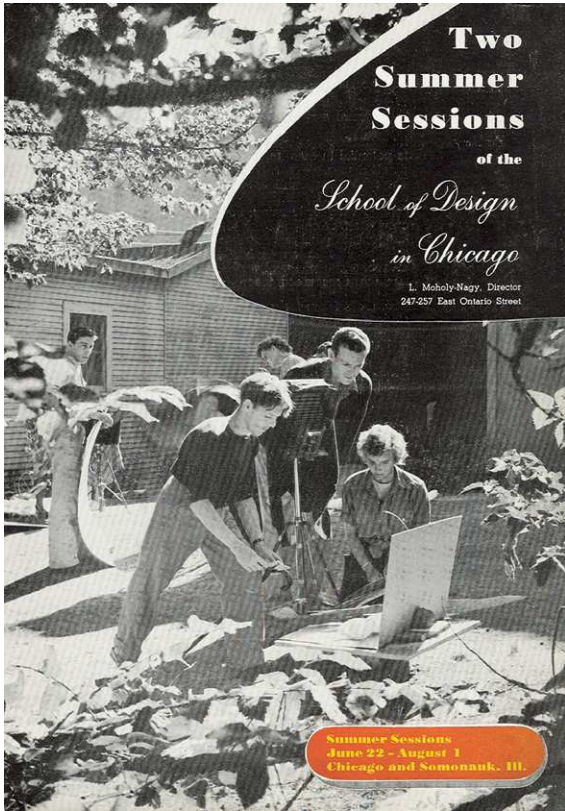
During his Chicago years, Moholy-Nagy managed to attract financial contributions to his school from dozens of small and medium-sized firms in the region. In addition, he attempted to share the school’s design work with neighboring industries.³³¹ Fueled by idealism, he indefatigably continued to negotiate with entrepreneurs and industrialists, “infecting” secretaries and foremen all the way up to the executive level with his ideas, as his wife later recalled.³³² From department stores such as Marshall Field & Co. and Sears, to various paper mills and the Masonite Corporation, to the sausage manufacturer Oscar Mayer and the Wrigley Chewing Gum Company, to United Airlines and the General American Transportation Corporation—a diverse group of industrialists figured among the “friends of the institute” over the course of the next few years.³³³ This roster of personal contacts to a great number of diverse industrial enterprises throughout the Midwest would eventually turn out to be an invaluable source for Giedion’s investigations into the history of the mechanization of everyday life, allowing the art historian to gain access to various company archives, and to get in touch with relevant

people at large corporations. While Giedion's previous work had been occupied mainly with the development of a theoretical, historical, and cultural foundation for the ideas of modern architecture, he now shifted his attention to the industrially fabricated products of everyday life, which had no lofty artistic meaning and were made to suit basic functional needs. The industrial landscape of the Midwest proved to be an inspiring environment for this endeavor—"the laboratory," as Le Corbusier described it in a letter to Giedion.³³⁴

During the 1940s, Chicago became the lynchpin for Giedion's research activities. In the course of his teaching engagements at Moholy-Nagy's school, Giedion began to formulate ideas for his new publication, and to expose his work in progress to a critical audience. Moholy-Nagy not only gave Giedion accommodations with his family but also provided a productive and challenging intellectual climate.³³⁵ Moholy served as a critic, helping Giedion to find new directions and revise his writings. While there is very little record of this collaboration, snippets of conversations underscore the mutual trust that existed between the two intellectuals. According to Moholy-Nagy,

With Pep [Giedion] I never stop talking of problems interesting to both of us, but one can do this so rarely in this country. ... He is working with the greatest concentration on his new book, which I believe will be wonderful—a documentation of the sources of our mechanized life, giving to the intelligent reader at the same time a clarity about the aims and principles of life too. ... When I was with him he was already recovering from his illness, which was I guess partly perhaps homesickness, but severe enough that it made us worry.³³⁶

3.60 Giedion regularly taught in the six-week summer sessions that were held near Somonauk, Illinois, and he was also a frequent guest lecturer at Moholy's School of Design (formerly the New Bauhaus), which changed its name, yet again, to the Institute of Design in 1944.³³⁷ Among other classes, Giedion taught a seminar on "The Spirit of Design held near Somonauk, Illinois, 1942, where Giedion taught. Invention" and lectured on "The Anonymous History of the Nineteenth Century," the very subject he was investigating at the time.³³⁸ His publications were prominently featured in the school's reading lists and, thanks to the affiliated industrial sponsors, disseminated beyond its inner circle. Giedion's active involvement with the Institute of Design, and his vigorous exchange with Moholy-Nagy and other resident intellectuals throughout the wartime period, were formative for the development of the Swiss historian's postwar work, and also marked the resumption of his increased engagement with cross-disciplinary studies.



3.60

Unless otherwise noted, all English translations of quoted material are by the author.

1 Sibyl Moholy-Nagy, letter to George Collins, ca. mid-1960s, from the George Collins Papers at Avery Library, Columbia University, New York, as quoted by Salomon Frausto, email to the author, June 2, 2004.

2 Giedion, *Space, Time and Architecture*, 1965, v.

3 Tournikiotis, *Historiography of Modern Architecture*, 16.

4 Posener, "Zu Siegfried [sic] Giedions 'Raum Zeit, Architektur,'" 87.

5 Giedion, *Space, Time and Architecture*, 1965, 5.

6 Posener, "Zu Siegfried [sic] Giedions 'Raum Zeit, Architektur,'" 88; Kostof, "Architecture, You and Him," 193.

7 Ibid., 87.

8 Giedion, *Space, Time and Architecture*, 1946, 394.

9 Sigfried Giedion, letter to Walter and Ise Gropius, May 7, 1943, HOU, bMS Ger 208 (773): "The young told me how Mendelsohn attacked the book a month before, 'that architects could not build in four dimensions,' and how he introduced his correspondence with Einstein and his opinion on *Space, Time and Architecture* as a chief witness. Do you understand this? After all, I have never attacked him all his life." See also Posener, "Zu Siegfried [sic] Giedions 'Raum Zeit, Architektur,'" 87.

10 Somer, *Functional City*, 52.

11 Sigfried Giedion, letter to J. J. P. Oud, August 25, 1928, NAI, J. J. P. Oud Papers, OUDJ-B53: "Wir hatten einen impertinenten Störenfried. Mr. Häring, der schon früher mit seiner Schulmeister pedanterie den ganzen Kongress sabotieren wollte—da er nicht vom Ring kam. Häring hatte den ganzen Kongress gegen sich und sprach unaufhörlich hinein."

12 Sigfried Giedion, letter to Le Corbusier, April 26, 1929, FLC D2-1-181: "Was uns betrifft, werden wir entscheiden müssen, ob wir einen kleinen Kongress (Avantgarde) haben möchten, oder Kompromisse machen, um grösser zu sein."

13 Schirren, *Hugo Häring*, 49.

14 Sigfried Giedion, letter to Alvar Aalto, January 13, 1931, AAA 10821: "Selbstverständlich gab es auch diesmal gewisse Trübungen, die aber, und dies beruhigt uns, immer von der gleichen Stelle ausgingen. Vielleicht haben Sie gehört, dass wir mit Hering [Hugo Häring] sehr unsanft umgehen mussten, doch so hoffe ich, damit wird auch auf absehbare Zeit hin die Atmosphäre gereinigt sein. Jedenfalls haben wir als Effekt unseres Vorgehens sofort einen engeren Zusammenhang der Mitglieder gespürt."

15 Hugo Häring, letter to Hans Scharoun, December 27, 1947, as quoted in Bürkle, "Berlin and the Influence of CIAM," 68–75.

16 Tafuri, *Theories and History of Architecture*, 151.

17 See also Julius Posener's critical review of the first German edition of *Space, Time and Architecture* (1965): Posener, "Zu Siegfried [sic] Giedions 'Raum Zeit, Architektur,'" 85–89.

18 Frampton, "Giedion in America," 44–51. It is, for instance, curious that Giedion never mentioned Team 10, and the generational conflicts that emerged within the group.

19 Giedion, *Walter Gropius: Mensch und Werk* (1954).

20 See, for example, Rowe and Slutzky, "Transparency," 45–54; Mertins, *Transparencies Yet to Come*, 1996.

21 Oechslin, *Moderne entwerfen*, 229.

22 Giedion, *Space, Time and Architecture*, 1965, 495–96.

23 Ibid., 497.

24 Giedion, *Bauen in Frankreich*, 2000, 83.

25 Giedion, *Space, Time and Architecture*, 1965, 531–40.

26 Ibid., 668.

27 Sigfried Giedion's obituary by Alvar Aalto, first published in Finnish, in *Arkkitehti*, no. 2 (1968). An English translation appears in Schildt, *Alvar Aalto in His Own Words*, 249.

28 Sigfried Giedion, letter to Alvar Aalto, January 10, 1949, AAA 10876: "In dieser Zeit habe ich an dem Kapitel für Sp. T. A. [*Space, Time and Architecture*] über Dich gearbeitet, wenn ich gerade einen klaren Augenblick hatte. Es ist im Vergleich zu den anderen Kapiteln, Gropius etc. etwas zu lang geworden und ich fürchte, dass dies bei manchem meiner Freunde viel Unwillen erregen wird. Andererseits ist mir das Buch dadurch völlig klar geworden."

29 Sigfried Giedion, letter to Alvar Aalto, January 10, 1949, AAA 10876: "Aus Deinem Brief ... ersehe ich, dass Du mit meinem Aufsatz, d. h. meiner Tonart nicht ganz einig bist. Dies tut mir leid. Jedermann weiss, dass wir befreundet sind. ... Wenn ich nicht meinen Finger darauf lege, was für einen Einfluss Du in den U. S. A. hast, so geschieht es nicht, weil wir befreundet sind, sondern, da ich als Historiker einen kühlen Ton bevorzuge. Ich glaube, der ist nicht nur gerechter, sondern auch wirksamer."

30 Posener, "Zu Siegfried [sic] Giedions 'Raum Zeit, Architektur,'" 85–89; more recently, Rykwert, "Siegfried [sic] Giedion Gave My Generation a Place in History."

31 Mertins and Jennings, G., 3–18.

32 Ockman, "*Bauhaus Culture from Weimar to the Cold War* by Kathleen James-Chakraborty."

33 Serge Chermayeff as quoted in Blum, *Oral History of Serge Chermayeff*, 31.

34 Johnson, *Mies van der Rohe*, 7; the exhibition was held at the Museum of Modern Art in New York from September 16 to November 23, 1947.

35 Sigfried Giedion, letter to Philip Johnson, March 15, 1948, GTA 43-K-1948-03-15(G).

36 Giedion, *Space, Time and Architecture*, 1967, 564.

37 Sigfried Giedion, letter to Henry-Russell Hitchcock and Philip Johnson, September 18, 1930, GTA 42-K-1930-G.

38 Only four letters between Henry-Russell Hitchcock (1903–1987) and Sigfried Giedion can be found to date in Giedion's papers, and it is highly questionable whether more material will be revealed once Hitchcock's papers become fully accessible. (At the time of my archival research, the papers held at the Smithsonian Archives of American Art were still inaccessible to researchers. The collection has been processed in the meantime.) The directories available online, however, do not include correspondence between Giedion and Hitchcock. See Archives of American Art, "Henry Russell Hitchcock Papers, 1919–1987," <https://www.aaa.si.edu/collections/henryrussell-hitchcock-papers-9728>

(accessed April 17, 2024).

39 Sigfried Giedion, letter to László Moholy-Nagy, December 19, 1938, GTA 43-K-1938-12-19.

40 Hitchcock, *Modern Architecture*, 1993, 14.

41 Reyner Banham, as quoted in Whiteley, *Reyner Banham*, 400.

42 See also Scully, "Foreword to the Da Capo Edition," in Hitchcock, *Modern Architecture*, 1993, v–x.

43 Giedion, *Bauen in Frankreich*, 1928, 1; Giedion, *Building in France*, 1995, 85.

44 Ibid.

45 Hitchcock, *Modern Architecture*, 1993, 90.

46 Ibid., 104.

47 Hitchcock, "Modern Architecture I–II," 347.

48 Hitchcock, *Modern Architecture*, 1993, 149.

49 Hitchcock toured Europe with Philip Johnson and Alfred Barr Hanks, "Bauhaus," 34; Kantor, *Alfred H. Barr*, 146–61.

50 Giedion, *Space, Time and Architecture*, 1946, 5.

51 Mart Stam (1899–1986) was a Dutch architect, urban planner, furniture designer, and a founding member of CIAM. Stam, "Holland und die Baukunst unserer Zeit," 185–88, 225–26, 241–43, 268–72.

52 ABC was published between 1924 and 1928. Five issues appeared as part of the "first series," with another four issues as part of the "second series." See Stam, *ABC—Beiträge zum Bauen*; see also Gubler, "Nationalisme et internationalisme dans l'architecture moderne de la Suisse," 109–41.

53 In the late 1930s, these voices eventually formed a majority, siding with the *Geistige Landesverteidigung* (spiritual national defense) movement and the creation of a modernist approach centered on Swiss cultural identity. See also Geiser and Stierli, "Architecture Officielle Maudite," 3–5. For the debate promoted through *Schweizerische Bauzeitung*, see Rümle, *Peter Meyer*, 91–93.

54 Sigfried Giedion, sketch for a leaflet for *Bauen in Frankreich, Eisen, Eisenbeton*, ca. 1928, GTA 43-T-13: "IST DAS NEUE BAUEN EINE MODE? LEBEN WIR TRADITIONSLOS? AUFLÄRUNG ÜBER DIE GANZE ENTSTEHUNG DES NEUEN BAUENS BRINGT: SIGFRIED GIEDION, BAUEN IN FRANKREICH · EISEN · EISENBETON"; "Es deckt endlich die eigenste Tradition unserer Zeit auf."

55 Hitchcock, *Modern Architecture*, 1993, 198.

56 Meyer, *Moderne Architektur und Tradition*, 1928, 7: "Jede Generation tritt eine Erbschaft an Lebensinhalten und -Formen an, mit denen sie sich auseinandersetzen muß, zwangsläufig und ungefragt."

57 Medici-Mall, *Im Durcheinander der Stile*, 120.

58 Ibid., 121.

59 Giedion, *Spätbarocker und romantischer Klassizismus*.

60 Le Corbusier, *Toward an Architecture*, 91–98.

61 Giedion, *Space, Time and Architecture*, 1946, 23.

62 Ibid., 18.

63 Ibid., 5.

64 Ibid., 5–7.

65 Philip Johnson, interview by Sharon Zane, February 6, 1991, transcript, p. 61, MOM, The Oral History Program.

66 Eisenman, "Introduction," 15.

67 The *Modern Architecture In-*

ternational Exhibition was on view at MoMA from February 9 to March 23, 1932. It was accompanied by an exhibition catalogue with the same title, and later by the book *The International Style*. Hitchcock and Johnson, *Modern Architecture International Exhibition*; Hitchcock and Johnson, *International Style*, 1932. For a detailed account of the exhibition, see Riley, *International Style*. There was also a Chicago showing of the exhibition later in 1932; see Lambert and Oechslin, *Mies in America*, 150.

68 For example, George Howe's residence in Philadelphia (1914), Walter Gropius's "Houses for Workmen" in Pomerania, Germany (1906), and the highly ornamented Millard House in Pasadena, California (1921), by Frank Lloyd Wright.

69 Philip Johnson, letter to J.J.P.Oud, 1930 [no specific date indicated], NAI, J.J.P.Oud Papers, OUDJ-B69.

70 Philip Johnson, letter to Lewis Mumford, April 18, 1932, VPL, Ms. Coll. 2, Folder 2483.

71 In the foreword to the 1995 edition of *The International Style*, Philip Johnson described the collaboration with Hitchcock and Barr as follows: "Of the three of us, Russell had the great eye. He was a supreme historian. The text of our book was his. Alfred was the resident ideologue and goad; he was the one who came up with the title of the exhibition, insisting on capitalizing 'International Style.' He was the one who shaped our thinking, who led the battle for 'strict principles.' ... I was still somewhat of a student at the time. Therefore, I was five times as enthusiastic and propagandistic as they were. I was more catholic than the Pope." See Johnson, "Foreword to the 1995 Edition," 14.

72 Critic Reyner Banham pointed out, "[W]hat you see is what you get." See Banham, "Set of Actual Monuments," 90.

73 Gropius, *New Architecture and the Bauhaus*, 23.

74 Le Corbusier, *Précisions sur un état présent de l'architecture et de l'urbanisme*, 70. See also Le Corbusier, *Toward an Architecture*, 146: "Architecture suffocates in routine. The 'styles' are a lie. Style is a unity of principle that animates all the works of an era and that results from a distinctive state of mind. Our era fixes its style every day. Our eyes, unhappily, are not yet able to discern it."

75 Joseph Rykwert has discussed Giedion's conception of style in detail. See Rykwert, "Giedion and the Notion of Style," unpaginated.

76 Ibid.

77 Muthesius, *Style-Architecture and Building-Art*, 81: "Wherever possible we should for now ban completely the notion of style. When the master builder clearly refrains from any style and emphasizes that which is required of him by the particular type of problem, we will be on the correct path to a contemporary art, to a truly new style no longer so distant."

78 Giedion, *Space, Time and Architecture*, 1946, xxvii.

79 R. M. Schindler, letter to Philip Johnson, March 9, 1932, MOM, Museum Archives, *Modern Architecture: International Exhibition* (MoMA Exh.#15, February 9 to March 23, 1932), Correspondence.

80 Mumford, *Brown Decades*, 1971, 173.

81 Lewis Mumford, letter to

Catherine Bauer, February 9, 1931, VPL, Ms. Coll. 2, Folder 6345.

82 Ibid.

83 Eisenman, "Introduction," 16; in 1952, Hitchcock, together with Arthur Drexler, curated an exhibition entitled *Built in USA: Post-war Architecture* at MoMA. The accompanying catalogue (see Hitchcock and Drexler, *Built in USA*) presents various currents in postwar International Style architecture in the United States; Sigfried Giedion, "Internationale Architekturbücher 1932," typescript, undated, GTA-43-T-15(1932): "Als ich Russell-Hitchcock vor ungefähr 2 Jahren fragte, warum er die ästhetische Seite der Architektur vor allen anderen betone, so meinte er, dass dies nicht nur seine Überzeugung sei, sondern dass man auf eine andere Weise in Amerika das Publikum überhaupt nicht zum Begreifen der modernen Phänomene bringen könne."

84 Sigfried Giedion, untitled typescript, May 2, 1959, GTA 43-T-10 (S.3).

85 Giedion, *Space, Time and Architecture*, 1965, xxvi-xlviii.

86 Ibid., xxvi. In January 2007, a panel discussion entitled "Playboy Architecture: Then and Now," contrasting the discourse of the time with contemporary positions, was organized by Reto Geiser at the Swiss Architecture Museum (SAM) in Basel; for a detailed account of Giedion and Philip Johnson, see Moos, "Playboy Architecture," 170-89.

87 Philip Johnson, letter to Giedion, undated, ca. 1931, GTA 42-K-1930-Giedion: "Ich weiss wie verschieden unsere ansichten ueber das [sic] Essenz der Architektur und die Hauptfragen; ich glaube aber dass wir uns gegenseitig viel helfen koennen."

88 Giedion and Hitchcock only met once for a "short hour" without much concentration in the "unpleasant Russian Tea-Room." Sigfried Giedion, letter to Henry-Russell Hitchcock, January 16, 1941, GTA 43-K-1941-01-16(G)-2.

89 Stritzler-Levine, "Curating History," 34.

90 Eggner, "Nationalism, Internationalism," 243-58.

91 Ibid., 114.

92 Ibid., 117.

93 Johnson, "Historical Note," 1969, 19.

94 Philip Johnson, letter to Lewis Mumford, January 3, 1931, VPL, Ms. Coll. 2, Folder 2483.

95 Mumford, "Sky Line: Organic Architecture," 49.

96 Hitchcock and Johnson, *International Style*, 1966, 27.

97 Giedion, "Die architektonische Front," 179-84: "Wenn Lloyd Wright seinen Betonsteinen einen ornamentalen Stempel gibt, so ist das keine Morgenröte, sondern aller Wahrscheinlichkeit nach die Nachwirkung romantischer Jugenderinnerungen."

98 Ibid.: "Kein Architekt seiner Zeit hat das Wohnproblem von Anfang an so in den Mittelpunkt seiner Arbeit gestellt wie Lloyd Wright. ... Für die Geschichte jedenfalls dürfte der junge Lloyd Wright mit seinen Wohnhäusern von 1893 bis ungefähr 1910 das lebenswichtige Beispiel geliefert haben."

99 Wright, *Ausgeführte Bauten und Entwürfe*.

100 H.P.J. Berlage lectured on March 30, 1912 at *Zürcher Ingenieur- und Architektenverein* on "Neuere amerikanische Architektur."

101 "Das Bad von heute und ges-

tern," Zurich, Kunstgewerbemuseum, April-May 1935. Wohnbedarf AG was co-founded by Giedion and Moser in 1931 to promote mass-produced furniture that would fit the needs of modern living. Arthur Rüegg and Stanislaus von Moos have written extensively on this topic.

102 Lewis Mumford already announced this remarkable shift in his review of *Modern Architecture: International Exhibition* at the Museum of Modern Art. See Mumford, "Sky Line: Organic Architecture," 45.

103 Sigfried Giedion, "Danger and Advantage of Luxury," typescript, 1939, GTA 43-T-15; also published in *Focus*, no. 3, (1939), 34-39.

104 Ibid.

105 Giedion, *Space, Time and Architecture*, 1946, 347.

106 Ibid., 396.

107 Giedion, *Bauen in Frankreich*, 2000, 60.

108 Mumford, *Brown Decades*, 1971, 143.

109 Mumford, *Sticks and Stones*, 101.

110 Mumford, *Brown Decades*, 1971, 143.

111 Ibid., 172.

112 Mumford, "New York vs. Chicago in Architecture," 243.

113 Wojtowicz, "Lewis Mumford: The Architectural Critic as Historian," 242.

114 Initial travel accounts were already available at the end of the nineteenth century. Descriptions by architects such as Hendrik Petrus Berlage, Karl Moser, Adolf Loos, Erich Mendelsohn, Richard Neutra, or Walter Gropius were the subject of many public presentations and eventually also accessible in print. See, for example: Mendelsohn, *Amerika*; Neutra, *Wie baut Amerika?* See also Banham, *Concrete Atlantis*.

115 Sigfried Giedion, letter to László Moholy-Nagy, December 19, 1938, GTA 43-K-1938-12-19(G): "Es kommt mir darauf an den Einfluss Amerikas auf Europa festzustellen. Obwohl ich mir nach allem was ich gelesen und an Abbildungen gesehen habe, mache ich mir ein Bild davon, aber ohne Studium des Middle west würde ich nicht wagen eine Zeile darüber zu schreiben."

116 Sigfried Giedion, letter to Paul Sachs, December 6, 1940, GTA 43-K-1940-12-6(G)-1: "Der Aufenthalt in Amerika war für meine eigene Arbeit von grosser Fruchtbarkeit. Erst jetzt, glaube ich, ist es mir möglich, vollen Einblick in mein eigenes Gebiet zu haben."

117 The six volumes of *Industrial Chicago* are *Building Interests* (vols. 1 and 2), *Manufacturing Interests* (vol. 3), *Commercial Interests* (vol. 4), *Lumber Interests* (vol. 5), and *Bench and Bar* (vol. 6); Giedion, *Space, Time and Architecture*, 1946, 291, referencing Giorgio Vasari's *The Lives of the Most Excellent Painters, Sculptors and Architects*, first published in Florence in 1550.

118 Frank Lloyd Wright, letter to Lewis Mumford, April 30, 1928, as quoted in Pfeiffer and Wojtowicz, *Frank Lloyd Wright and Lewis Mumford*, 48: "I am heartily sick of the historical falsifying of the real course of ideas in the Architecture of our country, unconsciously done as most of it is. ... Why don't you record it? ... Why not you?"; and in Lewis Mumford's new introduction to the 1955 edition of *The Brown Decades*: "With this went the beginning of an appreciation, long overdue, ...

- to buildings like Richardson's Pray Building in Boston, Root's Monadnock Building, and Sullivan's neglected masterpiece, the old Schlesinger and Mayer [Carson, Pirie, Scott Company] Building, too long dwarfed by his skyscrapers; or in his role as a critic: Mumford, "The Skyline: Organic Architecture," 49–50: "If the modern movement began anywhere, it began in Chicago in the eighties; if any one person has carried it forward consistently during the past forty years, beyond the point where Richardson and Sullivan established it, Wright is the man. Here [at the *Modern Architecture: International Exhibition* at MoMA] his work stands face to face with the buildings of those Europeans and Americans who consciously or unconsciously have come under his influence, absorbing it or reacting against it. ... Mr. Wright's work is not so far from the best European architecture as he imagines—or as they perhaps do. His new buildings have lost the ornamental exuberance of the Midway Gardens and the Imperial Hotel: they are more in the line of his earlier houses. Meanwhile the Europeans have moved nearer to Wright: passing from dogma to building, they have lost a little of their faith in ferro-concrete as an absolute; they have acquired some of Wright's love for natural materials, his interest in the site and the landscape, his feeling for the region."
- 119** Mumford, *Roots of Contemporary American Architecture*, 13.
- 120** *Ibid.*, 19, 201; Giedion, *Space, Time and Architecture*, 1965, 345–46.
- 121** *Ibid.*
- 122** Sigfried Giedion, "American Architecture Viewed from Europe," lecture at the Symposium for Contemporary Architecture, New York University, Institute of Fine Arts, typescript, May 12, 1939, GTA 43-T-15.
- 123** Giedion, *Space, Time and Architecture*, 1965, 305–15.
- 124** Giedion, "American Architecture Viewed from Europe."
- 125** A few years after Giedion, Carl Condit became interested in the Chicago School. Condit, "Chicago School and the Modern Movement in Architecture"; Condit, *Rise of the Skyscraper*.
- 126** Giedion, *Space, Time and Architecture*, 1946, 11.
- 127** Robert Bruce Tague, letter to Sigfried Giedion, October 31, 1939, GTA 43-K-1939-10-31; David Van Zanten has published widely on the architectural culture of Chicago. Of interest in this context is Van Zanten, "Chicago in Architectural History," 91–100.
- 128** Pevsner, "Judges VI, 34," 77.
- 129** Wojtowicz, *Lewis Mumford & American Modernism*, 11. For a detailed account of Patrick Geddes (1854–1932), see Welter, *Biopolis*.
- 130** Geddes, *Cities in Evolution*, 3–4.
- 131** Wojtowicz, *Lewis Mumford & American Modernism*, 10.
- 132** Lewis Mumford, letter to Patrick Geddes, December 5, 1920, as quoted in Novak, *Lewis Mumford and Patrick Geddes*, 83.
- 133** Camillo Sitte (1843–1903) was an Austrian architect and town planner; Ebenezer Howard (1850–1928) was the founder of the English garden-city movement; Raymond Unwin (1863–1940) was an English town planner who advocated the improvement of working-class housing.
- 134** Mendelsohn, *Amerika*. Herman George Scheffauer wrote a series of articles for *The Dial* and *The Freeman*, introducing German expressionism to an American audience. This was probably Mumford's first indirect contact with such architects as Erich Mendelsohn (1887–1953) and Bruno Taut (1880–1938). Scheffauer also helped to organize Mendelsohn's American tour in 1924.
- 135** Erich Mendelsohn, letter to Lewis Mumford, January 8, 1925, as quoted in Beyer, *Eric Mendelsohn: Letters of an Architect*, 75.
- 136** Walter Gropius, letter to Lewis Mumford, April 4, 1928, VPL, Ms. Coll. 2, Folder 1970. Gropius visited the United States in 1928 with a recommendation from Mendelsohn: "Our mutual friend Erich Mendelsohn gave me the enclosed letter of introduction to you." Mumford was invited by Hendricus Theodorus Wijdeveld (1885–1987) to contribute an essay to the special issue of *Wendingen* on Frank Lloyd Wright. Ernst May (1886–1970) traveled to the United States in 1925, just a few months after Erich Mendelsohn.
- 137** Ernst May, letter to Lewis Mumford, June 24, 1925, VPL, Ms. Coll. 2, Folder 3194.
- 138** Charles Harris Whitaker, the editor of the *Journal of the American Institute of Architects*, introduced Lewis Mumford to Walter Curt Behrendt (1884–1945), who was just recently appointed the new editor of *Die Form*. Behrendt published a book on American city planning and social housing in 1926 entitled *Städtebau und Wohnungswesen*.
- 139** *Die Form and Innen-Dekoration*, among others. Mumford, *Vom Blockhaus zum Wolkenkratzer*, translation by Margarete Mauthner.
- 140** Moos, "The Visualized Machine Age," in Hughes and Hughes, *Lewis Mumford: Public Intellectual*, 190–91; Samson, "Unser Newyorker Mitarbeiter," 126.
- 141** Oswald Spengler's *Der Untergang des Abendlandes* (The Decline of the West), a book that Mumford studied in detail, gave expression to this fear.
- 142** Mumford, "Preface to the 1971 Reprint Edition," vi.
- 143** See also correspondence between Lewis Mumford and Van Wyck Brooks, July 22, 1925, in Spiller, *Van Wyck Brooks Lewis Mumford Letters*, 29.
- 144** Giedion possessed a copy of the German edition of Lewis Mumford's *Vom Blockhaus zum Wolkenkratzer*. Lewis Mumford, letter to Sigfried Giedion, June 1, 1967: "... and it would give me great pleasure to meet you again in the city where we first met 35 years ago." GTA 43-K-1967-06-01:1.
- 145** Wojtowicz, *Lewis Mumford & American Modernism*, 87.
- 146** In an article for the Catholic journal *Commonweal*, Mumford summed up Le Corbusier's *Pavillon de l'Esprit Nouveau* as "fanatically barren." See Lewis Mumford, "Decoration and Structure," 533.
- 147** Wojtowicz, *Lewis Mumford & American Modernism*, 87.
- 148** Pfeiffer and Wojtowicz, *Frank Lloyd Wright & Lewis Mumford*, 9.
- 149** Lewis Mumford, letter to Dorothy Cecilia Loch, December 8, 1925, VPL, Ms. Coll. 2.
- 150** The four volumes were *Technics and Civilization* (1934), *The Culture of Cities* (1938), *The Condition of Man* (1944), and *The Conduct of Life* (1951).
- 151** Mumford, *Technics and Civilization*, 363.
- 152** Lewis Mumford, "Form and Personality," typescript, undated, ca. 1930, VPL, Ms. Coll. 2, Folder 6595.
- 153** Bergson, *Creative Evolution*; see also Mumford, *Sketches from Life*, 144; Miller, *Lewis Mumford*, 250.
- 154** Giedion, "Anonyme Geschichte," typescript, February 16, 1936, GTA 43-T-5-8: "Uns interessiert das biologische Geschehen: Der Lebensprozess und seine Verschmelzung mit der Realität."
- 155** Sigfried Giedion, "Die Entstehung des heutigen Menschen," table of contents, vols. 1–4, October 12, 1935, Bibliothèque Nationale Paris, GTA 43-T-5-2.
- 156** Ernst May, letter to Lewis Mumford, March 4, 1941, VPL, Ms. Coll. 2, Folder 3194.
- 157** Sigfried Giedion's papers contain only fourteen letters (including CIAM correspondence), and there is also only a small number of letters in Mumford's papers.
- 158** Walter Gropius, letter to Sigfried Giedion, spring 1938, undated, GTA 43-K-1938:8: "Viele Punkte darin müssen Dich interessieren, denn es handelt, was für Dich wichtig ist, die amerikanische Mentalität"; "Art: Form of Forms," in *Time*, April 18, 1938, front cover and 40–43.
- 159** Walter Gropius, letter to Lewis Mumford, February 26, 1938, HOU, bMS Ger 208 (1248); Spiller, *Van Wyck Brooks Lewis Mumford Letters*, 153; László Moholy-Nagy, letter to Lewis Mumford, September 16, 1937, VPL, Ms. Coll. 2, Folder 3331.
- 160** Walter Gropius, letter to Sigfried Giedion, June 1, 1938, GTA 43-K-1938-06-01: "Das Gewicht von Mumfords Buch scheint Dich noch nicht ganz getroffen zu haben. Ich bin wirklich sehr beeindruckt davon, und zu meiner grossen Freude hat das Buch eine enorme publicity hier bekommen. Da wir hier gerade im Beginn einer grossen Housing-Bewegung stehen, nehme ich das als eine gute Prognose für die schnellere Aufnahmefähigkeit des Amerikaners. Es wird gerade Dir den Weg persönlich ebnen, denn was Du hier zu sagen haben wirst, ist wirklich in höchstem Masse aktuell. Ich erwarte von Dir grosse Dinge, und den Richtwinkel, den Du Deinem Briefe gibst, kann ich nur hundertprozentig unterschreiben. Die grosse Gründlichkeit und Wissenschaftlichkeit, das Hinter-die-Erscheinungen-Leuchten ist wahrscheinlich der Beitrag des Europäers in diesem Lande, zu dem Du natürlich besonders berufen bist, hinzuzusteuern."
- 161** Sigfried Giedion, letter to Walter Gropius, May 14, 1938, GTA 43-K-1938-05-14(G): "Inzwischen ist auch das Buch 'the Culture of the Cities' von Mumford angekommen, für das ich Dir ausserordentlich dankbar bin. Mumford verfügt über ein ganz erstaunliches lexikographes Wissen. Ich konnte dieses Buch noch nicht genauer durchlesen und machte nur einige Stichproben. Mumford bringt zum Teil Abbildungen, die man nur kennen kann, wenn man die Quellen studiert und zwar auf ganz anderem Gebiet als der Architektur (z. B. Ursprung der Baumwollindustrie). Noch enger mit dem Thema meines Buches ["Die Entstehung des heutigen Menschen"] berührt sich das frühere Buch Mumfords 'Technics and Civilization' das ich aber nach einigen Versuchen es zu lesen doch wieder stehen liess, denn, von mei-

nem Standpunkte aus bin ich dagegen allzuviel Wissen in ein Buch zu kondensieren."

162 For example, Mumford's controversial article about the Bay Region Style: "Sky Line: Status Quo," 104-110; or his critique of Le Corbusier's Unité d'Habitation in Marseille, "Sky Line: Marseilles 'Folly,'" 76-95.

163 Mumford, "Architecture as a Home for Man," 113-16.

164 Lewis Mumford, letter to Frank Lloyd Wright, February 6, 1932, as quoted in Wojtowicz, *Lewis Mumford & American Modernism*, 94; Mumford, "Architecture as a Home for Man," 113-16.

165 Lewis Mumford, letter to Walter Gropius, November 25, 1940, HOU, bMS Ger 208 (1248); Sigfried Giedion, letter to Lewis Mumford, September 20, 1940, GTA 43-K-1940-09-20(G).

166 Lewis Mumford, letter to Sigfried Giedion, November 30, 1940, GTA 43-K-1940-11-30.

167 Lewis Mumford to Frederic J. Osborn, November 27, 1942, in Hughes, *Letters of Lewis Mumford and Frederic J. Osborn*, 34.

168 Moos, "Mumford versus Giedion," 25-26.

169 Mumford, "Sky Line: Architecture of Power," 58.

170 Frederic J. Osborn, letter to Lewis Mumford, July 30, 1942, in Hughes, *Letters of Lewis Mumford and Frederic J. Osborn*, 31; see also Bacon, "Josep Lluís Sert's Evolving Concept of the Urban Core," 83.

171 Lewis Mumford to Frederic J. Osborn, November 27, 1942, in Hughes, *Letters of Lewis Mumford and Frederic J. Osborn*, 34.

172 Josep Lluís Sert, "Lewis Mumford," typescript, October 1979, LOE, Josep Lluís Sert Collection, Folder D29.

173 Bacon, "Josep Lluís Sert's Evolving Concept of the Urban Core," 81-83; the film *The City* was co-produced with Clarence Stein, frequently screened at the fair, and eventually considered one of its highlights. See Wojtowicz, *Lewis Mumford & American Modernism*, 143.

174 Lewis Mumford to Frederic J. Osborn, November 27, 1942, in Hughes, *The Letters of Lewis Mumford and Frederic J. Osborn*, 34; Lewis Mumford, letter to Josep Lluís Sert, December 28, 1940, LOE, Josep Lluís Sert Collection, Folder E1: "I was very much impressed by the illustrated folio you sent me, and I was no less impressed by the skill and wisdom you brought to the task of unifying the knowledge and establishing the guiding principles about modern town planning. ... But before discussing practical details I must, to be frank, point out what seems to me a serious flaw in the general outline which C. I. A. M. prepared, and which established therefore the main lines of the collective investigation and of the book itself. The four functions of the city do not seem to me adequately to cover the ground of city planning: dwelling, work, recreation, and transportation are all important. But what of the political, educational, and cultural functions of the city. ... Unless some attention was paid to this as a field, at least, for future investigation, I should find it very difficult to write the introduction that you suggested."

175 Lewis Mumford, letter to Sigfried Giedion, November 26, 1967, GTA 43-K-1967-11-26.

176 Mumford and his family lived at

Sunnyside Gardens in Queens, New York, a community that was laid out by Clarence Stein (1882-1975) and Henry Wright (1878-1936) according to garden city principles. On the formation of the RPAA, see Dal Co, "From Parks to the Region," 231-35. For more information about Mumford and the RPAA, see Domhardt, *Heart of the City*, 70-5, 161-75.

177 For an account of *Modern Architecture: International Exhibition*, see Bergdoll, "Modern Architecture," 136-47.

178 Martin Wagner (1855-1957) was a German architect and city planner who emigrated to the United States in 1938. Walter Gropius, letter to Sigfried Giedion, September 3, 1938, GTA 43-K-1938-09-03: "Da im Frühjahr auch Mumford hier sprechen will, wird die Frage des Planning in ganz grossem Stil attackiert werden."

179 A detailed analysis of the exchanges between American planners and European émigrés during the Second World War would provide enough material for a study of its own, as recent and ongoing scholarship indicates. See Cohen, *Architecture in Uniform*; Domhardt, *Heart of the City*, 185-242.

180 Among others, see Channel Heights housing project, San Pedro, California (1942) by Richard Neutra (1892-1970); Aluminum City Terrace housing project in New Kensington, Pennsylvania (1942-1944), by Marcel Breuer and Walter Gropius; and projects for the Philadelphia Housing Authority by Oscar Stonorov (1905-1970), George Howe (1886-1955), and Louis Kahn (1901-1974). See also Bacon, "Josep Lluís Sert's Evolving Concept of the Urban Core," 89.

181 Eric Mumford, *CIAM Discourse on Urbanism*, 204.

182 Tyrwhitt, *Patrick Geddes in India*.

183 Drew, *The Architects' Yearbook 1*; Shoshkes, *Jaqueline Tyrwhitt*, 97-102.

184 Lewis Mumford, letter to Sigfried Giedion, February 4, 1948, GTA 43-K-1948-02-04.

185 Lewis Mumford, letter to Josep Lluís Sert, December 28, 1940, LOE, Josep Lluís Sert Collection, Folder E1.

186 CIAM 8, Commission IV, addenda to outline report of Commission Four, typescript, July 1951, GTA 42-JLS-17-51.

187 Giedion, *Architecture, You and Me*, 125.

188 Sigfried Giedion, letter to Lewis Mumford, 1958, VPL, Ms. Coll. 2, Folder 1833; Lewis Mumford, letter to Sigfried Giedion, February 4, 1948, GTA 43-K-1948-02-04.

189 Walter Gropius, letter to Sigfried Giedion, April 6, 1965, GTA 43-K-1965-04-06.

190 Lewis Mumford, letter to Sigfried Giedion, June 14, 1962, GTA 43-K-1962-06-14.

191 The beginning of chapter five on the "American Development" is dedicated to the anonymous industrial production in the United States. See Giedion, *Space, Time and Architecture*, 1946, 258-90.

192 Giedion, "Mode oder Zeiteinstellung?," 8-11: "Heute sind verhältnismässig wenig 'Experimentierzellen' nötig." Giedion claimed, "[d]as Weltbild ist in seinen Anfängen geschaffen."

193 Wölfflin, *Principles of Art History*, 76.

194 Sigfried Giedion, "Anonyme Geschichte," typescript, February 16, 1936, GTA 43-T-5-8: "Unsere Zeit

hat die Aufgabe die Zusammenhänge der einzelnen Lebensgebiete stärker aufzudecken. So wichtig die grossen Explosionen sind, uns interessiert heute ebenso sehr eine andere Frage: Wie haben die Menschen einer Zeit das tägliche Leben geführt? Wie bewältigten sie Aufgaben, die sie zu organisieren hatten? Was für Schwierigkeiten tauchten auf? Wie versuchten sie sie zu meistern? Uns interessiert das biologische Geschehen: Der Lebensprozess und seine Verschmelzung mit der Realität. In diesem Zusammenhang geben die Tagesereignisse, die kleinen Meldungen, die Bücher von Zeitgenossen ohne jeden besonderen Glanz, unentbehrlichen Aufschluss. Die anonyme Geschichte bietet den Untergrund für unsere Darstellung."

195 Giedion, "Mode oder Zeiteinstellung," 9.

196 See also Huber, "'Konstruktion und Chaos,'" 63-69.

197 Giedion, "Das Bad von heute und gestern," in Internationale Kongresse für neues Bauen (CIAM), *weiterbauen*, no. 3 / no. 4 (1935). The complete set of panels is reprinted in Huber, *Sigfried Giedion*, 75-82. In chapter seven of *Mechanization Takes Command*, Giedion summed up his insights acquired through this study, extended with a few new case studies, such as Buckminster Fuller's prefabricated bathroom. See Giedion, *Mechanization Takes Command*, 628-712.

198 Giedion, "Beiträge zur Gestaltung der Landesausstellung 1939."

199 Giedion, *Space, Time and Architecture*, 1946, 11.

200 Giedion, *Building in France*, 120.

201 Giedion published an excerpt of the chapter on exhibitions in *Schweizerische Bauzeitung*: Giedion, "Sind Ausstellungen noch lebensfähig?"

73-77; Sigfried Giedion, materials and notes related to "Konstruktion und Chaos," GTA 43-T-5-6; Folder 21 contains, for example, excerpts about the "human conditions," the "equipment of the house around 1850," and "forms of living."

202 Gottfried Salomon (1892-1964) taught at the New School for Social Research, and later at Columbia University. In 1958, he returned to his native Frankfurt.

203 Huber, "'Konstruktion und Chaos.'"

204 Walter Benjamin (1892-1940) was a German-Jewish man of letters who fled to Paris in 1933 to escape the rise of fascism in Germany. At the time, Benjamin focused on an analysis of everyday culture, which culminated in his *Arcades Project*. Walter Benjamin, letter to Sigfried Giedion, February 15, 1929, GTA 43-K-1929-02-15.

205 Huber, "'Konstruktion und Chaos,'" unpaginated.

206 Benjamin, "Passagen-Werk, Aufzeichnungen und Materialien 'Übersicht,'" 81-82; Sigfried Giedion, "Die Entstehung des heutigen Menschen," Materialien und Notizen, GTA 43-T-5-3/4/5/6/7.

207 Sigfried Giedion, typescript, "Institute for Contemporary History and Research," 1938, GTA 43-S-8-6.

208 Giedion, "Konstruktion und Chaos," notes about his reflections on the methodology of the project, GTA 43-T-5-6.

209 Benjamin, "Das Passagen-Werk, Aufzeichnungen und Materialien 'N11.3,'" 595: "Das Geschehen, das den Historiker umgibt und an dem er

- teil nimmt, wird als ein mit sympathischer Tinte geschriebener Text seiner Darstellung zu Grunde liegen."
- 210 Giedion, *Building in France*, 85.
- 211 Giedion, *Mechanization Takes Command*, 2.
- 212 Benjamin, "Das Passagen-Werk, Erste Notizen, 'O', 36," 1030: "Methode dieser Arbeit: literarische Montage. Ich habe nichts zu sagen. Nur zu zeigen. Ich werde keine geistvollen Formulierungen mir aneignen, nichts wertvolles entenden. Aber die Lumpen, den Abfall: die will ich nicht beschreiben sondern vorzeigen." Benjamin, "Das Passagen-Werk, Aufzeichnungen und Materialien, '[N11,4] 36,'" 596.
- 213 Agamben, *Potentialities*, 89.
- 214 Roberts, *Dwellings of the Labouring Classes*, 1-28.
- 215 Sigfried Giedion, letter to László Moholy-Nagy, July 27, 1937, GTA 43-K-1937-07-29(G); Sigfried Giedion, "Die Entstehung des heutigen Menschen," materials and notes, overview, GTA 43-T-5-3.
- 216 Read, *Art and Industry*.
- 217 See also Kinross, "Herbert Read and Design," 145-62.
- 218 Sigfried Giedion, letter to Walter Gropius, October 25, 1937, GTA 43-K-1937-10-25 (G): "Ich bin in den letzten Monaten sehr stark hinter meinem Buch her und nun durch den gröbsten Stoff hindurch. Hoffentlich gelingt es, soweit es meine Kraft erlaubt, einen kleinen Ansatz zu liefern, um unserer Zeit ein wenig zur eigenen historischen Bewusstwerdung zu helfen. Bei aller Anspannung bin ich mir doch klar, dass ich nur einen Weg vorzeichnen kann. ... Andererseits ist es vielleicht gut, wenn die Dinge einmal im Umriss hingestellt werden."
- 219 László Moholy-Nagy, letter to Sigfried Giedion, December 22, 1937, GTA 43-K-1937-12-22.
- 220 László Moholy-Nagy, letter to Walter Gropius, September 13, 1937, HOU bMS Ger 208 (1221); László Moholy-Nagy, list of possible books, ca. 1940, HOU bMS Ger 208 (1221).
- 221 László Moholy-Nagy, letter to Sigfried Giedion, April 25, 1939, GTA 43-K-1939-04-25.
- 222 László Moholy-Nagy, letter to Sigfried Giedion, June 4, 1938, GTA 43-K-1938-06-04.
- 223 Sigfried Giedion, letter to Walter Gropius, October 25, 1937, HOU bMS Ger 208 (773): "Ich habe im letzten Jahr ziemlich viel Gedankengut des letzten Jahrhunderts verarbeiten müssen, um die Methoden der Technik und Erfindungen zu untersuchen und es zeigt sich dabei, dass von früh an—seit 1830 ungefähr—die Amerikaner für ihre Erfindungen jeweils eine zugleich praktische und entwicklungs-fähige Lösung gefunden haben, die vielfach anderen in Europa arbeitenden Erfindern versagt blieb (z. B. Morse-Telegraph, Telephon, Pelton- und Francis-Turbine, Glühlampe bis zum Flugzeug)."
- 224 Sigfried Giedion, letter to László Moholy-Nagy, December 19, 1938, GTA 43-K-1938-12-19(G). Giedion had already traveled the industrial areas of northern England together with Moholy-Nagy in 1938.
- 225 Giedion, "Notes on the Life and Work of L. Moholy-Nagy," 35.
- 226 Moholy-Nagy, *Vision in Motion*, 244.
- 227 Sigfried Giedion, letter to László Moholy-Nagy, December 19, 1938, GTA 43-K-1938-12-19(G).
- 228 Sigfried Giedion, letter to Edgar Kaufmann Jr., December 24, 1940, GTA 43-K-1940-12-24(G).
- 229 John U. Nef (1899-1988) was a co-founder of the University of Chicago's Committee on Social Thought. Arnold Wolfers (1892-1968) was a Swiss-American lawyer and political scientist, who served as a consultant to the Office of Strategic Services (1944-45), and the National War College. Sigfried Giedion, letter to John U. Nef, August 3, 1943, GTA 43-K-1943-08-03(G): "We should sit here together, surrounded by meadows and trees [Giedion at this time was staying in New Hampshire], and discuss once our points of view and our attitude towards historical developments. But letters are terribly fragmentary. You know that I like to emphasize more what separates us than what unites us. You know that my own point of view is completely identical with yours, and that in fact, the book I am writing [*Mechanization Takes Command*] tries to stress the ideas you are developing in *Industrial Revolution Reconsidered*." See also Nef, *Rise of the British Coal Industry*; Nef, "Industrial Revolution Reconsidered," 1-31.
- 230 Sigfried Giedion, letter to Walter Gropius, undated (probably between 1942 and 1945), HOU bMS Ger 208 (773): "Er gab mir den Rat besonders die Erforschung des 'way of living' in den Vordergrund zu stellen, denn für den 'way of living' und für seine Verbesserung würden die Amerikaner auch in den Krieg gehen. Das deckt sich auch mit meinen Zielen, nur ist es psychologischer ausgedrückt, als ich es tat."
- 231 Giedion, *Mechanization Takes Command*, v.
- 232 A closer look at both the outline of "Die Entstehung des heutigen Menschen" and the final publication of *Mechanization Takes Command* helps to trace similarities and differences in Giedion's work from his studies of the industrial culture of the nineteenth century in Europe to investigations of anonymous history in the United States. This comparison is based on the first published version of *Mechanization Takes Command* in relation to various annotations of the project "Die Entstehung des heutigen Menschen," including Sigfried Giedion, "Die Entstehung des heutigen Menschen," notes, October 12, 1935, Bibliothèque Nationale Paris, GTA 43-T-5-2; Sigfried Giedion, "Die Entstehung des heutigen Menschen," materials and notes, GTA 43-T-5-3/4/5/6/7.
- 233 Giedion, *Space, Time and Architecture*, 1959, 164.
- 234 Sigfried Giedion, "Documents on Mechanized Life," typescript, June 1942, GTA 43-T-7 (S. 16).
- 235 Giedion, "A Complicated Craft Is Mechanized," 3.
- 236 *Ibid.*
- 237 Cohen, *Scenes of the World to Come*, 186.
- 238 Giedion, *Mechanization Takes Command*, 38-39.
- 239 Sigfried Giedion, "Bewegung," typescript, undated, GTA 43-T-13 (S. 7); Sigfried Giedion, letter to Lillian Gilbreth, January 24, 1943, GTA 43-K-1943-01-24(G):2. While working on his book, Giedion directly approached Lillian Gilbreth: "Concerned with a book on the impact of mechanization on intimate life, I have just finished a chapter on the assembly-line and scientific management. It was for several reasons especially inspiring for me to go through the books by Frank B. Gilbreth, written in collaboration with you and those, written by yourself. I should be glad to have the opportunity to speak with you about these problems and why I am particularly interested in your and your late husband's studies. Coming from art-history, I am no specialist at all on the subject, but the way of my research forced me to go through your experiences; certainly there will corrections be necessary from the side of an expert as you are. I should like very much to reproduce in my book (published by the Oxford University Press) two or three of your photographs on the wire models, showing 'one man's progress of least waste' and on motion from the book on 'Fatigue Study.'"
- 240 Giedion, *Mechanization Takes Command*, 77-127; Sigfried Giedion, "Die Entstehung des heutigen Menschen," notes, October 12, 1935, Bibliothèque Nationale Paris, GTA 43-T-5-2.
- 241 For example, in *Der Zürcher Bauer oder Werk*. See also Bignens, "Amerika am Werk," 59-63.
- 242 Giedion, *Mechanization Takes Command*, 130-251.
- 243 Jean-Louis Cohen has argued that "the originality of Giedion's approach resides ... in his study of the mechanization of organic processes, which he views as one of the constituent features of America, where specialization revolutionized agriculture." See Cohen, *Scenes of the World to Come*, 193.
- 244 Giedion, *Mechanization Takes Command*, 169-208, 596-606. For a detailed visual description of the pavilions at the fair, see Appelbaum and Wurts, *New York World's Fair*, 68-73.
- 245 Giedion, *Mechanization Takes Command*, 209-46.
- 246 Sigfried Giedion, letter to Hanneke Schroeder, May 30, 1943, GIE: "Wir werden sehr wahrscheinlich bald in die Zeit kommen, in der man nach dem SINN der Mechanisierung fragen wird + bestimmen, d. h. planen wird, welche Gebiete gefördert + in welchen Gebieten eine zu hohe Mechanisierung die Würde + den Sinn des Lebens zerstört."
- 247 Sigfried Giedion, "Die Entstehung des heutigen Menschen," materials and notes, GTA 43-T-5-6; Sigfried Giedion, letter to Hanneke Schroeder, September 23, 1943, GIE: "Und wir als Historiker gelten im Augenblick soviel wie gar nichts. Trotzdem geht meine Arbeit weiter; es ist ein ganz neues Gebiet das ich beackere, jetzt bin ich bei der Entstehung der Mechanisierung im Haushalt."
- 248 Bévier and Usher, *Home Economics Movement*.
- 249 Sigfried Giedion, typescript, "Institute for Contemporary History and Research," 1938, GTA 43-S-8-6.
- 250 Sigfried Giedion, "Die Entstehung des heutigen Menschen," materials and notes, GTA 43-T-5-6.
- 251 Moos, "Le Corbusier und Loos," 122-33.
- 252 For a detailed account of Wohnbedarf (composed of the two German words "Wohnen" [living] and "Bedarf" [need / requirement]), see Mehlau-Wiebkling, Rüegg, and Tropeano, *Schweizer Typenmöbel*.
- 253 Giedion, *Mechanization Takes Command*, 393-401.
- 254 Giedion, *Mechanization Takes Command*, 394.
- 255 Sigfried Giedion, letter to Hanneke Schroeder, December 25, 1943, GIE: "Ich bin daran ein ziemlich

- schweres Kapitel über das Möbel des XIX. Jahrhunderts zu beenden. Nicht das Salon Möbel, sondern die unentdeckte American patent furniture von 1850-1893. In Amerika wurde das wirklich originelle Möbel des XIX. Jhdts. gebaut. Sie werden erstauert sein wie modern sie waren und was für ausgezeichnete Lösungen sie hatten—unabsehbar viele.”
- 256** Giedion, *Mechanization Takes Command*, 484.
- 257** Moos, “Zweite Entdeckung Amerikas,” 790-91; see also Banham, *Architecture of the Well-Tempered Environment*, 1984, 15.
- 258** Sigfried Giedion, “Die Entstehung des heutigen Menschen,” materials and notes, GTA 43-T-5-3/4/5/6/7.
- 259** Ibid.
- 260** See also Geiser, “Mechanization Takes Command,” 113-15.
- 261** Giedion, *Mechanization Takes Command*, vii.
- 262** Sigfried Giedion, letter to Frank Aydelotte (president of the Institute for Advanced Study, 1939-47), December 22, 1942, GTA 43-K-1942-12-22.
- 263** Giedion, *Mechanization Takes Command*, 3.
- 264** Ibid., vi.
- 265** Sigfried Giedion, letter to John U. Nef, February 1, 1943, GTA 43-K-1943-02-01(G):2.
- 266** Sigfried Giedion, “A Propos of American Anonymous History,” typescript, ca. 1942, GTA 43-T-13 (S. 2).
- 267** Sigfried Giedion, speech at the Swiss Dinner (at the Swiss Consulate in New York), typescript, New York, January 21, 1939, GTA 43-T-15. The Swiss Consulate was among several venues at which Giedion presented *Space, Time and Architecture*.
- 268** Giedion, “Specialism and Universality,” typescript, ca. 1942, GTA 43-S-8-6; a similar text was published as Giedion, “Practical Arts in American History,” 198-202.
- 269** Sigfried Giedion, letter to John U. Nef, February 1, 1943, GTA 43-K-1943-02-01(G):2.
- 270** Giedion, *Mechanization Takes Command*, vi.
- 271** Sigfried Giedion, “Suicide of History,” typescript, April 22, 1943, GTA 43-T-15-1943.
- 272** Sigfried Giedion “The Study of Anonymous History,” typescript, 1944, RIBA TVJ/17; Moos, “Zweite Entdeckung Amerikas,” 781-816; see also Moos, “Le Cobusier und Loos,” 122-33.
- 273** Sigfried Giedion, letter to László Moholy-Nagy, August 5, 1937, GTA 43-K-1937-12-05: “Wie dem auch sei, ich verdanke Euch [artists] ungeheuer viel. Es ist alles da der Stoff, die Optik, die Ihr geschaffen habt, der Historiker braucht nur das Fernrohr ein wenig auf die Welt einzustellen. Ich mache nichts als einstellen und ein wenig im Panorama herumfahren.”
- 274** See, for example, Ernst, *La femme 100 têtes*; Ozenfant, *Art*.
- 275** Moos, “Zweite Entdeckung Amerikas,” 796.
- 276** Sigfried Giedion “The Study of Anonymous History,” typescript, 1944, RIBA TVJ/17.
- 277** Giedion, *Mechanization Takes Command*, vi.
- 278** Catalogue of the unrestricted auction sale of 2,000 original United States patent models, April 26, 1943, GTA 43-T-7-S. 11.
- 279** Sigfried Giedion, “Suicide of History,” typescript, April 22, 1943, GTA 43-T-15-1943.
- 280** Sigfried Giedion, letter to Edsel Ford, March 28, 1943, GTA 43-K-1943-03-28(G).
- 281** John U. Nef, letter to Sigfried Giedion, February 8, 1943, GTA 43-K-1943-02-08; Giedion, “Specialism and Universality,” typescript, ca. 1942, GTA 43-S-8-6.
- 282** Sigfried Giedion, letter to Walter and Ise Gropius, May 7, 1943: “Es hat keinen Sinn mit ihm [Henry Ford] zu sprechen, da er [illegible] ungefähr ebenso [illegible] wie F. L. Wright.—Er ist stolz das Personal für sein Edison Institut—so heisst das Museum—aus seinem Fabrik Personal genommen zu haben. Was ist da für Geld verschleudert worden, denn überall ist alles sprunghaft angefangen und nicht zu Ende geführt worden. Es gibt weder Kataloge noch Inventare. Ich habe praktisch fast nichts gefunden in diesem viele Millionen Dollar umfassenden Areal.”
- 283** Lewis Mumford, letter to Sigfried Giedion, February 4, 1948, GTA 43-K-1948-02-04.
- 284** Mumford, “The Sky Line: Status Quo,” 84.
- 285** Lewis Mumford, letter to Sigfried Giedion, February 4, 1948, GTA 43-K-1948-02-04.
- 286** “Evolution of the Bath,” 79-82.
- 287** Molella, “Science Moderne,” 374-89.
- 288** J. M. F., “Reviews: Mechanization Takes Command,” 160-62.
- 289** See Moos, “Zweite Entdeckung Amerikas,” 790-91.
- 290** Sigfried Giedion, letter to Cornelius van Eesteren, August 3, 1939, GTA 43-K-1939-08-03(G); Sigfried Giedion, letter to Cornelius van Eesteren, June 20, 1939, GTA 42-K-1939.
- 291** Bruderer-Oswald, *Neue Sehen*, 154.
- 292** Sigfried Giedion, letter to Herbert Bayer, December 6, 1940, GTA 43-K-1940-12-06.
- 293** Ise Gropius, letter to Carola Giedion-Welcker, April 30, 1940, GIE: “[C]hermayeffs waren gerade ein paar wochen hier bei uns und erzählten wilde geschichten von ihrer überfahrt. zuerst fuhren sie im blackout auf einen felsen, dann wurden sie von einem u-boot angegriffen, das dann seinerseits von einem flugzeug aus bombardiert und vernichtet wurde.”
- 294** Sigfried Giedion, letter to Walter Gropius, June 18, 1940, HOU bMS Ger 208 (773): “Hier gehen wir gelähmt durch den Tag und unruhig durch die Nacht. ... Unsere Leute sind fast alle im Dienst. Werner Moser als Soldat, Steiger zeichnet Bunker, Haefeli zeitweise bei den Motorfahrern, sogar Roth ist im Hilfsdienst. Ich bin frei vorläufig wegen der Augen, aber ich werde mich, sobald ich soweit normal bin, für bestimmte Zwecke in Bern zur Verfügung stellen (*auslands propaganda für Switzerland*) [emphasis added].”
- 295** Carola Giedion-Welcker, letter to Hanneke Schroeder, September 3, 1941, GIE: “In Zürich sind ja nur muffige Architekten + spiessige Weiber die es mehr aufregt wenn ihre Kinder die Masern haben, als wenn ganze Welten zusammenbrechen. ... J'en ai assez de cette bande.”
- 296** British squadrons bombarded Zurich on December 23, 1940. Sigfried Giedion, letter to Herbert Bayer, December 24, 1940, GTA 43-K-1940-12-24 (G) 1/6: “Gerade vor Weihnachten hat Zürich einige Bomben abbekommen, aber diese, sowie die beschränkten Heizmöglichkeiten und was damit zusammenhängt sind nicht so gefährlich solange man uns noch ein wenig Luft zum Atmen gibt.”
- 297** Lewis Mumford, letter to Sigfried Giedion, November 30, 1940, GTA 43-K-1940-11-30.
- 298** Sigfried Giedion, letter to Walter Gropius, August 2, 1940, HOU bMS Ger 208 (773): “Moholy war so freundlich mir auf alle Fälle einen Vortrag für eine Stelle an der School of Design zu senden. Ich sprach vorgestern mit dem amerikanischen Council in Zürich. Wie ich erwartet hatte versperrt man die Tore zu Amerika fast hermetisch. Zwar gibt es für Kaufleute und Industrielle immer noch Wege, aber mit den ‘Geistigen’ sind sie viel handfester.”
- 299** Sigfried Giedion, letter to Walter Gropius, August 2, 1940, HOU bMS Ger 208 (773).
- 300** Herbert Bayer, letter to Walter Gropius, May 1, 1941, HOU bMS Ger 208 (431), 1.
- 301** Sigfried Giedion, letter to John Burchard, February 5, 1941, GTA 43-K-1941-02-05(G).
- 302** Maynard Meyer, letter to Sigfried Giedion, January 31, 1941, GTA 43-K-1941-01-31.
- 303** Sigfried Giedion, letter to Maynard Meyer, January 12, 1940, GTA 43-K-1940-01-12(G).
- 304** Everett Victor Meeks, letter to Sigfried Giedion, May 15, 1941, GTA 43-K-1941-05-15.
- 305** Sigfried Giedion, letter to Maynard Meyer, March 26, 1941: “[My] mind has become free for new tasks. I was specially interested to learn how you try to enlarge the basic lines of the architectural education in calling in specialists in various fields. I know how difficult it is still to work with specialists of other disciplines who are rarely accustomed to collaboration.”
- 306** Sigfried Giedion, letter to C. L. V. Meeks, September 30, 1941, GTA 43-K-1941-09-30(G):1 “Noted Swiss City Planner, Here to Lecture at Yale, Forecasts More Attractive, Safer Municipalities,” in *New Haven Register*, Sunday, October 26, 1941.
- 307** In the Clipper’s fuselage there was room for seventy-four daytime passengers or for forty passengers in reclining seats for long nighttime flights. This low-altitude flight across the Atlantic took approximately twenty-nine hours; Munson, *Flying Boats and Seaplanes*.
- 308** Sigfried Giedion, letter to Hanneke Schroeder, July 16, 1941, Zurich, Doldertal, GIE; Sigfried Giedion, letter to Andres and Verena Giedion, August 21, 1941, GTA-SG/CGW.
- 309** Ibid.
- 310** Panofsky, *Meaning in the Visual Arts*, 328.
- 311** After a troublesome journey with a forced stopover in the Bermuda Islands because of a huge storm, Giedion arrived at New York Municipal Airport (now LaGuardia Airport). On his arrival, he stayed for two weeks with friends on Long Island before assuming his teaching duties at Yale. Sigfried Giedion, letter to Hanneke Schroeder, September 14, 1941, GIE.
- 312** Marian Willard (1904-1985), owner of the renowned Willard Gallery in New York, represented such artists as Paul Klee, Alexander Calder, and Mark Tobey. A good friend of Carola and Sigfried Giedion, Willard frequently stayed at the Guthrie Estate in Locust Valley, Long Island—also named “Meudon” after its French prototype—where she regularly re-

- ceived members of the colony of exiles living in New York City. Joan Ockman has provided a rich description of the intellectual climate in New York during the Second World War. See Ockman, "War Years in America," 22–43.
- 313** "Great Flight of Culture," 102.
- 314** Sigfried Giedion, letter to Edward Carter (Royal Institute of British Architects), October 29, 1938, GTA 43-K-1938-10-29(G):1/2.
- 315** Stamo Papadaki (1906–1992) was a Greek architect who emigrated to the United States in 1935. Sigfried Giedion, letter to Walter Gropius, November 26, 1942, GTA 43-K-1942-11-26(G).
- 316** Sigfried Giedion, letter to Hanneke Schroeder, May 30, 1943, GIE: "Ich lebe seit einem Jahr in New York. Ich 'lecture' habe Kontakt mit den Jungen, aber wie die Architektur so sind auch die Universitäten wenigstens soweit sie die 'humanities' (Das sind Geschichte, Philosophie etc.) sehr, sehr reduziert. Es hat keinen Sinn im Augenblick zu lehren."
- 317** Ockman, "War Years in America," 26.
- 318** Giedion, *Architecture, You and Me*, 53–54.
- 319** Sigfried Giedion, letter to Hanneke Schroeder, May 30, 1943, GIE.
- 320** Sigfried Giedion, letter to Hanneke Schroeder, September 23, 1943, GIE; Sigfried Giedion, letter to Hanneke Schroeder, November 20, 1943, GIE: "Meine Gesundheit ist besser. Aber hier wird es nicht gut werden. Ich brauche Schweizer Luft."
- 321** Sigfried Giedion, letter to Hanneke Schroeder, January 4, 1942, GIE.
- 322** Smith, *Switzerland Builds*.
- 323** Léger, "New York," 84; Derouet, *Fernand Léger*, 31.
- 324** Wallace K. Harrison (1895–1981) was an American architect and active CIAM member until his resignation at the end of 1944. See Giedion, *Raum, Zeit, Architektur*, 1965, 352.
- 325** Mary Callery (1903–1977) was an American sculptor associated with modernism and post-World War II abstract expressionism. See Rubinstein, *American Women Sculptors*, 329.
- 326** Josep Lluís Sert as quoted in Peter, *Oral History of Modern Architecture*, 255.
- 327** Sigfried Giedion, "Danger and Advantage of Luxury," typescript, 1939, GTA 43-T-15.
- 328** Geiser, "Eine Reise durch den Mittleren Westen der USA," 240–43.
- 329** Sigfried Giedion, letter to László Moholy-Nagy, January 5, 1939, GTA 43-K-1939-01-05(G):1; Giedion's meticulously compiled itinerary included dozens of buildings.
- 330** On his second visit to the Bauhaus in June 1926, Giedion got to know Moholy-Nagy. In the following months, their contact increased. Moholy spent his summer vacation of the same year with Oskar Schlemmer and his family at Ascona, Switzerland, where he most likely also saw Giedion.
- 331** Herbert Read, letter to the Board of Directors, October 18, 1946, UIC Folder 1-12 (Institute of Design Collection), Special Collections.
- 332** Sibyl Moholy-Nagy, *Moholy Nagy*, 159.
- 333** Friends of the Institute (1943–44) included the Continental Paper Grading Co., Morris Paper Mills, Masonite Corp., Marshall Field & Co., Container Corp. of America, Standard Rate and Data Service, Chicago Carton Co., Wm. Wrigley Jr. Co., General American Transportation Corp., Sears Roebuck and Company, United Air Lines, United Wallpaper Factories Inc., Belden Manufacturing Company, Maymar Corp., Oscar Mayer & Co (UIC Folder 1-13). Companies such as People's Gas Light & Coke Co. financed scholarships for the school in February 1945 (UIC Folder 1-13).
- 334** Le Corbusier, letter to Sigfried Giedion, May 23, 1948, GTA 43-K-1948-05-23.
- 335** The importance of Moholy-Nagy's support is emphasized in the introduction to *Mechanization Takes Command*: "Last but not least, I had the precious advice of my dear friend, the late L[ászló] Moholy-Nagy." Considering that Giedion hardly ever mentioned any of his sources and supporters, this is quite exceptional and indicates the uniqueness of this collaboration.
- 336** László Moholy-Nagy, letter to Carola Giedion-Welcker, April 20, 1944, GTA 43-K(DD)-1944-04-20.
- 337** From 1937 to 1938, the New Bauhaus: American School of Design, was located at 1905 Prairie Avenue, Chicago (Marshall Field Mansion). During subsequent years, it went through the following name and location changes: 1938–1944, School of Design, 247–257 East Ontario Street, Chicago; 1944–1946, Institute of Design, 247–257 East Ontario Street; 1946–1948, Institute of Design, 1009 North State Street, Chicago; 1948–1949, Institute of Design, 632 North Dearborn Street, Chicago; 1949–present, Institute of Design, now part of the Illinois Institute of Technology (IIT), Chicago.
- 338** "Two Summer Sessions of the School of Design in Chicago," syllabus, 1942, UIC Folder 3-72 (Institute of Design Collection), Special Collections; Sigfried Giedion, lecture announcement, ca. 1942, UIC Folder 6-83 (Institute of Design Collection), Special Collections. Giedion as well as Fernand Léger were, for example, guest lecturers during the fall-winter term 1944–1945 (September 25–January 27), UIC Folder 3-93 (Institute of Design Collection), Special Collections. Giedion was also a visiting lecturer at the Institute of Design in the academic year 1949, UIC Folder 1-11 (Institute of Design Collection), Special Collections.

In Between

Academies

*Nemo Propheta
in Patria:*
Giedion and the ETH

Building Bridgeheads:
Preparing the Return
from America

Almost a year before his return to Europe in 1946, Sigfried Giedion approached Harvard University's President James B. Conant to discuss "American Swiss cultural relations," specifically, a possible exchange of American and Swiss students and teachers—an idea that he had begun to develop about three years earlier when he found himself trapped in a wartime devoid of cultural and academic activities.¹ In correspondence with a number of academics, including Frank Aydelotte, president of the Institute for Advanced Study at Princeton University, and John E. Burchard, first dean of the School of Humanities and Social Science at the Massachusetts Institute of Technology, Giedion had repeatedly stressed the critical importance of preparing the ground for the eventual rehabilitation of international exchange while the war was still raging.² Citing Switzerland's alleged neutrality, its "solid democratic experience,"³ multilingualism, and comparatively good economic standing, he recommended "build[ing] up ... a new European attitude"⁴ by installing a select group of scholars on either side of the Atlantic to establish "closer, truly cultural relations."⁵ This ambition was also supported by Burchard, who wrote to the Swiss art historian:

It is believed desirable as an international matter that a substantial system of international exchanges of students and university faculties be effected. In the long run, it is hoped that these exchanges would be made between many nations. As a start in this direction, and based upon the fact that it lies within their current financial powers (as is not the case for a number of nations) it is proposed that Switzerland and the United States begin such exchanges.⁶

While Giedion was positive that "there will be an exchange between Europe and this country and between this country and Europe, which will exceed expectations," he was also convinced that this mutual exchange had to be "canalized by [the universities] and not by politicians."⁷ Most likely, Giedion was referring to an initiative promoting a "moral reconstruction" of the European continent, which was launched by the United States Office of War Information (OWI), a government propaganda agency that began operations in 1942. The same year, a more intensive international effort to restore the European educational systems devastated by war, the Conference of Allied Ministers of Education (CAME), which included eight governments

in exile and the French National Committee of Liberation, took place in London. The war had just ended when this group, endorsed by the U.S. government, signed the constitution of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in November 1945. Its goal was to establish the “intellectual and moral solidarity of mankind” in order to prevent the outbreak of another war on the scale of the Second World War.⁸

Giedion thought that a collaboration between “any of the great American universities” and the Swiss Federal Institute of Technology (Eidgenössische Technische Hochschule, or ETH) in Zurich would serve as an “educational carrier” that would initiate this new exchange program in a “democratic ambience.”⁹ He suggested establishing a firm academic alliance between Harvard University, the school that had offered him his first official position as an educator, and the ETH, at the time the most attractive place in Switzerland for an architectural historian to teach. Calling for special university chairs to promote intercultural exchange, Giedion suggested that he himself could act as a facilitator between Switzerland and the United States postwar, once Harvard or Yale were again reachable by air within a day.¹⁰ As opposed to most of his colleagues, who established new professional and private lives after emigrating to the United States, Giedion intended to retain a strong bond with Europe. This might also be a reason why he hoped to be a driving force in the establishment of new cultural relations between North America and his native country. By this time, many of CIAM’s key players were based in the United States, and because modern architecture in Europe was challenged by nationalistic and regional forces during the war, Giedion was very much interested in reimporting the former vanguard’s ideas—which had been altered and expanded in exile—back to Europe, especially to Switzerland.

With the end of the war approaching, Sigfried Giedion was gradually faced with questions about his own personal and professional future. He held only temporary teaching appointments at Yale University and László Moholy-Nagy’s Institute of Design during the war years, and with a flood of American servicemen returning from their tours of duty in the armed forces, prospects for a more permanent position were rather slim. Also, he had been separated from his family for a period of more than four years. Carola and their two children, Andres and Verena, spent the war years at their Doldertal home in Zurich, while political developments rendered any trip between Europe and the United States practically impossible. In that sense, Giedion’s efforts cannot be regarded solely as selfless attempts to create a better academic network for the benefit of war relief and reconstruction. His initiative could very well have been a measure to facilitate the long-desired return to his home country, and also to position himself within the Swiss academic community.

A majority of the Allied countries also came to Giedion's conclusion that it was crucial to prioritize education in their postwar reconstruction efforts. Yet despite this favorable intellectual climate, Giedion encountered more difficulties than he had anticipated. Compared to international policy makers, he clearly lacked experience and diplomatic skills as well as the official backing needed to bring his proposals to fruition. Following the advice of his closest colleagues and his own experience with decision-making processes in American academia, he brought his case directly to Washington, D.C., to the U.S. State Department's Division of Cultural Cooperation.¹¹ Concurrently, Giedion sought support from Aydelotte, who at this time was president of the United States Committee on Educational Reconstruction, and launched a campaign for his cause in Switzerland, where he approached various colleagues with the same concern. Among them were such distinguished figures as Rudolf Fueter, secretary of the association of Swiss University Professors (Schweizer Universitätsprofessoren), Wilhelm Löffler, dean of the faculty of medicine at the University of Zurich, and Paul Scherrer, head of the Department of Physics at the ETH.¹² He also received significant support from the consul general of Switzerland in New York, Victor Nef, with whom he was in frequent contact throughout his extended stays in the United States. Nef proposed creating an International Board of Education to be based in Switzerland and that would take a form similar to the Institute of International Education (Institute of Intellectual Co-operation, 1925), which had been created under the auspices of the League of Nations in Geneva to promote peaceful exchange as a substitute for war.

4.01 While progress in Switzerland was slow but steady, advances in Sigfried Giedion, America came to a halt with the intensification of the government's "Towards a Closer official actions. Giedion was certain that the question of education Post-war Contact in a postwar world could not "be tackled by mere pedagogues and between Scholars, government officials, but only by creative scholars who have shown in Students and their own work that they are capable to think in terms of methods."¹³ Countries," type- Torn between his own intentions and the rising impact of a political script outlining the elite, Giedion became proactive and advocated the creation of small ambition for an advisory committees, which he called "bridgeheads," on either side improved academic of the Atlantic in order to gather and "trace the outline for reform and exchange between international relations."¹⁴ the United States and Europe, 1944. Suggesting that it is "always helpful, when one can work from both sides at once," Giedion contacted a group of academic pioneers, including John U. Nef, an economic historian with Swiss roots who was teaching at the University of Chicago; John E. Burchard and James B. Conant, president of Harvard University and chairman of the National Defense Research Committee at the time.¹⁵ Both Nef and Conant responded encouragingly, but indicated that they were unable to participate in the project at the current moment.¹⁶ Burchard,

TOWARDS A CLOSER POST-WAR CONTACT

BETWEEN

SCHOLARS, STUDENTS AND COUNTRIES

The experience of the past twenty years has shown what it means to enter a period of peace without a plan and without knowing what has to be accomplished. This time the educators have to be especially prepared for the necessities of the post-war period. The time for preparation is now.

There are two difficulties which arise immediately: our period has to restore again the contact between the different branches of knowledge, between Sciences and Humanities. There is a distinct trend away from overstressed specialization among the best scholars of today. For moral as well as for methodological reasons they feel that their research should not be any more an isolated one. It should be integrated into a larger scheme.

As in every period of cultural growth there arises again the interest in a methodological approach of other disciplines. But we have lost the means of understanding, we have lost the common vocabulary that former periods possessed as a matter of course. This vocabulary has to be restored between the different disciplines, between Sciences and Humanities. It may finally lead to a faculty of interrelation, where representatives of the different branches give account of their methods and their problems, so that a common understanding may slowly develop.

The second difficulty is the lack of sufficient contact between the educational institutions of different countries. The former exchange of students and professors had successfully tried to overcome this difficulty in the pre-war period. The barriers between Europe and America in this respect were nevertheless nearly unsurmountable. There were as yet too few cases to eliminate them. Institutions should be provided with special facilities to bring the foreign student in closer touch with the guest country.

We do not underestimate the difficulty to solve these two problems, but they have to be solved and solved simultaneously. Both are interrelated and important to the moral and scientific education of the post-war period; they are problems of reconstruction.

The following is concerned with practical suggestions for the establishment of a closer and continuous contact between the U.S.A. and the democratic countries of Europe.

Bridgeheads in U.S.A. and Switzerland

There is not much choice left for immediate post-war contact between U.S.A. and corresponding democratic states on the other side of the Atlantic.

on the other hand, worried that Giedion's proposal was competing with comparable advances in the international community.¹⁷ He reminded his colleague of the large number of returning American troops that would have to be reintegrated into civil society. For their war services, soldiers were offered free education, which limited the number of spots available to foreign students and the willingness of colleges to let their faculty spend time at other schools. In order not to discourage Giedion, Burchard suggested he seek support in the Midwest, rather than restrict his efforts to the Ivy League.¹⁸

Nevertheless, Giedion was certain that a reciprocal cultural exchange between Europe and the United States would emerge after the war. The dire need for housing in the United States and the upcoming reconstruction efforts in Europe made architecture conspicuous as the appropriate discipline in which to establish and pioneer an exchange program between Swiss and American institutions.¹⁹ In a last effort, the historian approached the head of Zurich's urban planning department, Hermann Herter, who had previously indicated that he supported the installation of academic chairs dedicated to rehabilitation and reconstruction after the war. Positioning himself as an academic ambassador between the two continents, Giedion encouraged Herter to establish several chairs that would create a transatlantic relationship. Also mentioning the importance of the study of contemporary history, the art historian made it explicitly clear that he was willing to take up such a position in his home country.²⁰

An Inconvenient Faculty Member

"Giedion has turned his Doldertal [Zurich] home into a unique international meeting place, and an intersection of the intellectual and artistic forces of his time. His wife Carola was significantly involved through her own drive and charisma. The Zurich and Swiss establishments, however, barely noted this singular convergence of forces and its relevance for our artistic and architectural production in Zurich and Switzerland."²¹—Alfred Roth

As early as 1925, just after receiving his doctorate in art history, Giedion noted in his diary that he aspired to the future profession of university lecturer.²² While his pursuit of advancement in academia at the time was to a degree hesitant and half-hearted—on the one hand he claimed that he wanted to abandon the academy, and on the other hand he officially applied to succeed Josef Zemp, who had retired as chair of art history and archaeology at the ETH—Giedion later came to the conclusion that the academic environment was, after all, the best place to test his ideas and undertake his research projects.²³

On his return to Switzerland in 1946, almost a decade after his first teaching appointment at Harvard, Giedion launched another attempt to get a position at the ETH, this time with more experience and impressive references from major American institutions. After failing to obtain an appointment to a Swiss institution while he was still in America, Giedion was reluctant to wait for a call from a Swiss university. He took the liberty of submitting his dossier, including a detailed outline and schedule for a potential class, directly to Arthur Rohn, then president of the Schweizerischer Schulrat (board of the ETH, today known as the ETH-Rat). Obliquely indicating his disappointment about the lack of interest in his services in his home country, he wrote: “[It would be important to me] not to remain without assignment in my own country. I was appointed to Harvard and Yale; here, I would like to take the liberty to offer my services.”²⁴

Giedion’s course of action was quite unconventional and was received as impolite and impertinent by many of the school’s board members. Additionally, the art historian had never submitted a *Habilitationsschrift* (postdoctoral thesis), which at the time was—and at many faculties in German-speaking areas still is—a prerequisite for a teaching position. Aware that Giedion had previously taught at Harvard, and believing his claim that he had held a tenured position in the United States—which, in fact, was untrue—Rohn was astonished to learn that the historian had never obtained the *venia legendi* (the permission to read, meaning to lecture in a particular academic discipline). He promised to consider Giedion’s case and suggested that he take measures to obtain his *Habilitation* in the meantime.²⁵

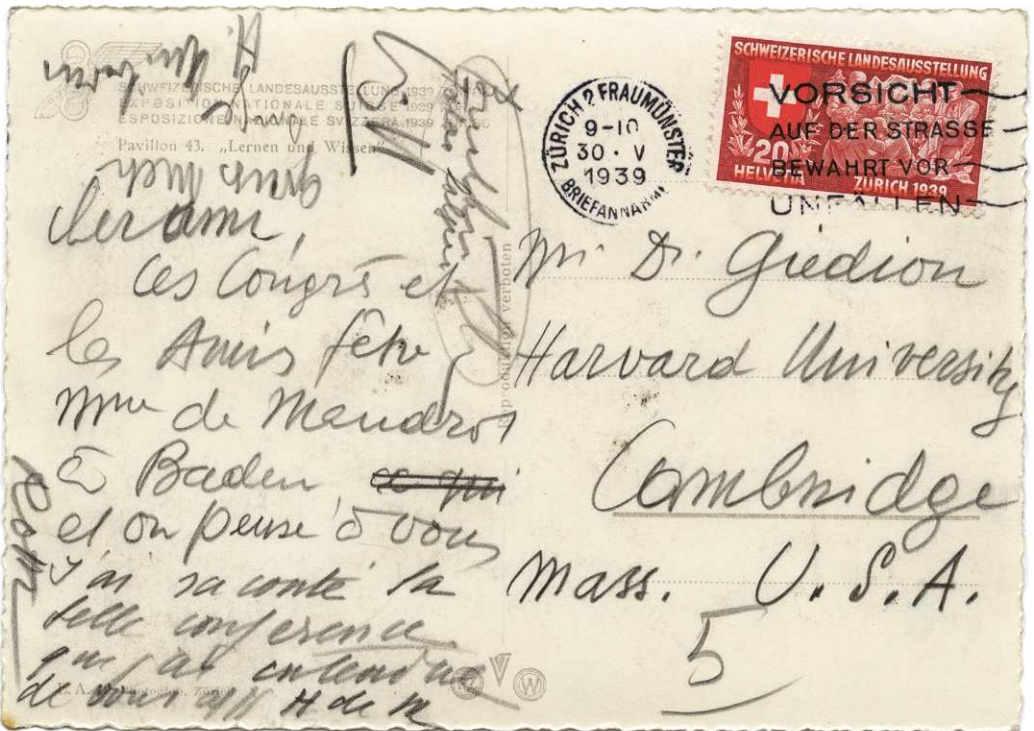
Rohn approached the Department of Architecture, headed by Dean Hans Hofmann, who had been the architect in charge of the Swiss National Exhibition (*Schweizerische Landesausstellung*) in 1939, commonly known as *Landi 39*. Aware of the serious differences of opinion he had had with Giedion about the conception of the exhibition, which resulted in the exclusion of the art historian from further planning of the legendary exhibition, Hofmann responded negatively. Without further explanation, Hofmann suggested that Giedion be hired instead by the humanities department (Abteilung XII) and that his teaching activities could eventually extend into the architecture department. Since dual appointments were uncommon at the time, Hofmann was likely trying to turn down Giedion without making himself or the department unfavorable to the board of the school.

In a letter to László Moholy-Nagy, Giedion described his awkward situation in his homeland, and expressed his desire to “influence the rising generation,” which, according to him, would not be possible for anyone actively involved in CIAM. He wrote to John Burchard that “the reaction in Switzerland against architects working in our sense is getting greater and greater.”²⁶ Since none of Giedion’s friends—namely, Werner Moser, Rudolf Steiger, and Le Corbusier—had been con-

4.02–4.03
Postcard from
Hélène de Mandrot
to Sigfried Giedion,
May 30, 1939,
sent to Cambridge,
Massachusetts, from
the Swiss National
Exhibition. The
photograph depicts
Hans Hofmann’s
pavilion number 43,
“Lernen und Wissen.”
The verso is signed
by de Mandrot, the
architect Alfred Roth
and other, unidenti-
fied individuals.



4.02



4.03

sidered in a recent search to fill the vacancy caused by professor Otto Rudolf Salvisberg's untimely death, he was certain that it was impossible to get involved in the Swiss academy, and would be "for the next ten years."²⁷ Salvisberg's chair at the ETH had just been assigned to Hans Hofmann, the former architect in charge of the highly popular and successful national exhibition.²⁸ The person who had barred Giedion from an active participation in the exhibition now occupied a key position at the country's foremost architecture school.

It appears that the president of the board of the ETH felt somewhat intimidated by Giedion's sphere of influence, and especially the historian's strong transatlantic connections, and was therefore disposed to allow him to lecture.²⁹ Since Giedion had previously taught at "two great American universities [Harvard and Yale]," the board agreed to grant him the opportunity to teach a one-hour class jointly in the architecture and the humanities departments without waiting for his *venia legendi* to be approved by the respective departments.³⁰ Giedion was invited to give a lecture entitled "Beziehungen von Architektur, Kunst und Konstruktion seit 1910" (Relations between Architecture, Art, and Construction, since 1910) in the winter term of 1946–47.³¹ Aware of the president's policy of avoiding redundancies within the curriculum of the ETH and between the different schools in town, and knowing that his chances were better in the humanities, Giedion shrewdly renamed his lecture "Formung und Sinn der Mechanisierung seit 1770" (Formation and Purpose of Mechanization, since 1770), underlining his interest in cultural history.³² Once his appointment was officially approved, he asked to change the title of his course once more, to "Ausdrucksmittel der heutigen Kunst seit Picasso" (Means of Contemporary Artistic Expression, since Picasso), a class that would not have been approved by the ETH, as it clearly overlapped with the interests of the faculty of art history at the neighboring University of Zurich.³³

After finishing his first official class in Switzerland, Giedion submitted a formal application to obtain the right to teach at the Federal Institute of Technology. Even though he never had a permanent position in the United States, Giedion gave the impression that his intention was to switch from a tenured position at Harvard to a comparable appointment in Switzerland by applying for a "transfer of his postdoctoral degree to the ETH."³⁴ To stress his affinity for a school with a predominant emphasis on engineering, he proposed teaching a class in "cultural history" with a special focus on the "needs of engineers and architects," and—as he had done at the Massachusetts Institute of Technology (MIT)—emphasized his first degree in mechanical engineering, which he previously had tended to downplay.³⁵ At the same time, Giedion also asked the board of the ETH to extend his teaching duties from a one-hour lecture to two hours per week. Informing board members that he regularly taught complementary

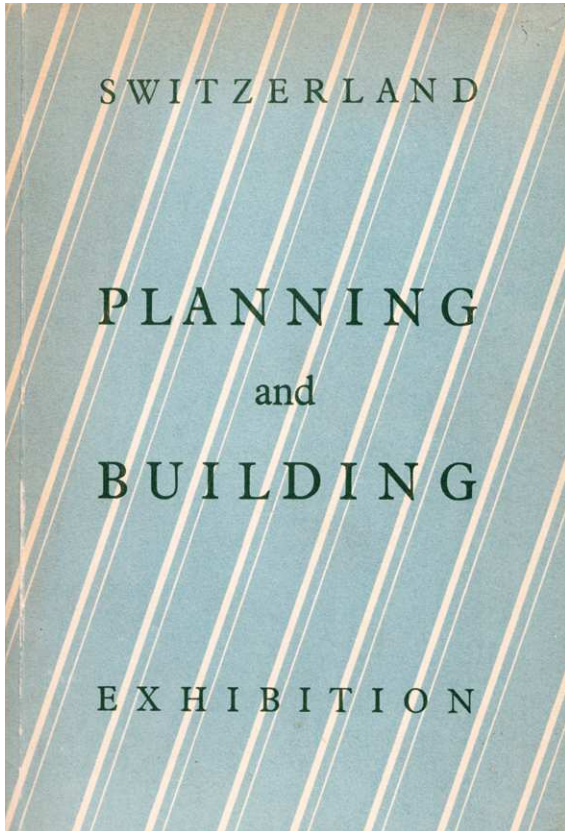
classes over the course of this first term, Giedion argued that it was impossible to address the complexity of the topics he was offering in the limited time given. Beyond his wish to spend more time with his students, he profitably used this expansion of his role to communicate his teaching success to the board of the school, to make known his expectation of a formal approval of his academic appointment, and to gain more influence at the school.

Giedion's official request first reached the humanities department, whose faculty was skeptical of his qualifications. From an academic point of view, his major publication to date, *Space, Time and Architecture* seemed too vague and imprecise, particularly its interpretation of the relationship of space and time to art, architecture, and construction. To this circle of philosophers, historians, geographers, and other scholars, Giedion was firmly positioned within the field of architectural history. His achievements in the realm of anonymous history were mostly ignored. By referring Giedion's application to the architecture department, claiming that they were unable to judge his request, members of the humanities department indirectly made clear that they were unwilling to integrate Giedion within their faculty.³⁶ Also, the underlying tone of the letters directed to the board of the ETH suggests that there were serious disagreements between the inconvenient art historian and several tenured faculty members.

After this tacit rejection, Giedion's case was referred back to the architecture department. Dean Hofmann's response regarding both the *venia legendi* and the extension of Giedion's teaching duties arrived promptly and unequivocally:

It would be likely the best solution, if Giedion keeps the assignment for a one-hour lecture, as long as he speaks about the topic of architecture. ... With this solution we would also reasonably honor the principle of tolerance vis-à-vis another opinion on architecture. An extended teaching activity of Dr. Giedion, I am afraid, would potentially bias the student body. Already now signs indicate such a possibility. It would be really a pity if the harmony existing today, both socially and professionally, would be disturbed. A related approach to building is of utmost importance to the architecture department, which is organized in an artistic manner. ... Aside from the person of Dr. Giedion, we are in principle against a proliferation of lectures on architecture that are merely based on theory.³⁷

The negative reaction of the architecture department cannot have surprised either Giedion or the members of the school's board. The disagreements between the art historian and other faculty members of the architecture department originated long before he was involved in the school. His CIAM activities were oriented toward an international audience, leaving him without much connection to the



4.04



4.05

local Swiss scene.³⁸ Already in 1941, while staying in Switzerland for a short time, Giedion indicated to various friends in the United States that the school was hiring faculty that “neither Burchard [at MIT] nor Hudnut [at Harvard] would ever have accepted.”³⁹

4.04 The harmony that Dean Hofmann was referring to developed in the early 1940s, with his appointment to the ETH. At the time the international avant-garde was gradually losing its impact, and as architect-historian Peter Meyer, the most vocal proponent of this new development, pointed out, there was a growing desire for *Geborgenheit* (comfort), which could hardly be satisfied by an “engineered way of life, which had distanced itself dangerously from an anthropocentric tonality into specialization.”⁴⁰ With his appointment as a lecturer at ETH Zurich in 1935, while he was still editor in chief of the journal *Schweizerische Architektur*, Meyer became one of the most esteemed individuals in the architectural circles of the city, if not the country. He and Hans Hofmann comprised the opinion-making force within the faculty of architecture, which had gradually transformed into a homogenous, self-referential coterie of architects. Convinced that the modern movement “already belong[ed] to the past,” the group was mainly concerned with a shift from “Neues Bauen” to “Neue Baukunst,” a “Korrektur” (correction), “Ausreifung” (maturation) and “Ergänzung” (extension) of the architectural principles established by the avant-garde in the interwar period.⁴¹ By introducing the term “Neue Baukunst,” Hofmann and Meyer unmistakably stressed their affinity for the nineteenth-century Semperian tradition that had so clearly influenced the ETH, not only ideologically but also physically.⁴² In an essay published in the catalogue accompanying the exhibition *Switzerland: Planning and Building Exhibition*, on view at the Royal Institute of British Architects (RIBA) in 1946, this position was even manifested in an international context.⁴³

4.05 *Schweizerische Architektur*, Kunsthalle Basel, Switzerland, exhibition catalogue, edited by Peter Meyer, 1949. “In design,” Hofmann declared, “we are guided by the appropriate use of structure and material, and the aesthetic laws of harmony and proportion. These organic laws may preserve us from the pitfalls of a new formalism of the *l’art pour l’art* type.”⁴⁴

This attitude naturally was also reflected in the curriculum and the teaching methods implemented by the architecture faculty around Hofmann. The group was firmly tied to the tradition of the master class. Hofmann barely structured his classes, with little in the way of a systematic program or clear methodological framework; critical discourse was not encouraged.⁴⁵ Whenever criticism of his approach arose, he stressed the importance of the individual student’s “talent and passion,” and his belief that architecture was a form of art—hence *Bau-Kunst*—that could not be taught like other subjects.⁴⁶

Giedion on the other hand, who was used to collaboration and negotiation through his work in the United States and within CIAM, was propagating teaching methods that would breach the limits of the discipline and challenge the existing curriculum of the school.

In a letter to his close friend Franz Roh, Giedion described his insistence on “an integrated and universal education” and the resulting “opposition to most professors,” who were not concerned with “objectivity, but rather the defense of their own little post.”⁴⁷

Apart from these ideological differences, which seemed impossible to bridge, there was yet another problem on a much more personal level. Peter Meyer, one of Hans Hofmann’s closest colleagues within the faculty and also the department’s *vox populi*, had been granted the *venia legendi* as early as 1935. Meyer received his doctoral degree from the University of Zurich, followed by his postdoctoral thesis in 1943.⁴⁸ At the time of Sigfried Giedion’s return to Switzerland, Meyer, one of the sharpest, most uncompromising, and polemical critics in the country, was still waiting for a full position at the ETH about a decade after his first engagement. It was therefore not so much a matter of objection to an increase of theoretical positions alongside Linus Birchler, who taught foundational courses in architectural history, but rather a question of personal preference and long-established alliances.⁴⁹ Even if Giedion and Meyer’s ideological positions and approaches could have hardly been more opposed, the titles of Meyer’s lecture classes, such as “The Main Currents of Architecture from Classicism to the Present” or “Outlines of Nineteenth and Twentieth Century Architecture,” suggest that both scholars were working on comparable time periods and subjects, teaching similar problems from different perspectives.⁵⁰ Giedion and Meyer were thus competing for the same position within this small circle of the Swiss academy. This is why Hans Hofmann’s vehement refusal of a potential long-term engagement for Giedion should be understood not exclusively as a personal rejection of CIAM’s secretary-general, but as a protective move toward his friend Peter Meyer. It is also useful to bear in mind that Giedion spent almost the entire war period in the United States, far away from the scenes of terror and desolation in Europe. He was absent from his hometown, Zurich, when political developments paved the way for a fundamental change in Swiss architecture culture. Hofmann and Meyer on the other hand—as, respectively, chief architect of the 1939 Swiss National Exhibition, and editor in chief of the most influential Swiss architecture journal—had been heavily involved in the creation of a new type of modernism, based on a Swiss cultural identity, which would be “in the best sense Swiss and in the best sense modern.”⁵¹ Even after the end of the war, the *Geistige Landesverteidigung* (spiritual national defense) movement remained a powerful force in Swiss politics, and was also reflected in the educational policy of the ETH—which was a governmental institution, after all.⁵² The architecture faculty led by Hans Hofmann encapsulates this sociopolitical and cultural attitude; the strong resistance toward and ultimate rejection of Giedion’s request for a permanent teaching position was an inevitable consequence.

Negotiating between the art historian and the architecture department, Arthur Rohn encouraged Giedion to solicit letters of recommendation from his colleagues in America. Most notable among these documents is the testimonial of Walter Gropius, who stressed Giedion's importance and impact at Harvard, without mentioning, however, that his friend had only lectured there for a year. Gropius named Giedion the "first authority in his field," and described his colleague's Norton Lectures as "unusually successful" and even "printed by the Harvard University Press"—though this publication was part of the contract for the position and not dependent on the substance of the lectures.⁵³ Gropius admonished the "country" to do what he himself never quite managed to do at Harvard—to "give this eminent scholar the high standing and influence he deserves."⁵⁴

Despite all additional efforts, neither of the two departments was willing to entertain the proposal submitted by the board of the ETH. Tied to university regulations which left the decision to grant a *venia legendi* to the individual departments, Rohn saw his efforts stymied. He could hardly believe that both departments had rejected Giedion's motion, considering that he used to teach at one of the most prestigious universities in the world.⁵⁵

4.06 Sigfried Giedion, letter to Adolf Lüchinger, mayor of Zurich, June 21, 1949, describing Giedion's struggles with the Department of Architecture and suggesting that the ETH establish an independent professorship for cultural history as he had outlined in his proposal for an "Institute for Contemporary History" before the Second World War.

Unwilling to accept the rejection of his application to the humanities department, which had based its decision on the negative reaction of the Department of Architecture, Giedion indicated to Rohn that he was taking further measures by involving Zurich's mayor, Adolf Lüchinger, another member of the ETH board.⁵⁶ This was a typical procedure to follow for Giedion, who had an impressive network of decision makers in politics, commerce, and the cultural sphere at his disposal. Whenever his own advances were not effective, he called on others to reach out for him, or to speak up on his behalf. The case of his unsettled *venia legendi* is a perfect example of this *modus operandi*. At the next board meeting after having been contacted by Giedion, Mayor Lüchinger highlighted the historian's teaching success at the ETH in a very personal and positive manner, and also voiced his indignation about the denial of Giedion's right to teach.⁵⁷

There was mutual agreement among board members that Hans Hofmann's intention to keep the Department of Architecture free from "too many different doctrines" was intolerable within an academic institution.⁵⁸ For this reason the board started to question and debate whether it made sense that the power to overrule applications should lie exclusively with the individual faculties of the university, or whether the board of the school should have a final veto in these decisions. After contemplating the consequences of causing a problematic precedent—never in the history of the ETH had a *venia* been granted in opposition to the report of a department—Rector Hans Pallmann concluded that there should be no obstacle in granting Giedion the *venia legendi*, and that the Schulrat should make this de-

Herrn Dr. A. Luechinger
Z u e r i c h

Sehr geehrter Herr Stadtpraesident,

ehe ich Sie Freitag sprechen werde, moechte ich Ihnen doch kurz mitteilen, worum es geht.

In den drei Jahren meiner Taetigkeit an der ETH war es - wie Sie wissen - noetig, jeden Schritt zu erkaempfen. Vom Lehrauftrag bis zur Abhaltung eines einstuendigen Seminars geschah alles sozusagen gegen den Willen der Architekturabteilung. Dies mag zum Teil psychologisch zu erklaren sein, da die Herren von Anfang an meinten, meine Taetigkeit wuerde die "Einheit der Abteilung" gefaehrden. In der Praxis hat sich - glaube ich - etwas Anderes herausgestellt; denn gerade diejenigen Studenten, auf die meine Vorlesungen und Uebungen Einfluss hatten, brachten positives Leben in ihren Jahrgang. Unwillkuerlich stuetzte sich zum Beispiel Prof. Hofmann auf jene Studenten, die meine Vorlesungen und Uebungen innerlich absorbiert hatten und steht mit ihnen in bestem Einvernehmen. Ich glaube allerdings, dass gewisse Reformen noetig sind, jedoch nicht im Sinne einer "Opposition", sondern im Sinne einer Angleichung an die heutigen Bedingungen: Unter anderem um eine verstaerkte Betonung der geistigen Grundlagen und der sozialen Verpflichtungen des heutigen Ingenieurs und Architekten. Ich versuche gerade diese Einstellung in meinen Vorlesungen und Uebungen zu betonen, um dabei gleichzeitig - wenn auch noch so fragmentarisch - die verschiedenen Abteilungen (zum Beispiel Architekten und Bauingenieure) einander naeher zu bringen. Ich bin ueberzeugt, dass verschiedene Abteilungsvorstaende mit mir einig gehen werden in diesem Ziel; aber in meiner jetzigen Stellung bin ich - wie neuerliche Erfahrungen zeigten - unfrei und gehemmt. Bei dem Stand der Dinge und der dauernden Betonung der Rangunterschiede scheint mir nur eine radikale Massnahme moeglich: Die Schaffung eines Lehrstuhls fuer Kulturgeschichte in dem Sinn, wie ich es Ihnen und Alt-Schulratspraesident Rohn vor laengerer Zeit schon schriftlich dargelegt habe. Ich sprach vor Kurzem nur mit Schulratspraesident Rohn ueber die Sache, da er stets in freundlicher Weise meine Angelegenheiten behandelt hat. Er befuerchtet, dass in Bern finanzielle Einwendungen gegen die Errichtung eines neuen Lehrstuhls vom Finanzdepartement gemacht wuerden. Vielleicht ist meine Ansicht irrig, aber ich glaube doch, falls dem Schulrat ein Lehrstuhl in obigem Sinn nuetzlich erscheint, die etwaigen Widerstaende ueberwunden werden koennen und ausserdem die Opposition der Architekturprofessoren verschwinden wird.

cision even in defiance of the two individual departments. Most likely, the willingness of the board to take this risk also relates to Giedion's age at the time. At sixty years old, it was clear that his appointment would last for a decade at most.⁵⁹ It was the perfect opportunity to reprimand the faculty of architecture for its self-absorption without causing lasting damage. Two years after he first broached the subject and after a grueling process, Giedion was eventually granted the right to teach for a period of eight semesters.⁶⁰ In order to avoid a possible upheaval in the faculty of architecture, the board released his promotion through the humanities department, but still granted him the *venia*—against the faculty's will—within the Department of Architecture.

In the course of the following years, Giedion gradually attracted more attention and was consequently invited more frequently to present his work to larger audiences outside of his usual seminar course. While these engagements mostly took place at the ETH or the neighboring University of Zurich, a majority of requests were not submitted by established faculty members, but rather by student associations or special committees within the schools. The list of lectures and invitations indicates Giedion's strong ties to the younger generation.⁶¹ Most notable among them is the invitation to present for the first time in a European context his thoughts on the "New Monumentality"—ideas he had developed in collaboration with Josep Lluís Sert and Fernand Léger in the United States during the Second World War. Given Hans Hofmann's and Peter Meyer's differing understandings of monumentality and the fusion of architecture with painting and sculpture, topics that concurrently dominated the post-war CIAM congresses, this prominently staged presentation of CIAM principles, transformed in the cultural context of the United States and reimported to Switzerland, must have been a slap in the face for the architecture department at ETH.

Buoyed by the support of his students, Giedion took the further step of extending his teaching duties within the faculty of architecture soon after his official appointment. Interested in the intersection of architectural history and the current debate on the city—specifically the implementation of CIAM principles on an urban scale—he also aspired to teach design projects rather than exclusively lecture on these topics. In his workshops at Moholy-Nagy's summer schools in Somonauk, Illinois, during the war years, he had had positive experiences with this studio-like teaching environment and was determined to replicate it in his classes at the ETH and later also at Harvard University's Graduate School of Design (GSD). Not surprisingly, there was no interest on the part of Dean Hofmann and the architecture school. However, the faculty knew well that the board of the ETH had the power to overrule any decision made by the architecture department, and also that the formal acceptance

of Meyer as honorary professor (*Titularprofessor*) by the president of the ETH was still pending.⁶² Giedion's case was brought to the board's attention once more, with the clear subtext that the architecture faculty did not intend to extend his duties. Thanks to Lüchinger, Giedion's stubborn advocate on the board, the department's position was declared a pure act of revenge and once again overruled, and Giedion was granted permission to offer classes on "The City as a Form of Culture: Antiquity, Middle Ages, Renaissance."⁶³

On the one hand, this ongoing support from the board of the school was crucial for Giedion's work, but on the other hand it further marginalized him within the faculty. Desperate for recognition, and constantly under pressure to legitimize his work, Giedion regularly asked his colleagues in the United States to send letters to the president of the ETH, attesting to his teaching success abroad and the significance of his research. Such statements as "he has been extraordinarily popular here [MIT]," or "... no friction of any sort has arisen though of course disagreements have ...," and the observation that "Professor Giedion has also fitted [*sic*] in with faculty discussions and worked as hard as he could on the integration of disciplines" were consciously introduced to prove that he was not the unpleasant and eccentric persona that was portrayed by his peers in Zurich.⁶⁴

Giedion was not satisfied with his marginal role at the school. As secretary-general of CIAM and a well-known member of the international architecture community, he was accustomed to occupying a key position in most endeavors in which he was involved. Giedion probably was aware of his uncompromising character, which had caused him trouble before, yet he considered the main reason for his struggle to be the lack of German translations of his two key works, *Space, Time and Architecture* and *Mechanization Takes Command*. In the context of the latent nationalism that dominated the architecture school at the time, the fact that Giedion's main works were exclusively available in English certainly did not help his cause.⁶⁵ But even if there had been German books at hand, it probably would not have improved his position. *Space, Time and Architecture* was an ode to the international modern architecture community, which was vehemently opposed by the Swiss group. *Mechanization Takes Command* addressed a set of issues that were too American, and it was ahead of its time in introducing aspects of industrial archaeology, a field that had not yet been firmly established. The book did not unequivocally belong to the field of architecture, nor did it fall properly within the domain of the Department of Humanities, which dismissed the book as a piece of popular science. Comparing his own struggle to Alvar Aalto's success in Finland and abroad, Giedion concluded: "Only in Finland, I believe, can you be a globetrotter and an *enfant gâté* [spoiled child] at the same time."⁶⁶

4.07 Accordingly, the next permanent part-time position in architectural history at the ETH was given to someone who was deeply rooted in the local scene: Giedion's adversary Peter Meyer, who was eventually tenured, in 1951, by unanimous recommendation from the Department of Architecture. Protocols of the board of the ETH suggest that his teaching duties were not only extended in recognition of his achievements as an academic but also because Meyer was in financial straits and hardly able to support his family with his writing and tenuous teaching positions—arguments that were never considered in the case of Giedion.⁶⁷

Formal confirmation of Giedion's lectureship for a one-hour class on "Architecture and City Planning since 1920" in the second term of the academic year 1950–51 at ETH Zurich.

Despite Giedion's frequent absences from the ETH due to other teaching commitments in the United States, as well as a significant number of guest lectures and participation in conferences and competition juries, the art historian's *venia legendi* was renewed for another eight years without further discussion in 1952. At the same time as his contract was renewed, Giedion received a major grant from the Rockefeller Foundation in New York to support his research in prehistory, which would be published in two volumes as *The Eternal Present*, and which required various field trips to Egypt, Iraq, and other Middle Eastern countries. The sum of almost \$10,000 was not administered by Harvard University, with which Giedion was still affiliated at the time, nor was it transferred to the historian directly.⁶⁸ Instead, the Swiss institution that had shown so much resistance to Giedion's work, and especially to his personality, was asked to manage the funds. Both the board of the school and the architecture faculty tacitly agreed to tolerate Giedion's presence at the ETH as long as it was limited.

To accommodate extended field trips to France and Spain as well as to the Middle East, Giedion asked for two consecutive leaves of absence in 1952 and 1953. From 1954 onward, with Josep Lluís Sert's appointment as dean of Harvard University's Graduate School of Design, Giedion began to teach at the GSD on a regular basis. These constant absences from his commitments at the ETH in Zurich, as well as an accumulation of changes of plans on short notice, certainly did not improve Giedion's position within the Department of Architecture—he was barely contributing to administrative tasks, or the political discussions within the school—or within the ETH in general.⁶⁹ When the board of the ETH considered naming him an honorary professor in 1956, they discussed Giedion's shortcomings, but also his extraordinary teaching success.⁷⁰ Records indicate that his classes were well attended; with his seminars attracting up to 183 students, Giedion's classes had better attendance than the mandatory lecture classes in architectural history, which were held by Dean Hofmann's protégé, Peter Meyer. Suspicious of Giedion's methods, other faculty members closely observed the group of students that enthusiastically followed his seminars.⁷¹ Despite his

AUSZUG AUS DEM PROTOKOLL
DES SCHWEIZERISCHEN SCHULRATES

Zürich, den 3. Februar 1951.

Lehraufträge für das Sommersemester 1951.

Auf den Antrag des Präsidenten

wird beschlossen:

1. Für das Sommersemester 1951 wird folgender
Lehrauftrag erteilt:

Herrn Privatdozent Dr. S. G i e d i o n : Architektur
und Stadtentwicklung seit 1920, 1 Stunde, an den Abteilungen I
und XIIIA, gegen eine Entschädigung von Fr. 400.-- nebst Studien-
geldanteil.

2. Mitteilung an den Lehrbeauftragten, das Rekto-
rat, die Vorstände der genannten Abteilungen und die Kasse.

Für getreuen Auszug:

Der Sekretär des Schweiz. Schulrates:

Boulerde

merits as a teacher, Giedion was continuously alienated within the school. He wrote to Walter Gropius: "If only I could build a few ball joints into my spine, what a fine life I would have at ETH!! But as it is, I am entering frowning and without contact to my colleagues, which, however, doesn't prevent me from having by far the largest audience. As mentioned, I will consider if one shouldn't procure ball joints."⁷²

Under pressure from the board of the ETH, the Department of Architecture finally agreed to Giedion's promotion, under the condition that he would not be able to achieve further influence at the department or, in other words, that a tenured position and the installation of his own chair (*Lehrstuhl*)—including the financial resources to maintain a staff of researchers and lecturers—would be out of the question.

If we hesitated thus far to follow along the direction of the multiple suggestions from Dr. Giedion's circles, it is not because of a disrespect for his intelligence, knowledge and diligence, or the pedagogical talent of Dr. Giedion, but because of concerns related to an intolerant-sectarian hustle in service of dubious, worldwide vanguard organizations that are trying to impose on architecture schools and architectural practice at large a supervision and monopoly by means of organizing competitions, congresses, awards, and an enormous propagandist publicity. In addition, the fact that Dr. Giedion has not successfully objected to being called "Professor, ETH" at international activities, has not served the efforts to realize this ambition.⁷³

In light of the fact that Giedion would reach the retirement age of seventy within two years, the possible promotion to honorary professor was a rather small concession to the art historian. Because of the high costs of social benefits, most members of the board of the ETH refused to tenure Giedion, even if some of them favored his approach.⁷⁴ While there was great respect on a professional and academic level, his "tragic ability to alienate other people" was repeatedly asserted.⁷⁵ Considering his age and his frequent travel activities, it is likely that Giedion himself did not expect the school to offer him a fully tenured position. He counted on an appointment as associate professor (*ausserordentlicher Professor*), which would have put him on the same level as his rival Meyer, and would have been a "decent recognition" that, according to a member of the board, would also have been "beneficial for the ETH."⁷⁶ Nevertheless, the proposal to hire Giedion as an associate professor with only half the teaching load and no claims for social benefits was rejected by a majority of the board, and his status was upgraded to honorary professor.

Unwilling to accept this decision, Giedion yet again enlisted his network of influential friends to take action. Wilhelm Löffler addressed a letter of protest directly to Swiss Federal Councilor Philipp Etter.

He stressed that Giedion had already had the rank of “full professor” at Harvard—which was actually untrue. Löffler also emphasized Giedion’s role as a “bridge” between Switzerland and countries such as the United States, Great Britain, Sweden, Finland, France, and the Netherlands.⁷⁷ Similarly, Alfred Roth—a former collaborator at Le Corbusier’s atelier in Paris, editor of the journal *Werk*, and one of the architects of Giedion’s multifamily houses he had built according to modernist principles on his Doldertal property—underlined his colleague’s outstanding role as an advocate for the discipline of architecture, and the discrepancy between his recognition abroad and the lack of critical acclaim in his home country.⁷⁸

These letters resulted in a consultation between Swiss government officials and the ETH and a long debate at the school’s next board meeting. The previous arguments were reiterated once more; however, there were only a few statements in favor of Giedion’s tenure. While some members claimed that the historian was overambitious and propagandistic, others questioned the structure of his courses.⁷⁹ The critic’s wide-ranging, international network of architects, art historians, and intellectuals from a variety of other fields could have been instrumental in establishing strong international relations for the school; instead, Giedion was continuously badgered for his “international approach.” With the ever-critical view to the other side of the Atlantic—Max Frisch described this attitude in his text “Unsere Arroganz gegenüber Amerika” (Our Arrogance toward America)⁸⁰—the president of the board himself concluded that the broad reception of his work in the United States was no guarantee for comparable success in Europe.⁸¹

As could be anticipated, Giedion was enraged when Hans Pallmann informed him of the final decision to offer him “only” an honorary professorship (such luminaries as the psychologist Carl Jung shared this status) and declared that it was impossible to accept the honorary title as opposed to an associate position for someone with the status of a “full professor” in the United States.⁸² He reiterated his demand for a full, tenured appointment that would allow him to teach equally in the departments of architecture and the humanities, and to have a full vote in all discussions about the future development and direction of the school. In response to the denial of his request, Giedion turned down the offer of the president to confer upon him the title of honorary professor. This immediate reaction confirmed the board’s opinion that Giedion was “aggravating” and “choleric,” and therefore not to be integrated in the body of the school.⁸³ Afraid of unpleasant repercussions for the school, and to avoid Giedion’s potential refusal of the title once the Swiss government formally offered it—which would have been a slap in the face for the institution—the board agreed that the inconvenient historian’s refusal would be accepted, closing the curtain on that unsatisfactory matter.

After this episode, the board of the ETH did not approach Giedion again. His *venia legendi* was extended until 1958, when Giedion reached the mandatory retirement age. Even though he continued to teach at Harvard until 1966, the punishing process he had to undergo to receive his official acceptance at the ETH left him with much resentment and bitterness, even years afterward, as various comments in Giedion's extended correspondence suggest. Deeply hurt that his own country never granted him the recognition he expected, Giedion began to praise Harvard even more, and eventually concluded that "the 'Poly' [ETH] would never have the spirit of Harvard."⁸⁴

The Effect of the Historian

"With his unshakable belief, but also an almost fatherly willingness to help, Giedion has always followed, directed, and, where he considered appropriate, praised the activities of us young architects. By his example, his moral courage in artistic, cultural, and especially cultural-political questions, he repeatedly encouraged us. On the contrary, he slowed us down when it appeared to him that our verve was not based on a sufficiently stable foundation."⁸⁵
—Willy Rotzler

Ever since his return from the United States and with his first teaching commitments at the ETH, Giedion actively strove to reform architectural education, which was a difficult endeavor as he had no say in the educational politics of the Department of Architecture with which he was affiliated. In his 1947 reflection "On the Education of the Architect," Giedion spoke of the "worldwide dissatisfaction with the present training of the architect," which he attributed to a "one-sided specialization," and called for a "methodological approach" that would enable students to raise relevant questions of the time.⁸⁶ Aware of advancing specialization in all fields, he declared that architectural education "cannot be regarded as an isolated case, but must be integrated in the long run in the all-over reform of educational training."⁸⁷ In contrast to the isolationist attitude predominant in Switzerland, Giedion was seeking international cooperation, ideally coordinated by the newly founded UNESCO, in order to avoid "the collapse of civilization," as he dramatically noted in his essay. Even as his advocacy for increased internationalization contributed to his marginalization at the ETH, Giedion did not fail to spread the word about the danger of isolation in the emerging cultural climate of the Cold War:

Even if we may completely isolate ourselves in Switzerland at this moment, in the long run, the struggle for survival won't be resolved

with Sputniks, but much rather with the attitude a country takes in a moment of danger. America makes many mistakes, but one thing people understood, that in a scientific and artistic existence it is only possible to withstand imminent danger if one does not remain provincial. That's exactly what Switzerland has to avoid.⁸⁸

Giedion was certainly not the only voice in Switzerland to find fault with the "provincial" attitude of the Swiss academy. It is likely that he particularly appreciated "Cum Grano Salis," Max Frisch's well-known lecture on current Swiss architectural culture, presented to members of the Zurich chapter of the Bund Schweizer Architekten (BSA) in June 1953, and subsequently published in its official organ, *Werk*.⁸⁹ Frisch—today esteemed as one of Switzerland's most eminent writers—was initially trained at the ETH and practiced architecture before shifting his professional focus to literature.⁹⁰ On his return from the United States, where he had spent almost two years as a stipendiary of the Rockefeller Foundation, Frisch outspokenly criticized the work of some of the most recognized members of the profession.⁹¹ Frisch suggested that the "dictatorship of the average," the "nostalgia for the day before yesterday," and the "myth of the compromise" predominant in the country's architecture were not limited to that particular field, but were expressions of a general Swiss sensibility.⁹²

Frisch's broadside reads like a direct response to Peter Meyer, who repeatedly described the issues discussed in "Cum Grano Salis" as evidence of the democratic structure inherent in Swiss architecture. Over the course of the war years, and even subsequently, when there was no more vital need, the concept of *Geistige Landesverteidigung* had been ingrained in the work of Swiss architects to the point where even such liberal minds as Werner M. Moser observed that the Swiss "have succeeded in some interesting buildings, no topwork, because it is framed by the smallness of Switzerland, but they are at least *sincere efforts* [emphasis added]."⁹³ Given that there was little resistance to Frisch's position—on the contrary, it was published at the request of the assembled architects—one could interpret his sharp speech as an indicator of a gradual change in sensibility, a rising critique of the country's omnipresent desire for consensus and its alleged neutrality, which were issues that dominated the Swiss cultural and political landscape.

This change can be also perceived in the architecture journal *Werk*, the very publication that released Frisch's piece. Alfred Roth, a member of CIAM, replaced Peter Meyer as the journal's editor in chief in 1943, and gradually established a new direction for this important voice of the architecture scene in Switzerland. Another constant platform promoting the ideals of modern architecture was the Zurich-based Kunstgewerbemuseum, under the direction of the former Bauhaus master Johannes Itten. Many exhibitions conceived

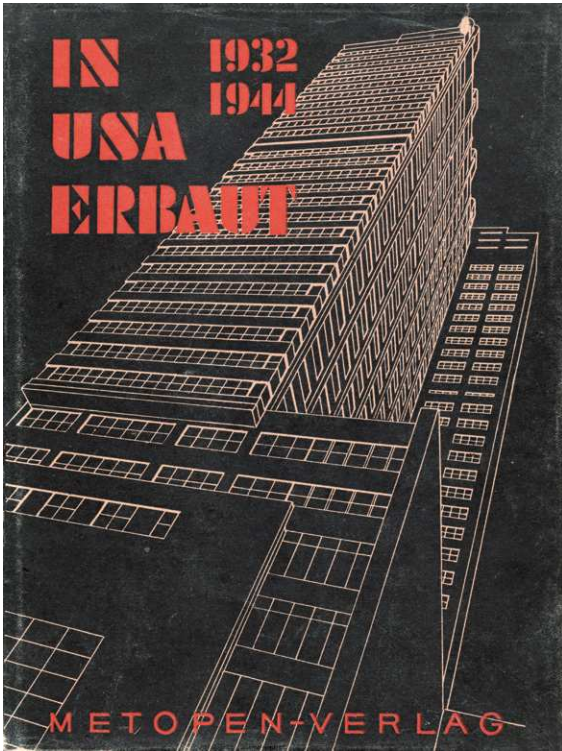
4.08–4.12 under the auspices of Itten, who headed the institution from 1938 to 1954, suggest a close contact between the museum and those engaged with modern architecture. This is also reflected in the museum's openness to topics from outside Switzerland. Just after the war, the museum hosted the exhibition *Built in USA*, which originated at the Museum of Modern Art in New York (MoMA). The Swiss version was accompanied by the catalogue *USA baut* and also a special edition of *Werk*.⁹⁴ In 1951, Frank Lloyd Wright's work was introduced to a larger Swiss audience, and recent American architecture could be found side by side with Swiss projects in the 1954 exhibition entitled *Das Neue Schulhaus*, curated by Alfred Roth.⁹⁵ Reflecting Giedion's conviction that only Finland and Brazil had reached an above-average architectural standard,⁹⁶ an exhibition on his close friends Aino and Alvar Aalto was presented at the Kunstgewerbemuseum in Zurich in 1948; and the crusade of modern architecture in Brazil, which Giedion had witnessed on the occasion of the first São Paulo Biennial, was documented in the 1954 show *Brasilien baut*.⁹⁷

In USA erbaut: 1932–1944 (1948), German translation of Elizabeth Mock's catalogue for the exhibition *Built in USA: 1932–1944; Built in USA: Post-war Architecture* (1952), published to accompany the eponymous exhibition at MoMA (1953); *USA baut*, exhibition catalogue, Kunstgewerbemuseum Zurich, Switzerland, 1945; *USA baut*, exhibition brochure, Gewerbemuseum Basel, Switzerland, 1946; *USA baut: Bildbericht der Ausstellung moderne Amerikanische Architektur* (1945).

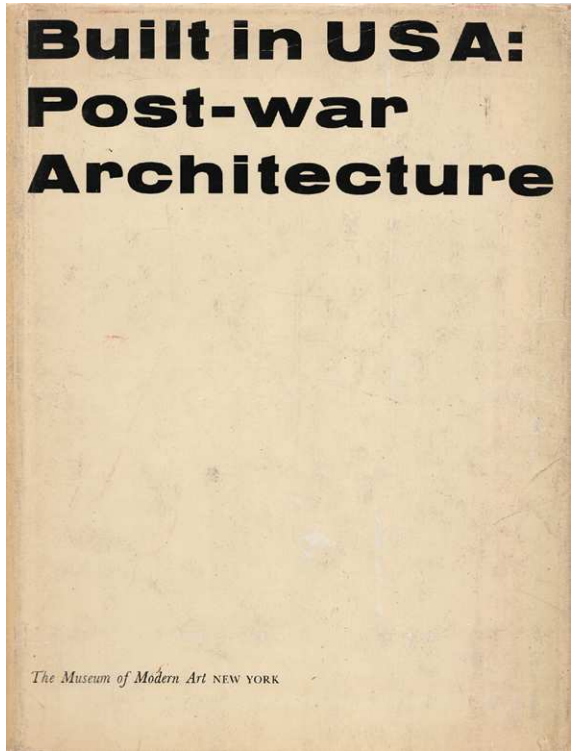
4.13 Alvar Aalto and Sigfried Giedion at the opening of the *Alvar und Aino Aalto: Ausstellung* at the Kunstgewerbemuseum, Zurich, 1948.

In the late 1950s, the ETH's architecture faculty underwent a fundamental change. Only a year after the final rejection of Giedion's call for a tenured position, Friedrich Hess, who had been teaching design since 1925, retired. The same year, Hans Hofmann unexpectedly passed away, and only two years later, William Dunkel stepped down from his position.⁹⁸ The dissolution of this triumvirate, which had dominated the Department of Architecture over decades, presented the school with the opportunity to take a new direction by hiring a whole new group of teachers. This possibility loomed larger when Linus Birchler retired early, freeing up the chair in art history. The official architectural associations Schweizerischer Ingenieur- und Architektenverein (SIA) and Bund Schweizer Architekten (BSA) saw this massive turnover in a period of less than five years as a chance to assess the future of architectural education in Switzerland; Hans Pallmann and the board of the ETH, who had closely and critically followed the activities of the architecture faculty over the past decade because of Giedion's controversial case, also saw an opportunity to restructure that part of the architecture department. Six new professorships in architectural design were introduced, along with two in architectural history.⁹⁹ In order to consolidate planning within the school, the foundations for the Institute for Local, Regional and National Planning were established.¹⁰⁰

Some of the foundations of this landslide development were laid much earlier, and coincided at least partially with Giedion's appointment to teach a weekly seminar. Despite the unfavorable environment he faced at the ETH, the historian ended up teaching for more than a decade within the school of architecture.¹⁰¹ Giedion was highly motivated to educate the emerging generation of architects, to prepare them to make connections within the larger framework of cultural



4.08



4.09



4.10



4.11



4.12



4.13

March 6, 1947

Dr. Julian Huxley,
Secretary General,
UNESCO,
Paris, France.

The undersigned, having met together in the Conference, urge that you set up immediately a committee of professionals and educators in the field of Planning and Architecture, to draw up a plan for a fundamental reform of training for Architects and Planners in all countries, and to draft as part of such a plan basic curricular standards for all countries.

This request is based on our conviction that existing curricula, with few exceptions, are not adjusted to the needs of the immense task of re-planning and re-construction which lies ahead of us everywhere.

We desire to state in particular that any new program must include development of knowledge of social, economic, and emotional factors involved as well as technical competence, - for it is through the understanding of the interrelation of these that the Architect and Planner of our time may be properly equipped not only to make his special contribution more significant but further to equip him for essential collaboration with other specialists in allied fields.

Further, to study and formulate legislation, uniform in principle, directed toward making effective planning legally and economically possible, to be recommended for adoption on the national level.

This program should further be considered in two parts: (1) a program of education in Architecture and Planning to meet long term needs, and (2) a short term program to meet the immediacy of post-war reconstruction.

As a first step toward the realization of such a program, we respectfully suggest that the Secretary General of UNESCO appoint an interim chairman to whom detailed proposals may be addressed at the earliest time.

Please sign your name on the following ^{4.14} page

Gyorgy Kepes, Massachusetts Institute of Technology

Gyorgy Kepes

Henry A. Jandl, Architect

Henry A. Jandl

John Knox Shear, Architect, Princeton

John Knox Shear

Sigfried Giedion, Federal Institute of Technology, Zurich, Switzerland.

S. Giedion

George Howe, Architect, Philadelphia

George Howe

Mies van der Rohe, Illinois Institute of Technology

Mies van der Rohe

Walter Baermann, Associate, Norman Bel Geddes, New York City

Walter Baermann

Jean Labatut, School of Architecture, Princeton University

J. Labatut

Thomas H. Creighton, Editor, "Progressive Architecture"

Thomas H. Creighton

Martin L. Beck

Martin L. Beck

George Fred Keck, Architect, Chicago

George Fred Keck

Le Corbusier, Architect and City Planner, Paris

Le Corbusier



4.16

history and their correlation with the actual design process, while shifting the focus away from “drawing-board architecture” and establishing a focus on the “social obligations of the present-day engineer and architect.”¹⁰²

This direction mirrors what an illustrious committee of architects and architectural historians, including Sigfried Giedion, had agreed on at the General Conference of UNESCO in 1947.¹⁰³ At the beginning of the postwar reconstruction period in Europe, the committee, consisting of a notable number of CIAM members and European émigrés, came to the conclusion that most curricula in the field of architecture and planning were not suited for the challenges facing future generations. Most likely on the basis of Giedion’s input, the committee stated that “a new program must include development of knowledge of social, economic, and emotional factors involved as well as technical competence”¹⁰⁴ Giedion signed this charter as a representative of the ETH, presumably without the approval or knowledge of the faculty, given that it is not possible to trace a discussion regarding UNESCO and there were absolutely no efforts to reform the course of studies at the architecture department.¹⁰⁵ He was convinced that, at a time when in Switzerland there was still a “sardonic fight” between the large camp of moderate voices and the small group that proclaimed modern ideals, teaching was worth the effort and sacrifice, in order to forge the approach of at least a small group of future architects who would eventually operate within the local community, and would help to promote the ideals he had fought for throughout his career.¹⁰⁶ Looking back at the developments of the time, Werner M. Moser associated exactly that group of students with the radical makeover of the architecture faculty at the ETH.¹⁰⁷

Without explicitly mentioning Giedion, Moser was clearly referring to the students in his seminar—some of whom eventually were appointed professors at the school—which operated as an independent cell within the complex of the university.¹⁰⁸ Giedion was the guiding spirit of a selected group of students whom he considered rather as colleagues and equal interlocutors than pupils.¹⁰⁹ His class attracted mainly rebellious and self-confident students who could stand up to their design tutors’ frequent confrontations about their involvement in Giedion’s seminar. In the late 1940s, Ulrich Stucky, Bernhard Hoesli, André Studer, Paffard Keatinge-Clay—Giedion’s future son-in-law—Christian Norberg-Schulz,¹¹⁰ and Eduard Neuenschwander formed the core of this group.¹¹¹

Giedion’s seminars on architecture and urbanism had an unambiguous international focus; many of the themes discussed were also on the agenda of the postwar CIAM conferences. Colleagues from abroad were regularly invited to speak to his classes—and in turn backed up Giedion’s position by supporting the direction of his teaching, which countered the official canon of the school. With his

4.14–4.15

Letter from a group of architects and architectural historians to the secretary-general of UNESCO, Julian Huxley, March 6, 1947, requesting the establishment of a committee of professional educators in the fields of architecture and planning. The collection of signatures reads as a who’s who of modern architecture.

4.16

Marcel Breuer, Pier Luigi Nervi, Bernard Zehrfuss, Secretariat Building, UNESCO Headquarters, Paris, 1955–58, photographed by Giedion, winter 1956–57.

classes limited to one hour per week, Giedion eventually extended the classroom to his Doldertal home for a small circle of interested students. According to his wife, the Giedions introduced architecture students to the study of the writings and works of contemporary artists such as Wassily Kandinsky and Paul Klee, to “make up what the university and the polytechnic institute so terrifically failed to teach over the last twenty years.”¹¹² They essentially began to forge a “third generation of modern architects.”¹¹³

The lack of German editions of his books was certainly a handicap for Giedion in his teaching activities; meanwhile, the conscious omission of standard works and journals on modern architecture at the architecture library at the ETH made matters even worse.¹¹⁴ The suppression of differing opinions within the school was so obvious that students quietly began to revolt, challenging generally accepted design standards with provocative projects that were clearly informed by models promoted in Giedion’s class.¹¹⁵ As a further step, the students around Neuenschwander and Norberg-Schulz published two pamphlets entitled *Ventil* and *NU*, setting forth their ideas in the hope of launching a serious discourse at the school.¹¹⁶ Encouraged by Giedion, the same group eventually also mounted two exhibitions exploring the intersections between architecture and various related disciplines. For the exhibition *Das Organische* (The Organic), which opened in the summer of 1948, they engaged in an exchange with other faculties, consulting with art, literature, music, psychology, medicine, the sciences, and engineering.¹¹⁷ In a Giedionian manner, Neuenschwander proclaimed in the student newspaper *Zürcher Student* that the omnipresent specialization needed to be tackled with a rigid methodology, as well as an enhanced “understanding of interrelations” and a “sense for values.”¹¹⁸ Inspired by Giedion’s method of visual comparison, the students combined references to modern art, architecture, engineering, science, and technology into a dense visual assemblage, offering startling comparisons and opening new perspectives. A second exhibition entitled “Synthesis,” held only half a year later, was a further demonstration of the same idea with different source material.

Apparently, Giedion was extremely successful in motivating his students to raise their voices.¹¹⁹ The faculty’s suspicion that he was inciting young architects to promote his “propagandistic” activities was not completely without cause.¹²⁰ For instance, the newly created Kommission für zeitgenössische Kunst (Commission for Contemporary Art), an initiative of students from both the University of Zurich and the ETH, was co-founded by Eduard Neuenschwander and Giedion’s son Andres, a close friend of the former and a student in medicine.¹²¹ With the aim of improving the intellectual climate at both universities, they invited architects to lecture on contemporary issues.¹²² Taking advantage of Aalto’s Zurich visit on the occasion of the opening of his exhibition at the Kunstgewerbemuseum, the group managed to en-

gage the Finnish architect to give a lecture on issues of architectural education entitled “Die Erziehung zur Architektur.” Giving a platform to established voices from the modern canon to counter the lectures at the architecture department was a main objective of the invitation, and, as Neuenschwander recalled, Giedion urged him to declare his stance toward contemporary architecture and especially Aalto’s significance in his introduction.¹²³ Less than three years later, in February 1951, Giedion himself was invited by the commission to present his most recent studies about *Urkunst und Gegenwart* (Prehistory and Present).¹²⁴ This lecture was so well received that Giedion was invited by the Verband der Studierenden an der ETH, the polytechnic’s official student organization, to give two more lectures in 1953 and 1954 based on his studies of the “beginnings of architecture.”¹²⁵

Along with his activities at the ETH and his ongoing interest in educational matters, Giedion was also determined to engage the new generation in the activities of CIAM. The organization needed to bridge the gap between those architects who had already been in practice before the war and the significantly younger generation who began their professional careers directly afterward. The big challenge, as Jaqueline Tyrwhitt, acting secretary of CIAM and Giedion’s editor, realized, was “the promotion of a creative sort of co-operation between the younger architects with really fertile ideas.” As an initial vehicle to foster a constructive dialogue between established members and architectural students, Giedion promoted the CIAM Summer School, the first of which was organized by the Modern Architectural Research (MARS) Group and held in London in 1949. He and Alfred Roth, representing the Swiss section within the organization, considered holding a summer school in Zurich, but because of the resistance to modernist ideals within the country and the “indifference” of the local chapter, they abandoned the project. The second event, open to students in their final year as well as to young architects, was hosted in Venice in 1952, guided by Ernesto Rogers, Franco Albini, Ignazio Gardella, and Giuseppe Samonà.¹²⁶ Also among the participants were Giedion’s protégés Neuenschwander and Norberg-Schulz, both of whom had been the driving forces in the establishment of a Swiss CIAM Junior Group, an initiative endorsed at the eighth CIAM congress in Hoddesdon, England, in 1951 when the delegates decided to include student groups in their activities.¹²⁷ Georges Candilis of the Groupe d’Architectes Moderne Marocains (GAMMA), and William Howell of the British MARS group were elected as the first two youth representatives on CIAM’s council.¹²⁸ At the request of the organization they were asked to “investigate further methods of starting student groups in universities, and working groups of young architects.”¹²⁹

One of these groups materialized in Zurich, launching a small publication series entitled *TEAM*. As correspondence suggests, once again it was Giedion who pulled the strings, nudging Norberg-Schulz

TEAM

3

1100.32
Fortsatz von unten! W.M.M.
1. Team - Obj. = überspringen anderer Kategorie!
2. Bedürfnis Neuland. jeun bellevue
3. Atalies Prinzipien der école des beaux arts - signiert sich am besten über Poly Wohnkultur im Stadt
Polyreform: Wie sieht die
Erziehungsreform nach
Notthaus?
Polyreform: Gastropfentent

CIAM JUNIOR GROUPS - GROUPES DES JEUNES - JUNIOR GRUPPEN

CONTENTS: 'A Call' and 'the concrete symbol' by P. KEATINGE CLAY. CIAM Junior-Gruppen, junior groups, Aufbau der Junior-Gruppen. Organization of CIAM Junior-Groups. Original woodcuts from a drawing by LANFRANCO BOMBELLI TIRAVANTI, Paris.

A call. Having been freed from the ties of academicism this coming generation will further have to free itself of materialism that architecture may retake its stand among human activities as pure creation of the spirit.

This does not imply that mechanics, economics and social planning be layed aside but contained and that those who have the calling to architecture differentiate it as a creative art or otherwise chose those alternate professions.

A new generation must throw a new light on architecture which does not mean the presentation of theories nor the manifestation of principles but the outbreaking of a new vision that comes with experience itself in an architecture as clearly defined from planning as music is from sonics.

This is a call to those who have that calling that they may identify eachother wherever they may spring up.

An opportunity is being granted by the generation of the pioneer movement before us that those who are revealing this new trend in their own work can work together despite the barriers of nationality.

CIAM is offering this opportunity which can only be earned by our strength to take the initiative independant of the traditions of the receding generation and in gratitude to the pioneers before us.

This call is now in the time of preparation for those whose creative instinct is listening. The means of communication of these young architects is not the word but the architecture itself. The synthesis

That this form of communication be made possible an exhibition to witness the new spirit will be necessary. In this way the really creative people will be able to identify eachother and through the similarity of this fresh direction in their work will be able to form a working body in CIAM as in their independant practice.

The value of these young people in CIAM will be according to their creative ability. There is no repetition in creation and what is to unfold in CIAM is unknown.

CIAM will in this way not be a systematised organisation but the meeting point of the outstanding creators of the day. It will be free every time to find its own purpose and meaning freshly through its own work.

This call in its very nature will single out those who have the calling within them.

hamstery - neues Utopium - also unabhängig
neues!

and Neuenschwander to raise their voices publicly.¹³⁰ Positioning themselves as the successors to the founding members of CIAM, the editors of *TEAM* called for a reform of architectural education and aimed to “create a means to disseminate the modern ideas among the students.”¹³¹ It took more than three years to develop this publication from a set of ideas to the first printed issue, which was released in May 1951. Two consecutive issues followed quickly: *TEAM 2*, published in early 1952, repeatedly highlighted educational deficits, asked for an increased exchange between students and faculty, and—reflecting the title of the publication—called for more teamwork.¹³² *TEAM 3* followed in the fall of the same year, in time for the ninth CIAM congress in Aix-en-Provence, France. Reinforcing the resolutions made in Hoddesdon, CIAM Junior Groups were the subject of *TEAM 3*.¹³³ In this last issue, Norberg-Schulz and Neuenschwander, who were serving as interim president and secretary-general of the CIAM Junior Groups, published the mission and bylaws of the new association in preparation for its establishment.¹³⁴ Following in Giedion’s footsteps, this project was almost an exact replica of its mother organization: the organizational structure of the group, its close attachment to the official congresses, its general tone and language, and even the design of the leaflet are reminiscent of prewar CIAM. Critical voices immediately emerged from both inside and outside the organization. Tyrwhitt was torn. She appreciated the effort, but was at the same time worried that “the new generation of CIAM will consist entirely of ‘followers.’”¹³⁵ Nevertheless, she urged CIAM President Sert to “take no action that will discourage” this project, “even if *TEAM* itself and some of the active youngsters seem a bit green.”¹³⁶

The initiative to constructively involve a future generation of architects in CIAM occurred too late to develop a natural succession; the demand for continuity formulated by Giedion and others left little space for new ideas. This is precisely what Werner M. Moser, delegate to the Swiss CIAM group between 1930 and 1949, annotated in his personal copy of the third issue of *TEAM*: “The relationship of the youth to us should be as open as our generation’s to my father [Karl Moser, the founding president of CIAM], we cannot raise them to be our sidekicks.”¹³⁷

Even though *TEAM*’s impact was limited, its influence in Switzerland was significant. Barely six years before his appointment to teach design at the ETH, Moser had closely studied the proposals of the school’s recent graduates, and wondered how the suggested approach to teaching might be implemented at “the most conservative institution.”¹³⁸ Only a few years later, he would become one of the leading voices within the newly hired faculty that gradually reformed the school, “liberating it from its ‘splendid isolation.’”¹³⁹

Giedion’s direct impact on the emerging generation through his teaching activities is unquestionable. Another important factor, how-

4.17

Werner M. Moser’s personal, annotated copy of *TEAM 3*.

4.18 Group photograph taken at the Giedions' Doldertal home in Zurich. From left to right: Carola Giedion-Welcker, Moncha Sert, Josep Lluís Sert, Walter Gropius, Ise Gropius, photographed by Giedion, ca. 1950.

ever, was the finely woven global network the historian had established and cultivated over the course of his long career, and which he eventually made available to his students. Beginning in the late 1940s, from his Doldertal home, Giedion operated almost as a recruiting agency, bringing many of his students into contact with established architects such as Alvar Aalto, Le Corbusier, and Walter Gropius.¹⁴⁰ Giedion also played an important role in supporting recent graduates to continue their studies abroad. Writing letters of recommendation, arranging scholarships, and enabling contact with a local network of academics and practitioners, through his personal connections Giedion helped many young architects to cross the Atlantic, and to gain exposure to the cultural climate of the United States at universities such as MIT, Harvard, and the Illinois Institute of Technology (IIT).¹⁴¹ In the 1950s, he also tried once again to implement his idea of a student and teacher exchange between MIT and the ETH, though now funded by private scholarships rather than with official governmental support.¹⁴² As a consequence of this endeavor, Giedion was appointed the first to assume a new visiting professorship at MIT, which he held from January to September 1950. Apart from this exchange of teachers, however, no continuing collaboration between the schools was established.

Sigfried Giedion never managed to span the chasm that separated his successful teaching in the United States from his cool reception in Switzerland. At the end of his professional career, he repeatedly praised his experiences at Harvard and MIT. Giedion eventually dedicated a full lecture to this topic, underlining the internationalism of Harvard, its inspired atmosphere, constructive criticism, and the positive mood among the various faculty members. Without mentioning any particular institution, the undertone of his speech plainly conveys resentment toward his home country, where—a Swiss at heart—he always longed for proper recognition:

Harvard is a mouthpiece for the world. There is no sense of prison walls, of a dull atmosphere one would escape as quickly as possible. There is joy and optimism among instructors and students. Of course, there are difficulties that are rooted in the subject matter, and which develop through people being exposed to one another, but I don't know anyone who would withdraw from the positive atmosphere of the university, for it would never occur to the positive attitude to put as many obstacles in one's way as possible.¹⁴³

What Giedion failed to mention is the fact that Harvard never offered him tenure either. From an administrative point of view, he held comparable positions in Switzerland and the United States. The pivotal difference lay in the immediate academic environment. Harvard had become a modernist school under the influence of Walter Gropius,



4.18

and followed CIAM doctrine under the auspices of Josep Lluís Sert during the postwar period. This orientation was decidedly more congruent with Giedion's own position than that of the ETH, which was forged in the climate of the Second World War. Additionally, Giedion's happy experience at Harvard was nurtured by personal connections to not only the successive heads of the Graduate School of Design but also the other faculty members, many of whom had strong ties to the European modern movement, were émigrés themselves, or were even members of CIAM.

CIAM in America

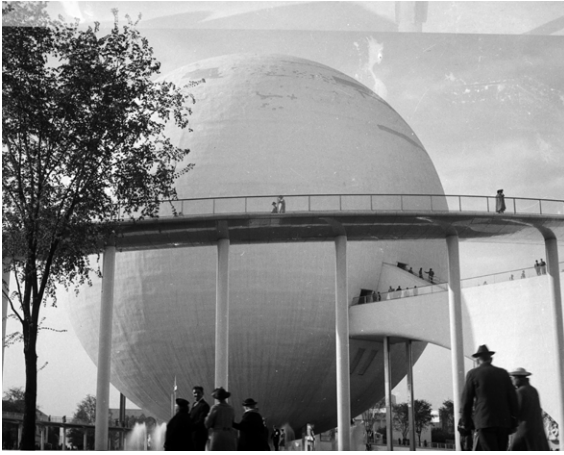
A Network Transplanted

From its inception in 1928, CIAM included American delegates, but its activities on the other side of the Atlantic were limited to the efforts of a few individuals—most of them with European roots—dispersed across the country: Richard Neutra was the official correspondent on the West Coast; Knud Lönberg-Holm established a chapter in the Midwest and then moved to New York.¹⁴⁴ In the context of the growing diaspora, many members of the European vanguard began to live and work in the United States, which also encouraged the prospects for a renewed interest in CIAM. After various unsuccessful attempts in previous years, on the eve of the 1939 World's Fair, Giedion and Gropius recognized a favorable moment to increase the organization's profile in the United States.¹⁴⁵ In January 1939, they arranged for a meeting in New York, where “the organization of the Sixth Congress” and the “organization of the American group of the C. I. A. M. and the members now in the United States” were to be discussed.¹⁴⁶ The foundations for a first congress in the United States were already laid in July 1938 when members attending the meeting of the Comité International pour la Réalisation des Problèmes d'Architecture Contemporaine (CIRPAC) in Brussels came to the conclusion that “New York should be the scene of the next Congress.”¹⁴⁷

4.19–4.22 On April 30, 1939, President Franklin D. Roosevelt inaugurated the The 1939 World's Fair in New York, photographed by Giedion. Wallace Harrison and André Fouilhoux, Perisphere; Carola Giedion-Welcker; Sven Markelius, Swedish Pavilion; Giedion-Welcker in front of the Swedish Pavilion.

On April 30, 1939, President Franklin D. Roosevelt inaugurated the New York World's Fair under the theme “Building the World of Tomorrow.”¹⁴⁸ Only a short time before, Giedion had invited a group of his CIAM colleagues and potential candidates for an American chapter to Oscar Stonorov's farm near Phoenixville, Pennsylvania. Giedion's timing was good, considering that many European architects were entrusted with the construction of national pavilions at the fair, including Alvar and Aino Aalto from Finland; Sven Markelius from Sweden; Ernest Weissmann from Yugoslavia; CIAM Vice President Victor Bourgeois, Léon Stynen, and Henry van de Velde from Belgium; and Lúcio Costa and Oscar Niemeyer from Brazil. Walter Gropius and Marcel Breuer were in charge of the Pennsylvania Pavilion.¹⁴⁹

Nevertheless, both the outreach in New York and at Stonorov's farm were unsuccessful. In New York, there was opposition to the “congress methods,” unsuited to the local design culture, and critical voices dominated the Phoenixville meeting. As Giedion reported back to Switzerland, cultural differences militated against the establishment of an American group in the United States, where “architecture is understood as a technical matter” and architects were “commercialized” and “had a completely different standing than in Europe.”¹⁵⁰



4.19



4.20



4.21



4.22

Mr. A. Conger Goodyear
President

Mr. Cornelius N. Bliss

Mrs. Robert Woods Bliss

Mr. Stephen C. Clark

Mrs. W. Murray Crane

The Lord Duveen of Millbank

Mr. Marshall Field

Mr. Edsel B. Ford

Mr. Philip Goodwin

Mr. Wallace K. Harrison

Mr. Samuel A. Lewisohn

Mr. William S. Paley

Mrs. Charles S. Payson

Mrs. Stanley Resor

Mrs. John D. Rockefeller, Jr.

Mr. Nelson A. Rockefeller

Mr. Beardsley Rumel

Mrs. John S. Sheppard

Mr. Edward M. M. Warburg

Mr. John Hay Whitney

Trustees

The President and Trustees of
the Museum of Modern Art
invite

Professor Siegfried Giedion
to attend the Private Opening
of the New Museum Building
and the Tenth Anniversary
Exhibition "Art in Our Time"
on the evening of May tenth
from nine until one o'clock
11 West 53rd Street, New York

R. S. V. P.

On the presentation of this invitation
two persons will be admitted

Giedion saw the main problems in a general cultural reception and was convinced that “the Americans, especially the youth, will adopt the European views of the position of the architects today.”¹⁵¹ The question about the provenance of modern architecture, as has been discussed in relation to Henry-Russell Hitchcock and Lewis Mumford (see chapter 2), was intensely debated and enshrined in the respective historiographies on either side of the Atlantic. Even though Gropius’s Bauhaus pedagogy eventually was adopted by Harvard’s Graduate School of Design, and there was a community receptive to European ideals in New York—the two contexts with which Giedion was mainly engaged—a majority of American universities and cultural institutions favored a different approach.

Despite this backlash, the longtime secretary-general kept lobbying for an American CIAM group. There was a further opportunity for Giedion to spark interest in his cause and to activate his growing network of American architects on May 10, 1939, when he attended the official opening of the newly constructed building for the Museum of Modern Art (MoMA) with his wife, Carola.¹⁵² Only two days later, the discussions continued at the Institute of Fine Arts of New York University with the “Symposium on Contemporary Architecture,” which was moderated by MoMA curator James Johnston Sweeney. With his paper “American Architecture Viewed from Europe,” Giedion set the general tone of the event and the following discussion.¹⁵³ Once again he provoked the American architects by claiming that, in the realm of architecture, their country had led for a period of three decades from the late nineteenth century until 1910. From then on, Giedion argued, “Europe took the leading role.”¹⁵⁴ He concluded by challenging his American colleagues to comply “once more [with] the obligation to take up the leading role,” not because he appreciated the developments of the local architecture culture, but “because of circumstance [the Second World War].”¹⁵⁵ The panelists at this event, which included Alvar Aalto, Sven Markelius, John Burchard, and George Howe, were, with the exception of R. Buckminster Fuller and Frederick Kiesler, all connected to CIAM.¹⁵⁶ Additionally, Giedion could count on support from audience members—among others, László Moholy-Nagy and Antonin Raymond, who also came to New York for the MoMA opening, were present. The lack of leading American voices at this symposium might be the reason why Giedion’s forthright—if not offensive—declaration of European superiority was not repudiated or attacked.

This gathering of so many CIAM members prompted Giedion to host another informal meeting the following day. Meant as a constructive reunion to cement the basis for an American organization espousing CIAM principles, the initiative ended up with open resistance to the dominant position of the CIAM establishment—perhaps a reaction to the developments of the day before.¹⁵⁷ Most Americans favored

4.23

Giedion’s personal invitation to the Museum of Modern Art’s private opening of the new museum building, May 10, 1939.

establishing an independent group, instead of founding another chapter of the European mother organization. As Philadelphia-based architect George Howe stated in a subsequent letter to Giedion, he would actively participate only “in the formation of a number of regional groups of modern architecture ... on the understanding that no official connection whatever should exist between the Congrès Internationaux d’Architecture Moderne and the American groups.”¹⁵⁸ Giedion was aware of the obstacles he was facing; there was skepticism toward the expansion of the most prominent association of modern architects from the very beginning. Nevertheless, it surprised the otherwise successful impresario that the unification of even a small circle of modern voices from both continents proved to be impossible.

The problems CIAM encountered in firmly establishing a network in the United States were predominantly an issue of cultural difference. The group was strongly criticized for being represented exclusively by “American citizens of foreign origin who had gained their stature in architectural practice in their native countries,” and that there was accordingly “no reverberation of the activity of the C. I. A. M. in this country.”¹⁵⁹ As opposed to Europe, where various members of the organization had strong ties to architectural journals and vanguard publications, CIAM “did not receive any important place in any American architectural journal of the period.”¹⁶⁰ Along with the difficulties in adapting visions rooted in the European sociopolitical context to the American sphere, the state of war was another decisive factor against a successful dissemination of the organization’s ideals. Burchard wrote to Giedion in 1940:

The CIAM situation is extremely difficult at the moment. Everybody is restless, and only those of us who have been lucky enough to be given some task, big or small, that is officially connected with defense have a sort of excitement which keeps us from worrying quite so much. Under the circumstances it would seem to me very hard indeed to persuade young students who may be in the army tomorrow to try to develop a CIAM group and it is probably easier these days to pick apples, figuratively speaking, that is to do some homely or simple thing, than to make large plans. Though it would be good to rebuild the world after it has smashed, I have rather lost my faith in large plans.¹⁶¹

The war period not only fueled reluctance on the American side but also brought an abrupt halt to CIAM’s activities in Europe with the exodus of many of its core members. The sixth congress, to be held in Liège, had to be canceled, and the work of many European members was either suppressed by totalitarian governments or postponed until after the conflict.

Giedion experienced the war on both sides of the Atlantic. Having escaped Europe just before the declaration of total war, and in contact with his wife and children who were staying in Switzerland throughout this uncertain time, he came to the conclusion that America had to take the leading role in cultural endeavors in the future:

How ever [*sic*] things may turn out, Europe will not be able to continue the cultural work. All people have lost contact with one another. We know that Corbusier is in a small peasant house in the Haute Pyrenées, but nobody knows i. e. [*sic*] where Picasso is living. As far as I can see, the whole cultural weight will fall to the USA and this from one day to the other, without giving time for the people to be prepared for it. But if our cultural life should not fall in pieces, there is no other choice and it is inevitable that the USA will take over this burden.¹⁶²

From this perspective, there was serious doubt about the future of CIAM. Many members who were actively engaged before the war either gradually neglected their duties while setting up their new practices in exile, were “silenced during the war,” or else lost contact with one another, as a result of their forced dispersion within Europe.¹⁶³ Concluding that the establishment of an American CIAM group under the current circumstances and without a functioning network in Europe was virtually unrealizable, Giedion began to redirect the group’s activities toward postwar reconstruction, for he believed that American architects did not share the same experience in regional planning, and that there was finally a better reception for these issues among the general public.”¹⁶⁴

To formally and legally establish a renewed CIAM in the United States, Giedion and Sert began to prepare the incorporation of a “CIAM Chapter for Relief and Postwar Planning” in the state of New York. Preliminary negotiations began in early 1943, and in May 1944, all delegates and members of CIAM in the United States were called together for an inaugural meeting to bring this temporary association to life.¹⁶⁵ The minutes of the convention held at the New School for Social Research in New York suggest that the architects present—mainly European émigrés, including Walter Gropius, Richard Neutra, Josep Lluís Sert, Ernest Weissmann, Pierre Chareau, and Marcel Breuer—were split in two camps. Giedion, Gropius, and Sert intended to “re-connect the broken threads between this continent [America] and Europe” on a “democratic basis,” and saw a chance “to do some lobbying in the State Department at Washington,” with the aim of gaining more influence in the country.¹⁶⁶ The other group, including Weissmann, Knud Lönberg-Holm, and Breuer, was hesitant about imposing their help on Europe and also critical about continuing “the pattern of the C. I. A. M.,” given that the younger generation

took many of the issues at hand for granted. The minutes suggest an awkward atmosphere, which is also confirmed by recollections of chairman Harwell Harris.¹⁶⁷ Even though there was not unconditional approval among those present, the chapter was formally established and officers and a board of directors elected—the course of action, it seems, was set long before the meeting.¹⁶⁸ The newly established CIAM chapter met several times over the course of the year, setting up committees to deal with “Technical Housing Research,” “Programming and Planning,” and a “Professional Groups Committee.”¹⁶⁹ Correspondence suggests that there was also a publication project about “relief shelter for thirty million,” which could be widely distributed and would give CIAM “immediate recognition.”¹⁷⁰ In spring 1945, not long before the Second World War ended in Europe, Richard Neutra, president of the U.S. CIAM chapter, was invited to participate in the United Nations Conference on International Organization (UNCIO) in San Francisco, in the course of which the fifty nations present established the United Nations and adopted its charter. This marked the beginning of CIAM’s activities that would promote UN goals. Giedion’s intimates had early on indicated that “statesmen may talk in terms of a new future,” but that the “realization of such statements must be carried out by professionals in cooperation with Governmental bodies if a type of reconstruction and rehabilitation is to take place that is compatible with modern thought and technique.”¹⁷¹ This moment of international consolidation was CIAM’s ultimate chance to gain worldwide influence on a political level, an opportunity to “infiltrate the great associations,” as Giedion unmistakably indicated in a letter to Josep Lluís Sert.¹⁷²

Considering themselves a “precursor of the United Nations,” CIAM members were active in a range of UN committees and suborganizations from the beginning.¹⁷³ Giedion was in regular contact with Julian Huxley, the director of the newly established United Nations Educational, Scientific, and Cultural Organization (UNESCO), with the aim of spreading his ideas related to inter-faculty exchanges, while other CIAM members were attempting to work within the UN Economic and Social Council (ECOSOC) in order to participate in the Committee of World Reconstruction and Development—not quite selflessly, as they likely hoped to be involved in the distribution of the “billions of dollars” of reconstruction funds.¹⁷⁴ Le Corbusier, a member of the UN site selection committee that considered the location for the organization’s headquarters, was eventually commissioned to design the new building for the United Nations in collaboration with Wallace K. Harrison in 1947. The Board of Design established to oversee the work on the headquarters included other CIAM members and architects who worked in the spirit of the organization, among them Sven Markelius, Gaston Brunfaut, Matthew Nowicki, and Oscar Niemeyer. Walter Gropius chaired the committee established to con-

sult on the selection process for UNESCO's headquarters in Paris.¹⁷⁵ In a further step in the dissemination of CIAM principles, Sert managed to have major works by Giedion, Le Corbusier, Gropius, Tyrwhitt, Stonorov, and himself listed on an official recommendation of publications related to the fields of "building, housing, and town and country planning" issued by the UN Technical Assistance Administration.¹⁷⁶

Despite the great number of individual initiatives, the CIAM Chapter for Relief and Postwar Planning paradoxically did not resolve the organization's major problems. Steered by the old guard, the association was too insular to appeal to and attract new American members, and from the coordination of its letterhead to the actual work of various smaller groups, it proved to be impossible to unify the different voices within the organization. This lack of a coherent "official stand" was especially problematic for CIAM's participation in gatherings of the United Nations and UNESCO, and is a reason why CIAM did not gain a more permanent influence within the global enterprise.¹⁷⁷ The main activity of the association remained outside of the United States, even after the war.¹⁷⁸ Up to the group's dissolution in 1959, all CIAM congresses were held in Europe. Giedion's friend Moholy-Nagy had questioned the successful establishment of CIAM in America as early as 1939, emphasizing that "if somebody does not push, it will never be." Even then, he agreed with Giedion that the involvement of "the youngsters has the greatest possibility" for the future of the organization.¹⁷⁹ With the mounting critique of CIAM in Europe and the difficulties within the organization of successfully bridging the gap between the pre- and postwar generations, the Graduate School of Design at Harvard University formed a last bastion for presenting this particular approach to a generation of emerging architects.

The project for the UN headquarters in New York was a first testing ground for CIAM's revised position. The goal of modern architecture, according to CIAM, was to shift its focus toward a "democratic" and "humanistic" approach to civic art.¹⁸⁰ A countermodel to the reactionary understanding of monumentalism that was predominant before and during the Second World War, modern voices eventually began to relate monumentality with *civitas*, a revitalization of community life, and a redefinition of the urban core—or, as American architect George Howe put it, monuments needed to "return from the arbitrary scale of vanity to the human scale."¹⁸¹

In 1943, Sert, Léger, and Giedion were each invited to contribute an essay to a publication initiated by the American Abstract Artists (AAA), an artist-run organization with a strong affinity for abstract European tendencies—Josef Albers was one of its founders.¹⁸² The three intellectuals collaboratively prepared a manifesto entitled "Nine Points on Monumentality," which was supported by an essay from each contributor, outlining a particular point of view.¹⁸³ For unknown reasons, the issue was never published. Giedion's piece,

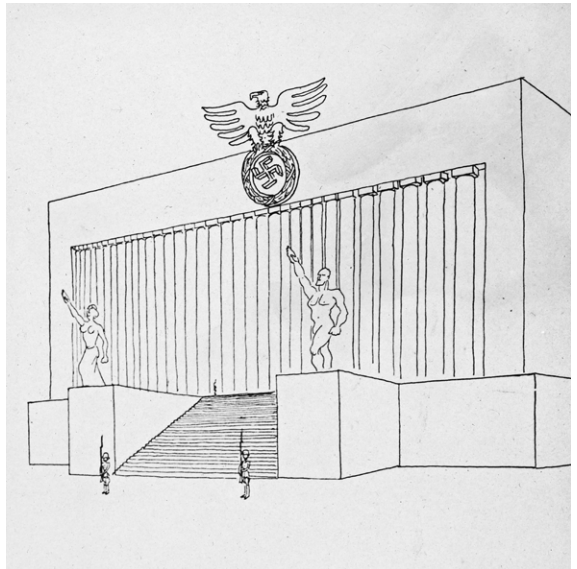
- 4.24–4.25 Paul Ludwig Troost, Haus der Deutschen Kunst (1933–37), and Benno Janssen, Mellon Institute of Industrial Research (1937), slides from Giedion’s library. “The Need for a New Monumentality,” and Sert’s essay on “The Human Scale in City Planning” were included a year later in a volume entitled *New Architecture and City Planning*, edited by Paul Zucker. Léger’s essay, “On Monumentality and Color,” was eventually published as “Modern Architecture and Color” by the AAA in 1946.¹⁸⁴ The actual manifesto, consisting of nine positions placing “monumentality within the historical evolution of modernism itself,” was not published until it was included in Giedion’s 1956 book, *Architektur und Gemeinschaft*.¹⁸⁵ Despite this significant delay, the topic gained prominence as a result of a series of lectures Giedion dedicated to aspects of monumentality, as well as the immediate response from other critics, the academic discourse, and the press.¹⁸⁶
- 4.26–4.27 *Monumental architecture in Nazi Germany and the Soviet Union*. Osbert Lancaster, “From Pillar to Post” (1938), slide from Giedion’s library, also published in *Architektur und Gemeinschaft* (1956) and *Architecture, You and Me* (1958). Lewis Mumford can be seen as a precursor to Giedion’s manifesto. As early as 1938 in his *Sky Line* column for *The New Yorker*, he declared the monumental order of public buildings to be “perhaps the worst obstruction to modern architecture in the United States.”¹⁸⁷ Mumford also outlined his approach in full detail in *The Culture of Cities*, which was published in the same year. An advocate of the garden city, he championed the replacement of the “static monument” by “powers of social adaptation and reproduction,” which he located in various forms of dwelling that could be renewed from one generation to the next.¹⁸⁸ “The notion of a modern monument,” he claimed, “is veritably a contradiction in terms: if it is a monument it is not modern, and if it is modern, it cannot be a monument.”¹⁸⁹ While this position did not differ much from the widespread opinion of European modernists before the Second World War, Mumford’s focus on community and the “social basis of the new urban order” provided a model that was not far removed from the issues various architects and organizations began to promote during and after the war.¹⁹⁰ The worldwide crisis and its immediate consequences asked for a renewed approach to the question of monumentality, and in the case of the modernist project, a radical change of direction. In contrast to the decided rejection of monumental schemes during the interwar years—they were considered an elitist legacy of the nineteenth century—modern architects now began to advocate monuments as “meaningful symbols of human ideals and collective forces for both new and redefined democracies.”¹⁹¹ The American architect Louis I. Kahn, for example, contributed to the debate with one of his first extended theoretical statements and the proposal for lightweight structures made of tubular steel.¹⁹² In contrast to Giedion, who considered monuments the conscious “integration of the work of the planner, architect, painter, sculptor, and landscapist,” Kahn’s notion of ethereal structures resonated much more with Alois Riegl’s idea of “unintentional monuments,” as outlined in his concept of *Kunstwollen* (artistic volition), which describes the “unity of creative powers manifested in any given artistic phenomenon.”¹⁹³
- 4.28 Sigfried Giedion, *Architektur und Gemeinschaft* (1956). Cover composition with one of Giedion’s photographs of the consecration of Le Corbusier’s chapel of Notre-Dame-du-Haut at Ronchamp on June 25, 1955.



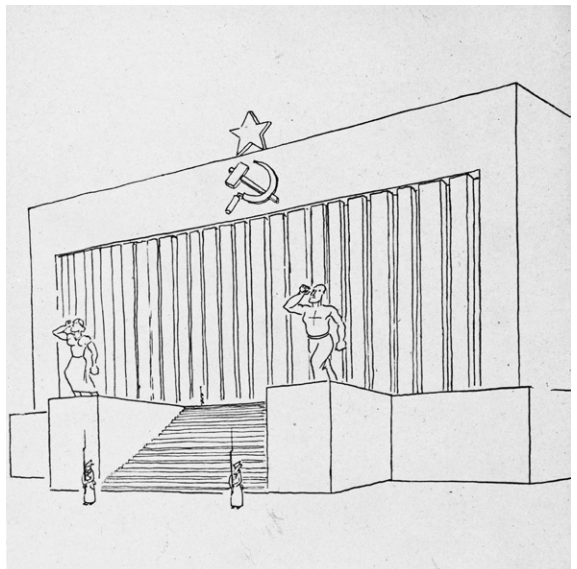
4.24



4.25

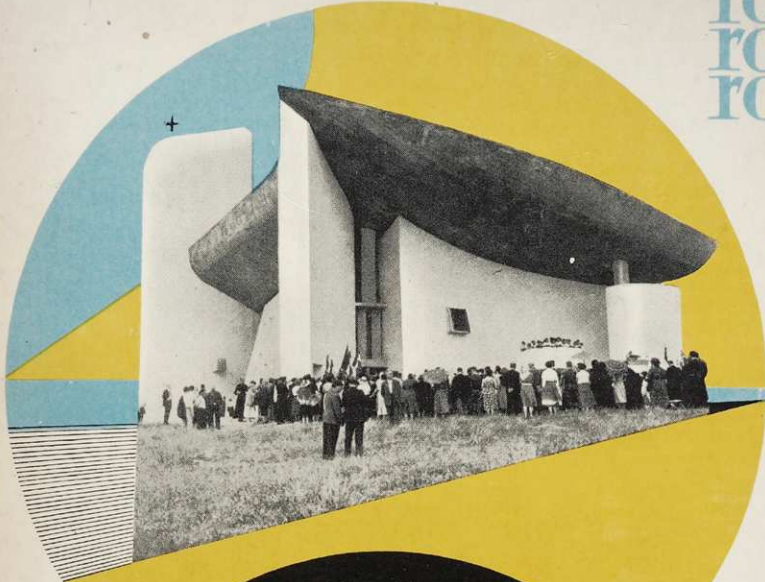


4.26



4.27

RO
FO
FO



rowohlt's deutsche
enzyklopädie

S. GIEDION
ARCHITEKTUR
UND
GEMEINSCHAFT

In correspondence with Giedion, Lewis Mumford eventually suggested that “nothing ... would be more fatal to the modern movement than to remain in a state of rigidity as a result of following formulae and solutions first arrived at in the nineteen-twenties,” and that “nothing, by contrast, indicates its healthy development more surely than the fact that certain elements left out of that original formulation—for [Giedion] the problem of monumentality, for [Mumford himself] the problem of symbolism—should come into the picture once more.”¹⁹⁴ At the eighth CIAM meeting, the group finally aimed to reassess the four urban functions, supplementing them with a fifth function, “The Heart of the City,” to address the “political, educational, and cultural functions of the city,” as Mumford phrased it.¹⁹⁵ The critic was scheduled to speak at the congress, but documentation as well as the published proceedings, entitled *The Heart of the City: Towards the Humanisation of Urban Life* (1952), indicate that he did not participate in this event.¹⁹⁶ Despite the lack of a direct contribution, there is no doubt that Mumford’s thinking strongly influenced “the humanization of urban life,” as it was discussed throughout the postwar CIAM debates.¹⁹⁷

Mumford, of course, was among those critically observing modern architecture’s change of direction and, above, all Giedion’s own shift of argument: “Mr. Siegfried [*sic*] Giedion, once a leader of the mechanical rigorists, has come out for the monumental and the symbolic”¹⁹⁸ In *Space, Time and Architecture*, Giedion praised Le Corbusier’s famous contribution to the 1927 League of Nations competition for its absence of monumental rhetoric. “For the first time,” he claimed, “present-day architects challenged the routine of the Academy in a field which it had dominated for generations, the design of monumentally impressive state buildings.”¹⁹⁹ Giedion’s text reflects the radical ideological stance that the core group within the modernist vanguard took up regarding the “period of pseudomonumentality,” as it described the majority of the nineteenth century.²⁰⁰ Later, through the influence of the American cultural sphere, and with the fascist regimes raging in Europe, perspectives gradually began to change. In his quest for a program of architectural expression and planning for postwar democracies, the theme of “monumentality” offered a productive means to bridge the cultures on either side of the Atlantic. When Giedion declared “there is no difference ... between Europe and America” in terms of the “predisposition for dramatic representation,” he likely had in mind the influence of the Beaux-Arts tradition as a defining factor in prewar Europe and during the rise of the totalitarian regimes, and also as the predominant position at most American architecture schools.²⁰¹

The Human Scale:
Reintroducing
Architectural History
at Harvard

“History walks beside the student as a friendly guide, liberating but not inhibiting his spatial imagination.”²⁰²—Sigfried Giedion

Significant change was about to take place at Harvard University’s Graduate School of Design when both Walter Gropius, chairman of the Department of Architecture, and Joseph Hudnut, the school’s dean, resigned from their positions in 1952 and 1953, respectively. Over the years, the disagreements between Hudnut and Gropius had become irreconcilable. While Gropius moved to impose Bauhaus design philosophy on the GSD, Hudnut tried to give civic design a leading role in the school. Despite this major power struggle toward the end of the tenure of these two outsized personalities, the Hudnut-Gropius era initiated a period of reorientation for the school, which paved the way for its evolution in the late 1950s. Seeking to reestablish a constructive environment at the GSD, Harvard’s President James B. Conant decided to hire a new leader who would simultaneously serve as dean of the school and chair of its architecture department. Reflecting an acknowledgment that modern architecture extended to Latin America—a view that Giedion had begun to promote toward the end of the Second World War—Oscar Niemeyer was first offered the position. However, because of the architect’s membership in the Communist Party, it was impossible to engage Niemeyer in the United States during the McCarthy era. The job was offered instead to Ernesto Rogers, a prominent member of CIAM who had just assumed the editorship of *Casabella*.²⁰³ After the president’s second choice turned down the position, CIAM President Josep Lluís Sert was appointed dean of the Graduate School of Design in 1953.

Sert’s tenure at the GSD coincided with CIAM 9, held in Aix-en-Provence, the very congress that heralded the gradual end of the organization. With Sert likely to continue CIAM’s legacy—Aldo van Eyck claimed that the organization had been Harvard-dominated since CIAM 8—this was a last opportunity to ingrain CIAM doctrine in the United States, seizing the long-desired mantle in American planning efforts.²⁰⁴ As a leader of the middle generation of the European modern movement, Sert supported many of the initiatives that Gropius had previously launched at the GSD.²⁰⁵ Among other actions, he reintroduced “Design Fundamentals,” a preliminary course that was to “foster individual creativity and to establish a ‘universal language of form’” based on Bauhaus principles—Hudnut’s initial cancellation of this course had been the reason for Gropius’s

sullen resignation from the school.²⁰⁶ Under Sert, a second wave of modern architects and artists, including Serge Chermayeff, Reginald Isaacs—who eventually became Gropius’s biographer—and Naum Gabo, was appointed to the school.²⁰⁷

Following the general belief within CIAM that architecture and city planning could no longer be considered separate disciplines, Sert began to work on the “common ground” for the disparate fields that Joseph Hudnut had established in creating the GSD in 1936.²⁰⁸ Instruction focused on the urban scale was not new at Harvard. Hudnut began teaching classes in the history of civic design—one of the first in the United States to do so—as early as 1942, and co-founded the American Society of Planners and Architects (ASPA), an American alternative to CIAM, in 1944. Building on this existing interest in the urban realm, Sert spent the first year of his deanship restructuring the school, reevaluating certain modernist orthodoxies, and giving urban design a central place in the curriculum.²⁰⁹ As a result of his experiences at the postwar CIAM conferences during his presidency, Sert was sympathetic to the growing criticism of the younger generation, and accordingly attempted to shift the focus away from a dogmatic functionalism to a broader perspective based on “human needs.” Sert was obviously negotiating a position in between CIAM’s old guard and its young radicals, revising the modernist agenda while maintaining the organization’s importance for the field. A good example of his delicate but skillful consideration of the retention of CIAM values and their reformation is Sert’s declaration, at the 1954 American Institute of Architects’ symposium on the “Changing Philosophy of Architecture,” that “functionalism has been widely accepted as a guiding principle of all architectural work, but it has produced clichés of an appalling poverty,” and his conclusion that “today we need a new vocabulary, rich and flexible. Functionalism does not satisfy our needs.”²¹⁰

One of the new dean’s first steps in this direction was the appointment of his close colleague Sigfried Giedion to establish classes on the history of architecture and urban design. While the CIAM secretary-general belonged to the maligned generation, his insistence on the unifying force of history made him an ideal candidate to reintroduce history into architectural education at Harvard. Any foundational history course had been banned from the curriculum under Walter Gropius. In contrast, Sert considered history a subject with the potential to amalgamate the three disciplines embedded in the school.²¹¹ As early as 1947, Giedion had argued for an “active role of history in architectural education”—as a paper given at a symposium entitled “Planning Man’s Physical Environment” during the Princeton University Bicentennial Celebration suggested.²¹²

Giedion’s teaching activities at the ETH in Zurich, which were closely related to the topics discussed within CIAM, had given the

4.29
Sigfried Giedion, memorandum on the visual arts and history, Harvard University, Graduate School of Design, January 1956, in which Giedion argues for visual arts and the history of architecture as fundamental components of the curriculum.

JANUARY, 1956

REMARKS AND PROPOSALS ABOUT THE VISUAL ARTS AND HISTORY AT
THE GRADUATE SCHOOL OF DESIGN

INTRODUCTION

This memorandum summarizes briefly the outcome of experience in courses given in the Graduate School of Design Fall 1954, Spring 1955, Fall 1955. It recounts what could and what could not be accomplished under present circumstances, and makes proposals for the better incorporation of the Visual Arts and History courses within the general architectural curriculum.

The purpose of these courses needs to be clearly distinguished.

- a. The Visual Arts course has to deal with general visual education -- it is a simple eye-opener course -- not for architects only. It needs to be a basic introduction to the art of seeing, with as little historical ballast as possible. It should be combined as closely as possible with the studio courses on Design Fundamentals.
- b. The History courses have to be organized so that they become spiritual eye-opener courses. All these courses have to be based on the conceptions of space during the whole architectural evolution. This method will help the students to gain an apprehension that they can employ in their own work without becoming bound up with forms and styles.
- c. An Advanced Seminar should be offered dealing with problems that cannot be handled in lecture courses.

INTRODUCTION TO THE VISUAL ARTS

1. Since it is the purpose of this course to deal with general visual education as an eye-opener course predominantly for undergraduates of all Faculties, and not architecture alone, it could well be offered eventually by the Department of Design that is envisaged.
2. This course should give insight into certain fundamentals, or constituent facts, in architecture: structure, volume, space, color, etc. without the heavy weight of historical developments. It has to show, in a vertical section through history, how certain elements -- certain constituent facts -- can be observed throughout all architecture. This does not exclude that some of the lectures of the course should present some present day and historical examples that demonstrate a synthesis of these different elements. The whole course has to educate the eyes of the student so that he becomes able to judge what he sees.
3. On the undergraduate level, this course is intended for all faculties, because the visual education of students in law, medicine, theology, business, etc., is of extreme importance. This is the only moment in their training when they can acquire the fundamental tools for judging later the quality of an architectural or a planning scheme about which they have to decide once they are in leading positions.



4.30



4.31

4.30 Sigfried Giedion in conversation with other participants at the Princeton University Bicentennial Conference, “Planning Man’s Physical Environment,” Princeton Inn, March 5–6, 1947. historian the opportunity to test and refine his teaching methods and approaches. These were put to practice when Sert—taking advantage of art historian Kenneth Conant’s leave of absence from the GSD—invited Giedion to reestablish architectural history as a required course in collaboration with the young Austrian CIAM member and architect-historian Eduard Sekler, and to introduce an urban design seminar.²¹³ This new teaching commitment at Harvard finally provided Giedion with the privileges he had been trying to obtain in Switzerland for years. He was invited to establish a fundamental course for all students, to teach history in close collaboration with the design faculty, and to take field trips with his students.²¹⁴ Excited about the developments at the school, and especially the collaboration with other faculty members, many of whom were close colleagues, Giedion wrote to his friend Sert that “life here is indeed stirring. It is not only the lectures but the many social contacts which one thinks are necessary here to establish a sound university life in contrast to Zurich. Of course, this takes energy and time, but it is very worthwhile.”²¹⁵

4.31 Eduard Sekler (second from left) and Sigfried Giedion (second from right) with students during the Human Scale Seminar at Harvard University, Fall 1959. In their history course, Giedion and Sekler aimed to “break down the barriers in the history of architecture so that [students] can better understand the organizing principles that have been successful in various periods of history.”²¹⁶ The newly established course, intended “to kindle the student’s imagination,”²¹⁷ was spread over four terms and covered antiquity to the present.²¹⁸ Giedion replaced the common analysis of forms and styles and the study of “chronological historical facts” with a “space conception of different periods,” an approach that he was simultaneously laying out in his work for *The Eternal Present*.²¹⁹ Throughout his time at Harvard, Giedion managed to combine his personal research interests and ongoing projects with the classes he taught. Widener Library and Boston’s museums were valuable sources for his “personal studies,” but also “helpful in introducing an experimental course on how [he] believe[d] the History of Architecture should be taught in schools of design.”²²⁰

Giedion soon had to realize that the possibilities for the foundational course were constrained by class size and the students’ limited experience. As a result of his experiences teaching “Space, Structure, and Urban Design,” he eventually proposed clearly distinct courses: a “Visual Arts Course” to introduce undergraduate students from all fields to the “art of seeing”; history courses organized as “spiritual eye-openers,” organized in close collaboration with the “Design Fundamentals” courses; and an “Advanced Seminar” that would deal with issues that could not be addressed in lectures. Many of the themes touched on in the history course were almost seamlessly extended into an urban design master class, which was offered for fourth-year, and “outstanding third[-]year students.”²²¹ With Giedion convinced that “history should be closely connected

with the workshop problems as is structural design,” the seminar was organized in three sections.²²² Giedion and Sekler collaboratively taught proportional systems and their cultural backgrounds, landscape architect Hideo Sasaki elaborated on the “handling of outer space,” and Sert was responsible for introducing concrete architectural case studies.²²³ By means of this close collaboration within the GSD, Giedion aimed to anchor contemporary architecture in a larger cultural and historical context, and “to make enquiries, to seek out the reasons for some of the doubts, hesitations and inefficiencies of present-day architecture,” as he declared in his introductory speech to the class.²²⁴ With the intention of tackling “the present state of inhuman urbanism,” and with Sert’s 1944 text on “The Human Scale in City Planning” in mind, the master class was eventually titled “The Human Scale.”²²⁵ Embracing its name, the seminar was typically introduced with a thorough study of proportional systems, from the golden section to Le Corbusier’s Modulor, which students were supposed to “handle like a yardstick.”²²⁶ Students had to absorb aspects of proportion, symmetry, rhythm, and sequence from both historical and present perspectives, while applying their newly acquired expertise in architectural projects. As a brief syllabus indicates, the urban design seminar was closely linked with the issues debated at CIAM. The “structure of the community” and its “civic core (heart of the city)” were some of the topics discussed in this context.²²⁷ Very much in that spirit, Giedion insisted on analyzing maps of cities and drafting interpretative drawings and plans, rather than describing the inherent phenomena theoretically and in written examinations. This preference for the form-giving character of architectural practice is also reflected in Giedion’s renaming the seminar “The Shaping of Urban Space.”

Students were engaged in comparative studies of various urban environments, with a focus on their respective fields—architecture, landscape architecture and urban planning. Complementing historical and contemporary town planning was the study of colonial cities and the construction of new capitals such as Chandigarh and Brasilia. The study of modern architecture emerging far away from Europe and North America was of particular interest to Giedion—evident in the revised editions of *Space, Time and Architecture*, and in *A Decade of New Architecture*—especially because these projects engaged with the themes that were most important to him, namely, the synthesis of the arts, aspects of symbolism, and his search for a new monumentality, which aimed to redefine monuments as meaningful symbols of human ideals, particularly in newly established democracies. Beginning with a first analysis, gathering selected socioeconomic and political facts, and retracing the plans of these urban habitats, the students under Giedion’s guidance engaged in debates and were motivated to sharply critique the projects at hand. An integral part of

4.32–4.33

Comparative urban analysis, Brasília (Brazil) and Chandigarh (India). Drawings from the “Human Scale Seminar,” published in *The Human Scale II*, 1958.

4.34

A Decade of New Architecture, first edition cover design by Richard Paul Lohse, 1951.

4.35

Mockup for the cover of the pamphlet published on the occasion of the First Gropius Lecture at Harvard University, 1961.

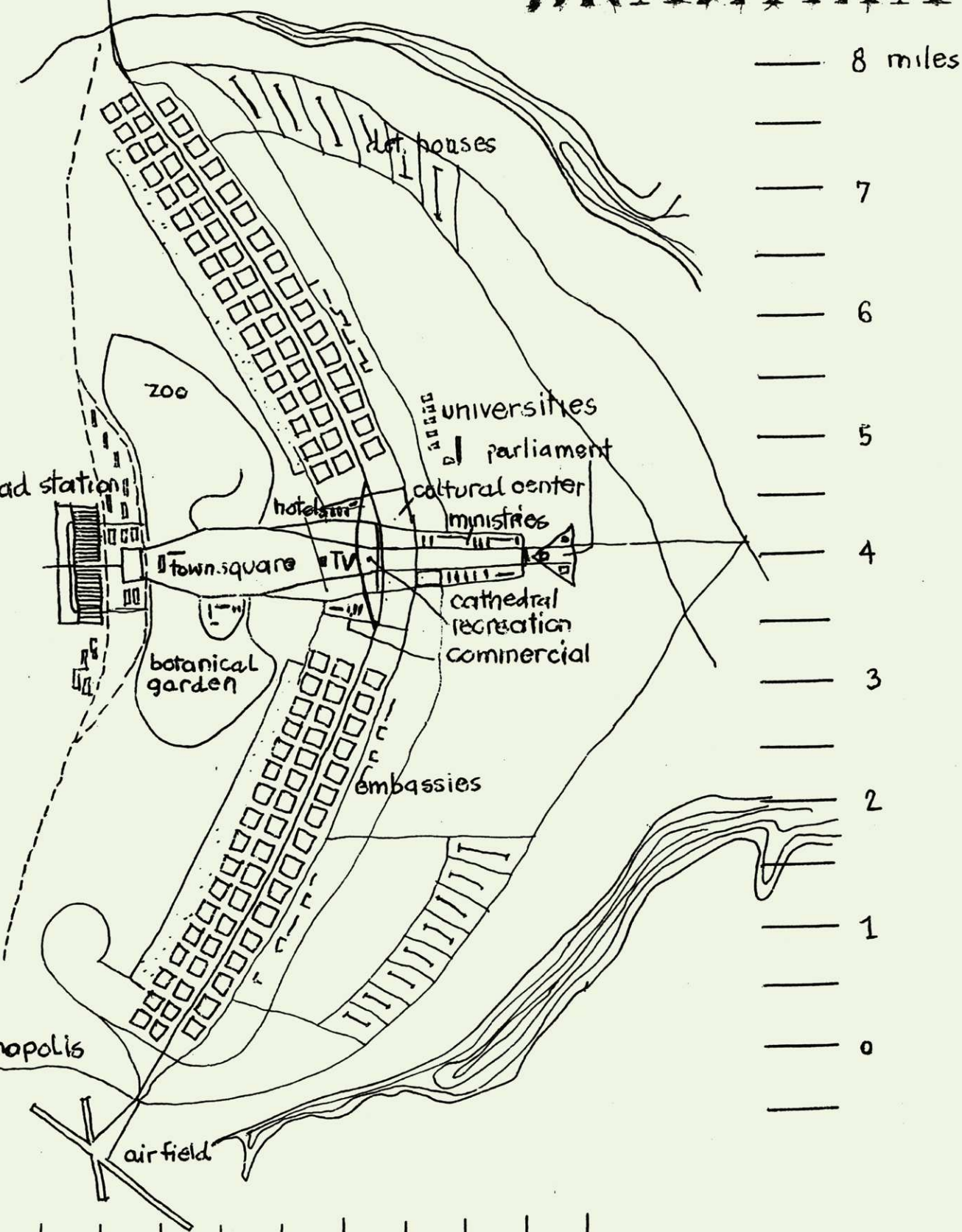
Giedion's didactic concept was the careful documentation of both presentations and discussions. This documentation prepared by the students was eventually printed and bound into four volumes entitled *The Human Scale* (1957–1959), and a fifth booklet, *The Shaping of Urban Space* (1960). The character of these documents is reminiscent of CIAM conference minutes, with participants listed by country of origin, and the use of Le Corbusier's typical stencil type in a majority of the analytic drawings. The "minutes" suggest that the CIAM secretary-general made hardly any distinction between the organization's meetings and his seminar—the fact that Giedion passed on notes from the class outlining a harsh critique of the Brasília master plan to Lúcio Costa and Oscar Niemeyer, the architects in charge, underlines the seriousness and intensity of Giedion's discourse with his young colleagues.²²⁸ Very much along the lines of what had been concluded in the class at Harvard, Giedion asked Niemeyer to "change the plan! It is still possible. Make a human city out of an ornament."²²⁹

From the beginning of their collaboration, the relationship between Giedion and his younger colleague Eduard Sekler was somewhat unbalanced. Sekler was clearly carrying the main teaching load, including all administrative tasks, as Giedion only taught every other term—alternating with the ETH—and repeatedly made his appearance after the official start of the semester. He also frequently traveled within the United States and abroad to conduct research for his books during the semester. Unwilling to teach a full load of five hours per week, Giedion initially agreed to share the responsibility with Sekler, however, under the condition that this would apply only "at the beginning but not constantly."²³⁰ Sekler, on the other hand, had just started his career; he was young and highly motivated, and consequently intensely focused on his teaching duties. Not only did he lecture during Giedion's absence, but he also guided the students in developing general outlines for their seminar projects.²³¹

A growing contention emerged between the two scholars, whose personalities could not have been more different. Giedion was a master of engaging students in conversation, weaving in topical subjects, and testing ideas from his ongoing research. Sekler, more than thirty years younger, compensated for his limited experience with an enormous amount of organization and preparation. Trained and practicing as an architect, Sekler brought an alternative perspective to the class. At the same time, he profited immensely from Giedion's expertise in structuring the courses "so they would not degenerate into a boring sequence of names and dates."²³² Over the course of the decade in which Giedion taught at the GSD, Sekler gradually gained more experience and influence within the school, which also affected his relationship with his older colleague, who was hardly suited for team teaching. When Giedion finally realized that he was gradually losing control of "his" program, he began to attack Sekler

To parrocústo

BRAZILIA



8 miles

7

6

5

4

3

2

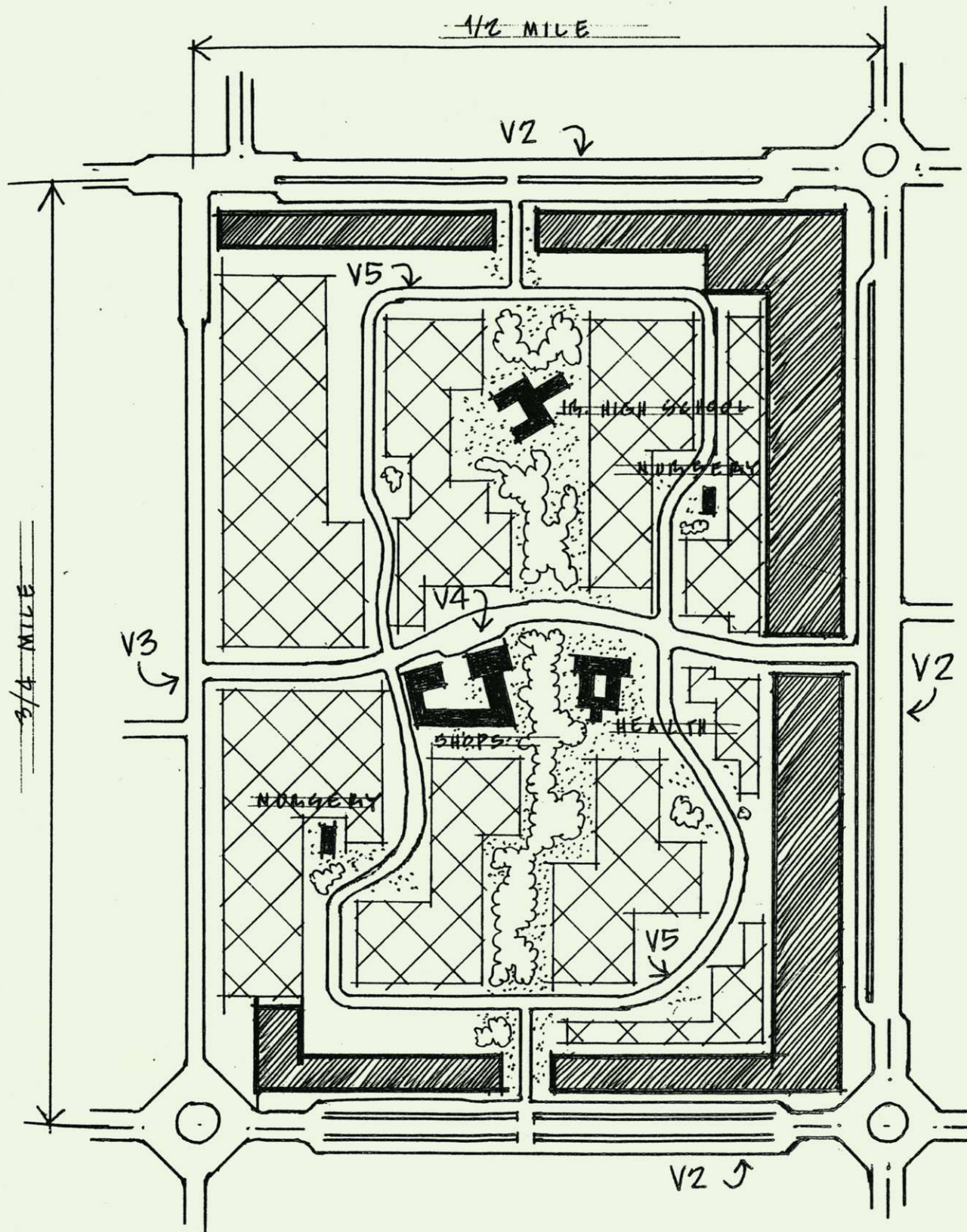
1

0

4.32

miles

CHANDIGARH



Commercial

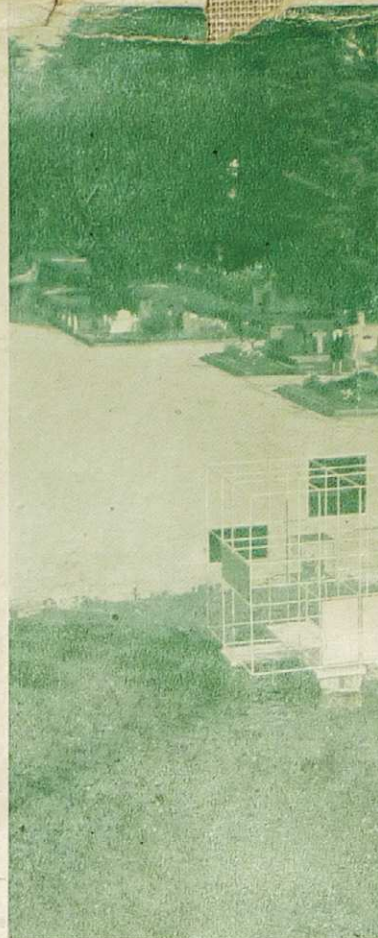


Residential

CIAM

**A Decade
of New
Architecture**

**Dix Ans
d'Architecture
contemporaine**



S. Giedion

Harvard University

FIRST GROPIUS LECTURE 1961

S. GIEDION

CONSTANCY, CHANGE
AND
ARCHITECTURE

caustically. Well aware of his co-teacher's weak points, he blamed him for over-organizing, with his talks for two terms "already 'carefully' planned and all time already 'allocated.'"²³³ Giedion considered this approach suited for "courses where the teacher is carrying on a monologue," but inappropriate for a seminar based on dialogue. Most likely this criticism was a counterreaction to Sekler's rejection of Giedion's ever-changing schedules and themes for the master class. Toward the end of his tenure at Harvard, Giedion was finally forced to realize that he had lost ground as a result of his divided engagement between two continents, and that he had even begun to lose Sert's previously unflagging support.²³⁴

These developments indicate once more that Sigfried Giedion was obviously struggling to establish well-functioning teaching environments on both sides of the Atlantic. With his two positions almost 4,000 miles apart, Giedion had to shoulder a significant amount of travel at a time when the passage took around five days by boat, and air travel was expensive and troublesome.²³⁵ Along with his overbooked schedule, these frequent absences limited Giedion's involvement in the day-to-day business of both schools and clearly reduced his sphere of influence. However, this position in between two differing academic contexts gave him a special standing within both institutions, and allowed him to negotiate the peculiarities of both Europe and the United States when collaboratively shaping the new discipline of urban design.

The Emergence of the Discipline of Urban Design

"Here, everything is dependent on the new blood, and since Harvard is the place in America that will be imitated by others later on, the training we offer the students over here will be in the broadest sense also important for the movement."²³⁶—Siegfried Giedion

The term "urban design" probably surfaced for the first time publicly in a lecture with the same title that Josep Lluís Sert delivered shortly after his appointment as dean of the Harvard Graduate School of Design. In conjunction with the curriculum of the school, it appeared initially in the 1954 syllabus introducing Giedion's class on the history of urban design.²³⁷ "The Human Scale" seminar was not only a history class but also marked the beginning of Harvard's urban design program, which emerged from a combination of Giedion and Sekler's theory course, Sert's design-based studio, and a seminar moderated by Jaqueline Tyrwhitt, who was appointed by Sert in 1954. With a clear focus on practice, these sequential courses promot-

ed cross-disciplinary collaborations among architects, engineers, sociologists, economists, geographers, and lawyers. The difficulty of this endeavor proved to be “teach[ing] social scientists how to see,” and “architects how to read,” an experience that provided beneficial insights for the ambitious project at Harvard.²³⁸

Only a few months before CIAM 10 took place in Dubrovnik, a select group within the GSD faculty, consisting of Josep Lluís Sert, Jaqueline Tyrwhitt, Wells Coates, Huson Jackson, Charles Eliot, and William Goodman initiated an urban design symposium, which eventually figured as the first of Harvard’s well-known urban design conferences.²³⁹ The GSD had a tradition of such events, starting with the “Conference on Urbanism,” hosted by Joseph Hudnut and Walter Gropius in 1942, and the 1949 symposium “Debunk: A Critical Review of Accepted Planning Principles,” under the auspices of Dean Hudnut.²⁴⁰ While the general format of these conferences was similar, as was their interdisciplinary and humanistic approach, there was a significant shift from Hudnut’s treatment of planning, which was rooted in Werner Hegemann’s CIAM-critical practice, to a transformation of the foundation of the GSD through CIAM principles. Similar to the congresses in Europe, these events were envisioned as a forum to discuss the problems of the contemporary city, and in the case of the inaugural meeting, to “define the essence of urban design.”²⁴¹ The short report published in *Progressive Architecture* indicates that Sert was strongly interested in the “physical form of the city.”²⁴² The critique of suburban sprawl in the United States, and the related call for a “recentralization,” followed along the lines of discussion that took place at the postwar CIAM congresses.²⁴³ Nevertheless, in contrast to the early CIAM congresses, “a collection of crazy animals assembled on a single spot working night after night till three or four o’clock, just for fun,” created a more open-minded spirit, and the group was quite heterogeneous, bringing in different approaches to the making of cities.²⁴⁴ Next to CIAM veterans like Josep Lluís Sert, Jaqueline Tyrwhitt, William Muschenheim, Neutra, and Coates, the panel included opposing voices such as Lewis Mumford, Jane Jacobs, landscape architects Garrett Eckbo and Hideo Sasaki, and the mayor of Pittsburgh, David Lawrence.²⁴⁵ The effort to bring together professionals from architecture, planning, landscape, engineering, art, and politics is an indicator of Sert’s aspiration to create a “common ground” among the disciplines involved in shaping “humanized” cities.²⁴⁶

Over the course of the ten conferences, all of which were hosted by Dean Sert and skillfully organized by Tyrwhitt, the presence of CIAM gradually faded. Despite the attendance of members of the dissolving vanguard organization as well as representatives of Team 10—namely, Jacob Bakema, Jerzy Soltan, and Shadrach Woods—attention to the European scene remained marginal.²⁴⁷ With a clear focus on American developments, the conferences were concerned with the



4.36

4.36 negotiation of the functions of planning and architecture, and with the introduction of artistic practice into planning. After debating the scope and meaning of urban design over the course of four years, the Graduate School of Design officially initiated an urban design program, starting with the academic year 1960–61. The body of the faculty engaged in this new program hardly differed from the group involved in “The Human Scale.” Until Giedion’s retirement in 1964 and Tyrwhitt’s relocation to Greece to collaborate with Constantinos Apostolos Doxiadis, the one-year interdisciplinary postgraduate course remained in the hands of Sert, Sekler, Sasaki, Fumihiko Maki, and planner François Vigier.²⁴⁸ While CIAM’s presence began to fade over the course of the 1960s, the close collaboration between its president, secretary-general, and acting secretary inevitably suggests a partial transplantation of the former vanguard organization into the institutional framework of the GSD.

Constancy and Change

Despite his attempts to transfer CIAM to the American sphere, the postwar period marked the end of Sigfried Giedion’s unimpeded promotion of the network. The art historian was gradually retiring from his daily duties as secretary-general—Jaqueline Tyrwhitt took over as acting secretary with CIAM 8—and immersing himself in his own work on the beginnings of art and architecture.²⁴⁹ In the early 1950s, Giedion began to focus heavily on prehistoric art as well as early architecture in Egypt and Mesopotamia. This shift of interest from the propagation of the architectural vanguard to the study of cave paintings and pyramids might seem radical at first glance; his last three publications indicate, however, that Giedion’s establishment of “three space conceptions” was not really a fundamental turn, but rather a last vindication of his life’s work, a final synthesis placing modern architecture in the cradle of humanity. Even though Giedion reduced his activities on behalf of the network, his research was still rooted in the fundamental principles of modern art and architecture. Despite an intervening period of more than two decades between *Space, Time and Architecture* and his last publications, Giedion always stressed the close relationship between them. He considered all his works developments of one and the same problem: “how modern man has been formed.”²⁵⁰

Shortly after the Second World War, the world was poised to witness significant societal and cultural shifts, particularly in the United States, where an economic boom, expanding social welfare, rapidly changing technologies, and an emerging consumer society strongly affected the country’s modernization and its implications for archi-

tectural culture. As scholars have pointed out, military technology and rational planning based on a functionalist ethos began to dominate the American imagination, and especially the accelerating building activity of major corporations.²⁵¹ Giedion encountered significant difficulties adapting to this cultural shift from the heroic years of the interwar period to a radical new world order after the Second World War. Together with the insularity of CIAM's professional debates and its insuperable generational conflicts, this cultural turn made it difficult for the organization to translate its ideas to the United States. As opposed to many European émigrés who eventually blended into American capitalist society in order to acquire large-scale commissions, Giedion was primarily interested in an aesthetic culture and a methodological approach that would reform art and architecture, transcending political ideologies or cultural differences—a vision that was irrevocably shattered when cold war followed world war.²⁵² His reservations about the postwar developments in architecture become apparent in the first annual Gropius Lecture—endowed in honor of the former chair of the Department of Architecture—that Giedion delivered at Harvard in 1961.²⁵³ Under the title “Constancy, Change and Architecture,” Giedion attacked the most recent architectural developments in the United States, which he would later describe as “Playboy-Architecture” in the new introduction to *Space, Time and Architecture*:

The fashions of 1960 with their lacework of heterogeneous historical relics, and their attenuated stilts, as thin as toothpicks, are the outcome of doubt and uncertainty. Unfortunately many gifted architects have caught the infection of this disease, but hopefully they will soon find cure. I have no doubt that the instability of this kind of architecture will soon become generally apparent, and that the current fashion will rapidly become obsolete. However, at the moment its effects can be rather dangerous because of the worldwide influence of American trends.²⁵⁴

Continuing his campaign against what he saw as the excrescence of the “International Style”—whose glass and steel facades had become the preferred architectural expression of corporate America—Giedion isolated the developments in American architecture as fashionable, style-oriented tendencies, without rooting them in the broader context of the time.

In response to the cultural situation after the war, about which Giedion was “deeply worried,” he claimed that the time was ripe to “become human again and let the *human scale* [emphasis added] rule over all our ventures.”²⁵⁵ With his interest in prehistoric symbols and monumental aspects of early architecture, and an aim to establish an explicit link between art and architecture, Giedion's last

three books—*The Eternal Present: The Beginnings of Art*, *The Eternal Present: The Beginnings of Architecture*, and *Architecture and the Phenomena of Transition*—are yet another manifestation of CIAM's major themes discussed over the course of its four postwar congresses. Even Lewis Mumford, who had strongly criticized CIAM's approach—not only in his correspondence with Giedion but also publicly in various *Sky Line* articles for *The New Yorker*—now detected a meaningful contribution in his colleague's new research, and hailed it as "... giving back to the new generation the appreciation of the 'constants' which was temporarily lost in the revolt—salutary and necessary—against the meaningless superficial forms of the past."²⁵⁶ Mumford emphatically had refused to write the introduction to Josep Lluís Sert's CIAM gospel, *Can Our Cities Survive?*, as it asserted a view of the city that he did not share, so this change in attitude indicates a reorientation at the heart of the movement itself.²⁵⁷

Rather than acknowledging the sociopolitical and cultural changes of the period and the frictions within CIAM, Giedion immersed himself for more than a decade in his search for the "equilibrium between man and his environment," and promoted a "vertical section" through history that would be defined by the formation of types and methods, instead of a "horizontal section" based on styles and periods.²⁵⁸ Not ready to accept the constancy of change, Giedion began to trace the prehistoric roots of art and architecture, searching for the "unchanging elements of human nature"²⁵⁹ in two phenomena that "existed throughout human history" as evidence of constancy and change.²⁶⁰ Constancy, he was convinced, was the foundation of an "uninterrupted fabric" uniting the distant past, the present, and the future. In that sense, Giedion's last major project pursues an overarching synthesis based on a unified formal language and a universal methodology. His selective historiography roots modern art and architecture all the way back in prehistory, provides it with historical legitimacy, and thus suggests its eternal character.

Big Sig in the
Roman Underground

Through the Needle
Eye of Modern Art

Giedion had dedicated himself to the study of prehistory, working for more than a decade on the manuscripts for his two volumes of *The Eternal Present* and *Architecture and the Phenomena of Transition*, but the books were heavily criticized from the very moment of their publication. Giedion's tacit critique of the experts in prehistory—for their use of photography as well as for their methodology—did not make him popular among that group of scholars. He was perceived as a “trespasser of territory,” while the shift in focus from nineteenth- and twentieth-century art to prehistory seemed “a capricious move” to some.²⁶¹ Specialists in anthropology, prehistory, and archaeology were determined to prove Giedion wrong, as many reviews indicate, especially in the English-speaking world. But critical voices also emerged from the younger generation of architectural historians. In his review of the posthumously published *Architecture and the Phenomena of Transition*, Reyner Banham not only dismantled “Big Sig's” argument but also described Giedion as “talking about the right things at the right times, however wrong-headedly.”²⁶² And Adolf Max Vogt sardonically suggested that Giedion's “Gospel”—*Space, Time and Architecture*—naturally had to be followed by his Old Testament, including Genesis—the art historian's last three books.²⁶³

It may be more productive to view the three books as a significant step in Giedion's efforts to bridge the gap between scientific development and artistic expression. According to Giedion, modern art was supposed to provide “the key to reality” and to reinforce the cohesion between “the methods of thinking and the methods of feeling,” which had been abandoned in the nineteenth century:

We ought to restore the relationship between the different areas of science and art, i. e. we intuitively have to absorb the results from science and art. ... The parallelism between thinking and feeling is the sign for a universal conception of the world. The Renaissance possessed it, the Baroque possessed it, and we have to recapture it with our own means.²⁶⁴

Giedion spared no effort to acquire visual material that would surpass the quality of any prehistoric art previously published. The impeccable photographs also reinforced the view of cave paintings as conscious artistic acts, rather than coincidentally beautiful, as most of the literature of the time suggested. By directly connecting prehistoric drawings and reliefs with works of Paul Klee, Hans Arp,

Georges Braque, and other modern artists, Giedion was able to bring to light an innate association between contemporary art and archaic forms of prehistory. In this context Giedion's studies can be closely related to those of his wife, Carola Giedion-Welcker, who had already compared "primitive" artifacts and modern sculpture in her 1937 publication entitled *Moderne Plastik*. By means of a clever orchestration of illustrations, Giedion-Welcker traced coherent links among the works assembled in her book, which was designed by Herbert Bayer, critically supported by Hans Arp, Naum Gabo, and László Moholy-Nagy, and published by Hans Girsberger, who had released the first volume of Le Corbusier's *Oeuvre complète* just two years earlier. Following Wilhelm Worringer's *Kunsttheorie* and Carl Einstein's remarks on the aesthetic consequences of the reception of African art, Giedion-Welcker succeeded in expanding the discussion to areas that typically did not receive much attention, and thus contributed to a discourse in art history and cultural history that was highly topical at the time.²⁶⁵ She observed,

There is a remarkable accord between modern art and everything primitive, archaic and prehistoric. It is not a matter of a fashionable or romantic approach to the "barbarian," to things that are temporally or spatially distant and foreign. The inner ties develop based on the common point of departure of an unencumbered literary morphogenesis, a clear structure, a simple transformation.²⁶⁶

Symbolism and monumentality—topics that were approached critically by the proponents of modern architecture at the beginning of the twentieth century—recurred against the backdrop of post-war CIAM, and the role of the artist consequently came to the fore. "Today," Giedion concluded, "there cannot be a creative architect, who hasn't passed through the needle eye of modern art."²⁶⁷ These interests concurred with Giedion's research for the two volumes of *The Eternal Present*, which, influenced by Ernst Cassirer's *Philosophie der symbolischen Formen* (1923), reflect Giedion's consistent effort to rehabilitate symbolic form in relation to contemporary architecture.²⁶⁸ Accordingly, Giedion discussed symbolism as a fundamental human need, and crucial for the comprehension of both Paleolithic and modern art, in his lectures at MIT in the early 1950s, and later on at Harvard.

From Bollingen to
the CIA: A Network
of American
Research Funding

At the beginning of the 1950s, before his appointment at Harvard, Giedion was seeking funding for field research trips to France and Spain, and later, to Egypt and Mesopotamia. He not only had to finance travel, which he typically covered himself, but also needed significant resources for equipment. Given that support from institutions in Switzerland was practically nonexistent—he unsuccessfully tried to obtain a grant from the Swiss National Science Foundation to cover translation costs for the German edition of *Space, Time and Architecture*²⁶⁹—and that his personal and professional network was by then more effective in the United States, Giedion sought support on the other side of the Atlantic, and indicated this intention in a letter to his colleague Josep Lluís Sert:

You asked me if I'm coming over to the U. S. A. It seems to me very uncertain, as I have no definite appointment. But regarding the fact that the praehistoric [*sic*] expeditions are too costly to be paid exclusively from my own purse, I may prepare the way for financial assistance from some of the foundations and in this respect it is possible that I come over.²⁷⁰

4.37 Giedion provided his own financing for a first excursion to France in Huntington Cairns, the fall of 1950. The amount of photographic equipment necessary to achieve the desired results as well as the exigent need for an assistant to “help in the darkness of the caverns with the cumbersome equipment in the difficult access,” soon made clear that it would be impossible for him to cover the cost of further trips.²⁷¹ Around that time, Giedion made his initial outreach to the Bollingen Foundation, not directly, but via his colleague Philip Vaudrin, an editor at the publishing house Alfred A. Knopf in New York. The foundation was particularly interested in the photographs for Giedion’s project. John D. Barrett, the foundation’s president, and Herbert Read, who gave the A. W. Mellon Lectures in the Fine Arts on the subject of cave paintings, invited him to deliver the 1956 A. W. Mellon Lectures in the Fine Arts on the subject of cave paintings. Giedion was “on excellent terms,” personally visited the Zurich studio of Giedion’s photographer, Hugo Herdeg, to get a better idea of the endeavor.²⁷² Five years later, Giedion would take Read’s place in the Mellon Lectures, presenting his thoughts on “Art as a Fundamental Experience” to a large audience in the American capital.

Both volumes of *The Eternal Present* are based on Giedion’s 1957 series of Mellon Lectures, delivered at the National Gallery of Art in Washington, D.C. This major public presentation of the historian’s work was based on almost eight years of research, followed by



NATIONAL GALLERY OF ART

WASHINGTON 25, D. C.

February 4, 1954

Dear Dr. Giedion:

You may recall the pleasant luncheon that Sir Herbert Read and I had with you last Summer in Zurich. I have thought many times since of your most interesting explanation of cave painting. It has occurred to me that this might make a fit subject for the A. W. Mellon Lectures in the Fine Arts, which are held each Spring here at the National Gallery of Art. This lectureship is intended to develop the results of the best contemporary thought in the Fine Arts as a contribution to scholarship. Professor Jacques Maritain delivered the first series in 1952 and I am sending you under separate cover a copy of his lectures. Sir Kenneth Clark delivered the lectures last year and our friend Sir Herbert Read will deliver this year's series in March and April. Dr. Etienne Gilson has been selected for next year's series, and if you are interested I would like to have our Trustees consider the appropriateness of cave painting as a subject for 1956.

Each series of lectures consists of not less than six lectures delivered a week apart during the Spring of the year. The honorarium for the series is \$7,500 payable one-half upon the delivery of the lectures and one-half upon the delivery of the completed manuscript ready for publication. The lecturer is also reimbursed for actual traveling expenses in connection with the delivery of the lectures up to a maximum of \$2,500.

We are required by the rules of the lectureship to obtain from the lecturer an agreement that within six months after the delivery of the final lecture in the series he will furnish us a complete manuscript of the full series of lectures together with all necessary illustrative material, and will transfer to the Trustees of the National Gallery of Art all rights, title, property and interest, literary and otherwise, in the manuscript and accompanying material and in the lectures, including the right to secure copyright. If the Trustees publish the manuscript they will, of course, pay the lecturer an author's royalty. If they do not publish the manuscript I am sure they will transfer back to him, upon his



4.38



4.39



4.40



4.41

SAKKARAH: Nord, Mut, Sphinxallee
KARNAK : Gesamtansicht
LUXOR : Heiligtum

Sukka Kahn



KODAK SAFETY FILM



KODAK SAFETY FILM



KODAK SAFETY FILM



KODAK SAFETY FILM



another five years of collecting further materials, before the writing of the book and its production occurred. Publishing a book by each participant was an integral part of the Mellon Lectures, which had featured such esteemed intellectuals as Jacques Maritain, Herbert Read, and Ernst Gombrich.²⁷³ The costly publication of Giedion's two-volume work would have been unthinkable without the support of Paul Mellon's Bollingen Foundation and the Bollingen Series.²⁷⁴ Publishing two volumes was a privilege granted to only a few authors in the series; moreover, Giedion's books were the first to boast thirty-two color illustrations, and the only ones ever to be printed in Switzerland—after difficulties with the American printers, Giedion insisted on producing the plates with the photoengraving firm Schwitler AG in Basel, so he could control the process personally.²⁷⁵ William McGuire, the managing editor of the Bollingen Series, recalled that “there sometimes were creative innovations,” among them Giedion's *Eternal Present*, “which required a more than usually careful juxtaposition of pictures and text.”²⁷⁶ Because of the placement of photographs throughout the books, it was necessary to print them entirely on coated paper stock, which was more costly. In general, the volumes had to follow the standards of the Bollingen Series, which is reflected in the format and the rough grid. Considering all of Giedion's special requests, it is clear that the production of these two massive volumes would have been impossible without the support of the foundation—or at least could not have been accomplished according to the art historian's specifications.

Giedion also approached the New York-based Rockefeller Foundation, asking for support for two trips to Spain and France, and another two excursions to Egypt, each of them between three and five weeks long. He requested funds to cover the fee for Hugo Herdeg, his photographer, as well as a long list of technical gear, which ranged from a rubber boat to flashlights to cameras and color film.²⁷⁷ Besides the travel expenses, reproduction costs comprised the bulk of the expenses. To convince the board of the necessity of his project, the art historian included a series of Herdeg's photographs, abstracts from his lectures at MIT, and an outline for two books, one of which would describe “The Role of Art in Contemporary Life,” while the other would be “intended for a larger public,” a coffee-table book composed exclusively of Giedion and Herdeg's photographic material. Considering the foundation's general mission, addressing both experts and laymen was certainly a canny move, even though the final publication on prehistoric art ultimately combined both approaches in one volume.²⁷⁸ It probably helped as well that the caves of Lascaux had only been discovered in 1940, and that a majority of publications written by French experts was not yet accessible in the United States, making Giedion's work groundbreaking. After some adjustments to the proposed budget, the Rockefeller Foundation finally

4.38–4.40
Travel impressions
from Giza, Egypt,
photographed
by Giedion,
ca. January 1954.

4.41 supported the project with a grant of \$9,875.²⁷⁹ With this significant sum, Giedion first embarked on two trips to the caves of Lascaux, Giedion and his wife, Carola Giedion-Pech Merle, and Les Eyzies in France, and to Altamira in Spain in 1952, followed by travels to the Middle East to fathom the “Continuity of Human Experience” in 1954.²⁸⁰ Accompanied by his wife, Giedion embarked on his first tour by ship via Alexandria to Cairo, Luxor, Egypt, 1960. from where he intended to explore Egypt’s “archaic cultures.”²⁸¹ After

4.42 spending two months along the Nile, Giedion traveled to Baghdad at the beginning of March, in order to study Sumerian architecture in Mesopotamia for another month. Around Christmas 1960, Giedion and his wife stayed a second time in Cairo, supplementing insufficient or missing photographic material.

Contact print with pictures from Sakkara, Karnak, and Luxor, Egypt, photographed by Giedion, ca. January 1954.

While it was not difficult for Giedion to access the caves in France and Spain, the conditions in Egypt, and later in Iraq, were much more demanding. It is unlikely that he would have succeeded with his endeavors without backing from the Rockefeller Foundation. First, there were obstacles to clear during the preparations for Giedion’s trips. In one case, it proved to be difficult to travel with large amounts of photographic equipment and film amid the rising tensions of the Cold War and in the Middle East, so some material needed to be shipped to the Iraqi Academy and the Department of Egyptian Archaeology in advance.²⁸² In Cairo, the Rockefeller Foundation offered Giedion a work space at its local office with a typist at his disposal. John Marshall, the associate director of the foundation, also helped to negotiate with local authorities and acted as an agent between the Swiss art historian and various institutions in Egypt and Iraq.²⁸³ By the 1950s the Rockefeller Foundation had become one of the largest philanthropic organizations in the world, a politically powerful institution with a well-established global network.²⁸⁴ Marshall indicated that Giedion only needed to mention “the fact that he is traveling with the aid of a grant from the Foundation,” and “all doors will be opened for him.”²⁸⁵ Given the foundation’s level of engagement with government agencies, this statement hardly seems exaggerated. After the Second World War, the United States began to intensify involvement in the Middle East; on the one hand to guarantee Israel’s newly gained independence as a nation-state and to support anti-communist countries—among them Iran and Saudi Arabia—and on the other hand to take part in the region’s promising oil production. Giedion’s travels to this area coincide with the planning of two major initiatives in Baghdad by architects based in the United States: Josep Lluís Sert’s project for the American Embassy, and Walter Gropius’s master plan for the University of Baghdad (as part of The Architects Collaborative [TAC]).

Giedion was certainly in the right place at the right time. Both Egypt and Iraq were of strategic interest to the United States. The Cold War was being fought on both political and cultural levels, with the

U.S. government investing money in research projects related to the region. As investigations into the role of American intelligence in the postwar era have shown, most philanthropic foundations based in the United States were involved with the Central Intelligence Agency (CIA), which had been recently established, in 1947.²⁸⁶ The agency channeled large sums of money through the foundations to research groups worldwide, without alerting them to the source of the funds—in fact, the CIA funded nearly 50 percent of grants in the field of international activities.²⁸⁷ With the approval of President James B. Conant, with whom Giedion was in frequent contact, Harvard University was maintaining connections to the CIA.²⁸⁸ While Sigfried Giedion certainly was not a spy in the service of the United States, his research topics overlapped with particular interests of the CIA; namely, the fields of cultural history and anthropology—the latter was “dominated by the Pentagon,” as Canadian anthropologist Edmund Carpenter recalled.²⁸⁹ Giedion, traveling with a Swiss passport at a time when the myth of Swiss neutrality was still intact, regularly reported back to the executives of the Rockefeller Foundation, describing his progress and reporting on a group of local individuals who were of general help and interest.²⁹⁰ Over the next decade, with the help of the foundation’s network, Giedion was able to access places that he otherwise might never have reached. In October 1961, two years after it was bequeathed to the Rockefeller Foundation, Giedion and his wife were invited to spend time at the Villa Serbelloni in Bellagio, Italy, to work on *Architecture and the Phenomena of Transition*. In this place that regularly brought together an illustrious group of international scholars, diplomats, and policy makers, the aging art historian received the appreciation he vainly awaited in his home country.

The postwar years also brought extended research funds from, and consequently expanded activities with, American institutions in Europe. The American Academy in Rome (AAR), founded at the end of the nineteenth century, was one of these central locations that facilitated cultural exchange between the two continents—hosting lectures, providing a critical yet supportive place to discuss current projects or ongoing research, and organizing field trips. Along with the political changes, the appointment of Laurance P. Roberts as the American Academy’s first director following the reopening of the AAR after the war in 1947 was a decisive factor in the fundamental turn of the institution’s Beaux-Arts tradition to a liberal environment.²⁹¹ Bringing together such architects and critics as George Howe, Pietro Belluschi, Ernesto N. Rogers, Robert Venturi, and Louis I. Kahn in the 1950s, and Jean Labatut, Edward Durell Stone, Max Abramovitz, Jacob Bakema, and Michael Graves in the 1960s, the AAR significantly contributed to the reimportation of modernist thought to Europe, as well as to a marked reconsideration of late modernist architecture

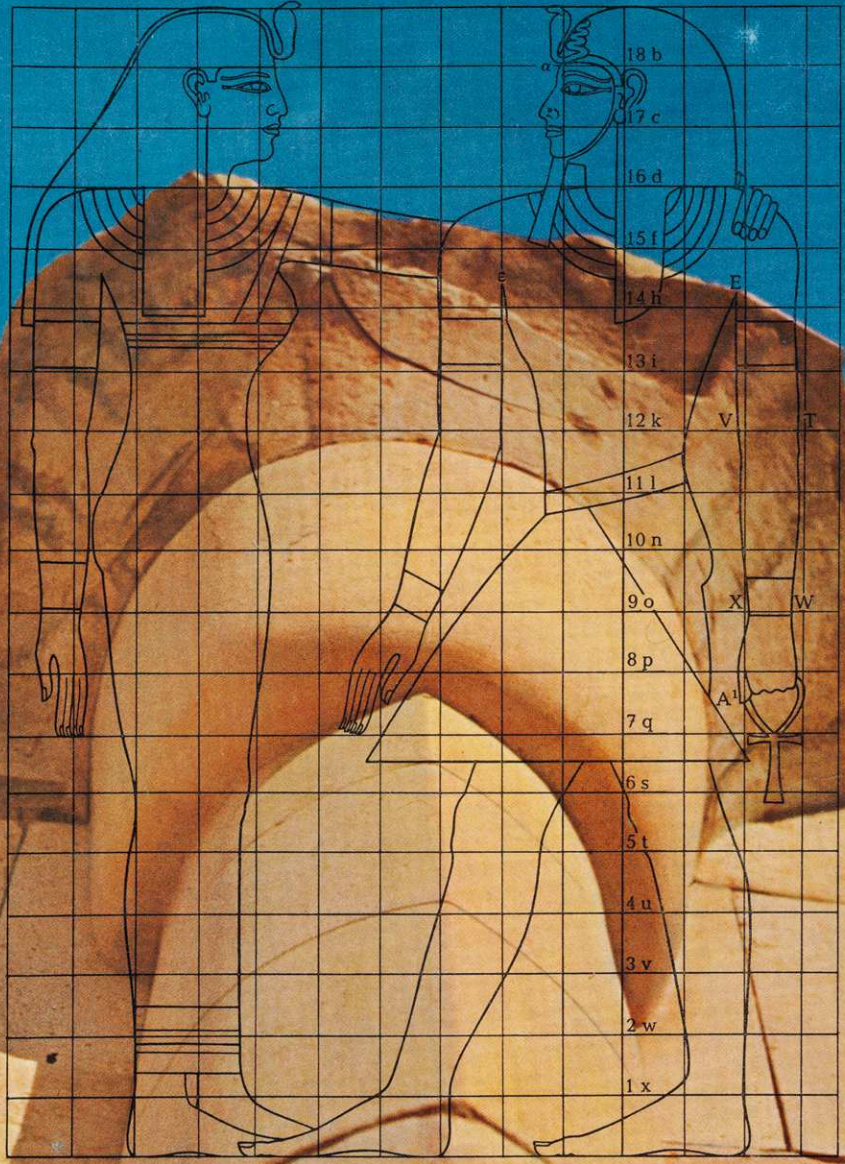
THE ETERNAL PRESENT

**THE
BEGINNINGS
OF ART**

S. GIEDION

The A. W. Mellon Lectures in the Fine Arts, 1957
4.43

THE ETERNAL PRESENT



THE BEGINNINGS OF ARCHITECTURE S. GIEDION

The A. W. Mellon Lectures in the Fine Arts, 1957
Bollingen Series XXXV. 6. II Pantheon

4.43–4.44 Sigfried Giedion, *The Eternal Present*, two volumes, dust jackets, 1962/64. based on European urban precedents.²⁹² In addition to fellowships, the new direction of the American Academy brought about the creation of an “Architects in Residence” program, which hosted eminent practitioners, researchers, and educators. Among them was Sigfried Giedion, who was invited to the program repeatedly throughout the 1960s. The academy’s newly appointed director, Richard Kimball, hosted Giedion so that he could conduct research and make his expertise available to some of the younger fellows of the institution.²⁹³ Giedion had been in contact with fellows of the academy already in the 1950s. When he was working on revised chapters of *Space, Time and Architecture* for the book’s third edition, he corresponded with Louis Kahn and, later, with well-known architectural historian James Ackerman to obtain reliable firsthand information and visual material for “Sixtus V and the Planning of Baroque Rome.”²⁹⁴ Having rejected Kimball’s invitation to Rome in 1963—he was busy finishing the second volume of *The Eternal Present*—Giedion returned annually to the AAR from 1964 to 1967 to study “the vaulting of the Roman arch” for *Architecture and the Phenomena of Transition*, and to lecture on contemporary architecture and art.²⁹⁵

Translating Modernist
Methodology into
Prehistoric Research
Practice

“Pebblestone [Sigfried Giedion] is again lost in prehistory and in the haze of the bison, he forgets about all architectural problems ...”²⁹⁶—Carola Giedion-Welcker

This amusing note from Giedion’s wife, Carola, to the couple’s friend Alvar Aalto perfectly captures how the art historian increasingly reduced his engagement with contemporary architecture over the last two decades of his life, and immersed himself in the fields of anthropology and archaeology—dedicating himself to the paintings on prehistoric cave walls. He was convinced that the study of prehistoric art would “reveal to us many things buried in the mind of contemporary man, if they are seen from a modern point of view.”²⁹⁷ Critical of the prevalent documentation of primitive sites, which he saw as failing to grasp their true nature, Giedion suggested that only “a modern eye” could grasp the artistic value of these early artworks.²⁹⁸ Translating this particular perspective into a visual representation that would be understandable to a general public was the main goal of his research, which was methodologically based on “the optical side.”²⁹⁹ *The Eternal Present* was not the only such publication to document cave paintings in France and Spain. Apart from Georges

Bataille's 1955 book, *Lascaux ou la naissance de l'art*, however, which Giedion enviously praised for its sumptuous color illustrations, most publications by anthropologists or archaeologists were, according to him, not of interest to those focused on art.³⁰⁰ He declared existing photographic reproductions of prehistoric art to be "insufficient for the demands of modern art history."³⁰¹

Despite his lack of expertise in prehistory, Giedion even proposed reorganizing the production and distribution of visual material in this field, establishing a comprehensive photographic archive of prehistoric art.³⁰² As indicated previously, Giedion embarked on two photographic expeditions together with the Swiss photographer Hugo Herdeg and, after his death, with Herdeg's assistant Achille Weider.³⁰³ But despite the phenomenal quality of Herdeg's prints, it soon became clear that photographs alone were not enough to illuminate the complexity of the cave drawings, or to make visible reliefs that had been washed out over the course of time. Throughout his studies on prehistoric art, Giedion was in close contact with anthropologists all over the world. Giedion received a considerable amount of material and advice related to his own work; he regularly corresponded with scholars Edmund Carpenter in Toronto and Dorothy Lee and Carl Schuster at Harvard.³⁰⁴ Inspired by "interesting life-line drawings," and other drawing techniques common to anthropologists, Giedion began to collaborate on illustrations with Karl Schmid, a teacher of drawing, painting, and scientific illustration at the Zürcher Kunstgewerbeschule who had produced woodcuts for Hans Arp.³⁰⁵ Here again, Giedion can be seen joining a sensibility for modern art with scientific accuracy. Based on fine dots rather than actual lines, Schmid's technique, which was mastered by his student Barbara Boehrs, had the capacity to suggest spatiality while simultaneously allowing for intricate details.³⁰⁶ The juxtaposition of photographs with scientific illustrations created a complete picture of the archaic works of art, and is perhaps the most lasting contribution of the first volume of *The Eternal Present*.

Although Sigfried Giedion never properly acknowledged it, both volumes of *The Eternal Present* are the result of energetic exchanges within a worldwide network of individuals from different fields. In that sense, the two books represent the beginnings of independent research institutions and studies that would eventually cross the boundaries of individual disciplines. Giedion participated in a multitude of conferences; some were aimed at very narrow interests in archaeology and prehistory, while others brought together individuals from many different backgrounds. The Delos Symposium, organized under the auspices of Greek architect and town planner Constantinos Apostolos Doxiadis in July 1963, is not only a prime example of such a conference; it is where extended work sessions and revisions of the first complete layout of Giedion's second volume of *The Eternal*

4.45

Edmund Carpenter, letter to Sigfried Giedion, ca. 1958, describing how the representation of a caribou shifts from a grazing to an upright, watchful position, when the image is rotated 90 degrees.

4.46

Photograph of the caribou represented on a dagger in *The Eternal Present: The Beginnings of Art*, page 525.

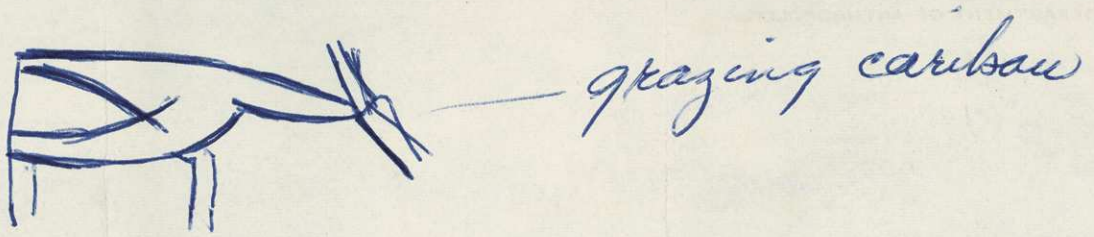
4.47

"Polychromie bison and tectiforms," at the cave of Font-de-Gaume, Dordogne. Barbara Boehrs, ink drawing based on minute ink dots, ca. 1961.

4.48–4.51 *Present* took place. While CIAM was formed by a group of young and idealistic architects, Doxiadis intended to open the eyes of influential people throughout the world to the worsening condition of human habitats. Jaqueline Tyrwhitt had been working with Doxiadis in her capacity as the editor of *Ekistics*, a journal published by the Athens Center of Ekistics, the academic counterpart to Doxiadis's international planning office. She also took responsibility for the organization and documentation of the annual symposia on the Greek islands over the course of a decade. Doxiadis invited more than thirty intellectuals from around the globe to discuss issues related to the "evolution of human settlements" from diverse points of view. Having participated in the fourth CIAM meeting as a student, he envisioned a gathering of the same extent and significance, and decided to hold the conference aboard the cruise ship *New Hellas*.³⁰⁷ To reinforce this relationship, Tyrwhitt was urged to convince her friend Giedion to participate and to deliver the closing address at the theatrically staged signing of the Delos Declaration.

Delos Symposium, 1963, plenary session, with Giedion standing, Barbara Ward (to his right), Marshall McLuhan (second row, behind Giedion), and R. Buckminster Fuller (last row, corner); Giedion at the signing of the Delos Declaration; Giedion and Marshall McLuhan in conversation aboard the *New Hellas*; Giedion addressing the participants during a field trip.

With the mornings tightly structured around intensive presentations and debates, the afternoons and evenings were kept free for field trips and discussions among the members of the group, which included anthropologist Margaret Mead, media theorist Marshall McLuhan, urban planner Edmund Bacon, architect Buckminster Fuller, and developmental biologist and paleontologist Conrad Hal Waddington, among others.³⁰⁸ The informal setting of the conference left plenty of time for participants to mingle and exchange ideas. Reminded of Athens in 1933, Giedion observed, "Greece has done it again! There must be something in the air to induce a peaceful working together and loosen normally constrained behaviour."³⁰⁹ It was this informal setting that supported Giedion's vision of a cross-disciplinary exchange and methodology, which he had been keenly interested in since the 1930s.



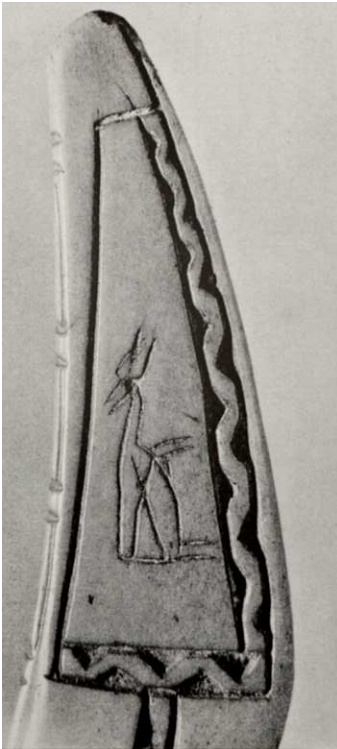
grazing caribou

now turn this sheet 90° counterclockwise,
the caribou stands upright, watchful,

Common art form - also in
forms.

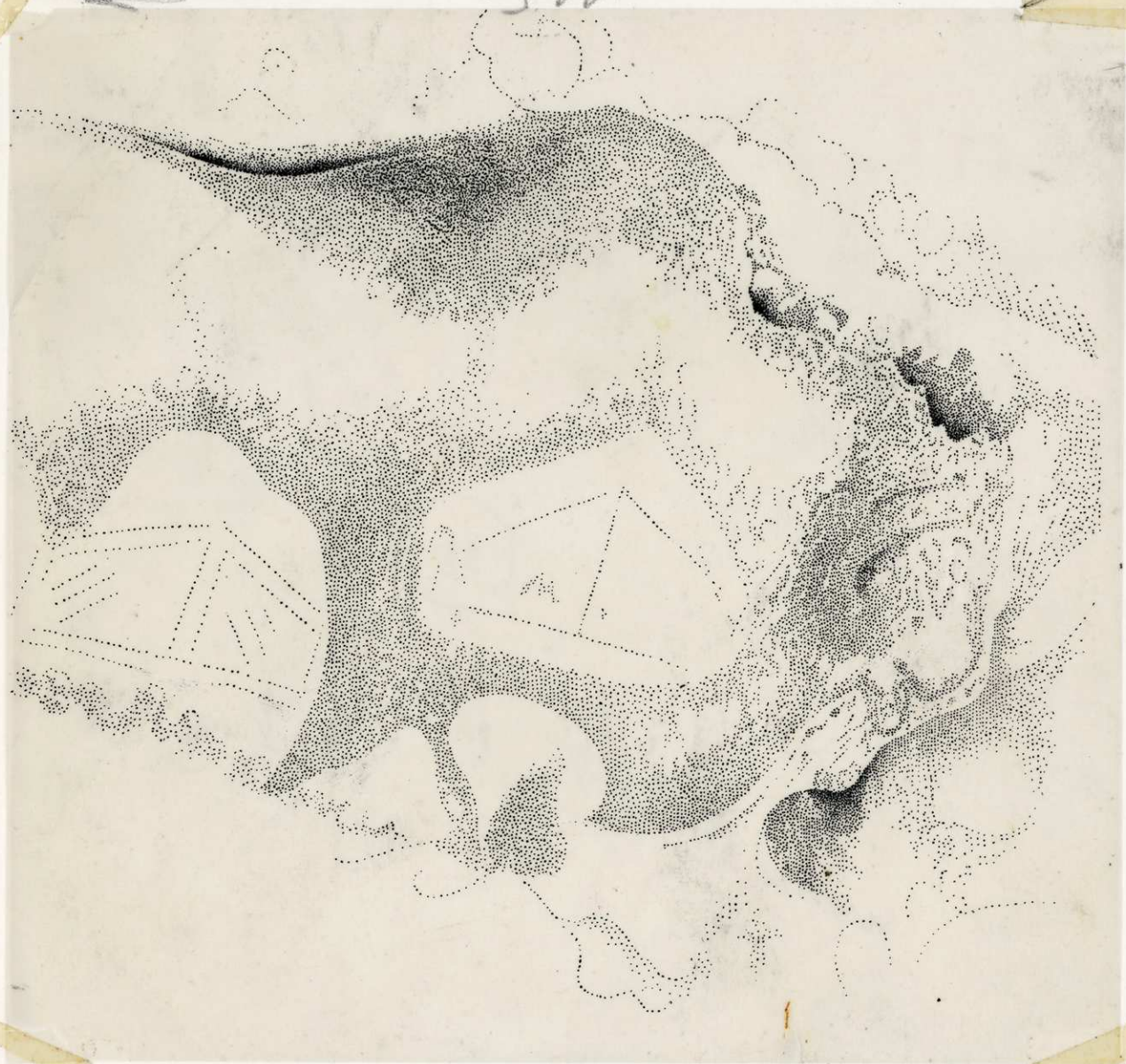
My sketch is poor. The original,
is before me, is very clever. Best
Ted

4.45



4.46

MS. 500





4.48



4.49



4.50



4.51

Unless otherwise noted, all English translations of quoted material are by the author.

1 Sigfried Giedion, "Towards a Closer Post-war Contact between Scholars, Students and Countries," typescript, 1944, GTA 43-T-15-1944.

2 See, for example, Giedion, "A Faculty of Interrelations," 1-4.

3 Sigfried Giedion, "Towards a Closer Post-war Contact between Scholars, Students and Countries," typescript, 1944, GTA 43-T-15-1944.

4 Sigfried Giedion, letter to Frank Aydelotte, President of the Institute for Advanced Study, Princeton, December 22, 1942, GTA 43-K-1942-12-22.

5 Sigfried Giedion, letter to James B. Conant, November 3, 1945, GTA 43-K-1945-11-03(G).

6 John E. Burchard, letter to Sigfried Giedion, November 30, 1945, GTA 43-K-1945-11-30.

7 Sigfried Giedion, letter to John U. Nef, August 3, 1943, GTA 43-K-1943-08-03(G).

8 UNESCO, "History of the Education Sector," <https://www.unesco.org/en/brief> (accessed April 17, 2014).

9 Sigfried Giedion, letter to Frank Aydelotte, December 22, 1942, GTA 43-K-1942-12-22.

10 Sigfried Giedion, letter to Hermann Herter, November 10, 1942, GTA-43-K-1942-11-10(G): "Ich glaube, dass nach dem Krieg, wenn Zürich einmal eine Tagesreise von Harvard oder Yale entfernt ist, ein viel grösserer Austausch als bisher stattfinden wird. [Dafür müssen] verschiedene neue Stühle geschaffen werden die auf die Beziehungen der Länder untereinander Rücksicht nehmen, und die endlich einmal auch besonders [auf] das Studium der Zeitgeschichte eingehen."

11 Bryn J. Hovde, Department of State, Washington, D.C., letter to Sigfried Giedion, June 5, 1945, GTA 43-K-1945-06-05; see also Sigfried Giedion, letter to James B. Conant, March 11, 1945, GTA 43-K-1945-03-11(G).

12 Karl Rudolf Fueter (1880-1950) was a mathematician and rector of the University of Zurich. The respected cardiologist and art collector Wilhelm Löffler (1887-1972) was a close friend of the Giedion family. Paul Scherer (1890-1969) was an experimental physicist and an early advocate for nuclear energy in Switzerland. Sigfried Giedion, letter to James B. Conant, November 3, 1945, GTA 43-K-1945-03-11(G). See also Huber, *Sigfried Giedion: Wege in die Öffentlichkeit*, 37.

13 Sigfried Giedion, letter to John U. Nef, August 3, 1943, GTA 43-K-1943-08-03(G).

14 Sigfried Giedion "Towards a Closer Post-war Contact between Scholars, Students and Countries," typescript, 1944, GTA 43-T-15-1944.

15 Sigfried Giedion, letter to James B. Conant, March 11, 1945, GTA 43-K-1945-03-11(G).

16 John U. Nef, letter to Sigfried Giedion, May 28, 1943, GTA 43-K-1943-05-10.1.

17 John E. Burchard, letter to Sigfried Giedion, November 30, 1945, GTA 43-K-1945-11-30: "Regardless of this, there are certain real pragmatic difficulties. The first rests in the uncertainty among the universities as to whether UNO will not in fact establish a more far reaching effort of the same kind."

18 Serious negotiations concerning an exchange of students and

teachers between MIT and the ETH only emerged in the 1950s. Correspondence with the president of the ETH, Hans Pallmann, suggests that Giedion was eager to establish an exchange program between MIT and its European equivalent that would allow students and young instructors to become familiar with "the methods used in other countries." See Sigfried Giedion, letter to Hans Pallmann, April 7, 1950, GTA 43-K-1950-04-07(G):2; J. R. Killian Jr., letter to Sigfried Giedion, September 14, 1949, GTA 43-K-1949-09-14; P. M. Chalmers, MIT Office of Admissions, letter to Hans Pallmann, Schweizerischer Schulrat, April 18, 1950, 43-K(DD)-1950-04-18.

19 In 1947 "Scientific English" was eventually introduced at the ETH as an optional class; ETH Board, minutes, meeting no. 3, March 5 (1947) 169, ETH, SR2, Schulratsprotokolle 1947.

20 Hermann Herter (1877-1945) was trained as an architect at ETH Zurich and served as the head of Zurich's City Planning Office from 1919 to 1942. Sigfried Giedion, letter to Hermann Herter, November 10, 1942, GTA-43-K-1942-11-10(G).

21 Alfred Roth, as quoted in Hofer and Stucky, *Hommage à Giedion*, 106-7: "Giedion hat sein Heim im Doldertal zu einem kaum anderswo wiederzufindenden internationalen Treffpunkt und einem Schnittpunkt der geistigen und künstlerischen Kräfte seiner Zeit gemacht. Daran ist auch seine Gattin Carola mit der ihr eigenen Tat- und Ausstrahlungskraft wesentlich beteiligt. Das offizielle Zürich und die offizielle Schweiz haben allerdings von dieser einmaligen Kräftekonvergenz und von deren Bedeutung für unser zürcherisch-schweizerisches Architektur- und Kunstschaffen wenig Notiz genommen."

22 Sigfried Giedion, letter to Schweizerischer Schriftstellerverein, February 18, 1925, "Voraussichtliche Zukunft: Dozentenlaufbahn," GTA 43-K-1925-02-18(G).

23 Josef Zemp (1869-1942) was a Swiss art historian and preservationist. Sigfried Giedion, letter to Josef Zemp, August 1, 1934, GTA 43-K-1934-08-01(G).

24 Minutes, meeting no. 8, item 121, November 8, (1946) 375, ETH, SR2, Schulratsprotokolle 1946: "[Es läge mir daran] im eigenen Lande nicht ungebraucht zu leben. Nach Harvard und Yale wurde ich gerufen, hier möchte ich mir die Freiheit nehmen, meine Dienste anzubieten."

25 Ibid.: "Ich machte Giedion darauf aufmerksam, dass die Erteilung eines Lehrauftrags in keiner Weise eine Existenzgrundlage darstelle. Übrigens empfahl ich ihm, sich als Privatdozent zu habilitieren."

26 Sigfried Giedion, letter to John E. Burchard, February 5, 1941, GTA 43-K-1941-02-05(G).

27 Sigfried Giedion, letter to László Moholy-Nagy, March 8, 1941, GTA 43-K-1941-03-08(G): "Ich möchte aber nicht nur schreiben, ich möchte wieder auf den Nachwuchs einwirken. Und das kann man hier nicht. Das kann keiner von uns und wird auch in den nächsten 10 Jahren nicht können. Ich habe gesehen, wie bei der Bestimmung eines Professors für Architektur der anstelle des plötzlich verstorbenen Professor Salvisberg gewählt werden sollte, jeder unserer Leute gleichgültig ob Werner Moser, Steiger oder Corbusier von vornherein ausgeschaltet wurden. ... Aber

vielleicht ist es heute bereits zu allem zu spät."

28 For his achievements related to the Swiss National Exhibition, Hans Hofmann was granted an honorary doctoral degree from the University of Zurich.

29 Arthur Rohn (board president), ETH Board, minutes, meeting no. 8, item 121, November 8 (1946) 376, ETH, SR2, Schulratsprotokolle 1946:

30 Ibid. "Da Giedion schon an zwei grossen amerikanischen Hochschulen unterrichtet hat, darf in diesem Fall jedoch von der Auferlegung der Habilitationsschrift abgesehen werden."

31 ETH Board, minutes, meeting no. 1, February 7 (1947), 2, ETH, SR2, Schulratsprotokolle 1947.

32 ETH Board, minutes, meeting no. 4, March 20 (1947), 226, ETH, SR2, Schulratsprotokolle 1947.

33 ETH Presidential Order, no. 1582, November 8 (1947), ETH, Präsidialverfügung 1947.

34 In most of the ETH lecture bulletins, Giedion is referred to as a "former Professor at Harvard University."

35 Sigfried Giedion, letter to Arthur Rohn, February 26, 1947, GTA 43-K-1947-02-26(G):5: "Kulturge-schichte unserer Zeit und ihrer Vorstufen, angepasst an die speziellen Bedürfnisse der Ingenieure und Architekten."

36 Arthur Rohn was rather astonished, as it was normally the humanities department that ruled on issues of cultural history; ETH Board, minutes, meeting no. 3, March 5 (1947), 169, ETH, SR2, Schulratsprotokolle 1947.

37 Steering Committee of the Architecture Department, ETH Board, minutes, meeting no. 6, October 2 (1948), 260-61, ETH, SR2, Schulratsprotokolle 1948: "Es ist wohl die beste Lösung, wenn Giedion den Lehrauftrag für eine einstündige Vorlesung beibehält, insofern er über Themen der Architektur spricht ... Mit dieser Lösung wäre wohl auch dem Prinzip der Toleranz gegenüber einer anderen Architekturauffassung in einem vernünftigen Masse Genüge getan. Eine ausgedehnte Lehrtätigkeit von Dr. Giedion lässt eine eventuelle Parteienbildung unter den Studenten befürchten. Bereits deuten Zeichen auf eine solche Möglichkeit hin. Es wäre wirklich schade, wenn die heute bestehende Harmonie in menschlicher und fachlicher Beziehung gestört würde. Eine verwandte Baugesinnung ist für den Erfolg der Abteilung I als künstlerisch organisierte Abteilung von grösster Bedeutung ... Abgesehen von der Person von Dr. Giedion, sind wir grundsätzlich gegen eine allzu grosse Vermehrung von rein theoretischen Vorlesungen über Architektur ..."

38 ETH Board, minutes, meeting no. 1, February 12 (1949) 52, ETH, SR2, Schulratsprotokolle 1949.

39 Sigfried Giedion, letter to John E. Burchard, February 5, 1941, GTA 43-K-1941-02-05(G).

40 Meyer, "Situation der Architektur 1940," 243.

41 Hofmann, "Gedanken über die Architektur der Gegenwart in der Schweiz," 18-22. The distinction between "Bauen" and "Baukunst" is partially lost in the English translation of Meyer's *Switzerland: Planning and Building Exhibition* (1946), while occupying a dominant place in the German version, entitled *Schweizerische Architektur-Ausstellung* (1949). In

general, the tone of the German edition is more belligerent—the words quoted here are missing in the English edition.

42 On Gottfried Semper and the ETH, see Maurer, “Lehrgebäude,” 306–13; Tönnemann, “Schule oder Universität?,” 64–79.

43 The exhibition was shown in London, Warsaw, Copenhagen, Stockholm, Luxembourg, and Cologne before it was presented at Kunsthalle Basel; Hofmann, “Thoughts on Contemporary Architecture in Switzerland,” 9–13. The exhibition catalogue’s review in *Werk*—the journal that had close ties to the ETH’s architecture faculty at the time—was extremely positive, suggesting that the represented work is that of “real architects”: “... wenn die neue Bauweise, die eine solche der Ordnung ist und der Menschlichkeit, sich überall durchsetzen könnte, unter den Händen der Berufenen, der wirklichen Architekten—und nur unter diesen—sich zur Baukunst entfalten würde!” Baur, “Zur Ausstellung ‘Schweizer Architektur,’” 2. See also Luchsinger, *Hans Hofmann*.

44 Hofmann, “Thoughts on Contemporary Architecture in Switzerland,” 11.

45 Moser, “Gedanken über die Schweizer Architektur,” 15.

46 Hofmann, “Die Abteilung für Architektur,” 381; for a detailed curriculum of Hofmann’s design pedagogy, see Hofmann, “Sechstes und siebtes Semester,” 50–56.

47 Sigfried Giedion, letter to Franz Roh, July 7, 1948, GTA 43-K-1948-07-07(G): “Ich glaube, Du weißt, dass ich hier an der ETH selbst in schwerer Opposition zu den meisten Professoren stehe, da ich für einen integrierten und universalen Unterricht eintrete, Zusammenschluss verschiedener Fakultäten und Disziplinen verlange, und die Studenten, die zwar auf meiner Seite stehen, natürlich machtlos sind. Hier wie überall kommt es ja nicht so sehr auf die Objektivität an, oder aufs objektive Ziel, wie auf die Verteidigung des eigenen Pöstchens, und da ist jeder, dem die Studenten vielleicht mehr anhängen wie anderen, eine persönliche Gefahr, der ihre Methode und ihr ruhiges Leben bedroht.”

48 Peter Meyer wrote his dissertation on “Zur Formenlehre und Syntax des Griechischen Ornamentes,” and his postdoctoral thesis *Habilitation* on “Die Struktur des frühmittelalterlichen Ornamentes.” See Medici-Mail, *Im Durcheinandertal der Stile*, 412.

49 Linus Birchler (1893–1967) was a Swiss art historian who taught at the ETH from 1934 to 1961; ETH Board, minutes, meeting no. 6, October 2 (1948) 261, ETH, SR2, Schulratsprotokolle 1948.

50 “Die Hauptströmungen in der Architektur vom Klassizismus bis zur Gegenwart”; “Grundlinien der Architektur des 19. und 20. Jahrhunderts.” 51 Meyer, “Schweizerische Landesausstellung,” 133. Meyer refers to the Kongresshaus in Zurich designed by Haefeli Moser Steiger, which served as a paradigm for this revised approach to modern architecture. On *Landi 39* and its architecture, see Meili, Obussier, and Hürlimann, *Schweiz im Spiegel der Landesausstellung 1939*, vol. 2, 13–100, 595–662.

52 Tanner, “Switzerland and the Cold War,” 113–28.

53 Walter Gropius, letter to Arthur Rohn, February 9, 1948, GTA 43-K(DD)-1948-02-09.

54 *Ibid.*

55 ETH Board, minutes, meeting no. 6, October 2 (1948), 261, ETH, SR2, Schulratsprotokolle 1948: “Ich ging davon aus, dass die Habilitation eines früheren Lehrers der Harvard University kaum Schwierigkeiten bieten würde.”

56 Adolf Lüchinger (1894–1949) was mayor of the city of Zurich from 1944 to 1949. Sigfried Giedion, letter to Adolf Lüchinger, August 14, 1948, GTA 43-K-1948-08-14(G):1.

57 Adolf Lüchinger, ETH Board, minutes, meeting no. 6, October 2 (1948), 262–63, ETH, SR2, Schulratsprotokolle 1948 ETH, SR2, Schulratsprotokolle 1948: “Die Vorlesungen von Dr. Giedion werden, offenbar weil sie interessant sind, sehr gut besucht Bei der Durchsicht [der] Akten habe ich den Eindruck gewonnen, die Professoren hätten vielleicht Angst, Dr. Giedion könnte ihnen das Wasser abgraben; diesen Eindruck gewinnt man besonders bei der Lektüre eines Briefes von Prof. Dr. Hofmann. Übrigens steht die Architekturabteilung der ETH nicht so grossartig da, was vielleicht verständlich macht, dass man Andersdenkende und eventuell Befähigte ausschliessen möchte. Solche Machinationen sollten aber vom Schweizerischen Schulrat nicht zugelassen werden.”

58 *Ibid.*, Adolf Lüchinger, 262: “Ich bin entsetzt darüber, dass an einer wissenschaftlichen Anstalt die Ansicht geäußert werden kann, es sollten keine anderen Lehrmeinungen vertreten werden dürfen.”

59 *Ibid.*, Arthur Rohn, 264: “Wegen seines Alters hat er neben einer Tätigkeit als Privatdozent an unserer Hochschule aber keine weiteren Zukunftsmöglichkeiten mehr.”

60 *Ibid.*, 265.

61 The Commission for Contemporary Art of both the ETH and the University of Zurich invited Giedion to lecture on the “New Monumentality” on December 10, 1948, at the main building of the ETH.

62 Peter Meyer’s position was confirmed in June 1949; ETH Board, minutes, meeting no. 4, June 24 (1949) 177, ETH, SR2, Schulratsprotokolle 1949.

63 ETH Board, minutes, meeting no. 1, February 12 (1949), 52, ETH, SR2, Schulratsprotokolle 1949: “Ich habe den Eindruck, die Abteilung für Architektur wolle sich irgendwie an Giedion rächen. ... Es wäre sehr zu begrüssen, wenn die Dozenten der Abteilung für Architektur sachlich bleiben und den Versuch unterlassen wollten, etwas abzureagieren.”

64 John E. Burchard, letter to Hans Pallmann, May 15, 1950, GTA 43-K(DD)-1950-05-15.

65 Sigfried Giedion, letter to Prof. Dr. Alexander von Muralt (President of the Swiss National Science Foundation), May 8, 1954, GTA 43-K-1954-05-08(G):1: “... da meine letzten umfangreichen Bücher, *Space, Time and Architecture* und *Mechanization Takes Command* (Oxford University Press) in englischer Sprache erschienen sind, bin ich geistig in gewisser Beziehung vom eigenen Land verbannt und empfinde diesen Zustand als schmerzlich.”

66 Sigfried Giedion, letter to Alvar Aalto, October 12, 1949, AAA 10871: “Ich glaube es ist nur in Finnland möglich zugleich ein Weltwandler und ein enfant gâté zu sein.” Aalto himself, on the other hand, always complained about the reception of

his work in Finland. Not without reason he named the boat that he designed for his weekend house in Muuratsalo *Nemo Propheta in Patria* (No man is a prophet in his own land).

67 ETH Board, minutes, meeting no. 1, February 3 (1951), 30, ETH, SR2, Schulratsprotokolle 1951; on the contrary, when discussing the potential promotion of the art historian, the president of the ETH stated that, for Giedion, teaching was only a “Nebenarbeit,” a side job, and that he was making his living with his writing, the very activity that in Meyer’s case was not sufficient to support a family. See also ETH Board, minutes, meeting no. 4, June 11 (1956), 292, ETH, SR2, Schulratsprotokolle 1951.

68 Giedion received \$9,875 from the Rockefeller Foundation; Hans Pallmann (Rector and President of the Board, ETH Zürich), letter to John Marshall (director, Rockefeller Foundation), asking for the wiring of the second half of the grant money, November 12, 1953, GTA 43-K(DD)-1953-11-12.

69 Giedion frequently changed the content of his classes and renamed them. These alterations always had to be approved by the board of the school. In one semester the title of his class changed three times, from “Beziehungen von Architektur, Kunst und Konstruktion seit 1910,” to “Formung und Sinn der Mechanisierung seit 1770,” to “Ausdrucksmittel der heutigen Kunst seit Picasso.”

70 ETH Board, minutes, meeting no. 3, April 14 (1956), 182, ETH, SR2, Schulratsprotokolle 1956.

71 Eduard Neuenchwander, interview by Reto Geiser, November 18, 2005, Gockhausen, Switzerland.

72 Sigfried Giedion, letter to Walter Gropius, November 16, 1949, GTA 43-K-1949-11-16(G):2: “Könnte ich in mein Rückgrat nur einige wenige Kugelenke einbauen, was für ein feines Leben hätte ich an der ETH!! So aber gehe ich mit gerunzelter Stirne hinein ohne Kontakt mit dem Kollegen, was jedoch nicht hindert, dass ich auf meinem Gebiet die weitaus grösste Hörschaft habe. Wie gesagt, ich will es mir überlegen, ob man sich nicht doch noch Kugelenke anschaffen soll.”

73 Friedrich Hess (Professor of Architecture, ETH), as quoted in ETH Board, minutes, meeting no. 3, April 14 (1956) 183, ETH, SR2, Schulratsprotokolle 1956: “Wenn wir bisher gezögert haben, mehrfachen früheren Anregungen aus dem Kreise Dr. Giedions in der genannten Richtung Folge zu geben, so stammte dies nicht aus einer Geringschätzung der Intelligenz, des Wissens und Fleisses oder der pädagogischen Begabung von Herrn Dr. Giedion, sondern aus Bedenken, die sich auf eine etwas unduldsam-sektiererische Betriebsamkeit im Dienste schwer überschaubarer, weltumspannender Avantgarde-Organisationen beziehen, die durch Organisation von Wettbewerben, Kongressen, Preisen und eine enorme propagandistische Publizistik den verschiedenen Architekturschulen und dem Architekturbetrieb im ganzen eine Art Oberaufsicht und Monopol aufzudrängen suchten. Auch hat die Tatsache, dass Herr Dr. Giedion nicht mit Erfolg verhindert hat, dass er seit Jahren an internationalen Veranstaltungen als Professor ETH bezeichnet wird, den Bestrebungen, diesen Anspruch zu realisieren nicht gedient.”

74 Ibid., 187: "[Die unsachliche Einstellung der Abteilung für Architektur] mag einerseits von der etwas unschweizerischen Art und Weise herrühren, wie Giedion seine Arbeit betreibt. ... Diese Haltung ist auch begründet durch das Wissen und die universelle Betrachtungsweise Giedions, die den Professoren für Architektur nicht eigen sind. Unsere Abteilung für Architektur ist ein in sich geschlossener Körper. ... Es besteht ein Mangel an Beziehungen mit der übrigen Welt und kein Drang, etwas Neues zu erleben und so sehen auf dem eigenen Fachgebiet."

75 Willy Spühler (member, Council of States), *ibid.*, 189: "Von Dr. Giedion aber darf gesagt werden, er habe die tragische Fähigkeit, andere Menschen vor den Kopf zu stoßen. ... Die menschlichen Bedenken gegen Dr. Giedion sind also verständlich."

76 Willy Spühler, *ibid.*: "Für Giedion würde ein Extraordinariat eine anständige Anerkennung darstellen und dieses Extraordinariat würde auch der ETH gut tun."

77 Wilhelm Löffler, letter to Philipp Etter, as quoted in ETH Board, minutes, meeting no. 4, June 11 (1956), 285, ETH, SR2, Schulratsprotokolle 1956: "Man kann Dr. Giedion in seinem Fach wirklich als geistige Brücke zwischen der Schweiz und diesen Ländern [USA, Finnland, Schweden, Grossbritannien, Frankreich, Niederlande] bezeichnen."

78 Alfred Roth, letter to Philipp Etter, as quoted in ETH Board, minutes, meeting no. 4, June 11 (1956), 287, ETH, SR2, Schulratsprotokolle 1956: "Giedion gehört in die vorderste Reihe der zeitgenössischen Kunstwissenschaftler und hat dadurch ganz Wesentliches zum guten Ruf der Schweiz auch auf diesem Gebiete beigetragen. ... [Der] grossen internationalen Anerkennung Dr. Giedions steht meines Erachtens eine nur ungenügende Würdigung im Heimatlande gegenüber, ein Grund mehr, um diesem Kunstwissenschaftler den Rang unserer ETH zu gewähren, der ihm auf Grund seiner Fähigkeiten und Verdienste zukommt."

79 Hans Pallmann, ETH Board, minutes, meeting no. 4, June 11 (1956), 288, ETH, SR2, Schulratsprotokolle 1956: "Er ist brennend ehrgeizig und versteht es auszeichnet, die Propaganda für seine Zwecke einzuspannen. Für einen systematisch-methodischen Unterricht ist er weniger geeignet."

80 Frisch, "Unsere Arroganz gegenüber Amerika (1953)," 222–29.

81 Hans Pallmann, ETH Board, minutes, meeting no. 5, July 7 (1956), 379, ETH, SR2, Schulratsprotokolle 1956: "Was in Amerika Furor macht, wird in Europa nicht ohne weiteres mit gleichem Enthusiasmus entgegengenommen."

82 *Ibid.*, 379.

83 *Ibid.*, 381.

84 Sigfried Giedion, letter to Dolf Schneebli, June 9, 1960, GTA 43-K-1960-06-09(G):1: "Dass das Poly [ETH] nie den Geist von Harvard haben wird, liegt an der Paraphenytanrei der sich jeder unterwerfen muss, sowie seinem Beamtengeist, der jede Initiative als höchst unbecquem empfunden."

85 Willy Rötzel (curator, Kunstgewerbemuseum, Zürich, and editor of the cultural monthly *Du*), as quoted in Hofer and Stucky, *Hommage à Giedion*, 134–35: "Giedion hat stets mit seinem unerschütterlichen Glauben, aber auch mit einer gera-

dezu väterlichen Hilfsbereitschaft das Tun von uns Jüngeren verfolgt, gelenkt und mit Lob bedacht, wo es ihm angebracht schien. Er hat uns aber auch immer wieder durch sein Beispiel, durch seine Zivilcourage in künstlerischen, kulturellen und vor allem auch kulturpolitischen Fragen angefeuert. Er hat umgekehrt dort gebremst, wo ihm schien, unser Elan stehe nicht auf genügend festem Fundament."

86 Giedion, *Architecture, You and Me*, 102–4.

87 *Ibid.*, 102.

88 Sigfried Giedion, letter to Dr. Zschokke, Regierungsrat (Councilor of the Canton of Zurich), May 6, 1961, GTA 43-K-1961-05-06: "Wir können uns im Moment in der Schweiz noch so sehr abkapseln, auf die Dauer wird der Kampf des Überlebens nicht mit Sputniks gelöst werden vielmehr mit dem Standard, den ein Staat im Augenblick der Gefährdung einnimmt. Amerika macht viele Fehler, aber eines hat man hier begriffen, dass man im wissenschaftlichen und künstlerischen Leben nur gegenüber drohenden Gefahren standzuhalten vermag, wenn man nicht provinziell bleibt. Gerade dies muss die Schweiz vermeiden."

89 Max Frisch (1911–1991) was trained as an architect at ETH Zurich, before he became one of the most influential voices in Swiss literature. Frisch, "Cum Grano Salis," 325–29.

90 Reto Geiser, "From Drafting Board to Writing Desk and Back: Max Frisch, Lucius Burckhardt and the Postwar Debate on Urban Planning in Switzerland," Paper presented at the 102nd Annual College Art Association Conference, Chicago, February 3–6, 2014.

91 Without mentioning names, Frisch implicitly singled out Stadt-Spital in Zurich by Alfred and Heinrich Oeschger, and the high-rises at Letzigraben by Albert Heinrich Steiner, among others, Frisch, "Cum Grano Salis," 326. On Max Frisch and the debates in the 1950s, see also Maurer, "Die Revolution hat nicht stattgefunden in der Erziehung," 117–41; Koch and Maurer, "Zauberformeln," 36–37; Hagen, *Städtebau im Kreuzverhör*.

92 Frisch, "Cum Grano Salis," 325–27: "Und das ist das erste was dem Heimkehrenden ernsthaft an die Nerven geht: die ganz allgemeine Mentalität, die aus der Erfahrung entstanden ist, dass es in der Demokratie nie ohne politischen Kompromiss geht, die Mentalität nämlich, nie etwas Radikales auch nur zu wollen, geschweige denn es zu tun. ... Offenbar, so merkt der Heimkehrende mit Verwunderung, ist es hierzulande ein heiliges Ziel, dass nichts dominiere. Das heisst bekanntlich, dass zuletzt die Langlewige dominiert, die Monotonie."

93 Werner M. Moser, letter to Frank Lloyd Wright, April 19, 1947, GTA 4 (Box 129).

94 Kunstgewerbemuseum Zürich, U. S. A. *baut*; Roth, *USA baut*. The original catalogue of the MoMA exhibition was Mock, *Built in USA*; a sequel to the exhibition followed eight years later, with a catalogue, Hitchcock and Drexler, *Built in USA*.

95 Kunstgewerbemuseum Zürich, *Das neue Schulhaus*.

96 This is indicated in the additions to later editions of *Space, Time and Architecture*, as well as in an essay in *Werk*: "In der heutigen

Architekturentwicklung gibt es zwei Länder, deren allgemeiner Standard höher ist als der anderer Gebiete: Finnland und Brasilien." Giedion, "Brasilien und die heutige Architektur," 238.

97 Giedion was invited to be part of the jury of the São Paulo Biennial in 1951; Kunstgewerbemuseum Zürich, *Brasilien baut*.

98 Friedrich Hess (1887–1962) was a professor of architectural design and construction in the architecture department at the ETH Zurich. William Dunkel (1893–1980) was a professor of architecture in the architecture department at ETH Zurich. ETH Zürich, "Professorinnen und Professoren," <https://www.ethistory.ethz.ch/materialien/professoren/> (accessed July 6, 2016).

99 Alfred Roth, Rino Tami (1908–1994), Albert Heinrich Steiner (1905–1996), and Charles Edouard Geisendorf (1913–1985) were hired in a first round in 1957, followed by Werner M. Moser in 1958, and finally Jacques Schader (1917–2007) and Bernhard Hoesli (1923–1984), who was brought on to introduce a new foundational course, in 1960. The same year, Linus Birchler retired to dedicate himself exclusively to questions of preservation. His position was eventually taken over by Erwin Gradmann (1908–1985) and Adolf Max Vogt (1920–2013).

100 Institut für Orts-, Regional- und Landesplanung (ORL). See Roth, "Der neue Lehrplan der Architekturabteilung," 258–59.

101 Roth, as quoted in Hofer and Stucky, *Hommage à Giedion*, 106–7: "Die wissensdurstigen Studenten leisteten ihm grosse und begeisterte Gefolgschaft, in der damaligen Fakultät blieb er hingegen ein Aussenseiter."

102 Sigfried Giedion, letter to Adolf Lühinger (mayor of Zurich), June 21, 1949, GTA 43-K-1949-06-21(G): "Ich glaube allerdings, dass gewisse Reformen noetig sind, jedoch nicht im Sinne einer 'Opposition,' sondern im Sinne einer Angleichung an die heutigen Bedingungen: Unter anderem um eine verstaerkte Betonung der geistigen Grundlagen und der sozialen Verpflichtungen des heutigen Ingenieurs und Architekten."

103 The group included Walter Gropius, Richard Neutra, Konrad Wachsmann, Josep Luis Sert, Serge Chermayeff, John Burchard, György Kepes, Ludwig Mies van der Rohe, and Le Corbusier, among others. Julian Huxley (secretary-general of UNESCO), letter, March 6, 1947, LOE, Josep Luis Sert Collection, Folder E3.

104 *Ibid.*

105 The fact that the school was most likely not aware of Giedion's involvement is also suggested in the protocols of the board: "Auch die Tatsache, dass Herr Dr. Giedion nicht mit Erfolg verhindert hat, dass er seit Jahren an internationalen Veranstaltungen als 'Professor ETH' bezeichnet wird, hat den Bestrebungen, diesen Anspruch zu realisieren, nicht gedient." ETH Board, minutes, meeting no. 3, April 14 (1956), 184, ETH, SR2, Schulratsprotokolle 1956.

106 Huber, "Werk 1955 bis 1961," 1579: "In der Schweiz herrschte damals noch der bittere Kampf zwischen den 'Gemässigten' und den wenigen 'Modernen' andererseits."

107 Moser, "Gedanken über die Schweizer Architektur," 15: "In diesen Jahren, ca. 1946, bildete sich eine

- Gruppe von Studierenden, die sich auf der Suche nach einem sinnvollen Ausdruck intensiv mit pendenten Gegenwartsproblemen befasst. ... Einen gewissen Rückhalt suchten sie durch gelegentliche Kontakte mit den Mitgliedern der CIAM oder mit jungen Architekten, die ihren Bestrebungen Verständnis entgegenbrachten. Zu Ende der 50er Jahre setzte an der ETH unter dem Einfluss jener Studentengruppen eine Auflockerung ein, die wiederum ein freieres Verhältnis in der Beziehung Lehrer-Lernender erlaubte."
- 108** These students included Bernhard Hoesli, who was appointed professor in 1960, and who failed his thesis under Hans Hofmann; and Dolf Schnebli, appointed in 1971, who was not one of Giedion's students at the ETH, but was exposed to his teaching when he studied at Harvard University. Dolf Schnebli, interview by Reto Geiser, June 13, 2007, Zurich.
- 109** "Er [Giedion] ist im Unterricht sehr anregend und betrachtet die Studenten nicht als Schulbuben, sondern als gleichwertige Gesprächspartner; diese Kollegialität ist m. E. wertvoll." Seippel (board member), ETH Board, minutes, meeting no. 4, June 11 (1956), 287, ETH, SR2, Schulratsprotokolle 1956.
- 110** On Norberg-Schulz and Giedion, see Otero-Pailos, *Architecture's Historical Turn*, 147–55.
- 111** Giedion eventually also helped Bernhard Hoesli, among others, to find a position in the United States. Sigfried Giedion, letter to Bob Carter (MIT, Department of English and History), January 18, 1950, UIC Folder 7-210 (Institute of Design Collection), Special Collections: "I am sending you the Architect Bernhard Hoesli, please be nice with him, he was one of my students + worked at Corbusier's big scheme at Marseille."
- 112** Carola Giedion-Welcker, letter to Ise Gropius, November 27, 1947, as quoted in Bruderer-Oswald, *Das Neue Sehen*, 247: "Hier geht alles seinen Doldertalgang, viel Besuch, viel Jugend die hier ein Aussprache- und Lesezentrum für moderne Kunst gefunden hat, das was Uni und Poly so wunderbar durch 20 Jahre hindurch verpasst und vernachlässigt hat."
- 113** Norberg-Schulz, in Hofer and Stucky, *Hommage à Giedion*, 130.
- 114** Neuenchwander, "Einzel- oder Massenausbildung," 1: "In unserer Fachbibliothek verbodet die entstehende Mittelschul-Mentalität sogar die Auflage wichtiger Fachzeitschriften oder die Anschaffung bedeutender Werke über zeitgenössische Architektur und Kunst, um Information und Kritik zu vermeiden, welche "in unseren Köpfen nur Verwirrung stiften konnten."
- 115** Eduard Neuenchwander, interview by Reto Geiser, November 18, 2005, Gockhausen, Switzerland.
- 116** Ibid.
- 117** Ibid.
- 118** Neuenchwander, "Für die moderne Architektur," 191–93: "Wir werden mit Einzelwissen versehen. Was wir aber in erster Linie von unserer Hochschule verlangen, ist *Methodik*: sensitives Verständnis für Gesetzmässigkeiten, Verstehen von Beziehungen und Empfinden von Werten."
- 119** Sigfried Giedion, letter to Adolf Lüchinger, June 21, 1949, GTA 43-K-1949-06-21(G): "In der Praxis hat sich — glaube ich — etwas Anderes herausgestellt; denn gerade die-
- jenigen Studenten, auf die meine Vorlesungen und Uebungen Einfluss hatten, brachten positives Leben in ihren Jahrgang."
- 120** ETH Board, minutes, meeting no. 4, June 11 (1956), 183, ETH, SR2, Schulratsprotokolle 1956.
- 121** Andres Giedion presided over the group until he left Switzerland to study in the United States shortly before Alvar Aalto's lecture; Neuenchwander was in charge thereafter. Kommission für zeitgenössische Kunst, 1947–1948, SZH, W II 12.145.
- 122** Eduard Neuenchwander, letter to Alvar Aalto, May 1, 1948, AAA: "Von der Studentenschaft beider Hochschulen wurden wir als sogenannte 'Kommission für zeitgenössische Kunst' dazu bestimmt, die etwas dicke geistige Atmosphäre hier etwas zu lüften. Da nun seit undenklichen Zeiten kein Architekt mehr an unseren Hochschulen zur akademischen Gesamtheit (also nicht nur zu einem auserwählten Kreise von Fachleuten) gesprochen hat, wir aber gerade in der modernen Architektur die öffentliche, allgemein sichtbare Stellungnahme des modernen Menschen sehen, möchten wir Sie einladen bei uns einen Vortrag zu halten. Es liegt uns vor allem daran, wie wir bereits feststellten, einem möglichst vielschichtigen Auditorium diese so wichtigen Grundfragen nahezubringen, z. B. unter dem Titel 'Die Bedeutung der Architektur in unserer Zeit', dies natürlich nur als ein möglicher Anhaltspunkt."
- 123** Eduard Neuenchwander, interview by Reto Geiser, November 18, 2005, Gockhausen, Switzerland: "Giedion sagte mir: 'Edi, jetzt sagen Sie es Ihnen.' ... Ich machte ein Manifest für die Modernen, insbesondere in Bezug auf Aalto. ... Ich schäme mich heute noch dafür, aber ich hatte diesen Push von hinten 'Sag's Ihnen.' Das war nicht selbstverständlich die Moderne. Noch um 1947/48 waren wir insulär."
- 124** Sigfried Giedion, "Urkunst und Gegenwart," February 2, 1951, GTA 43-T-13.
- 125** Sigfried Giedion, "Urkunst als Zeiterlebnis," January 22, 1953, and "Blick nach Agypten und Sumer," June 18, 1954, GTA 43-T-13.
- 126** Sigfried Giedion, letter to Alfred Roth, January 16, 1950, GTA 43-K-1950-01-16 (G).
- 127** Minutes of the Extraordinary Council Meeting of CIAM in Paris, May 10–11, 1952, GTA 43-K-1950-01-16 (G).
- 128** Georges Candilis (1913–1997) was a Greek-French architect and urbanist, and co-founder of Team 10. Eric Mumford, *CIAM Discourse on Urbanism*, 206.
- 129** Minutes of the Extraordinary Council Meeting of CIAM in Paris, May 10–11, 1952, LOE, CIAM Collection, Folder C11.
- 130** Sigfried Giedion, letter to Eduard Neuenchwander, April 2, 1947, GTA 43-K-1947-04-02 (G).
- 131** Eduard Neuenchwander, letter to Alvar Aalto, October 21, 1947, AAA.
- 132** Eduard Neuenchwander and Christian Norberg-Schulz, *TEAM 2* (1952), 2.
- 133** Norberg-Schulz, "CIAM Junior Groups," 4–8.
- 134** Ibid., 4, 6, 8.
- 135** Jaqueline Tyrwhitt, letter to Josep Lluís Sert, Toronto, December 2, 1952, LOE, CIAM Collection, Folder C12.
- 136** Ibid.
- 137** *TEAM 3*, copy annotated by Werner M. Moser, November 1, 1952, GTA 42-WM-X-1.
- 138** Ibid.
- 139** Maurer, "Die Revolution hat nicht stattgefunden in der Erziehung," 138.
- 140** Giedion's extensive correspondence suggests that he had contact with a large number of students. Among the Swiss students Giedion helped to find work were André Studer and Bernhard Hoesli, for Le Corbusier; Eduard Neuenchwander, Ulrich Stucky, and Ruedi Brennstuhl, for Alvar Aalto; and Dolf Schnebli, for The Architects Collaborative (TAC), co-founded by Walter Gropius.
- 141** For example, Giedion helped Fritz Stucky (1929–2014) with his application to MIT: Ulrich Stucky [cousin of Fritz Stucky], letter to Sigfried Giedion, August 23, 1950, GTA 43-K-1950-08-23; he facilitated a scholarship for Christian Norberg-Schulz (Christian Norberg-Schulz, letter to Sigfried Giedion, October 19, 1950, GTA 43-K-1950-10-19); and he supported Werner Blaser (b. 1924), initially trained as a carpenter and later a collaborator in Aalto's office, in his successful application to IIT; (Rudolf Brennstuhl [office partner of Eduard Neuenchwander], letter to Sigfried Giedion, May 17, 1950, GTA 43-K-1950-05-17-2).
- 142** Sigfried Giedion, letter to Hans Pallmann, April 10, 1950, GTA 43-K-1950-04-10(G):3.
- 143** Sigfried Giedion, "Erfahrungen mit Harvard," lecture, typescript, June 13, 1955, GTA 43-T-13 (S.2): "Harvard [ist] heute ein Sprachrohr für die Welt. ... [Es besteht] kein Gefühl von Zuchthausmauern, von dumpfer Atmosphäre, der man so bald als möglich enttrinnen möchte. Es ist Freude und Optimismus bei Lehrern und Lernenden. Natürlich gibt es Schwierigkeiten die im Stoff liegen und immer im Umgang mit Menschen untereinander entstehen, aber ich kenne niemanden, der sich trotz allem der lebenssteigenden [sic] Atmosphäre der Universität entziehen [sic], denn es ist eine Atmosphäre der Lebensbejahung, der es nicht in den Sinn kommt, sich gegenseitig so viel Hindernisse als möglich in den Weg zu legen."
- 144** Richard Neutra (1892–1970) was an Austrian-American architect who emigrated to the United States in 1923; Knud Lönberg-Holm (1895–1972) was a Danish-American architect who emigrated to the United States in the same year as Neutra. For a list of CIAM delegates, see Steinmann, *CIAM: Dokumente*, 213.
- 145** The Philadelphia-based architect George Howe, office partner of ETH-trained Swiss architect William Lescaze, was about to establish a group on the East Coast. Walter Gropius and John Burchard aimed to form a "New England Group," and George Fred Keck, inspired by Moholy-Nagy, tried to gather forces in Chicago. Sigfried Giedion, letter to Cornelis van Eesteren, June 20, 1939, GTA 42-K-1939-Giedion/Eesteren. See also Walter Gropius, letter to Sigfried Giedion, June 24, 1937, GTA 43-K-1937-06-24.
- 146** Sigfried Giedion, circular letter to the American Delegation of CIAM, January 7, 1939, GTA 42-K-1939-Giedion/Lönberg-Holm.
- 147** Sigfried Giedion, circular letter to CIAM members, July 6, 1938, NAI EEST/Hoofdstuk IV: CIAM, IV-6-7-1938.
- 148** Harrison, *Dawn of a New Day*.

- 149 Eric Mumford, *CIAM Discourse on Urbanism*, 126. Oscar Gregory Stonorov (1905–1970) was a German architect who emigrated to the United States in 1929; Ernest Weissmann (1903–1985) was an architect from Zagreb who immigrated to New York in 1939; Victor Bourgeois (1897–1962) was a Belgian architect and urban planner, and vice president of CIAM; Léon Stynen (1899–1990) was a Belgian architect; Henry van de Velde (1863–1957) was a Belgian architect and designer, a member of the Werkbund, and the first director of the School of Arts and Crafts in Weimar; Lúcio Costa (1902–1998) was a Brazilian architect and planner; Oscar Niemeyer (1907–2012) was a Brazilian architect who collaborated with other architects on the design of the UN Headquarters in New York.
- 150 Sigfried Giedion, letter to Rudolf Steiger, March 1, 1939, GTA 42-K-1939-Giedion/Steiger: “[Der] Architekt [hat] eine ganz andere Stellung... wie in Europa. Die Architektur wird als eine technische Angelegenheit aufgefassen und der Architekt ist kommerzialisiert.”
- 151 Sigfried Giedion, letter to Cornelius van Eesteren, June 20, 1939, GTA 42-K-1939 Giedion/Eesteren.
- 152 Sibyl Moholy-Nagy, letter to Sigfried Giedion, April 30, 1939, GTA 43-K-1939-04-30. See also “Franklin D. Roosevelt speech, 1939, <https://www.moma.org/research/archives/archives-highlights-04-1939> (accessed April 17, 2024).
- 153 Sigfried Giedion, “American Architecture Viewed from Europe,” lecture at the “Symposium for Contemporary Architecture,” New York University, Institute of Fine Arts, typescript, May 12, 1939, GTA 43-T-13 S. 15.
- 154 Ibid.
- 155 Ibid.
- 156 R. Buckminster Fuller (1895–1983) was an architect, author, and inventor; Frederick Kiesler (1890–1965) was an Austrian-American architect who worked across different mediums.
- 157 Sigfried Giedion, letter to Rudolf Steiger (architect and partner at Haefeli Moser Steiger [HMS]), March 1, 1939, GTA 42-K-1939-Giedion/Steiger.
- 158 George Howe, letter to Sigfried Giedion, July 5, 1939, GTA 42-K-1939-Giedion/Howe.
- 159 Carl Feiss (American architect and urban planner), as quoted in Sigfried Giedion, “On CIAM’s Unwritten Catalogue,” typescript, undated, unpaginated, GTA 43-T-15.
- 160 Ibid.
- 161 John E. Burchard, letter to Sigfried Giedion, October 21, 1940, GTA 43-K-1940-10-21.
- 162 Sigfried Giedion, letter to Lewis Mumford, September 20, 1940, collection of Reto Geiser.
- 163 Paul Lester Wiener, summary of a meeting with Walter Gropius, Marcel Breuer, Josep Lluís Sert, Herbert Bayer, and Marian Willard, September 4, 1943, UOR Box 12, Folder: Personal Journal.
- 164 Sigfried Giedion, letter to Hanneke Schroeder, November 20, 1943, GIE: “Wir arbeiten hier schon für die Postwar period und glauben, dass unsere Architektenvereinigung erst dann richtig aufblühen wird, denn all die Pläne [the following appears in English] (Regional planning) für die wir eingestanden sind und eine Erfahrung woanders haben, die anderen fehlt, werden erst jetzt langsam für die Allgemeinheit reif.”
- 165 Letter to the delegates and members of CIAM in the United States, including the proposed structure of the new group, signed by Gropius, Giedion, and Sert, 1944, SAA, Marcel Breuer Papers, Reel 5710.
- 166 Pierre Chareau (1883–1950) was a French architect and designer; “Proceedings: Special Meeting of the International Congress for Modern Architecture, New York, May 20” (1944) 6–8, GTA 42-JLS-1-8.
- 167 Eric Mumford, *CIAM Discourse on Urbanism*, 145–46.
- 168 “Minutes of the Meeting of the Constituting Committee held at the New School for Social Research, 66 West 12th Street, New York City, May 20, 1944 at 3:00 p.m.,” GTA 42-SG-2-201/203. Richard Neutra was elected president, with Knud Lönberg-Holm, Paul Nelson, and Josep Lluís Sert as vice presidents and Harwell Harris as treasurer. The board of directors included Sigfried Giedion, László Moholy-Nagy, Ernest Weissmann, Oscar Stonorov, Walter Gropius, William Wurster, A. Lawrence Kocher, Joseph Hudnut, Paul Lester Wiener, Ludwig Mies van der Rohe, Pierre Chareau, and Wallace K. Harrison.
- 169 Ibid.
- 170 Paul Lester Wiener, letter to Richard Neutra, August 10, 1944, UOR Box 12, Folder: Correspondence-Outgoing.
- 171 Paul Lester Wiener, summary of a meeting with Walter Gropius, Marcel Breuer, Josep Lluís Sert, Herbert Bayer, and Marian Willard, September 4, 1943, UOR Box 12, Folder: Personal Journal.
- 172 Sigfried Giedion, letter to Josep Lluís Sert, January 18, 1947, LOE, CIAM Collection, Folder C4: “Je crois que notre influence peut être infiltrée dans des grandes associations.”
- 173 Le Corbusier, *U. N. Headquarters*, 72: “In 1928, at the Château de La Sarraz, the CIAM was born. Real precursor of our United Nations, this Congress, having harmonized what might be called the ‘dissenters’ of architecture and urbanism, worked 20 years perfecting a doctrine of architecture and urbanism. This doctrine is now established. It is acknowledged in a great number of countries and serves as the basis for the reconstruction of cities and entire countries.”
- 174 Paul Lester Wiener, meeting notes, June 5, 1946, UOR Box 12, Folder: Personal Journal.
- 175 Gaston Brunfaut (1894–1974) was a Belgian architect; Matthew Nowicki (1910–1950) was a Polish architect who was appointed chief architect for the city of Chandigarh, India, Giedion, *Walter Gropius: Work and Teamwork*, 14.
- 176 The list includes, among other works, *Space, Time and Architecture* (Giedion), *Can Our Cities Survive?* (Sert), *Basic Surveys of Planning* (Tyrwhitt), *The City of Tomorrow* (Le Corbusier), *Rebuilding Our Communities* (Gropius), and *You and Your Neighbourhood* (Stonorov). “Announcement of the Availability of Technical Publications in the Fields of Building, Housing, and Town and Country Planning through the United Nations Technical Assistance Administration,” September 14, 1951, LOE, CIAM Collection, Folder C9. On Tyrwhitt and UNESCO, see also Shoshkes, *Jaqueline Tyrwhitt: Transnational Life*, 103–6.
- 177 Josep Lluís Sert, letter to Sigfried Giedion, June 12, 1952, LOE, CIAM Collection, Folder C11. In March 1948, UNESCO “rejected the whole idea of establishing a board for architecture and planning.” See Josep Lluís Sert, letter to J. M. Richards, August 19, 1948, GTA 42-JLS-13-18.
- 178 Eric Mumford, *CIAM Discourse on Urbanism*, 149.
- 179 László Moholy-Nagy, letter to Sigfried Giedion, December 1, 1939, GTA 43-K-1939-12-01.
- 180 Aronovici, “Civic Art,” 366–91.
- 181 Howe, “Monuments, Memorials, and Modern Design,” 202–7.
- 182 Ockman, “War Years in America,” 26.
- 183 Christiane and George Collins have elaborated on issues of monumentality in an essay for the *Harvard Architecture Review*. See Collins and Collins, “Monumentality,” 15–35; see also Ockman, *Architecture Culture*, 27–30.
- 184 Giedion, “Need for a New Monumentality,” 547–68.
- 185 Ockman, *Architecture Culture*, 27; Giedion, *Architektur und Gemeinschaft*, 27–39.
- 186 The American journal *Architectural Forum* published various articles on the topic; the Museum of Modern Art covered the issue at a 1948 symposium based on the question “What Is Happening to Modern Architecture?” that included such figures as Alfred Barr, Lewis Mumford, and Henry-Russell Hitchcock; and the British *Architectural Review* held a symposium entitled “In Search of a New Monumentality,” which was directly linked to a presentation Giedion gave at the Royal Institute of British Architects (RIBA) in 1946.
- 187 Mumford, “Sky Line: For the Common Good,” 74.
- 188 Mumford, *Culture of Cities*, 433.
- 189 Ibid., 438.
- 190 Elizabeth Mock, for example, concludes her account *Built in USA* with a discussion of monumentality.
- 191 Bacon, “Josep Lluís Sert’s Evolving Concept of the Urban Core,” 90.
- 192 Kahn, “Monumentality,” 577–88.
- 193 Forster, “Monument/Memory,” 21–56; Wood, *Vienna School Reader*; Panofsky, “On the Relationship of Art History and Art Theory,” 43; Ockman, *Architecture Culture*, 30, 47.
- 194 Lewis Mumford, letter to Sigfried Giedion, February 4, 1948, GTA 43-K-1948-02-04.
- 195 Lewis Mumford, letter to Josep Lluís Sert, December 28, 1940, LOE, Josep Lluís Sert Collection, Folder E1.
- 196 CIAM 8, Commission IV, “Addenda to Outline Report of Commission Four,” typescript July 1951, GTA 42-JLS-17-51; Tyrwhitt, Sert, and Rogers, *The Heart of the City*.
- 197 Giedion, *Architecture, You and Me*, 125.
- 198 Mumford, “Sky Line: Status Quo,” 109.
- 199 Giedion, *Space, Time and Architecture*, 1965, 519.
- 200 Giedion, *Architecture, You and Me*, 25.
- 201 Ibid., 38.
- 202 Ibid., 119.
- 203 Ernesto Nathan Rogers (1909–1969) was an Italian architect and educator. Eric Mumford, interview by Jerzy Soltan, as quoted in Eric Mumford, *CIAM Discourse on Urbanism*, 238.

- 204 Eric Mumford, *CIAM Discourse on Urbanism*, 260.
- 205 The *Harvard Crimson* called Sert's appointment a "clear-cut victory for those favoring the policies of Walter Gropius." See "Sert Proposes to Introduce New Design 1."
- 206 Pearlman, "Joseph Hudnut and the Unlikely Beginnings of Post-modern Urbanism," 201-39; Pearlman, "Breaking Common Ground," 117-29.
- 207 Alofsin, *Struggle for Modernism*, 250.
- 208 "The Human Factor in Architecture and City Planning," December 18, 1952, LOE, Josep Lluís Sert Collection, Folder D69; see also Pearlman, "Breaking Common Ground," 117-29.
- 209 For a detailed account of the emergence of the discipline of urban design, see Mumford, *Defining Urban Design*.
- 210 Josep Lluís Sert, "Contribution of José Luis Sert, Dean of the Harvard Graduate School of Design, to the A. I. A. Symposium on the Changing Philosophy of Architecture," typescript, June 16, 1957, LOE, Vertical Files Collection, NA 2563.
- 211 Josep Lluís Sert, letter to Sigfried Giedion, May 19, 1954, GTA 43-K-1954-05-19: "As you know, we are looking forward to your cooperation in the organization of the history courses in this School. The Faculty of Design considers it of great importance to introduce these history courses for the architects, the landscape architects, and the city planners at Harvard."
- 212 Sigfried Giedion, letter to Josep Lluís Sert, January 18, 1947, LOE, CIAM Collection, Folder C4; Princeton University Bicentennial Conference on Planning Man's Physical Environment, Princeton Inn, March 5-6, 1947.
- 213 Josep Lluís Sert, letter to Sigfried Giedion, March 18, 1954, GTA 43-K-1954-03-18. See also Mumford, *Defining Urban Design*, 115.
- 214 Sigfried Giedion, "Remarks and Proposals about the Visual Arts and History at the Graduate School of Design," typescript, January 1956, GTA 43-T-10 (S.20).
- 215 Sigfried Giedion, letter to Hans Girsberger, October 29, 1954, GTA 43-K-1954-10-29 (G):1.
- 216 Harvard Graduate School of Design, Urban Design Seminar, "The Human Scale I," Spring 1957, minutes of the eighth meeting, April 10, 1957, LOE, Vertical Files Collection.
- 217 Sigfried Giedion, "Minutes of the Staff Luncheon Meeting," March 2, 1955, LOE, Josep Lluís Sert Collection, Folder E7.
- 218 Sekler, "Sert, CIAM, and the GSD," 23.
- 219 Sigfried Giedion, letter to Josep Lluís Sert, March 7, 1955, LOE, Josep Lluís Sert Collection, Folder E7; see also Sigfried Giedion, "Minutes of the Staff Luncheon Meeting," March 2, 1955, LOE, Josep Lluís Sert Collection, Folder E7.
- 220 Sigfried Giedion, letter to John Marshall (Rockefeller Foundation), November 26, 1954, GTA 43-K-1954-11-26(G):1.
- 221 Sigfried Giedion, "Remarks and Proposals about the Visual Arts and History at the Graduate School of Design," typescript, January 1956, GTA 43-T-10 (S.20).
- 222 Giedion, *Architecture, You and Me*, 118.
- 223 Hideo Sasaki (1919-2000) was an American landscape architect, professor, and chairman of the Department of Landscape Architecture at Harvard.
- 224 Harvard Graduate School of Design, Urban Design Seminar, "The Human Scale III," Spring 1959, minutes, Giedion's introduction to the class, March 4, 1959, LOE, Vertical Files Collection.
- 225 Sigfried Giedion, letter to Josep Lluís Sert, March 7, 1955, LOE, Josep Lluís Sert Collection, Folder E7; Sert, "Human Scale in City Planning," 392-412.
- 226 Sigfried Giedion, letter to Josep Lluís Sert, November 14, 1956, LOE, Josep Lluís Sert Collection, Folder E7.
- 227 Josep Lluís Sert, letter to Sigfried Giedion, March 18, 1954, GTA 43-K-1954-03-18.
- 228 Harvard Graduate School of Design, Urban Design Seminar, "The Human Scale III," Spring 1959, minutes, Giedion's introduction to the class, March 4, 1959, LOE, Vertical Files Collection.
- 229 Sigfried Giedion, letter to Oscar Niemeyer, October 8, 1958, GTA 43-K-1958-10-08(G).
- 230 Sigfried Giedion, letter to Josep Lluís Sert, March 20, 1955, *R. M. S. Queen Mary*, LOE, Josep Lluís Sert Collection, Folder E7.
- 231 Eduard Sekler, interview by Reto Geiser, February 14, 2006, Cambridge, Massachusetts; Sekler, "Sert, CIAM, and the GSD," 2004, 86-93, slightly altered and republished in Sekler, "Sert, CIAM, and the GSD," 2008, 16. Both in memoirs and interviews, Sekler repeatedly stressed that he was never Giedion's assistant.
- 232 Sekler, "Sert, CIAM, and the GSD," 2008, 16.
- 233 Sigfried Giedion, letter to Josép Lluís Sert, November 22, 1963, LOE, Josep Lluís Sert Collection, Folder E8.
- 234 Jaqueline Tyrwhitt, letter to Sigfried Giedion, Christmas Eve, 1958, RIBA TYJ/54/7: "Of course, Sekler would be very happy to take over, and I don't think Sert would become radically changed: much more systematic, far less inspirational!" See also Josep Lluís Sert, letter to Sigfried Giedion, January 22, 1964, LOE, Josep Lluís Sert Collection, Folder E9: "I would like to say once and for all that your feeling that you are an 'intruder' in this visit to Harvard is absolute nonsense. You are more than welcome by Faculty and students, and we only regret that you insist on calling this visit your last one to the School. Your obsession with Sekler's attitude in this matter is, I believe, totally unfounded. I have spoken to Edward [sic] several times, and he has been very reasonable. This is not my opinion only, but it is also Jaqueline's."
- 235 Correspondence suggests that Giedion was mostly traveling by boat. Until the early 1960s, when Swissair acquired Douglas DC-7C aircraft that allowed for a nonstop flight between Zurich and New York, transatlantic flights took around twenty hours, with stopovers in Shannon (Ireland) and Stephenville (Newfoundland).
- 236 Sigfried Giedion, letter to Cornelius van Eesteren, April 19, 1939, GTA 42-K-1939 Giedion/Eesteren: "Hier ist alles vom Nachwuchs zu erhoffen und da Harvard in Amerika ein wenig die Stelle bedeutet, die später von andern imitiert wird, so ist das Training, das wir hier den Studenten geben in einem weiteren Sinn auch für die Bewegung wichtig ..."
- 237 Marshall, "Josep Lluís Sert's Urban Design Legacy," 133.
- 238 Tyrwhitt, "Urban Planning Training in South East Asia," 483-87.
- 239 Huson Jackson (1913-2006) was an architect, Harvard professor, and from 1958, Sert's office partner; Charles Eliot (1899-1993) was a landscape architect and Harvard professor; William Goodman (1919-1995) was an urban planner.
- 240 Marshall, "Josep Lluís Sert's Urban Design Legacy," 134.
- 241 *Ibid.*
- 242 Graduate School of Design, "Urban Design," 97-112.
- 243 Sert, "Centres of Community Life," 4.
- 244 Sigfried Giedion, letter to John E. Burchard, August 5, 1949, GTA 43-K-1949-08-05(G).
- 245 William Muschenheim (1902-1989) was an American architect trained in the United States and Europe, and a member of the American CIAM chapter from its inception.
- 246 For a detailed account about the conference, see Marshall, "Josep Lluís Sert's Urban Design Legacy," 134-36.
- 247 Jacob Bakema (1914-1981) was an architect and member of the Dutch CIAM delegation; Jerzy Soltan (1913-2005) was a Latvian-born architect and Harvard professor; Shadrach Woods (1923-1973) was an American architect and urban planner.
- 248 Constantinos Apostolos Doxiadis (1913-1975) was a Greek architect and town planner, and founder of the Ekistics movement; Fumihiko Maki (b. 1928) is a Japanese architect, who graduated from the GSD in 1954; François (Frank) Vigier (b. 1931) is a professor of regional planning emeritus at Harvard.
- 249 Sigfried Giedion, letter to Josep Lluís Sert, November 21, 1950, LOE, CIAM Collection, Folder C7.
- 250 Giedion, *Eternal Present*, 1962, xviii. See also: Geiser, "From Constancy to Change," forthcoming.
- 251 Ockman, "Toward a Theory of Normative Architecture," 122-52; Martin, *Organizational Complex*.
- 252 Walter Gropius's approach to architecture shifted from "totality" to "team." He saw the architect's role as a "servant to the democratic state," as Joan Ockman has pointed out in Ockman, "Toward a Theory of Normative Architecture," 125; see also "Architect—Servant or Leader?" and "The Architect within Our Industrial Society," in Gropius, *Scope of Total Architecture*, 76-98.
- 253 Giedion, *Constancy, Change and Architecture*.
- 254 Giedion, *Constancy, Change and Architecture*, 4. A very similar attack was also published in a section of the introduction to the 1965 edition of *Space, Time and Architecture* under the title "Architecture in the 1960s: Hopes and Fears."
- 255 Sigfried Giedion, letter to Lewis Mumford, March 24, 1948, GTA 43-K-1948-03-24 (G): "... am deeply worried about the present cultural situation. Those trying to defend human and emotional needs, like you and me, find themselves today, as we all experience it, between hammer and anvil."
- 256 Lewis Mumford, letter to Sigfried Giedion, June 14, 1962, GTA 43-K-1962-06-14.
- 257 See also Frampton, *Modern Architecture*, 224.
- 258 Sigfried Giedion, "Prehistoric and Contemporary Means of Artistic Expression," typescript of a paper presented at the 3. Internationaler Kongress für Vor- und Frühgeschichte, 1950, GTA 43-S-6-4 (M 1).

- 259 Giedion, *Eternal Present*, 1962, xviii.
- 260 "Constancy of Change"—an adaptation of Giedion's "Constancy and Change"—is the subtitle of a book of essays on Philip Johnson by Emmanuel Petit and Robert A. M. Stern. For Giedion, the human organism is regarded as constant, with narrow limits of tolerance and with contact to the earth. The relationship between man and his environment, on the other hand, is subject to continual and restless change. See Giedion, *Eternal Present*, 1962, Introduction.
- 261 Rykwert, "Giedion: The Discovery of Space," 463–66.
- 262 Reyner Banham's review of Giedion's *Architecture and the Phenomena of Transition* (1971) was entitled "A & PhoT: Big Sig in the Roman Underground." See Banham, "A & PhoT," 350.
- 263 "Wer ein Evangelium für die Gegenwart schreibt, wird wohl auch das Alte Testament einschliesslich der Schöpfungsgeschichte neu schreiben wollen ..." Adolf Max Vogt in a conversation at the Institute for the History and Theory of Architecture (gta) at the ETH Zürich, as quoted in Hofer and Stucky, *Hommage à Giedion*, 177.
- 264 Giedion, "Malerei und Architektur," 38–39: "Wir haben wieder die Beziehung zwischen den verschiedenen Gebieten der Wissenschaft und Kunst herzustellen, d. h. wir haben gefühlsmässig die Resultate der Wissenschaft und Kunst zu absorbieren. ... Die Parallelität von Denken und Gefühl ist das Zeichen für eine universale Auffassung der Welt. Die Renaissance besass sie, der Barock besass sie, und wir müssen sie mit den uns eigenen Mitteln wieder erobern."
- 265 Worringer, *Abstraktion und Einführung*; Einstein, *Negerplastik*; on the work of Carl Einstein, see Fleckner, *Carl Einstein*, 69–83; on the discourse revolving around African sculpture, see Itten, "Afrikanische Kunst," 17–18.
- 266 Giedion-Welcker, *Moderne Plastik*, 17: "[Es] besteht ein auffallender Zusammenklang von moderner Kunst und allem Primitiven, Archaischen und Prähistorischen. Es handelt sich dabei nicht um eine geschmackliche oder romantische Annäherung an das 'Barbarische,' an das zeitlich oder räumlich Ferne und Fremde. Die innere Anknüpfung entsteht durch den gemeinsamen Ausgangspunkt einer literarisch unbelasteten Formbildung, eines klaren Aufbaus, einer einfachen Transformation."
- 267 Giedion, "Malerei und Architektur," 36: "Durch das Nadelöhr der modernen Kunst."
- 268 Giedion launched his seminars at MIT in the early 1950s by referring to Cassirer's *Essay on Man*. Cassirer, *Philosophie der symbolischen Formen*; see, for example, Giedion, *Eternal Present*, 1962, 82–85.
- 269 Sigfried Giedion, letter to Alexander von Muralt, Schweizerischer Nationalfonds zur Förderung der Wissenschaftlichen Forschung, May 8, 1954, GTA 43-K-1954-05-08(G); and the negative response: P. Sutermeister, letter to Sigfried Giedion, June 3, 1954, 43-K-1954-06-03.
- 270 Sigfried Giedion, letter to Josep Lluis Sert, November 21, 1950, LOE, CIAM Collection, Folder C7.
- 271 Sigfried Giedion, letter to Rockefeller Foundation, November 6, 1951, GTA 43-K-1951-11-06(G); 2; Sigfried Giedion, letter to Edward F. D'Arms (associate director Rockefeller Foundation), February 18, 1952, GTA 43-K-1952-02-18(G).
- 272 Sigfried Giedion, letter to Philip Vaudrin, January 18, 1952, GTA 43-K-1952-01-18.
- 273 Jacques Maritain (1882–1973) was a French philosopher influential in the development of the Universal Declaration of Human Rights; Ernst Gombrich (1909–2001) was an Austrian-born art historian and director of the Warburg Institute in London.
- 274 The publication of the Bollingen Series was inaugurated in 1943 as a program of the Old Dominion Foundation, which Paul Mellon had founded in 1941. In 1945, the Bollingen Foundation was formed as a separate entity, not only as the vehicle for the publication of the Bollingen Series but also as a source of funds for fellowships, subventions, and institutional contributions in a variety of humanistic and scientific fields. Major grants were made particularly in the fields of poetry, archaeology, and psychology. The Bollingen enterprise, named for the small village in Switzerland where Carl Jung, the founder of analytical psychology, had a private rural retreat, was established jointly by Paul Mellon and his first wife, Mary Conover Mellon. Their initial motive was to assure a wider audience in the English-speaking world for Jung's scientific works.
- 275 McGuire, *Bollingen*, 269. Giedion had to negotiate hard in order to get thirty-two color plates, as correspondence with Hugo Herdeg's assistant Achille Weider indicates. Sigfried Giedion, letter to Achille B. Weider, March 1, 1958, GTA 43-K-1958-03-01(G).
- 276 McGuire, *Bollingen*, 220.
- 277 Sigfried Giedion, letter to Rockefeller Foundation, November 6, 1951, GTA 43-K-1951-11-06(G); 2.
- 278 Sigfried Giedion, letter to Edward F. D'Arms, February 18, 1952, GTA 43-K-1952-02-18(G). In this letter to Edward F. D'Arms, Giedion indicates that his new book would be shorter, approximately 350 pages. The two published volumes of *The Eternal Present* each contain over 500 pages.
- 279 Hans Pallmann (president of the board of the ETH), letter to John Marshall (director, Rockefeller Foundation), asking for the wiring of the second half of the grant money, November 12, 1953, GTA 43-K(DD)-1953-11-12.
- 280 Sigfried Giedion, letter to John Wilson (Oriental Institute, University of Chicago), January 5, 1954, GTA 43-K-1954-01-05(G): "I am traveling with the aid of a Rockefeller Grant for a study "On the Continuity of Human Experience."
- 281 Sigfried Giedion, letter to Walter Gropius, January 14, 1954, GTA 43-K-1954-01-14(G).
- 282 Sigfried Giedion, letter to Dr. Najib el-Asil (president of the Iraqi Academy), January 14, 1954, GTA 43-K-1954-01-14(G); Sigfried Giedion, letter to Mustafa Amer (director general of the Department of Egyptian Archaeology, Cairo), January 11, 1954, GTA 43-K-1954-01-11.
- 283 John Marshall, letter to Sigfried Giedion, December 29, 1953, GTA 43-K(DD)-1953-12-29; Edward F. D'Arms, letter to Sigfried Giedion, January 14, 1954, GTA 43-K-1954-01-14; John Marshall, letter to Sigfried Giedion, August 12, 1964, GTA-43-K-1964-08-12: "I well remember a general talk we had about your projected visits to Egypt and Iraq, and I might have been able to give you the names of some there who could be helpful. I am glad indeed if this did 'open some doors' for you."
- 284 In 1950 the foundation mounted a major program for virus research, establishing field laboratories, one of them in Cairo. The foundation also had strong ties to local governments as a result of its agricultural research and aid programs.
- 285 John Marshall, letter to Sigfried Giedion regarding Giedion's visit to Egypt and Iraq, December 29, 1953, GTA 43-K(D)-1953-12-29.
- 286 See, for example, Stonor Saunders, *Who Paid the Piper?*; Price, "Buying a Piece of Anthropology," 8–13; Diamond, *Compromised Campus*. The CIA was founded in 1947 to collect and analyze strategic information. See "History of the CIA," CIA, <https://www.cia.gov/legacy/cia-history/> (accessed April 17, 2024).
- 287 Diamond, *Compromised Campus*, 134–35.
- 288 Ibid. 109; Price, "Anthropologists as Spies."
- 289 Edmund Carpenter, interview by Reto Geiser, February 28, 2006, New York; see also Carpenter, "That Not-So-Silent Sea," 250.
- 290 Sigfried Giedion, letter to Edward F. D'Arms, June 3, 1954, GTA 43-K-1954-06-03(G); 2.
- 291 Laurance P. Roberts (1907–2002) was an art historian and first director of the State Council of the Arts, New York.
- 292 Lyndon, "Architetti alla Accademia Americana di Roma," 140; Johnson: "Sketching Abroad," 129; Stierli, "In the Academy's Garden," 42–63.
- 293 Richard Kimball (1900–1997) served as director of the American Academy in Rome from 1960 to 1965.
- 294 Sigfried Giedion, letter to Louis I. Kahn, American Academy in Rome, February 12, 1951, GTA 43-K-1951-02-12(G); 2; Sigfried Giedion, letter to James Ackerman (1919–2016), American Academy in Rome (AAR), March 2, 1951, GTA 43-K-1951-03-02(G); 2; This chapter on Rome was added in the third enlarged edition of *Space, Time and Architecture*, published in 1954.
- 295 Invitation card from the director of the AAR, GTA 43-T-10 (S. 12). On May 5, 1965, for example, Giedion lectured on "Contemporary Architecture and the Vocation of the Architect."
- 296 Carola Giedion-Welcker, letter to Alvar Aalto, July 20, 1962, AAA 10920: "Pebbelstein versinkt wieder in Prähistorie und vergisst im Dunst der Bisons alle Architekturprobleme ..."
- 297 Sigfried Giedion, letter to Edward F. D'Arms, February 18, 1952, GTA 43-K-1952-02-18(G).
- 298 Sigfried Giedion, letter to Rudolph C. von Ripper (Officer of Office of Strategic Services [OSS]), November 6, 1951, GTA 43-K-1951-11-06(G): "An der Beilage der Photo der Venus von Laussel mag klar werden, dass es heute ein modernes Auge braucht, um die künstlerischen Werte überhaupt herauszuschälen. ... Die Abbildungen des Abbé Breuil, die durch alle Kunstgeschichten gehen, sind zwar ansprechende japanische Holzschnitte, haben aber mit der Urnatur der Gebilde nichts zu tun und verfälschen ihren Ausdruck total."
- 299 Sigfried Giedion, letter to Edward F. D'Arms, February 18, 1952,

GTA 43-K-1952-02-18(G): "But the whole method of my research is on the optical side. I have to see and to understand the whole environment and to give account of it as much as possible to the reader by means of photographs."

300 Sigfried Giedion, notes for a review of Georges Bataille's *Lascaux ou la naissance de l'art*, published by Albert Skira, GTA 43-T-10 (S.13).

301 Giedion, "Space Conceptions in Prehistoric Art," 38.

302 Sigfried Giedion, "3e Congrès International des Sciences Préhistoriques et Protohistoriques," typescript, August 19, 1950, GTA 43-S-6-4 (M1); Giedion, "Prehistoric and Contemporary Means of Artistic Expression," 85.

303 On Hugo Herdeg, see Nievergelt, "Zwischen sachlicher Dokumentation und Kunst," 69.

304 Edmund Carpenter, interview by Reto Geiser, February 28, 2006, New York; Carl Schuster, letter to Sigfried Giedion, April 22, 1958, MKB (Nachlass Carl Schuster). Thirteen letters between Giedion and Edmund Snow Carpenter document the exchange between the art historian and the anthropologist; GTA 43-K-1960-01-16(G):3, GTA 43-K. Additionally, many discussions must have taken place at the University of Toronto and at Harvard University, none of which are documented.

305 Sigfried Giedion, letter to Edmund Carpenter, January 16, 1960, GTA 43-K-1960-01-16(G):3.

306 Giedion, *Eternal Present*, 1962, viii.

307 CIAM IV (Athens, 1933) was held aboard the SS *Patris II* on a cruise through the Mediterranean.

308 Margaret Mead (1901-1978) was a cultural anthropologist; Edmund N. Bacon (1910-2005) was an urban planner; Conrad Hal Waddington (1905-1975) was a British biologist, paleontologist, geneticist, and philosopher.

309 Sigfried Giedion, as quoted in the minutes of the 1963 Delos Symposium, recorded by Jaqueline Tyrwhitt, "Ninth Meeting—July 12, 1963," 254.

In Between

Disciplines

Transgressing
Boundaries

“All ages are contemporaneous.”¹—Ezra Pound

Steps toward
a Contemporary
History

- 5.01 On his quest to root modern architecture in a larger cultural whole and to overcome the “split between thinking and emotion,” Sigfried Giedion gradually broke through the boundaries of his primary discipline, exploring such fields as scientific management, economics, philosophy, and sociology. He observed with consternation that during the nineteenth century, history had become “arranged in specialized compartments” to the point where historians engaged exclusively in the “major events of the past,” neglecting the less obvious developments related to the “origins of everyday life.”² His studies focused on the development of the kitchen or the role of the bath convinced him that it was necessary to conduct “research into the origins of everyday life, and ... the origins of our modern life” in order to “throw light on the genesis of our age.”³ According to Giedion, art provided a model to express what was going on “in the subconscious of man in the ever changing equilibrium within the human soul.”⁴
- Echoing the ideas that infused Picasso and Braque’s Cubist still lifes, Marcel Duchamp’s famous readymades such as *Roue de Bicyclette* (1913), *Porte-Bouteilles* (1914), and *Fountain* (1917), and even Le Corbusier’s journal *L’Esprit Nouveau*, which combined new architectural concepts with advertisements from the manufacturing industry, the art historian stressed the cultural interdependence of science, industry, and the arts.⁵

Modern painters have shown us through their art what an uncanny power, an uncanny influence is exercised by the things of every-day usage, which are again symbols of our customs. The modern painter has been capable of giving a picture of our modern conception of the world with some of these fragments; with bottles, pipes, cards, pieces of wallpaper, painted veins on wood, with fragments from the plaster decorations of a café.⁶

This breaking of disciplinary boundaries characterized Giedion’s work in academia. As early as 1934, he proposed establishing a chair for “Contemporary History and Research” at the ETH (Swiss Federal Institute of Technology), with the aim of drawing attention to multi-disciplinary research and teaching. This approach was inherent in his own work, but not yet widely acknowledged at most universities. Trained in both mechanical engineering and art history, and in close contact with colleagues such as László Moholy-Nagy and El Lissitzky,

Universalität und Spezialisieren

Einstellung und Aufgabe

Jeder Disziplin ihre Freiheit, aber so kompliziert
 sie auch sein mag. Es liegen verhältnissmäßig einfache Eingebungen
 zugrunde, die jeder, und auch herrliche Erleuchtung zugestehen kann.

- Die universelle Einstellung um 1800.
- Die Technik treibt uns Spezialisieren.
- Die Vernachlässigung des Menschen.
- Die Fortschritt des unigen Gleichgewichtis
- Die Fortschritt des Totalismus.

So aber Der Sinn eines
 Kulturs muss für jeden
 erfassbar sein
 man braucht kein Flug-
 ker zu sein, damit
 das Radio, T.S.F.
 Franklin, Röntgen
 Strahlen, co-mplex
 Strahlen, nicht isolieren
 und leichtes durch den
 Kopf fahren, als isolier-
 te Phänomene, diese
 Zusammenhang.

Man braucht nicht Malen und
 die Verbindung herbeizuführen. ^{darüber zu sein, um}
 diese v

Spezialisieren:

Verfolgung spezieller Ziele, bestimmten Aufgaben als
 Endzweck
 Keine Fühlung mit den Nachbar Disziplin
 Selbstüberheblichkeit als Folge des Spezialisieren
 Weg zum Universalismus - ein nicht denkbar, der alles in der
 umherfliegt einem Mann, der alles in der
 Suche nach dem blüht. Der Modultypus mal
 eine Spätere. Der Platoniker steht über dem
 Charakter, der Chemiker über dem
 ein Platoniker

Methoden gleiche

Jeder von uns muss fragmentieren
 zur Sicherheit. Der Architekt denkt
 der Künstler aus der einen Disziplin
 der Künstler aus der anderen nicht.

lehrt uns ein Descartes, der Richtlinien legt in ^{und was be-}
 die Methoden zusammen zu bringen, um ^{sonders auf}
 auffällt
 auch
 wenn
 gleiche
 Metho-

who were blurring the edges of their fields while teaching at the Bauhaus, Giedion criticized the absence of “inner contact” or exchange between the various disciplines. Prompted by this concern, he had been collecting materials related to the idea of interdisciplinary studies and anonymous history—a collective understanding of the everyday rather than a history focused on exceptional, individual creators—since the early 1930s. He saw the study of “contemporary history,” which was for most historians an oxymoron, as the way to provide the emerging generation of architects and designers with necessary insight into the complex relations of the “modern world” surrounding them.⁷

Giedion suggested that only a technical university could take on this challenge, given that most departments in the humanities—particularly art history in Europe—were organized according to an established academic order that did not leave much room for such endeavors. While Giedion’s proposals corresponded exactly to his general interests and approach, his shift following the completion of his dissertation from the endowed notion of art history to the contemporary architectural debate did not especially facilitate his academic career. While at first happy to work independently on mostly self-initiated projects, and to relentlessly promote modern architecture as the secretary-general of CIAM, Giedion eventually longed for an academic affiliation, which would allow him access to decent funding, a paycheck, and proper recognition. Aware of the immovable protocol characterizing art history faculties, Giedion specifically geared his proposals toward architectural students, who—according to him—were in need of gaining deeper insight into the humanities, natural sciences, art history, and the history of technology in order to meaningfully engage in contemporary architectural practice.

Clearly, the time was not ripe for such endeavors. While the ETH expressed general interest at the administrative level, it was impossible to introduce these methodologies into the existing framework of the curriculum and to the rather narrow-minded faculties. In addition, Giedion’s proposals were at least in part somewhat obscure and received little approval.⁸ His appointment to Harvard University in the fall of 1938 raised Giedion’s hopes of reengaging in the discourse on contemporary history. Both Walter Gropius, the chair of Harvard University’s Graduate School of Design (GSD), and László Moholy-Nagy indicated that American academicians, especially Harvard’s president, James B. Conant, were open to new approaches and suggested to their friend that he draft a proposal for the GSD. Disheartened by resistance to his project in Switzerland, Giedion transformed his antagonistic approach into an optimistic yet modest delineation of his intentions. Realizing that the establishment of his own institute was perhaps an unrealistic goal, Giedion stressed in various letters to Gropius that he envisioned his contribution

at Harvard as a seminar entitled “Exercises on Historical Method and Contemporary History,” in which he would discuss the possibility of “breach[ing] the borders between faculties,” of overcoming specialization and bringing about a universalism capable of resolving details in relation to a larger whole.⁹ When Giedion had taught as the Charles Eliot Norton Lecturer in Poetry, he was involved in seminars at the GSD and lectured at Harvard’s Fogg Museum. He soon found like-minded individuals, young scholars as well as such luminaries as Alfred North Whitehead, with whom he discussed “the relation between the methods of art and the methods of science.”¹⁰ His own institute, however, remained for the moment a visionary idea on a slip of paper. President Conant aspired to overcome the division between individual faculties by introducing so-called university professors, who would be independent of any particular department and form project-based interdisciplinary teams.¹¹ Despite this effort, it seemed practically impossible to establish an independent institute with at least one full-time faculty member and various researchers in light of the fact that the United States, even with Roosevelt’s New Deal, was still recovering from the Great Depression.¹² Resources were limited, and with the outbreak of the Second World War most funding flowed into technological research directly related to warfare—James B. Conant himself served as chairman of the National Defense Research Committee, which was formed to “supplement the activities of the Army and Navy in the development of instruments of war.”¹³ After the United States entered the war in December 1941, transatlantic travel became gradually more difficult and immigration policies more restricted.¹⁴ While trade was kept up as much as possible, intellectual exchange was curtailed. Younger faculty members and a large number of students had to abandon their university studies to join the war effort. Women, who were for the first time being admitted to Harvard’s GSD, did fill some of the spots, but general enrollment at universities declined, and open faculty positions frequently went to American citizens.¹⁵ The cultural and educational climate in the United States became unhealthier, as László Moholy-Nagy discovered in the struggle to keep his privately funded design school running:

Not in order to console you but to give you an idea of what is going on in this country I believe that people are completely undecided what should or should not be done This is also why I believe that a new Institute for Contemporary History and Research could not be set up easily. People are only interested in the utmost necessities. The keynote of [Frederick] Keppel’s [president of the Carnegie Corporation] report the other day to the Carnegie Corporation was that there are too many universities and colleges and suchlike enterprises to be carried by the American public. ... Of course I do not mean that you should give up the idea

Dear Hudson, since years I have the plan as it is roughly outlined, in the enclosed pages.

I know that the Time is not favourable for any plan.

Nevertheless I want to go ahead. This should be done in such a way that the research I am doing now leads me automatically to get in touch with persons, who may be perhaps interested, by the one or the other reason in the project.

The next step is, to go to Philadelphia (Newcomen-Society) Washington and Pittsburgh.

What I would appreciate very much is to have some advice, if possible, how to proceed.

You know, by your experience, who could be interested into our way of thinking.

I am working next week, - till Thursday -, at the Widener. Perhaps we could speak once together. I would like very much to show you some Material of my family Archive.

The idea of the whole Research would be:
To save essential material of contemporary history (since the begin of modern ^{their research} socialization).
To educate historians, so that they become again an active part, an active help for architects, economists etc.

What Rostovtzeff accomplished for the
education of archeologists, Fausillon
for the medieval period, I would like
to try for contemporary history.

Excuse me to embarrass you.
But I think, you have the best experience
and insight.

Sincerely

Gi'ozan'

Lincoln, 21/Nov./ 41.

of your beloved Institute or believe that it is a lost cause, but I think such matters can only be handled personally when the moment is favorable.¹⁶

The challenging situation, however, did not discourage Giedion. On the contrary, he was confident that it was an utmost necessity to “prepare an outline of later developments in a time of war,” just as “the soldier has to prepare the means of defense in peace times. ... The experience of the past twenty years has shown us what it means to enter a period of peace without a plan and without knowing what has to be accomplished.”¹⁷

5.02–5.03
Siegfried Giedion,
letter to
Joseph Hudnut,
November 21, 1941,
asking for Hudnut’s
support in the cre-
ation of an “Institute
for Contemporary
History.”

Giedion returned to his family in Switzerland in 1940 and stayed until his appointment to Yale University in the fall of 1941. The vacuum created by the war allowed him time to refine and extend the outlines for his institute that would explore the multifaceted relations between various disciplines. However, despite his detailed description, a budget, and ideas for funding, it was clear that this endeavor would not get off the ground in war-torn Europe in the near future.¹⁸ During this time of seclusion, the secretary-general of the slumbering CIAM efficiently used his personal network to disseminate ideas from his temporary retreat in Château-d’Œx, a safe location in the Swiss Alps with multiple escape routes in the event of a German occupation. In the many letters that Giedion wrote to his colleagues—mostly those who had emigrated to the United States—during this time, he repeatedly mentioned his idea for an Institute for Contemporary History and Research and his determination to make it happen, even if “the time [was] not favorable for any plan.”¹⁹

While the responses of his friends were generally enthusiastic and supportive, the reactions of the policy makers were more measured. Once again, Giedion’s position in between the European and American cultural spheres became a dilemma. Without a permanent faculty position, it was practically impossible for him to find the necessary support or to seek institutional funding. It was not feasible to go back to the United States without a formal offer from an academic institution. Giedion had burned bridges when he left in 1938, and it was out of the question that he would obtain a permanent position in Switzerland, given the country’s state of stagnancy and extreme national retrenchment. In a letter to Le Corbusier, Giedion expressed his feelings about Switzerland after returning from America:

Since I returned from America, I have begun to understand what you once said, that you feel strangled whenever you pass the Swiss border. The country is beautiful as always, there are even interesting personalities, but everyone lives isolated from one another. Since my return, I feel like an exile, because the official spirit is opposed to that of our friends. The reaction in architecture is palpable.²⁰

Aware of this delicate situation and his “weakness in dealing with people”—particularly those who did not share his ideas—Giedion shifted his time and efforts into the development of the institute, hoping to obtain a more stable teaching position in the United States.²¹

With the publication of *Space, Time and Architecture* finally in sight, Giedion began to develop plans for a lecture tour of the United States. He intended to use the publicity of his latest book, which he would briefly present in his talks, to familiarize a larger public with the idea of his Institute for Contemporary History and Research. This public exposure, he hoped, would bring him in touch with powerful representatives from the manufacturing industries, to garner financial support for his project.²² As he had done before, he hoped to emphasize to industrialists the necessity of incorporating the institute into an existing school such as Yale or the University of Chicago, to connect it with “a chair and lectures, so that all the unknown things which form our period could be brought into consciousness of the young generation.”²³ When Giedion was eventually invited to the Yale School of Fine Arts to deliver the 1941 Trowbridge Lectures, he did not pass up the opportunity to elaborate on “Lines of Research into Contemporary History.”²⁴

A constant aspect of Giedion’s work—and also one of the Swiss historian’s greatest strengths—was his ongoing attempt to integrate a comprehensive “human point of view” across disciplines, from the overarching principles to the smallest details. As he described in a speech at the Swiss Consulate in New York, Giedion saw in this paradigmatic model the only way to solve the problems of the time.²⁵ For him, the interrelations of a “new tradition in architecture” with other human activities and the similarities of the methods applied in architecture, art, and science, were the key principles for analyzing and understanding the current state of contemporary culture.²⁶ In the course of his ongoing denunciation of the nineteenth century, he argued that it was the “split between thinking and emotion,” which resulted in the “uneven development” and “maladjustment” of contemporary man, that was responsible for the divergence of a variety of disciplines, creating the “outstanding personality of [the] time—the specialist.”²⁷ According to Giedion, the specialist appeared in all fields of human knowledge. The art historian acknowledged that specialization was necessary for scientific progress, yet he was convinced that the character of the specialist needed to be refined. Giedion believed that the expert’s work had to be supported with a broader basis of knowledge, so that it could focus on intricate details while retaining a general overview. “[The specialist] must have at his disposal both the microscope and the aerial photograph,” he must obtain the “bird’s-eye view,” and at the same time he must examine certain isolated events intensely, “penetrating and exploring them in the manner of a close-up.”²⁸ In order to avoid the isolation of different

branches of learning as individual phenomena, Giedion asked specialists to “become aware of the proportionate relationship existing between [their own] confined field of investigation and the whole.”²⁹ Aiming to close the gap between various areas of knowledge, he advocated the acquisition of “a general view of the dominant methods in different fields of human activity, recognizing their differences and their likenesses.”³⁰

Giedion’s interest in scientific methods was motivated primarily by one major goal: the creation of a common vocabulary for all disciplines. Concerned that contemporary civilization had forfeited a “common language” which would allow diverse branches of art and science to coalesce, he declared that the scientific method could bridge the deepening gap between individual fields.³¹ While extreme differentiation had segmented science and mutual understanding among various disciplines, Giedion was convinced that the guiding principles, the *modus operandi*, and particularly the methods applied in each domain were comparable. The “Identity of Methods,” he hoped, would form a common denominator for all disciplines, helping to create an enhanced consciousness of the existing mutual elements of the present culture.³² Along the lines of his early writings, Giedion stressed the “unconscious parallelism of methods employed in art and science”³³ and called for a restoration of the “lost equilibrium between feeling and thinking, an external world which has gone wild, and the basic nature of man.”³⁴

Giedion considered this reconstituted correlation between “thinking” and “feeling”—or, in other words, the balance between scientific method and artistic practice—a fundamental step toward “universality.” He wanted a “healing process” to take place between the sciences and the arts, as they define the most extreme ends of the spectrum. In Giedion’s view, the interrelation of the different branches of human knowledge—especially the relationship of “highly developed sciences,” art, and the humanities—formed the fundamental basis for establishing a “new culture,” and for creating “order in [one’s] own field.”³⁵ As Giedion wrote in a letter to his colleague Le Corbusier, he considered universality the basis of the future epoch.³⁶ Accordingly, the “new type of specialist,” an ideal protagonist of the future, was tasked with overcoming specialization and solving singular problems with regard to the larger whole.³⁷

The underlying principles of his quest for multidisciplinary did not constitute a shift in Giedion’s approach, but were ingrained in the agenda of the modern movement. The desire for unity, common to a large number of exponents of Giedion’s generation, was based on a sociocultural fragmentation that originated in the aftermath of the First World War and the dispersal of general scientific knowledge into a variety of segregated areas of expertise at the turn of the century. Topics like “universality” and “synthesis” were major con-

cerns in the discourse on modern architecture long before its transplantation to America. The very expression “contemporary history” indicates an amalgamation of the past with the future and a desire to treat material and emotional needs holistically.

The understanding of inventions, technologies, and forms of organization as well as their repercussions for “modern life,” the “modern type of civilization,” and related forms of art were a central focus of the discussions among the proponents of the modern movement.³⁸ Giedion’s position consolidated various voices within his circle. As early as the mid-1920s, Giedion became aware of connections between sculpture, painting, and architecture through his engagement with the Bauhaus, which was systematically approaching the study of design in all fields. His conviction that the methods applied in modern architecture exhibited an “unconscious parallelism” between science and art was based on the refined 1923 Bauhaus program, which stressed that the interaction of art and technology was a constitutive element of functionalism.³⁹ On the other hand, one can clearly spot traces of Le Corbusier, who claimed that “the study of modern painting leads in a somewhat intangible way to the formation of a relevant modern taste in all the arts.”⁴⁰ Given that Gropius, Breuer, Le Corbusier, and Giedion were among the driving forces of the International Congresses of Modern Architecture (CIAM), it is not surprising that this interest in the “interrelations between contemporary art, architecture and techniques,” as Giedion described it in various lectures and writings, eventually also penetrated CIAM’s discourse.⁴¹

Consequently, at the first postwar CIAM congress in Bridgwater, England, in 1947, which was hosted by the British Modern Architectural Research (MARS) Group, Giedion stressed that architecture and urban planning no longer should be divorced from their “sister arts,” painting and sculpture. Giedion broached the issue of collaboration in an address to the members, a questionnaire he prepared with Max Bill, and even an exhibition proposal entitled “Toward a Re-union of Art, Architecture and Planning.”⁴² The dialogue, which eventually was continued at the seventh congress in Bergamo, Italy, involved such prominent critics and artists as James Johnson Sweeney, Giulio Carlo Argan, and Barbara Hepworth.⁴³ Despite the war and its effects on larger parts of society, many of the organization’s key concerns remained unchanged. The broader “investigation of modern life” included issues such as “teamwork and specialists,” “social developments,” and an examination of “symbolism,” which was closely related to Giedion, Sert, and Léger’s treatise on the New Monumentality.

Although Giedion promoted a shared vocabulary for all disciplines, he used the particular lexicon of CIAM and the European modern movement, implying that the language of “his” organization was univer-

sal. Not only did this attitude lead to confusion—such as the differing conceptions of the term “functionalism,” which was understood ideologically by Giedion and his peers, and interpreted through an economic lens by a majority of American designers and builders—but it also is certainly a reason why the proposed institute did not find broader acceptance outside of this exclusive group of people.

Chicago Initiatives:
Engaging with
John U. Nef,
Alexander Dorner,
and Deweyan
Pragmatism

Although Sigfried Giedion was one of the few intellectuals of his time to promote interdisciplinary work in Europe, in the United States alternative ideas and models were emerging beyond the tight circles of the architectural avant-garde. During an extensive lecture tour through the Midwest after his tenure at Yale University, Giedion met the Swiss economic historian John U. Nef at the University of Chicago in November 1942 in order to share his ideas about “Contemporary History.”⁴⁴ He was aware of Nef’s prewar study of coal mining, *The Rise of the British Coal Industry* (1932), which caught his attention while he was working on “Die Entstehung des heutigen Menschen.” Giedion was also interested in securing a personal contact in relation to his ongoing work on the impact of industrialization and mechanization on everyday life.⁴⁵ From this first encounter, the two historians realized that they had many interests in common and began to correspond on a regular basis.⁴⁶ Like Giedion and Lewis Mumford, Nef never regarded himself as a specialist. He had a strong affinity with the art world—painters like Paul Signac and Marc Chagall were among his friends—and was interested in a potential amalgamation of his own field, the humanities, with artistic creation. He envisioned an interdisciplinary department at the University of Chicago that would bring together scientists, humanists, and artists. Despite opposition from other faculty members, Nef managed to establish the Committee on Social Thought in collaboration with the economist Frank Knight, the anthropologist Robert Redfield, and the acting president of the University of Chicago, Robert M. Hutchins, in 1941.⁴⁷ The support of his closest colleagues and the head of the school, his tenured position at the university, and the investment of his own funds in the enterprise were pivotal preconditions for the success of Nef’s plan.

The committee was not organized according to one particular disciplinary focus as in a typical university department, but instead

consolidated experts from various disciplines to enable an intense intellectual exchange among scholars and graduate students. Nef's approach to "integral history" was very much based on learning from life experience, creating the "whole man" by combining the body, spirit, and emotions as well as the mind. At the time, Chicago was a center of the Pragmatist movement, and Nef was likely to have been exposed to the philosopher Charles W. Morris, who had been teaching at the University of Chicago in the late 1930s and eventually also figured among Moholy-Nagy's faculty at the New Bauhaus. Morris was advocating a "unity of science" and argued that "the integration and interpenetration of the characteristic human activities of the artist, the scientist, and technologist is a crying need of our time."⁴⁸ Similarly, Nef's thinking was influenced by John Dewey's theories and teaching on aesthetics, as laid out in *Experience and Nature* (1925) and *Art as Experience* (1934), in which Dewey, America's foremost educational modernizer, praised an organic integration of art and public life and, as he concisely outlined in *Experience and Education* (1938), identified experimentation as an essential requirement of education in both art and science. Following Dewey's belief that "much misunderstanding of aesthetics and the artistic process has resulted from paying almost exclusive attention to fine art," Nef was canny enough to balance the disciplines involved, and to anchor his studies in everyday experience rather than in a particular avant-garde perception.⁴⁹

It was probably through his correspondence with John U. Nef and contact with the Chicago Committee on Social Thought that Giedion became acquainted with John Dewey.⁵⁰ While there is no archival evidence of direct contact between Dewey and Giedion, the former is cited at length in *Space, Time and Architecture*. Giedion's strong interest in educational models indicates that he likely studied Dewey's writings. In addition, significant connections can be drawn between Dewey's "socio-biological" ideas to reform education and the Bauhaus pedagogy, particularly in its American iteration.⁵¹ Already in the 1930s and 1940s, American educators were justifying their interest in the German Bauhaus by means of Dewey's theories. The aspiration of Harvard's President Conant to introduce interdepartmental chairs, as well as GSD Dean Joseph Hudnut's formation of a "Harvard Bauhaus," engaging such key figures as Walter Gropius and Marcel Breuer, are only two examples in Giedion's immediate environment that indicate the impact of Pragmatist thought on the American academy. While Gropius assertively denied any connection of his Bauhaus to Dewey, emphasizing the fact that he only got to know the philosopher's work after his emigration,⁵² it was exactly this shift of cultural context that opened the possibility for various émigrés of the European avant-garde to adapt their "revolutionary, schismatic, [and] utopian" ideology to pragmatism, which was "evolutionary, organic,

[and] democratic.”⁵³ The reality of the American market forced many European artists, architects, and designers to conform their artistic attitudes to an integrative system of market-driven industrialism and an organic visual language.⁵⁴

Most prominent among the émigrés teaching at the Bauhaus, and also most influential for Giedion’s own work, was László Moholy-Nagy. Moholy’s New Bauhaus in Chicago was based on the educational principles presented in *Art as Experience*, depicting “science as the organ of social progress” and promoting “search instead of research”—an approach that was, according to Moholy’s wife, Sibyl Moholy-Nagy, “straight Bauhaus theory.”⁵⁵ Similar to Dewey’s theories emphasizing the interaction of the human being and the environment via experiences, the pedagogical work at the New Bauhaus aimed for a harmonious integration of nature, industry, man, and society. Moholy-Nagy arrived at the shores of Lake Michigan in the summer of 1937.⁵⁶ After a nine-year break from teaching—in Amsterdam and London, where he worked as a freelancer, testing out a theoretical stance in practice—the versatile artist was asked to establish a design school “on Bauhaus lines.”⁵⁷ The enterprise was initiated by the Association of Arts and Industries and funded by local industrialists around Walter P. Paepcke, a philanthropist and head of the Container Corporation of America, who hoped to “improve the design quality of goods manufactured in the Chicago region.”⁵⁸

5.04
Students in front of
the New Bauhaus
at its first location,
the Marshall Field
Mansion on Prairie
Avenue in Chicago,
ca. 1938.

As correspondence with his wife, Sibyl, suggests, Moholy-Nagy had to come up with a full four-year program for the school within only a few weeks. As he envisioned it, the institution was not to be an “elitist art school,” but would be geared toward the training of what Moholy-Nagy called “art engineers.”⁵⁹ The intention to contribute practical solutions to problems in industry was likely to have been particularly attractive to the sponsors of the institute at the beginning, but eventually proved difficult to follow through on, as the institute’s lack of hierarchy between students and faculty did not find resonance in corporate culture. Despite the attendance of more than eight hundred interested people at Moholy-Nagy’s public presentation unveiling the school he named “The New Bauhaus,” the institute, which was housed in the Marshall Field Mansion on Prairie Avenue, closed down less than a year later due to “a very bad general business depression,” according to the president of the association.⁶⁰

The problem, however, was not only of a financial nature but also related to personal and cultural issues. Whether the choice of name was fortunate or not can be debated: on the one hand, the use of a German denomination was certainly problematic, considering the geopolitical situation—Sibyl Moholy-Nagy indicated her reservations about the name for such reasons, even before it was officially presented;⁶¹ cultural circles in the United States, especially those closely related to the Museum of Modern Art, which positioned the



5.04

school as a phenomenon of the past, did not easily accept the idea of an “American Bauhaus.”⁶² On the other hand, it seems that the Association of Arts and Industries quickly adopted the name and even wanted to keep using it after the group’s disassociation from Moholy-Nagy’s school.⁶³ Apart from the name, another challenge was that the faculty predominantly consisted of European immigrants, and that the curriculum was a variation of the old *Vorkurs* (foundational course), strategically adapted to please the funders.⁶⁴ As enrollment shows, there were difficulties attracting the American middle class to engage in this Eurocentric educational program. That Moholy-Nagy was simultaneously courting the corporate world to finance his project while sympathizing with European socialist thought did not improve his case either.⁶⁵

Giedion only entered the scene during the second iteration and location of Moholy-Nagy’s school. Now simply named “School of Design,” it included the same faculty as the previous version and a small student body with their design studios set up in a large loft on East Ontario Street. At the beginning, Moholy-Nagy financed the basic costs to run the school from his own savings.⁶⁶ His colleagues agreed to teach without a salary for the first semester. The minimal budget, however, did not affect the quality of the institute’s offerings. Thanks to Moholy-Nagy’s well-established personal network, fellow émigrés and friendly American artists, architects, and intellectuals, including Fernand Léger, Man Ray, Richard Neutra, Walter Gropius, Charles Eames, and S. I. Hayakawa, were invited to contribute to workshops, reviews, and the lecture series. Giedion also contributed to these activities, presenting various papers on the occasions of his frequent visits. This was probably the happiest time at the school, as the program was shaped without concessions to private donors, and the group was working with a common goal in mind.

For the School of Design, Moholy-Nagy created the “sponsors committee” together with such well-known figures as Alfred Barr, the publisher W. W. Norton, Joseph Hudnut, the biologist Julian Huxley, and Walter Gropius. Among those who unconditionally supported Moholy-Nagy as a pedagogue was Walter P. Paepcke, who proved to be the most powerful, wealthy, and vital supporter of the School of Design. Shortly after Moholy’s split from the Association of Arts and Industries, the industrialist offered a vacant farm at Somonauk, Illinois, for the establishment of a summer school to attract students during that period of the year.⁶⁷

With the United States’ entry into the Second World War, the school entered a phase of bare survival, as enrollments decreased and private funding almost came to a halt. In order to reduce the vulnerability of the school in a time of crisis—many cultural institutions were seen as an unaffordable luxury—Moholy-Nagy began to engage in projects related to the American war effort.⁶⁸ “The School

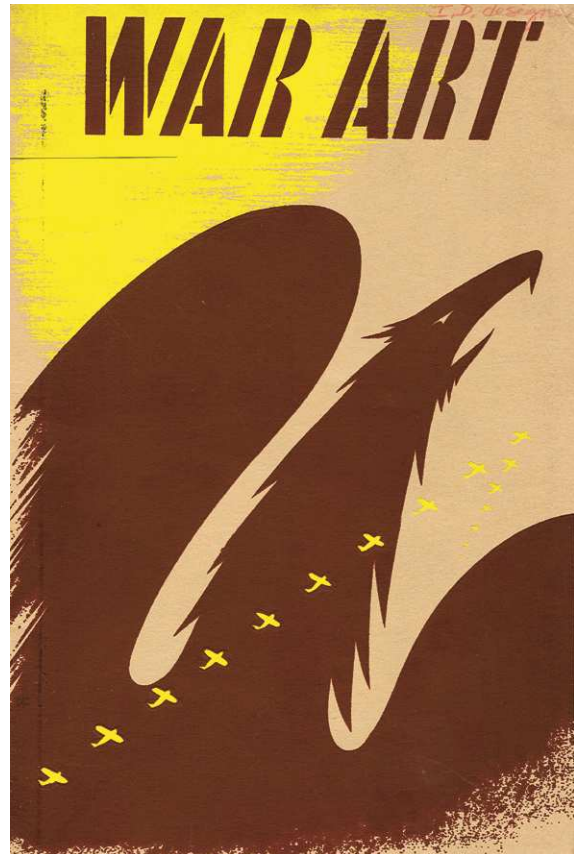
of Design in Chicago,” its syllabus announced, “has readily adapted its program to the requirements of the present emergency.”⁶⁹ As part of the “National Defense Courses,” Moholy-Nagy’s long-term associate György Kepes conducted courses in camouflage—covering such topics as visual illusions, mimicry, and geometrical optics—in collaboration with representatives of industry, medical doctors, and administrators.⁷⁰ Under the title “War Art,” in collaboration with the camouflage unit of the U.S. Army, the school began to explore “Principles of Camouflage,” strategically occupying the intersection between applied science and art.⁷¹ That the multifaceted intersections with industry and various governmental as well as private institutions fostered the inclusion of scientists alongside exponents of the humanities in the faculty of the Chicago Bauhaus, can be traced in Moholy-Nagy’s *Vision in Motion*, published in 1947, one year after his untimely death. In this outline of his pedagogical approach, the artist declared “the scientific and humanistic studies are arranged so that within eight semesters the student participates in general courses given by experts in biology, sociology, economics, anthropology, general semantics, history, literature, art history, and intellectual integration.”⁷²

German art historian Alexander Dorner, a close Bauhaus affiliate and friend of both Gropius and Moholy-Nagy, started to engage with Pragmatist thought shortly after his emigration from Germany via France in the mid-1940s.⁷³ In his book *The Way beyond “Art”* (1947)—dedicated to John Dewey, who also contributed a short introduction—Dorner stated, “I have reached conclusions similar to those of Pragmatism through long practical experience, and I am convinced that here lies the only road toward a reintegration of art history, esthetics and the art museum with actual life.”⁷⁴ Like Dewey and Giedion, Dorner criticized the extreme specialization of the previous century, which had resulted in “unconnected quantities of knowledge in all fields of human activity.”⁷⁵ As one of the European émigrés who found in Deweyan Pragmatism an alternative model to the doctrine espoused by CIAM, Dorner saw in Dewey’s approach a potential alternative to what Joan Ockman has called the “impasse of the avant-garde.”⁷⁶

Almost at the same time as Giedion was advancing his “Institute for Contemporary History,” Dorner proposed establishing an “Institute for Constructive Art History,” a museum-like institution that aimed to move the present moment toward a “new harmonious culture.” Dorner’s draft for his institute indicates that his view of the world was “antiabsolutist.”⁷⁷

We live at the close of a period which lacked the totality of great cultural periods of the past; we have not conceived yet a definite idea about our world system and about the meaning and impor-

5.05
New Bauhaus,
War Art, brochure
documenting
experiments with
camouflage patterns
and other designs
related to the war
effort.



5.05

tance of our own decade. ... What we need is a popular institute, devoted to the comprehensive representation of the constructive development of cultural history, culminating in a picture of the integral contribution of our time.⁷⁸

Like his Bauhaus colleagues, who educated craftsmen and artists to participate in a modern industrial society, Dorner was determined to bring art to the attention of the broad public. For this purpose, he planned to shift common museum and art-historical research practices away from individual achievements toward a more cohesive synthesis that would frame the art of a period within the cultural context of its creation.⁷⁹ Dorner proposed that no original works would be exhibited in his institute. Taking advantage of rapidly improving means of technical reproduction, he envisioned a sequence of rooms presenting the entirety of a cultural period by means of modern artistic media such as film, photomontage, and audio equipment.⁸⁰

The parallels between Giedion and Dorner's proposals are striking. Just as Giedion had called for in his drafts for a "Faculty of Interrelation," Dorner gave up the presentation of individual artifacts in favor of a holistic view, mapping out how social, political, legal, philosophical, religious, scientific, and artistic influences formed each of the presented periods spanning from ancient Egypt to the nineteenth century. He aspired to reveal a "fundamentally different and new 'Weltbild' [worldview]," which would present seemingly unrelated phenomena side by side as "active parts of a progressive development."⁸¹

In the spirit of John Dewey, who understood science as an engine for social progress, Dorner was convinced that his institute would "accomplish an urgent task and fill a gap in the educational system for the modern man," providing a "comprehensive primer for everybody."⁸² Dewey claimed that there is an intricate relationship between technological inventions and their creators, which requires understanding the social consequences of technology as "a human matter and a human responsibility." This idea is mirrored in Giedion's shift away from propaganda for the modern movement to questions of anonymous history that took place in the context of Dewey's Chicago School and the New Bauhaus.⁸³ Nevertheless, Giedion was ambivalent about Dewey. A look at his citations of the philosopher reveals that he used Dewey's voice to give weight to his own ideas rather than absorbing his theory in a comprehensive way. As opposed to Dorner, Giedion never quite adopted Dewey's view of a "biogenetic" world of change, but affirmed his "semi-static philosophy" as disseminated in *Space, Time and Architecture*. Dorner eventually confronted Giedion with precisely this criticism in an extended footnote in *The Way beyond "Art"*: "With good instinct Giedion is fighting the split-personality of today, yet he does not realize that his own

philosophy is still a typical split-philosophy that tried to preserve timeless elements in a world of change.”⁸⁴ Nevertheless, Dewey’s philosophy, which aimed to foster social and cultural transformation, and specifically his approach to the relationship of industrialization and society, likely posed some valuable questions for Giedion.

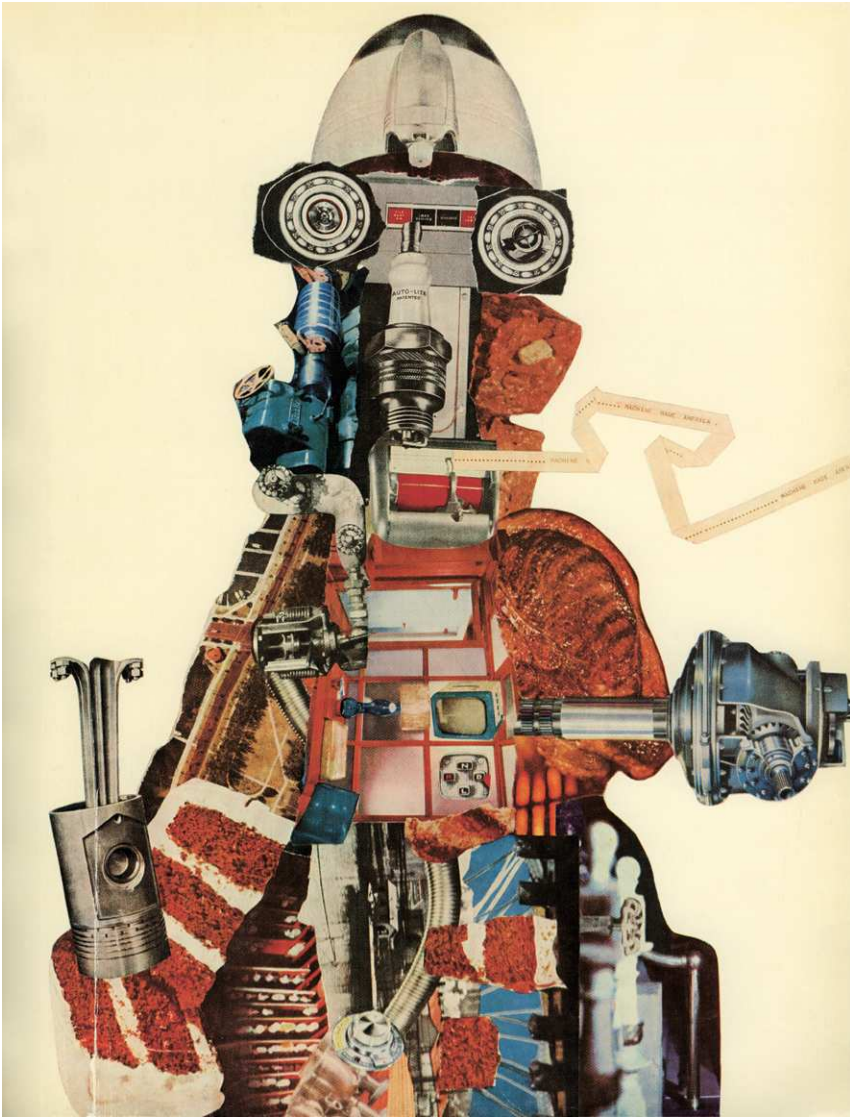
The Middle Atlantic States Art Conference in the spring of 1942 at the Philadelphia Museum of Art was one of Giedion’s last major attempts to engage the public with the idea of contemporary history. Despite the audience’s interest in a “Faculty of Interrelations,” there were no direct actions taken to realize the art historian’s project. From that moment on, Giedion addressed his proposal exclusively to his immediate colleagues at Harvard and to Marshall McLuhan at the University of Toronto, as well as to György Kepes and the mathematician Norbert Wiener at the Massachusetts Institute of Technology.⁸⁵

Postwar Initiatives: Military Science and Research

It was only after the Second World War that the importance of collaborative research and development beyond the restricted boundaries of the armed forces was finally widely acknowledged.⁸⁶ During the war, the involvement of scientists and academics from outside the military became a crucial factor in the advancement of military intelligence and strategy. According to Marshall McLuhan,

It was during World War II that Operations Research hit upon the strategy of pulling specialists out of their fields. A weapons problem was handed right off to biologists and psychologists, instead of to engineers and physicists. Because it was found that specialists inevitably directed their acquired knowledge at a problem. The non-specialist, knowing nothing of the difficulties involved, could only ask: “What would I have to know in order to make sense of this situation?” In a word he organized his ignorance not his knowledge. The result was many break-throughs and solutions that otherwise would not have happened.⁸⁷

After the war, the RAND Corporation was established in 1948 as one of the first interdisciplinary entities with the goal to further and promote “scientific, educational and charitable purposes for the public welfare and security of the United States.”⁸⁸ At the same time, other organizations and private institutions were newly founded or reorganized to promote universal peace, provide war relief, and resume the interrupted transatlantic dialogue. These included well-known exponents such as the New York-based Ford Foundation, which had



5.06

5.06 become one of the largest philanthropic institutions in the world by John McHale, the mid-1950s, and the Rockefeller Foundation, which launched a program to “increase understanding of one culture by members of another.”⁸⁹ In most academic environments, there was initially fierce resistance to the idea of blurring the boundaries between art, science, and technology, and it was only in the early 1960s that this expanded interest in a global cross-disciplinary and cross-cultural discourse began to affect smaller university-based research groups.⁹⁰ As can be observed in the work of such writers and theorists as Marshall McLuhan (*Understanding Media*) and Reyner Banham (*Theory and Design in the First Machine Age*), and culminating in a series of exhibitions including *The Machine as Seen at the End of the Machine Age* (Museum of Modern Art, New York, 1968) and *Art and Technology* (Los Angeles County Museum of Art, 1971), attitudes toward science and technology were decisively transformed in the early 1960s.⁹¹ The view of “machine-made America” became a focal point for European artists and architects, as John McHale’s collage for the cover of a 1957 special issue of the British journal *Architectural Review* with this title suggests.⁹²

The growing interest in the equal importance of science and the arts is also reflected in American politics of the period. After the Russians’ launch of *Sputnik 1* (1957) in the competitive climate of the Cold War, President Dwight D. Eisenhower signed the National Defense Education Act (1958), intended to promote mathematics and science at educational institutions of all levels. As a concomitant to this program, President Lyndon B. Johnson eventually founded the National Endowment for the Arts and Humanities in 1965 in support of “artists and scholars, who are the keepers of our vision” and who had been rather neglected in the previous decade.⁹³ This cultural climate provided fertile ground for Giedion in his conversations with colleagues on the unification of art, science, and technology.

Understanding
the World of
the Everyday:
Encounters with
Marshall McLuhan

Visual World: From
*Space, Time and
Architecture to The
Mechanical Bride*

On the occasion of a guest lecture he gave as part of the Culture and Communications Seminar chaired by Marshall McLuhan at the University of Toronto in 1955, Sigfried Giedion candidly admitted his failure to establish a multidisciplinary research group: "Since sixteen years I have had one bad luck after the other in trying to get going something that I call the faculty of inter-relation. Finally, I gave up and wrote my own books. It's so depressing that you can't ask the man in the next faculty 'What do you think about this? How has this to be done? You are a specialist. You have the experience.'"⁹⁴ This seminar was probably the art historian's first engagement with multidisciplinary research and teaching in an academic setting and marks the beginning of a number of initiatives he launched to enhance the connectivity between different fields.

Giedion and McLuhan crossed paths for the first time at Saint Louis University in Missouri in 1939 while Giedion was on a lecture tour of the Midwest presenting the outcome of his Norton Lectures and some early insights of his investigations in the realm of anonymous history.⁹⁵ McLuhan, a graduate student more than two decades Giedion's junior, was deeply inspired by the historian's work, as it addressed some of the problems he was grappling with: "I began to see how the vision in your work is, and can be, applied to ever so many things. But it will take me, at least, very long to digest and master. Meanwhile one must do partially satisfactory things."⁹⁶ The respect was mutual; in a letter to John U. Nef, the art historian reported that he had "met a young scholar of English literature" of whom he had gained "an excellent impression."⁹⁷ With regard to McLuhan's transgression of disciplinary boundaries, Giedion stressed that he "did not find many youngsters of this kind of approach."⁹⁸ The two scholars instantly began a loose friendship, which was held together by sporadic correspondence in the 1940s and eventually grew stronger in the postwar years.

Important for McLuhan's understanding of technology, which formed the foundation of his mature work, were two books the writer was first exposed to at Saint Louis University: Lewis Mumford's *Technics and Civilization* (1934) and Giedion's *Space, Time and Architecture*. From Mumford, he adopted the distinction of a first and second phase of industrialization, shifting from steam power and a mechanical dominance to an organic society based on electricity.

Even though Mumford would have never talked about a “global village”—the term later coined by McLuhan—the critic described the world as bound by a communications network. Mumford hoped that the widespread use of electricity would decentralize society again, reverse the process of urbanization, and restore a rural, community-and-craft-based way of life.⁹⁹ Similar to Giedion, who shared an interest in Mumford’s ideas, McLuhan did not fully trust this agrarian and handicraft mentality, however.

Nevertheless, a broad selection of Mumford’s seminal publications, including *Technics and Civilization*, *The Culture of Cities*, *The City in History*, *The Pentagon of Power*, and *The New Yorker* “Sky Line” columns, would eventually appear in McLuhan’s bibliographies and a majority of the reading lists McLuhan would give to his own seminar students. Mumford, one of the first North American intellectuals to programmatically cross the boundaries of various disciplines, was an important role model for young McLuhan: “It was very generous of you to write after reading *The [Mechanical] Bride*. Anything you may have gotten from it is insignificant compared with the satisfaction I have had in your books.”¹⁰⁰ The technological and moral approach in McLuhan’s early writing was still close to Mumford’s, and McLuhan’s “electronic man” can be understood as a continuation of Mumford’s—or rather Patrick Geddes’s—“Paleolithic and Neolithic man.” Over the course of time, however, the two intellectuals grew apart. Much later in their careers, after unsuccessful attempts to bring Mumford to the University of Toronto and a dispute about authorship in the context of the publication of McLuhan’s *Understanding Media* (1964), their correspondence took a strongly negative turn and eventually ceased.¹⁰¹ In *The Pentagon of Power*, Mumford accuses McLuhan of conjuring with “psychedelic extravagance” an “absolute mode of control: one that will achieve total illiteracy, with no permanent record except that officially committed to the computer, and open only to those permitted access to this facility.”¹⁰²

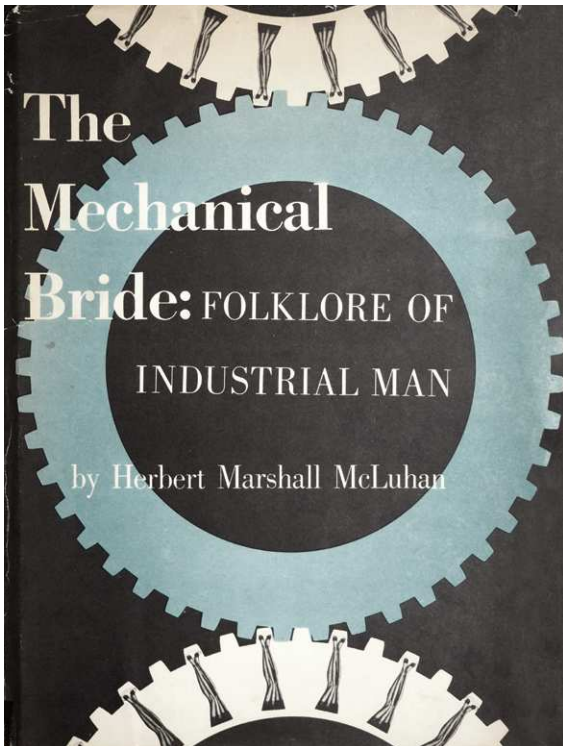
The other significant influence on McLuhan was Giedion, whose *Space, Time and Architecture* was “one of the great events of [his] lifetime,” for it provided a “language for tackling the structural world of architecture and artifacts of many kinds in the ordinary environment.”¹⁰³ The friendship between the two men was initially fostered by a mutual interest in technology and its impact on contemporary society. Both Giedion and McLuhan had trained in engineering—although the latter only for a short time.¹⁰⁴ Giedion’s elaborations of his methodology as a universal language for bridging the gap between disciplines were a lasting inspiration for McLuhan’s studies, as McLuhan would reflect on later, in 1971:

Running through some papers on Sigfried Giedion recently, especially his *Space, Time and Architecture* and *Mechanization Takes*

Command, I realized what a tremendous debt I owe to him in my work. ... After meeting him I naturally studied him more intensely and used his *methods* [original emphasis] in my own work. *In a word, the method is to use the dominant forms of perception in science, painting, architecture, town planning, etc., of an entire period, as a means of unifying and training one's own perceptions.* [original emphasis] Each style of perception in each discipline naturally resonates in all the other ones of the same period, modifying and re-enforcing the pattern everywhere. Above all, with this approach, nothing is “banal.” It was Giedion who taught me to look at the world of everyday objects, including advertising, for the style of the period.¹⁰⁵

In a joint review of Moholy-Nagy's *Vision in Motion* and Giedion's *Mechanization Takes Command* in 1949, McLuhan noted their “utmost relevance alike to the student, the teacher and the critic,” pointing out that both works “offer a set of master strategies for the extension and unification of literary with all the other arts and even with the sciences.”¹⁰⁶ The review's emphasis on Jacob Burckhardt's “great school of German encyclopedic study,” and Burckhardt's succession by Heinrich Wölfflin and Giedion, indicate that McLuhan liked to affiliate his own thinking with this lineage of Renaissance scholarship.¹⁰⁷ Indeed, McLuhan was trained by Renaissance scholars and wrote his doctoral thesis on the Elizabethan English pamphleteer and poet Thomas Nashe.¹⁰⁸

- 5.07 Sigfried Giedion's personal copy of *The Mechanical Bride* by Marshall McLuhan (1951). McLuhan's thesis indicates that early on the theorist was interested in interdisciplinary models of pedagogy and the significance of field study that engages with contemporary culture—topics that suggest his intellectual affinity for Giedion. Similar to the art historian in both his writings and in his academic activities, McLuhan aspired to interconnect a variety of specialized fields by a common “method of aesthetic analysis.” In a letter to his mentor, the poet Ezra Pound, McLuhan indicated that he intended “to set up a school of literary studies” based on Giedion's *Mechanization Takes Command*.¹⁰⁹ Giedion's intellectual production, particularly *Space, Time and Architecture* and his first explorations of anonymous history, can be considered an epistemological model for McLuhan's 1951 book, *The Mechanical Bride*, a collection of fifty-nine short essays that questioned the proliferating rhetoric of advertising and consumerism during the 1940s. Incubated in the cultural climate of post-war America, the book reveals the sources and meanings of icons of popular culture from Superman and Tarzan to automobiles and electric bulbs, to comic strips, newspaper layouts, and John Wayne films. This is also reflected in numerous working titles, including “Guide to Chaos,” “Typhon in America,” “Sixty Million Mama's Boys” and, potentially, as McLuhan wrote to Sigfried Giedion, “Illiteracy
- 5.08 Example of modern advertising, as published in Marshall McLuhan's book *The Mechanical Bride* (page 121).



5.07

In 13.9 Seconds
A Drum Majorette
Can Twirl A
Baton 25 Times
...But In Only

TWO SECONDS

Bayer Aspirin
Is Ready To Go
To Work!

MAKE THIS TEST!
To see how fast it's ready to go to work, drop a Bayer Aspirin tablet in a glass of water and time its disintegrating speed. What happens in the glass, happens in your stomach.

 The two most important kinds of relief when you're suffering from an ordinary headache, are *fast* relief and gentle, *dependable* relief. And one thing that gives you *both* is Bayer Aspirin.

Because Bayer Aspirin tablets start disintegrating almost instantly you take them...because they're actually ready to go to work in *two seconds*... they bring relief with amazing speed.

And besides being so *effective* that doctors regularly prescribe it for pain relief, Bayer Aspirin's single active ingredient is so *gentle* to the system that mothers give it even to small children

on their doctors' advice. That's why you can take it with utmost confidence.

So don't experiment with drugs that have not stood the test of time. For *fast*—and *dependable*—pain relief, use Bayer Aspirin. And when you buy, always ask for genuine Bayer Aspirin.

NOW... BAYER ASPIRIN IN CHILDREN'S SIZE
New 2½ grain tablets (containing half the amount of regular size Bayer Aspirin tablets) provide proper children's dosage as prescribed by your doctor...and are made so you can break them in half when even smaller dosages are required. They're neither flavored nor colored, so they cannot be mistaken for candy. 30 Tablets—25¢.

***Because no other pain reliever can match its record of use by millions of normal people, without ill effect, one thing you can take with complete confidence is genuine**

BAYER ASPIRIN

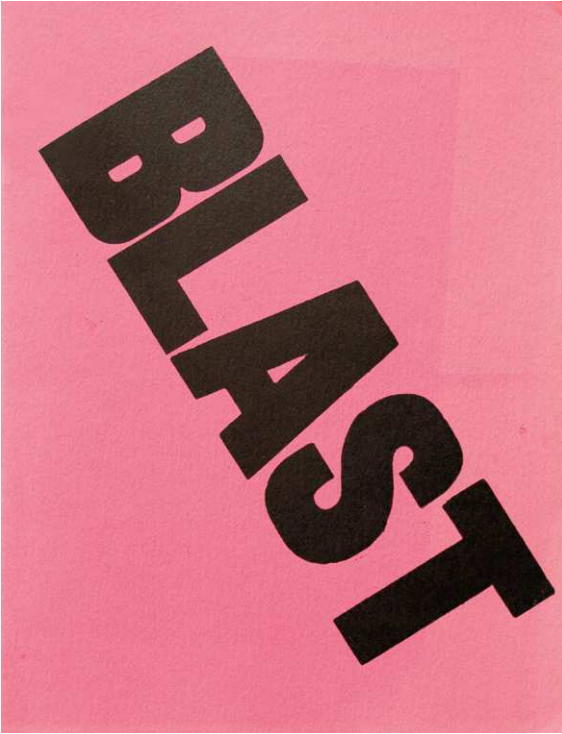
121

5.08

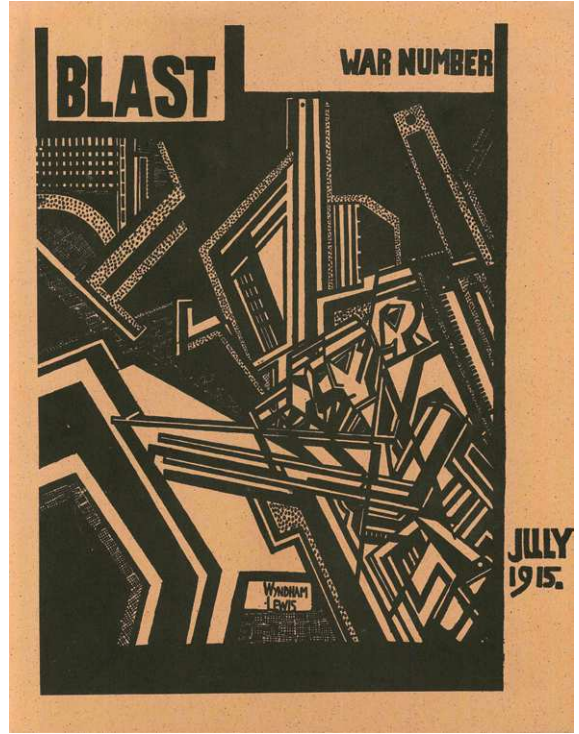
Unlimited.”¹¹⁰ Despite the daunting scope of its subjects and case studies, the book’s thematic focus remained consistent: advertising demonstrates the mechanization and fragmentation of all aspects of intellectual and emotional life. In an almost didactic mode rooted in a moral criticism, McLuhan called attention to the perilous impact of advertising media on humans: “Why not assist the public to observe consciously the drama which is intended to operate upon it unconsciously?”¹¹¹

Giedion provided McLuhan with a method to “grasp current society in its intellectual modes” and to examine the artifacts of mass culture without moral outrage.¹¹² The art historian’s emphasis on a structural analysis, which McLuhan immediately absorbed, was derived from Wölfflin’s method of pictorial analysis, which largely ignored the emotional tone and narrative content of the paintings under consideration. Combining this pictorial analysis with an interest in the persistence of modern culture, Giedion provided McLuhan with a paradigm for valuing the historical significance of humble objects drawn from daily life. In the postwar period, a time when specialization began to advance and public intellectuals were increasingly marginalized, Giedion’s method of using multiple models of exploration to achieve a universal outlook offered a counter-model for Marshall McLuhan.¹¹³ “For the past thirty years,” he declared, “we have been in a new era which is both encyclopedic and unified. The key men of this period, like [James] Joyce and Giedion, exhibit great traditional knowledge together with a universal contemporaneity.”¹¹⁴

In its focus and tone, *The Mechanical Bride* reads like a sequel to Giedion’s *Mechanization Takes Command*, which was published three years earlier. While it was Giedion’s intention to explain the effects of mechanization on man and the extent to which mechanization corresponds with or contradicts the “unalterable laws of human nature,” McLuhan’s pedagogical project, a call against a moral decline and the binary opposition of culture and nature, reveal a rather romantic critique of industrialization. Still, *The Mechanical Bride*, markedly in the tradition of Giedion’s studies on the mechanization of everyday life, can be read as an early cultural studies text, providing an analysis of emerging popular culture with a strong focus on domesticity. McLuhan’s interest in the rational structure of advertisements rather than their emotional content was a first step toward emphasizing the medium at the expense of the message. Both McLuhan and Giedion exploited their historical perspective to create awareness among a larger public for the role of tradition in present-day conditions. Correspondingly, both scholars employed history in order to comment on the present or even the future. Historical evidence was used—again, in a manner similar to Lewis Mumford—to reinforce their arguments and legitimize their critical evaluations of the present. The historical perspective was their vehicle for engaging



5.09



5.10

in a contemporary discourse, or as McLuhan described it: “We look at the present through a rear-view mirror. We march backwards into the future.”¹¹⁵

5.09–5.10 Concurrent with his work on *The Mechanical Bride*, McLuhan began to study the writings of Wyndham Lewis, Ezra Pound, and eventually also James Joyce and T. S. Eliot. McLuhan adapted many of Lewis’s techniques to his own writing. The annotation of news clippings, the short and dense chapters, and the amalgamation of philosophical and sociopolitical thinking with aspects of popular culture found in Lewis’s *Doom of Youth* (1932) had a lasting effect on McLuhan’s work and are reflected in the final publication of *The Mechanical Bride*.¹¹⁶ In close contact with Lewis during his tenure at Saint Louis University—the British painter and poet spent the war years in Canada¹¹⁷—McLuhan was introduced to Vorticism, an avant-garde movement that emerged in London around 1913 and was built on aesthetic principles established in Cubism and in Italian Futurism led by F. T. Marinetti.¹¹⁸ Although the Vorticists never achieved the broad impact of Futurism, their little magazine *Blast*, published twice in 1914 and 1915 and edited by Wyndham Lewis, was a forerunner to the typographic “revolution” of the 1920s and 1930s in Europe.¹¹⁹ The bold treatment of type and poster-like visual conventions reminiscent of advertisement strategies caught El Lissitzky’s attention and are echoed in the artist’s *Proun* constructions and particularly in his design for Vladimir Mayakovsky’s *Diia Gólosa*. McLuhan’s *Counterblast*, first published in 1954 as a hand-copied, nine-page leaflet, is a formal homage to Lewis’s *Blast* and Ezra Pound’s *Cantos*.¹²⁰ This explains why Giedion and McLuhan’s conceptions of typography and layout are so strikingly similar: not only was McLuhan inspired by Giedion’s work, but the two writers’ graphic standards are even rooted in two camps of the same tradition.¹²¹ This only holds true, however, for Giedion’s early work, which is clearly an offshoot of the Constructivist and Bauhaus traditions. While Giedion’s publications became more restrained over the course of the historian’s career, McLuhan’s work developed in the opposite direction, producing such stunning artifacts as the *Medium Is the Massage* (1967), in collaboration with the designer Quentin Fiore.¹²²

In McLuhan’s approach, reminiscent of the Vorticist movement and New Criticism, concepts such as juxtaposition, analogy, dislocation, and association were employed as structuring elements to arrange the larger set of ideas. This is most forcefully reflected in McLuhan’s recurrent language plays, which use rhetorical paradox as a way of obtaining truth. Almost in a Joycean manner, and similar to Giedion’s visual language but in a much more uncompromising fashion, McLuhan advocated the use of a discontinuous narrative and a “circulating point of view,” which would bypass the “need for

it to be read in any special order.”¹²³ Both McLuhan and Giedion were known as eclectic writers, patching up their writings from loose text fragments and lecture notes, a method that left its traces on the final morphology of their publications. The collage-like method of writing and occasionally incomprehensible citation of a large number of cultural references led to frequent misreadings of their work, a problem that had to be addressed by their collaborators and editors, especially Jaqueline Tyrwhitt and Edmund Carpenter.

Changing Patterns:
Explorations in
Communication

In the same way that Giedion’s focus shifted from advocacy of the modern movement to the analysis of prehistory, McLuhan’s *Mechanical Bride* launched a sarcastic farewell to machine-age civilization, paving the way for the author’s explorations into communications media. McLuhan discovered the field of communications—at least initially—through Harold Adam Innis, a colleague in the Department of Political Economy at the University of Toronto.¹²⁴ Innis’s *Empire and Communications* (1950) and *The Bias of Communication* (1951), written just a year before their writer’s untimely death, provided a formative point of departure—the emergence of cultural change through the effects of different media on civilizations such as Egypt, Sumer, Greece, Rome, and Europe—for McLuhan’s future work. The central idea of McLuhan’s mature oeuvre, the notion that every new medium shapes the perception of the people who use it—summed up most concisely in his iconic phrase “the medium is the message”—is based on Innis.¹²⁵ The political economist provided McLuhan with the modalities for a new theory of culture, an “amazing method of studying the effects of technology.”¹²⁶ In a letter to his colleague, McLuhan announced, “[T]here are lines appearing in *Empire and Communications*, ... which suggest the possibility of organizing an entire school of studies.”¹²⁷

McLuhan was impressed by the way Innis managed to rejoin the fields of economy, sociology, and political science. With Lewis Mumford in mind, he endorsed an “encyclopedic synthesis” that would foster a collaboration between English, modern languages, history, and fine arts departments.¹²⁸ Similar to what Giedion had proposed for his Institute for Contemporary History and had explored in his own writing, McLuhan was interested in “linking a variety of specialized fields by what might be called a method of esthetic analysis of their common features.”¹²⁹ With reference to the “method [that] has been used by [his] friend Sigfried Giedion,” McLuhan intended to conduct an experiment in communication entitled “Network,”

in which a mimeographed questionnaire would be sent to “people in different fields, at first illustrating the underlying unities of form which exist where diversity is all that meets the eye,” and would garner “feedback of related perception from various readers which will establish a continuous flow.”¹³⁰ In this process of intensifying the communication between different fields, McLuhan was determined to “by-pass the literary cliques and characters altogether,” to sensitize scholars in “physics, anthropology, history, etc. etc. to relevant developments in the arts which concern them so that they in turn can contribute their newest insights to the arts.”¹³¹ At the end of the 1950s, this idea was only realized in the form of McLuhan’s “Media Logs,” which were occasionally sent out to friends and acquaintances. The project for a formalized exchange between disciplines was soon to take shape.¹³²

In the late 1940s, after the death of its founders, the Ford Foundation formed a committee to redefine the organization’s worldwide activities.¹³³ One of the first projects announced under the new leadership of the institution was the call for an “Interdisciplinary Research and Study Program” offering \$50,000 for a two-year period.¹³⁴ Word of this unique opportunity spread to the University of Toronto, where the anthropologist Edmund Carpenter approached McLuhan, at the time professor of English literature at St. Michael’s College of the University of Toronto, to form a team with other colleagues at the university. McLuhan, known as a vocal eccentric who frequently talked in buzzwords, was proving himself to be an outcast. His uncompromising personality made him unpopular among the other professors at the school. It was therefore quite a surprise when the McLuhan-Carpenter proposal, entitled “Changing the Patterns of Language and Behavior and the New Media of Communication,” was chosen over that of Northrop Frye—an acclaimed literary theorist highly respected among his colleagues—to form one of the first interdisciplinary research groups in the American academy.¹³⁵ As opposed to the other competing academic groups, which understood communication as a problem of information engineering, the McLuhan-Carpenter syndicate stressed its conception of language and the media as an art form.¹³⁶ Considering the chosen methodological approach, it is once more evident that McLuhan is likely to have closely followed Giedion’s ideas about cross-disciplinary research as well as the outlines for his Institute for Contemporary History and Research.

The team that worked for the next two years under the auspices of McLuhan and Carpenter consisted of experts from a range of disciplines: Tom Easterbrook, a professor of economics and a colleague of McLuhan’s since their studies at the University of Manitoba; Carleton “Carl” Williams, a professor of psychology; and Jaqueline Tyrwhitt, a visiting assistant professor of town planning and archi-

ecture, who was actively involved in the establishment of an urban planning program.¹³⁷ Tyrwhitt had joined the group upon the recommendation of Giedion:

Jaqueline Tyrwhitt ... is a pioneer of interdisciplinary studies in Britain Long associated with the research projects of Sigfried Giedion, she brings to the project wide European and North American experience. ... She has worked with him specifically on the problem of interdisciplinary study in the university and came to Toronto University [*sic*] especially to advance this kind of co-operation between social work, anthropology, architecture and town planning. Naturally interested in the city as offering special nodes of communication within the suburban and rural networks, her work easily coincides with the points of view of Williams, Carpenter and Easterbrook. This area of coincidence is greatly extended by her historical approach to these contemporary problems.¹³⁸

Giedion's apparently selfless move also ensured his stable connection to this research group, which he could have been a member of himself.¹³⁹ In parallel to her work at the University of Toronto, Tyrwhitt was collaborating with Giedion—in the project credits it is downplayed as assistance—on various publications projects and in the context of CIAM. By means of this three-way collaboration, Tyrwhitt began to occupy a strategic position in the communication and exchange of ideas between McLuhan and Giedion, whose correspondence and encounters were less frequent before her active mediation.

The selected Ford Foundation proposal offered a perfect testing ground for interdisciplinary research, just as Giedion and McLuhan had envisioned it years before. At the suggestion of Tyrwhitt and Giedion, one of the main focuses was the “comparison of methodologies employed in different disciplines ... with a view to discovering means of direct communication between them.”¹⁴⁰ Before implementing the research project in the curriculum, the group came together to provide updates on the developments over the past century in the respective fields of each member. Alarmed by Giedion's unsuccessful attempts to establish a multidisciplinary research unit, McLuhan hoped their insights and consensus would “signal the world that the era of the specialist was dead and that what would now be termed a holistic view of things was possible.”¹⁴¹ While harmony among these extremely diverse individuals and their different intellectual positions did not quite ensue according to McLuhan's desire—in a report he commented that “the greatest enemy of an inter-disciplinary seminar would seem to be the individual eagerness to get tangible results in place of sharing insights”¹⁴²—he managed to get everybody on track with two major initiatives that structured the project when it started

5.11–5.18
 Issues 1 to 8 of
*Explorations:
 Studies in Culture
 and Communication*,
 Edmund Carpenter
 and Marshall
 McLuhan's journal
 presenting numer-
 ous approaches to
 contemporary media
 culture from
 1953 to 1957.

in 1953. In addition to a weekly Culture and Communications Seminar with graduate students from various faculties, McLuhan began *Explorations*, a unique and eclectic journal on “media explorations, exploring such languages as print, the newspaper format and television,” which was to become the backbone of the whole enterprise.¹⁴³ The editors stated the intellectual and methodological intention of the publication on the frontispiece of each issue:

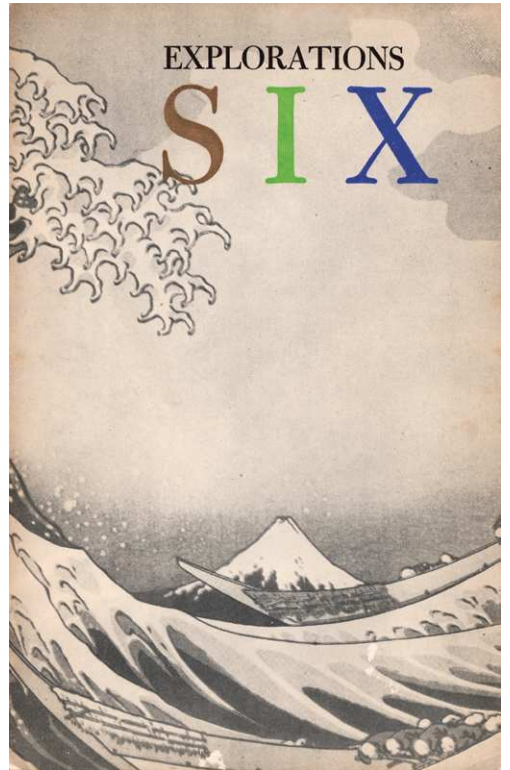
Explorations is designed, not as a permanent reference journal that embalms truth for posterity, but as a publication that explores and searches and questions. We envisage a series that will cut across the humanities and social sciences by treating them as a continuum. We believe anthropology and communications are approaches, not bodies of data, and that within each of the four winds of the humanities, the physical, the biological and the social sciences intermingle to form a science of man.¹⁴⁴

As its well-chosen name suggests, the magazine promoted explorations across disciplines and provided a platform for intense exchanges with scholars around the world. The publication created a window onto the academic world outside the University of Toronto, and helped to strengthen and unite the group, offering the individual members a platform for publishing the results of their research.

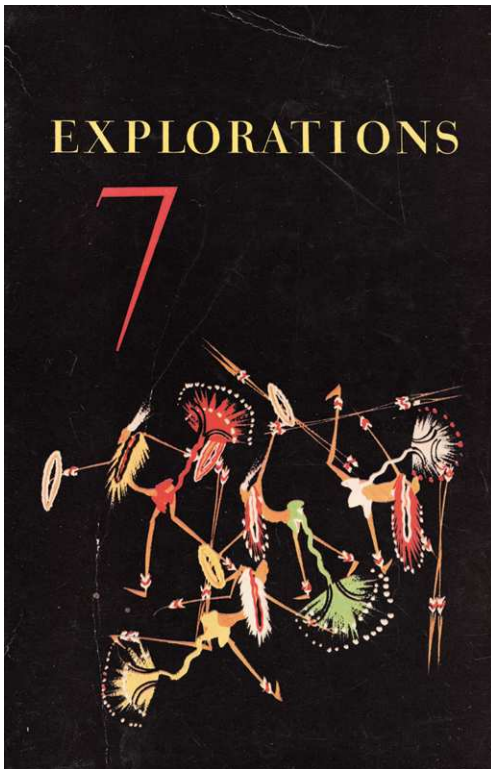
Explorations was published nine times over the course of the research project and ultimately summarized in an anthology edited by Edmund Carpenter and Marshall McLuhan. Each issue incorporated articles by an illustrious group of intellectuals from a variety of different disciplines and cultures, among them such thinkers as Jorge Luis Borges, Margaret Mead, Jean Piaget, Northrop Frye, and György Kepes. As the other faculty members at the University of Toronto observed the remarkable success of the journal, it enhanced the credibility of the research project and to an extent quieted their opposition.¹⁴⁵ The seminar, on the other hand, was constantly censured from all sides.¹⁴⁶ The dozen students representing the project's multiple disciplines faced real challenges. They did not earn proper credit for their participation and received unrelenting criticism from other faculty members of their respective departments. A majority of the professors at the university did not appreciate the advances of the McLuhan-Carpenter research group, and, as Giedion experienced in Switzerland and at various universities in the United States, these professors were unwilling to engage in anything outside of their own sphere: “Any specialist is going to see to it that his specialty is protected against any invasion from any quarter. They've got a very good thing. They've taken a long time to acquire this specialist skill and they don't see why yield one inch to people with different methods.”¹⁴⁷



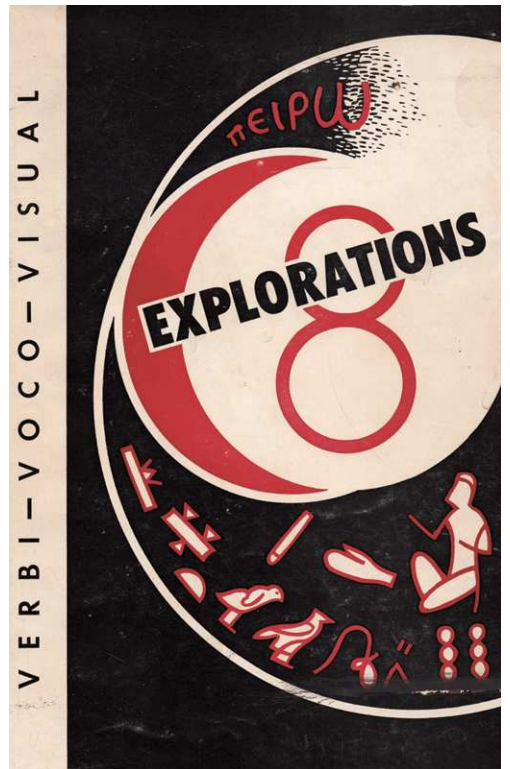
5.15



5.16



5.17



5.18

Similar to the *jour fixe* at the Giedions' Doldertal home, there were weekly informal gatherings at McLuhan's house or at the cafeteria of the Royal Ontario Museum, bringing together the faculty members involved in the project with guests from outside. According to Edmund Carpenter, Giedion was occasionally among those visitors, when stopping by in Toronto to work with Tyrwhitt.¹⁴⁸ Through these visits, his presence through Tyrwhitt, and his discussions with McLuhan, Giedion's thinking affected the direction of the ongoing research:

Summer, 1954: the faculty members of the seminar met regularly to discuss the work of Sigfried Giedion. We had decided that Giedion would provide an ideal approach to visual communication problems. His work, as much as that of Innis, in its way, is a pioneer effort at unifying various fields by teaching techniques of attention to the language of vision inherent in painting, technology, and architecture. His concept of "anonymous history" does for the language of vision all that Freud and others have done for the language of involuntary gesture. Miss Tyrwhitt, long an associate of Giedion (now a professor of town planning at Harvard) was of the greatest help here. The Innis verbal approach to many of Giedion's interests was for her as hard to master as the Giedion language of vision was for the rest of us. Our psychologists and anthropologists soon caught the idea and enriched our insights with any new materials and procedures. We were reassured, too, by the American enthusiasm for *Explorations*.¹⁴⁹

It is therefore no coincidence that students had to dissect *Mechanization Takes Command* chapter by chapter over the course of the first six weeks of the fall term in 1954 and that there was a full session dedicated to "the work of S. Giedion."¹⁵⁰ While *Space, Time and Architecture* offered McLuhan a first epistemological model for his own work, Giedion's notion of anonymous history became a key reference for McLuhan's seminars at the University of Toronto: "A great art historian like Siegfried [*sic*] Giedion has extrapolated the new art approaches to space ... to include 'popular culture' and 'anonymous history.' Art is for him as inclusive an idea as 'mimesis' is for Aristotle."¹⁵¹ Interested in the effects of popular culture, McLuhan was convinced that the most charged forms of culture were those rooted in daily use. From Giedion's work, he drew the insight that those anonymous and often ignored goods form "the hidden ground" that contrasts with highly esteemed cultural production in a "figure-ground relationship." This interrelation, McLuhan was convinced, is the underlying "dynamic of any culture."¹⁵²

Throughout *Mechanization Takes Command*, art references are juxtaposed with references to heavy machinery and mechanical production, indicating "how deeply mechanization penetrated man's

inner existence.”¹⁵³ According to Giedion, artists such as Marcel Duchamp and Fernand Léger managed to transform machines, “these marvels of efficiency,” into “irrational objects, laden with irony while introducing a new aesthetic language.”¹⁵⁴ Giedion’s “verbalization of American technology,” his analysis of the particular modalities of vision in the arts, as well as the visual language he established and refined over the course of his career, not only offered McLuhan an adequate method to represent his ideas but, more important, also helped him to bridge the ideological gaps that emerged within his own research group consisting of scholars from various fields.¹⁵⁵ Following Giedion’s position, McLuhan tended to conceive of history as interconnected constellations and “historical panoramas” rather than single events. Giedion’s “typological approach” to anonymous history, based on interrelations and a history of types as opposed to an exclusive history of styles, provided McLuhan with the means to show parallel developments and their interpenetration, and to superimpose existing knowledge onto new patterns:¹⁵⁶

Each medium, if its bias is properly exploited, reveals and communicates a unique aspect of reality, of truth. Each offers a different perspective, a way of seeing an otherwise hidden dimension of reality. It’s not a question of one reality being true, and others distortions. One allows us to see from here, another from there, a third from still another perspective; taken together they give us a more complete whole greater truth. New essentials are brought to the fore, including those made invisible by the “blindness” of old languages.¹⁵⁷

The emergence of new media such as television, movies and “pictorial journalism” asked for a modified sensibility and “visual literacy.” The creation of a new “language of vision”—an expression most likely taken from György Kepes’s 1944 publication of the same title—“draw[n] upon the reservoir of artistic wisdom,” was thus a major goal for McLuhan.¹⁵⁸ Influenced by the chapter on movement in *Mechanization Takes Command*, McLuhan was convinced that this new language would allow bridging the gap between science and art, as similar techniques of visual representation could be employed by scientists diagramming rational procedures and by artists charting “the inner life of man.”¹⁵⁹

Following the moderate success of *The Mechanical Bride*, and concurrent with his work under the aegis of the Ford Foundation grant, McLuhan started to write a book on “the End of the Gutenberg Era,” which dealt with the invention of the “writing alphabet,” the invention of printing, the mechanization of writing, the “decline of painting, music etc. in book countries,” the “‘abolition’ of history by dumping the [whole] of past into the present,” and the “transfer of

auditory to visual.”¹⁶⁰ Collected over a period of twenty years, *The Gutenberg Galaxy: The Making of Typographic Man* synthesized the topics that McLuhan had elaborated in the seminars, in his own writing, and in collaboration with the group of intellectuals involved in the research project at the University of Toronto. Over the course of one summer, the manuscript was finally assembled at St. Michael’s College, at a long table holding scores of books by contributors to *Explorations*, which were stacked behind each issue.¹⁶¹

The Gutenberg Galaxy points out the fundamental differences between oral culture and literate culture.¹⁶² It describes and comments on the causes of change in society when the world picture changed from a preliterate, oral culture to a visually oriented, radically new environment triggered by the invention of movable type and the printing press, as well as the related mass production of books and other printed matter. Specifically looking at North America and Europe, the book is an account of the rise of visual culture in the West. A major insight of McLuhan’s passage from *The Mechanical Bride* to *The Gutenberg Galaxy* is the modalities in which writing transforms speech into visual space.

McLuhan called his *Gutenberg Galaxy* a “footnote” to Harold Innis, but it could be read as a footnote to Giedion as well.¹⁶³ Not only did McLuhan adapt Giedion’s research methodology, but the book is also strongly related to the art historian’s oeuvre on a structural level. Similar to both Giedion and Innis’s process of writing, McLuhan based his *Gutenberg Galaxy* on a set of loose notes and text fragments—a “mosaic” approach, as he called it.¹⁶⁴ Compiled of manifold references and myriad quotations from some two hundred authors, he based his oeuvre on perception rather than ideas.¹⁶⁵ The non-linear narrative, united by short and graphically bold chapters that highlight or subsume specific ideas and visually structure the writing, evokes *Space, Time and Architecture*. Like Giedion’s captions for the “hurried reader,” visual arguments, and the indication of major topics at the margins of each spread, McLuhan’s 261 glosses, which are printed in overview on the final pages of *The Gutenberg Galaxy*, provide a précis of the author’s argument while typographically guiding the reader.

With his depiction of how Western culture in the Renaissance shifted from a primarily auditory mode to a largely visual mode of apprehending reality, McLuhan cleared the way for his imminent explorations of alternative modes of perception: “Now I see that I was trying to prop up the standards of book culture when we have passed out of the Gutenberg era.”¹⁶⁶ Over the course of a decade, McLuhan shifted his focus from “industrial man” in *The Mechanical Bride* to “typographic man” in his *Gutenberg Galaxy* and finally began to approach “electronic man.”

Exploring
Acoustic Space

Both Sigfried Giedion and Marshall McLuhan saw space as the medium to overcome the split between disciplines. Giedion played an important role in McLuhan's efforts to extend his notion of space-time. McLuhan was in need of a spatial conception that was neither static nor limited to the visual, and he eventually found this dynamic in the idea of sensory spaces. Space is therefore the subject that dominated the Culture and Communications Seminar between October 1954 and April 1955. From a lecture by Carpenter on "Eskimo Space Concepts" to a paper by Williams on "Auditory Space," to Macpherson's "Perceptions of Space in the 16th and 17th Centuries" and Giedion and Harvard anthropologist Dorothy Lee's appearances as guests of honor, a significant part of the seminar discussions revolved around questions of space and perception.¹⁶⁷ As a result, McLuhan had his first encounter with the notion of "acoustic space" in the weekly seminars at the University of Toronto. This concept eventually provided him with a far-reaching argument that he would employ in most of his subsequent works.

The "spatial discourse" between Giedion and McLuhan was initiated by Jaqueline Tyrwhitt.¹⁶⁸ It was she who repeatedly suggested studying and discussing aspects of Giedion's work, especially his interest in "interfaculty methodology."¹⁶⁹ Tyrwhitt engaged Giedion shortly after joining the McLuhan-Carpenter team by sending him the program submitted to the Ford Foundation and following up with a personal visit to Zurich to discuss the course of action and get his approval.¹⁷⁰ In her parallel collaborations with McLuhan and Giedion, Tyrwhitt became a transatlantic messenger between Toronto and Zurich, fostering and directing an intense debate that would have not taken place otherwise. As an associate editor of *Explorations*, Tyrwhitt was instrumental in orchestrating articles and continuing the discourse of the seminar in a printed format. As Carpenter recalled, "Jackie Tyrwhitt knew how to translate thought into reality. Never thanked, never credited, she helped change Toronto."¹⁷¹ At the outset of the publication project, there was serious discussion about publishing a full issue of the journal on Giedion, assembled mainly by McLuhan and Carpenter, but with contributions by Tyrwhitt and Giedion himself.¹⁷² Ultimately, *Explorations 4* did not turn out to be an exclusive issue on Giedion. Williams's article on "Acoustic Space" and Tyrwhitt's piece on "The Moving Eye," however, reflect a discussion directly related to Giedion's dialogue with the Toronto seminars.

At the same time as she was working with McLuhan, Tyrwhitt was actively involved in Giedion's research on prehistory, which was to culminate in the 1957 Mellon Lectures at the National Gallery of Art in Washington, D.C. She presented some of her insights into this



5.19

5.19 work-in-progress at the seminar. In addition to discussing Giedion's Le Corbusier work and publications, she also introduced his latest thoughts on with one of the conceptions of space in prehistoric art. In his argument, Giedion distinguished between two major types of space: visual and acoustic. While he cited the Romans as the first ancient civilization to create sculptures he visual space—a spatiality shaped by light and the exterior composition of a structure as it was achieved through the enclosure of an arch within a rectangle—acoustic space existed long before, in the form of vast caverns that were perpetually in darkness, only aurally perceivable, and filled primarily with sound.

created in collaboration with Joseph Savina, ca. 1950. An important impetus for Giedion's understanding of acoustic space was certainly his colleague and mentor Le Corbusier, who, according to Giedion, was the first to use the expression in the realm of architecture.¹⁷³ The architect developed an interest in what he defined as “visual acoustics” as early as his 1927 proposal for the Palace of the League of Nations as a complement to the typical engagement with “audible acoustics.” It was only after the Second World War, however, that “visual acoustics” became “codified as a fundamental conceptual tool” in the architect's work.¹⁷⁴ In a series of sculptures Le Corbusier conceived with cabinetmaker Joseph Savina around 1947, his acoustic theory found its way back to sculptural and architectural form, eventually culminating in his design for the chapel of Notre-Dame-du-Haut at Ronchamp, which he described in his *Oeuvre complète* as follows:

The researches of Le Corbusier have led him to the perception of an “acoustic component in the domain of form.” An implacable mathematics and physics reign over the forms presented to the eye; their agreement, their repetition, their interdependence, and the spirit of unity or of family which binds them together to form architectural expression, is a phenomenon which, as he says, is supple, subtle, exact and implacable as that of acoustics.¹⁷⁵

At the outset of this project, Le Corbusier conceived his design in accordance with the “acoustic of the landscape,” addressing the four horizons, provoking a resonance between architecture and landscape. According to Le Corbusier, places that are acoustic allow for “great forms of intelligent geometry composed of irregular surfaces” to inhabit modern architectural spaces.¹⁷⁶ In the acoustical trope, Le Corbusier saw a response to the “psycho-physiology of the feelings”—terminology strongly reminiscent of Giedion's attempt to overcome the “split between thinking and feeling.” He would eventually dub this strategy “plastique acoustique,” a way to overcome the predominant segregation of art and architecture.¹⁷⁷ This topic raised by the Franco-Swiss architect was also expanded into a major discourse at the first two postwar CIAM congresses at Bridgwater and Bergamo. Tyrwhitt likely was first exposed to acoustic plasticity at these meetings.¹⁷⁸

During a visit to McLuhan's Toronto home on St. Mary Street in 1953, Giedion explained his views of the Roman arch as enclosed space to a small group of faculty members.¹⁷⁹ In reference to the nonvisual space within Egyptian pyramids, Carleton Williams, the psychologist on the team, coined the term "auditory space," which he adopted from behavioral psychologist E. A. Bott.¹⁸⁰ According to Carpenter, "the phrase was electrifying."¹⁸¹ As a further response to this presentation, Williams presented a wide-ranging paper that initially claimed the contemporary understanding of space to be almost entirely visual: "Generally in our society a thing must be visible to be real."¹⁸² Since Aristotle assured his readers that the sense of sight was "above all others," Williams argued, most thinking was done in visual models. The psychologist pointed out that the feeling of depth, a main characteristic of visual space, is not primarily derived from a visual experience, but is only perceptible through motion in space. In contrast to the notion of visual space, Williams finally described sound as a medium that is not located at a single point, but has the capacity to "fill auditory space." He argued that auditory space was completely different from visual space, as it has no point of favored focus, no fixed boundaries, almost no sense of direction, and no center.¹⁸³

As Williams recalled, "the notion of auditory space struck Marshall with great force" ¹⁸⁴ Excited by the potential of his colleague's elaborations, McLuhan immediately appropriated the idea of auditory space, which had not been addressed in the context of communication before. The concept of auditory space "proved useful in unifying many sectors of a complex field,"¹⁸⁵ and provided the group with an explanation of why in preliterate societies "men naturally trusted their ears more than their eyes," as well as the implications of this peculiarity for the "control of visual space" and consequently also the built environment.¹⁸⁶ For McLuhan, the most important lesson from this first encounter with auditory space was to realize that there were spatial alternatives to visual space.

As a result of Williams's presentation, Tyrwhitt invited Giedion to join their seminar as a "guest of honor." On February 23, 1955, Giedion visited the Culture and Communications Seminar to discuss his advances in the realm of multidisciplinary work, as well as the insights of his most recent research. The minutes of the seminar suggest that it was Giedion—or rather Tyrwhitt speaking on his behalf—who initially triggered the discussion about acoustic space within the research group. Nevertheless, the detailed transcription of Giedion's guest appearance at the seminar indicates that he was not concerned directly with auditory space. When Tyrwhitt brought up the issue in the discussion, Giedion claimed that he could not share his opinion on this subject because he had "never thought particularly about it."¹⁸⁷ Given that Tyrwhitt, who was well aware of Giedion's agenda, raised the issue, and that they decided to resume

the conversation the following day, one might conjecture that Giedion was not unaware of acoustic space, but rather was unwilling to address the issue in public with students, as he had not yet come to a conclusion himself. Since there are no minutes of these informal gatherings, it is impossible to trace the individual contributions to the discussion. Yet it can be assumed that the emerging concept of acoustic space took shape multilaterally over the course of the periodic meetings that involved the core members of the research group as well as selected guests. Tracing the publication of related articles in *Explorations* and the incorporation of allied ideas into independent writings by various members of the group suggests that there was not a single source of influence, but a degree of mutual exchange, which is also reflected in the diversity of the final definitions and understandings of acoustic space. Along with Williams's psychological notions of auditory space, the economic parallels to medieval Europe brought up by Easterbrook, and Tyrwhitt's delineation of historical shifts in urban perspectives based on her experiences in Fatehpur Sikri, Carpenter's anthropological investigations into the realm of aboriginal cultures seemed to both Giedion and McLuhan the most fruitful for their interpretations of acoustic space.

The oral cultures that Carpenter and Harvard anthropologist Dorothy Lee were examining—her contributions to McLuhan's spatial understanding and the journal *Explorations* were significant yet widely unacknowledged—provided a solid basis for the intensifying discussion within the group.¹⁸⁸ Carpenter lived and worked among the Inuit of the Canadian Arctic for many years, and consequently, the “Aivilik Eskimo” provided a perfect case study, as the people lived in acoustic space, “boundless, directionless, horizonless, the dark of the mind, the world of emotion, primordial intuition, terror,” just as Western societies did before the invention of written text.¹⁸⁹ In a letter to his mentor Wyndham Lewis, McLuhan described the newly discovered acoustic space, paraphrasing Carpenter's insights:

A group of us here have been studying the new media and have been looking into the Character of Acoustic Space as reconstituted by the mechanization of sound. Acoustic space is spherical. It is without bounds or vanishing points. It is structured by pitch separation and kinesthesia. It is not a container. It is not hollowed out. It is the space in which men lived before the invention of writing—that translation of the acoustic into the visual. With writing men began to trust their eyes and to structure space visually. Pre-literate man does not trust his eyes very much. The magic is in sound for him, with its power to evoke the absent.¹⁹⁰

After ongoing discussions, McLuhan set about to write an article in collaboration with Carpenter, trying to prove using firsthand

7/6/8

Acoustic Space

It has been accurately observed that, apart from ~~optically~~^{optical} ~~axis~~ space visible to the eyes - there is such a thing as acoustic space, which knows no emptiness and ~~with~~ which can be filled with sound. ~~This is a realm~~ This is a realm ⁱⁿ which ~~lays~~ no importance ^{is laid} upon tangibility or visibility.

As far as we know, Le Corbusier was the first to speak of the notion of an acoustic architecture. His studies led him, as he says, to the perception of "an acoustic intervention in the domain of forms. . . One starts with the acoustics of the landscape, taking into account the four horizons. . . One creates forms to respond to these horizons, to greet them" (Le Corbusier p. 38).

This acoustic space, which does not concentrate upon the single form and isolation, has its counterpart in primeval apperception. The caverns are without any architectonic, tangible space. Yet they have audible space.

Once more the contemporary artist unconsciously comes near to the apperception of primeval man. E.C. Carpenter insists that the Avilik Eskimos do not describe space "primarily in visual terms. They don't regard space as static, and therefore measurable; hence they have no formal units of spatial measurement, just as they have no uniform divisions of time. . . They define space more by sound than sight. . . ~~With them the binding power of the oral tradition is so strong as to make the eye subservient to the ear. . . In our society to be real a thing must be visible and preferably constant. We see with the eye not the ear. . . The essential feature of sound is not its location but that it be, that it fill space. . . Auditory space has no favored focus. It is a sphere without fixed boundaries" (Carpenter, 1959, ~~xx~~ pages/^{unnumbered} ~~xxxxxx~~).~~

It may be that the intangibility of so much paleolithic art is a product of their relation with audible space. The figurations in the caverns appear and disappear from one moment to the next. Their aspect is dynamic, not static. Like sounds, they come and go.

Le Corbusier, Oeuvre complete 1946-1952. Zurich, 1953.

E.C. Carpenter, Eskimo, Explorations 9. Toronto, 1959.

anthropological knowledge that literate culture favored the visual and neglected audio-tactile sensations. The article only appeared in the *Explorations* anthology and was strategically placed just ahead of Giedion's essay on "Space Conceptions in Prehistoric Art," which had already been published in *Explorations* 6. Without proper citation, McLuhan and Carpenter appropriated large parts of Williams's article on acoustic space, which had appeared in *Explorations* 4. Some of the central points of their essay, however, are drawn from Carpenter's research on the Aivilik, which Carpenter eventually would further develop and publish as an independent publication entitled *Eskimo Realities* (1973).¹⁹¹ The anthropologist's insights drawn from everyday life experiences among the Aivilik supported the notion of auditory space introduced by Williams. In almost identical words, McLuhan and Carpenter concluded that "auditory space has no point of favored focus. It's a sphere without fixed boundaries, space made by the thing itself, not space containing the thing. It is not pictorial space, boxed in, but dynamic, always in flux, creating its own dimensions moment by moment. It has no fixed boundaries; it is indifferent to background."¹⁹²

The discussions among the group and in the seminar, as well as the various publications that emerged out of this context contributed to a spatial discourse, which is also reflected in the research on the beginnings of art and architecture that Giedion conducted over the course of more than a decade starting in the late 1940s. From his papers, it is evident that Giedion was far more inspired by Carpenter's work than by McLuhan's apprehension of acoustic space. Giedion was in close contact with the Toronto group, so it cannot be a coincidence that he opened his chapter on "The Space Conception of Prehistory" with remarks about Carpenter's research on "Eskimo perception and primeval art," followed by a subsection dedicated to "acoustic space."¹⁹³ It is clear that the anthropologist generously shared his work with the historian, providing him with unpublished manuscripts—for instance, a draft of his essay on "Space Concepts of the Aivilik Eskimo," which would be published in *Explorations* 5 (1955)—and repeatedly followed up on Giedion's vague questions with detailed responses.

5.20

Sigfried Giedion, typescript on "Acoustic Space," in which Giedion associates his interpretation of an auditory perception of space with Carpenter and Le Corbusier's work. Giedion's description of acoustic space principally focused on the habitat of prehistoric man. According to Giedion, there was no architecture before script; he claimed that "touch, sound, and the rest have neither uniformity or connectedness needed for the architectural 'enclosure' of space."¹⁹⁴ He carefully distinguished architectural or enclosed space from the hollowed-out and wraparound spaces of preliterate man. Understanding that "[the] space conception of a period is the graphic projection of its attitude towards the world," he described the perception of prehistoric man as two-dimensional, based on the curving surfaces of caverns, continually changing form

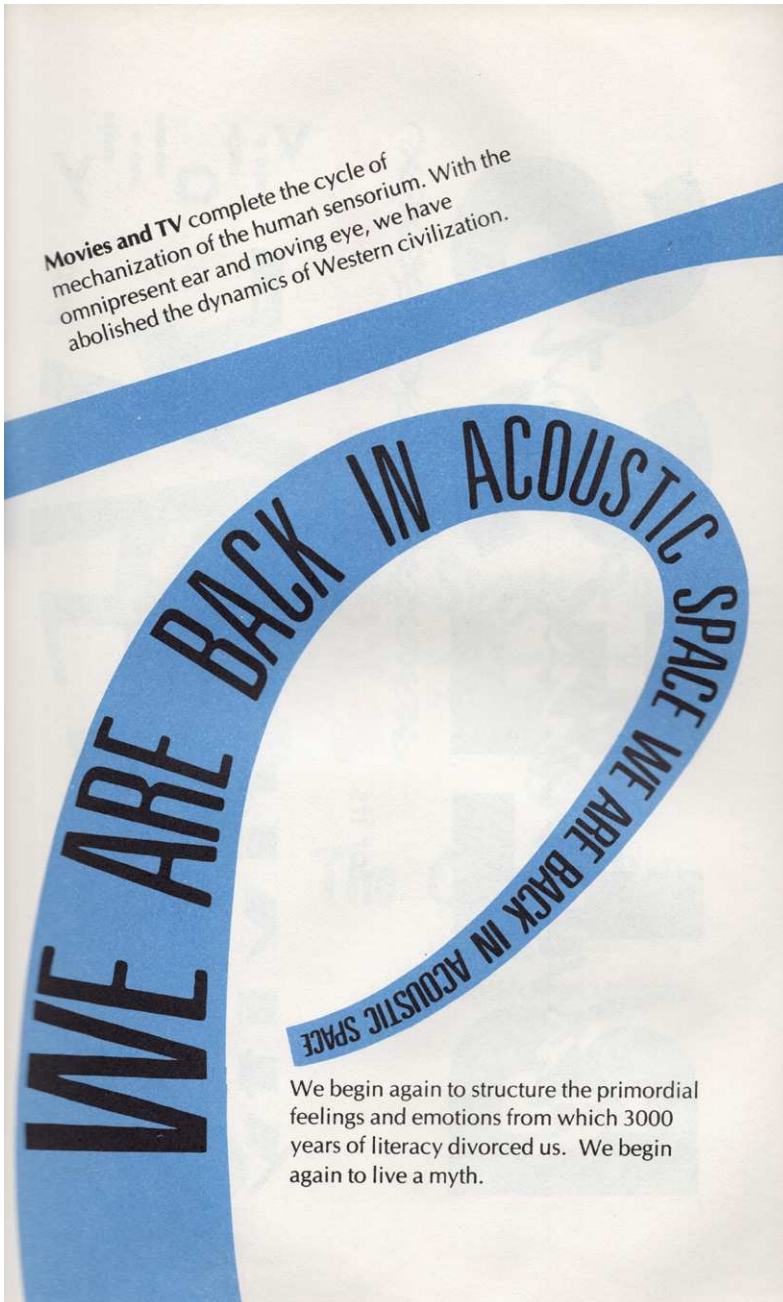
and direction.¹⁹⁵ Similar to a child, for whom “a picture is as acceptable sideways or upside-down as right-side-up,” in this “prearchitectonic” stage of human development, there existed a “freedom of direction.”¹⁹⁶ Along with his colleagues at the University of Toronto, Giedion was stunned by the fact that there was no clear sense of direction, “no up and no down, no above and no below” in prehistoric art.¹⁹⁷ As opposed to the perspectival point of view, which has dominated architecture and arts since the Renaissance, prehistoric art—in particular the paleolithic cave drawings of Lascaux and Altamira—was characterized by a planar, two-dimensional spatial perception, reminiscent of modern artistic tendencies such as Cubism, Surrealism, and Dada.¹⁹⁸

This independence of vision as it existed in prehistoric times has never been achieved again. While Giedion ascribed importance to the acoustic properties of space in prehistoric art, shaping what he described as the “space conception of prehistory,” he restricted the perception of architectural space to the visual sensorium.¹⁹⁹ A pupil of Wölfflin, Giedion considered space as a constituent element of visual art. In his architectural criticism as well, Giedion predominantly argued in spatial terms. He was convinced that “from the very beginning, man’s artistic utterances have been affected ... by his attitude toward visual space,” and that there was no art without a “definite relation toward visual space.”²⁰⁰ Consequently, he believed the sensation of space to be inseparable from the perception of light: “It is light that induces the sensation of space. Space is annihilated by darkness.”²⁰¹ While the art historian inconsistently described this abolition of space as a limitlessness created by darkness in other sources, there is no doubt about his certainty that in the realm of architecture space is only perceived by a combination of sight and touch. Giedion certainly acknowledged the existence of auditory space; however, he remained very much fixed on a visual perception of art and architecture and thus only understood the acoustic trope as a preliminary step in his narrative from prehistoric to modern art and architecture.

As Giedion immersed himself in prehistoric studies, McLuhan undertook a spatial reading of technology, following an approach to auditory space that deviated from his colleague’s in its focus on oral traditions and contemporary poetry. McLuhan was convinced that “acoustic” space—he renamed Williams’s auditory space in order to emphasize its abstract nature—by surrounding one in a 360-degree environment, was more encompassing than visual space. In spite of crediting Giedion’s “history of space,” *The Eternal Present*,²⁰² as the source of his own spatial investigations, McLuhan repeatedly criticized Giedion’s “lack of verbal culture” as well as his “unawareness of the properties of the various sensory spaces.”²⁰³ After the publication of the second volume of *The Eternal*



5.21



5.26

Present, McLuhan—who never confronted his colleague directly—approached Tyrwhitt with his critical comments:

I don't think that Giedion is sufficiently aware of the sensory components of parameters of space. He is quite sure that space is visual and that darkness eliminates space. In fact, auditory and kinetic space are greatly enhanced by darkness or blindness. The stepping up of the visual component dims the other components of space. Throughout the book [*The Eternal Present*] he rightly asserts that there is no enclosed space before script or writing, but doesn't realize the implication of this. Enclosed space represents a great increase of stress on visual organization, that is, on continuity, uniformity and connectiveness.²⁰⁴

Despite this pointed criticism of Giedion's approach, it is evident that the progress of McLuhan's work was fostered by the critical discourse with Giedion, Tyrwhitt, and Carpenter. McLuhan started to develop a spatial model of communications, which, as Richard Cavell has observed, was concerned with the "transformations in the relationship between message and context."²⁰⁵ The notion of acoustic space turned out to be a central aspect of McLuhan's media typology. Seeking a spatial model that would support the multifaceted needs of the electronic age, McLuhan advanced a dichotomy of two spatial paradigms by contrasting the dynamic, auditory space with the static, visual space of print culture. This distinction between the "visual and acoustic world" provided McLuhan with a far-reaching argument that he would employ in most of his subsequent works.²⁰⁶ Acoustic space was the space of the electric world of communications "in which people are hit with almost random bursts of information from all sides."²⁰⁷ As a consequence of his work with Carpenter, McLuhan concluded that literacy constituted a visual age that largely abandoned the oral characteristics of tribal societies.²⁰⁸ The electric world was aural, suggesting "the re-conquest of non-visual space by radio and mechanical means has perhaps returned us to the sort of awareness of preliterate man."²⁰⁹

In *Explorations 8*, better known as "Verbi-Voco-Visual," McLuhan introduced twenty-four "items," the last of which is aptly entitled "No Upside Down in Eskimo Art." In McLuhan's typical manner, this phrase is also represented visually by mirroring the phrase at its baseline. This insight drawn from anthropology, which helped Giedion characterize the prehistoric perception of space, was used by McLuhan to define the contemporary electric environment, the "acoustic age," which has no favored point of focus or direction and within which information can be grasped "from all directions at once."²¹⁰ Through electronic media, the preliterate reality of acoustic space was paradoxically transformed into the postliterate society

5.21
Edmund Carpenter,
typographic
representation of the
spatial perception
of the Aivilik,
as published in
*Explorations 8:
Verbi-Voco-Visual*
(1957).

of the electric world or, as McLuhan and Carpenter described: “Just as the Eskimo has been de-tribalized via print, going in the course of a few years from primitive nomad to literate technician, so we, in an equally brief period, are becoming tribalized via electronic channels. The literacy we abandon, he embraces; the oral language he rejects, we accept.”²¹¹

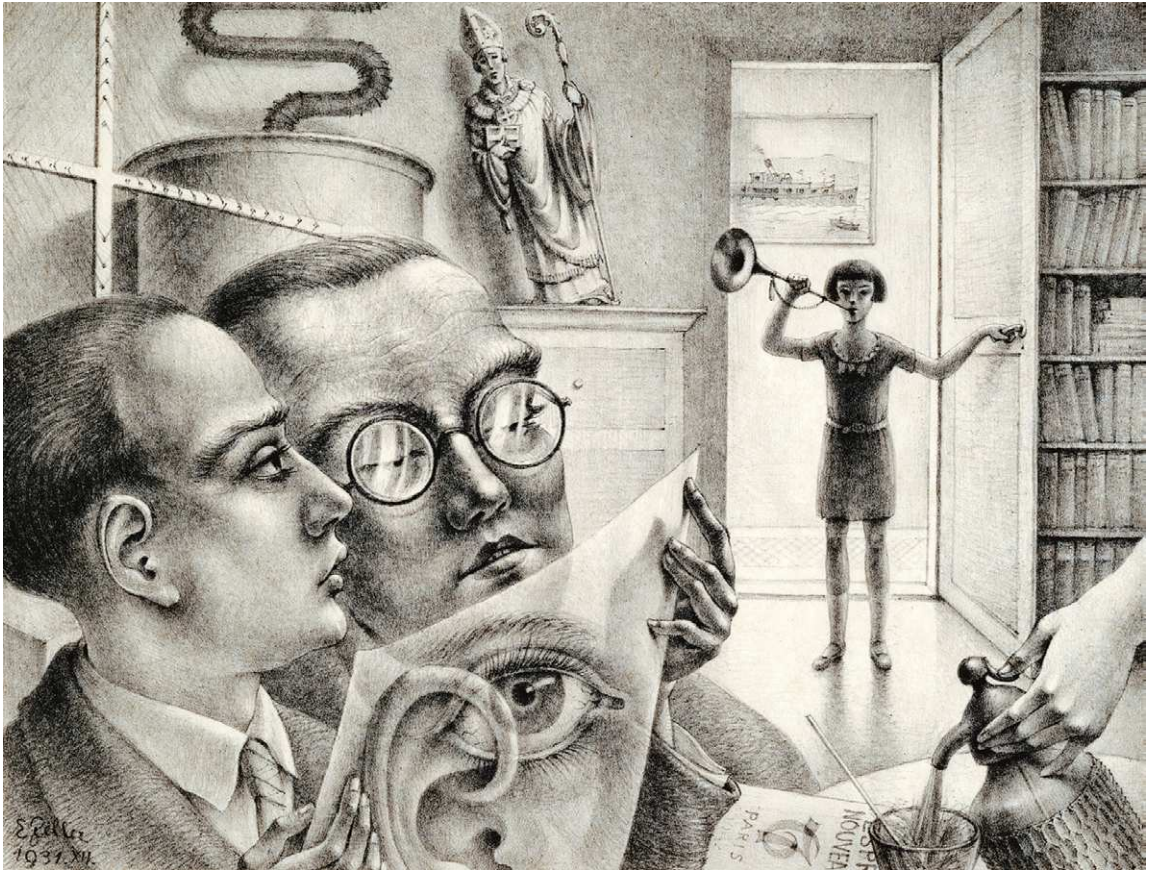
5.22 McLuhan was certain that print culture separated sight from sound and therefore fostered individualism and specialization. The reduction of the complex sensory modes of words into a uniform visual language of script led to a paralysis of the senses. In the electric age, however, all sensory modes were accessible simultaneously, while the “tyranny of typography in imposing its monotonous regime on all aspects of life and perception can no longer be sustained.”²¹² To illustrate this equation of hearing and sight, McLuhan used a photomontage by George Morris depicting the amalgamation of an ear and an eye in the portrait of a man—a conflation that is also prominently represented in an etching of Giedion and the photographer Hans Finsler by Eugen Zeller.²¹³ McLuhan most likely discovered Morris’s powerful illustration, which perfectly suited his own agenda, in László Moholy-Nagy’s *Vision in Motion* (1947).²¹⁴ By appropriating the montage—for the publication of *The Medium Is the Massage*, he even had it reshot by photographer Peter Moore—McLuhan not only proved his exceptional gift in assembling materials from disparate sources, but once more showed his sympathies for the early twentieth century avant-garde, which claimed an acoustic-optical dimension of reading.²¹⁵

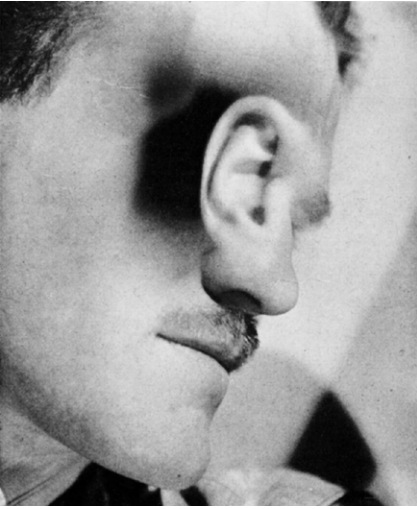
5.23 Eugen Zeller, *Sigfried Giedion and Hans Finsler* (1931). The etching depicts the photographer (left) and the art historian (right), examining a drawing of an eye that is partially overlapped with an ear.

5.24 Peter Moore, photomontage from Marshall McLuhan’s *The Medium Is the Massage* (1967).

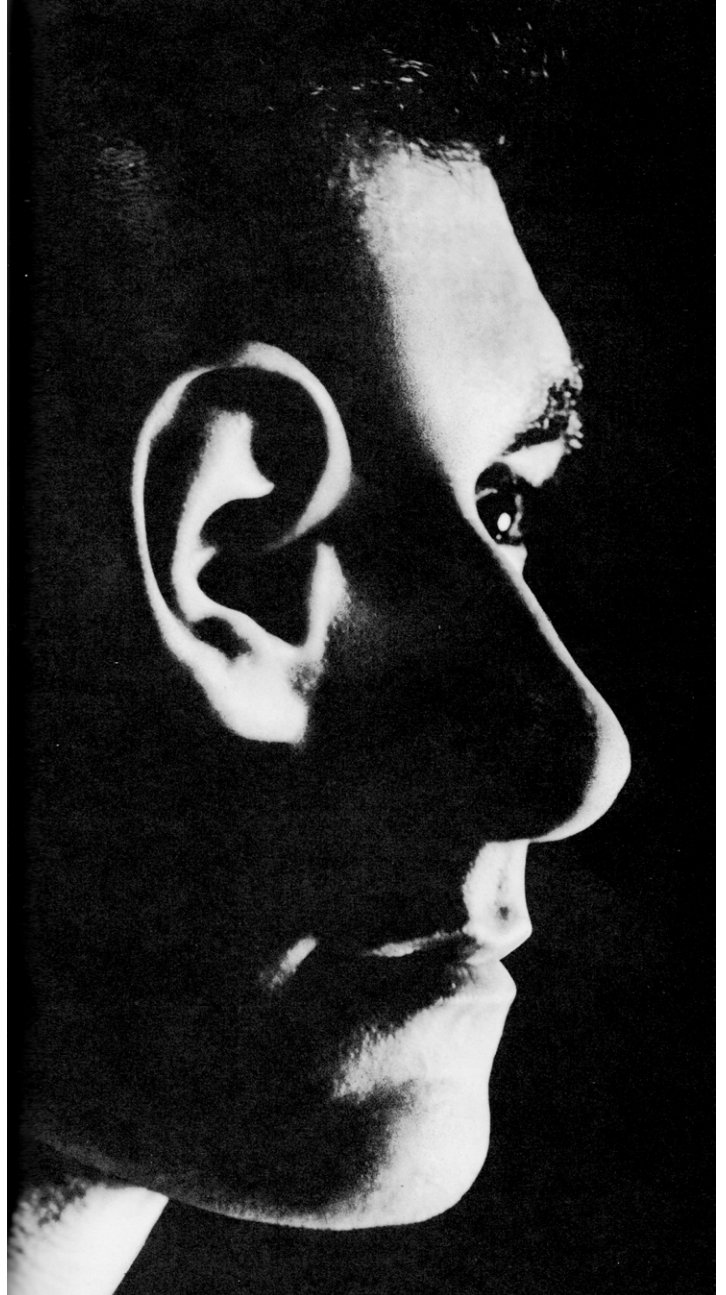
In his work on acoustic space, McLuhan received critical stimuli from his own field of English literature. Considering art and literature as essential keys to accessing communication and everyday culture—in a sense, he continued where he started off a decade earlier with *The Mechanical Bride*—he began to relate the notion of acoustic space to contemporary poetry and literary theory. McLuhan characterized the non-Euclidean auditory space as “somewhat like the space time used in poetry, where often two spaces are presented in one time.”²¹⁶ He found this simultaneity in the work of British poet, dramatist, and literary critic T. S. Eliot, whom he had studied extensively when he was exposed to the Vorticist movement. With his concept of “auditory imagination,” Eliot offered McLuhan a world of sound lying outside the natural or human-made auditory environment. “What I call the auditory ‘imagination,’” Eliot claimed, “is the feeling for syllable and rhythm, penetrating far below the conscious level of thought and feeling, invigorating every word; sinking to the most primitive and forgotten, returning to the origin and bringing something back, seeking the beginning and the end.”²¹⁷

The other important force that shaped McLuhan’s understanding of the structures of oral cultures by means of nonlinearity was the Irish





5.22



5.24

87 Mary St.

Toronto 5

Oct 26/51

Dear Professor Giedion

Friends of mine gave me great pleasure in reporting some of your lectures at M. I. T. last year. I'm sorry I couldn't have heard you there and can only hope you have another work in preparation.

My own *Folklore (Mechanical Bride)* I asked Vanguard Press to send to you. It seems rather feeble to me. Legal and other editorial problems arose which resulted in the guts being torn out of it.

If you don't find it too inadequate I hope you may be able to write a short phrase or two about it that would serve to get it a hearing. Just a phrase that could be quoted in an advertisement.

Lately I've been working on the evolution of some techniques in the arts — especially those leading to the passage intérieur, and Finnegans Wake.

most cordial good wishes

Marshall McLuhan.

5.25 writer James Joyce. The Canadian scholar was particularly fascinated by *Finnegans Wake* (1939), which he considered the most important work of art of the twentieth century. The book's open ending, marked by an unfinished sentence that is potentially completed by its opening phrase, suggests a perpetual reading and retelling of the story. This openness of Joyce's writing shares strong affinities with McLuhan's notion of acoustic space, which also has no beginning and no end. The auditory component of Joyce's writing surfaces most impressively in his puns. In order to transform from word to sound, and to unfold their entire strength in the auditory realm of space, these passages need to be read aloud. Joyce's "audio-tactile forms of writing," as Janine Marchessault has pointed out, "challenge the effects of typographic cultures."²¹⁸ Carola Giedion-Welcker, a close friend of James Joyce, observed the same phenomenon in her memorial publication for the author, who spent the year before his death in Zurich. "Joyce begins with the sound of words," she wrote. "This is why English here is for the most part written as it is spoken. Hearing is the primary sense for the linguistic, not the viewing of characters. Also, the meaning of the text is only graspable by reading it out loud. Sense is always multicolored."²¹⁹

5.26 In the books published after his rise to stardom, McLuhan imitated the auditory element of Joyce's work. Just as Joyce offered the reader "a set of multi-leveled puns," McLuhan introduced his characteristic wordplays in the audiovisual form of elaborated text-images.²²⁰ A first example of this onomatopoeic experiment can be found at the end of a homage to James Joyce entitled "Joyce's Wake," which was published in *Explorations 5* and featured Carola Giedion-Welcker as one of the voices in the article.²²¹ The reading of Joyce's work eventually also provided McLuhan with fuel for his criticism of Giedion's perception of acoustic space. He wrote to Jacqueline Tyrwhitt in 1964:

Last night I was reading *Finnegans Wake* I thought at once of writing to Giedion about it. In these pages Joyce runs through the letters of the alphabet from A to Z as a social cycle. When he gets to Z, the cycle begins again. He explicitly indicates the return to primal undiscriminated auditory space, then begins again the discovery of the vertical plane and enclosed space and numbers and measurement. Joyce is quite explicit that (page 501) as the alphabet ends its cycle we move out of visual space into discontinuous auditory space again. ... In his "Beginnings of Architecture" Giedion cites the evidence several times that there is no architectural enclosing of space before script. Giedion does not know why this should be. Visual space alone of all the space discriminated by our various senses is continuous, uniform and connected. Any technology that extends the visual power imposes these visual properties upon all other spaces. Our own return in the electric age

to a non-visual world has confronted us suddenly with this tyrannical and usurping power of the visual over the other senses.²²²

McLuhan's letter to Tyrwhitt describes an alternative view of Giedion's quest for multidisciplinary research. Similar to Giedion's focus on the cultural implications of anonymous history rather than the formal and technological aspects of his objects of study, McLuhan was far more interested in the way the media changed the sociocultural environment than in mere questions of how communication was transported. He stressed this intellectual affinity for Giedion once more in a comment on "The Beginnings of Architecture," pointing out that "his [Giedion's] work carries us from the period of the specialist and fragmented knowledge to plenary participation in an integral human awareness."²²³

McLuhan's first major endeavor after the Ford Foundation project was the study "Understanding New Media," which was funded through the United States Department of Health, Education, and Welfare, and presented and published by the National Association of Educational Broadcasters.²²⁴ The project eventually led to McLuhan's next major book, *Understanding Media: The Extensions of Man*, which took the idea of auditory space to yet another level.²²⁵ In both *The Mechanical Bride* and *The Gutenberg Galaxy*, McLuhan argued visually or literally, while his later books, starting with *Understanding Media*—in particular *The Medium Is the Massage* and the second version of *Counterblast*—are much more sound-based, communicating acoustics via the visual stimulus of type as image.

Emerging
Multidisciplinarity

Centre for Culture
and Technology

In one of his required reports for the Ford Foundation, Marshall McLuhan summarized that “the next great enemy of interdisciplinary seminars is the discovery that communication among specialists is possible. This is very disrupting. It destroys the entire base of emotional security and prestige which the average academic regards as his birthright today.”²²⁶ Fueled by this insight and never missing an opportunity to antagonize other faculty members at the University of Toronto, McLuhan presented the plans for his next multidisciplinary project to Richard Sheldon, the director of the Ford Foundation, even before filing the final report of his previous research project. As a permanent institutional version of their multidisciplinary seminar, McLuhan and Edmund Carpenter intended to establish a “Contemporary Institute of Culture and Inter-relation,” which would work independently from other faculties, could grant degrees, and “would offer the means of a natural follow-up to [their] inter-disciplinary beginning.”²²⁷ While broadening the focus to include education outside the academy, McLuhan and Carpenter intended to anchor this new institute of “modern cultural studies” in the approach they had cultivated over the past three years. The institute would investigate the interrelationships of all the “institutions” in the modern world, with primary emphasis on the arts.²²⁸ Given this viewpoint, it was natural that McLuhan would ask Giedion to serve as the “advisory head” of the institution:

Carpenter and I are now drafting outlines for [a] Contemporary Institute to submit to Ford and Rockefeller. ... We shall be able to add great force to our presentation in having your consent to act as our advisory Head. Would you prefer any particular title? Director of Studies? President? We are eager to device [*sic*] ways of working with all branches of Radio, TV and Film Board in working out the grammars of the new visual languages of the new media. Here you have already done so much for us in discovering the language of vision.²²⁹

Giedion had previously stated that he would be interested in continuing his studies on the “modest things of daily life” in “more complicated fields, for instance, the impact of the movies, radio and television on man,” topics that would eventually become key elements of McLuhan’s research on the culture of communications. He gladly accepted this offer and agreed to chair the group for a year.²³⁰ Giedion

wrote to McLuhan, “As you know, I am since years on the tracks for a faculty of interrelations establishing or trying to establish a common vocabulary, a clarification and comparison of methods used in different disciplines. I have full confidence in you and Carpenter and I will be delighted to be with the party.”²³¹ Jaqueline Tyrwhitt, who was laid off at the University of Toronto after the completion of the Ford Foundation project—and as a result of her CIAM network, immediately assumed a position at Harvard—indicated her willingness to return for such an endeavor, as did Dorothy Lee and Edward Hall.²³² Encouraged by the promised two-year support of the Ford Foundation, McLuhan and Carpenter proposed to the dean of the University of Toronto their institute, which would have an independent curriculum and could grant credit for courses.²³³ While it attracted general interest, the project ultimately collapsed because the individual departments were not willing to share their authority as credit-granting entities.²³⁴

Throughout the late 1950s, McLuhan held informal seminars at his home or in his office for a revolving group of participants. Since he was developing his ideas in talk, he desperately needed this vessel to move forward intellectually. After the wide success of *The Gutenberg Galaxy* and *Understanding Media* catapulted him to instant fame, McLuhan was highly sought after by the American academy. A considerable number of job offers from renowned universities finally exerted pressure on Claude Bissell, a close friend of McLuhan and president of the University of Toronto, and Father John Kelly, the head of St. Michael’s College at the university. In 1963 they invited McLuhan to create his own independent institute, which he established not long after as the “Centre for Culture and Technology” in a small coach house on campus.²³⁵ In one of the university’s first interdisciplinary centers—at an earlier stage it was also called the “Centre for the Study of the Extensions of Man”²³⁶—McLuhan set about to “bring together scholars, researchers and students of the Sciences, Humanities and Arts in order to explore and determine the effects of technology on patterns of culture.”²³⁷ Along with teaching interdisciplinary graduate seminars and supervising students, the actual research and its publication in a resurrected *Explorations* journal was to be the main focus of the institute. The proposal for the institute listed one more activity that no doubt was extremely satisfying to Giedion, who had been battling for a universal language among all disciplines throughout his career:

The compilation of a glossary of terms used by and useful to the Sciences, Arts and Humanities. These terms are often common to all these disciplines; frequently borrowed from one another but they have different meaning to the different disciplines in differing contexts. Thus such a dictionary is essential to adequate com-

munication between these disciplines. It will define the terms as originally used in the context of the discipline which devised them and then will trace their transformation and various meanings in other contexts.²³⁸

While a significant number of cross-disciplinary research groups sprang up in the United States after the Second World War, McLuhan's seminars at the University of Toronto can be considered the first interdisciplinary framework—today this would most likely be called a “think tank”—dealing with questions of space and the media and negotiating between the sciences and the arts. It began the institutionalization of applied research within the architectural realm and served as a model for other comparable endeavors, such as the Carpenter Center for the Visual Arts at Harvard and the Center for Advanced Visual Studies at the Massachusetts Institute of Technology, to name only two directly related cases.

The Visual Arts Center at Harvard

5.27–5.28 In between the McLuhan-Carpenter proposal to the Ford Foundation and the finalizing of the Centre for Culture and Technology, yet another project emerged with the potential to realize Giedion's pedagogical ambitions. In the mid-1950s, President Nathan M. Pusey tasked a Committee on the Visual Arts with assessing the role of the arts at Harvard.²³⁹ Chaired by John N. Brown—one of the so-called Monuments Men, who helped recover works of art stolen by the Nazis—the group prepared the Brown Report, which concluded that the university was in need of a “Division of the Visual Arts that would bring together the history of art with an expanded department of design (to include painting, sculpture, graphic arts, and other visual media) and the University's teaching collections housed at the Fogg and the Busch-Reisinger.”²⁴⁰ Following this evaluation, President Pusey began to actively seek donors to finance a new building for a center for visual arts, which was to be located adjacent to Harvard's Fogg Museum. The initial discussion of the mission of the proposed division had barely started when a potent benefactor, Alfred St. Vrain Carpenter, agreed to cover the building costs. What followed was a somewhat unorthodox approach to the establishment of a new academic institution. At the suggestion of the dean of the Harvard Graduate School of Design, Josep Lluís Sert, Le Corbusier was commissioned to design the building.²⁴¹ The Franco-Swiss architect began to develop his preliminary proposal in 1959, before the “Committee for the Practice of the Visual Arts” had even begun to define its needs and the building program.



5.27



5.28

With the committee lacking coordination and drawing a large number of members from different university departments, Sert, the group's chair, faced the thankless task of navigating the wishes of members, the donor, and eventually also Le Corbusier, who only visited Harvard twice during the design and construction process.²⁴² Sert's correspondence indicates that there was additional pressure from outside this group. Most vocal was Giedion, who likely saw this new program at Harvard as his ultimate chance to realize his long-desired project of a cross-disciplinary research and teaching center. His sense that this was his last opportunity was heightened by the fact that the semester of the official inauguration of the Carpenter Center was Giedion's final one as a visiting faculty member at the university: "For a long time now my wish has been a 'faculty of interrelation' based on inter-disciplinary methodological research to bridge this gap between feeling and thinking. This is why I was so deeply interested in the organization of the Visual Arts Center, which is a case in point."²⁴³

Giedion acknowledged the committee's difficulties in setting precise parameters for the establishment and orientation of such a center—which had no precedent. He claimed that it would be impossible to fully determine the needs of the institute in advance and consequently suggested an open-ended process to arrive at the final form of the curriculum that would allow for development and change, "as a result of experiment and experience in tune with the spirit of Harvard itself."²⁴⁴ While Giedion was not politically adept enough to win a voice in the committee, he cleverly attempted to influence its decisions indirectly. He realized that a loose structure would potentially allow him to mold the institution according to his own ideas. Giedion made clear that Harvard was not in need of money or an excellent building—it had both. What was lacking, however, was a larger scheme for how to organize a visual studies program.²⁴⁵ As an outcome of his seminar "The Human Scale" (see chapter 3) and the related problems that had surfaced, his aim was the incorporation of "the Visual Arts and History courses" within the architectural curriculum.²⁴⁶ Stating that he had contacted the "leading members of this University" three years before work on the Carpenter Center had commenced,²⁴⁷ Giedion proposed the creation of a "Center for Visual Education"—or in other instances, "Center for Visual Communication," "Visual Communications Center," or just "Visual Center"—the purpose of which was to "further the neglected visual sensitivity, especially in professions other than those concerned with art or art history."²⁴⁸

In an almost Deweyan manner, Giedion asserted that this "humanization of scientific investigation" was just one step within a larger historical framework. With a first pedagogical stage focused on advanced painting and industrial production having been achieved by the Bauhaus and its followers, and with CIAM helping to bring about

an international collaboration of architects and planners in a second stage, Giedion thought the time was ripe to create cultural centers that would furnish the next generation of “intellectual leaders” with the visual skills necessary in a “time of mass media.”²⁴⁹

The purpose of the new institution is a different one, it is revolutionary, and—as previous experience has taught us—hard to reach. Neither architects nor prospective artists should be taught here first and foremost. The center is rather intended for lawyers, economists, physicians, physicists, mathematicians, etc. in order to open their eyes and to teach them how to see at the beginning of their studies as college students, i.e., before they specialize in their field. And this is happening at a time in which the written word has continuously pushed sight into the background, in a period that is called the electronic age.²⁵⁰

Inspired by Marshall McLuhan’s endeavors at the University of Toronto, Giedion was determined to improve the “visual illiteracy” that, according to him, was omnipresent at most university departments.²⁵¹ The particular emphasis on decision makers—such as attorneys, politicians, and businesspeople—in the training of aesthetic basics and improvement of their visual skills, “in order to abolish the widespread ignorance and retarded aesthetic judgment,”²⁵² is revealing. It indicates that Giedion grasped the essence of the funding policies of Harvard University, a well-organized corporation of international reputation—or “ein Sprachrohr für die Welt” (a mouthpiece for the world), as he put it.²⁵³

To gain more control and to bypass faculty opposition, Giedion suggested setting up an advisory committee consisting “of people outside of Harvard, who by their work are known that their ideas are going already a long time in this direction.”²⁵⁴ The art historian, who wanted to shape this new institution according to his personal vision, did not intend to openly invite experts from other fields and universities. Instead, he started to spread the word among the circle of his close friends. Consequently, McLuhan, who was a constant—if not properly quoted—reference in Giedion’s papers regarding the Carpenter Center, was asked first if he would be interested in being involved with the program.²⁵⁵ The active cooperation of Tyrwhitt, who was once again mediating between both intellectuals, suggests that the developments at Harvard offered a potential vehicle for the rejected project for a cross-disciplinary institute at the University of Toronto. “I wish we could have you here for a period,” she wrote to McLuhan, “Your outlook would be just what we needed in the formative period of our new Centre for the Visual Arts, which is being built by Le Corbusier. The money is there, the ground is cleared and the superstructure is designed, but the foundations are not yet laid

literally or figuratively.”²⁵⁶ While McLuhan, marginalized in Toronto, showed serious interest in “having daily access to and dialogue with all the departments of Harvard and MIT” and this thought began “to assume in [his] mind the character of an absolute need,” Giedion failed to convince the committee of his idea.²⁵⁷ His frustration becomes apparent in his countless letters to Dean Sert, for he was convinced that the public would finally become aware that he “... pushed a door open, which leads beyond SP.T. + A. [*Space, Time and Architecture*]!”²⁵⁸

At the time, Josep Lluís Sert was not only heading the Graduate School of Design but also successfully leading his own architectural practice and working on commissions around the globe. Because of these pressures and the challenges of chairing the committee for the new center, he eventually stepped down from his position. For Giedion, whose political impact at Harvard was defined and limited by Sert’s sphere of influence—it was Sert, his friend and CIAM’s president, who regularly invited Giedion back to teach—this decision was a strong repudiation of his advances. He wrote to Sert, “I understand perfectly that you had to resign from the chairmanship of the Committee owing to pressure of work. Now I ask myself what rôle I could play in the present circumstances and I do not want to interfere if I cannot be instrumental in carrying through the proposal.”²⁵⁹ As he had so many times before, Giedion insisted stubbornly on his point of view, unwilling to negotiate other approaches. While this trait enabled him in some instances to create outstanding work of lasting significance, his lack of diplomacy and tactfulness also hindered him from reaching higher goals, especially in the academic community both in Switzerland and the United States.

When the “Visual Arts Center” finally opened its doors in the spring of 1963, the committee had still not made a decision as to the future director of the institute or its definitive program. In a letter to McLuhan, Tyrwhitt described the situation as she saw it:

It’s absurd that our wonderful instrument—the Corbusier building—is still without a program. It has a sculptor who is able to interest and inspire students, but has no interest outside his own work (Mirko Basaldella) and Robert Gardner, whom I think you know. ... The third member of the triumvirate is Eduard Sekler, an orthodox art historian who has been in touch with the modern world, but is nervous of it.²⁶⁰

For the first three years, the Italian sculptor Mirko Basaldella was hired as artistic director.²⁶¹ Eduard Sekler, the ambitious young architect and architectural historian, gradually began to take on a leading role in the developments of the new center as coordinator of studies. Sekler’s promotion was a red flag for Giedion. He had a hard time ac-

cepting that the young scholar would finally pursue his own academic track. As his former associate at the Graduate School of Design, Sekler had facilitated the “Human Scale” seminar and taken care of Giedion’s teaching duties whenever he was away, while constantly adapting his own teaching schedule so that his Swiss colleague could fly in and out as he pleased.²⁶² Turning the argument on its head in reaction to this new situation, Giedion declared to Dean Sert that he did not want “to be a kind of stopgap to facilitate Sekler’s heavy duties,” and that he saw his influence at the Visual Arts Center limited, now that Sekler had become “co-ordinator ... and probably aspiring to greater things.”²⁶³

Apart from the exclusion of his agenda, Giedion’s major objection was the naming of the institute. According to Giedion, “Art Center” was not the appropriate term for an institution aspiring to higher goals than being “just another art school.” Giedion’s criticism of the name was an attack on a curriculum that jeopardized his idea of a cross-disciplinary research institute:

If I was interested in the VAC [Visual Arts Center] it was because I saw in it a possibility to fulfill an important purpose in bringing an awareness of art to the non-architect and non-art-historian. All of us see the aim in one direction: not to produce a dilettantic [*sic*] art-school but to make clear to other disciplines the meaning of art (emotions) in their particular occupation. What I read about the VAC in the Harvard Crimson and other sources indicated that it was tending more and more to dilettantic [*sic*] artistic education. One can not [*sic*] force events. After a certain point one is obliged to give up a cause for lost, especially if it is not defensible. So let us drop the subject.²⁶⁴

Nevertheless, Giedion did not give up. Soon afterward he made proposals to establish small interdepartmental faculty seminars, which would allow for the development of a common methodology, and to invite short-term directors for the first few academic years, in order to keep the direction fluid. Once again, these suggestions were not merely proposed for the benefit of the institution, but were another step in Giedion’s plan to finally realize his research group. The candidates he proposed for the directorship were more than obvious. Along with various CIAM members, Giedion contacted Marshall McLuhan about a possible engagement, convinced that he “should somehow be connected with [the] Visual Arts Center, Harvard, which ... does by no means go the right way!”²⁶⁵ At the same time he managed to convince Dean Sert that Herbert Bayer, who was involved in most of Giedion’s book projects, would be a good interim solution for two or three years before handing the directorship over to a younger generation.²⁶⁶

Unwilling to accept the course followed by the committee and disregarding the fact that Sert had resigned as its chair, Giedion kept bombarding his colleague with correspondence about his personal intentions for the center throughout the summer of 1963. After years of catering to Giedion at Harvard, facilitating his special wishes and needs, and incorporating his ever-changing teaching and travel schedules, the otherwise calm, considerate, and tolerant dean of the GSD finally erupted:

I believe you are mistaken and do not understand the conditions here in the University. I rather resent your attitude, which seems to make me responsible for whatever happens in the Visual Arts Center. I have done my very best, taking more time than I could spare in meetings of the Committee. But things are not as simple or as easy as you may believe. As proof of my continued good will and desire to see a good program developed in the new Center, I followed your suggestion referring to Herbert Bayer. ... I believe that, like you and other friends, I have done more than my share in defense of the principles we all stand for. There is a limit to what one can do, and of course, I am not willing to sacrifice my health and happiness—and neither are you. I rather regret that you do not seem to be interested in the School of Design and its program, but seem only concerned with the new Center.²⁶⁷

Most likely on behalf of Sert, Sekler, who once again tried to make things right, arranged for Giedion to lecture at the Carpenter Center in the framework of an already established course on “Design in the Visual Environment.”²⁶⁸ He also agreed to organize faculty roundtable discussions in which “faculty members from all parts of the University would discuss [with Giedion] the inter-relation of disciplines at the VAC.”²⁶⁹ Giedion’s acknowledgment of Sekler’s offer was rather unenthusiastic, and the undertone of his response to Sert indicates that he unjustifiably saw himself yet again as the victim of a larger plot against his person. As intransigent as usual, Giedion declared that if the other faculties were not willing to commit to a minimum of three meetings, “it would be better to let the whole thing drop.”²⁷⁰ The idea of consensus, navigating institutional politics, and negotiating skills apparently were not compatible with Giedion’s personality.

Realizing that there was no chance to get his way with the people he knew at Harvard, Giedion launched a last effort to apply pressure from outside the university. Taking advantage of his wide-ranging connections, he urged Harvard Arnason, vice president of the Guggenheim Museum, to intervene with the committee. In due course, Sert received a letter from New York, outlining Arnason’s—or rather Giedion’s—position regarding the newly founded institute.²⁷¹

To anyone at Harvard, it undoubtedly was clear that this was another of Giedion's awkward political moves—interestingly, he had previously claimed that he was “not a lobbyist”—and consequently had no influence at all.²⁷² Unwilling to engage with the Visual Arts Center in any way other than his own, Giedion eventually withdrew from the project. He felt that his energy was “spoiled,” for nobody at Harvard was capable of leading a collaboration among all the “faculties with a visual approach.”²⁷³ In a letter filled with disappointment, he later wrote to his friend Sert: “I hope all is well at Harvard, maybe with the exception of the Art Center.”²⁷⁴ Indeed, things did not go well—at least not from Giedion's perspective. In June 1966, Sekler was appointed the first director of the Carpenter Center for the Visual Arts. For Giedion, this marked the end of his time at the school and another painful personal defeat in academia.

Vision + Value:
György Kepes and
the Center for
Advanced Visual
Studies

As early as 1931, Sigfried Giedion started to explore issues of optics, vision, and especially visual education. In that year, under the aegis of the fourth *Davoser Hochschulkurse*, a symposium hosted by sociologist Gottfried Salomon in the Swiss Alps, Giedion gave a lecture entitled “Erziehung zum Sehen” (Education of Vision).²⁷⁵ In his lecture, Giedion advocated establishing “chairs for contemporary history” and demanded a definition of the current purview of each discipline, free from the “optical disguise” of their specialization, in order to show that the methodological framework used in different fields was based on comparable challenges.²⁷⁶ Giedion was convinced that contemporary art should take a lead in this development and facilitate the registration of larger coherences by falling back to an abstract but widely understandable symbolism that he described as the “Urelemente der Malerei” (primal elements of painting). Modern art, he claimed, should provide the “key to reality” and reconstitute the cohesion between the “methods of thinking and feeling” that were lost in the nineteenth century:

We have to restore the relationship between different fields of the sciences and the arts, i. e. emotionally, we have to absorb the results of the sciences and the arts. ... The parallelism of thinking and feeling is the sign for a universal understanding of the world. The Renaissance possessed it, the Baroque had it, and we have to reconquer it with our own means.²⁷⁷

5.29
Cover of the journal *Davoser Revue*, 1931, issue no. 8, with a review of the fourth *Davoser Hochschulkurse* on the topic of “Education and Learning,” which echoes Giedion's presentation on the “Education of Vision.”

DAVOSER REVUE

INHALT:

PREISARBEITEN

Alexander Maria Fraenkel: Das bewegliche Bildungsziel (Novelle)

Madeleine Deschênes: Une expérience sportive à Davos

Hans Bütow: Ein Ski-Baby auf Parsenn

Dr. H. Kleint: Die Apfelsinen

ERZIEHUNG UND BILDUNG

J. F.: Rückblick auf die IV. Davoser Hochschulkurse mit ergänzenden Einzeldarstellungen der Dozenten

Davoser Chronik

Hinweise auf Bücher

Schachecke

**15. MAI 1931
VI. JAHRGANG**

8

**ZEITSCHRIFT FÜR WISSENSCHAFT,
LITERATUR, KUNST UND SPORT
ERSCHEINT AM 15. DES MONATS**

Beginning in the war years, when he was tied to the American continent without any official appointment, Giedion repeatedly tried to obtain a teaching position at the Massachusetts Institute of Technology, hoping to disseminate his ideas related to an “education of vision.” Through his Norton Lectures, he had been in regular contact with John Burchard, who had established the School of Humanities and Social Studies at the Massachusetts Institute of Technology (MIT), as well as an extra-departmental organization called the Center for International Studies.²⁷⁸ As director of the publications committee of the Office of Scientific Research and Development (OSRD), which emerged during the Second World War, Burchard was in close exchange with the president of Harvard University and chairman of the National Defense Research Committee (NDRC), James B. Conant.²⁷⁹ Burchard was inspired by Conant’s attempts to establish university professorships that would operate independent of particular faculties, an initiative that was reconfirmed by strategic developments during the war. Based on this idea, Burchard intended to strengthen MIT’s humanities department by introducing a mandatory course called “The Unity of Culture,” which would bring the history of art, music, architecture, and literature to the attention of students from all departments, providing a common basis for an increased dialogue between disciplines. One of the main struggles, it turned out, was to find faculty that had an affinity for such diverse topics.²⁸⁰

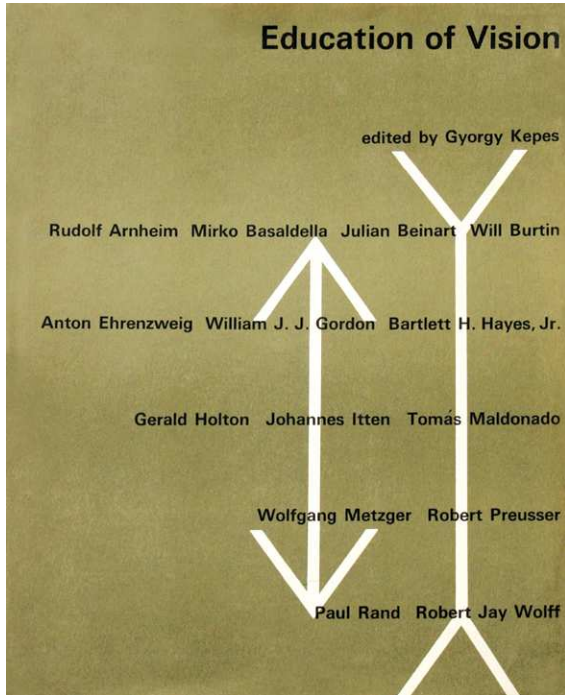
It was at the time of these developments that Giedion was invited to MIT to teach as a “Visiting Professor of Technological History” in the departments of English and history during the second term of the academic year 1949–50.²⁸¹ Giedion seemed to be the ideal person to talk about the past, while offering a perspective on current topics that involved a variety of different fields. *Mechanization Takes Command* had recently been published and offered the unique approach to the synthesis of art and technology that Burchard was seeking. Giedion eventually held five public lectures on “The Role of Art in Contemporary Life” and an elective seminar on “Civic Centers and Social Life”—a topic that was hotly debated in the context of postwar CIAM—for a smaller group of students.²⁸² Despite the success of his lectures and the popularity of the seminar, Giedion’s position was not renewed, as it was envisioned as an “annual chair” that would be offered to a “series of distinguished holders.”²⁸³

Following his engagement, Giedion stayed in close contact with Burchard, hoping to be able to teach “a normal course in the history of architecture at M. I. T. maybe for all faculties, during a term every year or every other year.”²⁸⁴ As Giedion was not yet provided with frequent teaching jobs at Harvard’s GSD, he was eager to supplement his duties at the ETH, where he taught only every other term. Over the years, Giedion had discussed with great zeal his ideas of a “faculty of interrelation” with Burchard, who also visited him several times

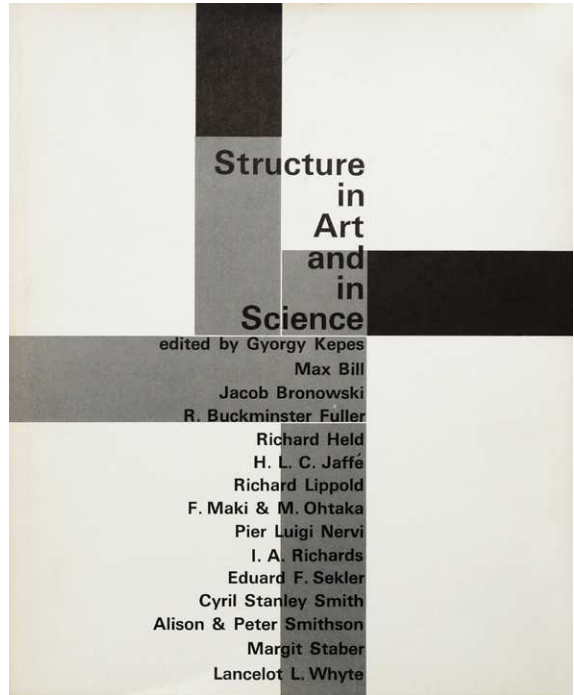
in Switzerland. The “interrelated seminars” that they “both always dreamt of doing,” however, had a difficult standing in an institution where there “is the great interest of the specialist and research.”²⁸⁵ This isolated culture of instruction and research, Giedion claimed, was the result of MIT’s “essential part in the atom warfare” and the institution’s being “closely connected with Washington.”²⁸⁶ While Giedion himself was not successful in implementing his ideas related to an “education of vision” at Harvard or at MIT, very similar concepts came to fruition at exactly those two institutions only shortly after—notably under different direction.

Almost at the same time as Giedion, the Hungarian artist György Kepes began to explore phenomena of perception and optical expression.²⁸⁷ Inspired and influenced by Moholy-Nagy’s “New Vision,” which took a pedagogical approach to avant-garde visual fundamentals, Kepes’s interests increasingly shifted toward the relationship between science and visual representation, as well as the media of photography and film. In 1937, Kepes emigrated from Berlin, following his mentor, László Moholy-Nagy, to Chicago where he was to head the “Light and Color Department” of the New Bauhaus. In 1944, Kepes published his first book, *Language of Vision*. Thematically, it echoes Moholy’s approach as outlined in *Malerei, Photographie, Film* (1925), *The New Vision* (1932), and *Vision in Motion* (1947). In the tradition of the German Bauhaus, Kepes focused on approaches and methodologies in the field of visual design. Giedion, in the introduction he wrote to *Language of Vision*, emphasized a mutual interest in aspects of vision.²⁸⁸ Roughly two weeks after the end of the Second World War, William Wurster, dean of the School of Architecture at MIT, invited Kepes to install a fundamental program in visual design at the school.²⁸⁹ It was during this time that Kepes began to assemble evidence of “new frontiers of the visible world ... until now hidden from the unaided eye.”²⁹⁰ The compilation of visual material and essays, with contributions by scientists and artists such as Norbert Wiener, Bruno Rossi, Heinz Werner, Hans Arp, and Fernand Léger, eventually led to the publication of *The New Landscape in Art and Science* (1956), which accompanied the exhibition *The New Landscape* held at MIT’s recently established Hayden Gallery.

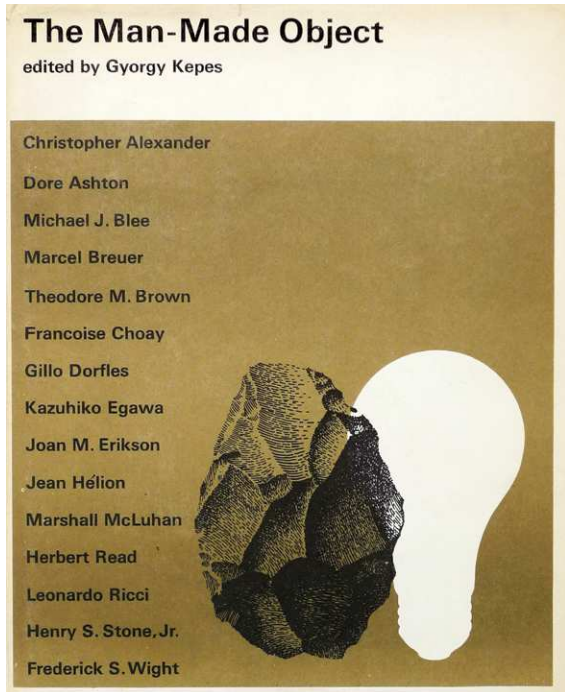
As an observer from outside Harvard’s Graduate School of Design, Kepes followed the debates related to the establishment of the Carpenter Center and was among the first to hold a teaching position when the institution was finally established. In 1963, he was invited to teach an advanced seminar entitled “Vision and Value,” exploring “aspects of contemporary visual forms and their relationship to broader issues of this contemporary world—science, technology and social problems.”²⁹¹ The approach of Kepes’s class reflects what Giedion had envisioned in his various proposals for the institute. Despite Giedion’s resentments about the Carpenter Center,



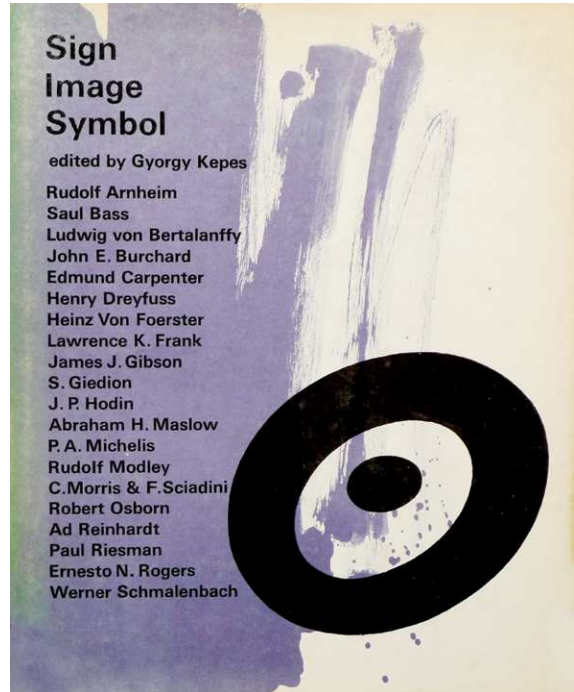
5.30



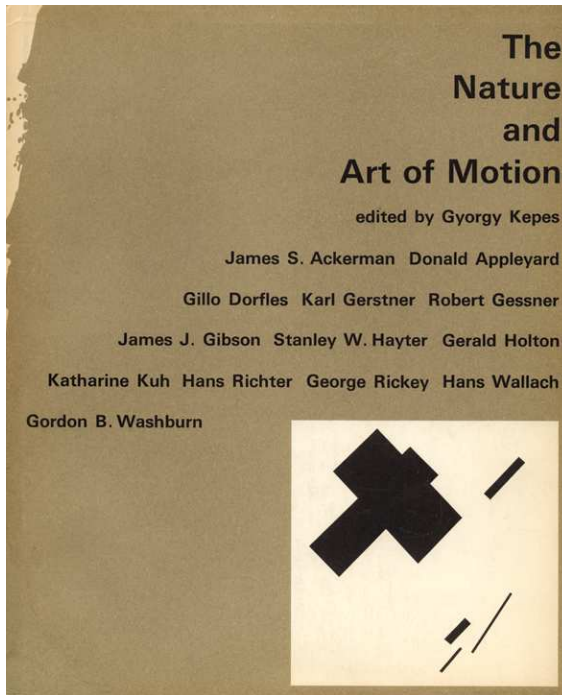
5.31



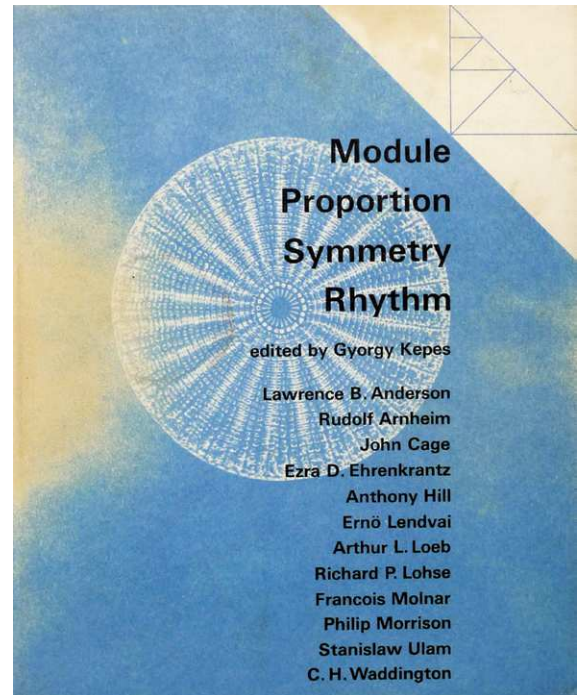
5.32



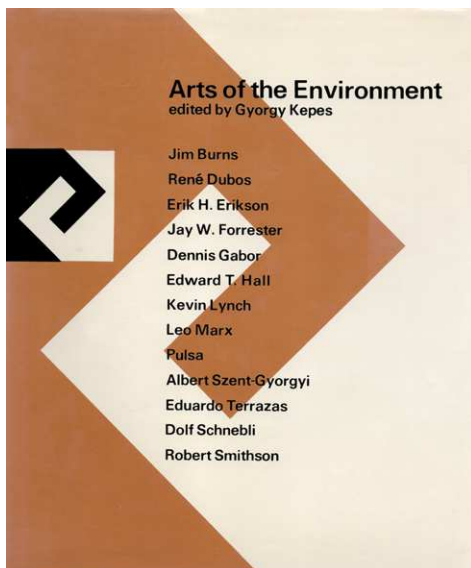
5.33



5.34



5.35



5.36

this institution offered a productive environment for his younger colleague. As a result of his seminar and teaching activities at MIT, Kepes launched a seven-volume series called *Vision + Value*, published by George Braziller, who was “courageous” in publishing “these books which demand of the American reader a background of a rather high standard.”²⁹² The series of primers, published between 1965 and 1972, compiles essays by leading scientists, artists, architects, designers, writers, and other intellectuals addressing problems common to science and the visual arts, such as education, aspects of visual perception, or symbolism.²⁹³ According to Kepes, the purpose of the impressive collection was to “systematize our knowledge about the role of vision, to find competent methods to develop it, and to map the concrete territories where creative vision is to be applied.”²⁹⁴

The first anthology in the series, entitled *Education of Vision* (1965), not only shared the title of Giedion’s various papers related to the creation of the Carpenter Center but also broached issues similar to those formulated by Giedion earlier on, notably his 1931 presentation “Erziehung zum Sehen” (Education in Seeing).²⁹⁵ Kepes’s efforts to bridge the gap between art and science by means of a common visual language are clearly anchored in the ideals taught at the Bauhaus, and later at its Chicago equivalent, where students had to participate in “general courses given by experts in biology, sociology, economics, anthropology, general semantics, history, literature, art history, and intellectual integration.”²⁹⁶ Giedion’s understanding of a common methodological approach to perception and vision as the precondition for any collaborative effort went hand in hand with Kepes’s understanding of “vision [a]s a fundamental aspect of human insight, regardless of the area of human involvement,” and his conclusion that “all creative thinking is based upon the ability to see in a clearer, broader and more coherent way than before.”²⁹⁷ The visual theorist’s first major publication, *Language of Vision*, in which he claimed that “the *language of vision* [original emphasis], optical communication, is one of the strongest potential means both to reunite man and his knowledge and to re-form man into an integrated being,” was undoubtedly inspirational for Giedion.²⁹⁸ Traces of the section on “advertising-design” as well as the analysis and depiction of motion can be found both in *Mechanization Takes Command*—Giedion was working on the manuscript when he was writing the introduction to Kepes’s book—and, albeit in a different way, in Marshall McLuhan’s *Mechanical Bride*. For the first time, Giedion did not react defensively when he recognized that someone else had carried his ideas further. He likely realized that Kepes, who was significantly younger than he was and yet still strongly connected to the first generation of the modern movement, could perpetuate his ideas on another level. Kepes’s correspondence suggests that the younger man was well aware of this intellectual heritage, which is also evident in the list

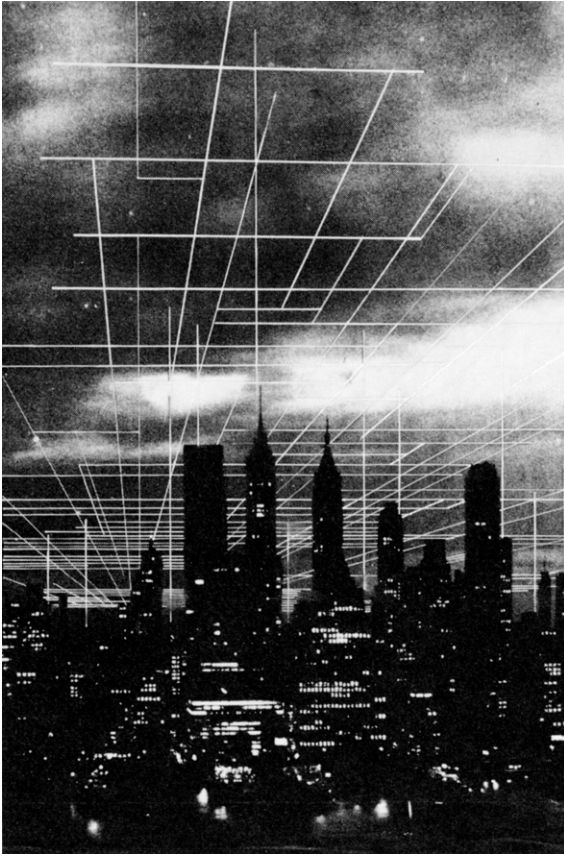
5.30–5.36

Cover designs by
Quentin Fiore for
György Kepes’s
Vision + Value series,
1965–72.

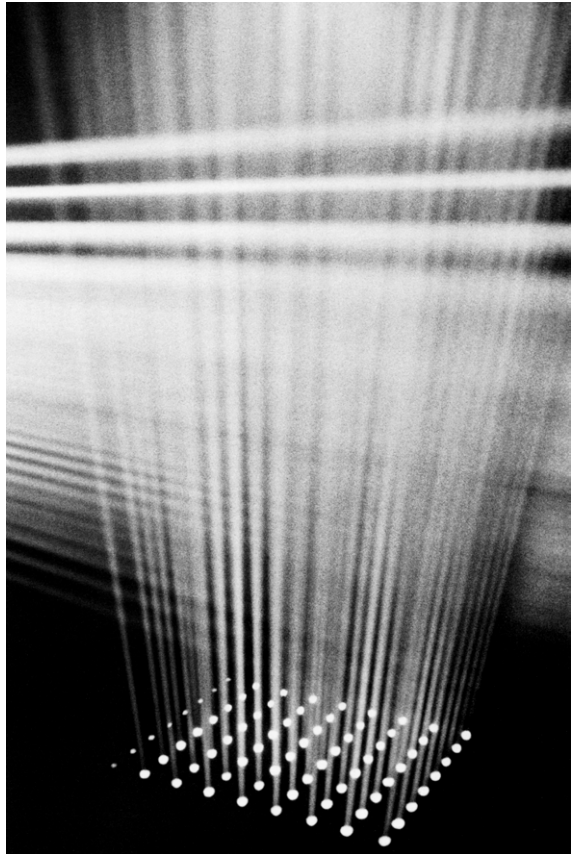
of contributors to the *Vision + Value* series.²⁹⁹ Ranging from Marcel Breuer, to Johannes Itten, to Herbert Read, to John E. Burchard, the network of modern thinkers—which emerged in the United States mainly at Harvard and MIT after the diaspora—was markedly present in this project. Reminiscent of the *Bauhausbücher*, the *Vision + Value* series could also be read as a sequel to McLuhan's *Explorations* journals. Beyond the overlapping group of contributors, Kepes's project—although different in structure, format, production quality, and permanence—addresses and expands a variety of issues that were discussed in *Explorations*.

Sibyl Moholy-Nagy disparaged Kepes's connection to “the ancient oldtimers from yesterday” in his books.³⁰⁰ By then a recognized architectural historian teaching at Pratt Institute in New York, in an enraged letter she accused Kepes of paraphrasing her husband's introduction to *Vision in Motion*, of including the same old positions that had been around for thirty years, and of blindly following the “computer boys of MIT,” who are “kill[ing] every last instinct for sense [emotional] values.”³⁰¹ Other voices, such as Lucy Lippard and John Chandler, as well as the artist Richard Hamilton, criticized *Vision + Value* for ignoring recent developments in the arts, including Minimalism and Pop Art, which would have been well suited for inclusion in the volume *Module, Proportion, Symmetry, Rhythm* (1966).³⁰² Considering that Kepes's roster of contributors also included such emerging voices as Christopher Alexander, Françoise Choay, Dolf Schnebli, and especially Alison and Peter Smithson, the *Vision + Value* series could also be perceived as an anthology that subtly documents the overdue accession of what is sometimes also referred to as the “third generation of modern architects.” As the eminent critic Lewis Mumford observed: “It was a pleasure ... to hear of the new project you now have under way. You are giving a fresh lead to thought in the field of design, and filling a vacuum that was left by the regrettable but inevitable fading of the original spirit of the old masters of the movement in the C. I. A. M.”³⁰³

The *Vision + Value* series and the seminars related to it prepared the ground for the foundation of Kepes's research institute at MIT. The same year that Kepes published the first three volumes, he put out a manifesto entitled “The Visual Arts and the Sciences: A Proposal for Collaboration,” which outlined what he considered the failures of different schools of art since the beginning of the twentieth century.³⁰⁴ This essay was based on proposals that he had submitted to the board of MIT in order to seek funding for his own institute as early as 1959.³⁰⁵ The Center for Advanced Visual Studies (CAVS) was established in 1967, just a year before Giedion's death, with the goal of advancing “the new technology as an artistic medium; the interaction of artists, scientists, engineers, and industry; the raising of the scale of work to the scale of the urban setting; media geared to



5.37



5.38

all sensory modalities; incorporation of natural processes, such as cloud play, water flow, and the cyclical variations of light and weather; [and] acceptance of the participation of ‘spectators’ in such a way that art becomes a confluence.”³⁰⁶ More than three decades after his first efforts to create an independent research institution of this stature, Giedion could at last witness how one of his vital concerns was finally carried out.

5.37–5.38
György Kepes,
visualization of
Laser Map Fantasy,
a laser projection
project for Manhat-
tan, 1972; simulated
effects of a mile-
long, programmed,
luminous wall
project for the
Boston Harbor
Bicentennial,
1964/65.

Within MIT’s architecture faculty, Kepes’s endeavors were among the first substantial efforts to incorporate technology into the theory and practice of architecture. Most of the projects that the visual theorist initiated at CAVS were ambitious, large-scale undertakings that would engage strongly with the urban environment. For this precise reason, projects such as a mile-long programmed luminous wall proposed for the Boston Harbor Bicentennial never came to fruition—they were simply too demanding and often overburdened the academic fellows involved in the center. Many of the institute’s proposals in the realm of conceptual and environmental art never evolved beyond the stage of “thought projects,” a fact that did not concern Kepes, who acknowledged that “the dissemination of ideas was one of the most important contributions he could make to art during this period.”³⁰⁷ As a result of the wide circulation of the *Vision + Value* series, Kepes’s exploration of the intersections of science and art offered a point of reference for various projects in the field even before the theorist’s think tank at MIT was officially established.

Most notable among these initiatives was the New York-based organization Experiments in Art and Technology (E. A. T.), which was founded by Billy Klüver, Robert Rauschenberg, Fred Waldhauer, and Robert Whitman in 1966 after the landmark event “9 Evenings: Theater and Engineering.”³⁰⁸ Kepes himself served both as a member of the council of agents and on the board of directors of this newly founded nonprofit institution.³⁰⁹ E. A. T.’s goal was to promote interdisciplinary collaborations among participants from industry, the sciences, and the arts and to encourage explorations into the rapidly growing field of emerging technologies such as fax machines, computer-generated graphics, lasers, and cable television. As opposed to CAVS, which predominantly operated within the academic sphere, E. A. T.’s operations were less institutionalized. As a “matching agency,” E. A. T. actively sought cooperation with industry, mediating between artists and engineers at Bell Laboratories and IBM Laboratories, for example.³¹⁰ These developments, as well as the critical reception of Kepes’s publications in contemporary art circles, reveal that while the Center for Advanced Visual Studies reflects the cultural climate of the 1960s, it is based on its founder’s cultural understanding, which was deeply rooted in the ideals of the early twentieth-century vanguard. E. A. T., on the other hand, aspired to revolutionize art, to introduce “a new strain of artistic practice.”³¹¹

The differing aspirations of the two institutions in the context of the “second machine age” manifest, in one case, the culmination of the modern project to bridge art and science by means of visual language as Giedion and Kepes repeatedly postulated it; and, in the other, a point of departure for “new perspectives on the relationship of art to science and technology,”³¹² which were eventually formalized in Pontus Hultén’s 1968 exhibition *The Machine: As Seen at the End of the Mechanical Age* at the Museum of Modern Art in New York.³¹³

A Last Synthesis:
Lineastruttura

“Our culture is like an orchestra where the instruments lie ready tuned but where every musician is cut off from his fellows by a soundproof wall.”³¹⁴—Sigfried Giedion

In 1966, Giedion embarked on a last project related to his longtime commitment to reducing the gap between disciplines. Perhaps considered marginal from a contemporary perspective, the fundamental idea of the project was quite promising. He was asked to guest edit an issue of *Lineastruttura*, an Italian quarterly review of “architecture, visual arts, and design” based in Naples and a seemingly perfect platform for reemphasizing his interest in a collaboration between various fields. The journal claimed to “believe that architecture and art must not concern only an elite of specialists ... but all people interested in the future of architecture, of painting, of sculpture, of design, of town-planning, of visual arts, and of graphics.”³¹⁵ In a synthesis of the related positions he had established over the course of the previous decades, Giedion proposed an issue on “interdisciplinary methodology” that would address the “methods of science and the method of art.”³¹⁶ In his project outline addressed to the editors Nino del Papa, Lea Vergine, and Enzo Mari, Giedion mentioned his repeated efforts in this direction and his belief in the utmost necessity to “overcome the usual isolation between thinking and feeling from the beginning of higher education.”³¹⁷ He even touched on the Carpenter Center as a place encouraging such developments and underlined his involvement without specifying any facts or details. However, the selection of contributors—“several friends from different faculties and different countries,” who were asked “to indicate their demands for the inner relation between thinking and feeling”—is telling.³¹⁸ Without exception, the invited authors were longtime colleagues involved in Giedion’s efforts to establish a cross-disciplinary institute, all of them with ties to Harvard and MIT, or former participants in the Delos Symposium. McLuhan was asked to elaborate on his recently published *Understanding Media*,³¹⁹ Kepes submitted a

5.39
Promotional leaflet
for the journal
Lineastruttura,
ca. 1967.

5.40–5.41 short piece on the “Confluence of Art and Science,” and the developmental biologist Conrad Hal Waddington was slated to describe Marshall McLuhan, letter to “the relation between [his] field of genetics, ... animal behavior + the Sigfried Giedion, organization of human cities.”³²⁰ Josep Lluís Sert was invited to describe his personal experiences with such artists as Pablo Picasso, April 21, 1966, confirming Joan Miró, and Alexander Calder.

McLuhan’s Giedion was eager to participate in this endeavor. *Lineastruttura* contribution to offered him a platform to reintroduce to the European continent the *Lineastruttura*. discourse he had begun years ago, and it would have also allowed him to finally create a lasting record of his exceptional journey through more than three decades. But while the first issue of the publication under the editorial guidance of Giulio Carlo Argan was published in 1966, followed by a second volume in 1967, the journal was terminated before the completion of the issue that Giedion prepared, just as he was working on his last book, *Architecture and the Phenomena of Transition*, at the American Academy in Rome.

While his numerous efforts to initiate academic cross-disciplinary collaboration, including a research institute, were unsuccessful, Giedion was able to establish and maintain a broad network of scholars who contributed to the formation of his ideas. His engagement with the disciplinary translations of methodological approaches allowed him not only to challenge the widely accepted understanding of the role of history in academic circles but also to create a wider awareness of multidisciplinary scholarship and teaching as a way to overcome the increasing tendency toward specialization, and to cultivate a universal language in which to describe the modern condition. As cross-disciplinary work gained greater acceptance among public and private interests in the postwar period, Giedion’s relentless pursuit of collaboration across disciplinary boundaries led to fertile encounters that continued throughout the historian’s career. Although the direct success of his efforts was limited, Giedion’s scholarship and initiatives provided a set of methodological tools that inspired intellectuals on either side of the Atlantic.

LINEASTITTI
ALTERNATIVE DI
ARCHITETTURA
DESIGN
ARTI VISIVE

INGEGNERI SI MISCE CON L'INTENTO DI
CUGLIERE
FINANSE AL LETTERE LA POSSIBILITÀ
A. SOSPICATO DELLE RICERCHE
E OPERATIVE IN ARCHITETTURA, ARTI VISIVE E DESIGN
NON PU' SOLTANTO NEL LAVORO
MA IN UNA UNITÀ RELAZIONATA GRAZIE AD UN DIBATTITO
INTERDISCIPLINARE.

CRITICI, STORICI, OPERATORI, PSICOLOGI,
SOCIOLOGI, FILOSOFI ECC. APPROFONDITANO L'ARGOMENTO
RISPONDENDI A PRECISE ESPERienze E REALIZZAZIONI
APPROPRIATE ESEMPLIFICATE ED ILLUSTRATE.

NEL SETTORE DEDICATO ALL'ATTUALITÀ,
SUDDIVISO IN RUBRICHE-SCHIEDE SONO RECEPITI
ATTUALMENTE OPERE E PROGETTI INEDITI LEGATI
ALLE ESIGENZE DELLE NUOVE STRUTTURE SOCIALI.

SOMMARIO DEL PRIMO NUMERO:

ERNSTO N. ROGERS
QUALITÀ PRINCIPALI ESSENZIALI PER L'ARCHITETTO

L'ORGANIZZAZIONE
E IL MANTENIMENTO DELLE IMPRESE

DE TENTATIVO DI RAZIONALIZZAZIONE DELLA FORMA A LIVELLO
TERMINAZIONE

INTERVALLI DELLA SECONDA LINEA
E COMPETENZE DELL'ARCHITETTO
CONTEMPORANEI

OPERAZIONI DI CONTROLLO ED OPERAZIONI DI PROGETTO.
L'ORGANIZZAZIONE ECONOMICA, INGEGNERIA E INVENZIONE.
L'ORGANIZZAZIONE SPECIALISTICA.

FONDAMENTI SOCIALI ED ECONOMICI PER
UNA NUOVA URBANISTICA.
LA MACROSTRUTTURAZIONE

PAR AVION

AEROGRAMME

Prof. Dr. S. Giedion

Roma

Accademia Albertina

Via Angelo Masina 5

Porta San Romano

verses 100 POSTAGE · POSTES

SECOND FOLD HERE — PLIER ENSUITE ICI

SENDER'S NAME AND ADDRESS — NOM ET ADRESSE DE

From Marshall McLuhan
Centre for Culture and
Technology
University of Toronto
Toronto 5, Ont. Can.

POSTE ROMA 16.15 25-1W 1966

FIRST FOLD HERE — PLIER D'ABORD ICI

NO ENCLOSURE PERMITTED — NE RIEN INSÉRER
POSTES CANADA POST

Dear Sirs:
I shall be speaking at M.I.T. on May 2nd and will have a chance to discuss your magazine with you. I assume that my contribution will be of modest length, collaborate in the number of the magazine you mention. I shall, of course, be very happy to cooperate in the number of the magazine you mention. This moment made use of your name while writing a letter to you from you. I had just received the information for U.S. circulation.

April 21, 1966

April 21, 1966

Dear Giedion:

Splendid to hear from you! I had just this moment made use of your name while writing a recommendation for E.S. Carpenter.

I shall, of course, be very happy to collaborate in the number of the magazine you mention. I assume that my contribution will be of modest length.

I shall be speaking at M.I.T. on May 2nd and will have a chance to discuss your magazine with Kepes.

Warm regards,

Marshall McLuhan
per mt.

HMM:ms

TECHNOLOGY
COMMUNICATIONS
MAY 21 1966
M.I.T.

Unless otherwise noted, all English translations of quoted material are by the author.

1 Ezra Pound, *The Spirit of Romance* (London: Owen, 1952; originally published 1910). Also cited in Giedion, *Eternal Present*, 1962, frontispiece.

2 Sigfried Giedion, "Institute for Contemporary History and Research," typescript, 1938, GTA 43-S-8-6.

3 Ibid.

4 Ibid.

5 On Marcel Duchamp, see Museum Jean Tinguely and Szeemann, *Marcel Duchamp*; Dermée, Seuphor, Jeanneret, Ozenfant, *L'Esprit Nouveau* (1920-25). On *L'Esprit Nouveau*, see Moos, "Standard and Elite," 306-23.

6 Sigfried Giedion, "Institute for Contemporary History and Research," typescript, 1938, GTA 43-S-8-6.

7 Sigfried Giedion, draft of a letter to Joseph Zemp (Swiss art historian and professor at the University of Fribourg), August 1, 1934, GTA 43-K-1934-08-01(G): "Also in the future, I envision instruction in the field of art history at the Technical University [Federal Institute of Technology] as it was handled so far, namely to give an overview of historical events, but to develop concurrently the tradition and history of our own time in a specialized manner. Essentially, I am envisioning today something certainly unrealizable: a chair for contemporary history. From a slightly different viewpoint, I am thinking of tracing the whole and largely anonymous evolutionary history of our current reality since roughly 1750."

8 Sigfried Giedion, letter to Walter Gropius, March 21, 1938, GTA 43-K-1938-03-21(G): "I talked about these issues with academics in Zurich a while ago. With the exception of mathematicians and physicists, people have not understood at all what I wanted and declared such an endeavor as irresolvable in the context of a university."

9 Sigfried Giedion, letter to Walter Gropius, January 21, 1938, GTA 43-K-1938-01-21(G): "Übungen über historische Methode und Zeitgeschichte"; Giedion, letter to Walter Gropius, October 25, 1937, GTA 43-K-1937-10-25(G): "Hoffentlich gelingt es, soweit es meine Kraft erlaubt, einen kleinen Ansatz zu liefern, um unserer Zeit ein wenig zur eigenen historischen Bewusstwerdung zu helfen. Bei aller Anspannung bin ich mir doch klar, dass ich nur einen Weg vorzeichnen kann, denn um die von mir gewollte 'Zeitgeschichte' auszufüllen, brauchte es jetzt schon ein Institut. Andererseits ist es vielleicht gut, wenn die Dinge einmal im Umriss hingestellt werden."

10 Sigfried Giedion, "The Inner Relation between Thinking and Feeling," typescript, ca. 1966, GTA 43-T-6 S. 18; Sigfried Giedion, letter to Carola Giedion-Welcker, December 19, 1938, GTA-SG/CGW-1938: "Als ich hereinkam sass auf einem der Sofas ein Herr von ungefähr 80 Jahren, lebhaft, mit rundem Kopf und einer grossen Glatze und freundlichem Gesicht. Whitehead, der Vater der modernen Philosophie. Ich sagte ihm, wie sehr ich ihn verehere + dass ich meiner Frau gerade ein Buch von ihm zu Weihnachten geschickt hatte. Ich werde ihn wieder sehen." AVE, SC Box 36 Harvard 1955, "Symposium on the Integration of the Arts," transcript, February 5, 1955, p. 15.

11 Walter Gropius, letter to Sigfried Giedion, June 24, 1937, GTA

43-K-1937-06-24: "Der Präsident von harvard ist gleichfalls ein mensch mit plan und entschlusskraft harvard eine moderne linie zu geben. er hat die idee die mauern zwischen den fakultäten zu durchbrechen und das spezialistentum durch totaleren ausgleich zu balancieren. er beginnt sogenannte university-professors zu ernennen, die keiner fakultät angehören, das recht haben in jeder fakultät zu lehren und arbeitsgruppen von mitgliedern verschiedener fakultäten zur lösung besonderer aufgaben zusammenzustellen."

12 In 1938, the unemployment figure was 10.39 million; in 1939 the number dropped to 9.48 million. See Carter, "Labor Force, Employment, and Unemployment: 1938-2000."

13 "Report of the National Defense Research Committee for the First Year of Operation, June 27, 1940 to June 28, 1941," Franklin Delano Roosevelt Presidential Library and Museum Archive, Vannevar Bush Index, Box 2, http://www.frdlibrary.marist.edu/_resources/images/psf/psfa0012.pdf (accessed October 10, 2016).

14 Sigfried Giedion, letter to Walter Gropius, August 2, 1940, HOU bMS Ger 208 (773): "Wie ich erwartet hatte versperrt man die Tore zu Amerika fast hermetisch. Zwar gibt es für Kaufleute und Industrielle immer noch Wege, aber mit den 'Geistigen' sind sie viel handfester."

15 Walter Gropius, letter to Herbert Bayer, undated, HOU bMS Ger 208 (431): "Ich glaube es wird notwendig sein mindestens einen amerikaner dabei zu haben, denn auch in diesem lande ist man national betont."

16 László Moholy-Nagy, letter to Sigfried Giedion, December 20, 1940, GTA 43-K-1940-12-20.

17 Giedion, "Faculty of Interrelations," 1-4.

18 Sigfried Giedion, letter to Herbert Bayer, December 6, 1940, GTA 43-K-1940-12-06(G): "2: "Die Atmosphäre reizt hier zu allem anderen als zum Produzieren. Trotzdem habe ich den Entwurf für das 'Institute for Contemporary History and Research' weiter durchgeführt inklusive Finanzierungsvorschlägen. Die Grundlagen sind da, aber der nächste Schritt kann von hier aus nicht gemacht werden."

19 Sigfried Giedion, letter to Joseph Hudnut, November 21, 1941, GTA 43-S-8-6.

20 Sigfried Giedion, letter to Le Corbusier, February 20, 1941, GTA 43-K-1941-02-20(G): "Depuis que je suis revenu d'Amérique, j'ai compris ce que vous avez dit une fois, que vous sentez comme égoïté au moment où vous passez la frontière suisse. Le pays est beau comme tousjours, il y a même des personnalités intéressantes, mais tout le monde vit isolé l'un de l'autre. Depuis mon retour, je me sens comme un exilé, parce que l'esprit officiel est opposé à celui de nos amis. La réaction en architecture se fait sentir."

21 Sigfried Giedion, letter to Walter Gropius, undated (ca. 1941/42), HOU bMS Ger 208 (773): "Wie ich dir, glaube ich, einmal schrieb, möchte ich mich an meinem eigenen Zopf aus dem Sumpf ziehen. Aber du weist auch meine schwache Seite und das ist der Umgang mit den Menschen."

22 Sigfried Giedion, letter to László Moholy-Nagy, March 8, 1941, GTA 43-K-1941-03-08(G): "Wenn das Buch [*Space, Time and Architec-*

ture] irgendwie mit einem weiteren Leserkreis in Berührung kommen sollte, so sollte daraus die Möglichkeit erwachsen, eine 'Lecture Tour' durch die USA zu machen. Als Themen würde ich einzelne Kapitel des Buches nehmen, daneben aber vor allem einen Vortrag über die Errichtung eines 'Institute for Contemporary History and Research' halten, dadurch würde ein breiteres Publikum in Kontakt mit den Ideen kommen, während ich gleichzeitig mit verschiedenen Industrien in Berührung treten möchte, um einen finanziellen Hintergrund für das Institut zu erhalten."

23 Sigfried Giedion, letter to John Burchard (director of the Albert Farwell Bemis Foundation), February 5, 1941, GTA 43-K-1941-02-05(G).

24 "Noted Swiss City Planner."

25 Sigfried Giedion, "Speech at the Swiss Dinner," typescript, January 21, 1939, New York.

26 Giedion, *Space, Time and Architecture*, 1965, 7.

27 Giedion, "Faculty of Interrelations," 1-4.

28 Giedion, *Space, Time and Architecture*, 1965, vii.

29 Giedion, "The Science of Relationship," typescript, ca. 1941, 2, GTA 43-S-8-6.

30 Giedion, *Space, Time and Architecture*, 1965, 15.

31 Sigfried Giedion, "CIAM at Sea," 36; see also Sigfried Giedion, "Steps toward Universality: The Faculty of Interrelation," typescript, 1942, GTA 43-T-13 (S. 19): "We have to create a new vocabulary so that we may understand each other. This is not easy. ... The extreme specialization in science has led to the lack of a vocabulary of a common understanding."

32 Giedion, "The Science of Relationship," typescript, ca. 1941, 5, GTA 43-S-8-6.

33 Giedion, *Space, Time and Architecture*, 1965, vi.

34 Giedion, "Faculty of Interrelations," 1-4.

35 Sigfried Giedion, "Steps toward Universality: The Faculty of Interrelation," manuscript, 1942, GTA 43-T-13 (S. 19).

36 Le Corbusier, letter to Sigfried Giedion, February 20, 1941, GTA-43-K-1941-02-20: "J'ai l'intention de fonder, si c'est possible, un 'Institute for Contemporary History and Research' où ... la comparaison des méthodes doit être étudiée par des gens qui sont des esprits créateur dans leur propre domaine et qui ont prouvé en meme temps par leur travail qu'ils ont compris la loi qui forme la base fondamentale de l'époque future: *Universalité* [emphasis added]."

37 Sigfried Giedion, letter to Walter Gropius, March 21, 1938, GTA 43-K-1938-03-21(G).

38 Sigfried Giedion, "Institute for Contemporary History and Research," typescript, 1938, GTA 43-S-8-6.

39 See also Moholy-Nagy, "Diaspora," 24-26.

40 Hitchcock, *Painting toward Architecture*, 38-40.

41 Sigfried Giedion, "The Integration of the Three Categories: Architecture, Sculpture and Painting," typescript, 1947, GTA 42-SG-9-7/10.

42 Sigfried Giedion, "Exhibition: Toward a Re-union of Art, Architecture and Planning," LOE, CIAM Collection, Folder B9.

43 On Giedion's position, see Sigfried Giedion, "The Integration of the Three Categories: Architec-

- ture, Sculpture and Painting," typescript, 1947, GTA 42-SG-9-7/10; on the questionnaire, see Max Bill and Sigfried Giedion, "Questionnaire on Synthesis of Architecture, Painting and Sculpture," May 1949 (first version, December 1946), GTA 42-JT-3-1/3; on Barbara Hepworth's reaction to Giedion's proposal, see Barbara Hepworth, letter to Sigfried Giedion, September 10, 1947, GTA 42-SG-9-27; on the exhibition proposal, see "Exhibition: Toward a Re-union of Art, Architecture and Planning," LOE, CIAM Collection, Folder B9.
- 44 Giedion and Nef began corresponding in April 1942 when Giedion approached Nef in order to set up a meeting in Chicago. Sigfried Giedion, letter to John U. Nef, April 9, 1942, GTA 43-K-1942-04-09(G):2.
- 45 Sigfried Giedion, letter to John U. Nef, August 3, 1943, GTA 43-K-1943-8-3(G).
- 46 John U. Nef, letter to Sigfried Giedion, November 18, 1942, GTA 43-S-8-6.
- 47 Over the years, members of the Committee on Social Thought have included Hannah Arendt, T. S. Eliot, Marc Chagall, Igor Stravinsky, Jacques Maritain, Paul Ricoeur, Charles Rosen, Harold Rosenberg, Artur Schnabel, and many others. See also "The John U. Nef Committee on Social Thought," University of Chicago, <http://socialthought.uchicago.edu> (accessed September 8, 2016).
- 48 Morris, "Contribution of Science to the Designer's Task," 195.
- 49 Fott, *John Dewey*, 101.
- 50 John Dewey (1859-1952) was an American philosopher and educational reformer and the founder of the University of Chicago Laboratory School. For more on John Dewey, see Suhr, *John Dewey zur Einführung*.
- 51 See also Füssli, "Pestalozzi in Dewey's Realm?," 77-92.
- 52 "May I take this opportunity to draw your attention that you are in error if you relate the Bauhaus to the theories of Dewey. Dewey's theories became known in the German circles of philosophers and pedagogues in 1926. I did not know about him before I came to this country in 1937." Walter Gropius, letter to Tomás Maldonado (painter, designer, educator, and theoretician), March 3, 1961, as cited in Grawe, *Call for Action*, 47.
- 53 Ockman, "Road Not Taken," 115.
- 54 See also Haus, "Moholy Nagy," 104-20.
- 55 Sibyl Moholy-Nagy (1903-1971), née Pietzsch, was an art and architectural historian and László Moholy-Nagy's second wife. See Sibyl Moholy-Nagy, "Diaspora," 25.
- 56 László Moholy-Nagy is the subject of a large number of publications. On his time in the United States, see Hahn and Engelbrecht, *50 Jahre New Bauhaus*; Shure, *Moholy-Nagy*; Grawe, "Continuity and Transformation," 338-61; Borchart-Hume, *Albers and Moholy-Nagy*; Schuldenfrei, "Assimilating Unease," 87-126; Stein, "László Moholy-Nagy and Chicago's War Industry," 398-417; Witkovsky, Eliel, and Vail, *Moholy-Nagy*.
- 57 Telegram to László Moholy-Nagy, June 1937, as quoted in *Institute of Design*, pamphlet published on the occasion of the move of the school to its new facilities at Ludwig Mies van der Rohe's Crown Hall, Illinois Institute of Technology (IIT), in 1949.
- 58 Engelbrecht, "László Moholy-Nagy in Chicago," 24.
- 59 Sibyl Moholy-Nagy, *Moholy-Nagy*, 149-50.
- 60 *Ibid.*, 162.
- 61 Sibyl Moholy-Nagy, letter to László Moholy-Nagy, August 4, 1937, SAA, Sibyl and László Moholy-Nagy Papers, Reel 951: "Bitte lass den Namen Bauhaus im Haupttitel fallen. Siehst Du nicht dass das heute nicht geht? Ueberleg Dir doch mal die politische Situation in Deutschland die über kurz oder lang zu einem kriegerischen Austrag kommt. Da willst Du eine neue Schule deutsch benennen? Du musst Dir doch einmal darüber klar werden, dass der Name Bauhaus nur für einen mikroskopisch winzigen Teil etwas bedeutet. ... Ihr braucht amerikanische Mittelklasse als Schüler, sonst könnt Ihr nicht bestehen. Und diese Mittelklasse weiss nichts vom Bauhaus, aber sie hat irgend eine Ahnung was deutsch ist." See also the short telegram that preceded this letter, Sibyl [?] Moholy-Nagy to László Moholy-Nagy, August 16, 1937, as quoted in Sibyl Moholy-Nagy, *Moholy Nagy*, 145: "Congratulations. Drop name Bauhaus. Identification with Germany and past program unwise. Suggest American School of Design."
- 62 The 1938 exhibition *Bauhaus 1919-1928*, curated by Walter and Ise Gropius with Herbert Bayer and held at the Museum of Modern Art, New York, was the Bauhaus's only prominent presentation in the United States. In his foreword to the exhibition catalogue, Alfred Barr, director of the museum, clearly indicated that this show did not represent an ongoing movement, but a period of the past. Moholy-Nagy struggled throughout his career with the fact that he did not manage to exhibit his work at the foremost cultural institution of the time. See Bayer, Gropius, and Gropius, *Bauhaus 1919-1928*.
- 63 Hahn, "Vom Bauhaus zum New Bauhaus," 16.
- 64 Sibyl Moholy-Nagy, letter to László Moholy-Nagy, August 4, 1937, SAA, Sibyl and László Moholy-Nagy Papers, Reel 951: "Du musst Amerikaner finden, das ist wichtig. Und wenn Du Dir nicht jetzt einen Stab von Amerikanern von Anfang an ranziehst, bleibt Ihr immer ein Fremdkörper, dem man—je mehr die politische Lage nach rechts geht—immer mehr misstrauen wird."
- 65 Schuldenfrei, "Assimilating Unease," 89.
- 66 László Moholy-Nagy, letter to Walter Gropius, October 20, 1937, HOU bMS Ger 208 (1221).
- 67 Sibyl Moholy-Nagy, *Moholy Nagy*, 177.
- 68 Schuldenfrei, "Assimilating Unease," 94-100.
- 69 "Two Summer Sessions of the School of Design in Chicago," syllabus, 1942, UIC Folder 3-72.
- 70 University of Illinois, Chicago, prospectus for the "National Defense Courses," 1942, UIC Folder 6-83.
- 71 On camouflage, see also Cohen, *Architecture in Uniform*, 187-215; Schuldenfrei, "Assimilating Unease," 104-9.
- 72 Moholy-Nagy, *Vision in Motion*, 80.
- 73 Alexander Dorner (1893-1957) was a German art historian and director of the Landesmuseum in Hannover until he emigrated first to France and then to the United States, where he became director of the Rhode Island School of Design Art Museum in 1938. On Alexander Dorner and Pragmatism, see Ockman, "Road Not Taken."
- 74 Dorner, *Way beyond "Art,"* 18-19.
- 75 Alexander Dorner, "Scheme for an Institute for Constructive Art History," typescript, undated, HOU bMS Ger 208 (314b).
- 76 Ockman, "Road Not Taken," 115.
- 77 Alexander Dorner, "Scheme for an Institute for Constructive Art History," typescript, undated, HOU bMS Ger 208 (314b).
- 78 *Ibid.*
- 79 See Ockman, "Road Not Taken," 82-97.
- 80 *Ibid.*
- 81 Alexander Dorner, "Scheme for an Institute for Constructive Art History," typescript, undated, HOU bMS Ger 208 (314b).
- 82 *Ibid.*
- 83 Dewey, "Between Two Worlds," 451-65. Address delivered at the Winter Institute of Arts and Sciences, University of Miami, Coral Gables, FL, March 20, 1944.
- 84 Dorner, *Way beyond "Art,"* 230.
- 85 For a detailed discussion of Norbert Wiener, see Martin, *Organizational Complex*, 15-17.
- 86 See Galison, "Americanization of Unity," 45-92.
- 87 Marshall McLuhan, "Project in Understanding New Media," sample of syllabus, undated [possibly early 1960s], NAC MG 31/D156/vol. 72-10.
- 88 Rand Corporation "A Brief History of RAND," <http://www.rand.org/about/history/a-brief-history-of-rand.html> (accessed September 5, 2016).
- 89 The Rockefeller Foundation also supported some of Giedion's research trips to the Middle East, as well as his stays at the American Academy in Rome. See The Rockefeller Foundation, "Our History [1949]," <https://www.rockefellerfoundation.org/about-us/our-history/> (accessed April 17, 2024).
- 90 See György Kepes, Billy Klüver, and James Seawright, interview by Douglas Davis, in Davis, "Art and Technology," 39.
- 91 For a more detailed view of the relationship between art and technology in the early postwar period, see Shanken, "Gemini Rising, Moon in Apollo."
- 92 McCallum, *Machine Made America*. On the European reception of American popular culture, see Cohen, *Scenes of the World to Come*, 197-203.
- 93 Collins Goodyear, "Gyorgy Kepes, Billy Klüver, and American Art of the 1960s," 616.
- 94 Sigfried Giedion, as quoted in Marshall McLuhan, Culture and Communications Seminar, minutes, February 23, 1955, NAC MG 31/D156/vol. 203-31.
- 95 Marshall McLuhan, letter to Wyndham Lewis, October 26, 1943, as published in Molinaro and Tøye, *Letters of Marshall McLuhan*, 136: "Well, Siegfried [sic] Giedion is a wealthy Swiss architect who was isolated here on the outbreak of the war. He had been giving the Chas. Eliot Norton lectures at Harvard. Beyond that fact, and his book, I know nothing. He seems to be a great 'Friend of the Stars,' however."
- 96 Marshall McLuhan, letter to Sigfried Giedion, December 22, 1945, GTA 43-K-1945-12-22.
- 97 Sigfried Giedion, letter to John U. Nef, August 3, 1943, GTA 43-K-1943-08-03(G).
- 98 *Ibid.*
- 99 In architectural terms, this notion is expressed in Lewis Mumford's enthusiastic support of the British garden city movement, particularly

- the work of Ebenezer Howard and his followers.
- 100** Marshall McLuhan, letter to Lewis Mumford, March 11, 1952, VPL, Ms. Coll. 2, Folder 3059.
- 101** Mumford was upset that McLuhan used the term "extensions of man," which Mumford claimed was his. McLuhan, on the other hand, credited the term to Edward Hall, who noted that he himself picked it up from Buckminster Fuller. See Carpenter, "That Not-So-Silent Sea," 256; and Marshall McLuhan, letter to Lewis Mumford, December 28, 1948, NAC MG 31/D156/vol. 32-26.
- 102** Mumford, *Pentagon of Power*, 293-94. See also Jaqueline Tyrwhitt, letter to Marshall McLuhan, June 8, 1972, NAC MG 31/D156/vol. 39: "He [Mumford] collects bêtes noires (such as Le Corbusier) and attributes a set of characteristics to them that generally are quite erroneous, but—as he never seems to study his subjects—he continues to use their names to pillory whatever he dislikes about what he says they stand for."
- 103** Dialogue between Marshall McLuhan and Gerald Emanuel Stearn, June 1967, in Stearn, *McLuhan: Hot & Cool*, 263.
- 104** Giedion only studied art history after graduating as a mechanical engineer from the Technical University in Vienna. McLuhan was enrolled for a year before switching to English literature.
- 105** Marshall McLuhan, letter to Kamala Bhatia, April 6, 1971, NAC MG 31/D156/vol. 19-16.
- 106** Marshall McLuhan, "Encyclopedic Unities," 599-600, NAC MG 31/D156/vol. 129-36.
- 107** Giedion established the Burckhardt-Wölfflin lineage in the introduction to *Space, Time and Architecture*. See Giedion, *Space, Time and Architecture*, 1946, 2-3. See also "Encyclopedic Unities," 599-600, NAC MG 31/D156/vol. 129-36: "This sounds Spenglerian, but is fortunately otherwise. For there are two great schools of German encyclopedic study of society and the arts. Riegl, Worringer and Spengler stem from Hegel, while Frobenius, Wölfflin, Giedion and Moholy-Nagy are in the humanist tradition of Burckhardt."
- 108** Marshall McLuhan, *Place of Thomas Nashe*.
- 109** Marshall McLuhan, letter to Ezra Pound, Toronto, January 5, 1951, in Molinaro and Tøye, *Letters of Marshall McLuhan*, 218.
- 110** Marshall McLuhan, letter to Sigfried Giedion, December 22, 1945, GTA 43-K-1945-12-22: "Do you know of a publisher who would be interested in a 200 page book, perhaps called *Illiteracy Unlimited?* [It] contains a series of essays dealing with popular culture from 'New York wits' to 'Dale Carnegie and the American grain' to 'Comics as social barometers.'" For the other titles, see Marchessault, *Marshall McLuhan*, 46.
- 111** McLuhan, *Mechanical Bride*, 1968, v.
- 112** *Ibid.*, 166.
- 113** Belgrad, *Culture of Spontaneity*.
- 114** McLuhan, "Encyclopedic Unities," 602.
- 115** McLuhan and Fiore, *Medium Is the Message*, 74-75.
- 116** Lewis, *Doom of Youth*.
- 117** Lewis was teaching at Assumption College in Windsor, Ontario, not far from the American-Canadian border.
- 118** For more on the "Vorticist" idiom, see Hickman, *Geometry of Modernism*; Kappeler, *Vorticism*.
- 119** With big, bold woodcut type on a bright pink cover, and a typographic layout reminiscent of telephone books, the first volume of *Blast* undoubtedly caught the attention of the prewar London intelligentsia; Lewis, *Blast* 1; Lewis, *Blast* 2.
- 120** McLuhan, *Counterblast*. Most likely, Giedion was exposed to Ezra Pound's work through his wife, Carola Giedion-Welcker who was closely studying James Joyce and was therefore also interested in Pound's oeuvre. Giedion-Welcker's private library contains many of Pound's books, among them his *Cantos*.
- 121** See also Geiser, "'Verbi-Voco-Visual,'" 79-90.
- 122** On the collaboration between Marshall McLuhan and Quentin Fiore, see Schnapp and Michaels, *Electric Information Age Book*, 72-74.
- 123** McLuhan, *Mechanical Bride*, 1968, v.
- 124** See Molinaro and Tøye, *Letters of Marshall McLuhan*, 219, 233; Marchessault, *Marshall McLuhan*, 80; Marchand, *Marshall McLuhan*, 111. On Innis, see Acland and Buxton, *Harold Innis in the New Century*; Barck, *Harold A. Innis*.
- 125** "The Medium Is the Message" is the title of the first chapter of McLuhan's *Understanding Media* (1964). Eventually it was published as a separate volume entitled "The Medium Is the Message." Quintessential McLuhan, this wordplay suggests various readings: "massage," "mass-age," "message," and "mess-age."
- 126** Marchand, *Marshall McLuhan*, 113.
- 127** Marshall McLuhan, letter to Harold Innis, March 14, 1951, NAC MG 31/D156/vol. 27-2.
- 128** Marshall McLuhan, letter to Lewis Mumford, December 28, 1948, NAC MG 31/D156/vol. 32.
- 129** Marshall McLuhan, letter to Harold Innis, March 14, 1951, NAC MG 31/D156/vol. 27-2.
- 130** *Ibid.* An outline of the project was also sent to Giedion and can be found among his correspondence and other publication proposals related to CIAM held at the gta Archives / ETH Zurich, CIAM Archive (NL42). See GTA 42-SG-39-238.
- 131** Marshall McLuhan, letter to Ezra Pound, January 5, 1951, NAC MG 31/D156/vol. 34.
- 132** McLuhan, "Media Log," 52-53.
- 133** Edsel Ford died in 1943 at the age of fifty, and Henry Ford passed away in 1947 at eighty-three. Future president H. Rowan Gaither headed the committee that produced the report that was eventually embraced by the board of the foundation. In 1950, a summary of the results was published, which recommended supporting activities that "secure greater allegiance to the basic principles of freedom and democracy," "advance the economic well being of people everywhere," "strengthen, expand and improve educational facilities," and "conserve and increase knowledge and enrich our culture." For more information, see "History," Ford Foundation, <https://www.fordfoundation.org/about/about-ford/our-origins/> (accessed April 17, 2024).
- 134** "The Ford Foundation, Behavioral Sciences Division: Announcement of Interdisciplinary Research and Study Program," NAC MG 31/D156/vol. 204-26. Among others, Herbert Goldhamer (senior analyst, RAND) was on the committee to select the proposals, another indication of the military's interest in interdisciplinary studies.
- 135** Northrop Frye (1912-1991) was probably the most distinguished Canadian literary critic and theorist of the twentieth century.
- 136** Janine Marchessault and Michael Darroch are working on an ongoing research project investigating the history of McLuhan and Carpenter's "Explorations Group." See: Darroch and Marchessault, "Anonymous History as Methodology," 9-27; Darroch, "Toronto School," 276-301.
- 137** Jaqueline Tyrwhitt arrived in Toronto in July 1951 to teach at the Faculty of Architecture at the University of Toronto. She met McLuhan for the first time in November 1952.
- 138** Marshall McLuhan, biography of Jaqueline Tyrwhitt as a member of the research team, manuscript, NAC MG 31/D156/vol. 204-26.
- 139** It was Giedion who introduced Tyrwhitt to McLuhan: "... he was the reason we ever got to know one another." Jaqueline Tyrwhitt, letter to Marshall McLuhan, April 16, 1968, NAC MG 31/D156/vol. 39. See also Marshall McLuhan, letter to Elsie McLuhan, November 1952, in Molinaro and Tøye, *Letters of Marshall McLuhan*, 233: "Tonight we are having Jacqueline [sic] Tyrwhitt, visiting professor of Town Planning in the School of Architecture. Siegfried [sic] Giedion wrote me about her when thanking me for the book [*The Mechanical Bride*]."
- 140** Jaqueline Tyrwhitt, letter to Marshall McLuhan, August 30, 1953, RIBA TYJ/18/2.
- 141** Marchand, *Marshall McLuhan*, 118.
- 142** Marshall McLuhan, "Interdisciplinary Seminar in Culture and Communications at Toronto University," typescript, undated, NAC MG 31/D156/vol. 203-31.
- 143** McLuhan, *Gutenberg Galaxy*, 2.
- 144** *Explorations*, all issues, frontispiece.
- 145** Richard C. Sheldon (Ford Foundation), report on a conversation with Marshall McLuhan, July 27, 1955, FFA 0530-0070.
- 146** "Report of the Ford Seminar at Toronto University, 1953-1955," August 5, 1955, 6, FFA 0530-0070.
- 147** Quotation from a TV interview with Marshall McLuhan, ca. 1960, *Life and Times*, "Out of Orbit: The Life and Times of Marshall McLuhan," first broadcast November 30, 1999, by CBC.
- 148** Edmund Snow Carpenter in conversation with the author, February 28, 2006, New York.
- 149** Marshall McLuhan, "Report of the Ford Seminar at Toronto University, 1953-1955," typescript, NAC MG 31/D156/vol. 204-26.
- 150** See Marshall McLuhan, Culture and Communications Seminar, minutes 1954-1955, NAC MG31/D156/vol. 203-30: "It was agreed to discuss the different sections of *Mechanization Takes Command* on October 20th, and the following students undertook to prepare notes on five parts of the book." Marshall McLuhan, "Notes on Faculty Meeting," minutes, NAC MG 31/D156/vol. 203-30.
- 151** McLuhan, *Gutenberg Galaxy*, 65.
- 152** Marshall McLuhan, letter to Jaqueline Tyrwhitt, March 24, 1972, NAC MG 31/D156/vol. 20: "All forms of vulgar, cheap, popular art constitute a major hidden ground for all the figures of our world."
- 153** Giedion, *Mechanization Takes Command*, 44.

- 154 Ibid.
- 155 Culture and Communications Seminar, "Notes on the 6th Meeting," November 10, 1954, 3, NAC MG 31/D156/vol. 204-26: "To-day we have a two-way bridge between the technological and verbal worlds on either side of the Atlantic. Europeans (Le Corbusier and Giedion) verbalize American technology; Americans (Poe, Pound, Eliot) develop techniques to handle words."
- 156 In a review of *Mechanization Takes Command*, McLuhan declared: "It is this intense preoccupation with contemporary problems of thought and feeling, and with the occasional triumphs of a unified sensibility that has led Giedion to a study of American life which has been rivaled, and at a different level, only by De Tocqueville." See McLuhan, "Encyclopedic Unities," 599-600.
- 157 Carpenter, "New Languages," 173-74.
- 158 University of Toronto, "Changing Patterns of Language and Behavior and the New Media of Communication," outline, March 23, 1953, 5, FFA 0530-0070.
- 159 Marshall McLuhan, Culture and Communications Seminar, minutes, NAC MG 31/D156/vol. 203-30.
- 160 Marshall McLuhan, letter to Ezra Pound, July 16, 1952, in Molinaro and Toye, *Letters of Marshall McLuhan*, 231.
- 161 Carpenter, "That Not-So-Silent Sea," 253.
- 162 Marchand, *Marshall McLuhan*, 154.
- 163 McLuhan, *Gutenberg Galaxy*, 50.
- 164 "[Innis] did not have time to clear quotations, so he paraphrased, distilling further. Notes he took became cards. He stacked these on his office floor. Card by card, stacks became books." See Edmund Carpenter, "Marshall," typescript, undated, presented to the author at the occasion of an interview on February 28, 2006, New York.
- 165 Marshall McLuhan, letter to the editor of the *Toronto Star*, July [?], 1978, in Molinaro and Toye, *Letters of Marshall McLuhan*, 540.
- 166 Marshall McLuhan, letter to Wyndham Lewis, December 9, 1953, in Molinaro and Toye, *Letters of Marshall McLuhan*, 241.
- 167 Culture and Communications Seminar, "Papers Presented during the Year & Topics Discussed," 1954-1955, NAC MG 31/D156/vol. 203-31.
- 168 At the 58th Annual Meeting of the Society of Architectural Historians (SAH) in Vancouver in 2005, Volker Welter organized a panel discussing the work of Jaqueline Tyrwhitt. Rhodri Windsor Liscombe presented a paper on Canadian perspectives on Tyrwhitt's spatial theory, which was published as "Perceptions in the Conception of the Modernist Urban Environment," 79-98.
- 169 Jaqueline Tyrwhitt, letter to Marshall McLuhan, August 30, 1953, RIBA TYJ/18/2.
- 170 Ibid.
- 171 Carpenter, "That Not-So-Silent Sea," 251.
- 172 Marshall McLuhan, letter to Jaqueline Tyrwhitt, October 29, 1953, RIBA TYJ/18/2; Marshall McLuhan, letter to Jaqueline Tyrwhitt, December 8, 1953, RIBA TYJ/18/2.
- 173 For a more detailed account on Le Corbusier and acoustic space, see Pearson, "Le Corbusier and the Acoustical Trope," 168-83.
- 174 Ibid., 178.
- 175 Le Corbusier, *Oeuvre complète* 5, 72.
- 176 Le Corbusier in an appreciation of the sculptor Antoine Pevsner, as quoted in Pearson, "Le Corbusier and the Acoustical Trope," 178.
- 177 Le Corbusier, *Oeuvre complète* 5, 72.
- 178 This issue is eventually also reflected in Giedion's "third space conception"—introduced at the very end of the second volume of *The Eternal Present*—which sheds light on the synthesis of volume and interior space, allowing for a new type of architecture to emerge. To illustrate the amalgamation of art and architecture, Giedion presented Jørn Utzon's Sidney Opera House and Kenzo Tange's gymnasium project for the 1964 Olympic Games in Tokyo. The question of an increased exchange between art and architecture leads back to the starting point of McLuhan's and Giedion's parallel advances in multidisciplinary research and the quest for a comprehensive method to approximate the different disciplinary cultures.
- 179 In a letter to Jaqueline Tyrwhitt shortly after Giedion's death, McLuhan indicated that he owed "much of [his] media approach, via the sensory modes, to him [Giedion]." The meeting at his house was, according to McLuhan, a "key moment." See Jaqueline Tyrwhitt, letter to Carola Giedion-Welcker (citing Marshall McLuhan), April 27, 1968, GTA 43-T-12 S3(1/9).
- 180 See especially Bott, "Studies on Visual Flicker and Fusion," 145-55.
- 181 Carpenter, "That Not-So-Silent Sea," 241.
- 182 Marshall McLuhan, Culture and Communications Seminar, minutes, NAC MG 31/D156/vol. 203-30. See also Marchand, *Marshall McLuhan*, 123-24; Molinaro and Toye, *Letters of Marshall McLuhan*, 245, 278.
- 183 Williams, "Acoustic Space," 17.
- 184 Carleton Williams, as quoted in Nevitt with McLuhan, *Who Was Marshall McLuhan?* 143.
- 185 "Report of the Ford Seminar at the University of Toronto, 1953-1955," August 5, 1955, 5, FFA 0530-0070.
- 186 Ibid. See also Marshall McLuhan, "Report of the Ford Seminar at the University of Toronto, 1953-1955," manuscript, NAC MG 31/D156/vol. 203-31.
- 187 Marshall McLuhan, "Culture and Communications Seminar, Discussion with Professor Giedion," minutes, February 23, 1955, 7, NAC MG 31/D156/vol. 203-31.
- 188 For more information on Dorothy Lee, see Marchessault, *Marshall McLuhan*, 90-93.
- 189 McLuhan, "Five Sovereign Fingers Taxed the Breath," 207.
- 190 Marshall McLuhan, letter to Wyndham Lewis, December 18, 1954, in Molinaro and Toye, *Letters of Marshall McLuhan*, 245.
- 191 Various phrases in the article in *Explorations* appear unchanged in Carpenter, *Eskimo Realities*.
- 192 Carpenter and McLuhan, "Acoustic Space," 67; and in Carpenter, *Eskimo Realities*, 35.
- 193 Giedion, *Eternal Present*, 1962, 522-28.
- 194 Marshall McLuhan, Graham Foundation Lecture, Chicago, typescript, April 24, 1964, NAC MG 31/D156/vol. 43-25.
- 195 Giedion, *Eternal Present*, 1964, 518.
- 196 Ibid., 502.
- 197 Ibid., 538.
- 198 Much later, in his posthumously published *Laws of Media* (1988), McLuhan and his son Eric eventually claimed "Cubism ('multi-localationalism') to be one of the 'painterly forms of acoustic space.'" See McLuhan and McLuhan, *Laws of Media*, 55.
- 199 Giedion, *Eternal Present*, 1962, 516; Giedion, *Architecture and the Phenomena of Transition*, 3.
- 200 Giedion, *The Eternal Present*, 1962, 514.
- 201 Ibid., 495.
- 202 Marshall McLuhan, Culture and Communications Seminar, University of Toronto, minutes, February 23, 1955, NAC MG 31/D156/vol. 203-31.
- 203 Marshall McLuhan, letter to Jaqueline Tyrwhitt, March 24, 1972, NAC MG 31/D156/vol. 20.
- 204 Marshall McLuhan, letter to Jaqueline Tyrwhitt, January 22, 1964, NAC MG 31/D156/vol. 20.
- 205 Cavell, "McLuhan and Spatial Communication," 91.
- 206 The idea of acoustic space, and especially its relation to literacy, crops up in *The Gutenberg Galaxy*, but then comes to full implication in *Understanding Media*.
- 207 Cavell, "McLuhan and Spatial Communication," 91.
- 208 McLuhan, *Understanding Media*.
- 209 Marshall McLuhan, Culture and Communications Seminar, University of Toronto, minutes, February 23, 1955, NAC MG 31/D156/vol. 203-31.
- 210 Marshall McLuhan, letter to R. Murray Schafer, December 16, 1974, as quoted in Schafer, "McLuhan and Acoustic Space," 67.
- 211 McLuhan and Carpenter, "Introduction," xii.
- 212 Marshall McLuhan, Graham Foundation Lecture, Chicago, typescript, April 24, 1964, NAC MG 31/D156/vol. 43-25.
- 213 Geiser, "'Verbi-Voco-Visual,'" 79-82. See also Schnapp and Michaels, *Electric Information Age Book*, 74.
- 214 Moholy-Nagy, *Vision in Motion*, 204.
- 215 The concept of an acoustic-optical dimension of reading was first introduced by De Stijl member Theo van Doesburg in 1929; van Doesburg, "Buch und seine Gestaltung"; reprinted in Schwarz and Gloor, "Die Form," 288.
- 216 Marshall McLuhan, Culture and Communications Seminar, University of Toronto, minutes of 10th Meeting, December 8, 1954, NAC MG 31/D156/vol. 203-30.
- 217 Eliot, *Use of Poetry and the Use of Criticism*, 118-19.
- 218 Marchessault, *Marshall McLuhan*, 140.
- 219 Giedion-Welcker, "Zu 'Work in Progress,'" 46: "Joyce geht vom Wortklang aus. Daher wird englisch hier meist geschrieben wie gesprochen. Das Hören ist für das sprachliche primär, nicht das Sehen der Schriftzeichen. Die Bedeutung des Textes ist auch nur durch lautes Lesen zu verstehen. Der Sinn ist immer vielfarbig."
- 220 McLuhan, *Understanding Media*, 35.
- 221 The typography was set by Cooper & Beatty, and the text was transcribed from a BBC program entitled "The Portrait of James Joyce." See Rodgers, "Joyce's Wake," 24-25.
- 222 Marshall McLuhan, letter to Jaqueline Tyrwhitt, May 11, 1964, in Molinaro and Toye, *Letters of Marshall McLuhan*, 299.
- 223 Marshall McLuhan, "Comment

- on 'The Beginnings of Architecture' by Sigfried Giedion," typescript, undated, GTA 43-T-12 S3.
- 224** Marshall McLuhan, report on project in understanding new media, June 30, 1960, NAC MG 31/D156/vol. 72-10.
- 225** At the occasion of the German translation of *Understanding Media*, McLuhan asked Giedion about a possible translation of the title. Giedion responded and suggested "Verständigungsmedien." Eventually the book was published as *Die magischen Kanäle* (The magic channels) in 1968. Sigfried Giedion, letter to Marshall McLuhan, November 9, 1966, NAC MG 31/D156/vol. 24.
- 226** Marshall McLuhan, "Inter-disciplinary Seminar in Culture and Communications at Toronto University," typescript, undated, NAC MG 31/D156/vol. 203-31.
- 227** The institute is also referred to as "Institute of Contemporary Studies" (Carpenter), and "Contemporary Institute" (McLuhan and Sheldon); Marshall McLuhan, "Report of the Ford Seminar at Toronto University, 1953-1955," August 1955, FFA 0530-0070.
- 228** Richard C. Sheldon (Ford Foundation), report on a conversation with Marshall McLuhan, July 27, 1955, FFA 0530-0070.
- 229** Marshall McLuhan, letter to Sigfried Giedion, July 12, 1955, GTA 43-K-1955-07-12.
- 230** Edmund Carpenter, letter to unknown group (including McLuhan), "re: Centre beginning," undated, NAC MG 31/D156/vol. 20.
- 231** Sigfried Giedion, letter to Marshall McLuhan, January 1, 1956, GTA 43-K-1956-01-11 (G).
- 232** Edmund Carpenter, letter to Marshall McLuhan, undated, NAC MG 31/D156/vol. 20: "But the faculty sure made things rough. Jackie didn't have tenure: fired."
- 233** Richard C. Sheldon (Ford Foundation), letter to Marshall McLuhan, September 30, 1955, NAC MG 31/D156/vol. 204-26: "If you should care to work out any further details of its operations and organization, I know that whatever you would present would be regarded with interest here."
- 234** Edmund Carpenter, letter to unknown group (including McLuhan), "re: Centre beginning," undated, NAC MG 31/D156/vol. 20.
- 235** To this very day, the McLuhan Centre for Culture and Technology, a small institute affiliated with the Faculty of Information, is located at the coach house.
- 236** Edmund Carpenter, letter to Marshall McLuhan, undated, NAC MG 31/D156/vol. 20.
- 237** Marshall McLuhan, untitled typescript, ca. 1963, NAC MG 31/D156/vol. 203-32.
- 238** Ibid.
- 239** Nathan Marsh Pusey (1907-2001) served as president of Harvard University (1953-1971) before he became the president of the A. W. Mellon Foundation (1971-1975).
- 240** <https://gsas.harvard.edu/news/stories/bridge> (accessed June 30, 2017).
- 241** For a detailed account of the genesis of the building and its design by Le Corbusier, see Curtis and Sekler, *Le Corbusier at Work*.
- 242** Under the chairmanship of Josep Lluis Sert, and with the designated artistic director Mirko Basaldella and coordinator of studies Eduard Sekler, the committee included, among others, I. A. Richards (English literature); Kenneth Galbraith, Arthur Maass, and David Riesman (sociology); and György Kepes (art).
- 243** Sigfried Giedion, letter to Martin Meyerson (Williams Professor of City Planning and Urban Research, Harvard University), June 7, 1963, LOE, Josep Lluis Sert Collection, Folder E8.
- 244** Sigfried Giedion, "Draft for Press Release on Center for Visual Communication," typescript, undated, GTA 43-T-10 (S. 3).
- 245** Ibid.
- 246** Sigfried Giedion, "Remarks and Proposals about the Visual Arts and History at the Graduate School of Design," typescript, January 1956, GTA 43-T-10 (S. 20).
- 247** Sigfried Giedion, "The Dual Purpose of a Visual Communications Center," typescript, 1964, GTA 43-T-10 (S. 3).
- 248** Sigfried Giedion "The Center for Visual Education," typescript, March 1961, GTA 43-T-10 (S. 20).
- 249** "Humanisierung der wissenschaftlichen Untersuchung," in Sigfried Giedion, "Das Carpenter Center for Visual Arts der Harvard Universität: Ein Experiment zur Erziehung zum Sehen," typescript, undated, GTA 43-T-10 (S. 3).
- 250** Sigfried Giedion, "Das Carpenter Center for Visual Arts der Harvard Universität," typescript, ca. 1961, GTA 43-T-10 (S. 20): "Der Zweck der neuen Institution ist ein anderer, ein revolutionärer, und—wie uns die bisherige Erfahrung lehrte—schwer zu erreichen. Nicht Architekten oder angehende Künstler sollen hier in erster Linie ausgebildet werden. Das Zentrum ist viel mehr für andere Fakultäten bestimmt, für Juristen, Nationalökonomien, Mediziner, Physiker, Mathematiker, usw., um ihnen am Anfang ihrer Studien als College-Studenten, d. h. ehe sie in das eigentliche Fachstudium treten, die Augen zu öffnen und sehen zu lernen. Und dies in einer Zeit wo das Sehen immer stärker gegenüber dem Wort in den Hintergrund tritt, in einem Zeitalter, das das Elektronische genannt worden ist."
- 251** University of Toronto, outline for "Changing Patterns of Language and Behavior and the New Media of Communication," March 23, 1953, 5, FFA 0530-0070.
- 252** Sigfried Giedion, letter to Martin Meyerson, June 7, 1963, LOE Josep Lluis Sert Collection, Folder E8.
- 253** Sigfried Giedion, typescript for lecture "Erfahrungen mit Harvard," June 13, 1955, GTA 43-T-13 (S. 2).
- 254** Sigfried Giedion, typescript, "The Center for Visual Education," March 1961, GTA 43-T-10 (S. 20).
- 255** Sigfried Giedion, typescript, "Das Carpenter Center for Visual Arts der Harvard Universität: Ein Experiment zur Erziehung zum Sehen," undated, GTA 43-T-10 (S. 3). Giedion uses phrases like "Und dies in einer Zeit, wo das Sehen immer stärker gegenüber dem Wort in den Hintergrund tritt, in einem Zeitalter, das das Elektronische genannt worden ist [emphasis added]."
- 256** Jaqueline Tyrwhitt, letter to Marshall McLuhan, November 29, 1960, NAC MG 31/D156/vol. 39.
- 257** Marshall McLuhan, letter to Jaqueline Tyrwhitt, December 23, 1960, in Molinaro and Toye, *Letters of Marshall McLuhan*, 278.
- 258** Sigfried Giedion, letter to Josep Lluis Sert, December 29, 1962, LOE, Josep Lluis Sert Collection, Folder E8; and in a previous letter: "Tu ma [sic] demandé ce que je veux. Tu le sois, c'est d'aider de former la ligne du Art Centre, du côté: 'relations avec les autres Facultés'—Mais pour cela il faudrait faire comprendre au comité, qu'il vaut la peine de trouver pour moi une sorte de membership"; Sigfried Giedion, letter to Josep Lluis Sert, March 14, 1962, LOE, Josep Lluis Sert Collection, Folder E8.
- 259** Sigfried Giedion, letter to Josep Lluis Sert, December 5, 1962, LOE, Josep Lluis Sert Collection Folder E8.
- 260** Jaqueline Tyrwhitt, letter to Marshall McLuhan, February 14, 1963, RIBA TYJ/49/2.
- 261** Mirko Basaldella (1910-1963) was an Italian artist, based in Rome, who settled in the United States in the 1950s.
- 262** Correspondence between Sigfried Giedion and Josep Lluis Sert, held at the Loeb Special Collections and the Giedion Archive at ETH Zurich, suggests that Giedion changed his teaching schedule on a regular basis and failed to fulfill his teaching obligations at the last minute because he was pursuing research related to his own work.
- 263** Sigfried Giedion, letter to Josep Lluis Sert, May 22, 1963, LOE, Josep Lluis Sert Collection, Folder E8.
- 264** Sigfried Giedion, letter to Josep Lluis Sert, October 4, 1963, LOE, Josep Lluis Sert Collection, Folder E8.
- 265** Sigfried Giedion, letter to Marshall McLuhan, March 13, 1963, NAC MG 31/D156/vol. 24.
- 266** Sigfried Giedion, letter to Josep Lluis Sert, May 22, 1963, LOE, Josep Lluis Sert Collection, Folder E8; Josep Lluis Sert, letter to Sigfried Giedion, June 27, 1963, LOE, Josep Lluis Sert Collection, Folder E8. Among the other candidates were Jørn Utzon and Paul Waltenspühl. See Sigfried Giedion, letter to Josep Lluis Sert, December 9, 1961, LOE, Josep Lluis Sert Collection, Folder E8. Jaqueline Tyrwhitt previously suggested McLuhan in a letter to Giedion. At the same time, she was doubtful about his performance: "This [the I. A. Richards Seminar] could be also run by Marshall McLuhan, though I suppose he would irritate some people." See Jaqueline Tyrwhitt, letter to Sigfried Giedion, December 12, 1962, GTA 43-K-1962-12-12:2.
- 267** Josep Lluis Sert, letter to Sigfried Giedion, September 25, 1963, LOE, Josep Lluis Sert Collection, Folder E8.
- 268** Josep Lluis Sert, letter to Sigfried Giedion, November 11, 1963, LOE, Josep Lluis Sert Collection, Folder E8.
- 269** Ibid.
- 270** Sigfried Giedion, letter to Josep Lluis Sert, November 22, 1963, LOE, Josep Lluis Sert Collection, Folder E8.
- 271** H. Harvard Arnason, letter to Josep Lluis Sert, September 29, 1964, LOE, Josep Lluis Sert Collection, Folder E9.
- 272** Sigfried Giedion, letter to Josep Lluis Sert, December 29, 1962, LOE, Josep Lluis Sert Collection, Folder E8: "I can't help because I am not a lobbyist."
- 273** Sigfried Giedion, letter to Serge Chermayeff, January 10, 1965, AVE, SC Box 6, Sigfried Giedion and Carola Giedion: "Last term when I was in Harvard, I gave the greatest part of my energy to bringing the Art Center back to the original intention. I achieved to bring the members of

different faculties around a table, not to more talks, but on determinate ideas. I had layed [sic] down previously. But I am afraid the energy was spoiled, because nobody is there who could lead the experiment where it should be led: The working together of the faculties with a visual approach [original emphasis]. And nobody has the time or the will, to travel around to find a man capable to do it."

274 Sigfried Giedion, letter to Josep Lluís Sert, February 19, 1965, LOE, Josep Lluís Sert Collection, Folder E8: "J'espère que tout va bien à Harvard, peut-être avec l'exception du Art Center."

275 Sigfried Giedion, "Erziehung zum Sehen," typescript, Spring 1931, GTA 43-T-13-20, reprinted and commented on in Huber, *Sigfried Giedion*, 18–22.

276 Sigfried Giedion, "Erziehung zum Sehen," typescript, 1931, GTA 43-T-13-20. See also Geiser, "Erziehung zum Sehen," 142–57.

277 Sigfried Giedion, "Malerei und Architektur," 36: "Wir haben wieder die Beziehung zwischen den verschiedenen Gebieten der Wissenschaft und Kunst herzustellen, d. h. wir haben gefühlsmässig die Resultate der Wissenschaft und Kunst zu absorbieren. ... Die Parallelität von Denken und Gefühl ist das Zeichen für eine universale Auffassung der Welt. Die Renaissance besass sie, der Barock besass sie, und wir müssen sie mit den uns eigenen Mitteln wieder erobern."

278 MIT School of Humanities, Arts, and Social Sciences, timeline, <https://libraries.mit.edu/mithistory/research/schools-and-departments/school-of-humanities-arts-and-social-sciences/> (accessed April 17, 2024).

279 See also Burchard, *M. I. T. in World War II*, 25–36; Burchard, *Rockets, Guns and Targets*, 343–45.

280 John Burchard, letter to Sigfried Giedion, December 21, 1949, GTA 43-K-1949-12-21:2: "The trouble with trying to achieve these integrations ... has of course been for the most part that the people who were competent to talk about one aspect of the culture were not really well informed about the other aspects, or if well informed not interested. People like Burckhardt were, of course, but there have not been many such people."

281 John Burchard, letter to Sigfried Giedion, July 23, 1949, GTA 43-K-1949-07-23.

282 *Ibid.*: Sigfried Giedion, letter to John Burchard, August 5, 1949, GTA 43-K-1949-08-05(G); Sigfried Giedion, letter to John Burchard, December 12, 1949, GTA 43-K-1949-12-02(G).

283 J. R. Killian (president, MIT), letter to Sigfried Giedion, September 14, 1949, GTA 43-K-1949-09-14.

284 Sigfried Giedion, letter to John Burchard, March 13, 1951, GTA 43-K-1951-03-13(G):2.

285 *Ibid.*

286 Sigfried Giedion, letter to Hans Pallmann, April 7, 1950, GTA 43-K-1950-04-07(G):2.

287 Kepes's life, his educational advances, and the related period have been examined by various scholars. See Vallye, *Design and the Politics of Knowledge in America*; Finch, *Languages of Vision*; Collins Goodyear, *Relationship of Art to Science and Technology in the United States*.

288 Giedion, "Art Means Reality," 7.

289 William Wurster (1895–1973)

was an American architect and educator who served as Dean of Architecture at MIT (1944–1950), before returning to the University of California at Berkeley. Finch, *Languages of Vision*, 175–210.

290 From Kepes's accompanying text to the exhibition *The New Landscape* at the Hayden Gallery, Massachusetts Institute of Technology, 1951, as quoted in Wechsler, "György Kepes," 12.

291 Eduard Sekler, "Carpenter Center for the Visual Arts: A Statement of Aims and Policy and Listing of the Curriculum to Be Offered," ca. 1963, GTA 43-T-10 S. 3.

292 Sigfried Giedion, letter to György Kepes, June 28, 1965, GTA 43-K-1965-06-28(G).

293 The first six volumes of the series appeared in 1965 and 1966; the last volume, which also has a different trim size, was published in 1972. The series consisted of *The Education of Vision* (1965); *Structure in Art and Science* (1965); *The Nature of Art and Motion* (1965); *Module, Proportion, Symmetry, Rhythm* (1966); *The Man-Made Object* (1966); *Sign, Image, Symbol* (1966); and *Arts of the Environment* (1972). For a detailed account of the project, see Arning, *György Kepes's Vision + Value*.

294 Wechsler, "György Kepes," 13.

295 Sigfried Giedion, "Erziehung zum Sehen," typescript, 1931, GTA 43-T-13-20 reprinted and annotated in Huber, *Sigfried Giedion*, 18–22.

296 Moholy-Nagy, *Vision in Motion*, 80.

297 Kepes, *Education of Vision*, book jacket flap description.

298 Kepes, *Language of Vision*, 13.

299 György Kepes, letter to Sigfried Giedion, June 15, 1965, GTA-43-K-1965-06-15: "I can honestly say that without your [Giedion's] contribution, these volumes cannot be a real contribution. In fact, one of the reviewers implied that your ideas are behind my ideas."

300 Sibyl Moholy-Nagy, letter to György Kepes, March 15, 1965, SAA, Sibyl and László Moholy-Nagy Papers, Reel No. 944.

301 *Ibid.*

302 Chandler and Lippard, "Visual Art and the Invisible World," 27–30; Hamilton, "Review of 'The Visual Arts Today' by György Kepes," 91.

303 Lewis Mumford, letter to György Kepes, December 28, 1961, SAA, György Kepes Papers, Reel No. 5303.

304 Kepes, "Visual Arts and the Sciences," 117–33.

305 Arning, *György Kepes's Vision + Value*, 99.

306 Finch, "A Brief History of the Center for Advanced Visual Studies, Massachusetts Institute of Technology," *Center for Advanced Visual Studies*, <http://cavs.mit.edu/about.html?id=3> (no longer available).

307 Collins Goodyear, "György Kepes, Billy Klüver, and American Art of the 1960s," 628.

308 See Lacerte, "9 Evenings and Experiments in Art and Technology," 161.

309 Getty Archives, Special Collections, Experiments in Art and Technology records, 1966–1997, Series VII. Audiotapes, including "9 Evenings," sounds used in the performances, recordings of some performances (copies of Tudor and Cage), and interviews with engineers and artists, https://primo.getty.edu/primo-explore/fulldisplay/GETTY_ALMA21123876310001551/

GRI (accessed April 17, 2024). "9 Evenings: Theater and Engineering" was performed at the 69th Regiment Armory, New York, in October 1966. In addition to thirty research engineers from Bell Laboratories, the cast included dancers, choreographers, composers, and visual artists such as Lucinda Childs, Deborah Hay, John Cage, Alex Hay, Robert Rauschenberg, and Robert Whitman. For a detailed comparison of György Kepes and Billy Klüver, see Collins Goodyear, "György Kepes, Billy Klüver, and American Art of the 1960s," 611–35.

310 Among the activities of E. A. T. was a "Lecture-Demonstration Series" for artists held by engineers and scientists from academic, industrial, and government laboratories covering technical subjects such as lasers and holography, color theory, computer-generated sound, and television. See Getty Archives, Special Collections, Experiments in Art and Technology records, 1966–1997, Series VII. Audiotapes, E. A. T. lecture-demonstration series, https://primo.getty.edu/primo-explore/fulldisplay/GETTY_ALMA21123876310001551/GRI (accessed April 17, 2024).

311 Collins Goodyear, "György Kepes, Billy Klüver, and American Art of the 1960s," 625.

312 *Ibid.*, 631.

313 Hultén, *Machine as Seen at the End of the Mechanical Age*.

314 Sigfried Giedion, outline of an introduction to *Lineastruttura*, "The Inner Relation between Thinking and Feeling: The Faculty of Interrelation," typescript, ca. 1966, GTA 43-T-6 (S. 18).

315 "Lineastruttura," sketch of the magazine, ca. 1965, GTA 43-T-6 (S. 18).

316 Sigfried Giedion, letter to Nino del Papa (editor, *Lineastruttura*), April 21, 1966, GTA 43-T-6 (S. 18); Sigfried Giedion, letter to Marshall McLuhan, April 16, 1966, GTA 43-T-6 (S. 18).

317 Sigfried Giedion, "The Inner Relation between Thinking and Feeling: The Faculty of Interrelation," typescript, ca. 1966, GTA 43-T-6 (S. 18).

318 *Ibid.*

319 Marshall McLuhan, letter to Sigfried Giedion, November 18, 1966, GTA 43-T-6 (S. 18).

320 Miscellaneous papers and materials related to the unfinished project for *Lineastruttura*, GTA 43-T-6 (S. 18).

Epilogue

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM[®]

W. P. MARSHALL
CHAIRMAN OF THE BOARD

R. W. MCFALL
PRESIDENT

SYMBOLS	
DL	= Day Letter
NL	= Night Letter
LT	= International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

819A EST APR 10 68 BA099
B CDU202 SNWZ316 P030980 12 PD INTL FR CD ZUIRCH/23 VIA WUI
10 1034
HARVARD UNIVERSITY
ROBINSONHALL J.L. SERT CAMBRIDGE (MASS)
GIEDION DIED APRIL 9
ALFRED ROTH

9 .

6.01 Sigfried Giedion's position in between two cultural contexts manifested itself even after Giedion passed away quite unexpectedly on April 9, 1968—the very day he handed in the manuscript for his last book, *Architecture and the Phenomena of Transition*, to the publisher. Discussions about what might happen to the papers in Giedion's possession, as well as the planned documentation of the accomplishments of the Congrès Internationaux d'Architecture Moderne (CIAM), which the doyen of the movement had aimed to publish in collaboration with Jaqueline Tyrwhitt, started barely a week after his death.¹ Preliminary negotiations about the consolidation of all the CIAM papers, most of which were held in personal archives dispersed around the world, had previously taken place on the occasion of the inauguration of Le Corbusier's *Maison de l'Homme* in the summer of 1967 in Zurich.² Alfred Roth, professor of architecture acting on behalf of the newly founded Institute for the History and Theory of Architecture at the Eidgenössische Technische Hochschule Zürich (ETH), and Josep Lluís Sert, dean of the Graduate School of Design (GSD) at Harvard University and CIAM's last president, as well as Giedion, secretary-general until the organization's dissolution in 1959, came to the conclusion that it would be best to collect all the materials in one location.³ There is no final document about this discussion, and correspondence suggests that the decisions informally made on this occasion were interpreted in a number of different ways: Roth was adamant that all the materials should be kept in Zurich, while Sert and Tyrwhitt initially preferred that CIAM's history be preserved at Harvard. Tyrwhitt was convinced that "Giedion wished to know that they [the papers] would be stored in some safe, yet accessible, place," and was sure that "he thought of Harvard."⁴ Sert asked Tyrwhitt, who was living in Greece at the time, to come back to the GSD in order to compile all the CIAM materials and to prepare the manuscript for a book that was "long overdue."⁵ Giedion had always insisted that he would prepare a comprehensive CIAM history with the support of Jaqueline Tyrwhitt.⁶ Now that Giedion was gone, she was "the only person ... who can put it together," as an "hommage to Giedion," as Sert noted.⁷ Like *Space, Time and Architecture*, this history of CIAM was slated to be published by Harvard University Press.

As a result of Roth's insistence and his "definitive statement" that "all the papers should be stored at the Zurich ETH," it was eventually agreed that prewar documents held at Giedion's Zurich home would be transferred to the ETH, while Sert and Tyrwhitt would assemble the postwar papers at Harvard, since a majority of the work had been conducted there, and a number of former CIAM delegates had emigrated to the United States. Once again, it would be a challenge to assign Giedion to a specific place, for he had left decisive traces at Harvard and in Switzerland. Opinions about his own preference regarding the safekeeping of the papers diverged (not surprisingly):



6.02



6.03

Walter Gropius and Cornelis van Eesteren thought that the documents should be placed in Europe as the “Congresses were in Europe and not the U. S. A.”;⁸ without ever saying so precisely, Sert hoped that they would be donated to the library of the Graduate School of Design as part of a “special section”;⁹ Tyrwhitt repeatedly asserted that Switzerland was an appropriate place, as a majority of the documents were in German, but she also indicated that Giedion “would have—in a way—preferred Harvard;”¹⁰ Carola Giedion-Welcker similarly suggested that “[i]t is a difficult emotional situation as S. G. always was so well treated in Cambridge and so badly [*sic*] treated at the Polytechnikum Zuerich.” She, however, eventually came to the conclusion that “perhaps one must see the Situation more objectively [*sic*] without sentiments of gratefulness,” and agreed to transfer all CIAM-related materials to the newly established Institute for the History and Theory of Architecture at the ETH.¹¹

6.02 By the summer of 1971, Giedion’s papers were moved from his house to the ETH. In addition, a request had been sent to all CIAM members, asking for the donation of their own records related to the organization, and, on a vacation in Switzerland, van Eesteren brought along the large panels from the fourth congress in Athens on which CIAM members from all over the world had presented a comparative analysis of various cities.¹² With this effort to consolidate documents related to the activities of CIAM in a single place, Sert and Tyrwhitt tackled one of Giedion’s last unfinished projects—a book on the history of the congresses, which they hoped to publish in his memory.¹³ At first there was no doubt that the two of them would oversee this project, with the assistance of a student or recent graduate. They were thinking of “a young man for whom Giedion had a high regard—S[tanislaus]. von Moos [who] has been going through the CIAM archives in the Doldertal. ... [and who] has a good mind and wrote a perceptive obituary on Giedion in ‘Werk’ (No. 5, 1968).”¹⁴

6.03 In the meantime, however, Alfred Roth and his assistant Martin Steinmann immediately began to “look through the material already in [their] possession to outline a history of CIAM.”¹⁵ Since all the documents were located in Switzerland, and Sert was preoccupied with his practice, frequently traveling, and Tyrwhitt was involved with Constantinos Apostolos Doxiadis’s Athens Center of Ekistics, it soon became clear that it would be impossible for the old CIAM core group to write this conclusive chapter of the organization’s history. The number of letters and telegrams exchanged over a short period of time, as well as the level of organization on the Swiss side, underline Roth’s ambition to spark the institute’s research activities with this keystone in the history of modern architecture. Rather than sum up the findings in a highly visual and personally biased account—as Giedion possibly would have approached the project—Steinmann followed Roth’s promise to handle the documents as “a severe objective” and

Sigfried Giedion and Carola Giedion-Welcker’s library at their Doldertal home in Zurich.

Sigfried Giedion at Bärengaben (Bear Pit) in Bern, Switzerland, January 1965.

to “exploit” them in a “scientifically correct” way.¹⁶ With Steinmann’s blue book on the prewar congresses, entitled *CIAM: Dokumente 1928–1939* (1979), the “bibliographical catalog” and a “complete classified CIAM documentation” took shape and laid the foundation for an ongoing historiography of the organization.¹⁷

Not long after Giedion passed away, Gropius quite rightfully observed: “The awareness of his personality and his extraordinary achievement will naturally grow, and I already anticipate how the blindness in his home country will turn into pride.”¹⁸ While the papers were being taken care of in Giedion’s native Switzerland, the art historian’s close friend Sert tried to ensure a lasting memory at Harvard in the form of a “Giedion scholarship or memorial of some kind.”¹⁹ Carola Giedion-Welcker promptly voiced her support, once again stressing the importance of the American context for Giedion’s career: “I contributed a larger sum, merely out of gratitude for all the stipends S. G. received from the USA, and not from Switzerland. Sert’s help, besides the fundamental support from Gropius, is a decisive reason.”²⁰ Initially, Sert even hoped to establish an endowed professorship of art history in Giedion’s name, but finally had to abandon this project because of a lack of funding. Instead, he proposed the installation of “a corner in the library dedicated to Giedion’s memory,” consisting of the historian’s publications and “a photograph of him with a memorial plaque.”²¹ Today, one searches in vain for this “Giedion corner” in Loeb Library. Apparently, the architect of Gund Hall, John Andrews, a graduate of the school and a former student of Giedion’s, did not find a way to include this project in his plans.²²

At first glance, this ultimate episode seems to reiterate the challenges tied to Giedion’s career, situated between two cultural contexts. The initial hesitation about the final location of papers belonging to Giedion, the belated interest in his achievements in Switzerland, and the sentiments toward him at Harvard—ranging from praise to indifference—all underline his unique orientation between Europe and the United States. Rather than assimilating seamlessly into one or the other cultural sphere, Giedion maintained a singular position that repeatedly revealed a startling discrepancy between the broad reception of his advocacy for modern architecture and the roadblocks he faced in attempting to change it. At the same time, this evidence of simultaneous support and resistance can be interpreted as a manifestation of the truly cross-cultural character of his career. It is impossible to consider Giedion’s contributions to the field of architecture without taking his transatlantic existence into account. His central position within a global network of protagonists allowed him to reposition modern architectural history by advancing little-explored issues—including visual literacy, popular culture, and interdisciplinary collaboration—topics that are as relevant today as they were in the early postwar years.

Unless otherwise noted, all English translations of quoted material are by the author.

1 Jaqueline Tyrwhitt, letter to Josep Lluís Sert, April 14, 1968, in transit from Zurich to Athens, LOE, Josep Lluís Sert Collection, Folder E13.

2 Jaqueline Tyrwhitt, letter to Josep Lluís Sert, April 26, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

3 Ibid.

4 Ibid.

5 Jaqueline Tyrwhitt, letter to Josep Lluís Sert, April 17, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

6 Jaqueline Tyrwhitt, letter to Josep Lluís Sert, April 14, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

7 Jaqueline Tyrwhitt, letter to Josep Lluís Sert, April 17, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

8 Carola Giedion-Welcker, letter to Josep Lluís Sert, November 28, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

9 Josep Lluís Sert, letter to Carola Giedion-Welcker, November 13, 1968, LOE, Josep Lluís Sert Collection, Folder E13; Josep Lluís Sert, letter to Alfred Roth, January 17, 1968, LOE, CIAM Collection, Folder C17.

10 Jaqueline Tyrwhitt, letter to Josep Lluís Sert, April 26, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

11 Alfred Roth, letter to Josep Lluís Sert, November 25, 1968, LOE, CIAM Collection, Folder C17; Carola Giedion-Welcker, letter to Josep Lluís Sert, November 28, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

12 Alfred Roth, letter to "Former CIAM Members," July 1969, LOE, CIAM Collection, Folder C17; Alfred Roth, letter to Josep Lluís Sert, July 30, 1971, LOE, CIAM Collection, Folder C17. See also Weiss, Harbusch, and Maurer, "A Major Heritage and an Unpublished Book," 21.

13 Josep Lluís Sert, letter to Carola Giedion-Welcker, November 13, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

14 Jaqueline Tyrwhitt, letter to Josep Lluís Sert, June 1, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

15 Martin Steinmann, letter to Josep Lluís Sert, April 2, 1970, LOE, CIAM Collection, Folder C17.

16 Alfred Roth, letter to Josep Lluís Sert, February 21, 1972, LOE, CIAM Collection, Folder C17.

17 Alfred Roth, letter to Josep Lluís Sert, undated, LOE, CIAM Collection, Folder C17. For the history of CIAM, see Steinmann, *CIAM*. Eric Mumford published the most comprehensive account on the history of the congresses: Mumford, *The CIAM Discourse on Urbanism*. Other recent CIAM scholarship includes Domhardt, *Heart of the City*; Somer, *Functional City*; van Es et al., *Atlas of the Functional City*.

18 Walter Gropius, letter to Carola Giedion-Welcker, April 14, 1968, GTA-SG/CGW: "Die Erkenntnis seiner Persönlichkeit und seiner grossen Leistung wird natürlich anwachsen und ich sehe schon, wie die Blindheit seiner Heimat sich in Stolz verwandeln wird."

19 Josep Lluís Sert, letter to Jaqueline Tyrwhitt, April 17, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

20 Carola Giedion-Welcker, letter to Ise Gropius, May 13, 1969, HOU bMS Ger 208 (772): "Ich habe eine grössere Summe gegeben, schon aus Dankbarkeit für die Stipendien die S. G. von der USA und nicht von der Schweiz empfangen hat. Die Hilfe Serts neben dem *fundamentalen* Beistand den Gropius ihm gab, ist natürlich ein entscheidender Punkt."

21 Josep Lluís Sert, letter to Carola Giedion-Welcker, November 13, 1968, LOE, Josep Lluís Sert Collection, Folder E13.

22 In view of Giedion's controversial role throughout the disputes about the direction of Harvard's Carpenter Center for the Visual Arts, it is very well possible that Sert's endeavor failed because of a lack of support from the GSD faculty. Three years before Giedion's death, Gropius had already nominated the art historian for an honorary doctorate at Harvard, but despite the support of Sert, Pietro Belluschi and György Kepes, who co-signed the nomination, and Gropius's efforts in approaching the relevant people at the university, he did not succeed in time to pay Giedion this tribute. Walter Gropius, letter to Josep Lluís Sert, September 21, 1965, LOE, Josep Lluís Sert Collection, Folder E10; Walter Gropius, letter to Josep Lluís Sert, October 4, 1965, LOE, Josep Lluís Sert Collection, Folder E10; Walter Gropius, letter to Carola Giedion-Welcker, April 14, 1968, GTA-SG/CGW: "Ich bedaure dass es nicht rechtzeitig gelang, ihm ein Harvard Ehrendoktorat zu bieten, trotz verschiedener Demarchen seit 3 Jahren, bei denen auch Sert half."

- AAA
Alvar Aalto Foundation, Helsinki, Finland
Alvar Aalto Archive
- AVE
Avery Architectural and Fine Arts Library, Special Collections, Columbia University, New York, New York
Serge Ivan Chermayeff Architectural Records and Papers, 1909–1980
- BUR
Busch-Reisinger Museum, Special Collections, Harvard Art Museums, Harvard University, Cambridge, Massachusetts
Alexander Dornier Papers
- ETH
Hochschularchiv der Eigenössischen Technischen Hochschule Zürich, Zurich, Switzerland
Protokolle des Schulrates der ETH
- FFA
Ford Foundation Archives, New York, New York
Grant No. 0530-0070, University of Toronto, Changing Patterns of Language and Behavior and the New Media of Communication
- FLC
Fondation Le Corbusier, Paris, France
- GTA
gta Archives/ETH Zurich, Switzerland
NL 42, *CIAM Archive*
NL 43, *Sigfried Giedion Archive*
NL 191, *Ulrich Stucky Archive*
- GIE
Private Archive Prof. Dr. Andres Giedion, Zurich, Switzerland
Now held at gta Archives/ETH Zurich, Switzerland
NL 43b, Private Archive Sigfried Giedion and Carola Giedion-Welcker
- HOU
Houghton Library, Special Collections, Harvard University, Cambridge, Massachusetts
Walter Gropius Papers
- HUA
Pusey Library, Harvard University Archives, Harvard University, Cambridge, Massachusetts
GSD Administrative Records
- IIT
Paul V. Galvin Library, IIT Archives, Illinois Institute of Technology, Chicago, Illinois
Institute of Design Collections
- LOE
Frances Loeb Library, Special Collections, Graduate School of Design, Harvard University, Cambridge, Massachusetts
The Josep Lluís Sert Collection
CIAM Collection
Vertical Files Collection
- MIT
MIT Museum, Massachusetts Institute of Technology, Cambridge, Massachusetts
Faculty Records
- MKB
Museum der Kulturen Basel, Basel, Switzerland
Nachlass Carl Schuster
- MOM
The Museum of Modern Art Archives, New York, New York
Modern Architecture: International Exhibition (MoMA Exh. #15, February 9 to March 23, 1932)
Bauhaus: 1919–1928 (MoMA Exh. #82, December 7, 1938 to January 30, 1939)
The Oral History Program
- NAC
Library and Archives Canada (National Archives), Ottawa, Canada
Marshall McLuhan Papers
- NAI
Netherlands Architecture Institute (now part of Het Nieuwe Instituut), Rotterdam, the Netherlands
J. J. P. Oud Papers
Cornelis van Eesteren Papers
- RIBA
Royal Institute of British Architects (RIBA), Architectural Library Drawings and Archives Collections, Victoria and Albert Museum, London, United Kingdom
Jaqueline Tyrwhitt Papers
- SAA
Smithsonian Archives of American Art, Washington, D.C., and New York, New York
Sibyl and László Moholy-Nagy Papers, 1918–1971
Marcel Breuer Papers
György Kepes Papers
- SZH
Staatsarchiv des Kantons Zürich, Zurich, Switzerland
Archiv der studentischen Verwaltung 1883–1919 und der Studentenschaft der Universität Zürich 1919–1978
- UIC
Richard J. Daley Library, Special Collections and University Archives Department, University of Illinois at Chicago, Chicago, Illinois
Institute of Design Collection
- UOR
Special Collections and University Archives, University of Oregon Libraries, Eugene, Oregon
Paul Lester Wiener Papers, 1913–1968
- VPL
Van Pelt Library, Special Collections, University of Pennsylvania, Philadelphia, Pennsylvania
Lewis Mumford Papers
- YAL
Yale University Library, Manuscripts and Archives, Yale University, New Haven, Connecticut
C. L. V. Meeks Papers

- Aalto, Alvar. "Sigfried Giedion." [Obituary]. *Arkkitehti*, 2, 1968.
- Abbaspour, Mitra, Lee Ann Daffner, and Maria Morris Hamburg (eds.). *Object:Photo. Modern Photographs: The Thomas Walther Collection, 1909-1949*. New York: Museum of Modern Art, 2014.
- Abram, Joseph (ed.). *Hugo P. Herdeg: Photographe/Photographer/Photograph—1909-1953*. Metz: Ecole des Beaux-Arts, 1994.
- Acland, Charles R., and William J. Buxton. *Harold Innis in the New Century: Reflections and Refractivections*. Montreal: McGill-Queen's University Press, 1999.
- Adkins, Helen, et al. *John Heartfield*. Cologne: DuMont Buchverlag, 1991.
- Agamben, Giorgio. *Potentialities: Collected Essays in Philosophy*. Stanford: Stanford University Press, 1999.
- Alexander, Samuel. *Space, Time and Deity: The Gifford Lectures of Glasgow, 1916-1918*. London: Macmillan, 1920.
- Alofsin, Anthony. *The Struggle for Modernism: Architecture, Landscape Architecture, and City Planning at Harvard*. New York: W.W. Norton & Company, 2002.
- Anker, Peder. "Biology and the Bauhaus." *Tate Etc.*, 6 (2006), 48-55.
- Appelbaum, Stanley, and Richard Wurts. *The New York World's Fair 1939/1940 in 155 Photographs*. New York: Dover Publications, 1977.
- Arning, Bill. "György Kepes's Vision+Value, 1965-1972: A Practical Training Program to Create a New Super-Perceiving Problem-Solving Artist." M.A. [Art History] thesis, Tufts University, 2008.
- Aronovici, Carol. "Civic Art." In Paul Zucker (ed.). *New Architecture and City Planning*. New York: Philosophical Library, 1944, 366-91.
- Arp, Hans, and El Lissitzky. *Die Kunstismen*. Baden: Lars Müller Publishers, 1990. [First published 1925 by Rentsch (Erlenbach-Zurich)].
- Ash, Mitchell, and Alfons Söllner (eds.). *Forced Migration and Scientific Change: Emigré German-Speaking Scientists and Scholars after 1933*. Cambridge: Cambridge University Press, 1996.
- Avermaete, Tom. *Another Modern: The Post-war Architecture and Urbanism of Candilis-Josic-Woods*. Rotterdam: NAI Publishers, 2005.
- Bacon, Mardges. "Josep Lluís Sert's Evolving Concept of the Urban Core: Between Corbusian Form and Mumfordian Social Practice." In *Josep Lluís Sert: The Architect of Urban Design, 1953-1969*. New Haven: Yale University Press, 2008, 76-114.
- . *Le Corbusier in America: Travels in the Land of the Timid*. Cambridge: MIT Press, 2001.
- Bakema, Jacob Berend. "What Became of CIAM?" *Architectural Review*, 129, no. 4 (1961), 226.
- Bail, Hugo. *Die Flucht aus der Zeit*. Munich: Duncker and Humboldt, 1927.
- Banham, Reyner. *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture, 1900-1925*. Cambridge: MIT Press, 1986.
- . "A & PhoT: Big Sig in the Roman Underground." *Architectural Design*, 41 (1971), 350-52.
- . *Architecture of the Well-Tempered Environment*. Chicago: University of Chicago Press, 1984.
- . *Das gebaute Atlantis: Amerikanische Industriebauten und die frühe Moderne in Europa*. Basel: Birkhäuser Verlag, 1990.
- . "A Set of Actual Monuments." *Architectural Review*, 185, no. 1106 (1989), 89-92.
- Barck, Karlheinz (ed.). *Harold A. Innis: Kreuzwege der Kommunikation*. Vienna: Springer, 1997.
- Barron, Stephanie (ed.). *Exiles and Emigrés: The Flight of European Artists from Hitler*. New York: Harry N. Abrams, 1997.
- (ed.). *Exil: Flucht und Emigration europäischer Künstler 1933-1945*. Munich: Prestel, 1997.
- Bartram, Alan. *Bauhaus, Modernism and the Illustrated Book*. London: British Library, 2004.
- . *Futurist Typography and the Liberated Text*. London: British Library, 2005.
- Bataille, Georges. *The Cradle of Humanity: Prehistoric Art and Culture*. New York: Zone Books, 2005.
- . *Die Vorgeschichtliche Malerei: Lascaux oder die Geburt der Kunst*. Geneva: Albert Skira, 1955.
- Battles, Matthew. *Widener: Biography of a Library*. Cambridge: Harvard University Press, 2004.
- Baur, Hermann. "Zur Ausstellung 'Schweizer Architektur': Kunsthalle Basel, 8. Januar bis 12. Februar 1949." *Das Werk*, 36, no. 1 (1949), 2.
- Bayer, Herbert. *Herbert Bayer: Das Werk des Künstlers in Europa und USA*. Ravensburg: Otto Maier Verlag, 1967.
- Behne, Adolf, and Heinrich Zille. "Ausstellung der AHAG am Fischaltgrund." In Adolf Behne and Martin Wagner (eds.). *Das neue Berlin: Grossstadtprobleme*, 1. Berlin: Deutsche Bauzeitung, 1929, 20-22.
- Behrendt, Walter Curt. *Städtebau und Wohnungswesen in den Vereinigten Staaten: Bericht über eine Studienreise*. Berlin: Verlag Guido Hackebeil, 1927.
- Belgrad, Daniel. *The Culture of Spontaneity: Improvisation and the Arts in Postwar America*. Chicago: University of Chicago Press, 1998.
- . *The Bench and Bar*. Vol. 6. Industrial Chicago. Chicago: Godspeer Publishing Company, 1891.
- Benjamin, Walter. "Das Passagen-Werk, Aufzeichnungen und Materialien 'N11,3.'" In Rolf Tiedemann and Hermann Schweppenhäuser (eds.). *Gesammelte Schriften*. Vol. 5. Frankfurt: Suhrkamp Verlag, 1977, 595.
- . "Das Passagen-Werk, Aufzeichnungen und Materialien 'N11,4' 36.'" In Rolf Tiedemann and Hermann Schweppenhäuser (eds.). *Gesammelte Schriften*. Vol. 5. Frankfurt: Suhrkamp Verlag, 1977, 596.
- . "Das Passagen-Werk, Aufzeichnungen und Materialien 'Überblick.'" In Rolf Tiedemann and Hermann Schweppenhäuser (eds.). *Gesammelte Schriften*. Vol. 5. Frankfurt: Suhrkamp Verlag, 1977, 81-82.
- . "Das Passagen-Werk, Erste Notizen, 'Oo, 36.'" In Rolf Tiedemann and Hermann Schweppenhäuser (eds.). *Gesammelte Schriften*. Vol. 5. Frankfurt: Suhrkamp Verlag, 1977, 1030.
- . *Gesammelte Schriften*. Vol. 5. Rolf Tiedemann and Hermann Schweppenhäuser (eds.). Frankfurt: Suhrkamp Verlag, 1977.
- . "On Language as Such and on the Language of Man." In Marcus Bullock and Michael W. Jennings (eds.). *Walter Benjamin: Selected Writings*. Vol. 1. Cambridge: The Belknap Press of Harvard University Press, 1996, 1913-26.
- . "Über Sprache überhaupt und über die Sprache des Menschen." In Rolf Tiedemann and Hermann Schweppenhäuser (eds.). *Gesammelte Schriften*. Vol. II-1. Frankfurt: Suhrkamp Verlag, 1977, 140-57.
- Bergdoll, Barry. "Modern Architecture: International Exhibition." In David A. Hanks (ed.). *Partners in Design: Alfred H. Barr Jr. and Philip Johnson*. New York: Monacelli Press, 2015, 136-47.
- Bergson, Henri. *Creative Evolution*. New York: Henry Holt and Company, 1911.
- Berke, Deborah, and Steven Harris (eds.). *Architecture of the Everyday*. New York: Princeton Architectural Press, 1997.
- Bertram, Alan. *Bauhaus, Modernism and the Illustrated Book*. London: British Library, 2004.
- Bévier, Isabel, and Susannah Usher. *The Home Economics Movement*. Boston: Whitcomb & Barrows, 1906.
- Beyer, Oskar (ed.). *Eric Mendelsohn: Letters of an Architect*. London: Abelard-Schuman, 1967.
- Bignens, Christoph. "Amerika am Werk: 'Das Werk' und der Amerikanismus." *archithese*, 24, no. 5 (1994), 59-63.
- . "Swiss Style." *Die grosse Zeit der Gebrauchsgrafik in der Schweiz 1914-1964*. Zurich: Chronos Verlag, 2000.
- Blanchot, Maurice. *Friendship*. Trans. Elizabeth Rottenberg. [First English edition.] Stanford: Stanford University Press, 1997.
- Blum, Betty J. *Oral History of Serge Chermayeff*. Chicago: Art Institute of Chicago, 2001.
- Borchardt-Hume, Achim (ed.). *Albers and Moholy-Nagy: From the Bauhaus to the New World*. New Haven: Yale University Press, 2006.
- Borrmann, Norbert. *Paul Schultze-Naumburg 1869-1949: Maler, Publizist, Architekt—vom Kulturreformer der Jahrhundertwende zum Kulturpolitiker im Dritten Reich*. Essen: R. Bacht, 1989.
- Bott, E. A. "Studies on Visual Flicker and Fusion." *Canadian Journal of Psychology*, 4 (1950), 145-55.
- Boydston, Jo Ann (ed.). *Collected Works of John Dewey*. Carbondale: Southern Illinois University Press, 1991.
- Bresciani, Elisabetta, Marco de Michelis, and Catherine de Smet. *Modern: Architecture Books from the Marzona Collection*. Cologne: Walther König, 2004.
- Bruderer-Oswald, Iris. *Das Neue Sehen: Carola Giedion-Welcker und die Sprache der Moderne*. Bern: Benteli Verlag, 2007.
- Brüning, Ute (ed.). *Das A und O des Bauhauses: Bauhauswerbung, Schriftbilder, Drucksachen, Ausstellungsdesign*. Leipzig: Edition Leipzig, 1995.
- . "Bauhausbücher: Grafische Synthese—synthetische Grafik." In Patrick Rössler (ed.). *bauhauskommunikation: Innovative Strategien im Umgang mit Medien, interner und externer Öffentlichkeit*. Berlin: Gebroder Mann Verlag, 2009, 281-96.
- Buddensieg, Tilmann, and Henning Rogge (eds.). *Die nützlichen Künste*. Berlin: Quadriga, 1981.
- Buhler, Richard. "Eine schweizerische Entgegnung." *Das Werk*, no. 10 (October 1923), 259-60.
- . *The Building Interests*. Vol. 1-2. Industrial Chicago. Chicago: Godspeer Publishing Company, 1891.
- Burchard, John. *M. I. T. in World War II: Q. E. D.* New York: John Wiley and Sons, 1948.
- . *Rockets, Guns and Targets: Rockets, Target Information, Erosion Information, and Hypervelocity Guns Developed during World War II by the Office of Scientific Research and Development*. Boston: Little, Brown and Company, 1948.
- Burke, David. *The Lawn Road Flats: Spies, Writers and Artists*. Woodbridge: The Boydell Press, 2014.
- Bürkle, J. Christoph. "Berlin and the Influence of CIAM in Germany after 1945." *Rassegna*, 14, no. 52 (December 1992), 68-75.
- Busch, Noel F. "Juan Trippe: Pan American Airway's Young Chief Helps Run a Branch of U.S. Defense." *Life* (October 20, 1941), 111-12, 115-18, 120-22.
- Bushart, Magdalena. "Logische Schlüsse des Auges: Kunsthistorische Bildstrategien 1900-1930." In Bernd Craqué, Daniela Mondini, and Matthias Noell (eds.). *Visualisierung und Imagination: Materielle Relikte des Mittelalters in bildlichen Darstellungen der Neuzeit und Moderne*. 2. Göttingen: Wallstein Verlag, 2006, 545-91.
- Caramellino, Gaia. *William Lescaze: Un architetto europeo nel New Deal*. Milan: Franco Angeli, 2010.
- Carpenter, Edmund. *Eskimo Realities*. New York: Holt, Reinhard and Winston, 1973.
- . "The New Languages." In Edmund Carpenter and Marshall McLuhan (eds.). *Explorations in Communication*. Boston: Beacon Press, 1960, 162-79.
- . "That Not-So-Silent Sea." In Donald Theall (ed.). *The Virtual McLuhan*. Montreal: McGill-Queen's University Press, 2001, 235-62.
- Carpenter, Edmund, and Marshall McLuhan (eds.). "Acoustic Space." In Edmund Carpenter and Marshall McLuhan (eds.). *Explorations in Communication: An Anthology*. Boston: Beacon Press, 1960, 65-70.
- (eds.). *Explorations 1. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1953.

- (eds.). *Explorations 2. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1954.
- (eds.). *Explorations 3. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1954.
- (eds.). *Explorations 4. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1955.
- (eds.). *Explorations 5. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1955.
- (eds.). *Explorations 6. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1956.
- (eds.). *Explorations 7. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1957.
- (eds.). *Explorations 8. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1957.
- (eds.). *Explorations 9. Explorations: Studies in Culture and Communication*. Toronto: University of Toronto, 1959.
- (eds.). *Explorations in Communication: An Anthology*. Boston: Beacon Press, 1960.
- (eds.). "Introduction." In Edmund Carpenter and Marshall McLuhan (eds.). *Explorations in Communication: An Anthology*. Boston: Beacon Press, 1960, ix–xii.
- Carpenter, Edmund, and Carl Schuster. *Patterns That Connect: Social Symbolism in Ancient & Tribal Art*. New York: Harry N. Abrams, 1996.
- Carpenter, Kenneth E. "The First 350 Years of the Harvard University Library." *Harvard Bulletin*, 34 (Winter 1986), 12–13.
- Carter, Susan B. "Labor Force" in chapter Ba of *Historical Statistics of the United States, Earliest Times to the Present: Millennium Edition*, edited by Susan B. Carter, Scott Sigmond Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. New York: Cambridge University Press, 2006. <https://hsus.cambridge.org/HSUSWeb/essay/showtableessay.do?id=Ba478-486&swidth=1920> (accessed April 17, 2024).
- Cassirer, Ernst. *Philosophie der symbolischen Formen*. Berlin, 1923.
- Cavell, Richard. *McLuhan in Space: A Cultural Geography*. Toronto: University of Toronto Press, 2002.
- Chandler, John, and Lucy Lippard. "Visual Art and the Invisible World." *Art International*, 9, no. 5 (May 1967), 27–30.
- Ciucci, Giorgio, Francesco Dal Co, Mario Manieri-Elia, Manfredo Tafuri, and Barbara Luigia La Penta. *The American City: From the Civil War to the New Deal*. London: Granada, 1980.
- Cohen, Arthur A. *Herbert Bayer: The Complete Works*. Cambridge: MIT Press, 1984.
- Cohen, Jean-Louis. *Architecture in Uniform: Designing and Building for the Second World War*. Montreal: Canadian Centre for Architecture, 2011.
- (eds.). *Scenes of the World to Come: European Architecture and the American Challenge, 1893–1960*. Paris: Flammarion, 1995.
- Cohen, Jean-Louis, and Hubert Damisch (eds.). *Americanisme et modernité: L'idéal américain dans l'architecture et l'urbanisme*. Paris: Flammarion, 1993.
- Coit, Elizabeth. "Review: 'Space, Time and Architecture.'" *Architectural Record*, 89 (April 1941), 28.
- Collins, Christiane C., and George R. Collins (eds.). "Monumentality: A Critical Matter in Modern Architecture." *Harvard Architecture Review*, 4 (Spring 1984), 14–35.
- Collins Goodyear, Anne. "György Kepes, Billy Klüver, and American Art of the 1960s: Defining Attitudes toward Science and Technology." *Science in Context*, 17, no. 4 (December 2004), 611–35.
- "The Relationship of Art to Science and Technology in the United States 1957–1971: Five Case Studies." PhD diss., University of Texas at Austin, 2002.
- *The Commercial Interests*. Vol. 4. Industrial Chicago. Chicago: Godspeer Publishing Company, 1891.
- Condit, Carl W. "The Chicago School and the Modern Movement in Architecture." *Art in America*, 36 (Spring 1948), 19–36.
- *The Rise of the Skyscraper*. Chicago: University of Chicago Press, 1952.
- Conrad, Sandra. "Die 'Blauen Bücher' und 'Der Eisener Hammer': die Fotobildbandreihe des Karl Robert Lange-wiesche Verlages von 1902 bis 1931 am Beispiel ausgewählter Kunst- und Naturbände." PhD diss., Universität Göttingen, 1999.
- Crasemann Collins, Christiane. *Werner Hegemann and the Search for Universal Urbanism*. New York: W. W. Norton & Company, 2005.
- Curtis, William, and Eduard F. Sekler (eds.). *Le Corbusier at Work: The Genesis of the Carpenter Center for the Visual Arts*. Cambridge: Harvard University Press, 1978.
- Dal Co, Francesco. "From Parks to the Region." In Giorgio Ciucci et al. (eds.). *The American City: From the Civil War to the New Deal*. London: Granada, 1980, 231–35.
- Darroch, Michael. "The Toronto School: Cross-Border Encounters, Interdisciplinary Entanglements." In Peter Simonson and David W. Park (eds.). *The International History of Communication Study*. London: Routledge, 2016, 276–301.
- Darroch, Michael, and Janine Marchessault. "Anonymous History as Methodology." In Andreas Broeckmann and Gunalan Nadarajan (eds.). *Place Studies in Art, Media, Science and Technology: Historical Investigations on the Sites and Migration of Knowledge*. Weimar: Verlag und Datenbank für Geisteswissenschaften, 2009, 9–27.
- Davis, Douglas. "Art and Technology—Conversations." *Art in America*, 56, no. 1 (1968), 28–47.
- Debbaut, Jan (ed.). *El Lissitzky 1890–1941: Architect, Painter, Photographer, Typographer*. Eindhoven: Stedelijk Van Abbemuseum, 1990.
- Deleuze, Gilles, and Félix Guattari. *Kafka: Für eine kleine Literatur*. Frankfurt: Suhrkamp, 1976.
- Dermée, Paul, Michel Seuphor, Charles-Edouard Jeanneret, and Amédée Ozenfant (eds.). *L'Esprit Nouveau*. Paris: Editions de l'Esprit Nouveau, 1920–25.
- Derouet, Christian (ed.). *Fernand Léger*. [Exhib. cat.]. Paris: Centre Georges Pompidou, 1997.
- *Le Corbusier: Un architecte et ses livres*. Baden: Lars Müller Publishers, 2005.
- *Vers une architecture du livre—Le Corbusier: Édition et mise en pages 1912–1965*. Baden: Lars Müller Publishers, 2007.
- Deutscher Werkbund (ed.). *Internationale Ausstellung des Deutschen Werkbunds: Film und Foto Stuttgart 1929*. [Exhib. cat.]. Stuttgart: Deutscher Werkbund, 1929.
- Dewey, John. *Art as Experience*. New York: Minton, Balch & Company, 1934.
- "Between Two Worlds." In Jo Ann Boydston (ed.). *The Later Works, 1925–1953*, Vol. 17. Carbondale: Southern Illinois University Press, 1990, 451–65.
- *Experience and Nature*. New York: W. W. Norton & Company, 1925.
- Diamond, Sigmund. *Compromised Campus: The Collaboration of Universities with the Intelligence Community, 1945–1955*. New York: Oxford University Press, 1992.
- Dilly, Heinrich. "Lichtbildprojektion: Prothese der Kunstbetrachtung." In Irene Below (ed.). *Kunstwissenschaft und Kunstvermittlung*. Giessen: Anabas-Verlag, 1975, 153–72.
- Doesburg, Théo van. "Das Buch und seine Gestaltung." *Die Form*, 21 (1929), 566–71.
- "Das Buch und seine Gestaltung." In Felix Schwarz and Frank Gloor (eds.). *Die Form: Stimme des Deutschen Werkbunds, 1925–1934*. Gütersloh: Bertelsmann Fachverlag Reinhard Mohn, 1969, 284–88.
- Domhardt, Konstanze Sylva. *The Heart of the City: Die Stadt in den transatlantischen Debatten der CIAM 1933–1951*. Zurich: gta Verlag, 2012.
- Dorner, Alexander. *The Way beyond "Art": The Work of Herbert Bayer*. New York: Wittenborn, Schultz, Inc., 1947.
- Doxiadis, Constantinos Apostolos. "Comment on the Delos Symposium." *Jaqueline Tyrwhitt* (ed.), *Ekistics*, 16, no. 95 (October 1963), 204.
- Drew, Jane B. *Architects' Year Book*. Vol. 1. London: Paul Elek, 1945.
- Droste, Magdalena (ed.). *Herbert Bayer: Das künstlerische Werk 1918–1938*. Berlin: Gebrüder Mann Verlag, 1982.
- Duhamel, Georges. *America the Menace: Scenes from the Life of the Future*. Boston: Houghton Mifflin, 1931.
- Dutta, Arindam (ed.). *A Second Modernism: MIT, Architecture, and the "Techno-social" Moment*. Cambridge: MIT Press, 2013.
- Eggner, Keith. "Nationalism, Internationalism and the 'Naturalisation' of Modern Architecture in the United States, 1925–1940." *National Identities*, 8, no. 3 (September 2006), 243–58.
- Eisenman, Peter. "Introduction." In Philip Johnson (ed.). *Writings*. New York: Oxford University Press, 1979, 10–23.
- Eliot, T[homas]. [Stearns]. *The Use of Poetry and the Use of Criticism: Studies in the Relation of Criticism to Poetry in England*. London: Faber and Faber, 1933.
- Engelbrecht, Lloyd C. "László Moholy-Nagy in Chicago." In Terry Shure (ed.). *Moholy-Nagy: A New Vision for Chicago*. Springfield: University of Illinois Press, 1991, 53–54.
- Engels, Friedrich. *Die Lage der arbeitenden Klasse in England*. Leipzig: O. Wigand, 1845.
- Ernst, Max. *La Femme 100 têtes*. Paris: Editions du Carrefour, 1929.
- Es, Evelien van, Gregor Harbusch, Bruno Maurer, Muriel Pérez, Kees Somer, and Daniel Weiss (eds.). *Atlas of the Functional City: CIAM 4 and Comparative Urban Analysis*. Bussum/Zurich: Tooth Publishers/gta Verlag, 2014.
- "The Evolution of the Bath: Swiss Scholar Finds the Modern Bathroom Primitive and Antisocial." *Life*, 25, no. 6 (August 9, 1948), 79–82.
- Ewig, Isabelle, Thomas Gaetgens, and Matthias Noell. *Das Bauhaus und Frankreich/Le Bauhaus et la France, 1919–1940, Passagen/Pas-sages, Deutsches Forum für Kunstgeschichte*. Vol. 4. Berlin: Akademie Verlag, 2002.
- F., J. M. "Reviews: Mechanization Takes Command." *Architectural Forum* (July 1948), 160–62.
- Feist, Peter H. "Sigfried Giedion." *Metzler Kunsthistoriker Lexikon* (1999), 118.
- Fiedler, Jeannine (ed.). *László Moholy-Nagy, Color in Transparency: Photographic Experiments in Color: 1934–1946*. Göttingen: Steidl, 2006.
- Finch, Elizabeth. "Languages of Vision: György Kepes and the 'New Landscape' of Art and Science." PhD diss., The City University of New York (CUNY), 2005.
- Finsler, Hans. "'wohndbedarf' und ein Fotograf." In 1931–1956. *25 Jahre Wohnbedarf*. Zurich: Wohnbedarf AG, 1956.
- Fleckner, Uwe. *Carl Einstein und sein Jahrhundert: Fragmente einer intellektuellen Biographie*. Berlin: Akademie Verlag, 2006.
- Fleischmann, Gerd (ed.). *Bauhaus: Drucksachen, Typografie, Reklame*. Düsseldorf: Edition Marzona, 1984.
- Fleming, Donald, and Bernard Baylin (eds.). *The Intellectual Migration: Europe and America, 1930–1960*. Cambridge: Harvard University Press, 1969.
- Flick, Caroline. *Werner Hegemann (1881–1936). Stadtplanung, Architektur, Politik. Ein Arbeitsleben in Europa und den USA*. Munich: K. G. Saur, 2005.
- Forster, Kurt W. "Monument/Memory and the Mortality of Architecture." In Peter Eisenman (ed.). *Oppositions*, 25 (1982), 21–56.
- Fott, David. *John Dewey: America's Philosopher of Democracy*. Lanham: Rowman & Littlefield Publishers Inc., 1998.

- Frampton, Kenneth. "Giedion in America: Reflections in a Mirror." *Architectural Design*, 51, no. 6/7 (1981), 44–51.
- . "Lewis Mumford: Ecologist, 1895–1990." *A + U [Architecture and Urbanism]*, 242 (November 1990), 3.
- . *Modern Architecture: A Critical History*. London: Thames & Hudson, 1980.
- Fraser, Murray, and Joe Kerr, *Architecture and the "Special Relationship": The American Influence on Post-war British Architecture*. London: Routledge, 2007.
- Frey, Edward F. (ed.). *Fernand Léger: Functions of Painting*. New York: Viking Press, 1973.
- Frisch, Max. "Cum Grano Salis: Eine kleine Glosse zur schweizerischen Architektur." *Das Werk*, 40, no. 10 (1953), 325–29.
- . *Gesammelte Werke in zeitlicher Folge: Jubiläumsausgabe in sieben Bänden*. Vol. 3 (1949–1956). Frankfurt: Suhrkamp Verlag, 1986.
- . "Unsere Arroganz gegenüber Amerika (1953)." In Hans Meyer (ed.). *Gesammelte Werke in zeitlicher Folge: Jubiläumsausgabe in sieben Bänden*. Vol. 3 (1949–1956). Frankfurt: Suhrkamp Verlag, 1986, 222–29.
- Fry, Maxwell. "A Lifetime of Service." Panayis Psomopoulos (ed.). *Ekistics*, 52, no. 324/315 (1985), 402.
- Füssli, Karl-Heinz. "Pestalozzi in Dewey's Realm? Bauhaus Master Josef Albers among the German-Speaking Emigrés' Colony at Black Mountain College (1933–1949)." *Paedagogica Historica*, 42, no. 1–2 (February 2006), 77–92.
- Galison, Peter. "The Americanization of Unity." *Daedalus*, 127, no. 1 (Winter 1998), 45–71.
- Gantner, Joseph. "Zur Bauhausfrage." *Das Werk*, 10, no. 12 (December 1923), 308–11.
- Gasser, Martin. "'Giedion, der selbst viel fotografierte und damit überraschende Dinge entschleierte ...': Sigfried Giedions Beitrag zur Neuen Fotografie in der Schweiz um 1930 und seine eigene fotografische Praxis." In Werner Oechslin and Gregor Harbusch (eds.). *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*. Zurich: gta Verlag, 2010, 58–73.
- Gassert, Philipp. "Amerikanismus, Antiamerikanismus, Amerikanisierung: Neue Literatur zu Sozial-, Wirtschafts- und Kulturgeschichte des amerikanischen Einflusses in Deutschland und Europa." *Archiv für Sozialgeschichte*, 39 (1999), 531–69.
- Geddes, Patrick. *Cities in Evolution: An Introduction to the Town Planning Movement and to the Study of Civics*. London: Williams and Norgate, 1915.
- Geiser, Reto. "Eine Reise durch den Mittleren Westen der USA, 1939." In Werner Oechslin and Gregor Harbusch (eds.). *Sigfried Giedion und die Fotografie. Bildinszenierungen der Moderne*. Zurich: gta Verlag, 2010, 241–43.
- . "Erziehung zum Sehen": Kunstvermittlung und Bildarbeit in Sigfried Giedions Schaffen beidseits des Atlantiks." In Werner Oechslin and Gregor Harbusch (eds.). *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*. Zurich: gta Verlag, 2010, 142–57.
- . (ed.). *Explorations in Architecture: Teaching, Design, Research*. Basel: Birkhäuser, 2008.
- . "From Constancy to Change: Sigfried Giedion and the Shifting Role of History in Architectural Education." In Joan Ockman and David Leatherbarrow (eds.). *Architecture Education Goes Outside Itself: Crossing Borders, Breaking Boundaries*. Philadelphia: University of Pennsylvania Press, forthcoming.
- . "Giedionia: A Contribution to Visual Literacy." Salomon Frausto (ed.). *Hunch*, 13 (2009), 6–21.
- . "Höhlenexpeditionen mit Hugo Paul Herdeg." In Werner Oechslin and Gregor Harbusch (eds.). *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*. Zurich: gta Verlag, 2010, 278–81.
- . "Mechanization Takes Command: A Contribution to Anonymous History." *Journal of Architectural Education*, 69, no. 1 (2015), 113–15.
- . "Transatlantische Wechselwirkungen: Nachwort zur Neuausgabe." In Sigfried Giedion. *Raum, Zeit, Architektur*. Basel: Birkhäuser, 2015, i–xxiv.
- . "'Verbi-Voco-Visual': Textual and Visual Montages in the Work of Sigfried Giedion and Marshall McLuhan." In Martino Stierli and Nanni Baltzer (eds.). *Montage Reader: Montage in Art, Architecture, and Book Design*. Zurich: Park Books, 2016, 74–92.
- Geiser, Reto, and Martino Stierli. "Architecture Officielle Maudite: The Zurich Congresshaus between Preservation and City Marketing." Jorge Otero-Pailos (ed.). *Future Anterior*, 4, no. 1 (Summer 2007), 1–11.
- Gellner, Ernest. *Nations and Nationalism*. Oxford: Blackwell Publishers, 1983.
- Genosko, Gary (ed.). *Marshall McLuhan: Critical Evaluations in Cultural Theory*. 3 vols. London: Routledge, 2005.
- Genosko, Gary, and Richard Cavell. "McLuhan and Spatial Communication." In Gary Genosko. *Marshall McLuhan: Critical Evaluations in Cultural Theory*. Vol. 2. London: Routledge, 2005, 91–107.
- Georgiadis, Sokratis. *Sigfried Giedion: An Intellectual Biography*. Edinburgh: Edinburgh University Press, 1994.
- . "Sigfried Giedion: Biografie einer Idee." PhD diss., Universität Stuttgart, 1986.
- . *Sigfried Giedion: Eine intellektuelle Biographie*. Zurich: gta/Ammann Verlag, 1989.
- . "Übungen im 'Neuen Sehen': Ein Kunsthistoriker als Architektur-fotograf." *Kunst + Architektur in der Schweiz*, 51, no. 4 (2000), 15–21.
- Giedion, Sigfried. "Alvar Aalto." *Architectural Review*, 107 (1950), 77–84.
- . *Architecture and the Phenomena of Transition*. Cambridge: Harvard University Press, 1971.
- . "Architecture in the 1960s: Hopes and Fears." *Zodiac*, 11 (1963), 24–35.
- . *Architecture, You and Me: The Diary of a Development*. Cambridge: Harvard University Press, 1958.
- . "Die architektonische Front." *de 8 Opbouw* 18 (September 2, 1932), 179–84.
- . *Architektur und das Phänomen des Wandels*. Tübingen: Verlag Ernst Wasmuth, 1969.
- . *Architektur und Gemeinschaft: Tagebuch einer Entwicklung*. Hamburg: Rowohlt, 1956.
- . "L'art se prépare à la vie publique." In M.-A. Couturier (ed.). *Fernand Léger: La forme humaine dans l'espace*. Montreal: Les Editions de l'Arbre, 1945.
- . "Aspects d'architecture aux États-Unis en 1953." *Architecture d'aujourd'hui*, 24 (December 1953), 7–9.
- . "Das Bad von heute und gestern." Internationale Kongresse für neues Bauen (eds.). *Weiterbauen*, 3 (1935), 17–22.
- . *Bauen in Frankreich, Eisen, Eisenbeton*. Berlin: Gebrüder Mann Verlag, 2000. [First published 1928 by Klinkhardt & Biermann (Leipzig)].
- . "Bauhaus und Bauhauswoche zu Weimar." *Das Werk*, 10, no. 9 (September 1923), 232–34.
- . *Befreites Wohnen*. Zurich: Orell Füssli Verlag, 1929.
- . "Beiträge zur Gestaltung der Landesausstellung 1939." *Die Weltwoche*, 1937.
- . "Brasilien und die heutige Architektur." *Das Werk*, 40, no. 8 (1953), 238–40.
- . *Building in France, Building in Iron, Building in Ferroconcrete*. [English translation of *Bauen in Frankreich, Eisen, Eisenbeton*]. Trans. J. Duncan Berry. Santa Monica: Getty Center for the History of Art and the Humanities, 1995.
- . "Can Expositions Survive?" *Architectural Forum* 69 (1938), 7–11.
- . "CIAM at Sea: The Background of the Fourth (Athens) Congress." In Jane B. Drew and Trevor Dannatt (eds.). *Architects' Year Book*. Vol. 3. London: Paul Elek, 1949, 32–36.
- . "CIAM und CIAM-Nachfolge." *Bauen und Wohnen*, 15 (1961), 2–6.
- . "A Complicated Craft Is Mechanized." *Technology Review*, 46 (1943), 3–9.
- . *Constancy, Change and Architecture*. Cambridge: Harvard University Press, 1961.
- . "The Dangers and Advantages of Luxury." *Focus*, 1 (Spring 1939), 34–39.
- (ed.). *A Decade of New Architecture*. Zurich: Editions Girsberger, 1951.
- . "Es kommt der neue Fotograf!" *Neue Zürcher Zeitung*, 1929.
- . *The Eternal Present: The Beginnings of Architecture*. Vol. 2. Bollingen Series (The A. W. Mellon Lectures in the Fine Arts; 1957). New York: Pantheon Books, 1964.
- . *The Eternal Present: The Beginnings of Art*. Vol. 1. Bollingen Series (The A. W. Mellon Lectures in the Fine Arts; 1957). New York: Pantheon Books, 1962.
- . "Evolution of the Modern Kitchen." *Pencil Points*, 27 (December 1946), 69–75.
- . *Ewige Gegenwart: Der Beginn der Architektur*. Vol. 2. Cologne: DuMont-Schauberg, 1965.
- . *Ewige Gegenwart: Die Entstehung der Kunst*. Vol. 1. Cologne: DuMont-Schauberg, 1964.
- . "A Faculty of Interrelations." *Michigan Society of Architects Weekly Bulletin*, 17 (1943), 1–4.
- . "The Hammock and Alexander Calder." *Interiors*, 106 (1947), 100–2.
- . "Herbert Bayer and Advertising in the U.S.A." Walter Amstutz and Walter Herdeg (eds.). *Graphis*, 1 (1945), 348–58.
- . *Die Herrschaft der Mechanisierung: Ein Beitrag zur anonymen Geschichte*. Frankfurt: Europäische Verlagsanstalt, 1982.
- . "History and the Architect." *Zodiac*, 1 (1957), 53–61.
- . "Die Humanisierung der Stadt." *Das Werk*, 39 (November 1952), 345–52.
- . "The Humanization of Urban Life." *Architectural Record*, 111 (April 1952), 121–29.
- . "Jörn Utzon and the Third Generation." *Zodiac*, 14 (1965), 36–47.
- . "László Moholy-Nagy." *Metron*, 13 (1946), 12–14.
- . "Leben und Bauen." *Neue Zürcher Zeitung*, 1934.
- . "Léger and America." In Fernand Léger. *Exhibition of Paintings by Fernand Léger in the Institute of Design* [Exhib. leaflet]. Chicago: Institute of Design, 1944.
- . "Léger in America." *Magazine of Art*, 38 (1945), 295–99.
- . "Malerei und Architektur." *Das Werk*, 36, no. 2 (1949), 36–42.
- . "Mars and ICA." *Architects' Journal*, 108 (1948), 206–7.
- . "Die Mechanisierung Des Haushaltes." *Das Werk* (September 1947), 297–312.
- . "The Mechanization of the Bath." *Architectural Review*, 102 (1947), 119–26.
- . *Mechanization Takes Command: A Contribution to Anonymous History*. New York: Oxford University Press, 1948.
- . "Mode oder Zeiteinstellung?" *information*, 1 (June 1932), 8–11.
- . "Napoleon and the Devaluation of Symbols." *Architectural Review*, 102 (1947), 155–58.
- . "The Need for a New Monumentality." In Paul Zucker (ed.). *New Architecture and City Planning*. New York: Philosophical Library, 1944, 547–68.
- . "Notes on the Life and Work of L. Moholy-Nagy: Painter Universalist." In Jane B. Drew and Trevor Dannatt (eds.). *Architects' Year Book*. Vol. 3. London: Paul Elek, 1949, 35.
- . "On C. I. A. M.'s Unwritten Catalogue." *Journal of the American Society of Architectural Historians*, 3 (1943), 43–46.
- . "On 'Playboy Architecture.'" *Architectural Forum*, 117 (1962), 116–17.
- . "On the Education of the Architect." In Sigfried Giedion (ed.). *Architecture, You and Me: The Diary of*

- a *Development*. Cambridge: Harvard University Press, 1958, 102–04.
- . “On the Force of Esthetic Values.” *Architectural Record*, 101 (1947), 84–87.
- . “Painting, Sculpture and the Architect.” *Architects’ Journal*, 108 (August 1948), 206–7.
- . “The Practical Arts in American History.” *College Art Journal*, 4 (1945), 198–202.
- . “Prehistoric and Contemporary Means of Artistic Expression.” *Congrès International des Sciences Préhistoriques et Protohistoriques*, 44 (1950), 81–85.
- . “Railroad Comfort and Patent Furniture.” *Architectural Review*, 101 (1947), 84–87.
- . *Raum, Zeit, Architektur*. Basel: Birkhäuser, 2015.
- . *Raum, Zeit, Architektur: Die Entstehung einer neuen Tradition*. Ravensburg: Otto Maier Verlag, 1965.
- . “The Reign of the Upholsterer.” *Architectural Review*, 103 (January 1948), 3–6.
- . “Sind Ausstellungen noch lebensfähig?” *Schweizerische Bauzeitung*, 109, no. 7 (February 13, 1937), 73–77.
- . “Sixtus V and the Planning of Baroque Rome.” *Architectural Review*, 111 (1952), 217–26.
- . “Space and the Elements of the Renaissance City.” *Magazine of Art*, 45 (1952), 3–10.
- . “Space Conceptions in Prehistoric Art.” In Edmund Carpenter and Marshall McLuhan (eds.), *Explorations 6*. Toronto: University of Toronto, 1956, 38–55.
- . *Space, Time and Architecture: The Growth of a New Tradition*. 1st ed., 1st printing. Cambridge: Harvard University Press, 1941.
- . *Space, Time and Architecture: The Growth of a New Tradition*. 1st ed., 6th printing. Cambridge: Harvard University Press, 1946.
- . *Space, Time and Architecture: The Growth of a New Tradition*. 3rd ed., 12th printing. Cambridge: Harvard University Press, 1959.
- . *Space, Time and Architecture: The Growth of a New Tradition*. 4th ed., 15th printing. Cambridge: Harvard University Press, 1965.
- . *Spätbarocker und romantischer Klassizismus*. Munich: F. Bruckmann A.-G., 1922.
- . “The State of Contemporary Architecture.” *Architectural Record*, 115 (1954), 84–87.
- . “The Status of Contemporary Architecture.” *Architectural Record*, 75 (May 1934), 378–556.
- . “Switzerland or the Forming of an Idea.” In [George]. [Everard]. Kidder Smith. *Switzerland Builds: Its Native and Modern Architecture*. New York: Albert Bonnier, 1950, 11–17.
- . “Transparency Primitive and Modern.” *Art News*, 51 (1952), 47–50.
- . *Walter Gropius*. Paris: Crès, 1931.
- . *Walter Gropius: Mensch und Werk*. Teufen: Niggli, 1954.
- . *Walter Gropius: Work and Teamwork*. New York: Reinhold Publishing Corporation, 1954.
- . “What Should Be Done to Improve Architectural Education?” *Architectural Record*, 75 (1934), 373–75.
- . “Zum Tode Hugo Paul Herdeg.” *Das Werk*, 40 (July 1953), 113.
- Giedion, Sigfried, and György Kepes. “Art Means Reality.” In György Kepes. *Language of Vision: Painting, Photography, Advertising-Design*. Chicago: Paul Theobald, 1951, 6–7.
- Giedion, Sigfried, and Bruno Zevi. “Three Critics Discuss M.I.T.’s New Buildings.” *Architectural Forum*, 104 (March 1956), 156–57, 174, 178, 180, 182.
- Giedion, Sigfried, et al. “In Search of a New Monumentality.” *Architectural Review*, 104 (1948), 117–28.
- Giedion-Welcker, Carola (ed.). *In Memoriam James Joyce*. Zurich: Fretz & Wasmuth, 1941.
- . *Moderne Plastik: Elemente der Wirklichkeit; Masse und Auflockerung*. Zurich: Verlag Dr. H. Girsberger, 1937.
- . *Plastik des XX. Jahrhunderts: Volumen- und Raumgestaltung*. Zurich: Girsberger, 1955.
- . *Schriften 1926–1971: Stationen zu einem Zeitbild*. Cologne: Du Mont Schauberg, 1973.
- . “Zu ‘Work in Progress.’” In Carola Giedion-Welcker. *In Memoriam James Joyce*. Zurich: Fretz & Wasmuth, 1941, 16–21.
- Goodway, David (ed.). *Herbert Read Reassessed*. Liverpool: Liverpool University Press, 1998.
- Gordon Kantor, Sybil. *Alfred H. Barr, Jr. and the Intellectual Origins of the Museum of Modern Art*. Cambridge: MIT Press, 2002.
- Graduate School of Design [Harvard University]. “Urban Design.” *Progressive Architecture*, 37 (August 1956), 97–112.
- Grawe, Gabriele Diana. *Call for Action: Mitglieder des Bauhauses in Nordamerika*. Weimar: VDG, 2002.
- . “Continuity and Transformation: Bauhaus Pedagogy in North America.” In Rainer K. Wick (ed.). *Teaching at the Bauhaus*. Ostfildern-Ruit: Hatje Cantz Verlag, 2000, 338–61.
- . “The Great Flight of Culture.” *Fortune*, 24 (December 1941), 102–15.
- Grewe, Cordula, and Dietrich Neumann. “From Manhattan to Mainhattan: Reconsidering the Transatlantic Architectural Dialogue.” *Bulletin of the German Historical Institute*, Supplement 2, 2005, 1–12.
- Grohn, Christian. *Die Bauhaus-Idee: Entwurf, Weiterführung, Rezeption*. Berlin: Gebrüder Mann Verlag, 1991.
- Gropius, Walter. *Architektur. Wege zu einer optischen Kultur*. Frankfurt: Fischer Bücherei, 1956.
- . *Internationale Architektur*. Vol. 1. Bauhausbücher. Munich: Albert Langen Verlag, 1925.
- . *The New Architecture and the Bauhaus*. Cambridge: MIT Press, 1965. [First published 1935 by Faber and Faber (London)].
- . *Scope of Total Architecture*. New York: Harper & Brothers, 1955.
- Gropius, Walter, Ise Gropius, and Herbert Bayer (eds.). *Bauhaus 1919–1928*. New York: Museum of Modern Art, 1938.
- Gropius, Walter, et al. (eds.). *The Architects Collaborative, 1945–1965*. Teufen: Arthur Niggli, 1966.
- Gubler, Jacques. *Nationalisme et internationalisme dans l’architecture moderne de la Suisse*. Geneva: Editions Archigraphie, 1988.
- . “Nationalisme et Internationalisme dans l’architecture moderne de la Suisse.” PhD diss., Université de Lausanne, 1975.
- Gutschow, Kai. “The Anti-Mediterranean in the Literature of Modern Architecture: Paul Schultze-Naumburg’s Kulturarbeiten.” In Jean-François Lejeune and Michelangelo Sabatino (eds.). *Modern Architecture and the Mediterranean: Vernacular Dialogues and Contested Identities*. London: Routledge, 2010, 148–73.
- Hagen, Petra. *Städtebau im Kreuzverhör: Max Frisch zum Städtebau der fünfziger Jahre*. Baden: LIT Verlag Lars Müller, 1986.
- Hahn, Peter. “Vom Bauhaus zum New Bauhaus.” In Peter Hahn and Lloyd C. Engelbrecht (eds.). *50 Jahre New Bauhaus: Bauhausnachfolge in Chicago*. Berlin: Bauhaus Archiv, 1987, 8–19.
- Hahn, Peter, and Lloyd C. Engelbrecht (eds.). *50 Jahre New Bauhaus: Bauhausnachfolge in Chicago*. Berlin: Bauhaus Archiv, 1987.
- Hamilton, Richard. “Review of ‘The Visual Arts Today’ by György Kepes.” *Design*, 154 (October 1961), 91.
- Hanks, David A. “The Bauhaus: Mecca of Modernism.” In David A. Hanks (ed.). *Partners in Design: Alfred H. Barr Jr. and Philip Johnson*. New York: Monacelli Press, 2015, 28–55.
- Harbusch, Gregor. “Work in Text and Images: Sigfried Giedion’s ‘Space, Time and Architecture,’ 1941–1967.” *Journal of Architecture*, 20, no. 4 (2015), 596–620.
- Harrison, Helen A. (ed.). *Dawn of a New Day: The New York World’s Fair 1939/40*. New York: The Queens Museum/New York University Press, 1980.
- Harwood, John. “How Useful? The Stakes of Architectural History, Theory and Criticism at MIT, 1945–1976.” In Arindam Dutta (ed.). *A Second Modernism: MIT, Architecture, and the ‘Techno-social’ Moment*. Cambridge: MIT Press, 2013, 106–43.
- Haskell, Douglas. “Architecture and Liberty.” *The Nation*, 153 (August 16, 1941), 145.
- Haus, Andreas. “Moholy-Nagy: Sinnlichkeit und Industrie.” In Stanislaus von Moos and Chris Smeenk (eds.). *Avant Garde und Industrie*. Delft: Delft University Press, 1983, 104–20.
- Hershberg, John. *James B. Conant: Harvard to Hiroshima and the Making of the Nuclear Age*. New York: Alfred Knopf, 1993.
- Heynen, Hilde. *Architecture and Modernity*. Cambridge: MIT Press, 1999.
- Hickman, Miranda B. *The Geometry of Modernism: The Vorticist Idiom in Lewis, Pound, H. D., and Yeats*. Austin: University of Texas Press, 2005.
- Hildebrand, Sonja, Bruno Maurer, and Werner Oechslin (eds.). *Haefeli*
- Moser Steiger. *Die Architekten der Schweizer Moderne*. Zurich: gta Verlag, 2007.
- Hitchcock, Henry-Russell. *American Architectural Books: List of Books, Portfolios, and Pamphlets on Architecture and Related Subjects Published in America before 1895*. Minneapolis: University of Minnesota Press, 1946.
- . “The Decline of Architecture.” *The Hound & Horn: A Harvard Miscellany*, 1 (1927), 10–17.
- . “Modern Architecture I–II.” *Architectural Record*, 63 (April 1928).
- . *Modern Architecture: Romanticism and Reintegration*. New York: Da Capo Press, 1993. [First published 1929 by Payson & Clarke (New York)].
- . *Painting toward Architecture*. New York: Duell, Sloan and Pearce, 1948.
- Hitchcock, Henry-Russell, and Arthur Drexler (eds.). *Built in USA: Postwar Architecture*. New York: Museum of Modern Art, 1952.
- Hitchcock, Henry-Russell, and Philip Johnson. *The International Style: Architecture since 1922*. New York: W. W. Norton & Company, 1932.
- . *The International Style: Architecture since 1922*. Repr. New York: W. W. Norton Company, 1966.
- . *Modern Architecture: International Exhibition* [Exhib. cat.]. New York: Museum of Modern Art, 1932.
- Hofer, Paul, and Ulrich Stucky (eds.). *Hommage à Giedion: Profile seiner Persönlichkeit*. Zurich: gta Verlag, 1971.
- Hofmann, Hans. “Die Abteilung für Architektur.” *Eidgenössische Technische Hochschule 1855–1955* [Festschrift] (1955), 381.
- . “Gedanken über die Architektur der Gegenwart in der Schweiz.” In Peter Meyer (ed.). *Schweizerische Architektur-Ausstellung: 8. Januar –13. Februar 1949*. Basel: Kunsthalle Basel, 1949, 18–22.
- . “Sechstes und siebtes Semester.” *Das Werk*, 40, no. 2 (1953), 50–56.
- . “Thoughts on Contemporary Architecture in Switzerland.” In Peter Meyer (ed.). *Switzerland Planning and Building Exhibition: September 19th–October 29th, 1946* [Royal Institute of British Architects, London]. Zurich: Orell Füssli, Arts graphiques SA, 1946, 9–13.
- Howard, Ebenezer. *Garden Cities of To-morrow*. 4th rev. ed., with an introduction by Lewis Mumford. Cambridge: MIT Press, 1965.
- Howard, H. Seymour Jr. “Review of Space, Time and Architecture, by Sigfried Giedion.” *Task 2* (1941), 37–38.
- Howe, George. “Monuments, Memorials, and Modern Design—an Exchange of Letters.” *Magazine of Art*, 37 (October 1944), 202–7.
- Huber, Benedikt. “Werk 1955 bis 1961.” *Das Werk*, 60, no. 12 (1973), 1579.
- Huber, Dorothee. “Images parlantes: sur la régie texte-image de Giedion.” *FACES*, 17 (1990), 10–15.
- . “Konstruktion und Chaos? il grande progetto incompiuto.” Vitto-rio Gregotti (ed.). *Rassegna*, 8 (March 1986), 63–69. English translation ap-

- pears at the end of the publication, unpaginated.
- (ed.). *Sigfried Giedion: Wege in die Öffentlichkeit*. Zurich: gta/Amann Verlag, 1987.
- Huber Nievergelt, Verena. "Zwischen sachlicher Dokumentation und Kunst: Hugo P. Herdeg und die Schweizer Fotografie der Jahre um 1940." *Neue Zürcher Zeitung*, January 19, 2008, 69.
- Hubert, Christian, and Lindsay Stamm Shapiro (eds.). *William Lescaze, Architecte: Genève–New York, 1896–1969*. Basel: Wiese, 1993.
- Hudnut, Joseph. *Architecture and the Spirit of Man*. Cambridge: Harvard University Press, 1949.
- Hughes, Michael R. *The Letters of Lewis Mumford and Frederic J. Osborn: A Transatlantic Dialogue 1938–1970*. New York: Praeger Publishers, 1971.
- Hughes, Thomas P. *Die Erfindung Amerikas: Der technologische Aufstieg der USA seit 1870*. Munich: Verlag C. H. Beck, 1989.
- Hughes, Thomas P., and Agatha C. Hughes (eds.). *Lewis Mumford: Public Intellectual*. New York: Oxford University Press, 1990.
- Hultén, K. G. Pontus. *The Machine as Seen at the End of the Mechanical Age*. New York: Museum of Modern Art, 1968.
- Innis, Harold. *The Bias of Communication*. Toronto: University of Toronto Press, 1951.
- . *Empire and Communications*. Toronto: University of Toronto Press, 1950.
- Internationale Kongresse für neues Bauen. *weiterbauen*. Vol. 3. Zurich: CIAM, 1935.
- Itten, Johannes. "Afrikanische Kunst." In Kunstgewerbemuseum Zürich (ed.). *Afrikanische Kunst aus Schweizer Sammlungen*. Zurich: Kunstgewerbemuseum, 1945, 17–18.
- Jaeger, Roland. "Bau und Buch, 'Ein Wohnhaus' von Bruno Taut." In Bruno Taut. *Ein Wohnhaus*. Berlin: Gebrüder Mann, 1995, 119–47. [First published 1927 by Franckh'sche Verlagshandlung (Stuttgart)].
- James-Chakraborty, Kathleen (ed.). *Bauhaus Culture: From Weimar to the Cold War*. Minneapolis: University of Minnesota Press, 2006.
- Jaun, Rudolf. *Management und Arbeiterschaft: Verwissenschaftlichung, Amerikanisierung und Rationalisierung der Arbeitsverhältnisse in der Schweiz, 1873–1959*. Zurich: Chronos Verlag, 1986.
- Johnson, Philip (ed.). "Architecture of Harvard: Revival and Modern: The New Houghton Library." *Harvard Advocate*, 75th Anniversary Issue (April 1942), 12–17. Also published in Johnson, *Writings*. New York: Oxford University Press, 1979, 62–70.
- . "Foreword to the 1995 Edition." In Henry-Russell Hitchcock and Philip Johnson (eds.). *The International Style*. New York: W. W. Norton Company, 1995, 13–17.
- . "Historical Note." In *Modern Architecture International Exhibition* [Exhib. cat.]. New York: Museum of Modern Art, 1932, 19.
- . *Mies van Der Rohe*. New York: Museum of Modern Art, 1947.
- . *Writings*. New York: Oxford University Press, 1979.
- Jokinen, Teppo, and Bruno Maurer (ed.). "Der Magus des Nordens": *Alvar Aalto und die Schweiz*. Zurich: gta Verlag, 1998.
- Jordy, William. "The Aftermath of the Bauhaus: Gropius, Mies, and Breuer." *Perspectives in American History*, 2 (1968), 485–543.
- . "The Aftermath of the Bauhaus in America: Gropius, Mies, and Breuer." In Donald Fleming and Bernard Bailyn (eds.). *The Intellectual Migration, Europe and America, 1930–1960*. Cambridge: Harvard University Press, 1969, 485–543.
- . "The International Style in the 1930s." *Journal of the American Society of Architectural Historians*, no. 24 (March 1965), 10–14.
- . "Symbolic Essence" and *Other Writings on Modern Architecture and American Culture*. New York: A. Buell Center/Columbia Book of Architecture, 2005.
- Jubert, Roxane. "The Bauhaus Context: Typography and Graphic Design in France." *Design Issues*, 22, no. 4 (Autumn 2006), 66–80.
- . "Typographie & graphisme, dissemblances, dissonances ... disconvenance?: La France en marge de la 'révolution typographique.'" In Isabella Ewig, Thomas W. Gaehtgens, and Matthias Noell (eds.). *Das Bauhaus und Frankreich/Le Bauhaus et la France, 1919–1940, Passagen/Passages, Deutsches Forum für Kunstgeschichte*. Vol. 4. Berlin: Akademie Verlag, 2002, 161–88.
- Kahn, Louis I. "Monumentality." In Paul Zucker (ed.). *New Architecture and City Planning*. New York: Philosophical Library, 1944.
- Kammen, Michael. *American Culture American Tastes: Social Change and the 20th Century*. New York: Alfred A. Knopf, 2000.
- Kandinsky, Wassily, and Franz Marc (eds.). *Der Blaue Reiter [Almanach]*. Munich: R. Piper & Co., 1912.
- . *Der Blaue Reiter [Almanach]*. Edited by Klaus Lankeheit. Munich: Piper, 1990.
- Kappeler, Suzanne. *Der Vortizismus: Eine englische Avantgarde zwischen 1913 und 1915*. Bern: Peter Lang, 1986.
- Kaufmann, Edgar. *The Rise of an American Architecture*. New York: Praeger Publishers/Metropolitan Museum of Art, 1970.
- Kentgens-Craig, Margret. *The Bauhaus and America: First Contacts, 1919–1936*. Cambridge: MIT Press, 1999.
- . *Bauhaus-Architektur: Die Rezeption in Amerika, 1916–1936*. Frankfurt: Peter Lang, 1993.
- Kepes, György (ed.). *The Arts of the Environment*. Vision+Value Series. New York: George Braziller, 1972.
- (ed.). *The Education of Vision*. Vision+Value Series. New York: George Braziller, 1965.
- . *Language of Vision: Painting, Photography, Advertising-Design*. Chicago: Paul Theobald, 1944.
- (ed.). *The Man-Made Object*. Vision+Value Series. New York: George Braziller, 1966.
- . *The MIT Years, 1945–1977: Paintings, Photographic Work, Environmental Pieces, Projects, at the Center for Advanced Visual Studies*. Cambridge: MIT Committee on the Visual Arts/MIT Press, 1978.
- (ed.). *Module, Proportion, Symmetry, Rhythm*. Vision+Value Series. New York: George Braziller, 1966.
- (ed.). *The Nature of Art and Motion*. Vision+Value Series. New York: George Braziller, 1965.
- (ed.). *Sign, Image, Symbol*. Vision+Value Series. New York: George Braziller, 1966.
- (ed.). *Structure in Art and Science*. Vision+Value Series. New York: George Braziller, 1965.
- . "The Visual Arts and Sciences: A Proposal for Collaboration." *Daedalus*, 94 (1965), 117–33.
- Kidder Smith, G[eorge]. E[verard]. *Switzerland Builds: Its Native and Modern Architecture*. New York: Albert Bonnier, 1950.
- Kim, Jeannie. "The Oracle of Athens: Constantinos Doxiadis and the Study of Human Settlements." In Reto Geiser (ed.). *Explorations in Architecture: Teaching, Design, Research*. Basel: Birkhäuser, 2008, 90–91.
- Kinross, Robin. "Herbert Read and Design." In David Goodway (ed.). *Herbert Read Reassessed*. Liverpool: Liverpool University Press, 1998, 145–62.
- Koch, Michael. "'Weiterbauen': Eine Beilage zur 'Schweizerischen Bauzeitung' vor 50 Jahren." *Schweizer Ingenieur und Architekt*, 102, no. 42 (1984), 826–28.
- Koch, Michael, and Bruno Maurer. "'Zauberformeln': Episoden auf dem Weg der Schweizer Architektur in die Welt 1939–1968." In Anna Meseure, Martin Tschanz, and Wilfried Wang (eds.). *Architektur im 20. Jahrhundert: Schweiz*. Munich: Prestel Verlag, 1998, 35–44.
- Koehler, Karen. "The Bauhaus 1919–1928: Gropius in Exile and the Museum of Modern Art, N. Y., 1938." In Richard A. Etlin (ed.). *Art, Culture, and Media under the Third Reich*. Chicago: University of Chicago Press, 2002, 287–315.
- Koenig, Thilo. "Hans Finsler in der Schweiz." In Thilo Koenig and Martin Gasser (eds.). *Hans Finsler und die Schweizer Fotokultur: Werk, Fotoklasse, moderne Gestaltung 1932–1960*. Zurich: gta Verlag, 2006, 16–41.
- Kostof, Spiro. "Architecture, You and Him: The Mark of Sigfried Giedion." *Daedalus*, 105, no. 1 (Winter 1976), 189–204.
- Köth, Anke, Kai Krauskopf, and Andreas Schwarting (eds.). *Building America: Die Erschaffung einer neuen Welt*. Dresden: Theltem Universitätsverlag, 2005.
- (eds.). *Building America: Eine große Erzählung*. Dresden: Theltem Universitätsverlag, 2008.
- (eds.). *Building America: Migration der Bilder*. Dresden: Theltem Universitätsverlag, 2007.
- Kunstgewerbemuseum Zürich (ed.). *Afrikanische Kunst aus Schweizer Sammlungen*. Zurich: Kunstgewerbemuseum, 1945.
- (ed.). *Brasilien baut: Moderne brasilianische Architektur, neue brasilianische Graphik, Plastiken von*
- Mary Vieira, Ausstellung Oktober bis November 1954*. Zurich: Kunstgewerbemuseum der Stadt Zürich, 1954.
- (ed.). *Das neue Schulhaus, Ausstellung 29. August bis 11. Oktober 1953*. Zurich: Kunstgewerbemuseum, 1953.
- (ed.). *U. S. A. baut, Ausstellung 8. September bis 7. Oktober 1945*. Zurich: Kunstgewerbemuseum, 1945.
- Kunsthau Zürich (ed.). *Dadaglobe Reconstructed*. Zurich: Scheidegger & Spiess, 2016.
- Lacerte, Sylvie. "9 Evenings and Experiments in Art and Technology: A Gap to Fill in Art History's Recent Chronicles." In Dieter Daniels (ed.). *Artists as Inventors—Inventors as Artists*. Ostfildern: Hatje Cantz, 2002.
- Lambert, Phyllis, and Werner Oechslin (eds.). *Mies in America*. New York: Harry N. Abrams, 2001.
- Lamson, Lorraine Welling. *William Lescaze, Architect*. Philadelphia: Art Alliance Press, 1987.
- Landau, Royston. "The End of CIAM and the Role of the English." *Rassegna*, 14 (1992), 40–75.
- Lantscher, Hellmut. *Spuren zum Kampf*. Berlin: Rowohlt, 1936.
- Leach, Andrew, Maarten Delbeke, and John Macarthur. *The Baroque in Architectural Culture, 1880–1980*. Farnham: Ashgate, 2015.
- Le Corbusier. *Ausblick auf eine Architektur*. Trans. Hans Hilbrandt. Wiesbaden: Vieweg, 1982.
- . *Une maison—un palais: A la recherche d'une unité architecturale*. Paris: Crès, 1928.
- . *Le Modulor*. Boulogne: Éditions de L'Architecture d'aujourd'hui, 1950.
- . *The Modulor: A Harmonious Measure to the Human Scale Universally Applicable to Architecture and Mechanics*. London: Faber and Faber, 1954.
- . *Oeuvre complète*. Vol. 5 (1946–52). Zurich: Editions d'Architecture Artemis, 1953.
- . *Précisions sur un état présent de l'architecture et de l'urbanisme*. Paris: Les Editions G. Cres et Cie, 1930.
- . *Toward an Architecture*. Trans. John Goodman. Los Angeles: Getty Research Institute, 2007.
- . *U. N. Headquarters*. New York: Reinhold Publishing Co., 1947.
- . *Vers une architecture*. Paris: Editions G. Crès et Cie, 1923.
- Le Corbusier and Amédée Ozenfant. *L'Esprit Nouveau: Revue internationale illustrée de l'activité contemporaine: arts, lettres, sciences*. Paris: Editions de l'Esprit Nouveau, 1922.
- Leniaud, Jean-Michel, and Béatrice Bouvier (eds.). *Le livre d'architecture, XVe–XXe siècle: édition, représentations et bibliothèques*. Paris: Ecole des chartes, 2002.
- Lewis, Wynndham (ed.). *Blast 1: Review of the Great English Vortex*. Vol. 1 (June 20, 1914). London: John Lane, 1914.
- (ed.). *Blast 2: Review of the Great English Vortex*. Vol. 2 (July 1915). London: John Lane, 1915.
- . *Doom of Youth*. London: Chatto & Windus, 1932.

- Lock, Max. "The Early Years—London." Panayis Psomopoulos, (ed.). *Ekistics*, 52, no. 314/315 (December 1985), 420–21.
- Luchsinger, Christoph (ed.). *Hans Hofmann: Vom neuen Bauen zur neuen Baukunst*. Zurich: gta Verlag, 1985.
- Lugon, Olivier. "Photography and Exhibition in Germany around 1930." In Mitra Abbaspour, Lee Ann Daffner, and Maria Morris Hamburg (eds.). *Object: Photo. Modern Photographs 1909–1949: The Thomas Walther Collection at The Museum of Modern Art*. New York: Museum of Modern Art, 2014, 366–75.
- . "Schulung der neuen Optik: László Moholy-Nagy, Sigfried Giedion und die Ausstellung Film und Foto." In Werner Oechslin and Gregor Harbusch (eds.). *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*. Zurich: gta Verlag, 2010, 88–105.
- The Lumber Interests*. Vol. 5. Industrial Chicago. Chicago: Godspeed Publishing Company, 1991.
- Lyndon, Donlyn. "Architetti alla Accademia Americana di Roma." *Meta-morfosi*, 6/7 (September 1987), 140.
- Magnaguagno, Guido (ed.). *Drössiger Jahre Schweiz: Ein Jahrzehnt im Widerspruch* [Exhib. cat.]. Zurich: Kunsthaus Zürich, 1981.
- Majakowskij, Wladimir [Vladimir Mayakovsky]. *Dlia Gólosa*. Berlin: Gosizdat, 1923.
- . *Meine Entdeckung Amerikas*. Berlin: SWA-Verlag, 1948.
- Maki, Fumihiko. "The Harvard Years, 1955–1969." Panayis Psomopoulos (ed.). *Ekistics*, 52, no. 314/315 (December 1985), 437.
- Malke, Lutz (ed.). *Europäische Moderne: Buch und Graphik aus Berliner Kunstverlagen 1890–1933*. Berlin: Dietrich Reimer Verlag, 1989.
- (ed.). "Skizze zur publizistischen Situation der modernen Architektur." In *Europäische Moderne: Buch und Graphik aus Berliner Kunstverlagen 1890–1933*. Berlin: Dietrich Reimer Verlag, 1989.
- The Manufacturing Interests*. Industrial Chicago. Chicago: Godspeed Publishing Company, 1991.
- Marchand, Philip. *Marshall McLuhan: The Medium and the Messenger*. New York: Ticknor & Fields, 1989.
- Marchessault, Janine. *Marshall McLuhan: Cosmic Media*. London: Sage Publications, 2005.
- . "Mechanical Brides and Mama's Boys: Gender and Technology in Early McLuhan." In Gary Genosko. *Marshall McLuhan: Critical Evaluations in Cultural Theory*. Vol. 2. London: Routledge, 2005, 161–80.
- Marinetti, Filippo. *Zang Tumb Tuum: Adrianopoli Ottobre 1912: Parole in Libertà*. Milan: Edizioni Futuriste di "Poesia," 1914.
- Marshall, Richard. "Josep Lluís Sert's Urban Design Legacy." In Eric Mumford and Hashim Sarkis (eds.). *Josep Lluís Sert: The Architect of Urban Design, 1953–1969*. New Haven: Yale University Press, 2008, 130–43.
- Martin, Reinhold. *The Organizational Complex: Architecture, Media, and Corporate Space*. Cambridge: MIT Press, 2003.
- März, Roland. *Heartfield Montiert*. Leipzig: Edition Leipzig, 1993.
- Maurer, Bruno. "The Eternal Present I. The Beginnings of Art—Grenzen der Fotografie." In Werner Oechslin and Gregor Harbusch (eds.). *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*. Zurich: gta Verlag, 2010, 288–91.
- . "Lehrgebäude—Gottfried Semper am Zürcher Polytechnikum." In Winfried Nerdinger and Werner Oechslin (eds.). *Gottfried Semper, 1803–1879: Architektur und Wissenschaft*. Zurich: gta Verlag, 2003, 306–13.
- . "Die Revolution hat nicht stattgefunden in der Erziehung: Werner M. Moser und die 'Erziehung zur Architektur.'" In Sonja Hildebrand, Bruno Maurer, and Werner Oechslin (eds.). *Haefeli Moser Steiger: Die Architekten der Schweizer Moderne*. Zurich: gta Verlag, 2007, 117–41.
- Mayakovsky, Vladimir. *For the Voice*. Cambridge: MIT Press, 2000.
- . *My Discovery of America*. Trans. Neil Cornwell. London: Hesperus Press Limited, 2005. [First published 1925 (Berlin)].
- McAtee, Cammie D. "Alien #5044325: Mies's First Trip to America." In Phyllis Lambert (ed.). *Mies in America*. New York: Harry N. Abrams, 2001, 132–91.
- McCallum, Ian (ed.). *Architectural Review*, 121, no. 724 (May 1957): *Machine Made America: A Special Issue of the Architectural Review*.
- McGuire, William. *Bollingen: An Adventure in Collecting the Past*. Princeton: Princeton University Press, 1982.
- McLuhan, Corinne. *Letters of Marshall McLuhan*. Matie Molinaro and William Toye (eds.). New York: Oxford University Press, 1987.
- McLuhan, Marshall. *Counterblast*. New York: Harcourt, Brace & World, Inc., 1969.
- . *Counterblast: 1954 Facsimile*. Berkeley: Gingko Press, 2011.
- . "Encyclopedic Unities." Joseph Bennett (ed.). *Hudson Review*, 1, no. 4 (Winter 1949), 599–602.
- . "Five Sovereign Fingers Taxed the Breath." In Edmund Carpenter and Marshall McLuhan (eds.). *Explorations in Communication*. Boston: Beacon Press, 1960, 207–8.
- . *The Gutenberg Galaxy: The Making of Typographic Man*. Toronto: University of Toronto Press, 1980. [First published 1962].
- . *The Mechanical Bride: Folklore of Industrial Man*. Boston: Beacon Press, 1968. [First published 1951 by Vanguard Press (New York)].
- . "Media Log." In Edmund Carpenter and Marshall McLuhan (eds.). *Explorations 4*. Toronto: University of Toronto Press, 1955, 52–53.
- . "The Place of Thomas Nashe and the Learning of His Time." PhD diss., University of Cambridge, 1943.
- . *Understanding Media: The Extensions of Man*. New York: McGraw-Hill, 1964.
- McLuhan, Marshall, and Quentin Fiore. *The Medium Is the Message: An Inventory of Effects*. Toronto: Bantam Books, 1967.
- . *War and Peace in the Global Village*. Toronto: Bantam Books, 1968.
- McLuhan, Marshall, and Eric McLuhan. *Laws of Media: The New Science*. Toronto: University of Toronto Press, 1988.
- McLuhan, Marshall, and Harley Parker. *Through the Vanishing Point: Space in Poetry and Painting*. New York: Harper & Row, 1968.
- Medici-Mall, Katharina. *Im Durcheinandertal der Stile: Architektur und Kunst im Urteil von Peter Meyer (1894–1984)*. Basel: Birkhäuser, 1998.
- Meier, Nikolaus. "Heinrich Wölfflin (1864–1945)." In Heinrich Dilly (ed.). *Altmeister moderner Kunstgeschichte*. 2nd ed. Berlin: Dietrich Reimer Verlag, 1999, 63–79.
- Meili, Armin, Robert Oboussier, and Martin Hürlimann. *Die Schweiz im Spiegel der Landesausstellung 1939*. Vols. 1–4. Zurich: Atlantis, 1941.
- Mendelsohn, Erich. *Amerika: Bilderbuch eines Architekten*. Berlin: Rudolf Mosse Buchverlag, 1926.
- . *Russland, Europa, Amerika: Ein architektonischer Querschnitt*. Berlin: Rudolf Mosse Buchverlag, 1929.
- Mertins, Detlef. "Nicht buchstäblich: Der Transparenzbegriff bei Sigfried Giedion." *ARCH+*, 144/145 (1998), 106–11.
- . "Transparencies Yet to Come: Sigfried Giedion and Adolf Behne." *Architecture and Urbanism*, 325 (1997), 3–17.
- . "Transparencies Yet to Come: Sigfried Giedion and the Prehistory of Architectural Modernity." PhD diss., Princeton University, 1996.
- . "Walter Benjamin's 'Tectonic' Unconscious." *ANY Magazine*, 14 (1996), 28–35.
- Mertins, Detlef, and Michael Jennings (eds.). *G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923–1926*. Los Angeles: Getty Research Institute, 2010.
- Meyer, Hannes. "Die neue Welt: Einige zeitgemässe Zeitschriften." *Das Werk*, 13, no. 7 (1926), 205–23.
- Meyer, Peter. *Moderne Architektur und Tradition*. Zurich: Girsberger, 1927.
- . *Moderne Architektur und Tradition*. 2nd ed. Zurich: Girsberger, 1928.
- . "Moderne Kunst in der Schweiz." *Das Werk*, 35 (1938), 74–78.
- (ed.). *Schweizerische Architektur-Ausstellung: 8. Januar–13. Februar 1949*. Basel: Kunsthalle Basel, 1949.
- . "Schweizerische Landesausstellung." *Das Werk*, 26 (1939), 129–33.
- . "Situation der Architektur 1940." *Das Werk*, 27, no. 9 (1940), 241–51.
- (ed.). *Switzerland Planning and Building Exhibition: September 19th–October 29th, 1946*. Zurich: Orell Füssli, Arts graphiques S. A., 1946.
- Miller, Donald L. *Lewis Mumford: A Life*. New York: Weidenfeld & Nicolson, 1989.
- Miller, Jonathan. *Marshall McLuhan*. New York: The Viking Press, 1971.
- Millmore, Royston. "Working with Sigfried Giedion: Giedion the Man." *Building Design*, March 15, 1974, 22.
- Mock, Elizabeth (ed.). *Built in USA, 1932–1944*. New York: Museum of Modern Art, 1944.
- Modern Architecture International Exhibition* [Exhib. cat.]. Repr. New York: Arno Press, 1969.
- Moholy-Nagy, László. *Malerei, Fotografie, Film [Neue Bauhausbücher]*. Passau: Passavia, 1927.
- . *Malerei, Fotografie, Film [Neue Bauhausbücher]*. Repr. Berlin: Gebrüder Mann Verlag, 1986.
- . "Die neue Typographie." In Karl Nierendorf (ed.). *Staatliches Bauhaus Weimar, 1919–1923*. Weimar: Bauhausverlag, 1923, 141.
- . *Painting, Photography, Film*. Cambridge: MIT Press, 1969.
- . *Vision in Motion*. Chicago: Paul Theobald, 1947.
- Moholy-Nagy, Sibyl. "The Beginnings of Architecture by Sigfried Giedion." *Journal of the Society of Architectural Historians*, 23, no. 4 (December 1964), 216–17.
- . "The Diaspora." *Journal of the Society of Architectural Historians*, 24, no. 1 (March 1965), 24–26.
- . *Moholy Nagy: Experiment in Totality*. Cambridge: MIT Press, 1969.
- Molella, Arthur P. "Science Moderne: Sigfried Giedion's Space, Time and Architecture and Mechanization Takes Command." *Technology and Culture*, 43, no. 2 (April 2002), 374–89.
- Moos, Stanislaus von. "Modern Art Gets Down to Business: Anmerkungen zu Alexander Dornor and Herbert Bayer." In Magdalena Droste (ed.). *Herbert Bayer: Das künstlerische Werk 1918–1938*. Berlin: Gebrüder Mann Verlag, 1982.
- . "Mumford versus Giedion: Reviewing the Machine Age." *Design Book Review*, 19 (Winter 1991), 25–30.
- . *Nicht Disneyland: Und andere Aufsätze über Modernität und Nostalgie*. Zurich: Scheidegger & Spiess, 2004.
- . "Playboy Architecture Then and Now." In Emmanuel Petit (ed.). *Philip Johnson: The Constancy of Change*. New Haven: Yale University Press, 2009, 170–89.
- . "The Second Discovery of America: Notes on the Prehistory of Mechanization Takes Command." In Sigfried Giedion, *Mechanization Takes Command*. Minneapolis: The University of Minnesota Press, 2013, 725–766.
- . "Standard and Elite: Le Corbusier, die Industrie und der Esprit Nouveau." In Tilmann Buddensieg and Henning Rogge (eds.). *Die nützlichen Künste*. Berlin: Quadriga, 1981, 306–23.
- . "The Visualized Machine Age or: Mumford and the European Avant-Garde." In Agatha C. Hughes and Thomas P. Hughes (eds.). *Lewis Mumford Public Intellectual*. New York: Oxford University Press, 1990, 181–232.
- . "Work Aesthetic and Mass Consumption: The Art of Max Huber." In Stanislaus von Moos, Mara Campana, and Giampiero Bosoni (eds.). *Max Huber*. London: Phaidon, 2006, 8–32.
- . "Die zweite Entdeckung Amerikas." In Sigfried Giedion (ed.). *Die*

- Herrschaft der Mechanisierung: Ein Beitrag zur anonymen Geschichte.* Frankfurt: Europäische Verlagsanstalt, 1982, 781–816.
- Moos, Stanislaus von, and Chris Smeenk (eds.). *Avant Garde und Industrie.* Delft: Delft University Press, 1983.
- Morris, Charles W. "The Contribution of Science to the Designer's Task." In Hans M. Wingerl. *The Bauhaus: Weimar, Dessau, Berlin, Chicago.* Cambridge: MIT Press, 1969, 195.
- Moser, Werner M. "Die Bedeutung Frank Lloyd Wrights für die Entwicklung der Gegenwartsarchitektur." *Das Werk*, 46 (1959), 423.
- . "Frank Lloyd Wright und amerikanische Architektur." *Das Werk*, 12 (1925), 129.
- . "Gedanken über die Schweizer Architektur, 1916–1958." In Heinz Ronner (ed.). *Die Architekturabteilung der Eidgenössischen Technischen Hochschule 1916–1956 (A12).* Zurich: ETH, 1971, 15.
- Mülhaupt, Freya (ed.). *John Heartfield: Zeitausschnitte, Fotomontagen 1918–1938.* Ostfildern: Hatje Cantz Verlag, 2009.
- Mumford, Eric. *The CIAM Discourse on Urbanism, 1928–1960.* Cambridge: MIT Press, 2000.
- . "CIAM Urbanism after the Athens Charter." *Planning Perspectives*, 7 (October 1992), 391–417.
- . *Defining Urban Design: CIAM Architects and the Formation of a Discipline.* New Haven: Yale University Press, 2009.
- . "The Emergence of Urban Design in the Breakup of CIAM." *Harvard Design Magazine* (Spring/Summer 2006), 10–20.
- Mumford, Eric, and Hashim Sarkis (eds.). *Josep Lluís Sert: The Architect of Urban Design, 1953–1969.* New Haven: Yale University Press, 2008.
- Mumford, Lewis. "Architecture as a Home for Man." *Architectural Record*, 143 (February 1968), 113–16.
- . *Art and Technics.* New York: Columbia University Press, 1952.
- . *The Brown Decades: A Study of the Arts in America, 1865–1895.* New York: Harcourt, Brace and Company, 1931.
- . *The Brown Decades: A Study of the Arts in America, 1865–1895.* Repr. New York: Dover Publication, 1971.
- . "The Case against 'Modern Architecture.'" *Architectural Record*, 131 (1962), 155–62.
- . *The City in History: Its Origins, Its Transformations, and Its Prospects.* New York: Harcourt, Brace and Company, 1961.
- . *The Condition of Man.* New York: Harcourt, Brace and Company, 1944.
- . *The Conduct of Life.* New York: Harcourt, Brace and Company, 1951.
- . *The Culture of Cities.* New York: Harcourt, Brace and Company, 1938.
- . "Decoration and Structure." *Commonweal*, 2 (October 7, 1925), 533.
- . *The Golden Day.* New York: Harcourt, Brace and Company, 1926.
- . *Herman Melville: A Study of His Life and Vision.* London: Secker & Warburg, 1929.
- . *In the Name of Sanity.* New York: Harcourt, Brace and Company, 1954.
- . "Man Takes Command: Notes on Sigfried Giedion's Comprehensive Study of Mechanization." *Progressive Architecture*, 29 (July 1948), 48, 108, 110, 112.
- . "Monumentalism, Symbolism and Style." *Architectural Review*, 105 (1949), 173–80.
- . *The Myth of the Machine.* Vol. 1. *Technics and Human Development.* New York: Harcourt, Brace, Jovanovich, 1967.
- . *The Myth of the Machine.* Vol. 2. *The Pentagon of Power.* New York: Harcourt, Brace, Jovanovich, 1970.
- . "New York vs. Chicago in Architecture." *Architecture*, 56 (November 1927), 243.
- . "Preface to the 1971 Reprint Edition." In *The Brown Decades: A Study of the Arts in America, 1865–1895.* New York: Dover Publications, 1971, vi.
- . (ed.). *Roots of Contemporary American Architecture: A Series of Thirty-Seven Essays Dating from the Mid-Nineteenth Century to the Present.* New York: Reinhold, 1952.
- . *Sketches from Life: The Autobiography of Lewis Mumford, The Early Years.* New York: The Dial Press, 1982.
- . "The Sky Line: The Architecture of Power." *New Yorker*, June 7, 1941, 58–60.
- . "The Sky Line: Buildings and Books." *New Yorker*, April 17, 1937, 39–40.
- . "The Sky Line: For the Common Ground." *New Yorker*, January 8, 1938, 74–76.
- . "The Sky Line: Manhattan, Inside and Out." *New Yorker*, May 15, 1948, 80–85.
- . "The Sky Line: The Marseilles 'Folly.'" *New Yorker*, October 5, 1957, 76–95.
- . "The Sky Line: Organic Architecture." *New Yorker*, February 27, 1932, 49–50.
- . "The Sky Line: Status Quo." *New Yorker*, October 11, 1947, 104–10.
- . *Sticks and Stones: A Study of American Architecture and Civilization.* New York: Boni and Liveright, 1924.
- . *The Story of Utopias.* New York: Boni and Liveright, 1922.
- . *Technics and Civilization.* New York: Harcourt, Brace and Company, 1934.
- . *Vom Blockhaus zum Wolkentrater: Eine Studie über amerikanische Architektur und Zivilisation.* Berlin: Bruno Cassirer Verlag, 1925.
- Munson, Kenneth. *Flying Boats and Seaplanes since 1910.* New York: MacMillan, 1971.
- Murphy, Earl Finbar. "The Skillful Editor." *Panayis Psomopoulos* (ed.). *Ekistics* 52, no. 314/315 (December 1985), 455–57.
- Muthesius, Hermann. *Stilarchitektur und Baukunst: Wandlungen der Architektur und der gewerblichen Künste im XIX. Jahrhundert und ihr heutiger Standpunkt.* Mülheim/Ruhr: K. Schimmelpfeng, 1902.
- . *Style-Architecture and Building-Art: Transformations of Architecture in the Nineteenth Century and Its Present Condition.* Santa Monica: Getty Center for the History of Art and the Humanities, 1994.
- Nef, John U. "The Industrial Revolution Reconsidered." *Journal of Economic History*, 3, no. 1 (May 1943), 1–31.
- . *The Rise of the British Coal Industry.* London: Routledge, 1932.
- Nerding, Winfried. "Bauhaus Architecture in the Third Reich." In Kathleen James-Chakraborty (ed.). *Bauhaus Culture: From Weimar to the Cold War.* Minneapolis: University of Minnesota Press, 2006, 139–52.
- (ed.). *Bauhaus-Moderne im Nationalsozialismus: Zwischen Anbiederung und Verfolgung.* Munich: Prestel Verlag, 1993.
- . "Historiograph der modernen Architektur: Zum 100. Geburtstag von Sigfried Giedion." *Neue Zürcher Zeitung*, 1988.
- . "Vom Amerikanismus zur Neuen Welt." In Winfried Nerding (ed.). *Walter Gropius: Zeichnungen, Pläne und Fotos aus dem Busch-Reisinger Museum der Harvard University Cambridge, Massachusetts, und dem Bauhaus-Archiv Berlin.* Berlin: Gebrüder Mann Verlag, 1985, 9–28.
- (ed.). *Walter Gropius: Zeichnungen, Pläne und Fotos aus dem Busch-Reisinger Museum der Harvard University Cambridge, Massachusetts, und dem Bauhaus-Archiv Berlin.* Berlin: Gebrüder Mann Verlag, 1985.
- Neuenschwander, Eduard. "Einzel- oder Massenausbildung." *TEAM*, 2 (1952), 1.
- . "Für die moderne Architektur." *Zürcher Student*, 30 (1952), 191–93.
- Neuenschwander, Eduard, and Christian Norberg-Schulz (eds.). *TEAM: Zusammenarbeit junger Architekten und Künstler.* Oslo, May 1951.
- . *TEAM 2: Zusammenarbeit junger Architekten und Künstler.* Oslo, February 1952.
- . *TEAM 3: Zusammenarbeit junger Architekten und Künstler.* Oslo, September 1952.
- Neumann, Eckhard. *Herbert Bayer: Kunst und Design in Amerika 1938–1985.* Berlin: Bauhaus-Archiv, 1986.
- Neutra, Richard. "Mechanization Takes Command, by Sigfried Giedion [book review]." *Arts and Architecture*, 65 (July 1948), 38.
- . *Wie baut Amerika?* Stuttgart: Julius Hoffmann, 1927.
- Nevitt, Barrington, and Maurice McLuhan. *Who Was Marshall McLuhan? Exploring a Mosaic of Impressions.* Toronto: Stoddart Publishing, 1994.
- Newhouse, Victoria. *Wallace K. Harrison, Architect.* New York: Rizzoli, 1989.
- Newman, Elmer S. *Lewis Mumford: A Bibliography, 1914–1970.* New York: Harcourt, Brace, Jovanovich, 1971.
- Nicolai, Bernd (ed.). *Architektur und Exil: Kulturtransfer und architektonische Emigration von 1930–1950.* Trier: Porta Alba Verlag, 2003.
- Noell, Matthias. *Das Haus und sein Buch: Moderne Buchgestaltung im Dienst der Architekturvermittlung.* Standpunkte Dokumente. Basel: Standpunkte, 2009.
- . "'Nicht mehr Lesen! Sehen!': Le livre d'architecture de langue allemande dans les années vingt." In Jean-Michel Leniaud and Béatrice Bouvier (eds.). *Le livre d'architecture, XVIe–XXe siècle: édition, représentations et bibliothèques.* Paris: École des chartes, 2002, 143–56.
- Norberg-Schulz, Christian. "Christian Norberg-Schulz." In Paul Hofer and Ulrich Stucky (eds.). *Hommage à Giedion: Profile seiner Persönlichkeit.* Zurich: gta Verlag, 1971, 130.
- . "CIAM Junior Groups." Eduard Neuenschwander and Christian Norberg-Schulz (eds.). *TEAM*, 3 (1952), 4–8.
- . "The New Tradition." *Architectural Design*, 61 (1991), 92–96.
- "Noted Swiss City Planner, Here to Lecture at Yale, Forecasts More Attractive, Safer Municipalities." *New Haven Register*, October 26, 1941.
- Novak, Frank G. (ed.). *Lewis Mumford and Patrick Geddes: The Correspondence.* London: Routledge, 1995.
- Ockman, Joan (ed.). *Architecture Culture 1943–1968: A Documentary Anthology.* New York: Rizzoli, 1993.
- . *Architecture School: Three Centuries of Educating Architects in North America.* Cambridge: MIT Press, 2012.
- . "Bauhaus Culture from Weimar to the Cold War by Kathleen James-Chakraborty." *Harvard Design Magazine*, 28 (Spring/Summer 2008), 115–17.
- . "Looking Back at the 1960s Looking Back: History and Historiography at the Modern Architecture Symposia." In Rosemarie Haag Blether and Joan Ockman. *MAS: The Modern Architecture Symposia, 1962–1966: A Critical Edition.* New Haven: Yale University Press, 2014, 17–42.
- . "The Road Not Taken: Alexander Dörner's Way beyond Art." In Robert Somol (ed.). *Autonomy and Ideology: Positioning an Avant-Garde in America.* New York: Monacelli Press, 1997, 80–120.
- . "Toward a Theory of Normative Architecture." In Steven Harris and Deborah Berke (eds.). *Architecture of the Everyday.* New York: Princeton Architectural Press, 1997, 122–52.
- . "The War Years in America: New York, New Monumentality." In Guido Hartray (ed.). *Josep Lluís Sert: Architect in New York.* Barcelona: Actar, 1998, 22–45.
- Oechslin, Werner. *Moderne entwerfen: Architektur und Kulturgeschichte.* Cologne: DuMont Buchverlag, 1999.
- (ed.). *Sigfried Giedion 1888–1968: Der Entwurf einer modernen Tradition.* Zurich: Ammann Verlag, 1989.
- Oechslin, Werner, and Gregor Harbusch (eds.). *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne.* Zurich: gta Verlag, 2010.

- Otero-Pailos, Jorge. *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern*. Minneapolis: University of Minnesota Press, 2010.
- Ozenfant, Amédée. *Art: Bilan des arts modernes*. Paris: Jean Budry & Cie, 1928.
- Panofsky, Erwin. *Meaning in the Visual Arts: Papers in and on Art History*. Garden City: Doubleday & Company, 1955.
- . "On the Relationship of Art History and Art Theory: Towards the Possibility of a Fundamental System of Concepts for a Science of Art." In *Critical Inquiry*, 35 (Autumn 2008), 43.
- Paulmann, Johannes. "Internationaler Vergleich und interkultureller Transfer: Zwei Forschungsansätze zur europäischen Geschichte des 18. bis 20. Jahrhunderts." *Historische Zeitschrift*, 267 (1998), 649–85.
- Pearlman, Jill. "Breaking Common Ground: Joseph Hudnut and the Prehistory of Urban Design." In Eric Mumford and Hashim Sarkis (eds.), *Josep Lluís Sert: The Architect of Urban Design, 1953–1969*. New Haven: Yale University Press, 2008, 116–29.
- . *Inventing American Modernism: Joseph Hudnut, Walter Gropius, and the Bauhaus Legacy at Harvard*. Charlottesville: University of Virginia Press, 2007.
- . "Joseph Hudnut and the Unlikely Beginnings of Post-modern Urbanism at the Harvard Bauhaus." *Planning Perspectives*, 15, no. 3 (2000), 201–39.
- . "Joseph Hudnut's Other Modernism at the 'Harvard Bauhaus.'" *Journal of the Society of Architectural Historians*, 56, no. 4 (1997), 452–77.
- . "The Spies Who Came into the Modernist Fold: The Covert Life in Hampstead's Lawn Road Flats." *Journal of the Society of Architectural Historians*, 72, no. 3 (2013), 358–81.
- Pearson, Christopher. "Le Corbusier and the Acoustical Trope: An Investigation of Its Origins." *Journal of the Society of Architectural Historians*, 56, no. 2 (June 1997), 168–83.
- Peter, John. *The Oral History of Modern Architecture: Interviews with the Greatest Architects of the Twentieth Century*. New York: Harry N. Abrams, 1994.
- Petit, Emmanuel (ed.). *Philip Johnson: The Constancy of Change*. New Haven: Yale University Press, 2009.
- Pevsner, Nikolaus. "Judges VI, 34." *Architectural Review*, 106 (1949), 77–79.
- . *Pioneers of Modern Design: From William Morris to Walter Gropius*. New York: The Museum of Modern Art, 1949.
- Pfeiffer, Bruce Brooks, and Robert Wojtowicz. *Frank Lloyd Wright & Lewis Mumford: Thirty Years of Correspondence*. New York: Princeton Architectural Press, 2001.
- Platt, Jennifer. "Some Issues in Intellectual Method and Approach." In Edward Timms and Jon Hughes (eds.), *Intellectual Migration and Cultural Transformation: Refugees from National Socialism in the English-Speaking World*. Vienna: Springer, 2003, 7–19.
- Posener, Julius. *Aufsätze und Vorträge, 1931–1980*. Bauwelt Fundamente. Braunschweig: Friedr. Vieweg & Sohn, 1981.
- . "Zu Siegfried [sic] Giedions 'Raum, Zeit, Architektur.'" In Julius Posener and Ulrich Conrads (eds.), *Aufsätze und Vorträge, 1931–1980*. Bauwelt Fundamente, 54/55. Braunschweig: Friedr. Vieweg & Sohn, 1981, 85–89.
- Pound, Ezra. *The Cantos*. New York: New Directions, 1948.
- . *The Spirit of Romance*. London: Owen, 1952.
- Price, David. "Anthropologists as Spies." *Nation*, 271, no. 16 (November 20, 2000), 24–26.
- Price, David H. "Buying a Piece of Anthropology." *Anthropology Today*, 23, no. 3 (June 2007), 8–13.
- Psomopoulos, Panayis. *Ekistics*, 52, no. 314/315. Athens: Center of Ekistics, 1985.
- Raabe, Paul (ed.). *Das Buch in den zwanziger Jahren*. Hamburg: Hauswedell, 1978.
- Read, Herbert. *Art and Industry: The Principles of Industrial Design*. London: Faber & Faber, 1934.
- Riley, Terence. *The International Style: Exhibition 15 and the Museum of Modern Art*. Columbia Books of Architecture. New York: Rizzoli, 1992.
- Risselada, Max, and Dirk van den Heuvel (eds.). *Team 10, 1953–1981: In Search of a Utopia of the Present*. Rotterdam: NAI Publishers, 2005.
- Roberts, Henry. *The Dwellings of the Labouring Classes: Their Arrangement and Construction*. London: Society for Improving the Condition of the Labouring Classes, 1853.
- Rodgers, Daniel T. *Atlantic Crossings: Social Politics in a Progressive Age*. Cambridge: The Belknap Press of Harvard University Press, 2000.
- Rodgers, W. R. "Joyce's Wake." In Edmund Carpenter and Marshall McLuhan (eds.), *Explorations 5*. Toronto: University of Toronto, 1955, 19–29.
- Roh, Franz, and Jan Tschichold (eds.). *Foto-Auge: 76 Fotos der Zeit*. Stuttgart: Akademischer Verlag Dr. Fritz Wedekind, 1929.
- Ronner, Heinz. *Die Architekturabteilung der Eidgenössischen Technischen Hochschule 1916–1956 (A12)*. Zurich: ETH, 1971.
- Rössler, Patrick. *bauhauskommunikation: Innovative Strategien im Umgang mit Medien, interner und externer Öffentlichkeit*. Berlin: Gebroder Mann Verlag, 2009.
- Roth, Alfred. "Amerika-Schweiz." *Das Werk*, 10 (1950), 293–312.
- . "Der neue Lehrplan der Architekturabteilung der Eidg. Technischen Hochschule in Zürich." *Das Werk*, 48, no. 8 (1961), 258–59.
- . *USA baut: Moderne Amerikanische Architektur, Bildbericht der Ausstellung, Sonderheft Werk*. Winterthur: Verlag Buchdruckerei, 1945.
- Rotzler, Willy. "Willy Rotzler." In Paul Hofer and Ulrich Stucky (eds.), *Hommage à Giedion: Profile seiner Persönlichkeit*. Zurich: gta Verlag, 1971, 134–35.
- Rovira, Josep M. *José Luis Sert*. Milan: Electa, 2000.
- . *Sigfried Giedion: Escritos Escogidos*. Murcia: Colección Oficial de Aparejadores y Arquitectos Técnicos, 1997.
- Rowe, Colin. *As I Was Saying: Recollections and Miscellaneous Essays*. Vol. 1. Cambridge: MIT Press, 1996.
- Rowe, Colin, and Robert Slutzky. "Transparency." *Perspecta*, 8 (1963), 45–54.
- Rubinstein, Charlotte Streifer. *American Women Sculptors: A History of Women Working in Three Dimensions*. Boston: G. K. Hall, 1990.
- Rüegg, Arthur, Friederike Mehlaui-Wiebkling, and Ruggero Tropeano (eds.). *Schweizer Typenmöbel 1925–1935: Sigfried Giedion und die Wohnbedarf AG*. Zurich: gta Verlag, 1989.
- Rümle, Simone. "Peter Meyer: Architekt und Theoretiker." PhD diss., Universität Zürich, 1999.
- Rykwert, Joseph. "Giedion and the Notion of Style." Vittorio Gregotti (ed.). *Rassegna: Sigfried Giedion: Un Progetto Storico*, 8, no. 25 (March 1986), unpaginated.
- . "Siegfried [sic] Giedion Gave My Generation a Place in History." *Architects' Journal*, January 22, 2009; <https://www.architectsjournal.co.uk/siegfried-giedion-gave-my-generation-a-place-in-history/1973319.article> (accessed June 7, 2009).
- Salmon, Frank (ed.). *Summerson and Hitchcock: Centenary Essays on Architectural Historiography*. New Haven: Yale University Press, 2006.
- Samson, David M. "Unser Newyorker Mitarbeiter": Lewis Mumford, Walter Curt Behrendt, and Modern Movement in Germany." *Journal of the Society of Architectural Historians*, 55, no. 2 (1996), 126–39.
- Schafer, R. Murray. "McLuhan and Acoustic Space." *The Antigonish Review*, no. 62–63, (Fall 1985), 105–13.
- Schildt, Göran. *Alvar Aalto in His Own Words*. Helsinki: Otava Publishing Company, 1997.
- Schirren, Matthias. *Hugo Häring: Architekt des Neuen Bauens 1882–1958*. Ostfildern-Ruit: Hatje Cantz, 2001.
- Schnapp, Jeffrey. "On 'Zang Tumb Tuuum.'" In Vivien Greene (ed.), *Italian Futurism, 1909–1944: Reconstructing the Universe*. New York: Guggenheim Museum, 2014, 156–58.
- Schnapp, Jeffrey T., and Adam Michaels. *The Electric Information Age Book: McLuhan/Agel/Fiore and the Experimental Paperback*. New York: Princeton Architectural Press, 2012.
- Schuldenfrei, Robin. "Assimilating Unease: Moholy-Nagy and the Wartime/Postwar Bauhaus in Chicago." In Robin Schuldenfrei (ed.), *Atomic Dwelling: Anxiety, Domesticity, and Postwar Architecture*. London: Routledge, 2012, 87–126.
- (ed.). *Atomic Dwelling: Anxiety, Domesticity, and Postwar Architecture*. London: Routledge, 2012.
- Schwarz, Felix, and Frank Gloor (eds.). "Die Form": *Stimme des Deutschen Werkbundes, 1925–1934*. Gütersloh: Bertelsmann Fachverlag Reinhard Mohn, 1969.
- Scrivano, Paolo. *Building Transatlantic Italy: Architectural Dialogues with Postwar America*. Farnham: Ashgate, 2013.
- . *Storia di un'idea di architettura moderna: Henry Russell Hitchcock e l'international style*. Milan: F. Angeli, 2001.
- Scully, Vincent. "Foreword to the Da Capo Edition." In Henry-Russell Hitchcock. *Modern Architecture: Romanticism and Reintegration*. New York: Da Capo Press, 1993.
- . *Modern Architecture and Other Essays*. Princeton: Princeton University Press, 2003.
- Sekler, Eduard F. "The Early Years—London." Panayis Psomopoulos (ed.), *Ekistics*, 52, no. 314/315 (December 1985), 422–23.
- . "Sert, CIAM, and the GSD." *Harvard Design Magazine*, no. 21 (Fall/Winter 2004), 86–93.
- . "Sert, CIAM, and the GSD: A Memoir." In Eric Mumford and Hashim Sarkis (eds.), *Josep Lluís Sert: The Architect of Urban Design, 1953–1969*. New Haven: Yale University Press, 2008, 8–23.
- . "Sigfried Giedion at Harvard." In Elizabeth Blair McDougall (ed.), *The Architectural Historian in America: A Symposium in Celebration of the Fiftieth Anniversary of the Founding of the Society of Architectural Historians*. Washington, D. C.: National Gallery of Art, 1990, 265–73.
- Sert, José Luis [Josep Lluís Sert]. *Can Our Cities Survive?* Cambridge: Harvard University Press, 1944.
- . "Centres of Community Life." In Jaqueline Tyrwhitt, Josep Lluís Sert, and Ernesto N. Rogers (eds.), *The Heart of the City: Towards the Humanisation of Urban Life*. [CIAM 8]. London: Lund Humphries, 1952, 3–16.
- . "The Human Scale in City Planning." In Paul Zucker (ed.), *New Architecture and City Planning*. Freeport: Books for Libraries Press, 1944, 392–412.
- Sert, José Luis, Walter Gropius, Le Corbusier, and Sigfried Giedion. "The Truth about CIAM: Letter from Four Founders." *Architectural Design* 35, no. 1 (1961), 5.
- . "Sert Proposes to Introduce New Design 1." *Harvard Crimson*. March 18, 1953.
- Shane, Graham. "Sigfried Giedion and der Mythos der Moderne: Zum 100. Geburtstag von Sigfried Giedion." *Archithese*, 18 (1988), 40–44.
- Shanken, Edward A. "Gemini Rising, Moon in Apollo: Attitudes on the Relationship between Art and Technology in the U.S., 1966–1971." In Anders Nereim (ed.), *ISEA97: Proceedings of the Eighth International Symposium on Electronic Art*. Chicago: ISEA, 1998, 57–63.
- Shoshkes, Ellen. "Jaqueline Tyrwhitt: A Founding Mother of Modern Urban Design." *Planning Perspectives*, 21, no. 2 (April 2, 2006), 179–97.
- . *Jaqueline Tyrwhitt: A Transnational Life in Urban Planning and Design*. Farnham: Ashgate, 2013.
- Shure, Terry (ed.). *Moholy-Nagy: A New Vision for Chicago*. Springfield: University of Illinois Press, 1991.
- Smet, Catherine de. *Le Corbusier: Architect of Books*. Baden: Lars Müller Publishers, 2005.
- . *Vers une architecture du livre—Le Corbusier: édition et mise en*

- pages 1912–1956. Baden: Lars Müller Publishers, 2007.
- Somer, Kees. *The Functional City: The CIAM and Cornelis van Eesteren, 1928–1960*. Rotterdam: NAi Publishers, 2007.
- Somol, Robert E. (ed.). *Autonomy and Ideology: Positioning an Avant-Garde in America*. New York: Monacelli Press, 1997.
- Spengler, Oswald. *Der Untergang des Abendlandes: Umriss einer Morphologie der Weltgeschichte*. 2 vols. Munich: C. H. Beck'sche Verlagsbuchhandlung, 1923.
- Spiller, Robert E. (ed.). *The Van Wyck Brooks Lewis Mumford Letters*. New York: E. P. Dutton & Co., 1970.
- Stam, Mart (ed.). *ABC—Beiträge zum Bauen, 1924–1928*. Baden: Lars Müller Publishers, 1993.
- . "Holland und die Baukunst unserer Zeit." *Schweizerische Bauzeitung*, 82, no. 15, 18, 19, 21 (1923), 185–88, 225–26, 241–43, 268–72.
- Stearn, Gerald E. (ed.). *McLuhan Hot & Cool*. New York: Dial, 1967.
- Stein, Emma. "László Moholy-Nagy and Chicago's War Industry: Photographic Pedagogy at the New Bauhaus." *History of Photography*, 38, no. 4 (2014), 398–417.
- Steinmann, Martin. *CIAM: Dokumente 1928–1939*. Basel: Birkhäuser, 1979.
- Steinorth, Karl (ed.). *Internationale Ausstellung des Deutschen Werkbunds Film und Foto Stuttgart 1929*. Stuttgart: Deutsche Verlags-Anstalt, 1979. [First published 1929].
- Stetler, Pepper. *Stop Reading! Look! Modern Vision and the Weimar Photographic Book*. Ann Arbor: The University of Michigan Press, 2015.
- Stierli, Martino. "In the Academy's Garden: Robert Venturi, the Grand Tour and the Revision of Modernism." Tom Weaver (ed.). *AA Files*, 56 (2007), 42–63.
- Stonor Saunders, Frances. *Who Paid the Piper?: The CIA and the Cultural Cold War*. London: Granta Books, 1999.
- Stritzler-Levine, Nina. "Curating History, Exhibiting Ideas: Henry-Russell Hitchcock and Architectural Exhibition Practice at MoMA." In Frank Salmon (ed.). *Summerson and Hitchcock: Centenary Essays on Architectural Historiography*. New Haven: Yale University Press, 2006, 33–68.
- Suhr, Martin. *John Dewey zur Einführung*. Hamburg: Junius Verlag, 2005.
- Szeemann, Harald, and Museum Jean Tinguely (eds.). *Marcel Duchamp*. Ostfildern-Ruit: Hatje Cantz Verlag, 2002.
- Tafari, Manfredo. *The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s*. Cambridge: MIT Press, 1987.
- . *Theories and History of Architecture*. New York: Harper & Row, 1980.
- Tanner, Jakob. "Switzerland and the Cold War: A Neutral Country between the 'American Way of Life' and Geistige Landesverteidigung." In Joy Charney and Malcolm Pender (eds.). *Switzerland and War: Occasional Papers in Swiss Studies*. Vol. 2. Bern: Peter Lang, 1999, 113–28.
- Tavares, André. *The Anatomy of the Architectural Book*. Zurich: Lars Müller Publishers, 2016.
- Taylor, Frederick Winslow. *The Principles of Scientific Management*. New York: Harper, 1911.
- Theall, Donald (ed.). *The Virtual Marshall McLuhan*. Montreal: McGill-Queen's University Press, 2001.
- Thoenes, Christoph. "Die Formen sind in Bewegung geraten: Zum Verständnis der Architektur Borrominis." *Daedalos*, no. 67 (1998), 62–73.
- Timms, Edward, and Jon Hughes (eds.). *Intellectual Migration and Cultural Transformation: Refugees from National Socialism in the English-Speaking World*. Vienna: Springer, 2003.
- Tönnemann, Andreas. "Schule oder Universität? Das Hauptgebäude der ETH." In Werner Oechslin (ed.). *Hochschulstadt Zürich: Bauten für die ETH 1855–2005*. Zurich: gta Verlag, 2005, 64–79.
- Tournikiotis, Panayotis. *The Historiography of Modern Architecture*. Cambridge: MIT Press, 1999.
- Tschichold, Jan. "Die Massverhältnisse der Buchseite, des Schriftfeldes und der Ränder." *Schweizer Graphische Mitteilungen*, 65 (August 1946), 294–305.
- . *The New Typography*. Trans. Ruari Mc Lean. Berkeley: University of California Press, 1995.
- . *Willkürfreie Massverhältnisse der Buchseite und des Satzspiegels*. Basel: Papierhandelsgesellschaft Bucherer, Kurrus & Co, 1962.
- . "Zeitgemässe Buchgestaltung." *Die Form: Zeitschrift für gestaltende Arbeit*, 2, no. 4 (1927), 116–23.
- Turpin, Bannister. "Sigfried Giedion, 'Space, Time and Architecture.'" *Art Bulletin*, 26 (March 1944), 134.
- Tyrwhitt, Jaqueline. "Jaqueline Tyrwhitt." In Paul Hofer and Ulrich Stucky (eds.). *Hommage à Giedion: Profile seiner Persönlichkeit*. Zurich: gta Verlag, 1971, 121–25.
- . "Ninth Meeting—July 12, 1963, The Declaration of Delos: Statements and Comments." *Ekistics*, 16, no. 95 (October 1963), 254.
- (ed.). *Patrick Geddes in India*. London: Lund Humphries, 1947.
- . "Urban Planning Training in South East Asia." *Ekistics*, 26, no. 157 (December 1968), 483–87.
- Tyrwhitt, Jaqueline, Josep Lluís Sert, and Ernesto N. Rogers. *The Heart of the City: Towards the Humanisation of Life*. London: Lund Humphries, 1952.
- Vallye, Anna. "Design and the Politics of Knowledge in America, 1937–1967: Walter Gropius, György Kepes." PhD diss., Columbia University, 2011.
- Vogt, Adolf Max. *Die Hunde bellen, die Karawane zieht weiter: Schriften*. Zurich: gta Verlag, 2006.
- Vogt, Emil. *Congrès International des Sciences Préhistoriques et Protohistoriques: Actes de la IIIe session, Zürich 1950*. Zurich: Congrès International des Sciences Préhistoriques et Protohistoriques, 1953.
- Wechsler, Judith. "György Kepes." In Marjory Supovitz (ed.). *György Kepes, The MIT Years, 1945–1977: Paintings, Photographic Work, Environmental Pieces, Projects, at the Center for Advanced Visual Studies*. Cambridge: MIT Press, 1978, 7–19.
- Weiss, Daniel. "Mit der Redaktion beauftragt: S. Giedion, Zürich: Die Architekturseiten der Cahiers d'art und die CIAM-Beilagen der Bauwelt." In Gregor Harbusch and Werner Oechslin (eds.). *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*. Zurich: gta Verlag, 2010, 106–23.
- Welter, Volker. *Biopolis: Patrick Geddes and the City of Life*. Cambridge: MIT Press, 2002.
- . "Perceptions in the Conception of the Modernist Urban Environment." In Iain Boyd Whyte (ed.). *Man-Made Future: Planning, Education, and Design in Mid-20th Century Britain*. London: Routledge, 2007, 79–98.
- Werner, Michael, and Bénédicte Zimmermann. "Vergleich, Transfer, Verflechtung: Der Ansatz der 'Histoire croisée' und die Herausforderung des Transnationalen." *Geschichte und Gesellschaft*, 28 (2002), 607–36.
- Whitehead, Alfred North. *Science and the Modern World*. New York: The Free Press, 1997. [First published 1925 by The Macmillan Company (New York)].
- Whyte, Iain Boyd (ed.). *Man-Made Future: Planning, Education, and Design in Mid-20th Century Britain*. London: Routledge, 2007.
- Wick, Rainer K. *Teaching at the Bauhaus*. Ostfildern-Ruit: Hatje Cantz, 2000.
- Williams, D. Carleton. "Acoustic Space." In Marshall McLuhan and Edmund Carpenter (eds.). *Explorations 4*. Toronto: University of Toronto, 1955, 15–20.
- Williams-Goldhagen, Sarah, and Réjean Legault. *Anxious Modernism: Experimentation in Postwar Architectural Culture*. Montreal: Canadian Centre for Architecture, 2000.
- Wingler, Hans Maria. *Das Bauhaus: 1919–1933 Weimar Dessau Berlin und die Nachfolge in Chicago seit 1937*. Braunschweig: Verlag Gebrüder Rasch, 1968.
- Witkovsky, Matthew S., Carol S. Eliel, and Karole P. B. Vail (eds.). *Moholy-Nagy: Future Present*. Chicago: Art Institute of Chicago, 2016.
- Wojtowicz, Robert. *Lewis Mumford and American Modernism: Eutopian Theories for Architecture and Urban Planning*. New York: Cambridge University Press, 1996.
- . "Lewis Mumford: The Architectural Critic as Historian." In Elisabeth Blair McDougall (ed.). *The Architectural Historian in America: A Symposium in Celebration of the Fiftieth Anniversary of the Founding of the Society of Architectural Historians*. Washington, D. C.: National Gallery of Art, 1990, 237–49.
- Wölfflin, Heinrich. *Die klassische Kunst: Eine Einführung in die italienische Renaissance*. Munich: F. Bruckmann, 1899.—.
- Kunstgeschichtliche Grundbegriffe: Das Problem der Stilentwicklung in der neueren Kunst*. Munich: Bruckmann, 1915.
- . *Kunstgeschichtliche Grundbegriffe: Das Problem der Stilentwicklung in der neueren Kunst*. 10th ed. Basel: Schwabe, 1948.
- . *Principles of Art History: The Problem of the Development of Style in Early Modern Art*. Trans. Jonathan Blower. Los Angeles: Getty Research Institute, 2015.
- Wood, Christopher S. *The Vienna School Reader: Politics and Art Historical Method in the 1930s*. New York: Zone Books, 2000.
- Wrobel, Ignaz [Kurt Tucholsky]. "Die Tendenzfotografie." *Weltbühne*, 17 (April 28, 1925), 637.
- Worringer, Wilhelm. *Abstraktion und Einfühlung: Ein Beitrag zur Stilpsychologie*. Neuwied: Heuser, 1907.
- . *Formprobleme der Gotik*. Munich: R. Piper, 1911.
- Wright, Frank Lloyd. *Ausgeführte Bauten und Entwürfe*. Berlin: Ernst Wasmuth AG, 1910.
- Zalduendo, Inés. "Jaqueline Tyrwhitt's Correspondence Courses: Town Planning in the Trenches." Presented at Society of Architectural Historians 58th Annual Meeting, April 6–10, 2005.
- Zanten, David Van. "Chicago in Architectural History." In Elisabeth Blair McDougall (ed.). *The Architectural Historian in America: A Symposium in Celebration of the Fiftieth Anniversary of the Founding of the Society of Architectural Historians*. Washington, D. C.: National Gallery of Art, 1990, 91–100.
- Zervigón, Andrés Mario. *John Heartfield and the Agitated Image: Photography, Persuasion, and the Rise of Avant-Garde Photomontage*. Chicago: University of Chicago Press, 2012.
- Zervos, Christian. *La civilisation de la Sardaigne du début de l'énéolithique à la fin de la période nuragique*. Paris: Ed. Cahiers d'art, 1954.
- Zucker, Paul (ed.). *New Architecture and City Planning*. New York: Philosophical Library, 1944.

- © Adelaide de Menil: p.15 bottom right
- Alfred Roth, *USA baut*. Winterthur: Verlag Buchdruckerei, 1945: 4.12
- Architectural Review*, May 1957 (cover): 5.06
- © 2024 Artists Rights Society (ARS), New York / VG Bild-Kunst, Bonn: 2.42, 2.44, 2.45, 2.46, 2.47, 5.19
- © Marcel Breuer Papers, Special Collections Research Center, Syracuse University Libraries: p.15 bottom left
- Collection Reto Geiser: 3.23
- © ETH-Bibliothek Zürich, Bildarchiv, photo by Wilhelm Pleyer, portr. 00764: p.19 bottom left
- Sigfried Giedion, *Befreites Wohnen*. Zurich: Orell Füssli Verlag, 1929: 2.25, 2.26
- Sigfried Giedion, *Mechanization Takes Command*. New York: Oxford University Press, 1948: 3.47, 3.4
- Sigfried Giedion (ed.), *A Decade of New Architecture*. Zurich: Editions Girsberger, 1951: 4.34
- Sigfried Giedion, *The Eternal Present: The Beginnings of Art*. New York: Pantheon Books, 1962: 4.43, 4.46
- Sigfried Giedion, *The Eternal Present: The Beginnings of Architecture*. New York: Pantheon Books, 1964: 4.44
- Sigfried Giedion, *Raum, Zeit, Architektur. Die Entstehung einer neuen Tradition*. Ravensburg: Otto Maier Verlag, 1965: 2.40
- Carola Giedion-Welcker, *Moderne Plastik*. Zurich: Verlag Dr. H. Girsberger, 1937: 2.34
- © GSD Photograph Collection of Faculty and Staff. Courtesy of the Frances Loeb Library, Harvard University Graduate School of Design: p.20 top right
- © GSD History Collection. Academic Affairs. Folder CE060. Courtesy of the Frances Loeb Library. Harvard University Graduate School of Design: 4.31, 4.36
- © gta Archives/ETH Zurich (CIAM Archive): p.18 right, 2.02, 2.03, 2.07, 2.36, 3.25, 3.26
- © gta Archives/ETH Zurich (Sigfried Giedion Archive): p.16 left, p.16 right, p.17 top, p.17 right, 1.03, 1.04, 1.05, 1.06, 1.07, 1.08, 1.09, 1.10, 1.11, 2.01, 2.04, 2.05, 2.08, 2.09, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 2.18, 2.27, 2.29, 2.30, 2.35, 2.37, 2.38, 2.39, 2.41, 2.48, 3.01, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.24, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35, 3.36, 3.37, 3.41, 3.42, 3.44, 3.45, 3.46, 3.49, 3.50, 3.51, 3.52, 3.53, 3.54, 3.55, 3.56, 3.57, 3.58, 3.59, 3.60, 4.01, 4.02, 4.03, 4.06, 4.07, 4.16, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23, 4.24, 4.25, 4.26, 4.27, 4.29, 4.30, 4.32, 4.33, 4.35, 4.37, 4.38, 4.39, 4.40, 4.41, 4.41, 4.42, 4.45, 4.48, 4.49, 4.50, 4.51, 5.01, 5.02, 5.03, 5.07, 5.20, 5.25, 5.27, 5.28, 5.29, 5.40, 5.41, 6.02, 6.03
- © gta Archives/ETH Zurich (Sigfried Giedion Archive), drawing by Barbara Stucky-Boehrs: 2.49, 4.47
- © gta Archives/ETH Zurich (Sigfried Giedion Archive), drawing by Eugen Zeller: 5.23
- © gta Archives/ETH Zurich (Sigfried Giedion Archive), photo by Reto Geiser: 2.06, 2.20, 3.38, 5.39
- © gta Archives/ETH Zurich (Sigfried Giedion Archive), photo by Martin S. James: 3.39, 3.40
- © gta Archives/ETH Zurich (Sigfried Giedion Archive), photo by Achille B. Weider: 2.19, 2.21
- © gta Archives/ETH Zurich (Hans Hofmann Archive): p.17 right
- © gta Archives/ETH Zurich (Werner M. Moser Archive s): 4.17
- © gta Archives/ETH Zurich (Ulrich Stucky Archive), photo by A. Ornano: 2.24
- © 2024 Artists Rights Society (ARS), New York / VG Bild-Kunst, Bonn: 3.43
- © 2024 Christian Herdeg, photo by Hugo P. Herdeg: 2.22, 2.23
- © HUP Hudnut, Joseph (7), Harvard University Archives: p.18 top left
- © Béla T. Kalman: p.18 bottom left
- © 2024 Juliet Kepes Stone and Imre P. Kepes / Kepes Estate: p.18 bottom left, 5.37, 5.38
- György Kepes (ed.), *The Arts of the Environment*. New York: George Braziller, 1972: 5.36
- György Kepes (ed.), *The Education of Vision*. New York: George Braziller, 1965: 5.30
- György Kepes (ed.), *The Man-Made Object*. New York: George Braziller, 1966: 5.32
- György Kepes (ed.), *Module, Proportion, Symmetry, Rhythm*. New York: George Braziller, 1966: 5.35
- György Kepes (ed.), *The Nature of Art and Motion*. New York: George Braziller, 1965: 5.34
- György Kepes (ed.), *Sign, Image, Symbol*. New York: George Braziller, 1966: 5.33
- György Kepes (ed.), *Structure in Art and Science*. New York: George Braziller, 1965: 5.31
- © Klinkhardt & Biermann: 2.28
- Wyndham Lewis (ed.), *Blast 1*. Vol. 1 (June 20, 1914). London: John Lane, 1914: 5.09
- Wyndham Lewis (ed.), *Blast 2*. Vol. 2 (July 1915). London: John Lane, 1915: 5.10
- © 2024 Familie Lips, photo by Hans Finsler: 4.13
- © Alex Matter, photo by Herbert Matter: 5.04
- © The Estate of Corinne McLuhan (Ginko Press, 2008, reprint): 5.07, 5.08
- © The Estate of Corinne McLuhan (Wipf and Stock, 2016, reprint): 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18
- © The Estate of Corinne McLuhan / The Estate of Harley Parker: 5.21, 5.22
- © 2024 Estate of László Moholy-Nagy / Artists Rights Society (ARS), New York: László Moholy-Nagy, *Vision in Motion*. Chicago: Paul Theobald, 1947, photo by George Morris: 5.22
- © 2024 Barbara Moore / Licensed by Artists Rights Society (ARS), NY: 5.24
- Photo: David Moore © Lisa, Michael, Matthew and Joshua Moore: p.19 bottom right
- © Photo: Museum für Gestaltung Zürich, Plakatsammlung, ZHdK: 4.10
- Digital Image © The Museum of Modern Art/Licensed by SCALA / Art Resource, NY: 4.09
- Digital Image © The Museum of Modern Art/Licensed by SCALA / Art Resource, NY/© 2024 Artists Rights Society (ARS), New York / VG Bild-Kunst, Bonn: 2.33
- © RIBA Collections: 1.01, 1.02
- © Rowohlt Verlag: 2.32, 4.28
- © Sert Collection. Folder A005. Courtesy of the Frances Loeb Library. Harvard University Graduate School of Design: p.20 bottom right
- © Sert Collection. Folder E003. Courtesy of the Frances Loeb Library. Harvard University Graduate School of Design: 4.14, 4.15
- © Sert Collection. Folder D012. Courtesy of the Frances Loeb Library. Harvard University Graduate School of Design: 6.01
- © Smith College, photo by Hanson Carroll: p.17 bottom left
- Jaqueline Tyrwhitt, Josep Lluís Sert, and Ernesto N. Rogers (eds.). *The Heart of the City*. London: Lund Humphries, 1952: 3.27, 3.28, 3.29
- © University of Toronto Archives and Robert Lansdale Photography Ltd.: p.19 top left

A

Aalto, Alvar 117, 141, 148, 231, 237, 268, 275, 283–84, 287, 291, 294, 333
 Abramovitz, Max 330
 Aix-en-Provence (see CIAM 9)
 Albers, Josef 298
 Albini, Franco 284
 Alexander, Christopher 423
 Alexander, Samuel 41
 Altamira 86, 329, 396
 Amsterdam 95, 363
 Andrews, John 444
 Argan, Giulio Carlo 360, 427
 Arnason, H. Harvard 415
 Arp, Hans (Jean) 16, 94, 109, 231, 321–22, 334, 419
 Ascoral Group 113
 Aspen, Col. 14, 129
 Athens (also see CIAM 4) 113, 335
 Athens Center of Ekistics 63, 335, 443

 Athens Technological
 Foundation 63

Aydelotte, Frank 253, 255

B

Bacon, Edmund 335
 Baghdad 329
 Embassy of the United States
 of America 329
 Bakema, Jacob (Jaap) 315, 330
 Ball, Hugo 93
 Banham, Reyner 152, 213, 321, 371
 Barr, Alfred H. 17, 32, 37, 157, 365
 Barrett, John D. 323
 Basaldella, Mirko 413
 Bataille, Georges 334
 Bauer, Catherine 187
 Bayer, Herbert 15, 64, 106–29, 212,
 231, 237, 322, 414–15
 Behne, Adolf 78, 155
 Behrendt, Walter Curt 171, 178
 Behrens, Peter 17, 212
 Bellagio

 Villa Serbelloni 330

Belluschi, Pietro 330
 Benjamin, Walter 73, 193, 198
 Bergamo (see CIAM 7)
 Bergson, Henri 180
 Berlage, Hendrik Petrus 42, 152,
 162, 167
 Berlin 24, 94, 124, 141, 149, 170
 Bill, Max 106, 360
 Binder, Walter 86
 Birchler, Linus 264, 265
 Bissell, Claude 408
 Blanchot, Maurice 57
 Boccioni, Umberto 109
 Boehrs, Barbara 129, 334
 Bollingen Foundation 323, 328
 Boston 232, 307, 425
 Bott, Edward Alexander 329
 Bourgeois, Victor 291
 Brancusi, Constantin 16, 229, 237
 Braque, Georges 322, 351
 Brasília 308–9
 Braziller, George 422
 Breuer, Marcel 15–16, 24, 31, 33–34,
 37, 141, 186, 199, 213, 237, 282, 291,
 296, 360, 362, 423
 Bridgeheads 9, 255
 Bridgewater (see CIAM 6)
 Brown, John N. 409
 Brussels (see also CIAM 3) 291
 Buffalo, N. Y.
 Darwin D. Martin House 162
 Larkin Company Administration
 Building 162
 Burchard, John E. 253, 255, 257–58,
 263, 294–95, 418, 423
 Burckhardt, Jacob 35, 41–42,
 158, 375
 Burnham, Daniel H. 166, 168, 170

C

Cairo 329
 Calder, Alexander 240, 427
 Calder, Mary 237
 Cambridge, Mass. 31, 34, 38–39, 54,
 106, 112, 203, 258, 443
 Harry Elkins Widener Memorial
 Library 39, 41, 307

Harvard University 7, 9, 12,
 31–35, 37–39, 41–42, 53–54,
 58–59, 63, 66–70, 74, 109, 112–13,
 180, 184, 186–87, 191, 203, 229,
 231–33, 240, 253–55, 258, 260,
 265, 269, 272–73, 287, 289,
 302–4, 307–8, 314–15, 317–18,
 323–24, 330, 334, 353–54, 362,
 369, 386, 408–9, 411–16, 418–19,
 423, 426, 441, 443–44
 Carpenter Center for the
 Visual Arts (VAC) 143, 409,
 411–16, 419, 422, 426
 Graduate School of Design
 (GSD) 13, 24, 32–34, 39, 58,
 66, 232, 267, 269, 289, 294,
 298, 303–4, 307–9, 314–15,
 317, 353–54, 362, 409,
 413–14, 415, 418–19, 441, 443
 Gund Hall 444

Massachusetts Institute of
 Technology (MIT) 59, 148, 231,
 253, 260, 263, 268, 287, 322,
 329, 369, 413, 418–19, 422–23,
 425–26

 Center for Advanced
 Visual Studies (CAVS) 409,
 423, 425

 The Architects Collaborative
 (TAC) 187, 329

Candilis, Georges 284
 Carlu, Jean 93
 Carpenter, Alfred St. Vrain 409
 Carpenter, Edmund Snow 15–16,
 330, 334, 380–83, 386, 389, 392–95,
 398–99, 407–8
 Carter, Edward J. 199
 Cassirer, Ernst 322
 Chagall, Marc 233, 236–37, 361
 Chandigarh 143, 308
 Chandler, John 423
 Chareau, Pierre 296
 Château-d'Éx 357
 Chermayeff, Serge 149, 304
 Chicago, Ill. 31, 80, 109, 149, 152–53,
 160–62, 166–70, 184, 203–4, 208, 212,
 240–41, 362–63
 Carson, Pirie, Scott and Com-
 pany Building 170
 Chicago Committee on Social
 Thought 361–62
 Chicago School 114, 143, 161–62,
 167–68, 170, 368
 Frederick C. Robie House 160
 Illinois Institute of Technology
 (IIT) 69, 149, 287
 Institute of Design 241, 254
 Lake Shore Drive Apartments 151
 Leiter Building 170
 New Bauhaus—American
 School of Design 29, 108–9, 114,
 203, 231, 241, 362–63, 365–66,
 368, 419, 422
 Reliance Building 166, 170
 Singer Building 233
 Tribune Tower 170
 University of Chicago 204, 255,
 358, 361–62

Choay, Françoise 423
 CIAM (Congrès Internationaux
 d'Architecture Moderne) 10, 13, 24,
 29, 33, 37, 41, 44, 51, 54, 57–58, 63,
 66–70, 113, 139–42, 148, 158, 167, 178,
 184–87, 192, 198–99, 203, 212, 229,
 254, 258, 261–64, 267, 282, 284, 286,
 289, 291, 294–98, 302–4, 308–9,
 315–19, 322, 335, 357, 360, 366, 382,
 411, 418, 441, 443–44
 CIAM 1 (1928), La Sarraz 141, 149, 192
 CIAM 2 (1929), Frankfurt 41, 193
 CIAM 3 (1930), Brussels 141
 CIAM 4 (1933), Athens 185, 192,
 335, 443
 CIAM 5 (1937), Paris—
 CIAM 6 (1947), Bridgwater 38, 57,
 291, 295, 360, 391
 CIAM 7 (1949), Bergamo 360, 391
 CIAM 8 (1951), Hoddesdon 57, 187,
 284, 286, 302–3, 317
 CIAM 9 (1953), Aix-en-Provence 286,
 303, 360, 391
 CIAM 10 (1956), Dubrovnik 57, 315

Coates, Wells 315
 Cohen, Jean-Louis 11
 Colin, Paul 93
 Conant, James B. 31–32, 68, 253,
 255, 303, 330, 353–54, 362, 418
 Conant, Kenneth 307
 Coolidge, Archibald Cary 38–39
 Costa, Lúcio 70, 291, 309
 Cuypers, Pierre 152

D

Dalí, Salvador 233
 Dessau
 Bauhaus 32–33, 35, 42, 69,
 79–80, 95, 108–9, 142–43, 149,
 158, 180, 240, 294, 303, 353,
 362–63, 411, 419, 422
 Dewey, John 362–63, 366, 368–69
 Doesburg, Theo van 93
 Dorner, Alexander 366, 368–69
 Doxiadis, Constantinos
 Apostolos 66, 317, 334–35, 443
 Dubrovnik (see CIAM 10)
 Duchamp, Marcel 223, 236, 351, 387
 Dunkel, William 275

E

Easterbrook, Tom 381–82
 Eckbo, Garrett 315
 Edgerton, Harold E. 82
 Eesteren, Cornelis van 63, 95, 443
 Eiffel, Gustave 95, 152
 Eisenhower, Dwight D. 371
 Eliot, Charles 315
 Eliot, T. S. (Thomas Stearns) 51,
 379, 399
 Ernst, Max 223, 236
 Etter, Philipp 272
 Eyck, Aldo van 303

F

Fatehpur Sikri 393
 Finsler, Hans 41, 80, 86, 229,
 231, 399
 Fiore, Quentin 379, 422
 Fletcher, Banister 35
 Ford, Edsel 224
 Ford, Henry 224
 Ford Foundation 369, 381–82, 387,
 389, 404, 407–9
 Franco, Francisco 233
 Frankfurt (see CIAM 2)
 Frisch, Max 272, 274
 Fry, Maxwell 63
 Frye, Northrop 381, 383
 Fuller, Richard Buckminster 294,
 335

G

Gabo, Naum 304, 322
 Galvani, Luigi 213
 Gardella, Ignazio 284
 Garnier, Tony 41–42, 166
 Geddes, Norman Bel 159
 Geddes, Patrick 171, 185, 187, 374
 Geneva 178
 League of Nations 255
 League of Nations, competition/
 contribution for the Palace 42,
 95, 143, 255, 302, 391
 Maison Clarté 170
 Geogiadis, Sokratis 11
 Giordion-Welcker, Carola 16, 53, 66,
 83, 106, 109, 229, 231, 237, 254, 257,
 287, 291, 294, 322, 329, 333, 403,
 443–44
 Gilbreth, Frank B. 74, 208, 223
 Gilbreth, Lillian 208
 Girsberger, Hans 106, 322
 Giza 83, 328
 Gombrich, Ernst 328
 Goodman, William 315
 Gräff, Werner 79
 Graves, Michael 330
 Gropius, Walter 12–13, 17, 24, 29,
 31–34, 37, 39, 41–42, 51, 53–54,
 58–59, 68, 91, 95, 106–8, 117, 141–43,
 148–49, 153, 158, 166, 170–71, 180,
 184–87, 189, 199, 203–4, 224, 231–32,
 265, 271, 287, 291, 294, 296–98,
 303–4, 315, 329, 353, 360, 362,
 365–66, 443–44

H

Haefeli, Max Ernst 94, 192, 229
 Hall, Edward 408
 Hamilton, Hector 94
 Hamilton, Richard 423
 Häring, Hugo 141–42
 Harris, Harwell 297
 Harrison, Wallace K. 237, 291, 297
 Haussmann, Georges-Eugène 44
 Heartfield, John 94, 118
 Hegemann, Werner 32, 90, 315
 Hepworth, Barbara 360
 Herdeg, Hugo P. 83, 86, 323,
 328, 334
 Herter, Hermann 257
 Hilberseimer, Ludwig 142, 178
 Hitchcock, Henry-Russell 17,
 151–53, 155–61, 167, 179, 294
 Hitler, Adolf 32, 118
 Hoddesdon (see CIAM 8)
 Hoepfli, Ulrico 91
 Hoesli, Bernhard 282
 Hoffmann, Josef 152
 Hofmann, Hans 17, 258–61, 263–65,
 267, 269, 275
 Horta, Victor 42
 Howard, Ebenezer 171, 185, 187
 Howe, George 186, 294–95, 298, 330
 Howell, William 284
 Huber, Dorothee 11
 Hudnut, Joseph F. 18, 31–34, 51, 112,
 263, 303–4, 315, 357, 362, 365
 Hultén, Pontus 426
 Hutchins, Robert M. 361
 Huxley, Julian 282, 297, 365

I

Independent Group 371
 Innis, Harold Adam 380, 386, 388
 Isaacs, Reginald 304
 Itten, Johannes 86, 274–75, 423

J

Jackson, Huson 315
 Jacobs, Jane 315
 Jaquet-Droz, Pierre 204
 Jeanneret, Pierre 74, 143, 213
 Jenney, William Le Baron 168, 170
 Johnson, Lyndon B. 371
 Johnson, Philip C. 32, 149, 157–61
 Jost, Heinrich 118
 Joyce, James 231, 377, 379, 403

K

Kahn, Louis I. (Isadore) 299, 317,
 330, 333
 Kandinsky, Wassily 78, 223, 283
 Karnak 329
 Keatinge-Clay, Paffard 282
 Kelly, John 408
 Kepes, György 18, 366, 369, 383,
 387, 419, 422–23, 425–26
 Kiesler, Frederick 240, 294
 Kimball, Richard 333
 Klee, Paul 80, 283, 321
 Klüver, Billy 425
 Knight, Frank 361

L

Labatut, Jean 330
 Labrousse, Henri 42, 193
 Lancaster, Osbert 299
 La Sarraz (see CIAM 1)
 Lascaux 83, 86, 328–29, 334, 396
 Lawrence, David 315
 Le Corbusier 10, 12, 18, 29, 41, 42,
 58, 78–79, 83, 93, 106, 109, 113, 118,
 141–43, 148–49, 151, 153, 158, 161–66,
 170, 178, 184, 187, 212–13, 223, 226,
 241, 258, 272, 287, 296–99, 302,
 308–9, 322, 351, 357, 359–60, 391,
 395, 409, 411–13, 441
 Lee, Dorothy 334, 389, 393, 408
 Léger, Fernand 7, 208, 233, 236–37,
 240, 267, 298–99, 360, 365, 387, 419
 Lethaby, William 141
 Lewis, Wyndham 379, 393
 Lippard, Lucy 423
 Lissitzky, El 80, 94, 118, 124, 351, 379
 Löffler, Wilhelm 255, 271–72
 Lohse, Richard Paul 106, 308
 Lönnberg-Holm, Knud 291, 296

- London 24, 38, 54, 74, 187, 198–99, 212, 240, 254, 263, 284, 351, 363, 379
 Lawn Road Flats (Isokon Building) 24, 199
 Trocadero 24
 Victoria and Albert Museum 199
 Loos, Adolf 212
 Lowell, Abbott Lawrence 38
 Lüchinger, Adolf 265, 268
 Luxor 329
- M**
 Mackintosh, Charles Rennie 212
 Maekawa, Kunio 70
 Maillart, Robert 42, 73
 Maki, Fumihiko 317
 Mandrot, Hélène de 231, 258
 Man Ray 365
 Mann, Thomas 51
 Marc, Franz 78
 Marchessault, Janine 403
 Marey, Étienne-Jules 208
 Marinetti, Filippo Tommaso 93, 379
 Maritain, Jacques 328
 Markelius, Sven 291
 Marseille
 Pont Transbordeur 42, 79, 82, 95
 Unité d'Habitation 143, 151
 Marshall, John 329
 Matter, Herbert 237
 May, Ernst 171
 Mayakovsky, Vladimir 53, 94, 379
 McGuire, William 328
 McHale, John 371
 McLuhan, Herbert Marshall 19, 55, 335, 369, 371, 373–89, 392–93, 395–96, 398–99, 403–4, 407–9, 412–14, 422, 423, 426–27
 Mead, Margaret 335, 383
 Mellon, A. W. 58, 323
 Mellon, Paul 328
 Mendelsohn, Erich 141, 166, 171, 178
 Metcalf, Keyes DeWitt 39
 Meyer, Hannes 149
 Meyer, Maynard 232
 Meyer, Peter 19, 155, 158, 263–64, 267–69, 271, 274
 Mies van der Rohe, Ludwig 32, 114, 141, 149–51, 161, 170
 Millmore, Royston 53–54
 Mill Run, Pa.
 Kaufmann Residence (Falling-water) 162
 Mock, Elizabeth 275
 Modern Architectural Research (MARS) Group 24, 54, 57, 187, 284, 360
 Moholy-Nagy, László 19, 24, 29–31, 44, 79–80, 82, 93–95, 108–9, 117, 124, 149, 167, 180, 199, 203–4, 223, 231, 237, 240–41, 254, 258, 267, 294, 298, 322, 351, 353–54, 362–66, 375, 399, 419
 Moholy-Nagy, Sibyl 139, 363, 423
 Molella, Arthur 226
 Moltke, Willo von 317
 Molzahn, Johannes 78
 Mondrian, Piet 80, 233, 236
 Moore, Peter 399
 Moos, Stanislaus von 11
 Morris, Charles W. 362
 Morris, George 399
 Morris, William 141, 212
 Moser, Karl 167, 286
 Moser, Werner M. (Max) 162, 192, 229, 258, 274, 282, 286
 Moses, Robert 237
 Mount Mansfield 237
 Mumford, Lewis 9, 19, 20, 71, 91, 159, 161–62, 170–71, 180, 184, 186–87, 189, 224, 231, 294, 299, 302, 315, 319, 361, 373, 377, 380, 423
 Munich 35, 69, 71, 74, 80, 108
 Haus der Deutschen Kunst 108, 299
 Muschenheim, William 315
 Muthesius, Hermann 141, 158, 212
- N**
 Nashe, Thomas 375
 Nef, John U. 20, 204, 218, 223, 255, 361–62, 375
 Nef, Victor 255
 Nervi, Pier Luigi 74, 282
 Neuenschwander, Eduard 74, 282–84, 286
 Neutra, Richard 186, 291, 296–97, 315, 365
 New Haven, Conn. 232, 358
 Yale University 39, 59, 66, 78, 204–5, 231–33, 236, 254, 258, 260, 357–58, 361
 New York, N. Y. 29, 32, 64, 69, 91, 108–9, 112–13, 118, 129, 153, 160–61, 184–86, 193, 203, 208, 224, 229, 233, 236–37, 240, 255, 291, 294, 296, 298–99, 319, 323, 358, 374, 423
 Columbia University 31–32
 Lincoln Center 160
 Museum of Modern Art 32, 108–9, 124, 149, 151, 157, 159, 160–61, 168, 184, 186, 275, 294, 363, 371, 426
 Rockefeller Center 82, 236
 Woolworth Building 232
 Niemeyer, Oscar 291, 297, 303, 309
 Nitzschké, Oscar 237
 Norberg-Schulz, Christian 282–84, 286
 Norton Lectures / Charles Eliot
 Norton professorship 7, 34, 38–39, 41, 51, 53–54, 167, 184, 191, 203, 229, 231–32, 265, 354, 373, 418
 Norton, W. W. (William Warder) 203, 365
 Nowicki, Matthew 297
- O**
 Ockman, Joan 366
 Oechslin, Werner 11
 Osborn, Frederic 185
 Ozenfant, Amédée 10, 78, 223, 233, 236
- P**
 Paepcke, Walter P. 109, 363, 365
 Pallmann, Hans 265, 272, 275
 Panofsky, Erwin 35, 37, 55, 233
 Papadaki, Stamo 208, 236–37
 Paris 24, 44, 86, 118, 124, 143, 178, 185, 193, 208, 223, 236–37, 272, 282, 298
 Bibliothèque Nationale de France 38, 42, 193
 Eiffel Tower 42, 79, 82, 95, 143
 Parker, Harley 403
 Pech Merle 86, 329
 Pei, I. M. (Ieoh Ming) 187
 Perret, Auguste 41–42, 152, 153
 Perriand, Charlotte 213
 Pevsner, Nikolaus 170
 Piaget, Jean 383
 Picasso, Pablo 142–43, 260, 296, 351, 427
 Poelzig, Hans 141, 178
 Poissy
 Villa Savoye 42
 Pound, Ezra 350, 375, 379
 Princeton, N. J.
 Princeton University 253, 304, 307
 Puget, Pierre 109
 Pugin, August 74
 Pusey, Nathan M. 409
- R**
 Racine, Wis.
 S. C. Johnson Headquarters (Johnson Wax Building) 162
 Radburn, N. J. 186
 Raschenberg, Robert 425
 Read, Herbert 199, 323, 328, 423
 Redfield, Robert 361
 Regional Planning Association of America (RPAA) 186–87
 Richardson, Henry Hobson 152, 166–68
 Riegl, Alois 158, 299
 Rietveld, Gerrit Thomas 233
 Roberts, Henry 199
- Roberts, Laurance P. 330
 Rockefeller, Nelson 237
 Rockefeller Foundation 203, 269, 274, 328–30, 371, 407
 Rogers, Ernesto N. (Nathan) 57, 187, 284, 303, 330
 Roh, Franz 71, 80, 264
 Rohn, Arthur 258, 265
 Rome 333, 380
 American Academy in Rome (AAR) 330, 333, 427
 Ronchamp
 Notre-Dame-du-Haut 299, 391
 Roosevelt, Franklin D. 291, 354
 Root, John Wellborn 166
 Rossi, Bruno 419
 Roth, Alfred 229, 257–58, 272, 274–75, 284, 441, 443
 Rotzler, Willy 273
 Rudolph, Paul 187
 Russell, Bertrand 38
- S**
 Sakkara 329
 Salazar, António de Oliveira 233
 Salomon, Gottfried 193, 416
 Saint-Dié 143
 Salvisberg, Otto Rudolf 260
 Samonà, Giuseppe 284
 Sasaki, Hideo 308, 315, 317
 Savina, Joseph 391
 Schawinsky, Xanti (Alexander) 64
 Scherrer, Paul 255
 Schindler, Rudolf 159
 Schmid, Karl 334
 Schmidt, Georg 192
 Schnebli, Dolf 423
 Schröder, Hanneke 233
 Schultze-Naumburg, Paul 74
 Schuster, Carl 334
 Schütte-Lihotzky, Margarete 212
 Schwitters, Kurt 94
 Sekler, Eduard 20, 31, 67, 307–9, 314, 317, 413–16
 Semper, Gottfried 158
 Sert, Josep Lluís 10, 13, 20, 21, 57–58, 66–67, 91, 124, 185, 187, 236–37, 240, 267, 269, 286–87, 289, 296–99, 303–4, 307–8, 314–15, 317, 319, 323, 329, 360, 409, 411, 413–16, 427, 441, 444
 Shand, Philip Morton 54–55, 199
 Sheldon, Richard 407
 Signac, Paul 361
 Sitte, Camillo 171
 Smith, George Everard Kidder 8, 237
 Smithsonian, Alison 423
 Smithsonian, Peter 423
 Soltau, Jerzy 315
 Somanauk, Ill. 241, 267, 365
 Stalin, Joseph 95
 Stam, Mart 95, 153, 155
 Stankowski, Anton 106
 Steiger, Rudolf 192, 229, 258
 Stein, Clarence 186, 187
 Steinman, Martin 443–44
 Stone, Edward Durell 330
 Stonorov, Oscar 186, 291, 298
 Stucky, Ulrich 282
 Studer, André M. 282
 Stynen, Léon 291
 Sullivan, Louis Henry 114, 152, 161–62, 166–70
 Sweeney, James Johnson 237
- T**
 Tafuri, Manfredo 142
 Taut, Bruno 78, 141, 166, 178
 Taylor, Frederick Winslow 208
 Toronto 386, 389, 392, 66
 University of Toronto 66, 334, 369, 373–74, 380–83, 386, 388–89, 396, 407–9, 412–13
 Troost, Paul Ludwig 299
 Tschichold, Jan 80, 106, 109, 118
 Tuc d'Audoubert 86
 Tucholsky, Kurt 94
 Tyrwhitt, Mary Jaqueline 21, 57–59, 63–64, 66–67, 113, 187, 284, 286, 298, 314–17, 335, 380–82, 386, 389, 391–93, 398, 403–4, 408, 412–13, 441, 443
- U**
 United Nations 58, 66, 297–98
 Unwin, Raymond 171
 Utzon, Jørn 70, 148
- V**
 Vaudrin, Philip 323
 Velde, Henry van de 212, 291
 Venturi, Robert 330
 Vigier, François 317
 Vogt, Adolf Max 321
 Volta, Alessandro 217
 Voysey, Charles 141
- W**
 Waddington, Conrad Hal 335, 427
 Wagner, Martin 186
 Wagner, Otto 42
 Waldhauer, Fred 425
 Warburg, Aby 198
 Ward, Barbara 335
 Washington, D. C. 69, 213, 217, 255, 296, 323, 389, 419
 Weider, Achille B. 83, 86, 332
 Weimar
 Bauhaus 93–94, 108, 142, 178, 360
 Weissmann, Ernest 291, 296
 Werner, Heinz 419
 Whitehead, Alfred North 38, 354
 Whitman, Robert 425
 Wiener, Norbert 369, 419
 Wijdeveld, Hendricus Theodorus 171
 Willard, Marian 229
 Wolfers, Arnold 204
 Wölfflin, Heinrich 35, 42, 74, 78, 158, 191, 375, 377, 396
 Woods, Shadrach 315
 Worringier, Wilhelm 78, 322
 Wright, Frank Lloyd 153, 160–68, 170, 178, 184, 275
 Wright, Henry 186
 Wurster, William 419
- Y**
 Yale, Linus 205
- Z**
 Zehrfuss, Bernard 282
 Zeller, Eugen 399
 Zemp, Josef 257
 Zervos, Christian 86, 237
 Zimmermann, Alfred 178
 Zucker, Paul 299
 Zurich
 Doldertal 53, 139, 231, 254, 257, 272, 283, 287, 386, 443
 Eidgenössische Technische Hochschule (ETH) / Swiss Federal Institute of Technology 7, 9, 12, 63, 68, 74, 83, 254–55, 257–58, 260–61, 263–75, 282–84, 286–87, 289, 441

As most projects that develop over an extended period of time, this book would have not been possible without the support of numerous individuals and institutions—I am grateful to them all.

My doctoral advisors, Stanislaus von Moos and the late Andreas Tönnemann, helped me lay the foundation for much of this book. They generously offered me astute guidance and inspired my work through their teaching, research, and writing. Marc Angélil and Arthur Rüegg are dedicated mentors who continuously supported this undertaking with their insights and encouragement.

Luke Bulman, Salomon Frausto, and Martino Stierli have supported this endeavor with many critical comments and advice, but, most of all, through their friendship.

Many friends and colleagues have shared of their time providing feedback, offering research clues, and encouragement at various stages. I would like to extend warm thanks to Grant Alford, Mardges Bacon, Nancy Bartlett, Marcia Brennan, Caroline Constant, Philipp von Dalwig, Michael Darroch, Angelus Eisinger, Nancy Eklund Later, Christian Emden, Rachel Julia Engler, Dietrich Erben, Kim Förster, Monica Giedion-Risch, Urs Gloor, Almut Grunewald, Britta Hentschel, John Hopkins, Dorothee Huber, Martin Josephy, Sharif Kahatt, Michael Kubo, Sanford Kwinter, Jesse Le Cavalier, Mark Lee, the late Diogo Seixas Lopes, Fabiola López-Durán, Anita Matusевичs, Mary McLeod, Rahul Mehrotra, Catalina Mejia Moreno, Keith Mitnick, Dietrich Neumann, Matthias Noell, Tilo Richter, Mireille Roddier, Lothar Schmidt, Deane Simpson, John Sparagana, Urs Staub, Ulrike Steiner, Uwe Steiner, Sara Stevens, Nancy Stieber, Elizabeth Tucker, Thomas Weaver, Eric Wolf, and Claire Zimmerman. Their encouragement and criticism were instrumental in propelling my work. Any lingering errors or omissions are my own.

Over the years, I have been fortunate to receive numerous opportunities to present

and discuss my work with peers. I would like to thank in particular Nanni Baltzer, Barry Bergdoll, Jean-Louis Cohen, Isabel Concheiro Guisan, Filip Geerts, Michael Gnehm, Derrick de Kerckhove, David Leatherbarrow, Janine Marchessault, Christof Mauch, Joan Ockman, Pepper Stetler, David Van Zanten, Julia Walker, and Robert Wiesenberger.

This book is based on archival sources from more than twenty archives across two continents. I am very grateful to all the archivists and librarians who patiently answered my many queries and helped me navigate the collections at the Alvar Aalto Archives, Helsinki; Avery Library at Columbia University; Busch-Reisinger Museum at Harvard University; the ETH Library, Collections and Archives; the Ford Foundation Archives; the Harvard University Archives; Houghton Library at Harvard University; the MIT Museum; the Museum der Kulturen Basel; the Museum of Modern Art Archives in New York; the National Archives of Canada; the Paul V. Galvin Library at the Illinois Institute of Technology; the Royal Institute of British Architects; the Smithsonian Institution Archives of American Art; the Special Collections Department at the University of Illinois; the State Archives of the Canton of Zurich; the University of Oregon Libraries; the Victoria and Albert Museum; and the Yale University Library. I am particularly indebted to Bruno Maurer, Daniel Weiss, Filine Wagner, and Gregor Harbusch at the gta Archives at the ETH in Zurich. They have been instrumental since the early stages of my research. Mary Daniels and Inés Zalduendo at the Frances Loeb Library Special Collections at Harvard University's Graduate School of Design made my research there a joy and kept providing me with materials when I had long returned to the other side of the Atlantic.

During my research, I had the privilege of meeting and interviewing Edmund Carpenter, Eduard Neuenschwander, Dolf Schnebli, and Eduard Sekler, all of whom have since passed

away. Anderson Todd shared his recollections as I was working on the manuscript. The late Andres Giedion generously and patiently shared much insight about his parents and granted me access to previously unconsulted materials. As eyewitnesses of the time, they all helped to build important bridges between the past and the present and to make this history come alive.

Over the past six years, the Rice University School of Architecture offered an intellectually vibrant environment that helped me to finalize this project. I am particularly grateful to my colleagues John Casbarian, Scott Colman, Christopher Hight, Carlos Jiménez, Lars Lerup, Albert Pope, Jesús Vassallo, and Sarah Whiting. My research assistants Kalyani Bhatt, Kelsey Olafson, and Tiffany Xu helped to untangle endnotes, locate images and their sources, and create the index. Mary Casper worked on initial edits, and Amelia Hazinski helped to reorganize the manuscript at a critical stage.

This book is based on my dissertation, which was made possible through a generous research grant provided by the Swiss Federal Institute of Technology (ETH) in Zurich. I thank the faculty and staff at the Department of Architecture and the Institute for the History and Theory of Architecture (gta), especially Vittorio Magnago Lampugnani, Ákos Moravánszky, Laurent Stalder, and Philip Ursprung. A Columbia University Libraries Research Award, and Dean's Summer Research Funding from the Rice School of Architecture helped me to fill remaining gaps in the research. A Humanities Research Center (HRC) Teaching-Release Fellowship at Rice University provided me uninterrupted time to work on the manuscript. I am grateful to Farès el-Dahdah, director of the HRC, and Sarah Whiting, dean of the School of Architecture.

Veronika Darius, the publisher at gta Verlag, deserves my gratitude for her commitment to this project. Early on, she signaled her interest in this book and supported it with conge-

niality and patience throughout the process. I am indebted to Stephanie Salomon, who gave the book a generous reading and edited the manuscript with a sharp pen and scrupulous care. Christopher Davey's exactitude in proofreading, and Ursula Bein's expertise in indexing were invaluable.

Maike Hamacher, Valentin Hindermann, Madeleine Stahel, and Christa Lanz of Büro 146 translated my text into a cohesive and elegant graphic form. I am grateful for the close collaboration and the exceptional exchange throughout this process.

The book's production was made possible by the generous support from the Graham Foundation for Advanced Studies in the Fine Arts, Chicago; the Stiftung Sigfried Giedion, Zurich; the Rice University School of Architecture, Houston; and the Ulrico Hoepli-Stiftung, Zurich.

I am fortunate to enjoy the unflagging support of my family. My parents, Katrin and Peter, have unconditionally supported my path and consistently encouraged me along it. My delightful daughters, Sofi and Tilda, were born as this project matured, and they have since brightened up every single day. Finally, I could have never accomplished this work without the love, inspiration, thoughtfulness, generosity, humor, and optimism of Noëmi Mollet, my wife and companion on this and all other journeys.

Addendum for Open Access Edition

A fundamental belief in the coexistence of physical and digital realms motivated me to make this book freely accessible to a broad audience. I am grateful for Moritz Gleich's encouragement and his willingness to provide me this platform. I am indebted to Ursula Bein for smoothly navigating the process of translation from print to screen. Isabeau Andrews took a last proofreading pass with a fine-tooth comb. Image rights remain a challenge in the world of digital publishing—I am indebted to all the rights holders who have agreed to be part of this endeavor. The open access edition of this book was made possible through a generous grant from the Fondren Library at Rice University. I am particularly grateful to Joe Goetz, information literacy librarian, for his advice, insight, and support.

Reto Geiser is a scholar of modern architecture with a focus on the intersections between architecture, pedagogy, and media. He is currently Associate Professor of Architecture and Director of Undergraduate Studies at the Rice University School of Architecture, where he teaches history, theory, and design. Geiser is the co-author of *Projectile* (2021) and *Reading Revolutionaries* (2014), the editor and co-translator of Sigfried Giedion's *Liberated Dwelling* (2019), and the editor of award-winning *Futures of the Architectural Exhibition* (2022) *Archetypes* (2021), *House is a House is a House is a House is a House* (2016) and *Explorations in Architecture* (2008). He has curated the exhibition *Explorations: Teaching, Design, Research*, Switzerland's official contribution to the 11th Venice Architecture Biennale, and the installation *Rooms for Books* at the 2017 Chicago Architecture Biennial. Geiser is a founding partner in the Houston-based design practice MG&Co.

Editing

Stephanie Salomon, New York

Proofreading

Christopher Davey, Bolton

Graphic Design and Typesetting

Büro 146—Maike Hamacher, Valentin Hindermann, Madeleine Stahel, Zurich; with Christa Lanz

Cover Illustration

Sigfried Giedion, photomontage of Rockefeller Center, ca. 1939

A Note on the Type

This book is set in GT America, a contemporary typeface family positioned in between the modernist typographic traditions on either side of the Atlantic. Designed by Swiss typographer Noël Leu and released by Grilli Type in 2016, GT America amalgamates the characteristics of late nineteenth- and early twentieth-century European Grotesque typefaces (for example, Ferdinand Theinhardt's Royal Grotesk) defined by open apertures and simple, static letterforms, with those of American Gothic typefaces (including Morris Fuller Benton's News Gothic or Franklin Gothic) that tend to be more upright in stance and less curvaceous than their European counterparts.

© 2024

gta Verlag, ETH Zurich
Institute for the History and Theory of
Architecture

Department of Architecture
8093 Zurich, Switzerland
www.verlag.gta.arch.ethz.ch

© Text 2018/2024 by Reto Geiser

© Illustrations: by the image authors and their legal successors; for copyrights, see image credits.

Every reasonable attempt has been made to identify copyright holders. Should any errors or omissions have occurred, please notify us.

Creative Commons License CC BY-NC-ND

ISBN (print) 978-3-85676-377-0

ISBN (PDF) 978-3-85676-488-3

<https://doi.org/10.54872/gta/4883>

The first edition of this publication was kindly supported by

The Graham Foundation for Advanced Studies in the Fine Arts, Chicago

Stiftung Sigfried Giedion, Zurich

Rice University School of Architecture,
Houston

Ulrico Hoepli-Stiftung, Zurich

This title is freely available in an open access edition made possible by generous contributions from the Fondren Library at Rice University.

This open access publication is also available as a printed book
at bookstores or at <https://verlag.gta.arch.ethz.ch>.

Sigfried Giedion, one of modern architecture's main protagonists, only consolidated his reputation far from his native Switzerland—in the United States. Over the course of extended stays in Cambridge, Chicago, and New York, he challenged widely accepted understandings of the role of architectural history, cultivated a new awareness of the expansive potential of multidisciplinary scholarship and teaching, and developed a language that made architectural thinking accessible to broader audiences.

Reto Geiser sheds light on the formative effect of Giedion's time in America. Questioning the unbroken lines of development portrayed in the historiography of modern architecture, Geiser argues that Giedion's position between cultural spheres not only caused ruptures and contradictions in the work Giedion produced but also productively shaped the reception of modern architecture on either side of the Atlantic.

“Giedion and America is an outstanding, original work of scholarship, one that extends our knowledge not only of Giedion but also of twentieth-century architectural history and the role that architectural historians have had in shaping the profession and architecture education.”

—Mary McLeod, Professor of Architecture, Columbia University

“An engaging and meticulous reconstruction of the diverse and robust intellectual design ecology that invigorated and modernized architecture education in the United States, this book unfolds, with great clarity, not only the academic trajectory of Sigfried Giedion but also the networks that influenced his cross-disciplinary teaching and writing on architecture.”

—Rahul Mehrotra, Professor of Urban Design and Planning, Harvard University

“Reto Geiser carefully demonstrates how the position that Sigfried Giedion occupied ‘in between’ European and American contexts guided his search for the historical roots of modern architecture. This deeply researched volume echoes Giedion's unique image-based rhetoric as it presents a trove of previously unpublished material.”

—Dietrich C. Neumann, Professor of the History of Modern Architecture, Brown University

ISBN 976-3-85676-377-0



ETH zürich