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Mies van der Rohe's Zeitwille: Baukunst between Universality and Individuality

Marianna Charitonidou ⓘD

ABSTRACT   The article explores the relationship between *Baukunst* and *Zeitwille* in the practice and pedagogy of Ludwig Mies van der Rohe, and the significance of the notions of civilization and culture for his philosophy of education and design practice. Focusing on the negation of metropolitan life and mise en scene of architectural space as its starting point, it examines how Georg Simmel's notion of objectivity could be related to Mies's understanding of civilization. Its key insight is to recognize that Mie's practice and pedagogy was directed by the idea that architecture should capture the driving force of civilization. The paper also summarizes the foundational concepts of Mies's curriculum in Chicago. It aims to highlight the importance of the notions of *Zeitwille* and impersonality in Mies van der Rohe's thought and to tease apart the tension between the impersonality and the role of the autonomous individual during the modernist era.

Introduction

The article argues that Ludwig Mies van der Rohe's agenda in both design and teaching was based on his conviction that his designs could achieve timeless and universal validity, only if he were able to

capture the specificity of the *Zeitwille*. It explains that Mies's simultaneous interest in impersonality and the autonomous individual is pivotal for understanding the tension between universality and individuality in his thought. The paradox at the center of this article is that while Mies believed in the existence of a universal visual language, he also placed particular emphasis on the role of the autonomous individual in architecture. The article draws upon George Simmel's understanding the relationship between culture and the individual in order to interpret this paradox characterizing Mies's thought.

One of the key principles of modernism was the concept of a universally understandable visual language. In the framework of this endeavor to shape a universal language, many of the modernist architects and theorists, including Sigfried Gideon, Nikolaus Pevsner, and Serge Chermayeff drew upon the work of philosophers such as Oswald Spengler. This article explores Mies's specific perspective on these general ideas common to modernist architects. It analyses his representations of interior spaces, such as those for his Court house projects (c.1934 and c.1938) and the Museum for a Small City project (1941–1943). These interiors shed light on the peculiarities of Mies' approach to modernism's generally accepted concern for universality. Mies's simultaneous interest in individuality and universality was related to Simmel's conception of the binary relationship between "subjective life" and the "its contents".[1]

The article links Mies's representations to Nietzsche's theory and to Simmel's understanding of culture and spirituality. The concept of negation functions as the common denominator that relates the design of Barcelona pavilion to Nietzsche's and Simmel's approaches. The "negativeness" toward the metropolis that characterizes Barcelona pavilion is not far from the "representational living" (*Ausstellungswohnen*) enhanced by the design of Tugendhat House. The "representational living" promoted through the austerity of the design of Tugendhat House had a liberating impact on its inhabitants that goes hand in hand with the "negativeness" toward metropolis characterizing not only the design of Barcelona pavilion, but also in the representations for Court house projects, Resor House project (1939), and the Museum for a Small City project. The liberating force of Mies's representations and designs is linked to his understanding of teaching as an organic unfolding of spiritual and cultural relationship and to his preoccupation with the preservation of every individual's autonomy. Mies's concern about preserving the autonomy of external culture and the social forces of a given historical period echoes Simmel's theory.[2]

Contextualizing Mies van der Rohe's conception of *Zeitwille*
Mies often designed vast open spaces, which represented the universal value of civic life. Mies's interiors were designed with the intention of helping inhabitants to distance themselves from the chaos of the city.

Mies understood *Baukunst* as an action. He considered it to be a result of the *Zeitwille* as it becomes evident in his article entitled "Baukunst und Zeitwille!" published in *Der Querschnitt* in 1924.[3] In this article one can read his famous aphorism "Architecture is the will of time in space." The German and original version of this aphorism is: "Baukunst ist raumgefaßter Zeitwille", while the term *Zeitwille* expresses simultaneously a Schopenhauerian "will of the age" and a "will of time." It would be interesting to juxtapose the notion of *Zeitwille* with that of *Kunstwollen* and *Zeitgeist*. In Maike Oergel's recent study the concept of Zeitgeist is related to the "formation of modern politics." The term is said to "capture key aspects of how ideas are disseminated within societies and across border, providing a way of reading history horizontally".[4] This connection of the Zeitgeist to the intention to disseminate ideas universally could be related to Mies's understanding of universality.

As Hazel Conway and Rowan Roenisch highlight, "[i]n an attempt to establish modernism as the only true style, early twentieth-century historians such as Nikolaus Pevsner and Sigfried Giedion employed the concept of the *Zeitgeist*".[5] Nikolaus Pevsner "interpreted the styles of the past as the inevitable outcome of what he conceived as their social and political Zeitgeist".[6] David Watkin characterizes Mies's conception of *Zeitwille* as a "blend of Lethaby and the *Zeitgeist* into a menacing vision of the depersonalised, secular, mechanistic future".[7] Given that the notion of *Zeitwille* implies a nonstop process of becoming which is inherent in life; a comprehension of architecture as *Zeitwille* implies a perception of architectural representation as a snapshot of a continuous process of transformation. *Zeitwille* implies a state of continuous becoming and a state of action. Mies's understanding of *Baukunst* as *Zeitwille* is characterized by the following ambiguity: on the one hand, it shows that Mies was attracted by man's capacity to convert his spiritual energy into something tangible, such as a building, and, on the other hand, it demonstrates that he was interested in the impact that products of human creation can have on civilization.

Oswald Spengler's work was influential on many modernists.[8] For instance, Oswald Spengler's *Man and Technics: A Contribution to a Philosophy of Life*.[9] had an important impact on Sigfried Giedion's *Mechanization Takes Command: A Contribution to Anonymous History*.[10] The impact of Spengler's work of Mies is of great importance for understanding Mies's conception of *Baukunst* as *Zeitwille*. Spengler declared, in *The Decline of the West*, that "[e]very philosophy is the expression of its own and only its own time." He rejected the distinction "between perishable and imperishable doctrines" and replaces it with the distinction "between doctrines which live their day and doctrines which never live at all." Spengler believed in the capacity of "philosophy [to] […] absorb the entire content of an epoch." For him, the main criterion for evaluating the potential and the eminence of a doctrine was "its necessity to life".[11] In 1959, during his presentation of The Commander's Cross of

the Order of Merit of the Federal Republic of Germany, Mies underscored his conviction that "architecture belongs to an Epoch." He claimed that he believed it would "take fifty more years to clarify the relationship of architecture to the epoch" and that "[t]his will be the business of a new generation".[12] Konrad Wachsmann notes in 1952, in *Arts and Architecture*, regarding the new conception of inhabitants that is implied in Mies's interior perspective views and their relationship to the will of epoch: "Thus he paves the way for anonymous building which will enable sensible solutions of modern problems to be achieved".[13]

Many of his representations that played a significant role in the dissemination of his work were produced in collaboration with Lilly Reich, before his departure to the United States, and in collaboration with his students or his employees after his settlement in Chicago. For instance, given that Lilly Reich and Mies collaborated closely between 1926 and 1938, her role in the design of the Barcelona Pavilion and Tugendhat House should not be underestimated.[14] The tendency of both Mies and Lilly Reich to avoid taking an explicit political position could be interpreted in relation to a generalized stance developed in Germany, since the late nineteenth century, around German Idealism, and especially around the notions of *Bildung* and Kultur.[15] Esther da Costa Meyer relates this unpolitical attitude to Thomas Mann's book entitled *Betrachtungen eines Unpolitischen* [*Reflections of a Non- political Man*] published in 1918.[16] Acknowledging Reich's role is useful for placing Mies's work within a broader cultural context. Mies's simultaneous interest in impersonality and the autonomous individual should be understood in relation to the perspectives that were at center of architectural and artistic debates in Germany at the time.

The ambiguity of Mies van der Rohe's simultaneous interest in impersonality and the autonomous individual

Central for Mies's work was the phenomenon of inhabitants distancing themselves from the chaos of the city, which is a particular effect of his interiors. This trait of his interiors should be associated with his belief in the autonomous individual and his conviction that in "town and city living [...] privacy is a very important requirement".[17] Mies's interiors function as fields within which the subjects are autonomous individuals, and as mechanisms permitting to overcome the tension – characterizing the modern metropolis – between the frenetic city and the private bourgeois dwelling. They could be perceived as indoor fragments of the metropolis. The way he represented his interiors, blending linear perspective and photomontage, intensifies the sensation of leaving behind the chaos of the metropolis.

Mies privileged the use of perspective as mode of representation, despite his predilection for the avant-garde, anti-subjectivist tendencies, which rejected the use of perspective and favored the use of axonometric representation or other modes opposed to the assumptions of

perspective. Mies used perspective as his main visualizing tool against the declared preference of *De Stijl*, El Lissitzky and Bauhaus's for axonometric representation. However, many of his perspective drawings were based on the distortion of certain conventions of perspective. Mies van der Rohe, despite the fact that he preferred objectivity, he did not privilege axonometric projection.

In "The Preconditions of Architectural Work" (1928), Mies claims that "[t]he act of the autonomous individual becomes ever more important".[18] As Robin Schuldenfrei notes, the "phenomenon, of the inhabitant set apart from his surroundings, was a particular effect of Mies's interiors".[19] Schuldenfrei associates this aspect of Mies's way of representing interiors with his belief "in the autonomous individual".[20] The place of the "autonomous individual" in Mies's thought is an aspect that needs to be examined attentively, if we wish to understand the ambiguity between universality and individuality in his thought. Mies gives credence to the acts of the autonomous individual, but mistrusts the endeavor to "express individuality in architecture", as is evident when he affirms that "[t]o try to express individuality in architecture is a complete misunderstanding of the problem".[21]

For Mies, individuality and autonomous individual are two different things. The way Kant and Nietzsche conceive the notion of autonomous individual is pivotal for understanding the distinction between individuality and autonomous individual in Mies's thought. Nietzsche, while appropriating Kant's notion of autonomy, rejects "its link to the categorical imperative and the 'formal constraints' interpretation of morality".[22] In order to understand the differences between Kant's and Nietzsche's conception of the autonomous individual, we could juxtapose the Kantian rule "act always according to that maxim whose universality as a law you can at the same time will"[23] to the Nietzschean rule "act always according to that maxim you can at the same time will as eternally returning."

Deleuze notes regarding the conception of "sovereign" or "autonomous" individual, in Nietzsche's second essay contained in his book entitled *On the Genealogy of Morals*, that it is "liberated [...] from morality of customs, autonomous and supramoral (for 'autonomous' and 'moral' are mutually exclusive), in short, the man who has his own independent, protracted will".[24] Deleuze's claim that "[i]n Nietzsche [...] the autonomous individual is [simultaneously] [...] the author and the actor"[25] relates to Mies's idea of the autonomous individual. We could claim that Mies was favorable toward acts that were expressions of autonomous individuals but negative toward individual means.

The individual's autonomy preoccupied not only Mies, but Georg Simmel as well. This common interest between Mies and Simmel's ideas is significant for understanding the differences between the concept of autonomous individual and that of individual means. Simmel introduced "The Metropolis and Mental Life" with the following phrase: "The deepest

problems of modern life derive from the claim of the individual to preserve the autonomy and individuality of his existence in the face of overwhelming social forces, of historical heritage, of external culture, and of the technique of life."[26] Mies's concern about the autonomous individual is related to his modes of representation, in the sense that his visualization strategies provoked a specific perception of his interiors.

Baukunst as Zeitwille and the dualism between object and culture

Mies's understanding of *Baukunst* as *Zeitwille* should be understood in relation to his interest in man's capacity to convert his spiritual energy into something tangible, such as a building. In parallel, he was interested in the impact that products of human creation can have on civilization. This is very close to the binary relationship between "subjective life" and the "its contents", as described by Simmel, in "On the Concept and the Tragedy of Culture", where the author examines the "radical contrast: between subjective life, which is restless but finite in time, and its contents, which, once they are created, are fixed but timelessly valid".[27]

Simmel also analyses how culture can help us resolve the dualism between object and culture. Mies's insistence on the importance of the understanding of architectural praxis as an expression of civilization and the fact that he perceived architecture as an act in "the realm of significance"[28] are compatible with Simmel's theory. Mies until his late days believed that "architecture must stem from sustaining and driving forces of civilisation."[29] He was convinced that if the architect, during the procedure of concretizing his ideas, manages to capture the "driving forces of civilization" and convert them into a space assemblage through the process of *Baukunst*, then the products of human intellect – the architectural artifacts – can acquire a universally and timelessly valid effect on the human intellect. For Mies, in order to achieve this timeless and universal validity, the architect had to grasp the specificity of the *Zeitwille*.

Georg Simmel examines the notion of objectivity in "On the Concept and the Tragedy of Culture", where he associates the "potentialities of the objective spirit" with the fact that it "possesses an independent validity." He claims that this independent validity makes possible its re-subjectivisation after "its successful objectification." For him, the wealth of the concept of culture "consists in the fact that objective phenomena are included in the process of development of subjects, as ways or means, without, thereby losing their objectivity".[30] We could argue that Mies understands *Baukunst* as an objective means, believing that only if *Baukunst* is based on objectifiable, impersonal and generalizable processes can it allow the subject to appreciate their visual interaction with the built artifact. Mies, in "Baukunst und Zeitwille", associates *Zeitwille* with impersonality, declaring: "These buildings are by their very nature totally impersonal. They are our representatives of the will of the epoch. This is their significance. Only so could they become

symbols of their time." He also affirms: "The building-art can only be unlocked from a spiritual centre and can only be understood as a life process".[31] Mies insisted on the fact that his way differed from any kind of individualistic approach, saying: "I go a different way. I am trying to go an objective way."[32]

A characteristic of the concept of *Zeitwille* that should not be overlooked is the fact that it is always in a state of becoming. The process of *Baukunst* is, thus, perceived by Mies as being in a permanent state of becoming and, for this reason, is conceived as a crystallization of an epoch. Mies declares in "Bürohaus", published in the first issue of the journal *G*:

> We reject every aesthetic speculation, every doctrine, and every formalism.
> The art of building is the will of our time captured in space.
> Living. Changing. New.
> Not yesterday, not tomorrow, only today can be formed.
> Only this practice of building gives form.
> Create the form from the nature of the task with the means of our time.
> That is our task.[33] (Figure 1)

Mies's interest in impersonality should also be related to his belief in the significance of anonymity. In "Baukunst und Zeitwille", he remarks:

> The individual is losing significance; his destiny is no longer what interests us. The decisive achievements in all fields are impersonal and their authors are for the most part unknown. They are part of a trend of our time towards anonymity[34]

Mies often referred to the following quotation of Erwin Schrödinger: "But the creative vigour of a general principle depends precisely on its generality."[35] This quotation brings to mind Mies's remark, in "Baukunst und Zeitwille", that "[t]he decisive achievements in all fields are impersonal and their authors are for the most part unknown".[36] Mies related the idea of innovation to impersonality and insisted on the fact that the notion of renewal in any discipline is "part of the trend of […] time toward anonymity."[37]

Mies's interest in anonymity and impersonality should be contextualized given that it was at the center of the discourse developed around *G: Material zur elementaren Gestaltung*. Two artists that were particularly interested in these two notions are Hans Richter and Werner Gräff, who declared in the first issue of the journal: "Today the trend of both artsiness and of life is individualistic and emotional. Operating methodically and impersonally is a cultural challenge today".[38] They opposed individualistic stance to culture, claiming that in order to

Kunst soll das Leben nicht erklären, sondern verändern K. Marx

Top film strip captions:
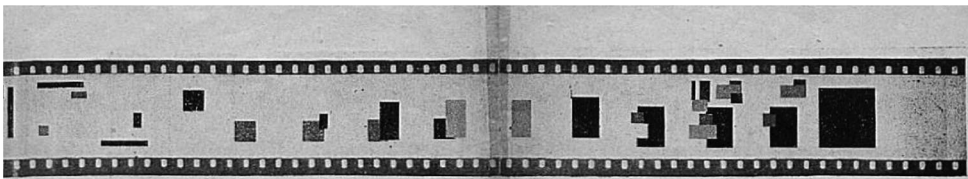
a an Größe und Intensität abnehmend, seitlich verschwindend

Halt

b in Lage und Intensität wechselnd, beginnt das neue Thema: Bewegung zweier Lichtqualitäten gegeneinander (Bewegung einer „Fläche" vor und hinter einer feststehenden Fläche

Anwachsen der vorderen Fläche

Schwinden der untere(n) Fläche

Halt !!!

Zusammenfassen aller Vorgänge in einem

Schluß. Größte Licht-Menge und -Intensität

Hans Richter

---

gabemöglichkeit mit Hilfe eines kleinen Kondensatormikrophons. Der wissenschaftliche Nachweis, daß sogar weit kleinere Kapazitätsänderungen, als sie der Film erwarten läßt, für die deutliche Wiedergabe ausreichen, wurde 1920 durch einen kleinen Cylinderkondensatorfühler erbracht.

Aber vom sprechenden Film zur Optophonetik ist noch ein großer Schritt. Als erster hat der Erfinder des Antiphons, Plenner, in einer Schrift „Die Zukunft des elektrischen Fernsehers" diese Frage behandelt. Er sagt darin: „Kann der Lichtstrahl gezwungen werden, (mittels einer Selenzelle) Induktionsströme zu erzeugen oder zu verändern, so muß ein in die Leitung geschaltetes Hörtelefon solche induzierten Erscheinungen in Klänge verwandeln. Was also in der Empfangsstation als Bild eintritt, würde im Zwischenapparat als Ton erscheinen und wenn am Ursprung bewegte Bilder, sichtbare Vorgänge, aufgenommen werden, so müssen sich diese als eine Folge von Tönen kundgeben, und umgekehrt. Die Gestalt eines Vierecks muß bei akustischer Verwandlung ein anderes Tonbild hervorrufen, als das von einem Dreieck oder Kreis genommene, ein Würfel muß anders klingen als ein Kegel oder Prisma. Kristalle und Sterne werden zu reden beginnen, in welcher Sprache, in welchem Tongefäll? Das liegt noch gänzlich im Felde der Ahnung, aber aus dem Nichtwissen wird dereinst das Verstehen aufsteigen."

Nun liegt dieser Vorstellung, wie auch dem Tonbildfilm, ein Naturalismus zugrunde, um den es sich für uns heute keineswegs mehr handeln kann. Daß die Musik in ihrer letzten Form (auch die der Futuristen) unserer Weltbewußtheit nicht mehr entspricht, so wie ihr die akustische Malerei nicht mehr entspricht, ist eine unleugbare Tatsache. Wir müssen also neue, für uns gültige Gesetze, eine neue Funktionalität für beide finden. Wir müssen die Zugehörigkeit der Formfunktionalität zu den Schwingungsintensitäten in eine grundlegende Weise ermitteln, um über das Zufällige zu einer neuen Formverbindlichkeit zu gelangen.

Berlin R. Hausmann

Dieser Film hat das Character einer gewaltenden Demonstration, in der bestimmte elementare Stimmungselemente elementar entfaltet werden. Das Auftreten der einzelnen Figuren und Filmgruppen ist entscheidend.

Die Lichtverhältnisse haben qualitativen und quantitativen Character: Helligkeitsunterschiede, Flächenunterschiede etc.

Die differenzierten Flächen sind de facto Begrenzungen von Vorgängen in verschiedenen Dimensionen (oder von Dimensionen in verschiedener Zeitfolge).

Die Linie dient zur Begrenzung bei Flächenvorgängen (als Material der Flächenbegrenzung) oder als Begrenzung von Raumvorgängen.

Die Linie, die genügend kleine Fläche, Fläche, und Quadrat (als einfachste und ökonomischste Form der Begrenzung)

— sind Hilfsmittel.

Das eigentliche Konstruktionsmittel ist das Licht, dessen Intensität und Menge. Die Gestaltung der Lichtmittel im Sinne einer zusammenfassenden Ausschließlichkeit ist die Aufgabe für das Ganze.

Dieser Film ist also prinzipiell nicht ein solcher, der das □ und die □ und die ▢ als Kompositionsmittel gebraucht — etwa orchestriert und entwickelt —, sondern ein solcher, der die Lichtintensität, als das Element, aus dem □ entstehen, — die „Form" (ob abstrakt oder natürlich) — ist vermeiden.

Schließlich die mittelbaren Formen sind weder Analogien noch Symbole, noch oder natürlich) — ist vermeiden.

Der Film vermittelt in seinem Ablauf (Vorführung) ganz eigentlich die Spannungs- und Kontrastverhältnisse des Lichts. Diese Verhältnisse bestehen zwischen hell und dunkel, groß und klein, schnell und langsam, horizontal und vertikal etc. etc.

Es ist versucht, den Film so zu organisieren, daß die stärkeren Teile untereinander die größten Centren in aktiver Spannung stehen, sodaß das Ganze in sich geistig beweglich bleibt.
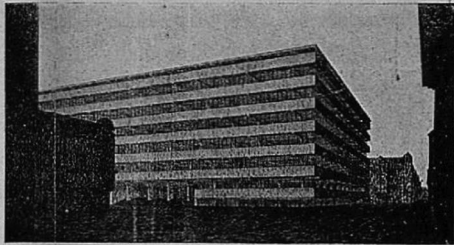
Berlin

Jede ästhetische Spekulation,
jede Doktrin,
und jeden Formalismus } lehnen wir ab.

Baukunst ist raumgefaßter Zeitwille.
Lebendig. Wechselnd. Neu.

Nicht das Gestern, nicht das Morgen, nur das Heute ist formbar.
Nur dieses Bauen gestaltet.

Gestaltet die Form aus dem Wesen der Aufgabe mit den Mitteln unserer Zeit.

Das ist unsere Arbeit.

BÜROHAUS

Das Bürohaus ist ein Haus der Arbeit der Organisation der Klarheit der Ökonomie. Helle weite Arbeitsräume, übersichtlich, ungeteilt, nur gegliedert wie der Organismus des Betriebes. Größter Effekt mit geringstem Aufwand an Mitteln.

Die Materialien sind Beton Eisen Glas.

Eisenbetonbauten sind ihrem Wesen nach Skelettbauten. Keine Teigwaren noch Panzertürme. Bei tragender Binderkonstruktion eine nichttragende Wand. Also Haut- und Knochenbauten.

Die zweckmäßigste Einteilung der Arbeitsplätze war für die Raumtiefe maßgebend; diese beträgt 16 m. Ein zweistieliger Rahmen von 8 m Spannweite mit beiderseitiger Konsolauskragung von 4 m Länge wurde als das ökonomischste Konstruktionsprinzip ermittelt. Die Binderentfernung beträgt 5 m. Dieses Bindersystem trägt die Deckenplatte, die am Ende der Kragarme senkrecht hochgewinkelt Außenhaut wird und als Rückwand der Regale dient, die aus dem Rauminnern der Übersichtlichkeit wegen in die Außenwände verlegt wurden. Über den 2 m hohen Regalen liegt ein bis zur Decke reichendes durchlaufendes Fensterband.

Berlin, Mai 1923

Mies v. d. Rohe

Figure 1
Page from Ludwig Mies van der Rohe, "Bürohaus", *G*, 1 (1923), 3.

contribute to culture creative processes should be impersonal. In the same text, they also refer to the "will to solve the problem of art not from an aestheticizing standpoint but from a general cultural one".[39]

The individual will or intention is peripheral to Mies's approach since his main concern seems to be the conception of a system that organizes an environment of changes toward progress. Fritz Neumeyer notes, in "A World in Itself: Architecture and Technology", that for Mies, "the merging of technology and esthetic modernism embodied the promise of a culture suited to the age, one in which form and construction, individual expression and the demands of the times, as well as subjective and objective values would converge into a new identity".[40]

Mies van der Rohe's representations: non-resolved emptiness as "negativeness" toward *Großstadt*

The representations that Mies van der Rohe produced for his Court house projects, Resor House project, and the Museum for a Small City project combine the techniques of collage and linear perspective. This combination of collage and linear perspective, the use of grid only in the ground floor, and the absence of frame around the representation intensify the effect of depth in the perception of the observer.[41] They provoke a sensation of extension, which is further reinforced by his choice to place the artworks and surfaces in a dispersed way. Additionally, the lines of the spatial arrangements are less visible than the objects, artworks and statues represented in his architectural representations. The impact of these techniques on the perception of the observers is intensified by the minimal expression of Mies's representation, pushing the observers of Mies's representations to imagine their movement through space. The contrast between the discrete symmetrical fond with the grid and the nonsymmetrical organization of the intense surfaces and artworks that are placed on it activates a non-unitary sensation in the way the observers perceive the Mies's drawings. This non-unitary sensation is in opposition to the unitary dimension of Erwin Panofsky's understanding of perspective. Mies overcame Panofsky's conception of the linear perspective apparatus as a "Will to Unification".[42] The representational ambiguity provoked by Mies's visualization strategies provokes a non-possibility to take the distance that is inherent in the use of perspective.[43]

The stagelike experience of Mies's interiors is related to a specific attitude of the inhabitant toward the metropolis.[44] Manfredo Tafuri related Mies's interiors to a "negativeness" toward the metropolis, which brings to mind what Georg Simmel called "blasé attitude" in "The Metropolis and Mental Life".[45] The reinvention of spatial experience through the movement of users is a characteristic of the Barcelona Pavilion. Tafuri drew a parallel between the visitors' experience in Mies's Barcelona Pavilion and stage experience. He related the

experience of moving in Barcelona Pavilion to Adolphe Appia's understanding of the effect of rhythmic geometries on how space is perceived and experienced.[46] The *mise en scène* of a stagelike experience by Mies in the Barcelona Pavilion activates a specific kind of perception of the relation between the spatial experience of the interior of the Barcelona Pavilion and the city. Mandredo Tafuri shed light on the sensation of "the impossibility of restoring 'syntheses'" provoked by the perception of the interior of the Barcelona Pavilion as an "empty place of absence".[47] This sensation is related to a specific kind of "negativeness" toward the metropolis that could be interpreted as a *mise en suspension* of the synthesis or suspended perception. It brings to mind Robin Evans' remark that in the case of Mies's Barcelona Pavilion "[t]he elements are assembled, but not held together",[48] and Hubert Damisch's claim that, in Mies' Barcelona Pavilion, "circulation […] was more visual than pedestrian".[49] This distinction between visual and pedestrian circulation is useful for comparing Mies's conception of circulation, which is more visual than pedestrian, to that of Le Corbusier that is simultaneously visual and pedestrian.

Tafuri analyses the effect of non-resolved emptiness of space produced by Mies's Barcelona Pavilion, noting: "In the absolute silence, the audience at the Barcelona Pavilion can thus 'be reintegrated' with that absence".[50] Mies avoided representing human figures in his interior perspective representations, especially during the first decade after he moved to the United States. The fact that Mies preferred the observers of his images and the users of his spaces not to meet other people while they mentally visualized or physically experienced his spaces shows that he prioritized the solitary experience of space. This choice reinforced that sensation of meditation and of taking distance from the chaotic rhythms of metropolitan life. Walter Riezler juxtaposed the experience based on a conception of the house as a "living machine" ("machine à habiter"), as defined by Le Corbusier, with the experience of the interior space of Mies's Villa Tugendhat, noting:

> no one can escape from the impression of a particular, highly developed spirituality, which reigns in these rooms, a spirituality of a new kind, however, tied to the present in particular ways and which is entirely different therefore from the spirit that one might encounter in spaces of earlier epochs … This is not a "machine for living in", but a house of true "luxury", which means that it serves highly elevated needs, and does not cater to some "thrifty", somehow limited life style.[51]

Regarding the Barcelona Pavilion, Mies held the following claim: "I must say that it was the most difficult work which ever confronted me, because I was my own client; I could do what I liked."[52] Frank Lloyd

Wright, in a letter he sent to Mies in 1947, wrote: "the Barcelona Pavilion was your best contribution to the original 'Negation'".[53] Mies responded to this letter telling Wright: "About "Negation" – I feel that you use this word for qualities that I find positive and essential"[54] (Figure 2). The "original 'Negation'" to which Wright refers in his letter is related to the fact that the Barcelona Pavilion constitutes a reaction "against both classical and modern [...] simultaneously and *in extremis*",[55] as Robin Evans suggests. The aforementioned exchange between Frank Lloyd Wright and Mies van der Rohe should be interpreted with the context of the theoretical debates of the modernist architects as far as the relationship between modern society and urbanism is concerned.

Through the design of the Barcelona Pavilion Mies expressed his rejection of both symmetry and asymmetry. Tafuri, analyzing this building, refers to the "'negativeness' toward metropolis" and interprets its "'signs' as devoid of meaning".[56] Wright's comment on the contribution of Mies's Pavilion "to the original 'Negation'" and Tafuri's remark regarding the "negativenesss" of Mies's stance toward metropolis might seem an oxymoron if we think that "[t]he Elementary design proclaimed by the Berlin circle around Mies, Ludwig Hilberseimer and Hans Richter outwardly promoted an unconditionally affirmative, yes-saying attitude toward reality".[57].The "negativeness" toward metropolis and the phenomenon of claustrophobia are apparent in Mies's collages for the Resor House project.[58]

Evans notes, in "Mies Van Der Rohe's Paradoxical Symmetries": "The problem is that we are being offered two extreme options: either the vertigo of universal extension, or the claustrophobia of living in a crack".[59] The claustrophobic aspect of Mies's representations could be related to the concept of *Berührungsangst* in Simmel's work. The dimension of *Berührungsangst* in Mies's representations is intensified during the first years of his life in the United States. Simmel's understanding of *Berührungsangst* as the fear for public spaces could be related to claustrophobic aspect of Mies's representations. Analyzing the relationship between Simmel's approach and Mies's design strategies is useful for understanding the fact that Mies did not design alone in a vacuum, but was responding to a cultural moment and others were responding to him. In this sense, Mies was part of a particular sensibility. A distinction that is important for understanding the vision of Mies is that between the dialectic of Enlightenment and the dialectic of Romanticism, which is analyzed by Peter Murphy and David Roberts in *Dialectic of* Romanticism.[60]

Mies's *Baukunst* as an antidote to the chaos of metropolis
For Mies, *Baukunst* functioned as an antidote to the complexity and the chaos of metropolis. The way he used glass in his architecture should also be understood in relation to his intention to respond to the chaos of metropolis. Characteristically, Francesco Dal Co and Manfredo Tafuri note in *Modern Architecture* regarding the role of glass in Mies's work:

November 25th,

1947.

My dear Frank:

Thank you so much for your letter.

It was an exaggeration if you heard that my feelings

were hurt by your remarks at my New York show.

If I had heard the crack " Much ado about next - to -

nothing " I would have laughed with you. About " Negation "

- I feel that you use this word for qualities that I find

positive and essential.

It would be a pleasure to see you again sometime in

Wisconsin and discuss this subject further.

As ever

Mr. Frank Lloyd Wright.
Taliesin.
Spring Green, Wisc.

Figure 2
Ludwig Mies van der Rohe, letter to Frank Lloyd Wright, 25 November 1947. Credits: Ludwig Mies van der Rohe papers, Box 60, Folder "Wright, Frank Lloyd 1944–1969." Manuscripts Division, Library of Congress, Washington, DC.

But the perfectly homogeneous, broad glassed expanse is also a mirror in the literal sense: the "almost nothing" has become a "large glass," although imprinted not with the hermetic surrealist ploys of Duchamp, but reflecting images of the urban chaos that surrounds the timeless Miesian purity.[61]

Francesco Dal Co associated Mies's approach to Nietzsche's "Beyond Good and Evil",[62] relating the conflict between the *arete* (αρετη) of *operari* and its historical determination in Nietzsche's thought to the tension between architecture and *Baukunst* in Mies's approach. Mies understood *Baukunst* as an expression of spirit and "[a]rchitecture [as] [...] the real battleground of the spirit"[63] (Figure 3), and elaborated the term *Baukunst* to capture the practice of building as a spiritualized art.[64] Useful for grasping Mies's understanding of spirituality is Simmel's remark that "the subjective spirit has to leave its subjectivity, but not its spirituality, in order to experience the object as a medium for cultivation".[65] This thesis of Simmel brings to mind Mies van der Rohe's conviction that the architectural artifacts and the ideals that are intrinsically linked to them can acquire a universally valid status only if
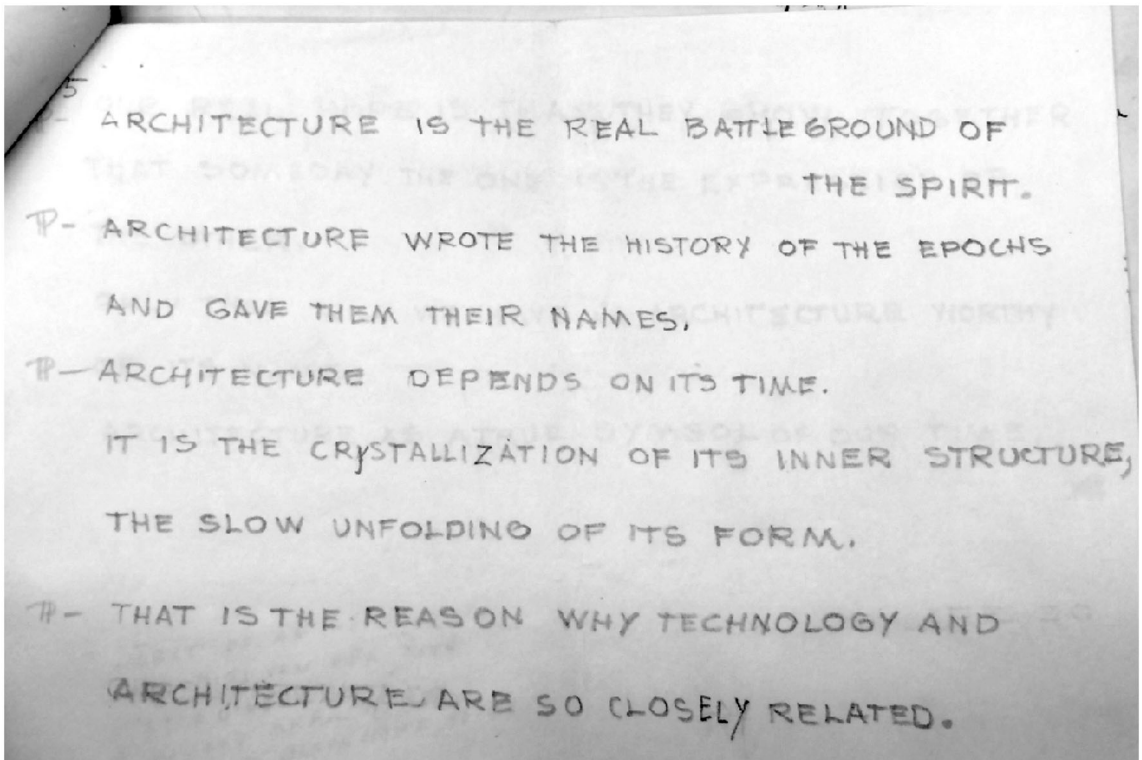

Figure 3
Ludwig Mies van der Rohe's notes for his speeches. Credits: Ludwig Mies van der Rohe papers, Box 61, Folder "Mies drafts for speeches, Speeches, Articles and other Writings", Manuscripts division, Library of Congress, Washington, DC.

their creation is based on the metamorphosis their concepts into something tangible as their architecture.

Franz Schulze and Edward Windhorst's argument that Mies "was [...] bound up with the esthetic, with art, [...] with architecture, but it took on an elevated quality that reached fully to the divine"[66] can help us understand how Mies understood the notion of *Baukunst*. Mies was interested in form as starting-point and not as result. In the second issue of *G: Material zur elementaren Gestaltung* (*G: Material for Elementary Construction*, published in September 1923, Mies wrote, in "Bauen" ("Building"):

> We refuse to recognise problems of form but only problems of building
> Form is not the aim of our work, but only the result.
> Form, by itself, does not exist.
> Form as an aim is formalism, and that we reject ...
> Essentially our task is to free the practice of building from the control of aesthetic speculators and restore it to what it should exclusively be: Building.[67]

Mies insisted on the fact that for him the most significant phase of the design process was the "starting point of the form-giving process." He associated the significance of the starting point of architectural design process to life. He distinguished two types of architectural forms: those that derive from life and those do not derive from life. This becomes evident from what he wrote in a letter he sent to Walt Riezler: "We want to open ourselves to life and seize it. Life is what matters in all the fullness of its spiritual and concrete relations. We do not value the result but the starting point of the form-giving process. It in particular reveals whether form was arrived at from the direction of life or for its own sake".[68]

Representational living and the capacity of space to stimulate the intellect

The concept of representational living is pivotal for understanding Mies' interiors. Representational living was linked to the cultural criticism of Walter Benjamin as well as the architecture of Adolf Loos. Walter Riezler's article in *Die Form* provoked the reactions of Justus Bier, Roger Ginsburger and Grete and Fritz Tugendhat, who also published articles commenting on the same building in the same journal.[69] What these exchanges reveal is that Mies's Villa Tugendhat activated a new mode of inhabiting domestic space. Bier, in his provocative article entitled "Can one live in the Tugendhat House?" ("Kann man im Haus Tugendhat wohnen?") associated the living experience in the Villa Tugendhat with an "ostentatious living" (*Paradewohnen*) and a "representational living" (*Ausstellungswohnen*). According to him, the special characteristic of this new mode of inhabitation was its capacity "to lead a kind of

representational living and eventually overwhelm the inhabitants' real lives".[70] Grete and Fritz Tugendhat, Mies's clients and first inhabitants of the house, responded to Bier and Ginsburger's critiques, asserting that their experience of the spaces of the Tugendhat house was "overwhelming but in a liberating sense." They related the liberating force of the space of the house to its austerity, claiming that "[t]his austerity makes it impossible to spend your time just relaxing and letting yourself go, and it is precisely this being forced to do something else which people, exhausted and left empty by their working lives, need and find liberating today."[71] Useful for understanding the place of dweller in Mies's thought is the work of Hans Prinzhorn.[72] The fact that the two men were friends should also be taken into account.

We can juxtapose the concept of the "machine for living in" ("machine à habiter") in Le Corbusier's thought and that of the "meditating machine" ("machine à méditer") in Mies's approach, drawing upon Richard Padovan's "Machine à Méditer", where the author claims that Mies desired to convert buildings into objects of meditation.[73] The following words of Mies confirm his desire to create objects that pushed him to think and to further activate his intellect: "I want to examine my thoughts in action … . I want to do something in order to be able to think."[74] One could relate the "representational living" to Mies's desire concerning the capacity of space to further stimulate the intellect through action. The attention that Mies paid to the intellect becomes evident in an interview he gave to some students of the School of Design of North Carolina State College, in 1952: "The shock is emotional but the projection into reality is by the intellect".[75]

Teaching as an organic unfolding of spiritual and cultural relationships
Mies's ideas about the autonomous individual and timeless architecture had an important impact on his conception of architectural education. This is evident in a letter from Mies to Henry T. Heald in December 1937, in which Mies claimed that the curriculum he proposed "through its systematic structure leads an organic unfolding of spiritual and cultural relationships".[76] In the same letter, he also declared that "[c]ulture as the harmonious relationship of man with his environment and architecture as the necessary manifestation of this relationship is the meaning and goal of the course of studies".[77] This quotation makes the importance of culture for his pedagogical agenda clear (Figure 4). He continued writing:

> The accompanying program is the unfolding of this plan.
> Step I is an investigation into the nature of materials and their truthful expression. Step II teaches the nature of functions and their truthful fulfilment. Step III: on the basis of these technical and utilitarian studies begins the actual creative work in architecture[78]

Mies's curriculum at the Department of Architecture of the Armor Institute of Technology, which would be renamed Illinois Institute of

Technology (IIT), moved from "Means" to "Purposes" to "Planning and Creating", placing particular emphasis on the different successive phases of the pedagogical process, and the significance that the notions of civilization, culture and *Zeitwille* Figure 5 and Figure 6. Mies divided the curriculum into three main progressive stages, that would be preceded by a short period of "preparatory training." This was influenced by the
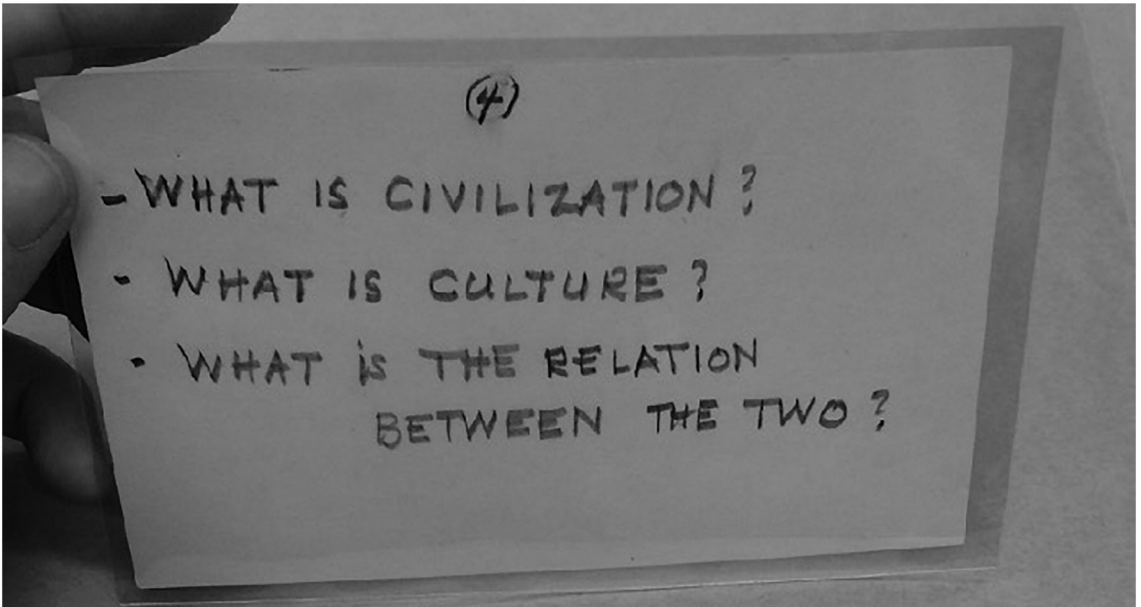

Figure 4
Ludwig Mies van der Rohe's notes for his speeches. Credits: Ludwig Mies van der Rohe papers, Box 61, Folder "Mies drafts for speeches, Speeches, Articles and other Writings", Manuscripts division, Library of Congress, Washington, DC.

Figure 5
Program for Architectural Education, Illinois Institute of Technology, 1938. Courtesy of Brenner Danforth Rockwell.

Figure 6
Ludwig Mies van der Rohe with his students at IIT discussing some problems they have come up in their individual projects. While emphasizing fundamental principles of architecture, he reminds them that "God is in the details." Photograph taken by Frank Scherschel on 1 November 1956. Credit: Getty Images.

so-called *Vorkurs*, the preliminary course at the Bauhaus. For Mies, the main components of "preparatory training" would be mathematics, natural sciences and drawing. In parallel, he considered that the main objective of the preparatory training would be "to teach the students to draw, to see proportions and to understand the rudiments of physics before starting the study of structural means".[79]

Walter Peterhans, who used to teach photography courses at the Bauhaus and was invited by Mies to join the faculty of the Department of Architecture of the Armor Institute of Technology, started teaching the "Visual Training" course there in 1938. He placed particular emphasis on

the role of visual perception for architectural practice. Mies, in "Program for Architectural Education", commented on the logic of the "Visual Training" course. He believed that the "Visual Training" course served "to train the eye and sense of design and to foster esthetic appreciation in the world of proportions, forms, colors, textures and spaces".[80] In parallel, he prioritized "visual training" over freehand drawing. For him, "visual training" was "indispensable as a means of recording an idea", while freehand drawing should be understood as "a means of fostering insight and stimulating ideas".[81] Mies described the philosophy of the "Visual Training" course as follows:

> Visual Training is a course which serves to train the eye and sense of design and to foster aesthetic appreciation in the world of proportions, forms, colors, textures and spaces. We attach incomparably more importance to visual training than freehand drawing or drawing from nude. Sketching is indispensable as a means of recording an idea, clarifying it and communicating to others; but as a means of fostering insight and stimulating ideas visual training has quickly shown itself to be a greatly superior method since it begins as a deeper level in training the eye for architecture[82]

Undoubtedly, the strategies employed in the *Vorkurs* at the Bauhaus constitute the precedents for the exercises given to the students in the framework of the "Visual Training" course. According to Peterhans, who taught this course, "Visual Training [...] [was] a [...] conscious education for seeing and forming, for esthetic experience in the world of proportion, shape, color, texture, space".[83] Its philosophy was based on the conviction that sensory knowledge can be a path to insight. What is of particular interest for this paper is the fact that the innovative quality of the "Visual Training" course taught by Peterhans lay in his intention to reconcile esthetic and scientific perspectives instead of prioritizing one over the other. Another distinctive characteristic of the didactic vision behind "Visual Training" is the fact that it treated the students' own work as its main material. Thus, students were invited to sharpen their visual perception on their own artefactual products, and not on preexisting cases or works of major architects that already occupied an important position within architectural epistemology.

In a letter that accompanied the "Explanation of the Educational Program" (Figure 7), which Mies sent to Henry T. Heald on 31 March 1938, he wrote: "I lay special worth upon the sharpening of the powers of observation and the development of the capacity to create imaginatively as well as a general control of the quality of the students' work by photographic methods".[84] Mies believed that the teaching of "Visual Training" by Peterhans could serve this purpose.

EXPLANATION OF THE EDUCATIONAL PROGRAM

The goal of an Architectural School is to train men who can create organic architecture.

Such men must be able to design structures constructed of modern technical means to serve the specific requirements of existing society. They must also be able to bring these structures within the sphere of art by ordering and proportioning them in relation to their functions, and forming them to express the means employed, the purposes served, and the spirit of the times.

In order to accomplish this, these men must not only be trained in the essentials of construction, professional knowledge and in the creation of architectural form, but they must also develop a realistic insight into the material and spiritual needs of their contemporaries, so that they may be able to create architecture which fittingly fulfills these needs.

Finally, they must be given the opportunity to acquire a basic architectural philosophy and fundamental creative principles which will guide them in their task of creating living architecture.

The accompanying program is intended to provide an education which achieves this purpose.

The period of study is divided into three main progressive stages, namely: MEANS, PURPOSES, and PLANNING AND CREATING, with a short period of preparatory training.

Parallel and complementary to this creative education, general theory and professional training will be studied. The subjects in these latter two divisions will be timed to prepare the students for each successive step in his creative development.

Work in mathematics, the natural sciences, and drawing, in these two divisions will be begun before the principal course of study begins. This is the preparatory training referred to above and is indicated on the program by raising these subjects in the two columns at the extreme left of the program in advance of all other subjects. This preparatory training is to teach the students to draw, to see proportions and to understand the rudiments of physics before starting the study of structural means.

Figure 7
Ludwig Mies van der Rohe, Explanation of the Educational Program sent to Henry T. Heald on 31 March 1938. Credits: Ludwig Mies van der Rohe papers, BOX 5. Manuscripts division, Library of Congress, Washington, DC.

The "means" were divided into material, construction and form. Informative for understanding the philosophy of not only the "preparatory training", but also of the whole educational programme that Mies suggested as newly-appointed Director of the Armor Institute of Technology is what he called "General theory", which included the six following sub-categories: mathematics and natural sciences, the nature of man, the nature of human society, analysis of technics, analysis of culture, and culture as obligatory task. Mies's curriculum was based on the idea that during the first phase of education, the students should focus on the development of their "drawing ability and visual perception, progressing through Construction as an understanding of principles, acquiring the technical knowledge of related Engineering and studying Function as a way of understanding problems and building types".[85] Therefore, during the first three years the pedagogical agenda was concentrated on the sharpening of visual and spatial perception, while the last two years of education were conceived as serving to enhance the synthesis of the skills acquired previously.

Central for his teaching and design strategy was the relationship between culture and civilization. Mies's hostility toward subjectivity in art is characterized by a paradox: despite his rejection of individualized esthetics, he asserts in the first issue of the journal *G* that "we need an inner order of our existence".[86] This inner order of our existence, which Mies refers at the same moment that he rejects individualized esthetics, reveals the paradoxical relationship between subjectivity and objectivity as Simmel describes it. An aspect of Simmel's approach, which reveals its affinities with Mies's point view, is the concern about the double gesture of the "objectivization of the subject and the subjectivization of the object", in *Philosophie der* Kultur.[87] This connection between Simmel and Mie's perspective is further legitimized by the fact that Mies owned Simmel's *Philosophie der Kultur*. Mies van der Rohe poses the following questions: "What is civilization? What is culture? What is the relation between the two?"[88] The distinction between civilization and culture was at the center of Oswald Spengler's thought, as it becomes evident in his following words:

> Civilization is the ultimate destiny of the Culture … Civilizations are the most external and artificial states of which a species of developed humanity is capable. They are a conclusion, the thing-become succeeding the thing-becoming, death following life, rigidity following expansion … petrifying world-city following mother-earth and the spiritual childhood[89]

Conclusions

For Mies, clarity was important not only in terms of its application to the design process, but for pedagogy as well. This becomes evident from

what he declared in his inaugural address as Director of Architecture at Armor Institute of Technology, in 1938, in which he underscored the significance of "rational clarity" for education. More specifically, he declared that "[e]ducation must lead us from irresponsible opinion to true responsible judgment." His pedagogical vision was characterized by the intention to replace "chance and arbitrariness" with "rational clarity and intellectual order." [90] A meeting point between Mies's design approach and his teaching philosophy is the interest in promoting clarity. He understood teaching as a means for clarifying his ideas. This becomes evident in what he declared a year before his death, in January 1968:

> Teaching forced me to clarify my architectural Ideas. The work made it possible to test their validity. Teaching and working have convinced me, above all, of the need for clarity in thought and action. Without clarity, there can be no understanding. And without understanding, there can be no direction — only confusion[91]

The main principle on which Mies's curriculum was based was the promotion of clarity and order. Regarding the importance of clarity for education, he remarked: "If our schools could get to the root of the problem and develop within the student a clear method of working, we could have given him a worthwhile five years".[92] To understand Mies's conception of clarity it would be useful to relate it to the debates around clarity in the pages of *G. Zeitschrift für elementare.* Regarding the theme of clarity Théo van Doesburg declares in the first issue of the aforementioned journal:

> What we demand of art is CLARITY, and this demand can never be satisfied if artists use individualistic means. **Clarity can only follow from discipline of means, and this discipline leads to the generalization of means.** Generalization of means leads to elemental, monumental form-creation.[93]

Clarity in the sense described in the journal *G* is associated with the invention of generalizable means. Mies's interest in generalizable means and the rejection of individualistic is related to his concern about objectivity as Georg Simmel describes it in "The Stranger".[94] Mies believed that one of the most important criteria for judging the practice of architects and educators in the field of architecture is the clarity of their working methods and the knowledge of the tools of the discipline. Mies's belief in the necessity of an extreme discipline of the design process could be associated with St Thomas Aquinas's conviction that "[r]eason is the first principle of all human work." [95]St Thomas Aquinas agrees with Aristotle's point of view in *Nicomachean Ethics* (*Ηθικά Νικομάχεια*) according to which

ethical is what is in accordance with right reason.[96] In this sense, we could claim that, in Mies's case, good architecture is assimilated to an architecture that is conceived according to right reason. Mies declared: "I don't want to be interesting – I want to be good!"[97] This declaration, apart from an echo of St Thomas Aquinas and Aristotle, can also be interpreted in relation to Nietzsche's approach in *Will to Power*, where the latter claims that it is important to avoid any confusion between the good and the beautiful. More precisely, Nietzsche states: "For a philosopher to say, 'the good and the beautiful are one,' is infamy."[98] Mies, as Nietzsche, refused to assimilate good and beautiful. The belief in the extreme discipline of the design process, which characterizes Mies's point of view, could be interpreted as an incorporation into architecture of the idea of St Thomas Aquinas that "Reason is the first principle of all human work."[99] For both Aquinas and Aristotle behaving according to reason is the first principle of ethics.

Mies understood *Baukunst* as an expression of spirit. The elaboration of the term *Baukunst* permitted him to capture the practice of building as a spiritualized art. It also helped him to grasp the idea of spiritual pertinence, which was, for him, the means to freedom and clarity. In parallel, he "saw architecture as the expression of a certain Zeitwille".[100] Mies's interest in the spatial expression of *Zeitwille* is related to his conviction that *Zeitwille* can be apprehended spatially.[101] As Jean-Louis Cohen has remarked, Mies believed that "the teaching of architecture should focus on the importance of values 'anchored in the spiritual nature of man'".[102] Descartes and Kant claimed that our rational minds impose meanings to the world, while St Thomas Aquinas understood this process in the reverse. The approaches of Descartes, Kant and St Thomas Aquinas can help us understand the relationship between the mental image and the art of building in Mies's thought, and his belief that "the art of building [arises] out of spiritual things".[103]

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Acknowledgements

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