

“Mies van der Rohe’s greatest achievement is the creation of a steel architecture ... He has arrived at structural clarity ... and found a harmony between the material means and his spiritual aims.” *Ludwig Hilberseimer, 1956*



## STEVEN KENT PETERSON

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# THE DEMATERIALIZATION OF ARCHITECTURE

## A Mies-CONCEPTION OF IDEALIZED SPACE

Ludwig Mies van der Rohe's seldom-discussed philosophical preoccupation, viewed as the basis for his architecture, seems to reveal a disparity with many who limit the definition of his principles.

Perhaps Mies himself intended this philosophical interpretation when he said, "The role of the critic is to test a work of art from the point of view of significance and value." "Truth is the significance of facts," implying that architecture embodied philosophical ideas.

It may have been in this sense that he described architecture as "the battleground of the spirit," and it suggests that the meaning of Mies' formal propositions are to be found in relation to his philosophical values.

If we can interpret Mies' statements to indicate that he understood philosophical significance to be transcendental, to go beyond apparent reality, then a corresponding formal proposition is that architecture should be dematerialized. Its specificity as object and its tangible reality should be reduced as far as possible to reveal the more essential understanding that is beyond form.

The usual evaluations of Mies, however, seem to present him differently. We receive either frustrated dismissals from his critics or descriptive categorizations from his admirers.

Those disapproving of Mies cannot tolerate the limitations of Purism and find too many of their own values missing. As Charles Jencks, pointed out, in the 1977 *Language of Post-Modern Architecture*, Mies' "critics cannot talk about place, identity, climate, symbol, culture, etc., except to deplore its absence," in frustration. With most Mies criticism, we do not learn what Mies is, but what he is not. His own values and terms often are not really identified.

On the other hand, apologists justify his work, but also narrow the focus of understanding with simplistic and often contradictory categories. Mies' systematized pavilions are seen as Neoclassicism while his attention to construction is seen as structural-expressionism. In general, it is assumed that technology is the message.

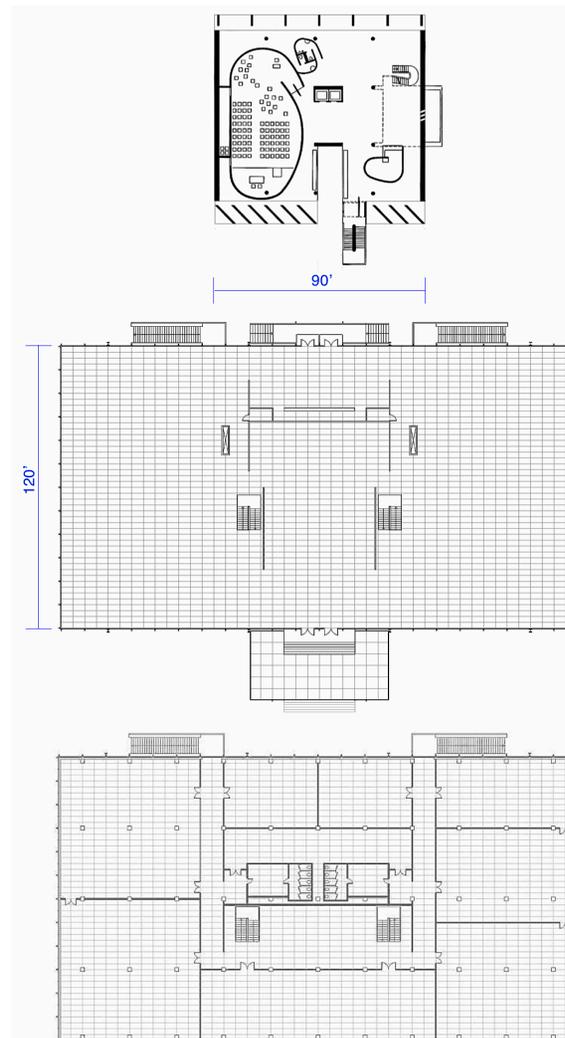
However, no simple category is entirely satisfactory. Neoclassicism is insufficient, since the plans aren't organized hierarchically. There are solid central cores with free perimeters and no vertical, multistory centralizing volumes.

Labeling him strictly a technologist is inconsistent with his avoidance of advanced techniques in construction and his refusal to express mechanical systems or to expose ducts and pipes. Also, while structural expressionism seems to explain Crown Hall, it doesn't clarify his decision to suppress the structural frame on every high-rise building after 900 Lake Shore Drive.

In a way, both sides represent Mies' terms in the same way: they assume that his Platonic images only stand for a pure and objective representation of those familiar predicates of modern architecture – determinism, functionalism, structuralism and technology. Mies' work is assumed to be a poetic version of these ideas, an intense pure of modernism. But, this label just obscures real appreciation and understanding.

Part of the problem in coming to grips with Mies may lie in this continual identification of a single concept of "modern architecture." We imagine the modern movement to be one thing easily recognizable, with a limited number of formal propositions and an apparently clear set of shared values. However, a single concept can't account for such dissimilar buildings as Mies' Crown Hall and Le Corbusier's Mill Owners' Building (figure 1).

The familiar concepts of "modern architecture" can be recognized in Le Corbusier's vigorous formal exercise in India, composed as a "free plan" articulated in a reference frame of round columns, and celebrating the object through assertive shapes and curved surfaces. But, Crown Hall has the exact opposite characteristics; it is an unarticulated void – free of columns, largely transparent and without composed surface or shape. This suggests a very different set of values, a fundamentally opposed theory about form.



- 1) *Plans of the Mill Owners' Building (top) and Crown Hall (middle and bottom) shown at the same scale. The two ideas of freedom in Modern Space: one, a compact canvas for the free play of independent interacting forms, the other, a formless expanse of universal emptiness, open to change and flexibility.*

*The real entrance to Crown Hall is not the gracious platform of floating front stairs, but the four straight runs hugging the building wall behind; one pair goes up to a narrow stoop in the middle and the outer two go down into the ground to separate basement entrances. There is no classical grace of movement, no subsidiary vestibules, no common foyers.*

*The symbolic space of drafting rooms upstairs is a precise and elegant dematerialization of architectural form, but the effect comes at a price; the dehumanization of the school as a whole institution, relegating half of it to the basement, lit only by clearstory windows with no outlook.*

These two opposed propositions emanate from different philosophical concepts. For Le Corbusier, the essential knowledge and principles of architecture are found in aesthetics, which can be defined as the study of things perceivable and experienced by the senses (as form). Specifically in the case of Cubism/Purism, it is the search for understanding through the appearance of objects or phenomena.

In contrast, Mies found the essential knowledge and principles of architecture in metaphysics, which can be defined as the study of being in essence beyond the physical. (The Platonic ideal is beyond perceived form). This knowledge is deduced from axioms claiming to be universal and certain, in contrast to empirical knowledge, which claims only to be probable and relative. Mies' conception of architecture as metaphysics is exemplified by his belief that while "architecture depends on facts ... its real field of activity is in the realm of significance ... It has nothing to do with the invention of forms ..."

Thus the abstraction in Mies' work is not a preference for pure simplicity as such, but a philosophical method applied to architecture, it is philosophical abstraction, the logical isolation of aspects from the total in order to reveal essential relationships.

What we experience in a Mies building, as a result of this abstraction, is both the flat *fact* of material elements and the *idea* of an "unformed and limitless" space. The bare fact as percept and the silent, empty space as concept are held together through the assumed axiom of geometry.

This architectural abstraction, in addition to isolating architectural elements, also can isolate the observer through a lack of familiar symbolic forms. The result is a certain kind of information is conveyed just because of this emptiness, the isolation and the sense of familiar missing values. A unique sense of self-awareness is promoted in confronting Mies' minimalism.

*"The point of view shifts its reference from the insistently neutral thing to oneself, stimulating contemplation about the nature of the conditions one is experiencing."*

This is José Ortega y Gasset's description of *The Dehumanization of Art* in 1925. It refers to the elimination of human content in modern art as a positive necessary step towards the contemplation of an abstracted pure aesthetic.

Similarly, as the architectural historian, William H. Jordy suggests:

*"In a Mies building, the mind goes from fact to inmost essence, which nevertheless holds onto the factual starting point; the tense ambiguous existence of what is at once within the work of art yet remains a fact outside it ... the brute thing, belligerently and mysteriously exists within its extra-human realm."*

For Mies, architecture as metaphysics was not a question of form, but philosophical *abstraction*, given significance through our speculation on the ideas it represents, an idealization. For Le Corbusier the emphasis of architecture through aesthetics was *form* given authenticity through our perception of it as phenomenon, a realization.

Mies and Le Corbusier agreed on what architecture must do, but differed on what architecture was. They shared the modern image of architecture as a mechanism of salvation from two important modern crises: the dilemma of man's relationship to technology and the role of the isolated individual in relation to a mass society. The urgency and inevitability of these tasks surely comprised their common vision of "the spirit of the times."

In Mies' own terms of "significance," metaphysics appears to be the framework for evaluating his work. And this statement by Mies indicates that Thomas Aquinas must be the starting point for our understanding of his philosophical values.

*"Only a relationship which touches the essence of the time can be real. This relation I like to call a truth relation. Truth in the sense of Thomas Aquinas, as adaequatio intellectus et rei. Or as a modern philosopher expresses it in the language of today: Truth is the significance of facts."*

Aquinas' great achievement was to formulate the first reconciliation of the facts of science with the idealism of the Catholic Church. The parallel here is with Mies' scientific attitude toward the facts of construction and the idealism of his visual and verbal presentation.

In both cases, we are presented with the dilemma of contradictory methods and origins for the realization of knowledge.

Aristotelian science sought truth through experiment with empirical facts, an intellectual process of inductive reasoning leading to general knowledge: from facts to ideas. The Church, however, proposed truth derived from general knowledge (God), spiritual faith in this leading through deduction to the explanation of facts: from ideas to facts.

Aquinas' reconciliation of this dilemma over the source and condition of knowledge involved the "philosophical problem of universals."

In other words, an attribute such as whiteness can be considered to exist in three ways: first, independently, as an idea (ideal); second, only in things white (real); and third, only in the mind of the perceiver (phenomenal).

Which is correct? Aquinas begins by assuming the universe as a unity imitating God. In this way, all three forms of existence are acceptable and must be in some way interrelated. Given this *a priori* idea of unity, it became unnecessary to choose among the three. For if the universe is singular, hierarchical and wholly integrated, then all things, minds and ideas must be one spiritual entity.

Thus Aquinas could declare a rational triangular linkage between the three existences: "It is the mind which realizes the whiteness in white things," or "it is thinking that penetrates through the particular to the universal." This is the precise equivalent to Mies' carefully composed statements: "Truth is the significance of facts" and "God is in the details."

It is possible, then, that Mies intended the essential experience in his architecture to be this mental one of placing us into the abstract condition of contemplating the triangular relationship of universal existences.

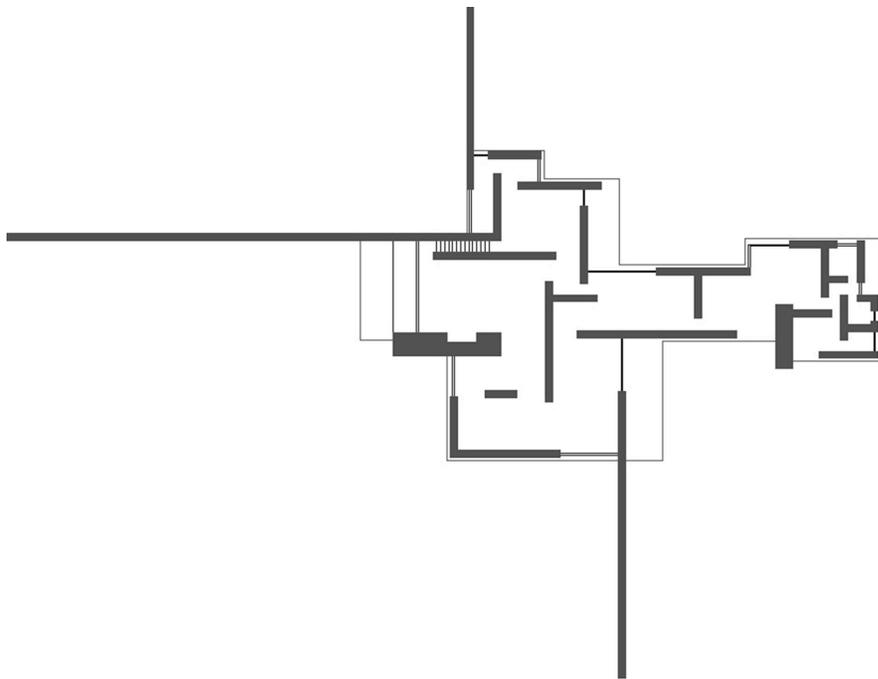
We are confronted with ourselves as participants in an abstract representation of this relationship of idea and thing: space as idea (conceived by Mies as universal), construction and material as facts in their most undifferentiated forms – “brute thing, belligerently and mysteriously within its extra-human realm.”

This Thomistic conception is the essential significance of existence, understood to be the rational “structure” of the order of knowledge in the world regardless of time. It is Mies’ “truth relation” and its presentation in the purest condition allows it to be best understood. As Aquinas says,

*“The most persuasive sort of composition to be found in the whole creation is that of essence and existence, while the composition of matter and form belong only to the corporeal part of creation.”*

This analysis starts to give us a better understanding of the apparent contradiction of Mies’ early “expressionism” in relation to his later “classical” period. In a sense, the expressionism never really disappeared from his work. It was simply transferred from an early expression in form to a later expression of “ideas” through a lack of form.

The expressive use of walls which first comprise the 1923 Brick Country House (figure 2) later becomes in effect only the characterless neutral outer boundary in the courtyard houses and finally just infill at IIT. The masonry starting as a formal objective compositional element in 1923 becomes a boundary frame in 1935 and finally disappears both inside and out at the Farnsworth House, 1950.



2) Brick Country House plan, drawn 1923

This transformation progressively abstracts the wall, unfolding the structure of the space more and more as a static geometric grid. For in the courtyard houses, just because of the continuous boundary walls, the house as identifiable object really goes away in one’s perception. Each interior emerges with its own outdoors. The recognizable autonomy of the house parts themselves are obscured by the continuity limiting the entire precinct. The boundary is so bland, without tangible aspects that it neutralizes all context into a universal condition of stasis (figure 3).

Also, we can understand why Mies would be reluctant to design ideal cities, since a specific “formal” image of society contradicts and obscures the more essential relationship of existence and knowledge. So, while Le Corbusier’s work might be seen as a progressive furnishing of the “Ville Radieuse”, or Wright’s as a constant buildup to “Broadacre City”, Mies cannot be examined in this way.

He must avoid the utopian proposal in order to emphasize the non-physical idea that each building and every detail represents a realization of the ideal in the particular.

However, we still cannot completely account for what one can only call Mies’ style. For scholastic Gothic architecture would seem to easily satisfy the requirements of an Aquinas architecture. Mies goes further than we might expect necessary. He rejects hierarchy; his work is aggressively neutral and nondirectional, both objects and space are undifferentiated, unformed. There is no figurative symbolism. It is stringently “minimal” as well as abstract.

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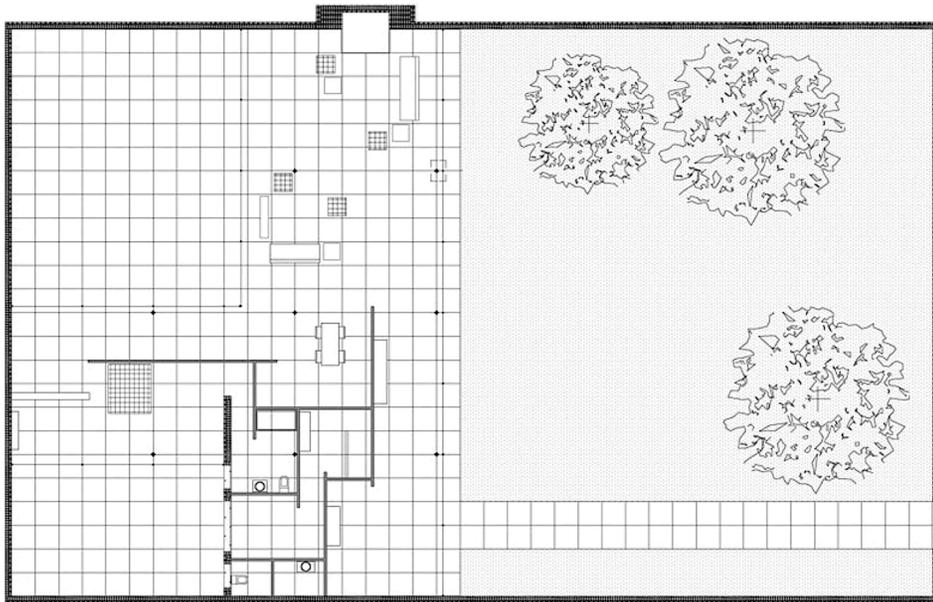
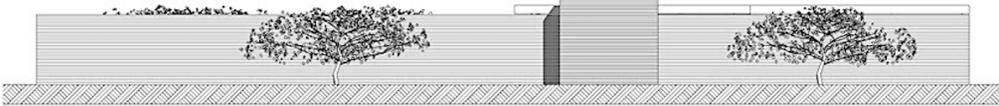
To account for this minimalism, we must turn to Mies’ concept of “the spirit of the time” when he says, “only a relation which touches the essence of the time can be real.” This temporal notion would seem contrary to an *a priori* timeless universal unity, imitating God.

The rationality of Aquinas’ triangle of universals conceivably remains constant through time as a solution to the conflict of spiritual and scientific ideas, only if the underlying assumption of one hierarchical universe can be maintained. But, this faith in unity came into continual conflict with the emerging notion of the individual in the 19th and 20th centuries – the individual self with separate rights in opposition to the ideas of traditional political and religious hierarchical systems. An important part of the “modern theme,” according to Ortega, is that man in the twentieth century found himself alone, confronted with his own individual life as the basis of reality.

The idea of an autonomous self carried with it the individual’s right to equality. This generated the concept of collectivism, which provided a social and economic role for the individual, but did not establish the validity of his philosophical or spiritual existence.

Two general philosophical attitudes toward this definition of the individual’s existence emerged: a differentiated one based on rational doubt (existentialism), and an integrated one based on spiritual certainty (mysticism).

Existentialism accepts that there is no certain reality beyond the individual’s own existence, which is understood as a condition of appearances or phenomena. Authenticity of the self is the relationship among separate existences, a resonance of circumstantial relationships.



3) Courtyard House with Three Courts, Project, 1934; exterior elevation of fireplace wall, plan, and interior photo in living room facing fireplace.

\* Drawings by: Maria Caridad Lopez.

\* Rendering by: Jacob García Gómez and José Jaraiz.

Mysticism or, in particular, Theosophy and Zen, is founded on spiritual certainty. It rejects appearances as an obscuring separation of the self from the real state of being. Reality for the individual is understood as a condition of oneness with the infinite. Authenticity of the self is found through the transcendental release of the individual consciousness into a single universe.

There is at least a superficial relationship between these two ideas and the two divergent characteristics of modern architecture we have already observed.

An architecture sympathetic to the existentialist would surely consist of specific forms juxtaposed and transformed by one another, their existences authenticated by their appearance to the self in a procession in time (as in Cubism or Le Corbusier's architectural promenade).

The aesthetic conception of Cubism, Purism, and Collage can be seen as the province of understanding for every individual living in an existential world, expressing not the point of view of the individual's taste, but the condition of interactive existences of people and objects.

It is this attitude which allows contemporary references into the vocabulary of modern architecture. The inclusion of ocean liners, airplanes and architectural grain silos becomes almost imperative as a consequence of the meaning given to "real" interactive existences.

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But for Mies the existentialism rejected the transcendental and the concept of a single unity. Mies' sympathy regarding a solution for this dilemma of the times would more naturally lean toward a concept of spiritual certainty like Theosophy, which maintained the idea of a universal oneness as the authentication of the modern self. "The thinker is an aspect of what is thought and the self an aspect of what it sees."

Mies surely was familiar with these ideas via Berlage in the beginning and Mondrian later on. Both were interested in Theosophy. It describes the premise for the modern tendency to abstract minimalism. "On the one hand, this process reveals an identity of essence between intellect and the universe. On the other hand, the content is progressively emptying itself of its apparent substance: matter tends to be an empty form ... the reduction of reality to the void."

The concept of the individual's oneness with the infinite could form an acceptable modification of Aquinas' *a priori* assumption of a world of unity, one responsive to the spirit of the time but still supporting his rational structure of universals.

An architecture corresponding to this view would find reality as the antithesis of form. As Mies said about his own work: "it has nothing to do with the invention of forms. The work as a non-form becomes a 'mantra' for the contemplation of 'the significance of facts.' "

*“In removing from the work all objects, the world is not separated from the spirit, but on the contrary put into balanced opposition with the spirit ... To love things in reality is to love them profoundly; it is to see them as a microcosmos in the macrocosmos. Only in this way can one achieve a universal expression of reality ... Art is not the expression of the appearance of reality as we see it.”*

Whether or not Mies believed exactly in Mondrian’s statement which derives from Theosophy, this attitude does correspond to the characteristics of Mies’ style – the insistent minimalism, the ever-present background geometry, the avoidance of the expressive object and particularly the non-hierarchical concept of space seen as the infinite, undisturbed, universal void.

“Less is more” is like a Zen haiku. It states the transcendental universal unity, projecting the void as a symbol of ultimate reality.

It seems an accurate hypothesis for Mies’ work, corresponding to these ideas, that he dematerialized architecture to eliminate the object as form which obscured the transcendental reality, revealing an infinite universal space, itself unformed, conceived as the void. And in producing the experience of this conjunction of void and fact, it is the geometry, represented as a grid of uniform measured modules, which maintains and symbolizes the rational structure of knowledge.

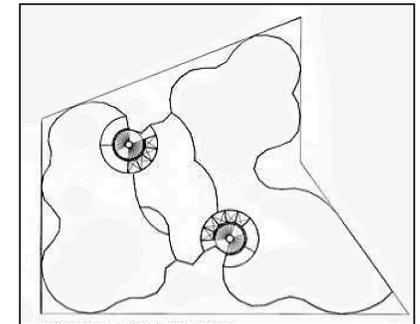
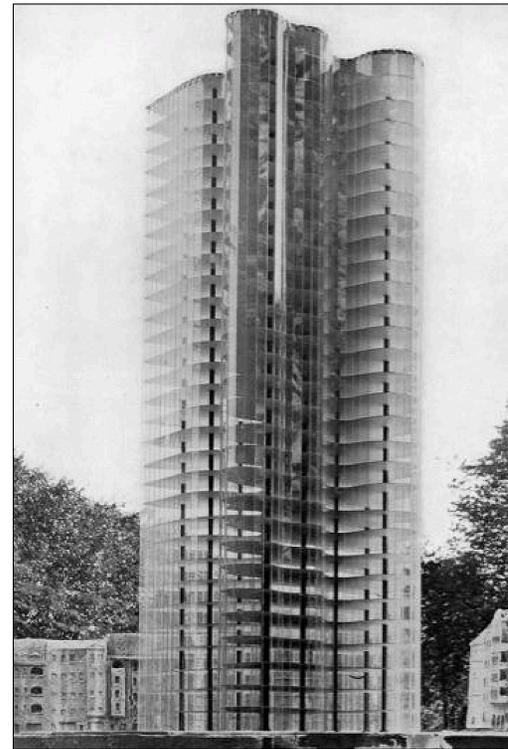
This dematerialization of form, removing both intentional and circumstantial objects suggests that for Mies the ultimate symbol was not the frame as structure, but the grid, as independent geometry – the abstraction, not the fact. A history of his work in some ways can be characterized by the transfer of attention from frame to grid – not to form the ultimate single cell of structural frame, but in a sense, to eliminate structure in order to form a “column-free” space.

Even in the early glass skyscraper project of 1921, the plans show no columns (figure 4) and the perimeter form, although curvilinear and apparently expressive, is not a specific composition; the two cores themselves de-emphasize any possible centrality and have no formal relationship to the shape of the building’s edges, which actually appear to be randomly drawn.

It is definitely not a technological or Constructivist image. It is, if anything, organic in the sense of appearing to be, a natural, not man-made, shape, capable of growing or changing. The tower relates to the trees and the sky, not to the delicate clay townscape placed at its base for scale. There is a suggestion that the objects of the everyday world obscure the true connection between architecture and the order of nature.

The curvilinear perimeter suggests not so much a specific object but rather evokes the sense that this project is merely a fragment of a more general spatial order, a representative piece of a more universal condition.

But in this early glass skyscraper the missing element is geometry, specifically the grid which gained importance as Mies’ work developed. One suspects that if the columns had been drawn in the skyscraper plan, their placement would have been conditioned not by a separate geometry, but by the shape of the perimeter and the necessity for a constant cantilever.



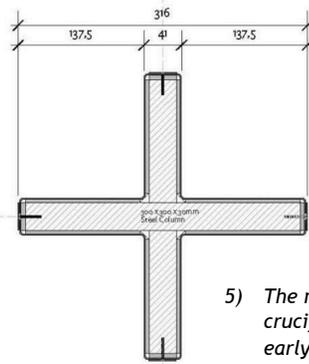
4) *Glass Skyscraper Project, model and plan, 1922*

*The columns shown as long cantilevers in model, but not shown in plan, indicate that structure was not a paramount interest here.*

Rendering the columns in the plan would have made the whole thing appear like a group of trees, a much too romantic image for Mies. In order that the structure itself not become expressive and so dominate the architectural idea, it must be subordinated to something else, something more enigmatic.

The geometric grid and its integral relationship to structure is first manifest in his work with the appearance of the cruciform column. It is significant that Mies avoided the convention of the round column, which in its abstraction as a cylinder is an autonomous object whose existence generates a strong radiating influence on the space around it (figure 5).

The cruciform column, however, is a more indefinite object. Made of shiny brass, it appears insubstantial and so capable of interpretation. It can represent the intersections of a spatial matrix, the materialization at a point of an *a priori* spatial order, the geometric grid. The column’s form implies a horizontal extension, a plane spatially connecting to the next column and perhaps infinitely beyond the last column. It is not a closed or confined form. Its extruded shape is non-specific and provides no clear vertical termination. It does not seem to hold up the ceiling as supporting structure, but suggests a virtual and symbolic grid extending beyond the floor and roof.



5) *The mirror-finished cruciform column used in early work.*

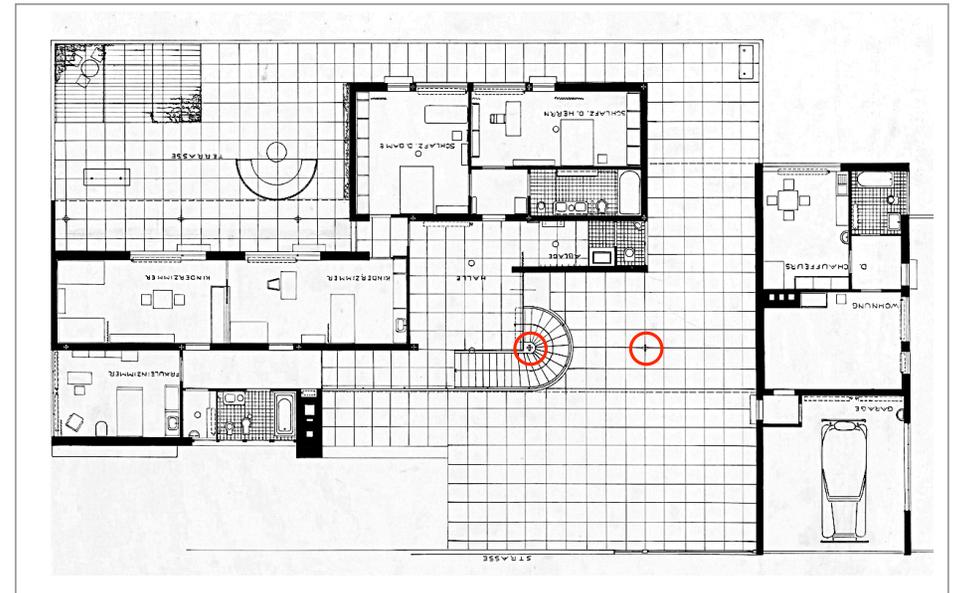
*It is more a marker of space than a substantive structural support. Like a shiny Brancusi sculpture, the “column” stands between floor and ceiling grids, an ethereal abstraction made of two mirrored planes that reflect the space around them and have their own illusion of depth and transparency.*

The importance of the grid and its integrated relationship to the cruciform column can be seen in all the houses done in Germany after the Barcelona Pavilion (except the housing for the Berlin Building Exhibition).

But looking specifically at the House with Three Courts in plan and perspective, it is apparent that the gridded square paving is intended to represent a pervasive geometry ordering the interior and exterior spaces, but blurring the distinction between them.

The continuity of the spaces, their neutrality, and the constant presence of the grid as an idea is reinforced by converting all partitions and roofs into planes which don't align with the grid in at least one direction. Thus he avoids cellular volumetric spaces and implies that the grid is independent and unaffected by the existence of particular circumstantial form.

In plan the columns are simply the intersection points of this abstracted geometry. Even at the Tugendhat House, where the grid is not expressed on the main floor paving, a cruciform column confronts us outdoors at the entrance, rising symbolically, out of the gridded exterior paving, to thematically establish the underlying spatial concept of the house (figure 6).



6) *Plan and view of entrance, Tugendhat House, Brno, Czech Republic, 1931*

*The cruciform column is an exterior declaration of the order to be found throughout the house. The next column is inside the glass stair wall that one turns around descending to the main level.*

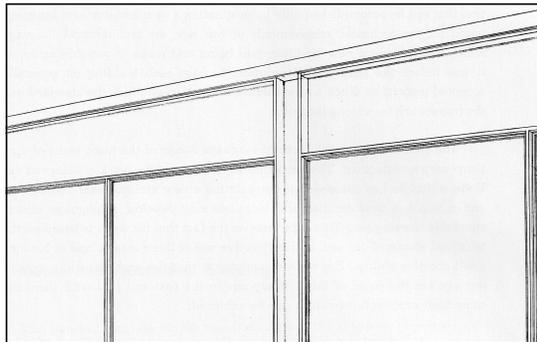
Beginning at IIT (the Illinois Institute of Technology), the structure and grid begin to engage in a different dialogue. The column is no longer cruciform, but is forced into its rectangle of fireproofing and begins to receive less attention. It is retracted from its position of prominence, merging with interior walls, and gives way to an independent gridded skin of steel and brick as the presentation of the building's geometric "structure."

The column, when it does appear, is now a hollow "H" shape sometimes reading as a dematerialized void, as in the girder construction of the IIT Library. Here the column imbedded in the context of the wall emphasizes the space between its own flanges. The beam appears to pass through the almost invisible web. The continuous welded flanges of column and girders give the ambiguous sensation of the column being only a gap between the jambs of the window and wall framing (figure 7).

The structure at IIT did not become more prominent by becoming rectangular, but less, as it merged with the wall and the geometric grid in a new way. When cellular room plans had to be made and the space couldn't be seen as literally continuous, the abstract conception of gridded space could maintain the universal quality in a virtual sense, extending through the necessary opacity of the walls, with the ceiling above continuing through transoms and clearstories.

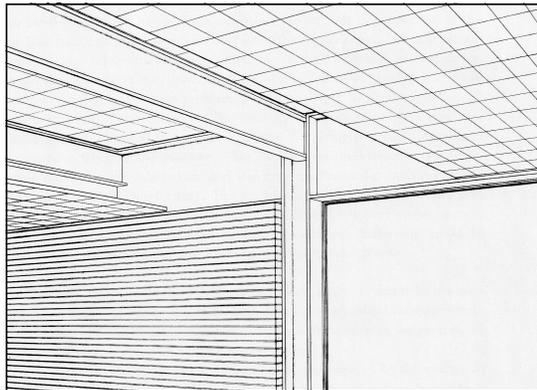
7) *Exterior and interior details of steel column/beam joints for the IIT Library and Administration Building.*

*The standard wide-flange rolled sections of the beams and glass stops are welded onto the outer flanges of the column inverting the reading of its support. The column web becomes a hollow gap and the continuous window frames to its side seem to be holding up the roof.*



*Study of north wall*

*On the interior, cross joists seem to pass through the column's web as if it had been dematerialized.*



*Interior view showing relation of structure to ceiling*



8) *Alumni Memorial Hall, IIT Campus, 1945*

*Although the facades suggest an architecture of exposed steel structure, the actual columns are hidden behind the continuous and regular steel-framed grid. It is an architectural language of geometry and systematic spatial subdivision, not an architecture of tangible structural expression.*

For example, on the long elevation of the Chemical Engineering building, we are not presented with the structure itself, but with a more frequent rhythm of a steel grid of extruded "I-beams" infilled with windows and brick panels. The columns themselves are recessed behind the wall; they are presented as exposed concrete and not steel. The column is no longer free, but engages the back of the wall without a corresponding expression on the exterior. The structure is retracted from our attention and veiled in a skin of abstracted geometry (figure 8).

As with the cruciform column, the history of Mies' brick masonry also comes to an end at IIT. It started as both a load-bearing structure and an expressive element in the early brick houses, to become merely a "framing" boundary in the court houses with an occasional supporting role, replacing the last row of columns. It is then disengaged from all its structural and expressive functions in the buildings at IIT where it acts merely as infill, the steel grid breaking up any continuity as brick wall.

Finally, with Crown Hall and 860-880 Lake Shore Drive, the brick wall disappears altogether from Mies' vocabulary except as interior partition. From its early reality as a multiple condition of enclosure, structure, and formal element, the brick masonry is consistently transformed in terms of this metaphysical hypothesis of the abstraction and dematerialization of form.

Mies progressively isolates the masonry's attributes until at IIT it is no longer a plastic object or an impenetrable boundary frame, but becomes virtually "transparent," simultaneously inscribed and penetrated by the grid. From this point on brick is not used; Mies dematerializes the architecture further by reducing the facts to just steel, glass and space.

The apartment buildings at 860-880 Lake Shore Drive were the important transition from the IIT type to the ultimate development of Mies' minimal style, as a comparative examination of the horizontal plan details of the Chemistry Building and 860-880 reveals the subtlety of the transition. The details are in fact almost identical except for the removal of the IIT bricks at 860-880. In both, the "I-beam" mullions are laid directly on the structural surface, maintaining their constant rhythm between and across the columns (figures 9,10).

The earliest wall of Alumni Memorial Hall at IIT does not expose the structure. Instead, a regular frame of mullions is applied to the outside surface. 860-880 Lakeshore Drive repeats this IIT building arrangement as mullions are applied to the outside front surface of the structure, but then deviates from IIT by moving the glass plane back directly onto the column surface, thus exposing the mullions as a solid visual element.

The result, although interestingly syncopated, requires an unjustified mullion on the column face. 900-910 Lakeshore Drive solves the problem by adding a gap between column face and screen wall, allowing the glass and the mullions to pass freely by the structure. As a result every window in the building is the same size and air conditioning runs are accommodated.

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The difference at the 860-880 apartment slabs from the IIT buildings is that the plane of glass and spandrel are pushed to the back side of the "I-beams." This decision shifts the reading of the facades back onto the flat structural surface, making it primary with the mullions then attached in front of it. Thus, there is a simultaneous emphasis on the larger rhythm of the structural frame and the absolutely regular steel mullion placement.

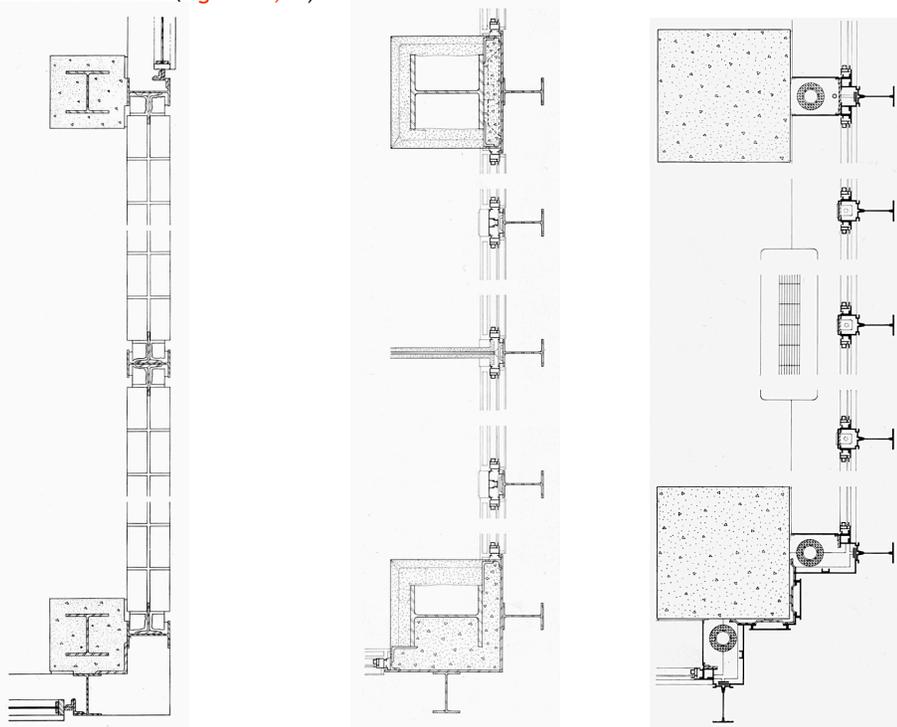
While one may lament the loss of this resulting contrapuntal richness in his later facades, starting with 900-910 Lakeshore Drive, Mies' own values required that he suppress the structure again as he had done at IIT, in order to reassert the constancy and regularity of the abstract grid which had been lost at 860-880.

He was not interested in structural expression. It was necessary to remove the structure so that the facade could be more abstract and transparent as a representation of the significance he attached to the idea of continuous space ordered by pure geometry.

In 860-880 the interaction of structure, mullions, and windows overemphasizes the building's presence as a complex material artifact, with its real form too clearly established by the continuous surface of encased columns and beams. A return to the de-emphasis of the structural frame was achieved at the Commonwealth Promenade Apartments across the street at 900-910 Lake Shore Drive, by interposing a layer of space between the column and the back of the mullion. Once resolved, this detail separating structure from building edge remained the constant solution for all Mies' remaining high-rise buildings, because he believed it was the right solution to a larger question. This constancy in itself is an indication of his quest for a singular philosophical clarity.

*"I don't want to be interesting; I want to be good."*

Even Crown Hall, with its apparent structural expression, can be seen as an attempt to remove "real" structure from our perception of its tangible role of support. The repetitive gridded frame itself is not used. The structure is removed from the interior of the main hall, so that the columns and beams seem applied outside the building box to produce a "column-free" neutral space. The columns are equated with the mullions, obscuring any differentiation of function with both made of "I-beam" sections placed on front of roof and floor edges. Every material element bypasses the other without apparently connecting to, or supporting anything. The front stairs seem to float and the roof girders seem to sit on the roof rather than hold it up (figure 11).



9) Alumni Memorial Hall, IIT, Chicago, 1945

10) 860-880 Lake Shore Drive, Chicago, 1951

11) 900-910 Lake Shore Drive, Chicago, 1954

Three plan details that show how the screen wall that Mies placed in front of the column structure at IIT developed to become the separate curtain wall in his high-rise buildings.

*Despite the dramatic exterior girders, all structure disappears inside Crown Hall where the acoustic tile ceiling dominates as it hangs mysteriously without support. The interior is, in a sense, unreal; empty, intangible, infinite space of calm contemplation, cut off from the outside world by translucent glass panels.*



The placement of all the “facts” – columns, mullions and girders – on the outside of the building leaves all apparent structure obscured from the inside, emphasizing only the space itself as a neutral, dematerialized ideal condition of an empty void. Standing on the floor beneath the “floating” roof, there is the sense of being in an abstracted, purified, and detached world which is both disconcerting and mesmerizing.

This fascination with “column-free” space, begun at Crown Hall, was to preoccupy Mies for the rest of his career. His continued development of this idea leads to the approaching limit of a minimal reduced vocabulary and toward a more dematerialized architecture.

Following Crown Hall, in the Farnsworth House (figure 12), a single column-free unit of space is raised above the ground, literally detaching the architecture from the reality of gravity and specific place, further abstracting the dialogue between facts and ideas. Stripping everything down to the presentation of “being in essence.” A pure free pavilion hovering above reality.

There is no mass, no aggregate single form, just independent parts, elegantly assembled and defying gravity. The whole building is an abstraction of geometry, space, and by-passing pieces. It does not even establish a fixed relationship to the site. The building could be anywhere, a few feet closer to the road or a mile down the river. Perhaps there really is no site! It is certainly not incorporated into the scheme. It has been removed from consideration.



11) Crown Hall, IIT Architecture School Building, 1956



12) Farnsworth House, a Weekend House on the Fox River, Illinois, 1950

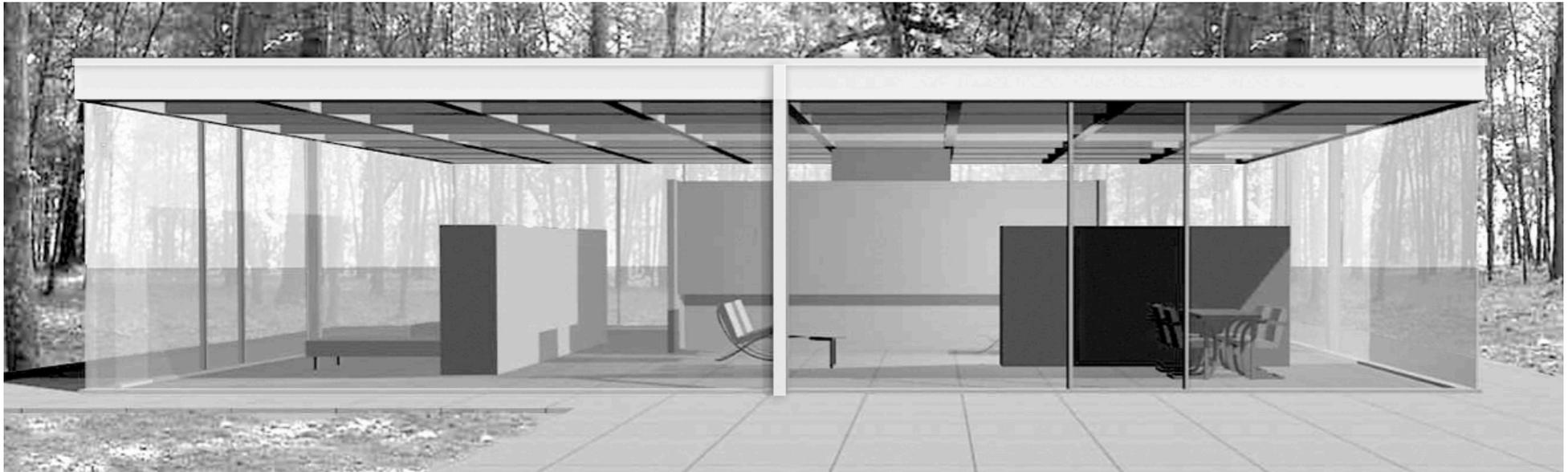
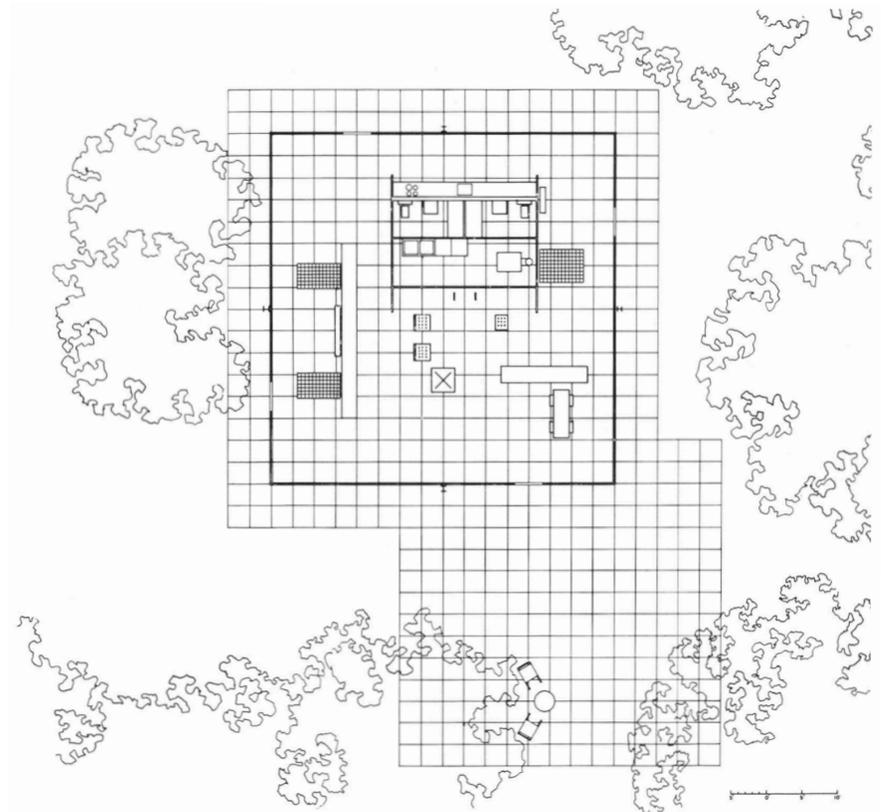
The same abstraction of site occurs in the 50 X 50 House where the structure is further reduced to only four columns. Each one is improbably centered on the side of a flat square roof. The roof itself, a thin space frame, becomes the only material element of the architecture (figure 13).

The term “space frame” itself is suggestive and perhaps carried some significance for Mies in the context of his philosophical values. The space frame’s vertical supports can be reduced to a minimum and the structural form of the ceiling, when exposed, produces a square grid expressed in steel.

But perhaps more accurately, it is the structure of a universal and infinite space. For how much architecture was left? What is finally manifest from the complex partitioning of a 3-bedroom house with bathrooms and toilets, etc.? There is an almost complete lack of substance and materiality, it is empty, a piece of the void deliberately created.

The 50 X 50 house established the basic conceptual model for the projects and buildings that followed it, leading through the first Bacardi Building project, finally to the realized Berlin Museum (figure 14). The “column-free” space, epitomized in the 50 X 50 house with its complete dematerialized form, remained the architectural paradigm of Mies’ metaphysical premise.

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13) 50 x 50 House, plan and rendering\*, 1951

\*Rendering by: Luciana Fornari Colombo



14) The New National Gallery, Berlin, Germany, 1968

One must be careful in connecting philosophical ideas to architecture or any creative endeavor because its effect is to justify the work simply by association with “serious” thought. It is like background music in a movie. We are seduced into a more significant and legitimate interpretation of the experience, if it is accompanied by a serious and grand theme. Philosophy is just another form of myth in the sense that, it structures and tries to explain our view of reality.

Some may doubt that Mies would have advocated the themes suggested here, and perhaps it is a case of eyes that see too much in too little. (The notorious conundrum about the “presence of absence.”)

Nevertheless, the hypothesis is consistent with his work and is by itself uncritical. It proposes only that there was an evolving struggle to demonstrate the philosophy of Thomism, which was modified by a response to the important contemporary spiritual crisis of a more existential self. This formed the imperative conviction for Mies’ abstracted isolation of certain aspects of architecture and generated his particular minimal style.

In addition, this speculative examination of Mies’ work reveals a basic opposition of values within the modern movement, an opposition which establishes its own mutual critique. The argument of aesthetics and existentialism opposed to the argument of metaphysics and mysticism.

So, it is worth quoting and returning here to Ortega y Gasset with his parallel position to Mies’s architecture, while also providing its own self critique. To deemphasize the materiality of architecture is the same as to deemphasize the human subject in art. Both attempt to strip away (abstract) the clutter of familiar reality (representation) from the act of perception (and contemplation) in order to reach the essence of idea itself. Truth resides with the observer (who is a particularly unique modern person) if new forms are created pure enough to facilitate an intense, unique new mode of perception. This advocates that an essential authenticity of being can be found through the reduction of both form and content.

Ortega’s description of this process in art could easily be about Mies’ architecture:

*“If turning our back on alleged reality, we take ideas for what they are – mere subjective patterns – and make them live as such, lean and angular, but pure and transparent”; in short if we deliberately propose to realize our ideas – “then we have to dehumanize them.”*

*“For ideas are really unreal. To regard them as reality is an idealization, a candid falsification. On the other hand, making them live in their very unreality is – let us express it this way – realizing the unreal as such.”*

Which is the argument that meaning resides only in existence and appearances:

*“In this way we do not move from the mind to the world. On the contrary, we give three-dimensional being to mere patterns, we objectify the subjective, we ‘worldify’ the immanent.”*

To “worldify” the immanent was a “modern” aspiration to which Mies did aspire. It is particularly apparent in his empty, voided architectural space. To achieve this awareness, Ortega y Gasset seems to argue that it would be necessary to dematerialize architecture and that, this would also dehumanize it, in the modern drive toward a deep significance manifest in analytical abstraction.

On the other hand, following this view, the significance and effectiveness of the ideas now being “worldified” in architecture, there remains a critical question. It may be that our feelings today in looking at these two theoretical positions in modern architecture AND art are not unlike Mies’ reflection on his own situation in 1910:

*“We young architects find ourselves in painful inner discord. Our enthusiastic hearts demand the unqualified, and we are ready to pledge ourselves to an idea. But the potential vitality of the architectural idea of the period has by this time been lost.”*