THE ‘ABSOLUTE’ TRUTH
OF MIES VAN DER ROHE

Abstract
The aim of the essay is to investigate the notion of truth in general terms between ontology, epistemology and ethics and sub specie architecturæ through the example of Mies van der Rohe’s research. Assuming the classification of works made by Peter Carter in low-rise buildings, high-rise buildings and clear-span buildings, the indissoluble link between technical and architectural forms as the essence of architecture is probed. Definitively, a relationship that claims the reference to reason as the basis of choices on the appropriate architectural forms and responsive to the representation of the theme and meaning.

Keywords: reality, Mies van der Rohe, truth of construction, reason

1. TRUTH AND FICTION IN ARCHITECTURE

The theme of truth / falsity essentially pertains to the theory of knowledge but also to ethics and, applied sub specie architectureæ, poses multiple possible articulations of meaning. If the ascertainment of the truth of a given phenomenon is task of epistemology, while the existence of a given entity in the “catalog of the world” is inherent in ontology, the dia-crisis of falsehood / truth concerns moral judgment and justice, honesty / dis-honesty of subjective and individual behavior. If in the nomothetic sciences the search for truth implies the use of experimental or logical tests and verifications – think of mathematics or physics – the judgment on a false or true statement enunciated for the purpose of a given behavior invests an intersubjective relationship but that moves from the issuer. The concept of truth in the context of the idiographic human sciences linked to interpretations is much more nuanced. The new-realist position, recently placed at the center of the philosophical debate by Maurizio
Ferraris\textsuperscript{1} and others,\textsuperscript{2} tends precisely to support the unreliability of some facts (natural and ideal) and the relativity of some others (social objects). Architecture lives of the dialectic between a condition of objective verifiability / illemorphic ascertained and a continuous and incessant possibility of interpretation, criticism, re-signification due to the fact it is an artifact as result of ideal statements (see Popper’s \textit{Theory of the Three Worlds}), of decisions and conventions based on the agreement and also the object of extensive interpretations / receptions. Even in his making, this dialectic is expressed in the constant opposition between contents and forms, between correspondence of uses and forms, between construction and representation (s), between exhibited truths (i.e. think of constructive rationalism from Laugier to Schinkel) and dissimulating fictions (think of the scenographic and illusory constructions of the Baroque).

Paraphrasing Arthur Schopenhauer it could be said that architecture is always in the balance between “will [of form] and representation [of the constructive act]”. Between thematic ideation (content) and its possible ostention in the forms more or less adequate to represent this trigger and underlying reason. If the ontic truth of architecture is its meaning, what can be the vehicles for its manifestation? In other words, should architecture create a superimposed representative apparatus to express the values and meanings that determined it or can it express these values with only its ingenious elements? Gottfried Semper, for example, also referring to the distinction by Karl Bötticher between \textit{Kernform} (core form) and \textit{Kunstform} (artistic form), entrusts the principle of the coating with the task of defining the meaning and expression of architecture, largely masking the building framework considered incapable of significant expression. In other words, Bötticher works on the dialectic relationship between \textit{Kernform} and \textit{Kunstform}, on the germinal formal spatial groups of architecture or on a certain German space theorist that finds its father in August Schmarsow. The position of Semper, that seems to concern more the syntactic question reducing to four the basic elements of the \textit{Baukunst}, in reality and in power, conceals, in hindsight, a decorative idea, an epidermal drift (today very current) of architecture traced back to the fabric, the skin, the surface completely independent of the underlying framework. While defining tectonics as the “art of connection” in which the elements are exhibited and stereotomy as “the art of volume modeling” in which the work is with the mass as two possible ways of composing and building, what mostly emerges in his theory is the principle of the coating, largely assumed by the great masters of the twentieth century as a reference. The German theorist contrasts the Marc-Antoine Laugier’s hut with the ‘Caribbean hut’ made of fabrics and mats that conceal or disguise the structural members unsuitable to convey the artistic meanings and values of living, dwelling and settling. If the passage between the megaron and the temple leads to the lithification of the wooden construction recalled by the opposing triglyph, in its metaphorization of the head of the wooden beam, to the ornamental and sculptural metope which is not essential to the construction but is only aimed at the allegorical representation, for Semper\textsuperscript{3} architecture superimposes on this first analogical mediation a further communicative and semantic skin.

\begin{footnotesize}
\footnote{2 A. Bilgrami et al., \textit{Bentornata realtà. Il nuovo realismo in discussione}, ed. by M. De Caro, M. Ferraris, Einaudi, Torino 2012, pp. 141–165.}
\end{footnotesize}
that is charged with expressive values. This dialectic between the static-constructive skeleton and the representative formal system will affect the entire modern debate starting from the metaphors by Perret to the Lecorbussian Domino chassis, from Peter Behrens’ Großeform to Miesian research. The purpose of this paper is precisely to show how the theme of truth in Ludwig Mies van der Rohe, starting from a reflection on the Semper theories, is fundamental and how in his research this theme finds different declinations until his absolutization in the works of the American period.

2. THE CONCEPT OF TRUTH IN MIES VAN DER ROHE

As anticipated, Mies’s research on the fundamentals of architecture explores the theme of truth according to many alliterations. The truth of the theme with respect to the spirit of the time, the truth of the construction with respect to the convenient ways of architectural representation, the possibility of creating free spaces in which to life and its universal values in the truth of its collective acts and rites can be manifested. Mies used to quote St. Augustine (in turn from Plato) – Pulchirudo splendor veritatis est – about architecture, noting that the beauty of which it is capable was precisely the splendor of truth. A truth that, referring to St. Thomas, had to be Adaequatio rei et intellectus⁴ or correspondence between reality and reason, between things and the intellect, between forms and cogitating thought.

Mies tells us that “When I was young, we started asking ourselves: ‘What is architecture?’ We asked anyone. They said, ‘What we build is architecture.’ But we weren’t satisfied with this answer. Until we understood that it was a question inherent in the truth: we tried to find out what the truth really was. We were enchanted by finding a definition of truth by Thomas Aquinas: ‘Adaequatio rei et intellectus’. I have never forgotten it”⁵. So, Architecture as an ostensive way of order and the notion of truth are inextricably linked. For Mies, in fact, “The long path that leads from material through function up to creation has only one purpose: to bring order to the confusion of our time. We must have an order that gives everything its place, that place which according to its nature belongs to it”⁶. In other words, the truth in general and in particular in architecture is the coincidence of the idea with its concrete manifestation, the forms with the underlying meanings. Not so much a truth as ἀλήθεια following Heidegger⁷ – not hiding or

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⁴ San Tommaso in De veritate, q. 1 a. 2 s. c. 2, states: “Praeterea, veritas est adaequatio rei et intellectus. Sed haec adaequatio non potest essenisi in intellectu. Ergo nec veritas est nisi in intellectu”.


unveiling – but a matching, adjusting things to the mind with claritas. After all, Mies himself affirms that “Building means giving shape to reality” and “beauty is linked to reality, it does not free itself in the air, it attaches itself to things and is inextricably connected to the shape of things.” A point of view in which the ‘designing mind’ builds, orders, shapes reality and is not determined by it. The forms are precisely the reality of architecture and the problem for Mies is always that of realizing and defining the conditions of possibility for the necessary passage from the forms of construction to architectural forms so that they, through measure and proportion, become representative forms of meaning. In other words, the theme is how to make possible to transmute the Konstruktion into the Struktur, the mere bautechnischen (technical construction) to the Baukunst (The Art of building). As he said in fact “In Gothic architecture for example, all the details contribute to clarify the theme of the work. The construction follows precise laws and cannot be representative. But when the construction is elevated to expression and you want to give it meaning, then you have to talk about structure (Struktur). The construction expresses facts (die Fakten) and the structure gives a meaning (ein Sinn) to these facts.” Ultimately Struktur acts on the truth of the constructive forms to give to the technical forms a surplus of meaning, a meaningful form or an expressive form. Mies’s effort in all his production, from the beginning to mature works, will always be oriented to define more precisely this delicate and ineliminable relationship between construction and representative forms, between constructive truths and their possible intelligible sublimation in search of the appropriate character to give to artifacts. This tiring but exemplary research will be clarified starting from some architectural types that Mies will investigate in the course of its production. In particular, by adopting the classification proposed by Peter Carter, then developed by Carlos Marti Arís, we can distinguish, by reason of the construction and informer principle, three types: low rise buildings, high rise buildings and clear span buildings.

In the next paragraphs, there will be an investigation, according to this tripartition, on the specific ways of representation of the constructive act in architectural forms, noting how, to anticipate a first conclusion, the Struktur used at the beginning in the German experience above all as way to free space will become, in the American period, more and more as the main vehicle of expression of the meaning, of the reason of the buildings. Starting from the facts, we will arrive at the intellect and tectonic thinking through the principle of convenient decoration. Mies warns us that "however gigantic the economic apparatus may be, however powerful the technique, all this is only raw material when compared with life. We don’t need less technique, but more technique. We do not need
less science, but a more spiritual science; not of lesser economic energies, but of more mature energies” and he adds ”This world is offered to us, no one else. In it we must affirm ourselves”.

3. LOW-RISE BUILDINGS

The Mies’s low-rise buildings are buildings with one or more floors mainly developed horizontally: a typology that will cross the entire work of Mies both in the German and the American periods. In this class of artefacts defined by the construction choice and not so much by the destination, works of various nature can be counted in which the relationship between construction and representation gradually becomes more explicit and intelligible. If in the Tugendhat house (Ill. 1/III. 2) or in the Barcelona pavilion (III. 3/III. 4) the problem is identified in the separation and distinction between construction elements elevated to the rank of columns of metal profiles assembled in a cross (albeit sheathed in a shell) formed to support a-tectonically diaphanous roofs to define distinct places and the partitions are called either to delimit the patios or to conform the spaces as in the three courtyards house. In the American experience the punctual system will become pervasive in the collective buildings of the IIT (Alumni, Commons and Library) (III. 5/III. 6) or in the masterful Bacardi headquarters in Mexico City (III. 7/III. 8).

If in the case of European masterpieces the theme is the distinction and clarification of the modular order that the structure can offer to the living space up to the extensive expansions of the museum for a small city, in the American experience the problem becomes more complex. In the IIT buildings, the regularity of the structure is used not to exhibit it, if not in the most representative places, but to allow a new relationship with the curtain walls that, far from concealing the skeleton, represent its necessary counterpoint, determining complex and masterful solutions of the corner where the internal metal framework is embedded in the concrete in order to protect it from fire and is then put back into representation with external profiles that want to reveal their presence.

The case of the Bacardi headquarters, in which a pervasive hypostyle system of HE columns of three spans by five crosses the entire building, is quite different and creates unprecedented overhanging solutions both with respect to the external façade and to the courtyard with double internal height which is located on the ground floor walls, now condensed in a sort of balance. A dense theory of uprights of smaller section is added to the profiles in view on the two long fronts, that allow the placement of the windows, stabilizing and connecting the two horizontal planes. With Bacardi, for the first time, there is no longer any distinction between building elements, secondary fixture systems – the curtain wall – becomes immediately façade, through the isonomic repetition of the building elements of various hierarchy, traced back to representative forms in the rhythm that they induce: main and exclusive vehicle of the architectural representation. The building shows its bones without reservations and makes construction its distinctive language without veiling.

16 Ibidem.

Ill. 2. Tugendhat House 1929–30. *Axonometry by low* (R. Capozzi, N. Campanile)

Ill. 3. Barcelona Pavilion 1929. *Critical redraw*ing (R. Capozzi, G. Di Costanzo)

Ill. 4. Barcelona Pavilion 1929. *Axonometry by low* (R. Capozzi, N. Campanile)
Ill. 5. Commons Building at IIT 1953. Critical redrawing (R. Capozzi, R. Esposito)
Ill. 6. Commons Building at IIT 1953. Interior view
Ill. 7. Bacardi offices in Mexico City 1967–61. Axonometry by low (R. Capozzi, N. Campanile)
Ill. 9. Seagram Building NYC 1958. Corner view (photo by R. Capozzi)
Ill. 10. Chicago Federal Centre 1958. Study model
4. HIGH-RISE BUILDINGS

The high-rise buildings of Mies are the tall buildings with a skeleton structure that propose different conditions and the relationship between construction elements and ways of representing the character. In particular, in the peripteral arrangement of the vertical structures, these buildings propose, in a completely revolutionary way, the coating problem introduced by Semper. It is not so much a question of concealing skins but of architectural members which refer in various ways to the resistant structure. In the Lake Shore Drives, that represent the first experiment for these products after the Promotory Apartments, the structure, in positioning itself flush with the glass façade, questions its regularity and uniformity (what Mies had sought in the twenties in the skyscrapers of Friedrichstraße) offering in the canonic repetition of 4 windows – two larger in the middle and two more stood at the ends in correspondence of the internal pillar covered in concrete and revealed by a covering sheet – a syncopated rhythm in which the skeleton is all in sight.

This aporia will be overcome by moving back the pillars and towards the floors allowing an undisturbed repetition of the uprights by matching and evening the windows to create a perfect and platonic stereometry that will find the highest expressions with some interesting specifications regarding the construction methods in the Seagram of New York (Ill. 9), in the Chicago Federal Center (Ill. 10). In New York, as in Chicago and Toronto, the point structure is revealed on the ground floor with a double-height porch, the cladding identifying the fronts identically due to the different volumetric articulation in steps in correspondence with the non-centralized irrigating cores not only houses the windows but also precious stone panels to reveal as in the previous cases the hidden internal presence of the construction elements.

In Toronto (Ill. 11), but also in Chicago, the creation of a large plinth or stereotomic crackle on which the hall of the bank is placed, which shows in the extrados of the roof through white glass panels its bidirectional construction is the counterpoint to the tectonic mode for distinctive elements of the towers. In the towers, searching for the purity of the volume, an arduous and refined representation of the internal construction order corresponds to their uniformity. The order is revealed by complex corner solutions (where the structure is more exposed and recognizable) in the porticos in relation to the placing to the ground, in the rhythm of the elements that, far from being only support to the glazed mirrors, play a stiff role and of connection between the slabs as well as a metric rule for the standard division of the interior spaces. The structure is explained and becomes representative on the ground floor – the most important and the most urban for this type of buildings – where the transparency of the porticoed perimeter corresponds to the wall density of the lifts embellished with stone coverings almost always in Roman travertine and in some cases in intermediate technical floors or at the top.

5. CLEAR-SPAN BUILDINGS

The clear-span buildings of Mies are the hall buildings with a peripheral structure that free the internal space by showing, more than other examined types, the stringent ontological relationship between constructive and architectural truth once again and more and more renouncing to any veiling. As elsewhere I argued:
Mies in his Hall-type buildings architecture will clarify the ways of the passage between the Säulendach (a roof supported by pillars) – an eminently technical solution that refers to the archetype of the “table” also in the hypostyle version, the Säulenhallen (hall with columns) – to the Hallenbauten (free halls). Therefore, the Hallenbauten have to be considered essentially as undivided covered spaces capable of impressing (Raumeindruck) for their vastness in great light. Spaces without further partitions or distinctions and articulations of the interior space, made possible by the peripheral position of the structure now exhibited externally and, only sometimes, declared “tectonically” also inside.¹⁷

In these clear-span (Hall-Type)¹⁸ buildings that make it possible to live in community and without obstructions, a universal and uncluttered space for Mies, the theme and challenge is to match this summary spatial principle with a specific and exemplary construction solution that somehow becomes its direct and distinctive expression.

The construction structure is linked to the planimetric forms of these undivided spaces in non-trivial terms. The arrangement of the main elements or on the long sides (Farnsworth House, Mannheim Theater, Crown Hall) will correspond to the rectangular and directional forms or, in rare cases, on the short ones (Cantor Drive Inn, Home Federal Saving & Lohan Building (Ill. 12)). The peripteral and uniform arrangement (50 by 50 feet House (Ill. 13), Bacardi headquarters in Cuba, Convention Hall (Ill. 14/Ill. 15) and Neue Nationalgalerie (Ill. 16/Ill. 17)) will correspond to squared and centralized forms. Specific radical solutions will correspond to this radical nature of the vertical structures, time to time in different and alternative ways. If in the Farnsworth House, the pillars placed on the false edge support a perimeter beam contained in the thickness of the roof which in turn supports secondary beams orthogonal to it, in the Theatre of Mannheim and in the Crown Hall by repeating extrados portals (reticular or full wall) they support in a tectonic way the roofing slab in turn punctuated by the uprights already seen in the Bacardi of Mexico City. In both cases, the construction is shown on the outside like the buttresses of a Gothic cathedral and is hidden inside the curtain that absolutizes the roof slab. On the other hand, in the 50 by 50 feet house, the four pillars placed in the centre of the sides support, in one of the two versions, a white ribbed roof exhibited in its technical perfection without concealment just perimeter by a glazed diaphanous window. In the case of the Convention Hall (Ill. 14/Ill. 15), the construction solution creates a complex spatial trellis which, in not clearly distinguishing the roof from the perimeter closure, aims, as in the elasto-wooden constructions of northern Europe, to redefine, for tectonic continuity, a new possible version of the wall, this time raised from the ground like a great modern temenos called again to define the place of the assembly. In the case of Bacardi in Cuba and then of the Neue Nationalgalerie in Berlin, the development of the construction / formal type becomes more complex: the coffered roof, as in the 50 by 50 feet house, is supported, due to its large size, by eight columns placed on the edge according to the harmonic sequence of 5–8–5 modules, the best possible not only from the point of view of the architectural proportions but also from the point of view of the deformation behaviour of the roof (Ill. 16). If in Bacardi the solution investigated in prestressed reinforced concrete with variable section (maximum in the center of the plate and minimum at the ends) is concealed by a curtain (a tectonic solution also proposed in the Schweinfurt museum) in Berlin (III. 16/Ill. 17), the steel version and particular precautions in the assortment of thicknesses

Ill. 11. Toronto Dominion Centre 1963–67. Aerial view
Ill. 13. 50x50 feet House 1951. Axonometry by low (R. Capozzi, N. Campanile)
Ill. 15. Convention Hall 1954. Study model
of the elements and of the resistance of the steel allow to show the structure in its naked and eloquent tectonic truth: a large slab based on only eight columns with capitals obtained by absence. According to Martino Doimo

It should be particularly emphasized that the new architectural order of the Neue Nationalgalerie [Ill. 18] is configured as a complete Kernform resolution of modern steel construction, from the Kunstform point of view. However, this occurs without resorting anymore to a coating, as in the Barcelona Pavilion or in the Casa Tugendhat, but through the direct expression of the structural data. As in the hollow metal structure prophesied by Semper, the dualism of the structural essence and its representation is solved in the same constructive reality, which takes on a new appropriate monumental form.\(^{19}\)

A finally emancipated construction that, in the technical challenge that makes itself eponymous of its collective character, makes itself expressive for its sole consistency reiterating that “Wherever technology reaches its real fulfilment, it transcends in architecture”\(^{20}\) (Ill. 19).

**6. REASON AND TRUTH**

At the end of these brief and certainly not exhaustive reflections on the truth in architecture, starting from the *exemplum* of Mies van der Rohe who in his patient research warns us of how difficult it is to reconcile truth and expression, meaning and signifier, an indissoluble link has to be underlined between this research for truth and the reason. René Descartes said in *Regle IV* in his *Discours de la méthode* that ”the method is necessary for the search for truth”; to this it has to be added that in architecture this research cannot dissociate itself from a logical-rational foundation from the unavoidable *Krisis* that every time the project realizes. For Mies this truth is in the continuous work on the ways of construction in its tectonic-elementary purity in which the parts can be clearly distinguished and made evident and intelligible. As the late Antonio Monestiroli stated ”rational thought [is] a thought that is based on reality in order to know it and to draw from it the most precious it contains”\(^{21}\). Rational architectures are those of Mies because they simultaneously make clear the reasons of their syntactic, architectural and constructive arrangement, architectures that call into question figurative apparatuses extraneous to the architectural essence that for Mies is and remains ”construction brought [however] to its exact expression” because the *Baukunst* is “rooted in the simplest forms more adherent to the purpose (in the practical)”\(^{22}\) or to the meaning and value of the happening of life that they allow.

Finally, Mies warns us: “[…] I have always wanted to know the ‘truth’ […] Truth and reason are the most important things, and ‘Reason is the first principle of all human works’ (St. Augustine). My pencil would bend if I didn’t follow reason”\(^{23}\). For Mies, the truth should be sought to know its absolute nature (that is loose from any bond) and, to be shown, the forms that take charge of its manifestation in reality have to be reduced to the essential to “less is more” or better to “almost nothing”, in the language of Mies: *Beinahe nicht.*

**References**


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