Efe Duyan

Critical Architecture: The Totaltheater by Gropius and the Museum of Infinite Growth by Le Corbusier

Abstract

Early modern architecture has not only reinvented formal vocabulary but also challenged lifestyles and building types. A critical attitude towards functional agendas has emerged, as incorporated in the design occasionally. Yet breaking with the given formulas of function has remained an overlooked right, as architecture discourse has predominantly focused on creating a form for a given function, rendering criticism a blurred tool for design. Critical Theory, starting with the Frankfurt School, has focused on the concept of criticism as a methodology and provided a framework for how the inquiry may achieve human emancipation: by explaining the restrictive structural conditions, providing a practical solution, and setting up a normative perspective. The unrealized projects of the Totaltheater and the Museum of Infinite Growth by modern pioneers Gropius and Le Corbusier, based on critical assessments of the existing functions for their respective building types, transformed their criticism into a design concept and proposed a reinterpretation of what kind of experience a theater and museum should offer. Their main spatial properties, namely the radical shapeshifting, the totality of their interiors, and the anti-hierarchical understanding, enabled them to provide space for alternative content: avantgarde drama in the Totaltheater and contemporary artifacts in the Museum of Infinite Growth. They can be seen as examples of critical architecture, in the sense that the form itself acts as a self-reflection of the function in addition to fulfilling it.

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Introduction

In his *On the Art of Building in Ten Books*, Leon Battista Alberti defines architectural beauty around the concept of harmony and the formal composition of parts (Alberti, 1988), which was to become a cornerstone for the modern imagination of architecture, which would tentatively influence the design paradigm in the 20th century, too. An architectural object succeeds aesthetically, according to Le Corbusier (1925), when its parts form a harmonious whole and "we gauge such success through imaginatively perceiving as much" (Fisher, 2015). Visual perception has been the core criterion of architectural aesthetics, while the architect's practical mission in modern times has mainly been creating a pleasing form out of the function. Design has been predominantly carried out as a problem-solving activity with the possibility of multiple answers aiming toward a fitting, delightful, and pleasing appearance. There are numerous ways to conceive a form – following the functional necessities to "give the form" or "finding the form" to place the functional elements inside afterward. Modern architecture also provides a colorful palette of rational shapes versus subjective ones while, recently, parametric design and AI have opened up new and hybrid-form creation opportunities. In each scenario, the process from the given function to the end visual composition seems to be the main gateway to *venustas*. Yet, whether the "art of architecture", in the words of Alberti, widens the horizon of the beholder remains a rarely discussed issue. The phase before the step from function to form has been a grey area for architecture. Can the architect disagree with the prescription of the function itself? While beauty has been related to harmony throughout history, modern arts not only opened up a fresh field for disharmony but also turned antagonism into a trademark feature in public opinion. Like the absurdities of Dadaists or the subconscious journeys of Surrealists, can architects use a special language to shake and

shock, generating a self-confrontation in the minds of inhabitants?

Any redefinition of the given function should be communicated in that special language, too, in order to be carried out. Architecture nevertheless is a language, Umberto Eco would argue. In his analysis of the column, Eco (1972) claims that architectural signs are a "system of...objects and... spaces that communicate possible functions". He further explains that in architecture, "the communicative aspect predominates over the functional aspect and precedes it". And with that, he moves beyond the symbolic ornamentation from Antiquity to Postmodernism, implying that every architectural element is a sign which carries information on how it functions. Derrida would add that functions and building types also delineate how we can and cannot behave by structuring our way of life in a singularity. As he puts it in *Of Grammatology* (1967/1996), all language – and Western philosophy in particular – carries the dominance of one particular way of thinking and therefore needs to be overturned as previously fixed categories.

How can architects have the right to criticize the functional programme they are prescribed and question the presuppositions, beliefs, habits, and our way of thinking? Is it possible to criticize building types as a normative category of living and overturn their subtle normative seeds through design?

Critical Theory

It is no coincidence that criticality gained attention as a central trait of philosophical inquiry in the aftermath of the First World War, in the Institute for Social Research, which saw the arrival of the Frankfurt School philosophers. Criticism and the concept of crises are etymologically rooted in the same ancient Greek word *krinein*, which means to separate, and the tragedy of the war paved the way for a (productive) intellectual crisis. Critical Theory as a movement, which is closely linked to the *Frankfurt School*, has given a crucial role to the criticism of societies and of the history of thought as a methodology while having had many different aspects and quite distinct historical phases that span several generations. (Bohman, 2005)

Critical theorists maintain that the primary goal of philosophy is to understand and help overcome the social structures through which people are dominated and oppressed. Especially Adorno and Horkheimer, among many others who can be linked to Critical Theory, focused on critique to reveal and challenge power.

The use of criticism in philosophy goes back to Immanuel Kant, famously in the very title of his *Critique of Pure Reason*, by which he means examining and establishing the limits of validity of knowledge, by digging deep down to its irreducible concepts. Not surprisingly, Karl Marx, who has been a major influence on Critical Theory itself, explicitly developed the notion of critique of false consciousness and economic relations, linking it with the practice of social revolution, as implied in his *Theses on Feuerbach* in 1845: "The philosophers have only interpreted the world, in various ways; the point is to change it."

"Critical Theory" in the narrow sense designates several generations of philosophers and social theorists who have distinguished a "critical" theory from a "traditional" theory according to a specific practical purpose: a theory is critical to the extent that it seeks human "emancipation from slavery", acts as a "liberating ... influence", and works "to create a world which satisfies the needs and powers of" human beings (Horkheimer, 1992/1972, p. 246). Such theories aim to explain and transform *all* the circumstances that enslave human beings. A critical theory provides the descriptive and normative bases for social inquiry aimed at decreasing domination and increasing freedom in

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all their forms.

While Critical Theory is often thought of narrowly as referring to the *Frankfurt School*, which begins with Horkheimer and Adorno and stretches to Marcuse and Habermas, any philosophical approach with similar practical aims could be called a "critical theory", including feminism, critical race theory, and some forms of post-colonial criticism. In the context of criticism through design, Critical Design in line with the *Frankfurt School* will be taken into consideration.

It follows from Horkheimer's definition that a critical theory is adequate only if it meets three criteria: it must be explanatory, practical, and normative, all at the same time. That is, it must explain what is wrong with current social reality, identify the actors to change it, and provide both clear norms for criticism and achievable practical goals for social transformation.

A critical social inquiry attached to practical emancipation can also be translated into the practical creativity attached to critical social inquiry – a designer's criticality, which can deal with many aspects of social life, such as gender roles, privacy, inequality, the climate, or in-field discussions. Any critical assessment in architecture will be correlated to the purpose of that very aspect, how it unfolds against the individual and social perception. Even the Vitruvian categories of *firmitas* and *venustas* have purposes, *raisons d'être*. Yet the purpose of being functional, *utilitas*, is what connects the designed space to the action of the inhabitant. It is inevitable for a critical social inquiry to ask how spaces ideologically and normatively prescribe our action. By placing such a critical reading of a building's given function into the focal point of the design, the critical act might have an aesthetic outcome, too. The way the inquiry is integrated into the design as a result of the re-examined function will be experienced by inhabitants even if not noticed. The gap between the prescribed and inverted functions might open up a field of experimental and aesthetic awareness.

Throughout history, building types themselves have altered and the production of the built environment has experienced many leaps in terms of function. The reconsideration of a particular function has been one of the main engines of architectural history. Modern times brought on drastic transformations in many aspects and, thus, opened up the possibility of new spatial arrangements with fresh aesthetic and structural aspects. In particular, the antagonism of modernist arts and architecture has been evident in many ways – especially about materials, anti-traditional lifestyles, and compositional choices. While modernist architecture might have turned out to be the norm after the Second World War and has become subject to criticism itself, its origin remains the soul of the protestor. Breaking with the given assumptions has only rarely and symbolically been for the sake of it – it has had a subject and a specific context. Some of the modern classics crystallize its critical attitude towards the pregiven types of building and functions, as it is well documented how early modernists propagated the modern lifestyle.

Whereas many *avant-garde* architectural enterprises include a questioning of the prescribed function, Le Corbusier and Walter Gropius, in their two trademark yet unrealized projects, went to extreme lengths in taking the redefinition of the building type as the starting point of their design. In the context of Critical Theory, Horkheimer's three aspects have become prominent in considering a design critical. The design must, firstly, critically engage to function as the content of the form; secondly, offer a practical design solution; and, thirdly, imply a creative vision as well. The Totaltheater and The Museum of Infinite Growth questioned the existing functional agendas, offered concrete solutions and put forward a future perspective about the function

as a critical act, which itself has become the main concept of the design.

The Totaltheater

The Totaltheater Project, designed by Walter Gropius and Erwin Piscator, famously challenged the given ways of performing plays and stage design in 1927. Walter Gropius was still the director of Bauhaus and Piscator was a palpable presence in the political theater scene. The Totaltheater design meant the juxtaposition of Bauhaus's spatial laboratory work with the modern epic theater, which aims to ensure an active response from the audience. Walter Gropius's alternative and non-formal understanding of architecture did respond to Piscator's need for a theater structure that will attract the audience and bring them into the action

(Berdini, 1984, p. 80). Back then, "the viewer's life horizon was reduced to the horizontality that stands in front of it, to the fixedness" (Woll, 1984, p. 127), as in the classical distinction of the stage inside the frame and audience of the theater since the Renaissance.

Complaining that he had been trying to "fill the new wine into old barrels", Erwin Piscator was convinced that nothing but a brand-new theater structure, that is, a theater architecture that incorporates the latest acoustic and optic facilities, can reveal the potential of its own vision. Walter Gropius was one of the few who, as an architect,

Figure 1. The Totaltheater (Cambridge, MA: Harvard University Gropius Archive. 24.19, 1927)
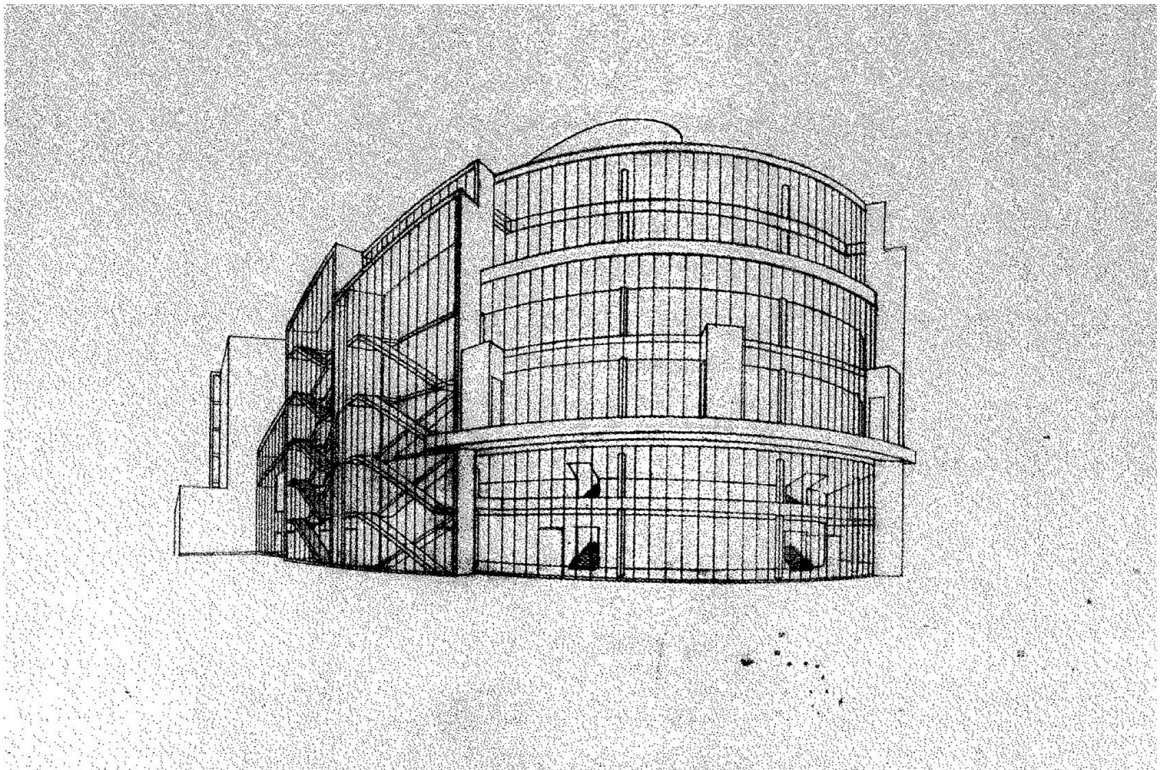
could flirt with modern machinery and design the flexible space that Piscator had dreamed of. The Totaltheater, then, should be regarded as a combined effort by the client and architect, while the Gropius-Piscator tandem should be regarded as a collective design agent. Although never realized, the project contained a revolving stage, which could be converted to an arena-stage, amphi-stage, or proscenium-stage in addition to the utilization of recent technological developments, which allowed innovative drama and mainly political epic theater to be performed for the masses. The shapeshifting theater with a remote control in the hands of the director was the symbolic and principal design ingredient to break with tradition.

Gropius and Piscator thought that Berlin's labor district of Kreuzberg was quite suitable for the Totaltheater. Besides the difficulty of securing land in the center, the reason for the slightly peripheral location can be found in the target audience of Piscator's drama, which is the worker community. Through its transparent surface on the front façade, the building tended to open itself to the cityscape. Instead of different foyers in the entrance implying class distinction, a single and transparent foyer where all the audience would be together can be considered as another gesture of the Totaltheater's tendency to equalize, just like the elimination of balconies inside.

Indeed, the holistic interior concept removed the sharp distinctions not only among the audience but also between the audience and the play. The intertwining of the stage and the audience might have seemed to them as a necessity to draw the audience into the play. The new possibilities of blurring this border, the totality itself, was going to be a central theme for epic theater. The use of projections all around the inner walls was another attempt to cut across the classical borders. Also, theater had entered a fierce competition with cinema, as the film industry was just developing and sound films were about to emerge.
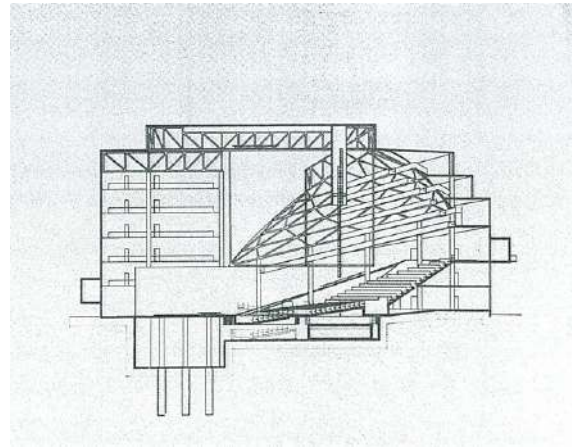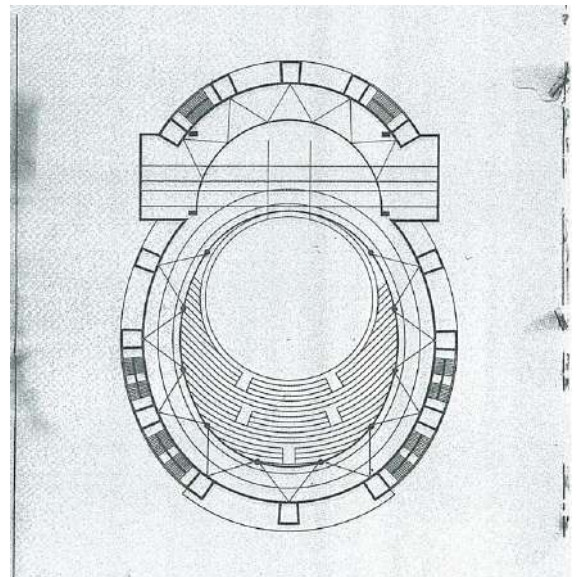

Figure 2. The Totaltheater (Cambridge, MA: Harvard University Gropius Archive. 24.83, 1927)

Figure 3. The Totaltheater (Cambridge, MA: Harvard University Gropius Archive. 24.84, 1927)
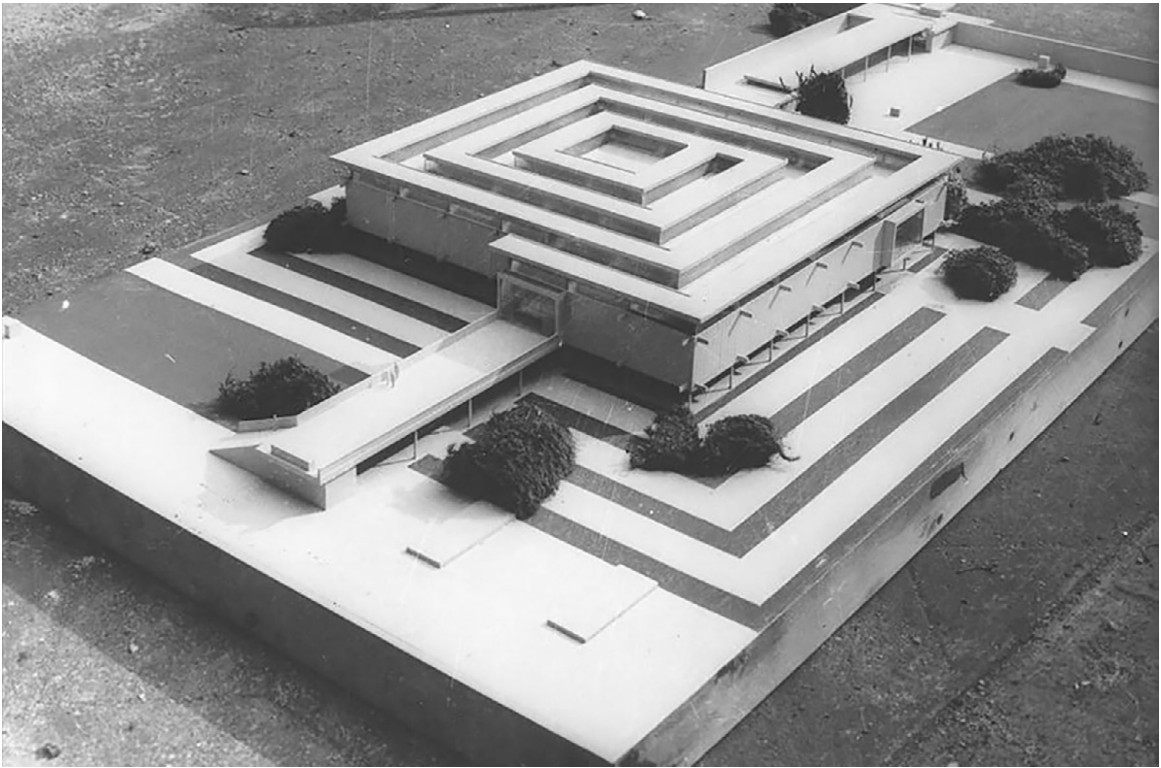
Figure 4. Museum of Unlimited Growth (Paris: Fondation
Le Corbusier/ADAGP (photo: Lucien Hervé), 1939)

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What made the Totaltheater critical towards the given was that, firstly, it was supposed to have a total effect. The design aimed to include the audience in the play, to make them an active part of it instead of passive participants, and to convey the play's supposedly enlightening social message and symbolize the anti-hierarchical point of view. Secondly, the transformation of the stage types provided for the dynamism and flexibility accompanying the need for social change. Thirdly, the machinery and additional technical facilities such as stage cranes, rails, and projections gave the director instant control over the performance. In their almost-realized project, Gropius and Piscator redefined theater and the theater building as an immersive and active experience.

As a result, it can be said that the central design idea of the Totaltheater was to distinguish itself from buildings in the same function. It was an effort to overcome the existing definitions of the function by criticizing it rather than providing a form for the given function.

In addition to hosting plays as an (unrealized) building, its design claimed to be the answer to the question of how to perform theater in another way. This particular meaning of the building, though, is not an explicit discourse but rather latent content expressed spatially.

The Museum of Infinite Growth

Another example of critical early modern architecture is the unrealized series of projects by Le Corbusier. It might not be surprising to say that Le Corbusier was obsessed with some of his ideas, but it is curious that his greatest fascination was his museum. His museum projects give the impression of being examples of a single template, which is called the Museum of Infinite Growth: a never-ending construction in the shape of a spiral.

Numerous times – 22 to be precise, excluding 14 possible proposals in correspondences – he proposed his typical museum for different locations and even placed it in his urban plans, which might well be considered product placements. In the end, Le Corbusier succeeded in constructing his ever-extending museum three times but as a static version.

Although the idea can be found in the very first project of his self-edited *oeuvre complet*, the art school, the preliminary museum building inside the Mundaneum complex of 1929 can be regarded as a crossroads where all his museum designs and exhibition spaces are linked. In other words, the World Museum of the Mundaneum represents a prototype, if not the end product, for the future museums.

Several museum projects were proposed throughout the 1930s. The first of Le Corbusier's typical museums was named the Living Artists Museum in 1930, whereas the Contemporary Aesthetics Center of 1936 is a variation of it. In 1939, he revisited the idea and labeled it as *Musée à croissance illimitée*, Museum of Infinite Growth. As an unrealized project, Le Corbusier's Museum of Infinite Growth can be seen as the most generic expression of his museum idea and the archetype of it.

Afterward, Le Corbusier often returned to his museum template. All museum projects after World War II refer precisely to the archetype, including his realized museum buildings. Le Corbusier put his museum template into practice three times in Japan and India in the 1950s. During the construction process, Le Corbusier's idea underwent substantial changes as he went in the direction of integrating locality into his architecture in the post-war cultural climate. Many other proposals emphasize how important his take on the museum was to the architect. In addition to the unrealized projects of the Delaunay Museum

Figure 5. Museum, Chandigarh
(Paris: Fondation Le Corbusier/ADAGP, 1952)

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Figure 6. The National Museum of Fine Arts of the West (Paris: Fondation Le Corbusier/ADAGP (photo: Olivier Martin-Gambier), 1955)

Exposition, the International Art Center in Erlenbach, and the 20th Century Museum in Paris, he tried to convince many potential clients to build his museum, as can be seen in his correspondences.

The reason for the number of his attempts and his persistence can be found in his unique perspective on the museum. According to Le Corbusier, a museum should represent its own time by growing as time passes, so that new artifacts from the present can be added. The infinite growth brings forth the spiral shape as a reference to nature. The spiral lends a geometric order to the growth, which, in turn, sets the length of the parts and paves the way for standardization of the parts of the museum during the construction for practical reasons. And the preference for an anti-hierarchic arrangement leads to the open plan, introducing a fluent and total space with multiple vistas so that the different parts of the museum artifacts are connected, not isolated from each other. His template redefined the museum conception through the features of expansion, standardization, and spatial flow, as well as the existence of various perspectives for the observer, all of which in turn reflect his vision of what a museum should be: a living and ever-changing space.

Le Corbusier's museum ideas were not aesthetic solutions towards how a typical museum should be, but an attack on the traditional understanding of the museum itself, a redefining formula, whose means are the forms, rather than the words. They exemplify Le Corbusier's critical attitude regarding how to redefine a building type and show how his criticism generates the form. Le Corbusier's museum shows us that architecture does not have to be an attempt to create the appropriate form for a function and that it can be an exploration of the function itself. It is a critical meditation on what the particular building type, the museum, is. Le Corbusier's design transforms the function, offering a practical solution and a normative understanding at the same time.

Through the Infinite Museum, he criticized the accepted functional scheme of the building type and replaced it with counter-norms. His museum approach offers a solution to a problem that was identified simultaneously – rejection and suggestion coexist in the practical process of design. The criticism of the building type itself is the starting point. A design that has constructed its aesthetic perception by deconstructing the given basis also has a liberating influence on the conventions. It is not a form after all, but a radical transformation of the content through the form.

Both projects by the two influential virtuosi have remained unrealized. Albeit theoretically, Walter Gropius went to severe lengths tackling the theater in the late 1920s, while Le Corbusier's museum demonstrates the most sensitive version of his utopianism.

Their radicalism might have been the reason for this, as both projects tried to express the opposite of a given framework – their own function – in the hope that they might dialectically create a conscious possibility of questioning. As an inherent part of its meaning, the proposed experience within the three-dimensionality offers a criticism tool to architecture as a branch of art. An architectural space, which can also be the spokesperson of the innovation it contains, has the potential to provide moments of critical inquiry within the emotions it arouses.

The cognitive critical meaning can be part of the aesthetic perception connected through the redefined daily life or, more precisely, the building type by questioning the purpose of the function. That is when architectural productivity as a critical stance directly takes on the human being and life itself becomes its subject.

The twin towers of unrealized, art-related classical modernity cut across borders, while redefining their function in terms of radical shapeshifting,

the totality of their interiors, and anti-hierarchical understanding of their objects. Their purpose was to provide space for new content in their own ways – avantgarde drama in the Totaltheater and contemporary artifacts in the Infinite Museum. Their skill lies in the way they practically transformed their critical standpoint into a central design concept instead of appealing to sheer symbolism to question habits.

That is the special language of architecture. It emerges when the critical attitude towards the function is expressed through three-dimensionality, redefining daily life, and helps to free up the minds of inhabitants. If opening new windows is what all great art does, it might well be the moment, or shall we say the place, where architecture becomes art.

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