

New Monumentality and Digital Documentality

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Contrary to the general perception that the world is in a state of constant change, the exhibition Crossover-Architecture focuses on the permanence and non- negotiability of the relationship between man and architecture. It addresses the anthropological foundation of architecture by arguing that architecture is one of the tools without which man cannot survive. Vitruvius had already pointed this out, but he also mentioned two other tools that he placed on an equal footing with architecture: language and community. For as he tells us, people first had to learn language to form human communities, which in turn is the basis and purpose for building shelter. However, when one speaks of anthropological foundations, this does not mean that the relationship between architecture, language, and community always remains unvaried. On the contrary, the question arises of how architecture can remain true to itself and its anthropological mission precisely through change.

Copernican Revolution

If we inquire into the anthropological foundations of architecture today, our focus must be on artificial intelligence and its influence on architecture. Not because of a fascination for the advanced technology, but because of the changes it triggers in human self-understanding. Because with AI the last thing that distinguishes a human being as unique from others falls: creativity. One simply has to acknowledge that artificial intelligence is increasingly competing with human creativity. There is no doubt that what is happening here is more than dramatic. What is emerging is what in the long history of mankind must be called nothing less than the fourth Copernican turning point.

The first Copernican revolution was triggered by the astronomer Nicolaus Copernicus (1473-1543), who was able to show that the solar system, the stars and planets, do not revolve around the earth, but the earth revolves around the sun. Thus, man lost his position in the center of the cosmos and together with the Earth, he moved into a marginal position. The second Copernican revolution is associated with Charles Darwin (1809-82), who recognized that mankind does not owe its uniqueness to being created by God, but that Man is related to the animal world from which he evolved. The third Copernican revolution was initiated by Sigmund Freud (1856-1939). Freudian psychoanalysis shattered some Enlightenment convictions by showing that man is not master of himself, that the id, the unconscious, is master of the ego. With each Copernican revolution, new scientific knowledge deeply shook the world view of man.

And now man must share the privilege of creativity with the computer. This not only bothers man' s self-consciousness, it leads to a profound crisis as far as the anthropological status of the human being is concerned. Though it is a paradox, the more man knows about himself and about the world through science, the more he moves from the center to the fringe. This now also applies to artificial intelligence. By the way, when we talk about the Copernican turn, it goes far beyond the talk of the digital turn, even if some theorists like Mario Carpo already announced the second digital turn. But the real shock is yet to come. These repeatedly proclaimed turns, such as the digital turn, the linguistic turn or the phenomenological turn only interpret the world differently. The Copernican revolutions, though, reach much deeper into the human psyche, they change the consciousness of man toward himself and his position in the world.

The New Materiality of Architecture

Unlike general expectations, the growing influence of artificial intelligence does not lead to a rupture within the concept of architecture, but, to make a concept by Fredric Jameson fruitful for the question of Big Data, it nonetheless leads to a momentous shift within the system of cultural dominants₁. This brings us to the central thesis: the influence of artificial intelligence in architecture manifests itself in the transition from the concept of monumentality to documentality. The term documentality goes back to the Italian philosopher Maurizio Ferraris₂. Under reorientation of the contents that Ferraris identified for philosophy, documentality in architecture manifests itself in the specific change of architecture as a document. The reasons for this, as will be argued below, they lie in Big Data as the new materialistic basis of architecture.

In general, the significance of the material for the reconceptualization of architecture can be illustrated using an example from Japanese architecture. The wrought iron nails that were first used in the construction of the five-story pagoda of Horyuji in Nara -- the oldest wooden building in the world -- exemplify Watanabe' s field theory, which is loosely related to the sociology of Pierre Bourdieu. It states that the decisive impetus for innovations in architecture always comes from a field other than architecture. In the 7th century it was the use of wrought-iron nails, which made it possible to build a five-story pagoda of dimensions unsurpassed at the time. One has to notice, though, that the nails belonged to a cultural field that had not been part of architecture as til then architecture was based on wood techniques. Furthermore, it is significant that the nails were applied invisibly. Had they remained visible, their visible presence would have intervened in the established system of meanings. New elements that one is unfamiliar with and that cannot be interpreted beyond their actual constructive function always cause great irritation.

For each new material and form, a semantic code must first emerge so that the new can be given a place within the existing grammar of materials and forms. In 18th- century European architecture, iron was already used in many ways as reinforcement steel to take over the tensile forces in stone constructions, for example in the construction of S. Geneviève (1790) by Jacques-Germain Soufflot in Paris. Like the wrought-iron nails in Horyuji, this steel also remained invisible. It would have interfered with the language of classicism in a disturbing way. It could not have been interpreted or been given a higher meaning beyond its material appearance. If the steel elements had remained visible, the steel elements and subsequently the entire building would have been perceived as ugly, because usually what is not understood is called the opposite of beautiful, namely ugly.

In important aspect emerges that is fundamental to understanding architecture. Changes in the material basis lead to change in the language of architecture and its symbolic function. This is also where the question of the changing conditions for architecture today must begin. Against the background of Big Data, we need to broaden the concept of material, just as it was the case in the transition from the traditional wooden connection to the wrought-iron nail in Nara around the year 600. We need to recognize the new material basis for architecture in an age of Big Data. Doubtlessly, the new material of architecture today is the mass of data that is collected, analyzed, and in data-based design applied to architecture. Stone, wood, steel or aluminum are increasingly turned into a function of Big Data.

Monumentality

Is one of the central concepts of architecture as well as one of the most important architectural techniques. Monumentality is associated with the ability of architecture to refer beyond its material presence to ideas and things that are not present. By means of material signs, architecture is able to refer to things that are absent. Hence, monumentality consists of the tension between materiality and sign, between things present and absent. One could also speak of the transcendence of the material presence of architecture through monumentality. S. Geneviève in Paris can again serve as an example. By means of columns, architraves, capitals, and ornaments the building refers beyond itself to ancient times of antiquity and the ideal values that are associated with it. They are carved into the material of the architecture, here, into the stone.

By means of monumentality, architecture becomes a document of something larger than itself. Monumentality thus has something to do with signs and their legibility and with the fact that signs always need a material in which they can be inscribed. In semiotics this is called a sign carrier, which is needed for any sign to be legible and durable, whether paper or stone. One might object that there are also buildings that exhibit no or only few signs, buildings that perhaps have smooth, untreated facades free of ornamentation and images, such as the Pyramid of Khufu or the Pyramid of Cestius in Rome. Yet these buildings are not monumental in the true sense, they are simply very large but do not exhibit features of monumentality. They are characterized by what can be described as bigness.

Monumentality is revealed in the fact that the material presence of architecture is transcended by the sign reference to something absent. In this

way architecture becomes an intellectual medium and a medium of imagination; it opens itself up to artistic and intellectual endeavors. It can be said that the building grows beyond itself and its material-physical limitations. It can be said that the building thus outgrows itself and its material-physical limitations. Growing beyond oneself then means that the symbolic qualities are combined with strong effects and the aesthetic concept of the sublime. Thus, we can maintain that monumentality short-circuits two experiences: thinking and sensual experience. By means of monumentality, architecture grows beyond itself and becomes an expanded field of thought and experience. Through its reference to things outside architecture, the architectural object fits into the cultural force field of which it is a part and in which it develops its effect.

What is new in architecture today lies in its changed documentary character or even, at times, its renunciation. This has to do with the changing conditions of cultural production that results from the growing storage capacity of computers. However, it would be a mistake to assume that data-based design only concerns the material and structural data. Data based design today means that the design process is based on data about emotional, mental and physical states, expectations and desires. In addition to the technical data, these data become the basis of the design process. Big Data is not limited to the objective and quantifiable facts, but also records purchasing, consumption, and leisure time behavior, mental states, and emotional patterns. What unconsciously determines life can easily be analyzed by means of artificial intelligence and become a parameter of form and shape of the architectural object, bypassing the architect.

Digital Documentality

In contrast to monumentality, digital documentality describes the fact that data are not visible signs and no longer have any materiality, since they exist somewhere in the memories of computers only as digital, binary codes. It distinguishes the binary codes from the visible and interpretable forms, signs, ornaments and pictorial metaphors that they are invisible and therefore cannot express anything. They are not aimed at narrative, but at effect, which requires that they be linked to each other first. Only then is their actual purpose activated. This is what distinguishes digital documentality from monumentality: Digital documentality describes the renunciation of the documentary character of architecture and the shifting of the balance of the expanded field of thought and experience to the side of experience, and thus to the side of the effect.

The architectural objects of today are increasingly generated from a wealth of data, which are less concerned with meaning than with effect. Projects such as the King Power MahaNakhon Tower in Bangkok by Olé Scheren or the Provincial Headquarters in Antwerp by Xaver de Geyter aim to evoke admiration and strong emotions. They are no longer part of a grand narrative of architecture. They no longer want to explain or justify where they come from or what they refer to. They’ re just there, present. Projects like Bałtyk by MVRDV in the Polish city of Posnan are hermetically self-contained and rely solely on monumental effects. Style and ornaments are replaced by a technique of pattern, and the semantic, intellectual dimension is replaced by emotional impact. The critical- individual intentionality of the architect is substituted by a collective intentionality based on Big Data.

This is not without precedence as the architecture of documentality can be associated with Friedrich Nietzsche’ s concept of grand style. He associated architecture with “the power which no longer needs any proof, which spurns pleasing, which does not answer lightly, [...] which reposes within itself, fatalistically, a law among laws — that speaks of itself as a grand style”³. Architecture is a “kind of eloquence of power in forms”⁴. Nietzsche’ s example was Palazzo Pitti in Florence. In this building the architectural signs and stylistic elements are simplified to the point of caricature. In the excess of simplification and enlargement, they lose their meaning. They are only big and aim solely at effect.

Elsewhere, Nietzsche also speaks of the uncanny sublime, which he equates with the aesthetic category of the sublime. In doing so, he refers to the aesthetic of idealism, which contrasts the principle of beauty with the principle of the sublime. While beauty relies on order and clarity of meaning, the sublime, on the other hand, is an aesthetic event that does

not explain how it came about. It achieves its strongest effect by leaving the sources of its origin in the dark. Hence, digital documentality ties in precisely with the concept of the sublime and transfers it into the digital age by shifting the cultural dominants.

New Monumentality

Today, artificial intelligence is the source for the great changes in architecture, which means that the impulses for change come from outside architecture. In the course of the fourth Copernican revolution, artificial intelligence, big data and data-based design are changing the humanistic foundations of architecture, as they have defined architecture for the past 600 years. Humanism in architecture is linked to the commitment of architecture to the documentation of designs in drawings and models. Leon Battista Alberti (1404-72) was the first to demand this. Architecture became a matter of the drawing desk. This changed architecture fundamentally. When architecture was previously a matter for the building site, reference to other architects and other architecture was only possible to a limited extent. Drawing, on the other hand, enabled architects to make reference to other architectures and other times in an experimental form.

Documentation on paper made it possible to quote and collage styles, forms, and details of other architects on a trial basis. Eventually, this led architecture to become an intellectual and artistic practice. This turned architecture into a cultural technique equivalent to the arts, such as painting and sculpture and subsequently upgraded the role of the architect. From then on, architecture was reliant on the intentionality of the individual architect.

Watanabe takes up precisely this thinking and goes far beyond the factuality and supposed lack of alternatives of digital documentality. He is not at all satisfied with an architecture of pure effects and proposes an interesting alternative in this exhibition. He does not want to leave open the gap in the monumentality that big data and data based design have struck. On the contrary, in closing the gap he sees an opportunity for a truly new monumentality. He writes: “Creating a void of monumentality means intentionally creating a void of technology”⁵. And then he continues, “the renewal of monumentality emerges from the values of new technologies”⁶.

Watanabe rightly points out that the gap in monumentality cannot be closed by the technologies that have opened it. This task can only be entrusted to other technologies. The gap in monumentality is an opportunity for other more sophisticated technologies to bring architecture back to its basic function as a social object. Watanabe also provides historical examples for this. The gap that modern mass production has opened up in monumentality has not been closed by the very same serial technology that caused the problem, but precisely by the use of technologies from other areas, such as shipbuilding and aircraft construction, in other words, the technologies that enabled individual production in architecture, but at a higher and more sophisticated technological level than the old technologies that they replaced, such as masonry or timber construction. This is the kind of new monumentality that Crossover-Architecture is striving for.

Berlin, 8. April 2020

■ NOTES

1. Fredric Jameson, Postmodernism or, The Cultural Logic of Late Capitalism, chpt. III, <https://www.marxists.org/reference/subject/philosophy/works/us/jameson.htm> (March 30, 2020)
2. Maurizio Ferraris, Documentalità. Perché è necessario lasciar tracce, Roma-Bari: Laterza 2009.
3. Friedrich Nietzsche, Twilight of the Idols, “Skirmishes of an Untimely Man”⁷, Aph. 11., see also Jörg H. Gleiter, »But Turin!«, Nietzsche’ s Discovery of the City, https://www.architekturtheorie.tu-berlin.de/menue/team/prof_dr_ing_habil_joerg_h_gleiter/parameter/de/