

# SEMIOTICS OF *ARCHITECTURAL*: DETAIL BETWEEN RATIONALISATION AND REPRESENTATION

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## A B S T R A C T

The aim of this paper is to discuss the realm of values upon which thoughts on architecture have been conceived, through the drawings of architectural detail. Although modernism, which opposes technical detail and ornament, is still regarded as influential theoretical position, it neglects to address a broader meaning of a detail in architecture.

The research disputes the opposition between an ornament and a technical detail, claiming that a detail in architecture is the more abstract term, which represents a certain level of design thought besides utility and embellishment. It is argued that both modern and traditional values from different aspects of societal and cultural activities, as for their changes were being referenced to the micro level of architecture, transforming the way of their presence through different visual representations of detail along the history and theory of profession. In this paper, the small-scale drawings are used as a medium a medium which reflects transdisciplinarity of the profession and its entanglement with the knowledge and dynamics of other fields of human activity such as philosophy, economy, religion, engineering, and arts.

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## INTRODUCTION

The representation of architecture uses various aspects of buildings in its formal narratives and identifies them with values that characterise a certain age. Rationalisation, as a process of secularisation of architectural aesthetics, is connected with the influence of truth within the design process in practice and theory of architecture. Assuming that the architectural detail represents a broader concept than the technical detail and ornament, this paper will explore the relationship between the socio-cultural context of creativity and various thematisations of details.<sup>1</sup> Reading the details as ornament and technical details is closely connected with science, religion, philosophy and art, reflecting the macro-level changes in culture onto the micro-level. In order to understand the relationship between technical and ornamental in detail, a particular focus will be put on understanding the changes in the production of architecture that have led to a different aesthetic reading of detail in modern and postmodern periods. The attitude is that dialectical contrast of the two concepts in the context of postmodern thought cannot be considered relevant, and for that reason a theoretical model will be proposed as one of the possible patterns for their multiple reading.

With the crisis of modernism during the 1960s and turning the discipline of architecture and design to exploring their own basis, we come to define new design methods that are becoming more sensitive to cultural and social values of environment in which the architectural operation takes place. In postmodern construction, we recognise the return of the romantic idea of tradition and history as an authority. The return to historical references as forming motifs, the preservation of historical city centres and the return of the ornament, bring with them the idea of restoring history. Such a tendency is similar to ‘radicalised Enlightenment’<sup>2</sup> and is related to discrediting functionality as the basic value of modernist aesthetics and the idea of understanding diversity as a new value.<sup>3</sup> Misunderstanding and intolerance of historical references, as diversities, is in fact a ‘prejudice’ per se, which can be rationalised.<sup>4</sup> Michel Foucault revisits the flow of modernity as a continuation or deviation from the idea and belief in reason which originated in the eighteenth century, considering that modernity can be regarded as an attitude about history, rather than a historical period.<sup>5</sup> The universality of reason and belief in reason as authority does not consist of subordination to an individual attitude, but in the creation of a state of ‘rational despotism’ based on the freedom of thought and the possibility of reconsideration. Instead of separating the modern era from premodern or postmodern, one should observe how the attitude of modernity, from its origin, has opposed the views of *countermodernity*.<sup>6</sup>

Postmodernism as an aesthetic context can be more precisely understood as ‘ultra-modernism’, because in a certain way, it represents a critique of the ‘tradition’ of modernism.<sup>7</sup> The return of historical references, even the ornament as a stylistic detail in architecture, can also be understood as a tendency towards formally expressed belonging to the past and as an attempt to redefine the theoretical foundations of architecture. The return of the ornament has never been a real return, inasmuch as it refers to a reality that no longer exists, and the discussion of return means a search for a definition of a new reality. Therefore, historical references are the way in which we recurrently understand ourselves, but also the way in which we understand ourselves in family, society, state.

#### THE CONSTRUCTION OF RATIONAL

The notion of architecture as the divine standard and its equalisation with natural was a form of formal mythologisation of construction activity.<sup>8</sup> In addition to reading Vitruvius, Renaissance architects find the purpose of their intellectual and practical work in interpreting ancient buildings. Renaissance architecture tends to achieve its value in the consistency of references to a defined historical frame, respecting the principles of *firmitas*, *utilitas* and *venustas*. With its reference frame, this architecture strives to achieve a sense of classicality, composing typical elements of representation – classical orders.<sup>9</sup> The rules of building, established classical typologies and the method of ornamentation have become the architectural means that practitioners use to project its value.<sup>10</sup>

However, the interpretation of the world and the structure of human life are inextricably linked to what is the function of truth in one culture.<sup>11</sup> The authority of reason gets its importance when natural and divine origins are changed by function and technique, as new types of the origin of rationality. Belief in reason is the belief that the way of thinking used in science, mathematics and technology can produce a true architectural object. While representation is a simulation of the meaning of the present through a message of history or technology, reason is a simulation of the meaning of truth through the message of science.<sup>12</sup> Rational has become an aesthetic and moral foundation of architecture. The Enlightenment has brought an ontological idea of the essence of the things that is in their origin, the universality of nature and the cosmos, that could be measured. In addition, during this period the metric system was introduced, replacing the existing traditional and local measuring systems on the international level.

Rationalism itself brings the idea of defying architecture, its reduction to its primordial forms in order to find its essence within them. Marc-Antoine Laugier highlights nature as primordial form or the essence of architecture, which is reached by eliminating ornaments and classical orders. A primitive hut represents a prototype on how to distinguish the essential parts of the composition of architectural orders and those parts that are added out of ‘caprice’.<sup>13</sup> However, Laugier considered it to be just a theoretical model, while in reality it was impossible to separate the construction from embellishment. It can be noticed that the architectural detail comes out of the sphere of the figurative set of the ornaments and becomes the subject of the analytical method. By using the method of section, Laugier questioned the layers of architectural elements and their interrelations. The metaphysics of light changes with the metaphysics of line, and separates in that way the space for living from the geometric space. The perception of space and plastic is thus separated from the perception of construction, which analytically penetrates the core of the walls, pillars and beams. The search for ontological origin is shown on the engraving *Essai sur l’architecture*, and the emergence of the ‘first’ architecture. Anatomic examination of architectural form, which develops in parallel with the development of anatomy,<sup>14</sup> sets the foundation for the rationalisation of design and production, but also for the changes in the way of designing details.

## MODELS OF REPRESENTATION

Reason uses different techniques of persuasion, measurement, and logical evidence to discover the essence. The technical form (Kernform) gets the chance to stand out as the only rationally-based and desirable form in a new modern secular society since it was divided by Karl Boetticher with the aim of explaining her unity with the art form (Kunstform). Technology, mechanical production and reproduction, steel, glass, film and photography have changed the perception of reality, insofar as their function was to discover the invisible. They created the need for searching similar characteristics in other things. In fact, the ‘tectonic unconscious’ at the transition from the nineteenth to the twentieth century, as written by Mertins, presents all aspects of the representation of the architectural form that have changed with steel construction, but also with the development of visual culture through photography, film, X-ray, microscopes and telescopes. As film and photography as a medium allow us to visualise the optically conscious, so do steel constructions allow us to see the tectonic unconscious.<sup>15</sup>

Through the technique of enlargement, reduction, framing and editing, we look at the aspects of reality that were previously unknown to us. As well as in architecture, steel constructions are becoming a form of optical instruments that enabled the examination of hidden tectonics through the network of intertwined profiles, connections and layers. Through statics, engineering calculations, technical drawings and industrial production, steel constructions are becoming self-sufficient rationally-based representation of architectural elements. The layered nature of details and the complexity of their static and constructional patterns, such as a frame made through the lens of steel constructions, reveal the new tectonic basis of *Kunstform*. The utility of technology is no longer exclusive in its role in the utopian vision of society, but in an innovative point of view of the things that have freed the world of the bourgeois aura of historical aspect and continuity of tradition.

#### RATIONALISATION OF PRODUCTION

‘Changes of ornament lead to a premature devaluation of the labour product. The worker’s time and the material employed are capital goods that are wasted,’ says Adolf Loos.<sup>16</sup> With an aim to distance itself from the earlier representational tradition, architecture used formal reduction as a method that is more precise in embodiment of the function and essence of things. Together with industrial breakthroughs modernism evolved in a representation based on a scientific and technological positivism, pursuing the simulation of efficiency as the ultimate goal.

The atmosphere of industrialisation and abrupt changes in the production process of architecture triggered the first reactions of architects defending the ornaments and craftsmanship.<sup>17</sup> The production imposed by industrialisation reduces the work of craftsmen to processing, dressing and correction of objects deprived of any intellectual participation. Reducing the task of workers to providing services and disregarding their other skills is a conceptually and economically an unethical act. According to Edward Ford, a specific definition of detail emerged from that kind of change in the role of a craftsman in the process of architecture creation: ‘The detail was born when the craftsmanship died’.<sup>18</sup> Loos also links the question of rationality of the use of ornaments with the economic cost of labor invested in the ornament as a product. In that way, there is a ‘mess’ in production as a result of neglecting the fact that the ornament is no longer a natural product of human culture such as the tattoo of a primitive man is the form of a pagan means of communication and the

expression of affiliation. The ornament becomes ‘a meaningless flower’ that no longer represents an expressive means of human culture.

‘Every time the ornament function is at the centre of attention, it suggests essential changes, whether in the form of a crisis or in the form of a turning point in culture.’<sup>19</sup> Marked as a communicator, it becomes the carrier of the meaning of the culture in which it is created and disappears, or it represents its value and economic system. The use of ornaments burdens the production process, which is contrary to the modernist idea of general social and cultural progress. The ornament can be understood as ethically suitable only in those cultures or those layers of society which, unlike the aristocrats that Loos equates with a modern man, find in it the joy and meaning of their work, and such societies can also be regarded as retrogressive.<sup>20</sup>

According to Ford, the modernist detail is a ‘non-detail’, which aims to demonstrate the ease and rationality of the production of a living machine through a form of plastic monolith.<sup>21</sup> The ostensible lack of detail indirectly signifies the simplicity of implementing architecture without the visible use of manpower resources. With this, the detail eliminates the craftsmanship from the aesthetics of architecture, through the alienation of work that arises as a result of the vertical division of labor. At the bottom of this new hierarchical order is the detail production, while at the top are the main design questions directed by the chief architect. The employees in lower positions such as modelers, ceramists and carpenters were deprived of the right to a personal expression, as their role was limited to the precise execution of the dictated formal requirements. The utilitarianism of architecture thus becomes a form of technocratic control of architects over the production process, in which the function as the possibility of a form becomes a kind of ‘aesthetic taboo’.<sup>22</sup>

## POST-DETAIL AND THE TRUTH

Postmodernism in philosophy and architecture cannot be interpreted in the same way. The revival of historical motifs and models of construction represent witty and ironic quotes that criticise the abstraction and impersonality of modernism.<sup>23</sup> Mario Carpo thinks that the two original meanings of postmodernism are very similar and states that both interpretations are based on the rejection of dominant narratives. While architecture had aspirations of reviving tradition, iconism and symbolism, postmodern philosophers dealt with discussions and expectations of the new technological, sociological and

economic environment.<sup>24</sup> In philosophy, the fragmentation of narratives marked the end of history, art, representation, mimesis, while the idea of the linearity of progress becomes irrelevant. Beautiful, good and true, as the three concepts of aesthetics that Sloterdijk distinguishes, follow the sequence in modernism that useful is good, and therefore beautiful. Postmodernism destabilises this division so beautiful can be beautiful for the beauty itself.<sup>25</sup> It is a period of multiple tastes and the acceptance of diversity, and therefore the postmodern ornament is not kitsch because it is the truth-telling element, which is at the same time tectonic and superficial.

The postmodern attitude towards the ornament is similar to the modernist attitude towards technical detail, accepting it as the content of the truth about architecture. Modernism, unlike postmodernism, uses functionality for decorative purposes, that is, as a support to an aesthetic narrative. The demand for the existence of function and the rejection of decoration arises from excessive rationalism that strives for intellectual connection and technocratic control of individual sensibilities. Monosemantic is identified with the ethical, and such a state represents moralism towards Jenks as dead (*dead moralism*). It is a misconception that utility necessarily means rejection and neglect of satisfaction in any form - in the form of beauty, ornamentation or entertainment.<sup>26</sup> It is more accurate to interpret these ideas as architectural features of *decoration and functionality*. This means that, as variant reference frames, the function and meaning have variable formal occurrences.

#### TOWARDS THE AMBIGUITY

It is necessary not to consider historical consciousness as something radically new, but as a new moment of difference within the thing that constitutes a human relation to the present. Progress is not necessarily spreading to new areas and materials, but also reaching a higher self-reflexive level of questioning. In this way, in order to be able to act interdisciplinary, we must first understand the boundaries of our own discipline and value framework of our own acts.<sup>27</sup>

The attempt to define the detail formally and functionally as an ornament or technical detail is actually a stereotypical polarisation, which ignores its potentially constructive meanings. *Architectural* aspect in detail is necessarily related to the ways and limits of knowledge in architecture through the analysis of internal design processes and values on which they are based. Therefore, the architectural detail in an independent architectural discourse becomes close to

an *index*, a parallel system of signs that signal the idea that should be read. Thus understood, the detail becomes an attempt to understand architecture without any prejudice and without fixed values as a multifaceted material practice that has the potential to express *technical and ornamental*. The function of the index is not to form the notion of some previous architecture, social practices and usage, but the embodiment of individual architectural narratives in a specific social context.

Multiple meanings as a value is directed to knowledge rather than belief, and as such offers the possibility for a narrow disciplinary and wider socio-cultural reading. Moving from the idea of belief to the idea of knowledge transfers the discussion about the ontology of architecture into the field of epistemology and phenomenology. Narrative in the postmodern context implies the possibility of a continuous construction of personal meanings, which reduces great ideas of functionalism and symbolism to personal experiences and meanings of representation. Architectural does not necessarily signify the truth of the object, or its historical, divine or rational foundation in order to be relevant in one view of architecture. Architectural can thus be considered everything that architecture as a discipline uses as the basis for logical argumentation of its value framework and design process, which may originate in the spheres outside the discipline itself. Based on a comparative overview in the Table 1, it is concluded that the theoretical polarity that exists between the technical detail associated with the idea of reason and the ornament associated with the idea of meaning defines *ornamental and technical* as special variant states of presence and absence of detail in the representation of the *architectural*. Based on these conditions we can more accurately read the relationships between function and meaning in the context of a fragmented architectural narrative, although the full spectrum of these relations is epistemologically inconceivable.

INTERPRETATION	VALUE	CULTURAL	PHILOSOPHICAL	ARCHITECTURAL	IDEA
Technical	utility	innovation	ontological empirical	FUNCTION	truth
Ornamental	symbolic	communication	semantic	meaning	message
Architectural detail	machination	quotation	phenomenological	index	narrative

## CONCLUSION

The nature of architecture is such that it cannot in itself embody the wisdom within building, but it can offer the aesthetics of reason, through the convincing experience of rationality. 'God is in the details' thus becomes the intention to present the meaning of an architecture on a micro level, which, through various means and values, technological or cultural, seeks its verification by a certain social context as a kind of desirable reality. The return of the ornament is the form of a tendency towards neo-configuration, which in its function of evoking similarities with historical quotations speaks of the opposite - the disappearance of objects from their own representation. Objects in such representations represent aesthetic machinations, i.e. empty forms of representation. By examining the relationship between the socio-cultural context of architectural creativity and the development of different thematisations of details in architecture, it has been observed that the detail represents a broader notion than the technical detail or ornament. Comparative reading shows that the variable conceptions of detail are closely related to attitudes about purpose, truth, utility of architecture, but also to attitudes about the meaning of architecture. In contemporary context, architectural details get the function of the bearer of the narrative, which controls both the meaning and the production of an image of architecture. The technicality of details is thus a reflection of the control over the process of realisation of architecture, while its ornamentalism is the control over the process of its signification.

It can be concluded that architecture must strive to define autonomous values on which it builds a relationship towards the context. Theoretically, it is a movement towards architecture as an independent discourse, stemming from classical or any other values, in order to be free from the burden of meaning and correctness of its operation. In the overall accumulation of practices and content, pluralism should be seen as an atmosphere, rather than a design method, in which everything is justifiable, as long as it is coherent and precise in its meaning and production.

## NOTES

- 1 Garcia, 18; In the 20th century the interpretation of detail was based exclusively within the framework of wider stylistic and technological paradigms, so the exact meaning of the notion of architectural detail was insufficiently clarified and open to further discussion in architecture. Today, the term *architectural detail* is most often referred to as a technical detail and part of the project documentation. In professional theory and practice it can often refer to a point, a piece, a fragment, an element, a component, while the use of the term is closer to understanding the detail as an ornament.
- 2 *Istina I metoda: Osnovi filozofske hermeneutike* (Sarajevo, IPO Veselin Maslaša, 1978), 308.
- 3 Gianni Vattimo, „The end of modernity, the end of the project”, in *Rethinking architecture: A reader in cultural theory*, yp. Neil Leach (London, New York: Routledge, 1997), 148.
- 4 Gadamer defines prejudice as the source of misleading in using the reason, calling them “the self-constructs of reason”: In Gadamer, *Istina I metoda*, 303.
- 5 Faucault defines the term “attitude” as sort of a voluntary and free relation between people and the actual reality, as a result of the form of thought, feelings, behaviour, which at the same time speak of their attitude towards the affiliation. In Foucault, *What is Enlightenment?*, 38.
- 6 Ibid.

- 7 Theodor Adorno, *Aesthetic theory* (London: Continuum, 1997), 59.
- 8 Vladimir Mako, *Aesthetic thoughts on architecture: Antiquity* (Belgrade, Architecture faculty University of Belgrade), 13-29.
- 9 Classicism is defined by Joseph Rykwert as the idea about ancient and appropriate, which suggests the authority and respect, it is the model of timeless excellence.
- 10 Certain conceptual thoughts related to rationalistic thinking could be traced back to Alberti's use of the term *lineamenta*. See also: Branko Mitrović, *Serene Greed of the Eye: Leon Batista Alberti and the philosophical foundations of renaissance architectural theory* (Munich Berlin: DeutscherKunstverlag, 2005), 123.
- 11 Peter Sloterdijk, *Kopernikanska mobilizacija i ptolomejsko razoružanje* (Novi Sad: Svetovi, 1985), 54.
- 12 Ajzenman, *Kraj klasičnog*, 89.
- 13 Marc-Antoine Laugier, *An essay on architecture* (Los Angeles: Hennessey&Ingalis, 1977), 12.
- 14 Alberto Perez Gomez, "Sketching around Lineamenta", y *Mobility of the line*, ed. Ivana Wingham (Basel: Birkhauser, 2013) 21-31. During the Renaissance, a great number of architects were working on the section drawings of human body and anatomical analysis. Gomez argues that this sort of analytical abstract thinking through materiality of human body has been transferred to architecture, as a concept of multilayered elements.
- 15 Detlef Mertins, *Modernity unbound: Other histories of architectural modernity* (London: AA Publications, 2011), 122-123.
- 16 Adolf Los, *Ornament i zločin* (Zagreb: Mladost, 1952), 8.
- 17 The Arts & Crafts movement was established in Britain during the nineteenth century based on the ideas of John Ruskin and Augustus Pugin, with a clear anti-industrial ideology. It recognised the need for 'encouraging artisans to continue to produce craft?', stating that the good architecture is closely related to the good and diligent workers, and consequently, with the good society. See also: Frempton, *Modern architecture*, 2004.
- 18 Edward Ford in Peggy Deamer, „Detail Deliberations”, 2008. From the official site of Peggy Deamer, attended (08.06.2016.) <http://www.peggydeamer.com/images/detaildelib.pdf>
- 19 Jörg H. Gleiter, "Ornament: The battleground of theory", in *Ornament, Return of the repressed, Zona#4*, 8 (2009);
- 20 *Ornament and crime*, 18.
- 21 Edward Ford, "55 door handles or what is a detail?", text is published at the official website of Edward Ford, attended (15.08.2016), <http://edwardford.com/wp-content/uploads/2012/03/55-Door-Handles2.pdf>
- 22 Sloterdijk, *Kopernikanska mobilizacija i ptolomejsko razoružanje*, 47.
- 23 Čarls Dženks, *Nova paradigm u arhitekturi: Jezik postmodernizma* (Beograd: Orion art, 2007), 111.
- 24 Mario Carpo, *The alphabet and algorithm* (Cambridge: Massachusetts, 2011), 159.
- 25 Glenn Adamson, Greyson Perry, Sam Jacob, Charles Jencks, "What is the role of ornament in contemporary architecture?", Institute of Contemporary Arts London video, 1:28:47, 14. September 2011. <https://www.youtube.com/watch?v=B14uaSxLong>
- 26 Mil, *Utilitarizam*, 32.
- 27 Ćirić, Dragana. "Relational logics and diagrams: No-scale conditions", in *Serbian Architectural Journal*, Volume 8, No.3, 2016, 400-403.

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