## THEORETICAL FRAMEWORK on understanding the city through type, elements and systems

## Architecture as a language

a language constructed along the lines of a newfound logic,

a logic rooted in place, through a personal (dynamic) understanding of the site and its people & positioned within architectural theory, presenting a new interpretation.

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The "city grows upon itself" (Rossi 1982:18); it acquires consciousness and holds memory. In the course of its development, original themes persist but also are modified or rendered illegibly. To work with the existing city thus requires a sensitivity towards past episodes, current conditions and future possibilities. This studio explores the post-carbon landscape of Liége, a city once a cradle of charcoal and iron ore exploitation, and now deserted by mining and manufacturing industries. [1]

This year's Urban Architecture Graduation Studio booklet opens with Rossi, introducing us to the concept of the memory of the city, how it can be dynamic and how it holds a strong connection to the past, present and future. Hinting towards themes such as the post-industrial city, black hill, scar, the introduction seems to have a strong focus on the negative remnants and traces of history, even calling them "inflicted on the landscape of the city, its buildings and communities." While I acknowledge the impact that past episodes have had on the memory of the city, I also strongly believe that Rossi would rather read them as part of a larger whole, "the sedimentation of history that can be discovered in built structures of architecture, the social spaces of human life and the material culture of the landscape.". When looking at Liége through the eyes of Rossi, there's a clear individuality in the city, one that surpasses the term 'post-industrial city' as a function of the past, and focusses on the construction of the present. Though all of the above mentioned themes are relevant and intertwined in the city's present memory, this research aims to assess the tendencies of remaining forms in order to anticipate emergent developments, investigating the position that elements give meaning to the city, making the ordinary become meaningful. By doing so, I believe Rossi can be current again, learning from his ideas to form my own understanding of the present state of a city as a human construct, changing over time, encapsulating values of the city but also of people. Though it may seem to some that Rossi is "outdated" - his books addressing topics that were current in the 1960s but have become obsolete today, my reading of Rossi, together with other theorists, presented in this paper, aims to show the value of his lessons when it comes to understanding the city. However, before we can start discussing those lessons, it's important to ascertain the value of understanding itself. How should this understanding be constructed?

Every case of 'making architecture' is preceded by understanding, whether it is understanding who you're building for, where you're building, understanding a problem you want to solve or a method you want to use. This process of understanding is vital to the making, but often seen as an aid in the design process rather than a standalone product such as a model or drawing. Why is it that the understanding cannot be the sole purpose of making architecture?

In architectural design, drawings and models are not the sole components of significance; the cognitive apparatus of architecture holds equal value. Knowledge of architecture is acquired not so much through the learning of abstract rules or theories, but rather through the study of concrete examples such as buildings and their designs. Giorgio Grassi, an Italian architect, demonstrates [...] that a systematic examination of buildings relies on a logical sequence of operations: describing, classifying, and comparing. The application of these rationalist principles assumes a vocabulary consisting of names, terms, and concepts that enable unambiguous identification of architectural objects and their constituent elements. It is within

these cognitive operations that the connection between language and architecture becomes evident. [2]

Though the definitions of these architectural objects may be unambiguous for their composer, descriptions of such objects or elements may vary depending on the means of classification. How to describe objects depends on the position of the architect within a certain theoretical framework. Many works of rationalism that address the issue of classifying architectural elements derive their significance from the objective of analysis: fulfilling an aesthetic need. In doing so, they present themselves as the definitive approach to a specific problem, characterized by the formal completeness of those works and their "elemental nature." This aspect becomes evident precisely through their form and is the base for the construct of type.

Typology in architecture gives us an apparatus to study the history of architecture, which can also be understood as a way to examine the collective memory of the city. As can be seen in canonical texts since Vitruvius, such as those by Alberti, Serlio, Palladio, during the Renaissance, to Durand during Enlightenment, Hilberseimer in the early twentieth-century, Rossi in the 1960s and others, we can view the process of architectural history unfolding, treatise to treatise, manual to manual, and manifesto to manifesto. Although not all of these works use the word typology, or type, the concept is implied because each use classification, description, and historical precedent to formulate a position.

In architecture, the most common theories of classification by type have been according to use: national monuments, town halls, prisons, banks, warehouses, factories, as can be seen in Nikolaus Pevsner's 1976 A History of Building Types; and according to form: centralised plan, linear arrangement, courtyard. Aldo Rossi tells us that the former understanding is limiting because the use of a building is independent from its form. Buildings evolve over time, so a warehouse becomes an apartment block, an apartment block becomes an office block, an office block becomes a brothel. Or as, for example, Atelier Bow-Wow show us in Made in Tokyo, all of these can be contained as a hybrid, so that above the warehouse is an apartment block, which is below an office, and the building terminates with a penthouse brothel.

Rossi's quote, "I would define the concept of type as something that is permanent and complex, a logical principle that is prior to form and that constitutes it," is significant for its location within The Architecture of the City. It mediates between a quotation by the Enlightenment architectural theorists Antoine Chrysothome Quatremère de Quincy and Jean-Nicolas-Louis Durand. Both Quatremère de Quincy and Durand acknowledged, in different ways the relationship of memory and history in the idea of type. Quatremère de Quincy linked type with that which is archaic, elemental and primitive, and we could say to memory. Free from this metaphysical speculation, Durand's technical understanding geometrised history. And as Rossi has said, history is the material of architecture. Thus, in the adjacency of each quote we get the opposition between the conceptual and the material once more. Rossi's quote then mediates between the "permanent and complex," which is archaic and elemental, something "prior to form;" and of the "logical principle," which is what is constituted by a reading of history.

The concept of collective memory and of type are closely interrelated, because collective memory relies on material reality. A material reality which is manifest both in built form and as images in treatise. Built form because buildings witness the evolution of the city. Images because they embody values, experience, ideas. What is important is that type constructs a link with history, and produces transmittable knowledge. Accordingly, architecture communicates its own history through typological ideas. One could even go as far as Rossi, saying, "In order to be significant, architecture must be forgotten, or must present only an image for reverence which subsequently becomes confounded with memories." Freud tells us that in forgetting, we commit something to the unconscious, where it is worked over during regression, which is an impulse to the archaic; and then to surface again when remembered, only now transformed, and reverent. The type is worked over within the collective history of architecture, to be transformed by a kind of temporal and formal regression.

In my reading of Rossi, his theory on type stands out as more comprehensive than previous theories due to its exploration of the interplay between observation, memory, and imagination within an analogical framework encompassing type forms, type elements, and their conceptual analogues. Rather than characterized by their "formal completeness", elements presented by Rossi in his theory on urban artifacts for example, seem to take on a more dynamic nature, still manifesting their autonomous reading through form but simultaneously acknowledging the human construct – life – of the element, and their role in the collective.

Another understanding of elements is presented by Charles Vandenhove, who defines the autonomous reading of elements in a less metaphysical way than Rossi has, focusing more on the role elements play in a bigger whole, not that of time but of space. His theory evolves around structuring his architecture classically, like a text, almost like a poetic composition. He starts his architectural text with words, like plinth, architrave or column, the words make up sentences, the composition: symmetry, frontality, centrality. Combining all of it in an architectural whole by using stylistic principles, for example like a house or gateway does.

Vandenhove's architectural approach comes close to affirming the essential 'autonomy' of architecture. It concerns an architecture that does not strive to be a part of life, or part of 'history', and which does not want to be decorative or auxiliary, nor an expression or petrified meaning, but an architecture that stands slightly outside of life. An architecture that both circumscribes and questions life. An architecture that is present as 'duration', an architecture that tells very little but allows room for living and telling. Bekaert, in his commentary to The Riddle of the Sphinx, showing the ouvre of Vandenhove not as buildings, but as a catalogue existing of essential components, describes it thus: not language, but language ground. To Vandenhove a column will always stand and a beam always rest, but as the column has had many shapes and forms so has the beams material changed over the course of time. "As form and use changes, autonomous reading remains the same, that is the power of good architecture. Architecture can be dynamic and fixed at the same time, its life is dynamic, while its root (autonomy)is fixed." - Charles Vandenhove.

As Jencks wrote, Vandenhove certainly believes in 'constructional beauty'. In other words, articulating the way that architecture works by decorating 'the transitional points of a building, the doors and the windows'. But he is not, contrary to what Jencks thought, 'like any number of Postmodernists (...) concerned with historical recall' The pavilion for the Middelheim sculpture park makes this abundantly clear. In this this monumental outdoor sculpture, Vandenhove does not refer to the past but to the fixed, timeless and essential nature of building, and also to its most fundamental forms: on the one hand, the square, and on the other, the elementary forces that determine a building and underpin the principles of architecture: the column that supports, the beam that rests. Gravity, mass, weight and stone. And standing alongside the most essential elements, next to the principles – but detached, as though an independent addition – the beginning of language and the beginning of the free, supplementary form: the lonic column, the symbol of accessibility, a marker on the human scale. [3]

While it is possible to understand architecture as autonomous, because architecture is a discipline with its own rules, values, formal and conceptual principles which are put forward in theories, drawings, built and unbuilt examples, architecture is not autonomous from its use, function, people or culture. Architecture has played a vital role in giving concrete form to culture from the first traces of the city. Its origins are deeply rooted in the development of culture and civilization, making the history of architecture inseparable from the history of culture itself. Consequently, architecture, culture, the people, and the city share an interconnected and mutually influential relationship, each influencing and shaping the other. Creating a space for culture, for people, is creating a space for architecture. Therefor my understanding of the element, takes into account the use and user, in an attempt to understand the transposed culture within elements that is an effect that time has on the context of the site.

This relation between element and context is one that Rossi and Vandenhove hold opposing views on, though they both seem apprehensive about the usage of the word context. Vandehove dismissing its relevance, Rossi criticizing its "empty formalism" proposing the term locus instead. Up until 1978, Vandenhove had never built in the city. His projects had all been free-standing buildings in open areas, or situated within age old landscapes that lacked a binding historical context. In the case of the Hors-Château renovation project, however, Vandenhove was compelled to work within the confines of a fixed spatial context and a highly specific history. His design approach, coupled with his predilection for a basic architectural vocabulary, was to completely ignore the issues associated with historical buildings and monument preservation, and to not differentiate between the 'historical' and the 'contemporary', dealing with the situation in a very free and convincing way. Though Vandenhove doesn't mention any analysis of the context of Liége, the design of Hors-Chateau seems to define the identity of the context very elegantly, clearly reading as the vocabulary of Liége and not of any other city. It seems to me that, that presence of city in Hors- Château undeniably tends to owe its permanent character to its location within a specific context. Rossi shares this opinion, voicing the argument against viewing context solely as a plan relationship of figure and ground.

The locus is a component of an individual artifact which, like permanence, is determined not just by space but also by time, by topography and form, and, most

importantly, by its having been the site of a succession of both ancient and more recent events. For Rossi, the city is a theater of human events. This theater is no longer just a representation; it is a reality. It absorbs events and feelings, and every new event contains within it a memory of the past and a potential memory of the future. Thus, while the locus is a site which can accommodate a series of events, it also in itself constitutes an event. In this sense, it is a unique or characteristic place, a "locus solus." Its singularity is recognizable in signs that come to mark the occurrence of these events. Included in this idea of the locus solus, then, is the specific but also universal relationship between a certain site and the buildings that are on it. Buildings may be signs of events that have occurred on a specific site; and this threefold relationship of site, event, and sign becomes a characteristic of urban artifacts. Hence, the locus may be said to be the place on which architecture or form can be imprinted. Architecture gives form to the singularity of place, and it is in this specific form that the locus persists through many changes, particularly transformations of function. [4]

Locus in this sense is not unrelated to context; but context seems strangely bound up with illusion, with illusionism. As such it has nothing to do with the architecture of the city, but rather with the making of a scene, and as a scene it demands to be sustained directly in relation to its functions. Rather, the permanence of the urban context is imbedded in the relationship between it and the element, the locus, therefor the use of the term context is unnecessarily confusing.

By building this theoretical framework, comparing different views and forming my own ideas, the element has become something relational, embedded, conditional as well as contextual, structured not purely by theoretical frameworks, but ordered by a social pattern, making it durable as well as livable, allowing for growth and change within clear ground principles. Ground principles that will help to establish the logic in architecture that is the objective of this research. In Introducing Boullée Rossi endeavors to formulate the theoretical framework and methodological principles of an 'autonomous architecture', seeking both analysis and a construction of architecture in rational terms, namely by employing techniques specific to reason. Rossi sees "... the need for a reading of architecture based on logical principles," in order to construct a rigorous theoretical framework in which to place his future built projects. Likewise, I resonate with the idea that rules and systems based on rational questions form a framework that facilitates a clear design.

This essay by Boullée is particularly interesting for those who believe that architecture should be interpreted based on logical principles and argue that architectural design can largely be founded upon the development of a series of propositions. Boullée, as an architect, is rationalist to the extent that once he has conceived a logical system of architecture, he commits himself to continuously testing the adopted principles through various designs. The rationality of the design lies in its alignment with this system. In this essay, evidence and drawings emerge as the unity of the design, forming a system together. [5]

Critics say that within this rationalist, scientific approach, design loses the aspect of empiricism, of knowledge derived from the senses, depriving the design of a soul, a

consciousness, of life. This is definitely not true for all rationalists, however, it may be true that senses have only a selective impact on the theoretical framework of Rossi. However, this doesn't mean that empirical architecture based on logical principles could not exist, it is just not something that interested Rossi. What fascinates me the most is how Rossi's way of interpreting architecture based on logical principles, still is able to produce such a poetic experience, filled with human life and a strong emphasis on time. To me those are the aspects that show, that even though his framework is rigid, its not a set theory. In both Introducing Boullée and The Architecture of the City Rossi's concern is not creating an academic theory but rather the importance of a logical "architecture as construction. Thus, architecture as a constructure of the city over time, addressing the ultimate and definitive fact in the life of the collective, the creation of the environment in which it lives, can still be interpreted based on logical principles.

- [1] Reinders, L. & Vermeulen, P. (2022) Black Hill City. MSc 3/4 Urban Architecture 2022-2023. TU Delft, Urban Architecture. p.7
- [2] Claessens, F. & Engel, H. (2007) Wat is architectuur?. Uitgeverij SUN, Amsterdam. p.133
- [3] Bekaert, G., & Zwarts, K. (1994). Charles vandenhove, 1985-1995. NAi uitgevers/publishers. p.26-27
- [4] Rossi, A., Ghirardo, D. Y., Ockman, J., Eisenman, P., Graham Foundation for Advanced Studies in the Fine Arts, & Institute for Architecture and Urban Studies. (199AD). The architecture of the city (Ser. Oppositions books). MIT Press. p. 7
- [5] Claessens, F. & Engel, H. (2007) Wat is architectuur?. Uitgeverij SUN, Amsterdam. p.197