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EARLY STAGE

GENERIC STRUCTURES AND SPECIFIC SPACES

ARTEFACT

*GENERIC STRUCTURES, TYPE, ORDER, SPECIFIC SPACES,
CONTEXT, COMPLEXITY*

DDR STATEMENT

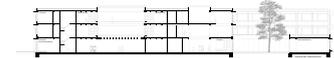
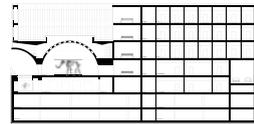
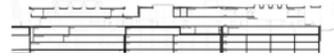
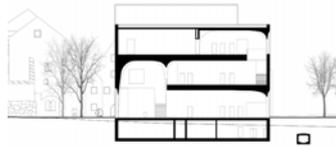
My research is based on the body of architectural work that has emerged from my many years of practice as an architect. The issue of the necessity to generate pragmatic, efficient structures and the creative will to give architecture its own identity and specificity is an expression of our time and my particular interest in design.

The design itself is the method and language of my research, whereby the artefact implicitly contains the knowledge within itself. In the first step, previous work and new more radical designs from the practice are mapped, reflected and categorised to sharpen the research question. In the second step, new case studies are systematically made under "laboratory conditions" and across a broader spectrum to make the research object more explicit and accessible through reflection. In an iterative process, the findings are implemented in new case studies. For this purpose, a particular type of presentation will be developed in order to make them comparable. In parallel, the community of practice will be consulted for comparable designs to contextualise the research topic. In addition to the design-based work, relevant theories are surveyed in order to form a theoretical-methodological framework and to integrate the findings into the current discourse and make them communicable and thus accessible. A digression will deal with the meaning of efficiency and identity in the discourse of contemporary architectural practice. At the moment, the research is still engaged in clarifying the terms and sharpening the research topic and the relevant criteria.

ABSTRACT

Within my designs I take two points of view. On the one hand, there is my urge to organise the building within a clear structure derived from type with a clear order, which can be adapted, transferred and reshaped flexibly, depending on the programme. On the other hand, there is the architectural space, which only exists through perception of the visitor and the spatial and nonmaterial context to which the building must position itself. Designing from the perspective of the moving visitor and with the context provokes unique specific spaces.

While the generic structure can be derived from the analysis and interpretation of the programme, the driving force of specific spaces is the perspective of the visitor and the interpretation of the context. The change of perspective from structure to space and space to structure, its implementation in one and the same design, leads in my designs to a perturbation of the respective systems of thought in a positive sense.



source

context
urban tissue / landscape
social, cultural, historical
context
clients intentional aim
interweaving of public realm

perspective / capacity

user *multi-layerdness
and abiguity in-use*
architectural space
*differnet perceptual results by
changing the perspective*
polyvalent

Driver

identity
expression
perception of the user

method

section
model
visualisation

quality

complexity surprise form
ambiguity
identification unexpected

design

specific space

**concepts of symbiotic
perturbation**

competition

public use component

hybrid

porosity

superposition

perturbation

disturbance

transparancy

overlaying

interference

integrative

interaction

symbiotic

interweaved

source

type
spatial organisation
program
building regulations
(cartesian) grid



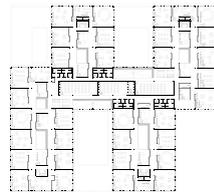
perspective / capacity

transferable *receptive*
adaptable
architecture as a system of rela-
tionships between elements
flexibility



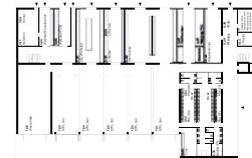
Driver

clear order
clear
calm



method

floor plan



quality

readability
orientation
expectable
security



design

generic structure



*“It is part of the irony of the protomodern movement that Eugène Viollet-le-Duc wrote his major work *Entretiens sur l'architecture*, published in 1872, without having once used the term “space” in the modern sense. Nothing could have been more distant from the structuralist underpinning of his thought than the primacy that August Schmarsow granted space as an end in itself twenty years later in his book *Das Wesen der architektonischen Schöpfung* (The Nature of Architectural Creation), first published in 1893. Like many theorists before him, Schmarsow saw the primeval dwelling in the primeval hut, but he understood it as a spatial matrix or “spatial designer”.” (1)*

Motive of research

Using a mind map, I reflected on and analysed the designs from my many years of practice as an architect. In the process, I found indications that the tension between structure and space is a reoccurring theme in my design work, at the beginning intuitively and finally consciously applied as a design strategy.

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On the other hand, there is the architectural space, which only exists through perception of the visitor and the spatial and nonmaterial context to which the building must position itself. Designing from the perspective of the moving visitor and with the context provokes unique specific spaces.

While the generic structure can be derived from the analysis and interpretation of the programme, the driving force of specific spaces is the perspective of the visitor and the interpretation of the context. The change of perspective from structure to space and space to structure, its implementation in one and the same design, leads in my designs to a perturbation of the respective systems of thought in a positive sense. From my point of view, the interaction is enriched when a fruitful interrelation between generic structure and specific space is created.

Within my PhD project, I would like to investigate this interplay with the help of the following questions: In which relationship between generic structures and specific spaces lies a particular architectural quality? When is the interrelation between generic structure and specific space beneficial? How can these qualities be positioned in the historical and contemporary discourse? How can these qualities be translated into a design strategy?

The tension between structure and space

The architectural relationship between structure and space, between rational organisation and sensual perception, as juxtaposed in the above-mentioned quotation from Kenneth Frampton, is of particular interest for the research proposal. The structures should be ordering and based on typological and tectonic regularities that generate orientation and

readability. The specific spaces should create identity and must therefore have a certain distinctiveness, but allow a degree of freedom of use and interpretation. The generic structures have an ordering quality, the specific spaces have an experiential quality. In order to approach these concepts further, they are to be examined in greater depth, theoretically and through designing.

Generic structure

Generic (from Latin *genus*, *gener-is* “gender, genus”)

Structures can be described in terms of the systems of relationships between their elements. Its object is not the definite form, but the underlying set of rules of the conditions of the interrelationships between its parts. It is in a certain respect an abstraction, elements are exchangeable, their form adaptable. Its generic characteristic emphasises its transferability. Their nature is not directly accessible to sensory perception, but must be recognised. They become legible in the abstracted drawing of a plan or a map, which isolate structural characteristics and thus make them accessible.

In its abstraction and transferability, the structure is related to the type, which can also take on different concrete morphological configurations. The decision for a type always includes one's own interpretation of the architectural project in the sense of the typical spatial composition associated with it. As a distinctive scheme, a spatial or building typology is adaptable and flexible. Therefore, it has a certain capacity, in the sense of a receptivity for characteristics or utilisations. Generic structures are suitable for many things, but not for everything. Flexibility and receptiveness are prerequisites for future viability in times of constantly changing technological and spatial conditions.

A clear system of relationships provides an ordering architectural quality.

“Order is.” (2)

Order is fundamental to architecture, *“architecturer, c'est mettre en ordre” (3)*. Order can be experienced when the rules on which it is based can be comprehended intellectually. This provides mental satisfaction, orientation and security. Clear order has always been seen as a genuine concern of architecture. The importance of order in generic structures, its significance for rational and economic building practice will become a research focus. Order and predictability are in a complementary relationship to complexity and surprise and should be balanced, as all too rigid orders threaten to appear repressive, monotonous or banal.

Specific spaces

Specific (from late Latin *specificus* = of a particular kind, peculiar).

“Space” has been a central term in architecture and spatial design for a century according to August Schmarsow its purpose, yet there is no one definition of architectural space. This may be due to the fact that it does not exist physically, but draws its nature from the in-between, the void between the tangible structural elements. Thus it cannot be grasped

(1) Kenneth 1930- Frampton, *Grundlagen der Architektur Studien zur Kultur des Tektonischen* (Oktagon-Verl., 1993).

(2) Kahn, Louis. *Order and Form, Perspecta Vol. 3*, 1955.

(3) Le Corbusier. *Défense de l'architecture*. In: *L'architecture d'aujourd'hui* 10/1933.

and is not directly accessible to sensory perception. Most definitions are based on the interplay of space and inhabitant, since space only comes into being in perception. Count Karlfried von Dürckheim describes architectural space as “lived” space, as a sphere that we only produce through our acts of life in interaction with architecture.

In my design work, space does not become specific until the context is interpreted. While the structure follows general principles of type and its underlying architectural order, the context is subject to the particular, or specific, conditions of the location. Context is not only to be understood as a spatial context in the urban texture or landscape, but also includes social, cultural, economic, legal and historical contexts. Architecture is always part of a context and at the same time forms context. The referring to the context presupposes an interpretation, which in my case is based on a differentiated examination of the context. Another position would be to consciously ignore and contrast the context.

In my work, I mainly design buildings with public use components, where the reference to and even interweaving with the context is particularly apparent. The interplay of the building mass with the inner and outer voids creates a contextual interweaving that Fritz Schumacher calls “the art of double spatial design”.

While I focus on the physical spatial structure when designing the non-public components, when designing the public spaces I take the perspective of the inhabitant, whose perception is the condition for the architectural space. In the design of these spaces, I am fascinated by the different ways of reading their shapes. They are a specific source of spatial complexity because they are not perceived from a single point of view, but rather open up the possibility of producing different perceptual results by changing the perspective, e.g. opening up unexpected views or allowing new points of orientation to be discovered. This spatial complexity does not have to be limited to a variety and abundance of spatial situations, but can also offer diverse possibilities for action and movement or allow for multi-layeredness and ambiguity in use.

In the design of the specific spaces, I am interested in this particular capacity of the specific space overlaid with utilisation, which stands in the tension between substance and contingency. On the one hand, it creates an articulated spatial density, complexity or distinctiveness, and on the other hand, it allows freedom, variability in use, in other words, room for manoeuvre.

Concepts of the relationship between structure and space

Concepts of combining order and surprise, generic structure and specific space already exist. However, these are usually not based on theoretical research, but rather on built reference examples, practice-related experiences and ad hoc theories. The research project will analyse own designs, contrast work from the community of practice and develop new concepts with the aim of developing descriptions and categories of qualities in order to work out parameters for an enriching symbiotic interrelation of structure and space, leading to a methodology of analysis and design.

Methodology

1. Mindmap

With the help of a mind map, previous design work is reflected upon and analysed in order to crystallise recurring themes. These will be examined for will moments, drives and fascination and brought into context.

2. Theoretical exploration of positions on structure and space

Relevant positions and texts on structure and space, as well as order and the experience of space in a historical context are discussed and compared. Aspects of order and the experience of space, as well as factors for differences, are recorded, described in their effect and categorised. They serve as a theoretical basis for defining the terminology and establishing a critical theoretical-methodological framework.

3. Research on positions in the community of practice

Relevant positions in the community of practice are contrasted and compared with one's own work. On the one hand, the survey of the community of practice serves to classify it in the historical and current discourse; on the other hand, it serves to identify influences on one's own work. Lastly, it also reveals a broader repertoire and variations, since the different personalities from the community of practice, with a similar method, lead to a wide variety of results.

4. Reflection on own new designs

Accompanying the theoretical discourse, designs for competitions are continually developed and reflected upon. In an iterative process, the insights gained inform the subsequent designs.

5. Design diary

The design steps are recorded in a design diary. The documentation of the research process is unfiltered and is reflected on later.

6. Case Studies

The insights gained are applied in case studies. In contrast to real design projects, case studies are detached from constraints and programmatic or constructional limitations and can therefore be more radical. They are made systematically under “laboratory conditions” and over a broader spectrum in order to make the object of research more explicit and accessible in reflexion. In an iterative process, the insights gained are implemented in new case studies.

7. Method of representation the relationship between structure and space

The design itself is the method and language of my research, whereby the artefact implicitly stores the knowledge within itself. In order to make the findings from the design practice, the community of practice and the case studies communicable and thus accessible, I developed my own method of representation. This serves to visualise the knowledge gained with creative means and leads to a comparability of the different design objects and a categorisation of different aspects.