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INVERSE ARCHITECTURE

INVERSE VISION OF THE BUILT
ENVIRONMENT OR HOW CAN WE OBSERVE
THE DENSE EMPTY SPACE

THESIS SUMMARY

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OBSERVE THE DENSE EMPTY SPACE

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ABSTRACT

Our perception splits into two parts in asymmetrical way: into figure and (back)ground. The doctoral dissertation states that an 'inverse approach' helps to reflect on 'competing visions' of architecture by focusing on the awareness of this perceptual duality in space and time and not only in one two-dimensional plane.

From our perceptual point of view, figure and ground are not equally important.

Through the history of architecture, analyzing the empty space remained mostly in the background. The specified thoughts in the dissertation attracts attention that in case we can grab the essence of the 'positive empty space', the order of priority may become reversible; the empty space turns into a nameable figure. This phenomena is labeled as 'dense empty space'. This term enables a new approach, in which even those phenomena will be distinguishable and comparable in space and also in historical perspective, which were previously merged into one another.

Figure and ground become interchangeable thanks to the inverse approach – furthermore this inverse way of thinking is even urged by the present cultural and social processes.

THESIS SUMMARY



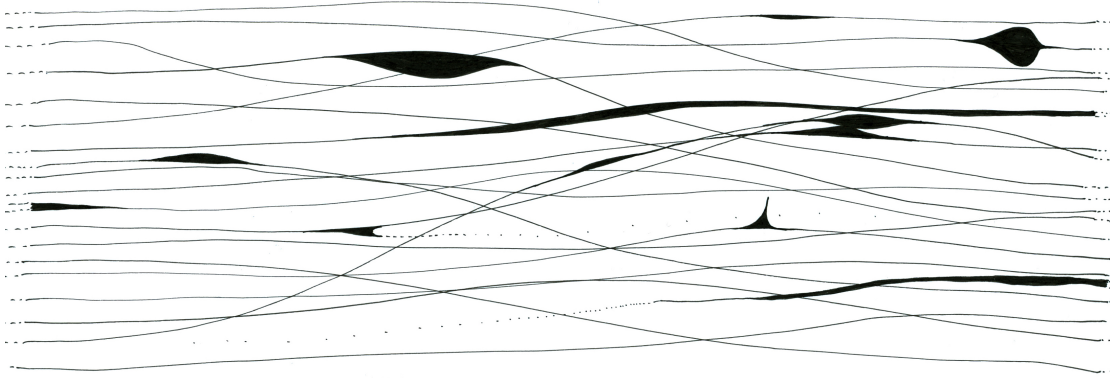
figure and ground

Inverse approach is a way of thinking in architecture, where equally important role is attached

- to that eye-catching element which we recognise from the built environment at first sight (to the figure)
- and to that part of our perception, which is not realised immediately (to the background).

It is essential to emphasize that the basis of our observation and thinking is in space and time and not only in two dimension.

1. THESIS: The inverse way of thinking helps to reflect on the 'competing visions' of architecture by focusing on the awareness of our perceptual asymmetry: a duality which is considered in space and time, divided into figure and ground.



Because of the diversified use of the traditional architectural expressions and also due to the rapid changes of the described phenomena, it became problematic to investigate architectural history based on a cross-section model. All these promotes raising a new aspect, which can act as a spatial web, which is able to create coherence in more dimensions – not only in space but in time and in culture also.

Regarding the history of architecture, one string from this 'spatial web model' can be selected, along which the inverse approach appears sometimes intensively sometimes moderately. Through analyzing architectural examples, we can set the following points to specialize the 'positive empty space'.

- a. The void is considered to be positive in case it is receptive and if it is possible to be part of it.
- b. Or at least we can imagine that we may become part of it - even if this indirect assumption is not based on direct experience and hence it can be more problematic.
- c. So it has to be personal and integrating, which suppose openness towards the users.
- d. It has to be flexible enough to ensure scope for personal aspects, which can fill the space.
- e. It has to be flexible enough so that the use can follow the changing demands in time, among limits.
- f. The scale of it can not be defined. The natural surrounding, the topography can also become part of it. Rather the temporal and spatial dimension of the human perception itself can limit the 'positive empty space'.
- g. The spatial minimum of the 'positive empty space' is close to the scale of a personal space but it has to be bigger, because
- h. its domain (its field of interpretation) is public space.

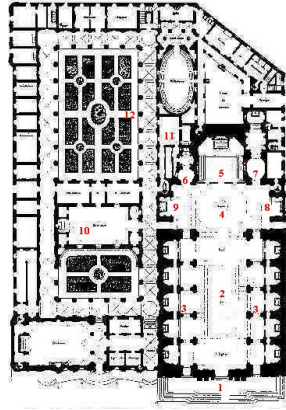
2. THESIS: The 'dense empty space' is a sensible scene, positively experienced by a community, which is flexible in time, receptive, confidential and open from the user's aspect.



Theater, Epidauros bc. 300

Why is it useful to create a new expression? Because the designation, the name itself concentrates several phenomena in the background, which can be described only with a long procedure. Mentally more manageable, more expressive. It is evident, that speaking as communication tool has an effect on thinking. The 'dense empty space' expression works as a label, as a pattern of thought, as a schema – and so we understand it more easily. Although: The easier is to understand a schema, the more chance is that this too simple schema distracts our thinking, as a communicational 'pit'. Whenever we are already in the middle of a contexture, it is really hard to jump from one 'pit' to another 'pit'. So in the beginning of creating an architectural concept it is well worth to select our point of reference carefully. This dissertation emphasizes the importance of the 'dense empty space' as conceptional point of reference, as origo, as primary value.

3. THESIS: Regarding the 'figure and ground' relation, the dense empty space can be perceived as nameable figure, and in this sense as primary value.



Francesco Borromini - orangerie (12), ground floor of Casa dei Filippini, Roma 1637-1650

It is even more easier to understand the 'dense **empty space**' schema when it is illustrated by architectural examples. However, examples can not replace the schema itself. Comparing examples does not necessarily show the coherence, as it is short of hierarchy and judging. So to say: we look but do not see clearly.

The 'dense empty space' schema consists of aspects, which can be used not only by creating new architectural concepts but by analyzing existing built environment. So it gives chance to join culturally and functionally different built structures as well; and the gained observations may be used in a new concept.

- a. On one hand: the need to change our aspects is because the traditional architectural categorization based on functions and scales is less and less valid.
 - b. On the other hand: even the global tendencies attach great importance to questions like community architecture, equally relevant in various cultures. With appropriate common platform, like the 'dense **empty space**', the possible answers can be researched with cooperation.
 - c. Third basis to change our aspects: the difficulty of joining traditional periodization approach in history and theory of architecture with the considerations of a present planning task. Using the 'dense **empty space**' schema can be a basis for comparison and it can create a bridge to connect bygone times with present. So we get more effective lessons from the past to use them for solving present problems. Observing the tendencies, some guidelines may even be foreseen for the future.
- 4. THESIS: By using the concept of 'dense empty space', even different built environmental scenes with apparently various means of usage and with different scale become comparable to each other, observing them either from historical or from present perspective.**



Louis I Kahn - travel sketch, pastel Siena, Italy 1951

The synthetic effort of this dissertation is based on many theoretical studies, which I do not wish to overwrite rather to give them more actuality. The methodology of the dissertation emphasizes: the same continuity is valid to the theoretical constructional line in this research which is valid to our built environment: *every construction is extension*⁶⁰.

The wish to actualize terminology guided my line of thought. I tried to define the adequate architectural frame to the 'inverse approach' with the help of traditional terms like *form* and *structure*, referring to the relevant thoughts in the theory of architecture.

5. During the process of the architectural conceptual decisions, focusing on the 'dense empty space', different formal and structural alternatives become comparable. However, concentrating on formal and structural decisions, the variants of 'dense empty spaces' are not judgeable.

⁶⁰ Tamás Tomay