From Words into Space: A Literature-based Design Strategy with a

Focus on Perception

Abstract

In this paper we present and discuss concept, process and results of an experimental

architectural design course at Cottbus University, Germany, which focuses on the

perception of architecture. Inspired by literature and drama we developed a text-

based design strategy. More common design aspects like shape, typology or

organization were put aside in favour of focussing on the atmosphere and character of

a building. The "literary approach" proved a helpful tool for transcending common

boundaries in the design process.

Introduction

"[...] a lot of architecture is totally stuck on the artistry of the form, what the

form of the building conveys emotionally and all that, and in some senses I

think that architecture has run off the beaten track [in focusing on form] when

really what their job is to design spaces for human interaction." ¹

Will Wright, a designer of computer games names a weak point in the production of

architecture today. A formal attitude haunts architecture studios as well as architecture

faculties all over the world. Talking about buildings as places of interaction and

immediate experience has become somewhat old-fashioned. The "artistry of form"

often makes us forget how buildings are seen and experienced in the first place: from the user's perspective.

To explore spatial qualities in architecture with regard to human interaction, we therefore decided to start a design project that deliberately focused on how buildings are perceived and used. As using a building is the last step in the process of its production we had to look for means to invent and envisage the atmosphere of a building before it had actually been designed. Literary texts became the main source of inspiration for our project and proved extremely helpful for overcoming "the formal bias".

1. Literature and Architecture

There are two features of literature in general and drama in particular that seemed interesting to us: first, literary and drama theory has developed a special approach to the ,user's perspective', assigning to the reader or audience an active part in creating the ,work'. Applying this idea to the field of architecture would mean to be aware of the building's qualities in the user's eyes. Secondly, literary texts supply us with innumerable atmospheric descriptions of space and thus provide an enormous thesaurus.

When it comes to literature and drama, it is not easy to see what exactly the piece of art is, its written version or its performance. ² In the foreword to his ,Obra Poética' Jorge Luis Borges points out the importance of the artistic act:

"The taste of the apple [...] lies in the contact of the fruit with the palate, not in the fruit itself; in a similar way [...] poetry lies in the meeting of poem and reader, not in the lines of symbols printed on the pages of a book. What is essential is the aesthetic act, the thrill, the almost physical emotion that comes with each reading." ³

To give an analytical overview of the piece of literature is not the job of the reader or audience, but the job of people who write literary criticism. If, in analogy, we focus on the *interplay* between user and building, we have to take a closer look on how people perceive architecture while using it. Non-professionals usually respond directly to spatial configurations and their atmospheric and emotional values. ⁴ Immersed in the situation the user will only perceive and react to *parts* of what is there. This is a feature we all know from memory.

Undoubtedly, it is partial perception or even fragmentation, which structures our memory. The idea of fragmented memories of the places of the past occurs in Rilke's novel "Malte Laurids Brigge", when he describes the house of his grand-father he used to visit, when he was a child:

"Afterwards I never again saw that remarkable house, which at my grandfather's death passed into strange hands. As I recover it in recalling my child-wrought memories, it is no complete building; it is all broken up inside me; here a room, there a room, and here a piece of hallway that does not connect

these two rooms but is preserved, as a fragment, by itself. In this way it is all dispersed within me – the rooms, the stairways that descended with such ceremonious deliberation, and other narrow, spiral stairs in the obscurity of which one moved as blood does in the veins; the tower rooms, the high-hung balconies, the unexpected galleries onto which one was thrust out through a little door – all that is still in me and will never cease to be in me." ⁵

If we talk about buildings we have been in, our memory focuses on specific situations and their spatial setting whereas other features of the building are completely gone.

We must assume, however, that this type of apprehension is not restricted to memory, but essential to the way we perceive our surroundings in general: Memory and imagination are capacities that allow us to *add up* fragmentary perceptions of different times to complex imagined spaces. Although we only perceive certain features of a building, we do not have a fragmented impression of it, but atmospherically sense and even see it as an ensemble. Its components have been *synthesized* into an overall picture. The atmospheric image is holistic.

2. Designing ,upside-down'

To use literature as thesaurus, seemed very promising as reading literature almost automatically triggers spatial images, i.e. imagined space. Even short descriptions of settings convey particular atmospheres and dense pictures that seem to contain a "world in a nutshell". Literary texts do allow for a wide range of associations, even before images can be pinned down. They combine ambiguity with precise description

and thereby evoke emotional pictures. According to Pallasmaa, literary descriptions of places may arouse almost natural sensations: "Through his words a great writer is capable of constructing an entire city with all the colours of life." ⁸

To start with imagining spaces rather than with the formal organization of a building or its construction means no less than reversing common design procedures and turning them upside down. Similarly, Edgar Allan Poe in his essay "The Philosophy of Composition" claims the effect to be the starting point of his literary work:

"I prefer commencing with the consideration of an *effect*. Keeping originality *always* in view [...], I say to myself, in the first place, ,Of the innumerable effects, or impressions, of which the heart, the intellect, or (more generally) the soul is susceptible, what one shall I, on the occasion, select? Having chosen a novel, first, and secondly a vivid effect, I consider whether it can be best wrought by incident or tone [...] afterward looking about me (or rather within) for such combinations of event, or tone, as shall best aid me in the construction of the effect." ⁹

We do not talk of eye-catching effects here, even if Poe might have thought of them. By effect we mean the immediate perception of spatial settings, the atmospheric impact architecture has on the viewer, something that cannot adequately be shown in technical drawings. In order to convey atmospheric quality we encouraged the

students to work with texts, perspectives and models or to invent other means of expression.

In an interview with the Italian magazine "Modo" the architect Louis Barragán speaks about his intuitive ways of designing which resemble what we called ,designing upside-down':

"Before I start on a project, I usually set off without touching a single pen, without any drawing, I sit down and try to imagine the craziest things. [...]

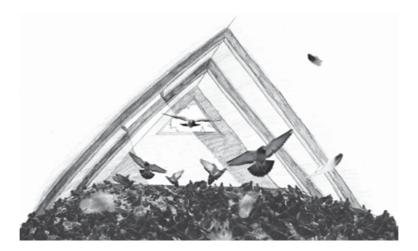
After conceiving of these things, I wait for some days, sometimes even longer, until they have settled in my head. I come back to them and start to swiftly throw a few small sketches on paper, often onto a sketch block, sitting on a chair. I do not design at the table or at the drawing board. Next, I give these sketches to a draughtsman and we start to draw the floor plans and elevations: Almost invariably we build cardboard models in order to work on them and to constantly change them." ¹⁰

3. Text, Space and Perception

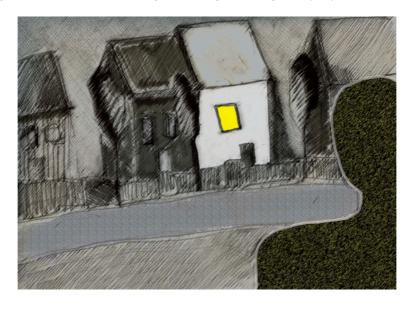
Exercises in Literature

Exploring the imaginary power of literary settings was a central asset in our design course. The aim was to make the evocative potential of spatial descriptions in literature accessible. Different scenes of short stories respectively clippings of longer texts had to be visualized and, secondly, built as architecture models by the students¹¹. Transferring poetic descriptions of space into pictures, drawings and models meant to

visualize "spelt-out" parts of the literary setting as well as the ones that are rather kept in the dark. It also meant to clarify certain ambiguities in the text by creating visible and touchable space. The key feature keeping text and image – or model – together was the specific *character* of the space described and/or shown. In a second exercise the students wrote texts mirroring the atmosphere of a given situation.



[img. 1] Visualization of Geiger's "Es geht uns gut" by Eyleen von Sehren



[img. 2] Visualization of Rothmann's "Erleuchtung durch Fußball" by Armenak Heydeyan

A Literature-based Design Strategy

After examining how characteristic atmospheric settings can be created in architecture, the students should design a fully-fledged building – a music school in the centre of Berlin – following a set of five instructions. These were meant to make sure that the atmospheric approach did not get lost on the way. By focussing on specific aspects and by strategically ignoring others for the creative moment the students were freed from common boundaries. We believe that such a temporal and strategic ignorance is necessary to investigate particular aspects of a design with more intensity and creativity.

(i) Describe first, Design later.

The first task was to describe key settings within the building, like a director's instruction in a theatre play. Our aim was to have the students work out the characteristic qualities of the building solely by – poetically – describing them.

Graphic or sculptural representations were forbidden at the outset. The students thus had to write the explanatory text before they designed the building. All descriptions were full of atmospheric moments, which guided the ensuing design process:

"After a short narrowness great wideness.

An open bright room.

Inside I see the open sky.

Passages are clear but confusing.

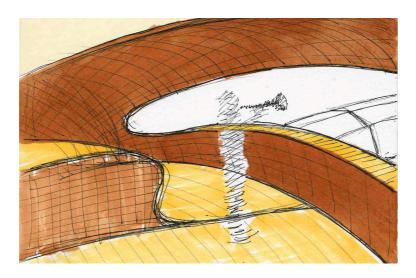
Rooms seem to be reachable but they are not conceivable.

[The building] is closed and open in one time.

There is a secret to discover."

(ii) Think Emotion, Mood, Atmosphere – not Shape.

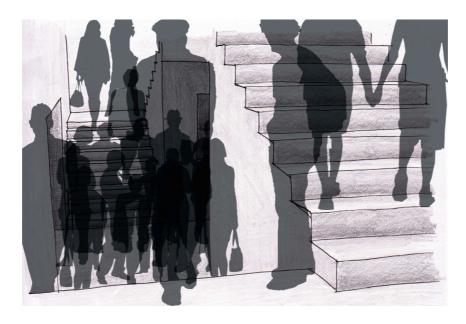
The following task was to develop images from the written text. We asked the students to neglect the shape at the outset and to picture emotions, moods, and atmospheres first. Freed from the task of shaping, the students could concentrate a lot more on the specific *character* of the space.



[img. 3] Key situation in the Music School by Nicole Dubral

(iii) Think User, not Architect.

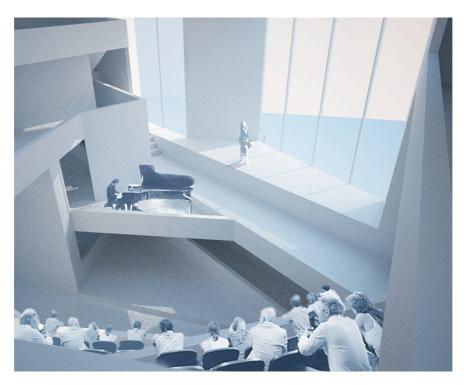
In the subsequent step the students transformed words and images into spatial structures. They had to build three-dimensional models that still expressed the spatial character developed in the previous steps. We asked the students to describe and think their building from the perspective of everyday users. This simple change of perspective helped the students to think of a space not in abstract terms but as something filled with and used by people.



[img. 4] People in the Music School by Eyleen von Sehren

(iii) Think Perspective, not Object.

As a building can almost never be grasped in a single perception, the students were asked to work out different perspectives within the future building first. Only then they were allowed to produce the object, i.e. the building itself.



[img. 5] Perspective of the Music School Foyer by Tino Mueller

(v) Think the parts first, and the whole building later.

In a last step the students had to work out the spatial and functional needs of the building without loosing their atmospheric images out of sight. The different settings were collaged from individual parts that had been thought out first.



[img. 6] Model of the Music School by Tino Müller

4. Conclusion

Perception and Hierarchy

The whole designing process was regulated by the first descriptions and imaginations. From this technique resulted shapes, objects and buildings, which could indeed accommodate the envisaged emotions, moods and atmospheres.

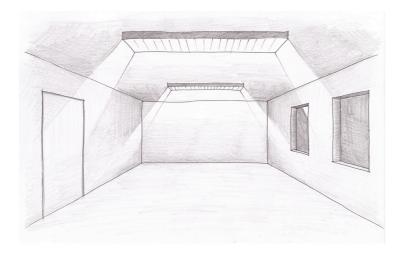
Most buildings designed by the students very much focussed on a central area of interaction that mediated the interchange of different uses. Particularly the connection between the urban space in front of the building, the foyer with the main staircase, the concert hall and the reading room were elaborated as spaces with changing atmospheres. Rooms that were not frequently used stood back and supported this

"enfilade". ¹² Focussing on imaginary spaces thus lead the students to design *hierarchically ordered spaces*. We think the relation between perception and the hierarchy of spaces is well worth further investigation.

Three Helpful Sources of Creativity

Rich texts, spatial metaphors and striking images proved very useful design tools. In our initial exercises we were impressed by the students' ability to write dense atmospheric texts. We didn't expect this from our architecture students. Usually explanatory texts and images are produced just before the presentation and most of them are quite banal. But here we were confronted with poetic ideas and very atmospheric characterizations of the projects.

Strong *spatial metaphors* as "treasure box", "swinging building" or "enclosing hand" emerged from the textual descriptions. They may drive the design process internally, when spatial metaphors for a building serve as a red line throughout the whole design process. Metaphors can also help to communicate the design to non-professionals. Starting from literary descriptions the students also showed great ability to visualize atmospheric spaces. *Striking images* taking in the user's perspective showed more than the mere empty space. They conveyed atmosphere and showed interrelation between people and space.



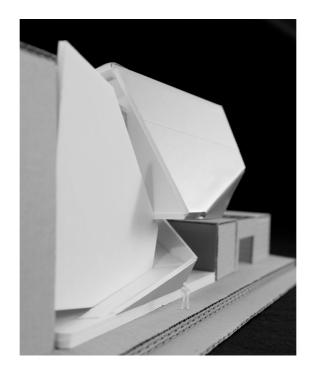
[img. 7] Memory of the theatre building "bat" in Berlin by Eyleen von Sehren



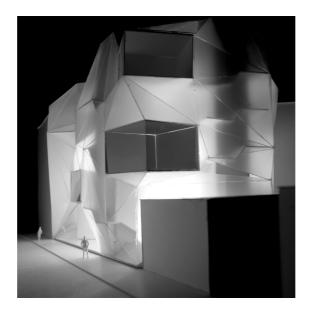
[img. 8] Memory of the theatre building "bat" in Berlin by Eyleen von Sehren

Literary Imagination As Design Tool

Literary imagination as an act of wishful thinking freed the students' minds from preconceptions. Formulating their atmospheric intentions at the beginning of the design process, the characteristic elements of the building were already "spelt-out", when it came to the point of using typologies and structures. Thus the students developed a tool that allowed them to control the design process and helped to modify and articulate their ideas. Quite original buildings resulted – with convincing qualities of use.



[img. 9] Model of the Music School by Linda Bley



[img. 10] Model of the Music School by Simon Winterhalder

We therefore strongly recommend the use of imaginative texts and atmospheric pictures of key situations as an additional design tool right at the beginning of the design process.

Ulrike Sturm

Julia Zillich

Ingolf Watzlaw

Günter Barczik

Brandenburg Technical University, Cottbus

Faculty 2: Architecture, Civil Engineering & Urban Planning

Konrad-Wachsmann-Allee 1

03046 Cottbus

Germany

Email: sturm@tu-cottbus.de

zillich@tu-cottbus.de

guenter.barczik@tu-cottbus.de

i.watzlaw@web.de

_

Similarly, architecture theorist Juhani Pallasmaa sees contemporary architecture as threatened by abstract thinking and avant-garde attitudes that lead to a reduced conception of what architecture is. "The current over-emphasis on the intellectual and conceptual dimensions of architecture further contributes to the disappearance of the physical, sensual and embodied essence of architecture. Contemporary architecture posing as the avant-garde is often more engaged with the architectural discourse itself and mapping the possible marginal territories of the art, than responding to human existential questions. This reductive focus gives rise to a sense of architectural autism." Juhani Pallasmaa, *The Eyes of the Skin. Architecture and the Senses* (London: Wiley & Sons, 1996), 22.

Receptionist theories interpret the piece of art as interaction between text, interpreter and reader/listener/viewer. See Wolfgang Iser, *The Act of Reading. A Theory of Aesthetic Response*

(Baltimore: The Johns Hopkins University Press, 1978), Hans-Robert Jauss, Towards an Aesthetic of

¹ William Wiles, "Interview with Will Wright" *Icon Eye*, February 2008 [full transcript of the interview: www.icon.com]

Reception (Minneapolis: University of Minnesota Press, 1982), or Erika Fischer-Lichte,

Transformative Power of Performance: A new Aesthetics (London: Routledge, 2008).

Paula Fox, *Desperate Characters* (New York, London: Norton, 1999), chap. I [First edition 1970]

Frost, Robert, "Home Burial," in *Complete Poems of Robert Frost* (London: Jonathan Cape, 1951), 71-75.

Arno Geiger, Es geht uns gut (München/Wien: Hanser, 2005), 7-13.

George Perec, Träume von Räumen (München: Fischer, 1993), 48-50.

Ralf Rothmann, "Erleuchtung durch Fußball," in: Rothmann, Ein Winter unter Hirschen (Frankfurt/Main: Suhrkamp, 2001), 59-75.

Arthur Schnitzler, *Dream Story* (London: Penguin Books, 1999) [First German edition 1926]

W. G. Sebald, Schwindel. Gefühle (Frankfurt/Main: Fischer, 1994), 80-83.

W. G. Sebald, Austerlitz (Frankfurt/Main: Fischer, 2003), 197-205, 391-399.

¹² During the baroque there was a similar approach called poché. The poché rooms served as filling material between the symmetric public rooms and courtyards and the property line. The design strategy of the Baroque is based on hierarchy. The hierarchy between public rooms and serving rooms enabled the architect to design a town house that is characterised by symmetry and order even though the medieval building plot was extremely irregular.

³ cited by Pallasmaa, *The Eyes of the Skin*, 6.

⁴ Interpretation or reflection, come a-posteriori through a conscious effort. It is not very likely, for instance, that a non-professional will admire a building for the combination of abstract forms it displays – whereas architects and architecture critics regularly do this.

⁵ Rainer Maria Rilke, *The Notebooks of Malte Laurids Brigge* (New York, London: Norton 1964), 30-31. [First German edition 1910]

⁸ Pallasmaa, *The Eyes of the Skin*, 39.

⁹ Edgar Allan Poe, "The Philosophy of Composition," in: *The Complete Works* (New York: AMS Press, 1965), vol. XIV, 193-208; here 194 [First edition 1902]

¹⁰ José Barragán cited in Daniele Pauly and Jerome Habersetzer, *Barragán: Space and Shadow, Walls and Colour* (Basel: Birkhäuser, 2008), 137.

¹¹ see Heimito von Doderer, (1951): *Die Strudlhofstiege* (München: dtv, 1951), 330-333.