Research and Graduation Plan

Personal Information

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Studio

Studio	-	DSD Architecture Thinking
Theme	-	The Asignifying Affordance of Assemblage / Bouwkunde Reloaded
Teachers	-	Andrej Radman and Marc Bouwmeester
Argumentation	-	Combining designing with thinking about why (and how) to design. I.e. trying to find the real essence and aim of (my) architecture and (my) role as architect through theory, tested in a design.

Product

Title	-	Determining Architecture
Subtitle	-	The role of the architect, architecture and architectural education

Problem statement -

Determination in / of architecture is an ongoing concern in the world of architectural design. What to design, what not to design? What to predict, what to leave open for chance, for the unknown? How to give that óne right answer to the design-question? Determining too much, overdetermination, leads to spaces that cannot be used proper anymore, determining too less, underdetermination, will lead to spaces that will not be used at all anymore.

With architecture we freeze space, which has an interactive influence on the way participants act, think and feel. These experiences of space are decisive for the way one appreciates architecture. Decisions on what to freeze are made by architects on basis of problems that need to be solved, these are the parameters for architects. But how do we know what these problems really are, how do we know that we offer thé right solution, for what time-span do we offer these solutions and how can we offer that óne perfect solution while experiencing space is multi-dimensional and dynamic? How do we know whether one, as architect, should invoke actions, thoughts and feelings (manipulate) or whether one should only let space function as neutral backdrop?

Creating solutions is freezing (the outlines of) space, fixing thing, but all architects know that this does not mea nthat architecture becomes something static. We could call it stable[1] but it does keeps changing from the moment the first ideas are born, that even once it has been built it ages, it is transformed by its users, by nature, modified by all what happens inside and outside, renovated and transformed in order to meet new demands and requirements. And we need this ‘flexibility in determinations’ to be able to create

1 - Note that stable means not the same as static. Although they are both opposite to dynamic, stable does accept dynamic while static exclutes any form of movement or transformation. In this research static is used to express that something is invariably and unalterable while being stable means that there is a constant that allows movement but will always keep containing its fundament. It is stationary, steady and consistent.

the most optimal spaces. But here it is that the two main problems of architecture become clear: firstly, a building is not static but we, as architects during designing, do treat it as something that looks desperately static. We are hardly able to grasp the process (!) of developing something architectural as movement, as a series of transformations. 'We seem not to be able to picture, as one continuous movement, the project flow that makes up a building' (Latour and Yaneva 2008, page 1 and 2). To solve this discrepancy, between the multi-dimensional space and the single-dimensional methods, more research should be done on how one could introduce transformation in the designing phase of architecture i.e. how we can introduce the factor 'time' in our mostly two-dimensional design methods. Secondly, there is a discrepancy visible from the moment on a building is built: we treat it a something static, but this is not reality. In reality architecture does change, but the life that takes place in and around architecture changes even more, it changes faster, is dynamic in every second. The design-question, the demands and requirements, change faster than the building. This miss-match between the stable architecture and the dynamic life is something every architect should be aware of and should take in as aspect of the design to be able to create a design that will be suitable for this world.

To be able to give an answer to these problems one should look at architecture as something less monumental, less as a finished building but more as a capacity, as a recognizable part of its own continuous design process. Starting point for this is stating that space gets produced once it is used and as architects one should design the possibilities for this. These possibilities are offered not through designing the unpredictable (the future) but designing the unknown (chance[2]). 'The architecture of the moment requires subject-object relations architects can influence only to a limited degree. While inhabiting an architectural environment, chance and it greater realm of indeterminacy play crucial roles in influencing these relationships and in possibly reshaping the architects' initial work.' (Manolopoulou 1997, page 63). Chance, in the form of coincidence and simultaneity, is inseparable from our experience of space and time. The qualities of relationships between subject-and-object, the experiences, are based more on chance factors than on the design. Chance in this means both an event proceeding from an unknown cause as the unforeseen effect of a known cause.

We don't have to make architecture totally flexible, a product that can be adjusted to every single wish at every second, we don't have to accelerate architecture: we need architecture as a stable devise to live in[3]. Designing the unknown in a stable though changeable space could be achieved by not seeing architecture as óne (static) system, but as a dynamic composition in process, based on different time-scales. Hereby one admits that architecture is four-dimensional and that all these dimension contain multiple levels. Designing the different time-scales within óne building will make it possible to create layers which

2 - Note that in this research determination and indetermination are not used in terms of freedom. Determination in architecture tells more about the ability to allow and accept chance (for change). It has to do with the ability to transform, to move and the ability to stay in the equilibrium.

3 - Note that this research is not about making architecture totally being in motion. One does have to acknowledgde the fact that we need stability in life. 'We are involved in many similar daily actions, that become 'consious automata' and we respond to our environment with 'refex acts'. This kind of perception depends on memory, resemblance and familiarity. It is not consious or specifically motivated; it is just automatic. We go down a staircase without thinking and guided by habit, for instance, because we have memories of doing this many times before. But habit protects us from the plethora of information that surrounds us (...) by making us inattentive.' In this way we are protecting ourselves. Through these protections though, 'we are menaced by a sence of repetition and boredom. An accident can then act as an antidote to this vicious circle to disrupt our routines with novelty.' (Manolopoulou 1997, page 64)

are more determined and layers which are less determined. These layers form óne system but will be able to be modulated apart from each other so chances and changes can be absorbed more easily. Working in layers will make sure that the degrees of determination will strenghten each other, as articulating the one stronger will define the other automatically more clear (Leupen 2002, page 23). Architecture will function as a dynamic system in which form and perception are never fixed, where parts and the whole are reducible to neither and where the focus is on capacities and singularities rather than on properties and manifestations.

Goal - My goal for this graduation project is to do research on these time-scales and the introduction of chance in this, find literature that support my thoughts and make analyses from architectural projects that dealed with these differences in determining and in-determining in the past to find out what these time-scales exactly are and how I, as architect, can design them to come to a more compleet architecture. The outcomes of my research will be tested in a design for the Faculty of Architecture at the TU Delft in Delft (Bouwkunde Reloaded).

Process

Method description - This studio of DSD focuses on theory in combination with design and therefor readings will be the main power source for developing my own theory and design. It is not about applying an existing method but about searching for new ways of designing, taking the philosophy of Gilles Deleuze and Félix Guattari, the Three Ecologies and the Dynamic System Theory as starting points.

As my theory states that architecture is a dynamic four-dimensional composition in process I will work mostly in three- and four-dimensional models: space is not óne static object but a dynamic project which contains multiple time-spaces. This can only be made visible and studied in real space, which models are. To find out whát to design (the requirements of a Faculty of Architecture) I will do mostly analyses of existing situations and surveys amongst other people to validate the outcomes of these analyses.

But it has to be stated that everything in this world is, just like architecture, an assemblage which comes together in a certain way to lead to an affect. The way things come together are always different and never predictable: 'there are no Russion dolls in designing' (Andej Radman). This is why one can not have a (fixed) methodology.

Literature and inspiration - For this research and design all literature obtained through our teacher, is used, in particular:

- Allen, S. (2009) Practice - Architecture, Technique and Representation. Routledge, Oxford
- Deplazes, A. (2010) Constructing Architecture. Materials Processes Structures. A Handbook. Birkhäuser Verlag AG, Basel
- Evens, R. (1995) The Projective Cast: Architecture and Its Three Geometries. MIT Press, Massachusetts
- Forty, A. (2000) Words and Buildings. Thames & Hudson, New York
- Manolopoulou, Y. (2012) Architectures of Chance. Ashgate, London
- And articles including: Koolhaas, R. BIGNESS and the problem of Large / Kwinter, S. A discourse on method / Latour, B and Latour, Y. "Give me a gun and I will make all buildings move": An ant's view

on architecture. / Manolopoulou, Y. The Active Voice of Architecture: An Introduction to the Idea of Change. / Massumi, B. Parables for the virtual / Cache, B. Earth Moves, The Furnishing of Territories / Etc.

The search to different time-scales in architecture will focus on the (in)determinacy of space and therefor I will find my inspiration in architecture that deals with flexibility and chance/change in very specific ways, amongst others the work of:

- Architecture and designs of Cedric Price
- Architecture and designs of Bernard Tschumi
- Architecture and designs of Rem Koolhaas
- Photography of Michael Wesely

Reflection

Relevance - Treating architecture not as stable, linear-objects but as multiple, non-linear projects will give architects more grasp on the dynamic time-spaces they are really designing and this will lead to designs that 'fit' beter and therefor exist longer. We have to be aware of the life that takes place in our buildings, and that will take over the design-process from us. We need to stop thinking that we designed 'the' building at the moment we hand-in our last drawing, we need to facture the rest of the process and give space to this process, from our first sketch on. This all will make architecture more rich and suitable to our world.

Time planning - From the theory I absorbed and have combined with my own thoughts first a serie of abstract models will be made that translate the theory into space. From that on I will continue researching in models on suitable building structures, masses, and interior issues, arising out of the first series of models and that fit the theory. Scale 1:500 is the scale to start with but at the same time the scale of 1:33 will be introduced because designing is not a linear route, working from big to small, but a dynamic process in which everything involved influences everything else involved.

Next to getting grasp on my theory and testing it in the design of the Faculty of Architecture the studio group of DSD will also work on a presentation at the Biennale in Venice (in October 2012) and other things that will come at our path, as for example the symposiums in England (Liverpool and Cambridge) in May 2012.

In between P2 and P3: - Reflecting on P2
- Reading more literature , amongst others: The Projective Cast: Architecture and Its Three Geometries by R. Evens.
- Working on the abstract models and translate them into models of building structures, masses and interior issues
- Working on the Biennale in Venice
- Preparing the P3 presentation

In between P3 and P4: - Reflecting on P3
- Translating the models of building structures, masses and interior issues into a well functioning Faculty of Architecture

- Embracing the things that will come at our path
- Preparing the P4 presentation

In between P4 and P5: - Reflecting on P4
- Embracing the things that will come at our path
- Preparing the P5 presentation

Attention -

Note that: Building Technology plays just as an important role in design as the designing of space, movement and experiences. 'Only these last aspects are just half the chicken, we need Building Technology to come to a complete chicken' (Andrej Radman). Architecture is not just designing experience ór just building/constructing: one needs the other. Also in this point of view architecture is not a stable, linear-object but a multiple, non-linear project which in all components will function as a dynamic system where parts and the whole are reducible to neither and where nothing precedes the other because they only exist in the relation. That is why building structures and details are already embedded from the moment on the abstract models become a building. The whole will be more then the sum of its parts.

Note that: In this project the end result is not the main goal. Just as in designing it is about they way in which the end result is achieved and the why it is used after being an end result. The end result itself is never an end result. It is not about producing but about conceiving.

Literature and sources -

Andrej Radman - Our teacher in this project at the TU Delft Faculty of Architecture, graduation studio DSD, in Delft

Latour, B. and Yaneva, A. (2008) 'Give me a gun and i will make all buildings move': an ant's view of architecture. Published in: Geiser, R. (2008) Explorations in Architecture: Teaching, Design, Research, Basel, Birkhäuser. Pages 80-89. Consulted at http://www.bruno-latour.fr

Leupen, B. (2002) Kader en generieke ruimte. Een onderzoek naar de veranderbare woning op basis van het permanente. Rotterdam, UItgeverij 010

Manolopoulou, Y. (2007) The Active Voice of Architecture: An Introduction to the Idea of Chance. Published in: Field: a free journal for architecture. vol1(1) Consulted at www.field-journal.org