TOOLBOX

FROM PUBLIC TO PRIVATE

TOOLBOX 1.0

TOOLBOX

FROM PRIVATE TO PUBLIC

DOMINIK PHILIPP BERNATEK

ExploreLAB25 2017/2018 TUDelft Bouwkunde
mentors: Robert Nottrot | Hubert van der Meel | Elise van Dooren

CONTENT

ABSTRACT

While cities densify, and fill up with building mass, it is of great importance to pay high attention to good quality public space. People should feel at home not only inside, but also outside their private home - in the city itself. Architecture has to provide possibilities for people to establish social contacts and on the other hand offer shelter and intimacy.

The research project deals with transitions between public space and adjacent private space of dwelling. Its main research question is 'What architectural tools create a transition between public and private space?' I approached my research via a systematic framework, which I developed for this purpose. It is a combination of plan analysis and research through design. A form of plan analysis is used to deduct common elements. Those are organized in 5 main categories. Using research through design, the categories are reevaluated and completed - by designing the missing elements. Last not least, individual categories and their combinations are evaluated in gradients of public-private. The research is presented in form of a toolbox.

Keywords: public space, extension, dwelling, transition, form, tool

INTRODUCTION

While cities densify, and fill up with building mass, it is of great importance to pay high attention to good quality public space. People should feel at home not only inside their private dwelling, but also outside the building - in the city itself. Architecture has to provide possibilities for people to establish social contacts and on the other hand offer shelter and intimacy. This is one of architecture's twin-phenomena (1). Richard Rogers states, that we as architects always have two clients: the people who use the buildings and the people who pass by the buildings, for whom the buildings form outside space. They have different ways of looking at things. "Public spaces - our streets and squares, parks and pavements - are the stages for public life; the public realm is at the heart of our life as social animals." (2) It is this 'twin-phenomena' of architecture - the phenomena of public and private - that interests me.

Working with the twin-phenomena, it is important for architects to know what tools they can make use of, when designing the transition between public and private. The main research question is:

'What architectural tools create a transition between public and private space?'.

The product of this research is a toolbox containing individual tools, combinations and evaluations, which are represented in form of schematic diagrams. The toolbox starts with an introduction on my research method. The second part deals with results. Research results are organized into 5 main categories and each category has its own chapter containing its own set of tools. The categories are evaluated separately in a gradient at the end of their chapter. The

1. Eyck, Aldo van. Twin Phenomena. [boekaut.] Francis Strauven Vincent. Ligtelijn. Collected Articles and Other Writings 1947-199. Amsterdam : SUN, 2008.
2. Rogers, Richard. CNN Style Guest Editor. Richard Rogers. 11 3 2016.

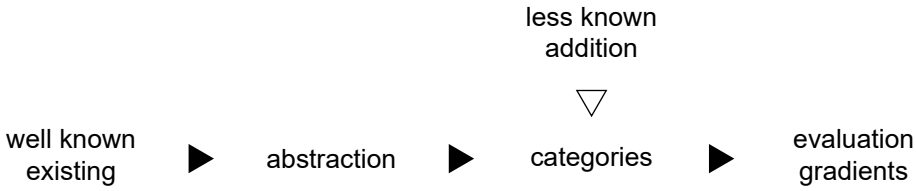
third part of the toolbox deals with various combinations between categories and serves as an example for its possible application. It contains concrete designs, created during the design process of my graduation project. The results demonstrate that each design is composed by a synergy of tools. In the end, the toolbox is summarized by a discussion.

METHOD EXPLANATION

SYSTEMATIC FRAMEWORK

I approached my research via a systematic framework, which I developed for this purpose. It is a combination of plan analysis and research through design, and consists of four steps: In the first step common situations are abstracted by reductive plan analysis. The result is the deduction of common elements, which are influencing transitions between public and private. The next step is the categorization of the found elements - tools. Because plan analysis on its own is limited to present examples, these categories are yet 'incomplete'. In order, to complete the categories, I use research through design, which helps to reevaluate and find the 'missing elements' for each category. The final step of the framework consists of an evaluation, which illustrates the grade of public-private for every tool in each category. Each category focuses on one set of tools at a time, while keeping everything else "constant".

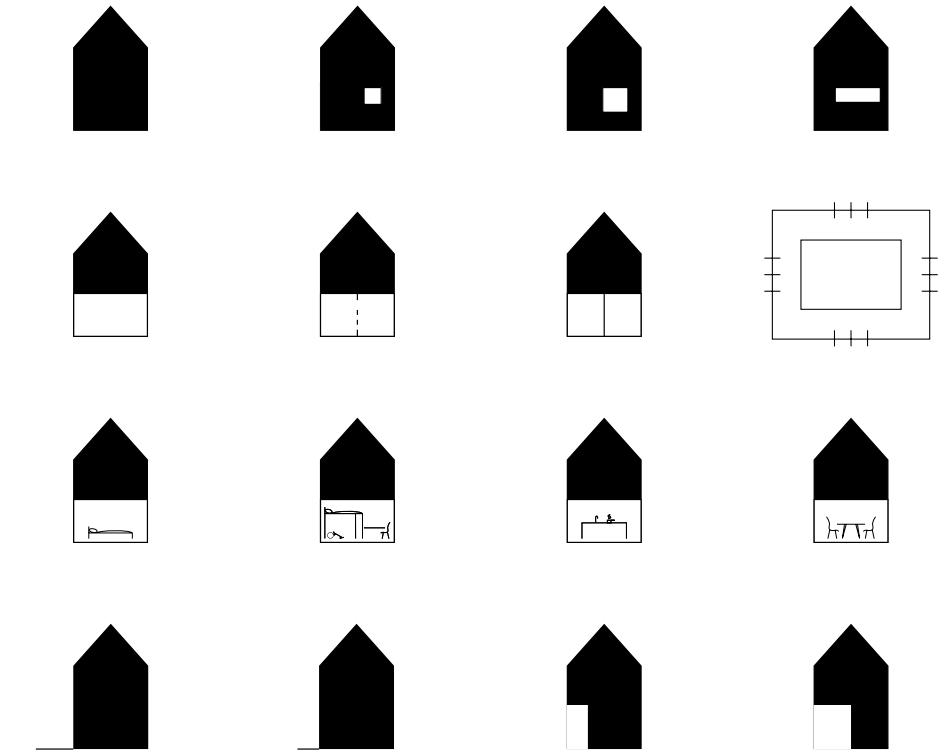
This systematic framework, turns out to be closely related to ACRREx. ACRREx is a teaching method developed to teach creativity in mechanical design. The shortcut stands for Abstracting, Categorizing, Reflecting Reformulating and Extending. (3)

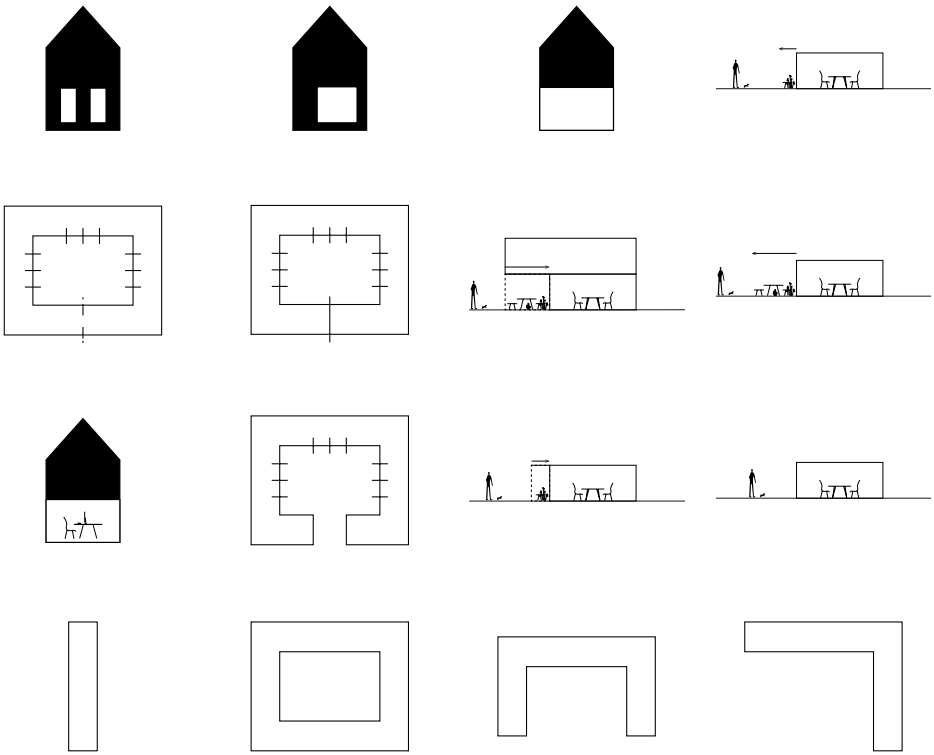


3. Paul Breedveld, Just L. Herder, Tetsuo Tomiyama. TEACHING CREATIVITY IN MECHANICAL DESIGN. Delft : TU Delft, 2011.

OBSERVATION

OVERVIEW ILLUSTRATION





The resulting tools are divided into five main categories. Every category focuses on one set of tools - represented by schematic diagrams (2D-diagrams as well as axonometric diagrams). In addition to the diagrams, collages illustrate possible views from public to private and vice versa.

DISCUSSION

REMARKS

Working with the toolbox

When using such a toolbox, one has to keep in mind its boundaries. There is only a certain range to the effect such a toolbox can have on the phenomena public private. The actual perception of public and private depends on additional factors, that can't be set by an architect. The most apparent of such factors are cultural context and personal perception.

1. Cultural context

The perception of public and private varies between cultures and societies. It is generally known that Asian cultures show a different perception of public and private compared to European culture. There is common ground between cultures, but the gradients of public-private may vary. Cultural and social background can have over-crossing influence on personal perception as well.

2. Personal perception

Even though, personal perception is influenced by cultural and social background, it can still vary from one individual to another. The difference in personal perception is demonstrated on photograph "with and without". The picture shows two dwellings adjacent to public space. The right is directly adjacent to public space. The left one has an enhanced level of privacy by an additional front garden (= horizontal distance). Despite that privacy increase, also the user of the second dwelling seems to have the need to reduce direct visual relation between the dwelling and public space by use of curtains. It is an example of how subjective the perception of privacy is. Evaluation gradients can have very different outcomes, because of differences in personal and cultural perception.

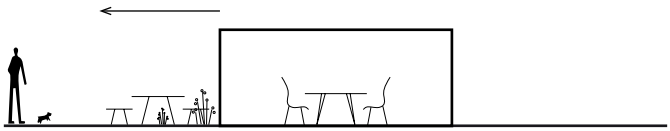
1.

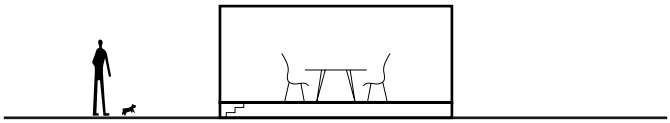
2.

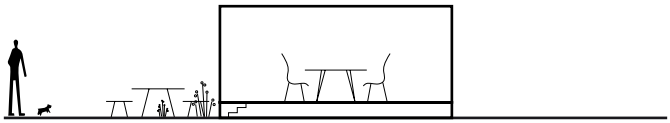
1. *WITH & WITHOUT* Distance - Horizontal - Useable | photo abstracted
2. *WITH & WITHOUT* Distance - Horizontal - Useable | photo original

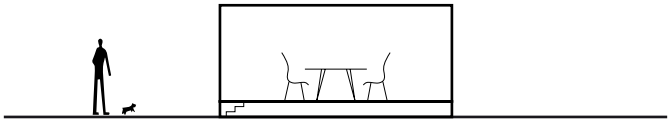
COMBINING CATEGORIES

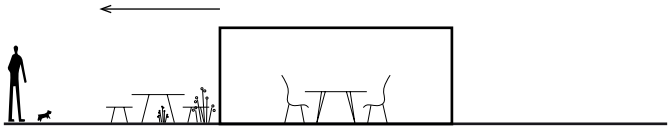
FREE OUTCOME

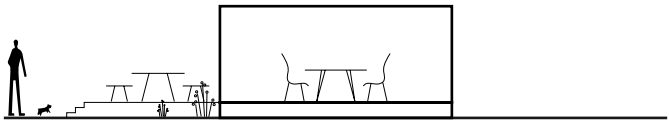












CONCLUSION

ADVICE

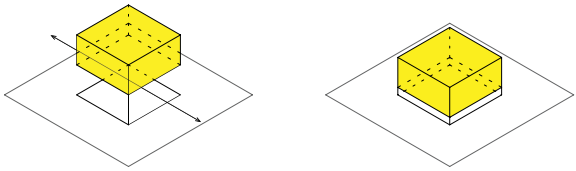
Tools do not limit creativity in the design process. The outcome of a design is still completely free and up to the designer. Another discovery of the research is, that the grade of public-private has to be reevaluated for each combination, because the individual evaluations may vary from the evaluation of combinations.

The toolbox is not an end in itself, but a tool to support architectural work which can serve as a design tool, as well as analytical tool for already created design. It is up to the user how to make use of the toolbox.

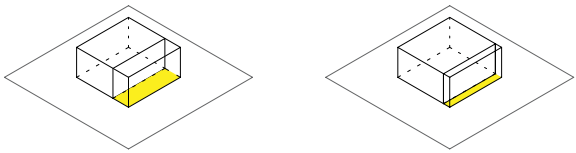
CONCLUSION

ALL CATEGORIES

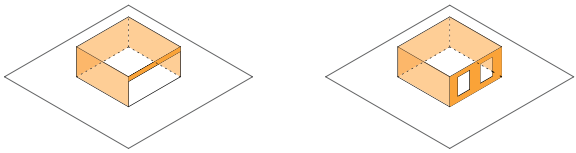
VERTICAL
DISTANCE



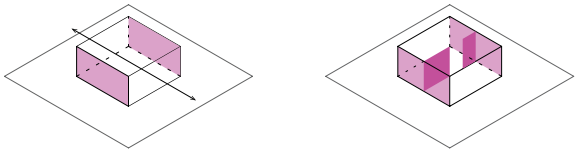
HORIZONTAL
DISTANCE



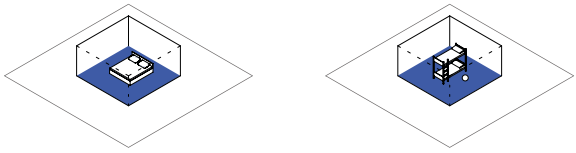
FACADE
ENCLOSURE



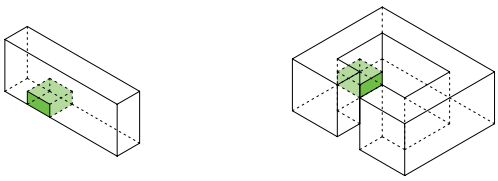
DWELLING
ENCLOSURE

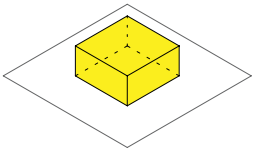
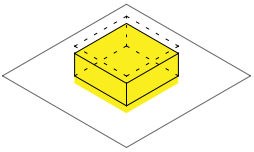
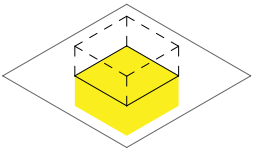
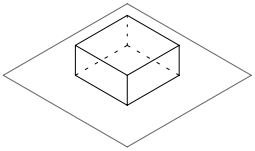
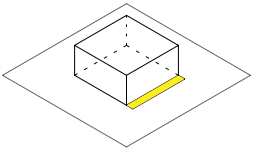
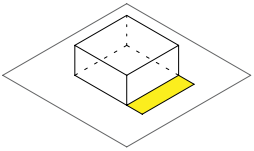
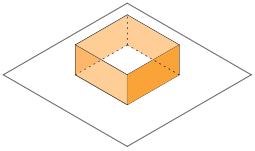
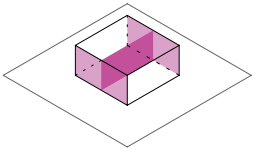
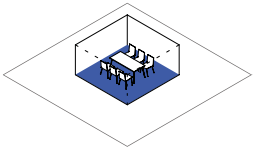
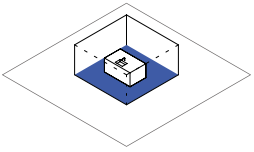
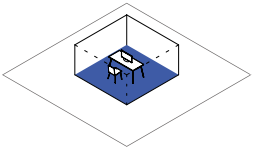
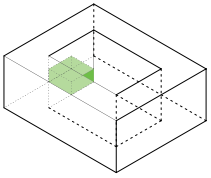


DWELLING
FUNCTION



URBAN
LAYOUT



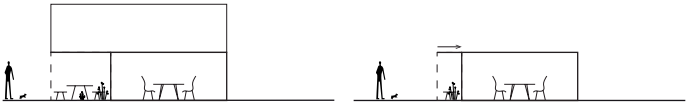













CONCLUSION

ALL CATEGORIES

VERTICAL
DISTANCE

HORIZONTAL
DISTANCE

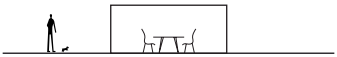


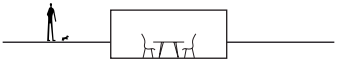
FACADE
ENCLOSURE

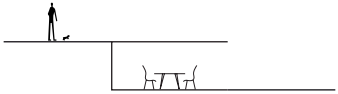
DWELLING
ENCLOSURE

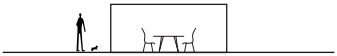
DWELLING
FUNCTION

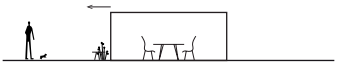
URBAN
LAYOUT

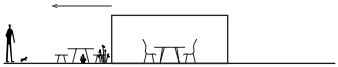


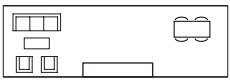


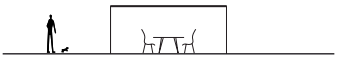


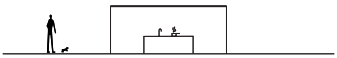












NOTE

It is interesting to compare my framework to ACRREx - a method used in mechanical design. It is very similar and the biggest difference seems to be the user's training: in comparison to mechanical engineers, architects are trained to be creative and tend to be skeptical towards very systematic approaches.

The testing of my framework during my design process, indicated that a systematic framework could be very beneficial. The method proved to be very effective for keeping a good overview and systematic workflow. The highly structured and 'strict' framework enhanced creative thinking, while helping to keep a good order at all time. I also found, that this method could be applied to nearly all architectural tools.

It could be very interesting for architectural educators, as well as designers to do further research in this direction. For now, a possible conclusion could be, that mechanical engineers are trained to be systematic and a systematic framework can trigger their creative thinking. Architects – as designers – are trained to be creative and such a framework can help them organize their creativity to be more efficient.

BIBLIOGRAPHY

1. Eyck, Aldo van. Twin Phenomena. [boekaut.] Francis Strauven Vincent. Ligtelijn. Collected Articles and Other Writings 1947-199. Amsterdam : SUN, 2008.

2. Rogers, Richard. CNN Style Guest Editor. Richard Rogers. 11 3 2016.

3. Paul Breedveld, Just L. Herder, Tetsuo Tomiyama. TEACHING CREATIVITY IN MECHANICAL DESIGN. Delft : TU Delft, 2011.