# CONTEXTUALIZE THE TYPE
## Design research through typology transfer

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## I    INTRODUCTION

Finding answers through research within the architectural profession, or any other kind of design practice, is a complicated but relevant issue. What mainly makes it complicated is the fact that the answer to a designer will always be of physical form, it's not a statement that tells you whether something is true or false. The answer can be one of many right answers, which doesn't ease the situation.

During my studies on architecture I found myself feeling stuck in a spiders' web struggling with all kinds of methods I was trying to use at the same time. Through the Research and Methodology course, I learned that I, as a designer, can create pointers myself which offers support towards one or multiple right answers. It is important to find the balance by selecting multiple methods which together arrange a rich base of knowledge containing multiple relevant perspectives. As Lucas Ray sets it out; 'As it is strongly associated with any type of research is the question of how you find things out. Various research methods are available, and all of these are equally valid. Nevertheless, some might be more or less appropriate to find the answers to your question'.[1]

What I gained from the course is the fact I realized many methods exist which can be used to find things out, but it is not the most important to find the best method. It is more important to critically reflect on the methods you decided on. According to Lucas, it is important in any research project to be able to describe your working process as part of the validation of your work. 'It is not enough simply to express opinions, as your work cannot exist in a vacuum'.[2] The second thing I've gained from the course is that the search for a physical answer does not end with applying results created through methods. A research-methodological awareness is needed to critically reflect on the results you're applying.

Currently I am working on my graduation project in the Dwelling – Dutch Housing studio. My project considers a residential building in the Merwe-Vierhavengebied in Rotterdam, a former harbour area which now will be developed into a residential area. My specific topic is the creation of collective residential housing building for one-parent families. The goal of my project is to find an answer in the form of design on whether collective housing in the city can support both single parents and their children. Research done by de gemeente Rotterdam in collaboration with Woonlab010 show that there is need for housing of modern families of which single-parent-families are a part.[3] For me, choosing this topic meant choosing to design for families and their individuals. What I find complicated about this project, which is typical of a Dwelling design question, is the fact I'm looking for one answer that applies to various individuals who all want to live by their own values, rules and habits. By using various applicable methods and critically reflect on them, I'm trying to map out the individuals needs and wishes, in order to be able to work towards a fitting solution in physical form.

## II    RESEARCH-METHODOLOGICAL DISCUSSION

The approach I take towards doing the research is mainly based on literature review, observation, interviews of future users and the analysis and application of case studies examples. In this paper I'll be focusing on the latter one, the analysis and application of case studies. In order to be more specific, I'll be using, and I've already used it in earlier stages, a typology transfer method. This method consists of a case-study analysis on historic examples of residential buildings which are transferred and composed onto the situation of my project. The first phase of this analysis was done with the entire studio group. We started off by mapping out collective spaces in case studies. While

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[1] R Lucas, *Research Methods for Architecture* (Laurence King Publishing, 2016). Pp. 36.
[2] Ibid.
[3] Jan-Maarten van Hemert, *Eengezinsappartement*, 2017.

normally we'd go to the place and observe what is happening, due to the current crisis we were now forced to use our imagination to map out how residents use the various spaces of the buildings throughout the day. By using story-telling methods we've been mapping out routes on the maps and pointed out the spots where various 'acts of collectiveness' possibly can take place. Hereafter the spacious characteristics of these particular spaces will be extensively described and visualized. After this phase, I will value the results of these research methods on the usability for the future users of my design. Through literature review and interviews I'm trying to map out the needs and desires of the users. Thereafter I can use those requirements to select the useful case studies and test those cases on my plot; by doing so I am applying the typology transfer method.

I'm choosing for this approach since I believe, especially in the field of Housing, there's a lot to learn from the past. By adapting well-functioning examples to a personalized set of requirements I'm trying to come to a conscious answer to my research question. In conclusion, I will mainly research the possibilities in a typological framework by combining, altering and contextualizing the for the future users' relevant architectural types of spaces. According to Rafael Moneo, the inventiveness of the architect allows to extrapolate form the type and changing its use. The architect can distort, transform, scale, overlap, and use all other kinds of application to existing types in order to produce new ones. 'The obsolescence's of architectural objects can be appraised by viewing them as types susceptible to differentiation in their secondary aspects. By doing it consequently one can act to change them. The type can thus be thought of as the frame within which change operates, a necessary term to the continuing dialectic required by history'.[4]

Finally, I want to highlight the fact I'm mentioning I will 'contextualize a type' earlier. According to Lucas, Allowing the context to take the lead in your research process is one way of establishing the primary importance of the physical, social or historical setting. Even more interesting might be the fact that het states the specific context of a case can be viewed as part of a type: 'Determine a typical context can help providing an example of comparable conditions found elsewhere. Examining a context as a case study of a *type* - particularly with reference to other circumstances following the same rules - allows a typology to be established.'[5]

## III     RESEARCH-METHODOLOGICAL REFLECTION

Moneo mentioned in his work that Quatremère de Quincy was the first to develop a coherent and explicitly formulation of an idea of type in architectural theory at the end of the eighteenth century. Moneo states that this development coincide with a time where the traditional discipline of architecture had been thrown into question by emerging social and technological revolutions. 'For Quetremère the concept of type enabled architecture to reconstruct its links with the past, forming a kind of metaphorical connection with the moment when man, for the first time, confronted the problem of architecture and identified it in a form'.[6] In short, the architectural type of Quatremère's time functioned as an identification with the past. This changed during the nineteenth century, when the idea of type was applied in exactly the opposite way. The meaning of a type then changed by the focus on a new aspect, namely the programs in architecture. The focus changed from the field of theory to the field of composition. 'Composition is the tool by which the architect deals with the variety of programs offered by the new society. A theory of composition is needed to provide an instrument capable of coping with a diversity that, with difficulty, can be reduced to known types.' Composition became a tool in order to

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[4] Rafael Moneo, 'On Typology', *Oppositions 13*, 1978, pp. 26.
[5] Lucas. Pp. 13.
[6] Moneo. Pp. 28.

connect form and program, in other words; form and function. These compositions couldn't be classified into singular types.

According to Moneo himself, the type, a formal structure, is more than a simple abstract geometry. Its geometry is intimately connected with reality, 'with a vast hierarchy of concerns running form social activity to building construction'.[7] He tries to describe how this complex typology can be theorized. In his eyes, the architect can contribute to the level of generality and anonymity that characterizes architecture as a discipline by describing a set of formal relations which generate a group of buildings or elements.

Michael Brawne, in contrast, illustrates architectural typology will never be able to arrange descriptions to solutions in physical form. He also foresees complications in the idea that form arises from the functions to be performed in a building and that these can be specified in types, just like the concept of a type in the nineteenth century was. He states three problems in the notion of determinism, which in his eyes underlies the system of typology. 'The first is that any set of functional criteria have to be expressed without simply being a description of the solution. If the solution is already present, the criteria need not be enumerated. The second difficulty is that it is extremely difficult to establish a direct correspondence between a set of verbal and numerical statements and a set of forms. It is only possible if the form exists and we simply describe the known form in verbal and numerical terms; we are thus back to the first problem. The third difficulty, which is that we can never be sure that we have enumerated all the criteria on which a solution is to be based. To say that we have selected the most important ones immediately introduces a set of value judgements and questions as to who is to decide which are the most significant and how do we determine what is important.'[8]

Finally, Daniel Koch illustrated a second difficulty when describing types in architecture. He mentions typologies are under constant change due to both rapidly changing building use and dynamic socio-cultural changes. Koch highlights those statements by mentioning Madge, who describes how the difference in the domestic sphere during the ancient Greece and ancient Rome. While in ancient Greece the living space used to be an 'aside, a dirty other, with focus lying on public spaces for the interaction and practices of free men', in ancient Rome the homes held a central role in culture.[9]

Koch adds to this by mentioning another studies on homes, which clearly point out there's a certain cultural and social difference you'd need to know to nowadays be able understand not only the internal configuration of homes, but also what home is. Koch uses Susan Henderson's study in 2009 on German women looking for single homes in the early twenties. In that time, it was argued that single women living alone would destabilise society. A single life was expected to be a route to low-life and prostitution, it would spoil women had to be small and of low standard, not comfortable enough to become permanent.[10]

Concluding this chapter, I'd say it is interesting to notice though Moneo that the use of composition of existing types were already used in the nineteenth century in order to develop new form and program. Anyhow, although Moneo was convinced of the capability of the architect to describe formal relations, one could say there exist various difficulties in architectural typology. It seems crucial to accurately determine whether architectural types in research methods are relevant, especially when coping with historic examples. Moneo's description on how the concept of a type changed from the 18th to the 19th century already shows how points of view are not always comparable to current situations. That

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[7] Moneo. Pp. 23.
[8] Michael Brawne, 'Architectural Thought : The Design Process and the Expectant Eye', *Architectural Press*, 2003.
[9] Daniel Koch, 'Changing Building Typologies: The Typological Question and and the Formal Basis of Architecture', *Journal of Space Syntax*, 5.2 (2014), 168–89. Pp. 173.
[10] Ibid.

problem also exists in Koch's statement on the complex situation of continuously changing habits, practices and, and therefore typologies.

Finally, Brawne, in contrast to Moneo, states it's impossible to establish a direct correspondence between a set of verbal and numerical statements and a set of forms. And if we could, will never be able to describe all possibilities, we will only be able to describe existing forms. For this fact, we can never be sure that we have enumerated all the criteria on which a solution is to be based.


IV    POSITIONING

As mentioned in the introduction, choosing this studio to me meant choosing to design for families and their individuals. To find the right answer to the question whether collective housing can support single parents and their children, I'd need to investigate the needs and wishes of those individuals. This design is not about what would I personally consider valuable in terms of dwelling. At first, I am not familiar with the specific situation the families find their selves in, and secondly if I'd rely on my current knowledge the research would be quite of a singular approach. This situation sounds merely basic, but I'm trying to draw the importance on research in design, which is not always as logical is it now seems. Doing research for both the studio and the Methods & Analysis course made me realize even more how important it is to set up a strong methodological framework.

While writing this paper I've been focussing on one of the main methods I'm using, namely the typology transfer. Valuable results of earlier done case studies can be cut, pasted, copied, altered and layered in order to test the (combinations of) cases in the particular situation I'm working in. Moneo's work is useful to declare why the use of this method can be valuable. It was interesting and surprising to find out the method of typology transfer has already ben uses since the nineteenth century, when the method became relevant due to changes in architectural programs. Using case studies from the past to test cases for the future amass an interesting playing field for design. According to Moneo, when you think of a type as 'the frame within which change operates' the type, rather than being a 'frozen mechanism' to produce architecture, becomes a way of denying the past as well as a way of looking at the future.[11] I'm exactly intending to achieve so by projecting the contextualized historical case studies on the future users of my projects. Being aware of the context in which you're working and the context from where the case studies have come is important to be able to work within this frame. As Koch stated, context is continuously changing and in some cases the typologies change as well. A critical understanding is needed to use the typology transfer method in a valuable way.

Remarkable is the fact that I'm designing for a one parent family which is considered a 'modern familiy' in the research reports of the gemeente Rotterdam. It is not very difficult to realize that the exitance of one-parent families is not a new phenomenon, those families are part of society since eternity. Nevertheless, earlier in history there's was no specific housing designed for those families. So, talking about types, this 'type' of household is relatively new within the 'houshold types'. Just as architectural form and context, household types and its tagging evolve over time. Anyhow, this might mean the available case studies contain shortcomings since still few designers have ever designed for this specific group.
      The creation of new types based on old typologies brings us to Brawne. Brawne states it's in no way possible to describe all possibilities of solutions in physical form, as we will only be able to describe existing forms. Through Brawne's perspective I realized the importance of the continuous switch between research methods while designing. From the results of the typology transfers it is

[11] Moneo. Pp. 28.

important to go back and forth to results from interviews, literature other kinds of social knowledge. It might even be a good idea to let the results from the typology transfer method be reviewed by the potential future users themselves. By processing their feedback over and over, you might come to an increasingly specific and appropriate solution.

The use of critical discourse analysis based on the results from the typology transfers might be useful to arrive to such feedback. According to Lucas, such an analysis might give insight in hidden or less obvious aspects of cultural phenomenon.[12] By combining those methods it might be possible to develop new types which are not described or created before. If so, it automatically solves the danger Brawne illustrated. By mentioning the ambition to do so, I conclude that well done research for architecture relies on a well thought-out selection, application and combination of different methods and a continuous critical reflection on both the specific methods as well as the total picture.

[12] Lucas. Pp. 40.

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