

I INTRODUCTION

Architecture is a profession with a knowledge tradition similar as geography, history or chemistry. Research in architecture is therefore not a singular process but rather as multifaceted as architecture itself.¹ It is a profession in which the creative process is arguably the most important. When you design the -creative- mind comes up with solutions or problems arising from the given design task. The first thoughts or ideas, which any designer consciously or unconsciously faces, are often the starting points of a design. Research is one of the tools which can be used to optimize and improve the design and can play a minor or major role in any phase of the design. According to Lucas "research is not a simple progression from A to B to C, rather it proceeds as a series of parallel activities, looping back to revisit ideas".² This concept of research not being a linear process is the same with the design process. The first ideas or sketches can -but do not have to be- the most important. For example Frank Lloyd Wright's first sketch for his design of Fallingwater proved to be the most essential.

In every design a certain aspect of research comes into play. And if we want to progress and improve the field of architecture we must conduct research too. Research is the systematic inquiry directed toward the creation of knowledge.³ There are various methods of doing research. Heuristics, the doctrine of finding or revising something, lies at the origin of every research. It is crucial to be aware and understand which method you are using during your research. If you are not consciously aware, you might execute your research in the wrong way. Topics such as history, context and precedent are important. Not to mention the social and cultural role buildings fulfill nowadays.⁴ The concept of 'thinking before doing' is important. It is very helpful in most circumstances -when building a house-, but it can also be counterproductive: too much thinking is detrimental for spontaneity when designing. Doing research for me is about this 'thinking before doing'. It narrows the possibilities of making mistakes.

During the lecture series several new terminologies were brought up, especially the term praxeology intrigued me. For me it seemed elusive how to integrate the study of human action within the design process. The lecture series helped to improve my understanding about different research methods and how and why to use a specific method for a specific research. The lectures offered a more academic point of view concerning the relation between architecture and research. It made me think of the overall position architects fulfill. An architect used to be a man -or women- who had a diverse interdisciplinary knowledge in different fields -philosophy, astronomy, etc-.⁵ Nowadays we tend to see the architect as a more singular profession. I used to see architecture as a mere practical profession in which research could only play a minor role. However I now believe it can shape and guide the architectural process in ways the practical mindset could never have been able to accomplish. In short, it is important to widen your view/vision upon architecture as much as possible. My vision is slowly shifting from a practical approach to a more theoretical one.

The main topic I would like to focus on is the relation between the user and the architect. Users have -in most cases- almost no participation with the design process. A lot of architects define users as passive, however some have a more complex understanding of the user and acknowledge users affect the way they design.⁶ I am curious as to what extent users can influence -preferably improve- the design process of the architect. The research question brought up in this essay therefore is: How can the interaction between architect and user be improved (to create a better designed building)?

¹ Wang, D., Groat, L. *Architectural Research Methods* (Hoboken: John Wiley & Sons, 2013), 7.

² Wang, D., Groat, L. *Architectural Research Methods* (Hoboken: John Wiley & Sons, 2013), 25.

³ Snyder, J. in Wang, D., Groat, L. *Architectural Research Methods* (Hoboken: John Wiley & Sons, 2013), 8.

⁴ Wang, D., Groat, L. *Architectural Research Methods* (Hoboken: John Wiley & Sons, 2013), 7.

⁵ Charytonowicz, J. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (2000), 104.

⁶ Hill, J. *The Use of Architects* (Urban studies, 2001), 355.

II RESEARCH-METHODOLOGICAL DISCUSSION

There are several ways to investigate what users want, like or need. An important method which revolves around use is the method of ergonomics. Ergonomics is the process of designing a comfortable environment for people to live in. It applies to small scale topics/objects. However it is quite important as it helps in “improving performance, productivity, safety and health in the built environment”.⁷ Bruno Taut was the first architect who looked at how a dwelling was used. He asked the women -who used the kitchen- to design that very same kitchen. It led to a new, optimized and better designed kitchen. This approach was -for its time- completely unseen but it led to a new insight concerning the relation between architect and user.

The method of psychology might seem relevant because psychology clarifies individual needs and demands. However in the case of a large public building it is more about what most people want. The method of sociology is -in this case- more obvious. In short, if you are designing a building for a lot of different users it is better to find the common denominator instead of focussing on individual wishes.

Investigating trendiness is the third method that could be used. It begs the question about what is popular? For a building it seems a bit short sighted and is way too subject to trends. Nowadays we see the necessity of sustainability and its capability to adjust to future needs. The Solid concept could prove its value: a sustainable shell with no predetermined function which has a predicted life span of over 200 years. “Buildings are classified by function in planning applications and building regulations”.⁸ The Solid concept leads to new ways of thinking regarding sustainability.

The last method: praxeology - the study of human action and conduct⁹- will be illustrated by discussing the *barriadas*. They are squatter settlements in which people choose their own neighbours, regulate their own building process according to their income and built their own homes.¹⁰ User becomes architect and architect becomes user. The building process is solely focussed on the intentions and income of the users. They are in control and create their own environment in which they feel safe and comfortable.

For me praxeology is the most interesting method for my research. The method of praxeology was introduced in the construction of economic theory which will be reviewed first. Next step is to find a link with architecture and how social practices have been used, or could be used in the design process. I would argue that one of the novel challenges praxeology faces is its translation within architecture. Praxeology still remains somewhat at the surface, I think it could -and maybe should- have a much larger influence in how we design.

III RESEARCH-METHODOLOGICAL REFLECTION

The methodology of praxeology was first mentioned by Ludwig von Mises, who stated that all human action involved choice.¹¹ Rothbard declared “action implies that the individual's behaviour is purposive, in short, that it is directed toward goals”.¹² Human behaviour can be managed and could be ‘steered’ into a specific direction. This means it could be helpful in the design process. Praxeology is about studying what people are doing instead of studying what they are thinking or saying what they will do (psychology). The term praxeology first made its entry within the field of economics. It derives from the idea that everyone acts towards their own chosen goals. However this is a bit too simplistic. People do not only act according to their predetermined goals, they also act differently depending on their surroundings. Conscious and unconscious decision-making is therefore contextually dependent.¹³ Senses such as taste, smell and touch further complicate the decision-making process.

⁷ Olguntürk, N., Demirkan, H. *Ergonomics and universal design in interior architecture education* (METU JFA, 2009), 123.

⁸ Hill, J. *The Use of Architects* (Urban studies, 2001), 355.

⁹ Berkers, M. *Praxeology* (2018). Accessed November 26th, 2018 from <https://brightspace.tudelft.nl/d2l/home/124943>

¹⁰ Turner, J. *The Squatter settlement: An Architecture that Works* (Architectural Design, 1968), 357.

¹¹ Brody, A. *Human Action: A Treatise on Economics* (Political Science Quarterly, 1951), 606.

¹² Rothbard, M. *Praxeology: The Methodology of Austrian Economics* (Cheltenham, Edward Elgar, 1977), 59

¹³ Paxson, N., Wenzel, N. *Praxeology, Experimental Economics and the Process of Choice* (2016), 163.

The methodology of praxeology in architecture has generally been focussed on observing and experimenting. It revolves around the comprehension of the use of space. Methods to map this phenomenon are sketching or drawing, photography, film and interview. A Japanese firm, Atelier Bow-Wow uses this methodology to present their ideas. They use sections to show how their buildings will be used. Detailed drawings display occupation and movement. They focus and emphasize on how people will predominantly act in their designed buildings.

Fortunately, praxeology has also made a more theoretical entry in architecture. Social practices are often related with human action and behaviour as mentioned before. However classic social and cultural theories have a 'double blind spot' concerning the important role emotions and spatiality -the way in which a space is designed- play in human action.¹⁴ For example, buildings and architecture are not regarded as part of the social itself.¹⁵ Nevertheless objects and individuals do have an impact on how you use space and how you act in this space. Reckwitz refers to artefacts as the embodiment of material and cultural objects.¹⁶ Social practices are being guided by space, artefacts and individuals. These spaces can be confined to a living room -a private space- or can be as big as a large urban square -a public space-. Humans react and act depending on how such a space is structured, what artefacts they encounter and which individuals they come across. "Only via objects can space be adequately grasped. And only via objects can one detect the omnipresence of senses and affects, which are regularly directed towards objects and affected by them".¹⁷ Thus, objects have a decisive influence on space -they strengthen the spatiality of a space-, they affect your senses which in turn influence the space in which you exist. Human actions are affected by how spaces are designed and decorated. Foucault states that it is important to define who has the authority and knowledge to change a space. He then refers to architect, owner and/or user.¹⁸ However this is too straightforward. Spaces have an impact on its users and vice-versa. Humans feel more comfortable at home than in a unfamiliar environment. Objects and people all affect the atmosphere and spatiality of a space.

Praxeology is eminently suited when you are dealing with large numbers of people. It reveals what people actually do instead of investigating what they say they will do (psychology/ethnographic approach). This approach will clarify the actual common needs and wishes of the intended users.

IV POSITIONING

During the lecture about praxeology I found the case study about the Moroccan neighbourhood - the Bidonvilles, Al Hung example- very interesting. The postcolonial Moroccan government had post-war ideas about urbanism and architecture which led to a complete misfit with the Moroccan inhabitants. Nobody, inhabitants nor government, felt responsible for the modernistic neighbourhood. The area was neglected, the government thought they had done enough by building the complex and the residents found themselves in a new type of 'ghetto' in which they didn't feel at home.

It somehow resembles the *barriadas* example where on the one hand residents live in 'shabby shacks', in which they feel comfortable and cosy, and on the other hand modern complexes are built with an impersonal and sterile atmosphere in which the residents feel uncomfortable. The residents have developed, over time, distinct building forms and used materials which are the outcome of a trial-and-error experimentation. This self-built community is in a way a type of architectural research.

It is obvious that when regarding the Bidonvilles the outcome would be very different if they had used a more praxeological approach -look at how the intended user act in space-. The *barriadas* clearly show what the people want -although they lack a good income, the idea is clear-. It only lacks a thorough systematic praxeological approach. It is crucial to take into account the effect emotions and spatiality have on human action. Buildings can influence the way you feel, thus they can change your mood, your attitude. Be aware of this and act -or in the case of the architect, design- accordingly. Whenever you are designing, in my case a public building, ensure the user feels comfortable, invited, wanted.

¹⁴ Reckwitz, A. *Affective spaces: a praxeological outlook*, *Rethinking History* (The Journal of Theory and Practice, 2012), 241.

¹⁵ Reckwitz, A. *Affective spaces: a praxeological outlook*, *Rethinking History* (The Journal of Theory and Practice, 2012), 245.

¹⁶ Reckwitz, A. *Affective spaces: a praxeological outlook*, *Rethinking History* (The Journal of Theory and Practice, 2012), 251.

¹⁷ Reckwitz, A. *Affective spaces: a praxeological outlook*, *Rethinking History* (The Journal of Theory and Practice, 2012), 252.

¹⁸ Foucault, M. in Hill, J. *The Use of Architects* (Urban studies, 2001), 357.

“By studying the praxis of architecture one can develop an eye for the actual users of a building, and not the imagined ones”.¹⁹ It is essential to be aware of who you are building for. Every culture, land or nation has different views (ethnographic research) on the question: what is architectural quality? To create a good reference framework it is important to talk with (psychology) and to observe (praxeology) the inhabitants (your intended user). Find out what they find appealing and comfortable. In that way you do not end up with another deteriorated and neglected neighbourhood. Furthermore be aware of the fact that humans act according to your designed spaces and that the spaces you create affect its users.

During the fieldtrip for my graduation studio (Public Building in Prague) I have conducted interviews and made a lot of maps. We focussed a lot on the pedestrian -or what we called ‘the stroller’- in Prague. For me this stroller represents someone who wants to experience his environment. A stroller experiences everything at eye level. This area is often beautiful, well detailed and expresses an inviting character -the theme of spontaneity is very present-. Michel de Certeau calls this the act of walking where the stroller creates appropriation for the topographical system. One is in need to find a comfortable space, the walking is a process of being absent and in search of this place.²⁰ Walking around the city -to stroll- is a continuous search for new spaces to which one can relate or feel at home. The method of praxeology in which to study this behaviour would be very helpful to come up with a design -most- people can identify with. Next step is to make a collaboration between user and architect. “Architecture is made by use and design. To use a building is to make it (...)”.²¹

However it is too simplistic to say that users should always have an influence in the design process. It is more complex than that. The design process entails a lot of different aspects which the user is unaware of. The influence users should have needs to be both consciously -having talks with the architect (psychology)- and unconsciously -architects thoroughly studying its users activity (praxeology)-. In this way the architect creates a complete image of what the user wants and needs - the user can be surprised because he might be unaware of this-. The title: never listen to your users encompasses a valuable lesson for architects, do not ask your users how they act in space rather critically *analyse* them, as this is much more valuable!

¹⁹ Berkers, M. *Praxeology* (2018). Accessed November 26th, 2018 from <https://brightspace.tudelft.nl/d2l/home/124943>

²⁰ Certeau, M. *The practice of everyday life* (Berkeley, University of California Press, 1984), 351.

²¹ Hill, J. *The Use of Architects* (Urban studies, 2001), 355.

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