TYPOLOGICAL METHODOLOGY

The relevance of typological research in an ever-changing architecture realm

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I INTRODUCTION

Research is sometimes seen as a collection of information which after being organised in a specific structure is forming the generalized basis for an act of design which is then leading to an architecture project. In my academic experience I have seen me, my groupmates and other students usually driving our attention mainly towards the objects of this research: for example the multiple case studies which can be collected and further analysed. As student, we are extremely glad when we find a clear architecture example that seems to respond in any way to a similar question that we have. And finding the right case-studies/article/theory/interview seems sometimes an unclear mixture between luck and effort: we tend to dive into an undistinguished flow of information, making an endless effort to caption specific elements from a multitude of disorganized resources. Less frequently we point our attention towards how we are getting these information. And moreover, we act as if these information are forming a flat and scattered realm, not considering the fact that they are actually the product of specific procedures and methodologies and as such, they should already have a direction. We concentrate more on the product of this research then on the methodology behind it, assuming that no matter how the latter is conducted, it would lead us to the similar conclusions. However, as explained in this course, the methodology of the research leaves important traces along all the design journey, therefore influencing not only the product of the research itself but also the consequent response to it, the product of the design. From the start of the research all the facts, resources that we find and evaluate are forming a specific direction, and consequently a versus which is directed towards our personal design response.

The lecture series shed a clear light on this theme, enabling me to get deeper in knowledge of different kind of methodologies.

My research aims to investigate how data and digital technologies are influencing the work environment. Especially focusing on the reality of the Netherlands, my research question is: how is the digitalisation of work changing the city of Rotterdam and its architectural design and city planning?

The ubiquity of the internet has enabled the spread of the work outside of the office. While with the modern workspaces (corporate offices etc) it's possible to individuate a clear distinction between home and office, now their boundaries are becoming more fluid, allowing overlapping conditions.

"The work spaces becomes much less territorial. The boundaries of such spaces are diluted in an omnipresent and reticular network". 1

¹ Sergio M. Figueiredo, Sukanya Krishnamurthy and Torsten Schroeder. Architecture and the Smart City, New York: Routledge, 2020. Pag 8

What would it be the right methodology for me in order achieve a better understanding of this fluid condition or work and living?

An accurate typological research would enable me to understand this current shift investigating the other spaces that now have been included as part of the production process of work. At the same time a typological methodology would allow me to investigate the development of spaces interested by the production process along history and understand their turning points in time.

II RESEARCH-METHODOLOGICAL DISCUSSION

As Lucas stated in his book "Research is typically conducted by the application of an existing model to a new set of circumstances". The new set of circumstances that I am focusing on is the contemporary situation of a networked society and the implication of the information age on architecture, especially focusing on those places where work is performed. Technology has always influenced architecture and often it has created interesting opportunities for rethinking its spatial conformations. The elevator can be taken as one of the most striking examples of these changes. The technology of elevating users without the means of staircases has enabled the birth of a new typology: the skyscraper. It's possible to see analogical implications for the redefinition of architecture due to the information technologies.

Since the birth of the Internet in 1969, it's possible to trace and study these moments of change. Fiftyone years has passed from this date, and this timeframe enables a study on how the conformation of workspaces has changed throughout its development. The history of the Internet is a recent one, but it can be also connected to similar historical moments prior to its birth, which had similar consequences in the definition of architectural spaces, in the frame of communication technologies. Therefore, History constitutes a relevant part of my research. As Lucas stated: "History provides prototypes, a catalogue of tried and tested responses to problems, subject to adaptation to new contexts and situations". For my research I therefore developed a timeline, individuating the different typologies and what elements contributed to the shift between one and another.

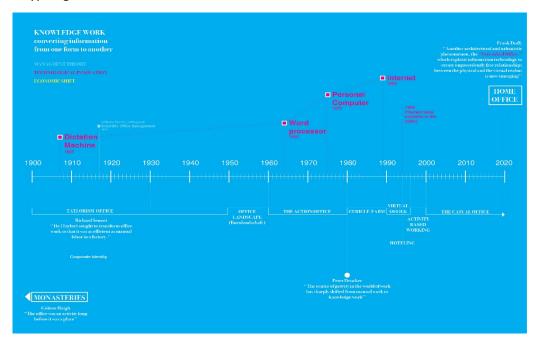


Image n.[1]: Timeline of Typology evolution of knowledge work

²⁻³ Lucas, R. Research Methods For Architecture. London: Laurence King Publishing, 2016. Pag. 8 and Pag 9.

My approach will constitute a position in between etic and emic. My study is based first on a mass observation upon working activities taking place in specific architectural typologies, therefore with an etic point of view, the one of the external observer. For this I started to making interviews and redrawing those places now informed by production. Being myself also involved in this phenomenon and continue transition in the current time, my position will also be emic, reducing the distancing from the object of my study and looking closely into what I can experience myself in regard to this shift.

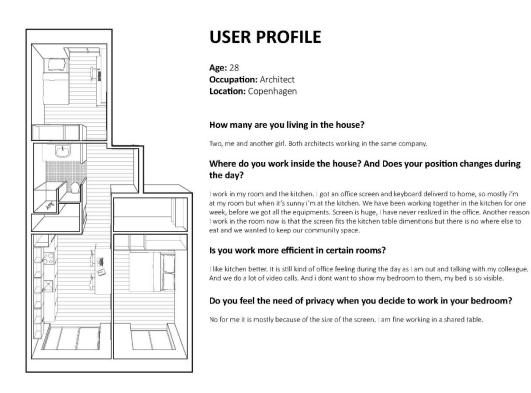


Image n.[2]: Interview. Working from home.

The approach I am taking is context lead as it is confined between certain boundaries: I am investigating how *knowledge work* - defined as the work done in order to convert an information from one form to another - changed through history by three criteria — developments related to communication technologies, work management theories and economical shifts - and which spatial conformations have accommodate these changes in architectural terms.

Architecture social science constitute a relevant source for my investigation because it identifies the actual usage of space. The networked society which is at the centre of my research is changing the housing and working typologies as known until today. Frank Duffy states that: "Another architecture and urbanistic phenomenon, the networked office, which exploit information technology and is creating unprecedently free relationships between the physical and the virtual realms is now emerging". On this theme Vittorio Aureli is suggesting that: "No longer defined by the 9-to-5 workday,

⁴ Frank Duffy, "Lumbering to Extinction in the Digital Field: The Taylorist Office Building" in Harvard Design Magazine: What about the inside? No. 29. Cambridge, 2008

freelance work transcends the traditional separation between living and working'5'. It is important to understand how the users are personally experiencing this shift, in order to design a relevant architectural solution: the aim of the research is to individuate all the nuances of the living and working aspect of user's life in order to come up with a responsive design approach based on these observations. In opposition of a top-down approach, social science gives the opportunity to project more immanent characteristic into the design, which results to be also user driven.

My research has been mainly based upon a typological methodology.

In order to form the necessary architectural spatial qualities that my graduation project would have to assume, it is important to study the typological development of workspaces along history. Typology is always a response to certain user needs. Regarding the site of Rotterdam there are certain typologies that have lost their capability of response to current needs and therefore they are interested by a process of redefinition. The open plan of modern office buildings in the Central Business District, for instance, is interested by an high vacancy rate: a large number of them have been transformed in housing projects, collectives, coworking places etc. The redefinition of an underused typology is a delicate process of understanding the typology itself. Its redefinition, adaptation or transformation comes with the investigation of the current social structure, the current definition of work and labour.

More than typology itself, my research is developed in order to find the moments in which, due to certain circumstances, typology has changed and transformed itself into new ones. The succession of different typologies along time can give a deeper understanding of an ever changing world, where technologies, social aspects, economical shift constitutes the core factors for differentiation. Moneo states that: "The most intense moment in architectural development are those when a new type appears" 6.

III RESEARCH-METHODOLOGICAL REFLECTION

The following paragraph reflects upon the historical development regarding the theory of typology and it is based on a personal and self-chosen methodology literature.

Typology is the study of types, and typological research aims to individuate constancy in a variable context. Typological research, taken at a wider extent, aims also to investigate the turning points when a typology changes into another, individuating a shift between two or more constant times.

The first definition of type has been given by Quatremere de Quency in Dictionnaire Historique de l'Architectura "A type does not present so much an image of something to be copied or imitated exactly as the idea of an element which should itself serve as a rule for the model: [...] The model understood as part of the practical execution of art is an object which should be imitated for what it is; the 'type' on the other hand is something in relation to which different people may conceive works of art having no obvious resemblance to each other. All is exact and defined in the model; in the "type" everything is more or less vague"⁷

The difference between model and type was of supreme importance in this discourse. However, as Quatremere himself wrote in the same essay, this warning has been unheard by later generations of architects which confused the two terms. The type, confused with the model, had been the primary source of the practise of copy and imitation.

⁵ Vittorio Aureli, Martina Tattara "Production/Reproduction: Housing beyond the Family" in *Harvard Design Megazine No. 41 Family Planning*

Moneo, Rafael. "On Typology." In Oppositions. 22-44. New York: The MIT Press, 1978. Pag 27

⁷ Malcovati, S., Caja, M. and Landsberger, M., *Tipologia Architettonica E Morfologia Urbana*. Milano: Libraccio, 2012. Pag 16

The modern movement constitutes the moment in which a redefinition of the theory of typology happened: modern architects rejected the connection with the past in order to produce a new image for the new society. Therefore they could not have connection with the theory of the type as described by Quatremere which was stating that: "Everything needs an antecedent: nothing comes from nothings". The rejection of type came instead with the birth of the prototype as a result of the mass production in architecture enabled by the industrialized society of the modern movement. Having confused these two terms caused the later critiques moved towards the endless reproduction of the same form of the modern movement. Moreover the core concept of Modernism known as functionalism rejected the one of typology: the project was not believed to be informed by types, as formal structures, but by function. Form follows function. Architecture became a mere object of the production process.

Against the idea of architecture as an object of mass production or as an object neglecting the past, in the sixties the theory or type came back to be further studied. Researchers such as Aldo Rossi and Giulio Carlo Argan renewed their interest in the theory of Type, although with some fundamental differences. According to Quatremere de Quincy the type was intimately related to needs and nature: it was the response to a natural condition. As an example he was stating: who does not believe that the shape of a Man's back must provide the type of the back of a chair? Argan departs from the idea of 'type' as something residing in nature but in building precedents and therefore in the history of architecture: the birth of a type is conditioned by the fact that a series of buildings having evident analogical functions and form already exists According to Argan, Typology is a posteriori process: a deductive process. Opposite to this discourse is the work of Saverio Muratori, who takes back the notion of a typology as an a-priori structure re-examinated the idea of type as the formal structure which enable the continuity of the city, from the house to the neighbourhood and to the whole.

Typology and city has been extensively studied by Aldo Rossi. Rossi was focusing on the similarities, on the universal and enduring, permanent, character of cities through comparative study of urban form, using a typological-morphological approach. Both for Muratori and Rossi the city itself contribute to the notion of type. Vidler Anthony would call this stage of thinking as the "Third Typology". Prior to this notion, according to Vidler, architecture was conceived, validated and legitimized by a nature outside of itself, being the latter either the rational order of nature (in Quatremere de Quincy thought) or the newly developing nature of the machine as the product of mass production (in the Modern Movement society). In the third typology the city becomes the site and origin of new typology in an attempt of continuity. Its validation can be found in the city itself with no need to take this validation from society, use or natural form.

IV POSITIONING* (ca. 750 words)

In my position I state the importance of typological methodology in order to gain knowledge for architectural research. I stand against the idea of the Type as a mode of replication and I agree with what Martis Aris stated in his book, which I found as an important reference for the development of my research methodology: "The type should not be conceptualized as simple reproduction method, but as a structure of the form, capable of multiple developments. [...] Only the connection with the previous experience creates possibility of development" 11

One of the main critique moved towards typology is that it cannot create added value but it too much constrained to existing pattern. However the type is not an object that can be replicated because it is

⁸ Malcovati, S., Caja, M. and Landsberger, M., *Tipologia Architettonica E Morfologia Urbana*. Milano: Libraccio, 2012. Pag 16.

⁹ Moneo, Rafael. "On Typology." In *Oppositions*. 22-44. New York: The MIT Press, 1978. Pag 28

Malcovati, S., Caja, M. and Landsberger, M., Tipologia Architettonica E Morfologia Urbana. Milano: Libraccio, 2012. Pag 23
Carlos Marti Aris, Le variazioni dell'identita'. Il tipo in architettura. Novara: De agostini Scuola Spa, 2006.

collocated on a general plan: "Although the type characterizes a group of object, it does not identify itself with any of them. Therefore, it cannot be inscribed in the classification of something reproducible: it cannot reproduce a repetition without difference'12'

I agree with what Moneo stated in his article, that the type is not a *frozen mechanism* but rather a *frame within which change operates*¹³. This moment of change is a reaction of a new condition: the typological change relies upon an understanding of an analogue change happened in society, technological development, economical shift or any other field that informs architecture. With this I am closer to the theories of types which takes their origin from outer natures (being these ones society, nature or technologies).

As explained in previous chapters, more than typology itself, my research is developed in order to find the moments in which, due to certain circumstances, typology has changed and transformed itself into new ones. One case study of this shift was the rise of the typology of the modern office which researchers such as Rem Koolhas and Vittorio Aureli elaborate on. The free plan type of the modern office is a response to an economical and social new condition: capitalism. Vittorio Aureli would suggest that "The spatial indeterminacy of the free plan is a radical manifestation of how labour power has been put at work by capital. If labour power is characterized by man's ability to adapt to any situation, and therefore by the total unpredictability of man's actions and reactions, then the only corresponding spatial form in such unstable conditions is free space: space emptied of any obstruction and ready to accommodate any situation"¹⁴. The first condition which begin the rise of this typology was the shift from a manual production of goods towards the production of immaterial work, services and information. Although nothing comes completely from scratch: also in this case the typology of white collar office space traces its origin back from the free floor plan of the loft type, as suggested by Koolhaas in the essay A-Typical.

This case study has been of great importance for my understanding of the current relevance of discourse around Typology. Rem Koolhaas, subtly or not, evocate typology as something permanent in architecture. While naming the free floor plan of the modern office "Typical Plan" he is taking back the typos as a methodology of understanding the architecture reality. In his essay he states: "Typical plan implies repetition – it is n-th plans: to be typical there must be many, and indeterminacy. To be typical it must be sufficiently undefined" In this words we can certainly see a close relationship with the original discourse of type suggested by Quatremere de Quincy.

Office building has been described by Rem koolhas as the most radical typology, which takes its origin from a clear understanding of the changes in society, economy and production. Now that this immaterial work can take place elsewhere, what would it be the typology of the future? Can we investigate all the changes in society and from the living realm extrapolate consistency?

¹² Carlos Marti Aris, *Le variazioni dell'identita'. Il tipo in architettura*. Novara: De agostini Scuola Spa, 2006. P. 84

¹³ Moneo, Rafael. "On Typology." In *Oppositions*. 22-44. New York: The MIT Press, 1978. Pag 24.

Vittorio Aureli, "Labour and Architecture" in Log n.23. Anyone Corporation. 2011 Pag 112
Koolhaas, R., Mau, B., Sigler, J. and Werlemann, H. Small, Medium, Large, Extra-Large. New York, N.Y.: Monacelli Press, 1998. Pag 338

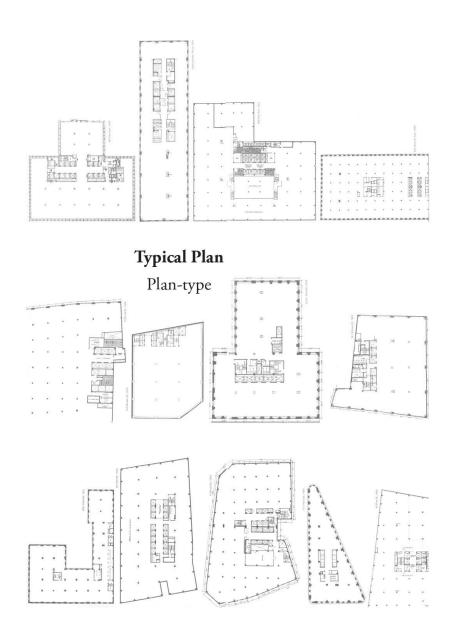


Image n.[3]: A-Typical floor plan

The question of the a priori – as Quatremere of Quincy - or posteriori – as Argan – position in regard of typology remains in my research: Rem Koolhaas for example seems to analyse a condition which already exist individuating the typos. Vittorio Aureli, with his projects of collective and coworking seems to first individuate a change in production and living condition and then anticipate a new kind of response. This approach, in my opinion is more similar to what the original concept of typology has been described: as a formal and natural response. Typological research should enable the architect to gain a clear understanding of the consistency of several architectural objects, in order to gain knowledge of the turning points. The ultimate aim would be to realise if, in the current society, it is possible to individuate a relevant shift which could lead to an architectural and typological change.

Bibliography:

- 1. Carlos Marti Aris, Le variazioni dell'identita'. Il tipo in architettura. Novara: De agostini Scuola Spa, 2006.
- 2. Frank Duffy, "Lumbering to Extinction in the Digital Field: The Taylorist Office Building" in *Harvard Design Magazine: What about the inside?* No. 29. Cambridge, 2008
- 3. Groat, L. and Wang, D., n.d. Architectural Research Methods. Canada: John Wiley and Sons, 2013.
- 4. Koolhaas, R., Mau, B., Sigler, J. and Werlemann, H. *Small, Medium, Large, Extra-Large*. 336-350. New York, N.Y.: Monacelli Press, 1998.
- 5. Lucas, R. Research Methods For Architecture. London: Laurence King Publishing, 2016.
- 6. Malcovati, S., Caja, M. and Landsberger, M., *Tipologia Architettonica E Morfologia Urbana*. Milano: Libraccio, 2012.
- 7. Moneo, Rafael. "On Typology." In *Oppositions*. 22-44. New York: The MIT Press, 1978.
- 8. Rossi, A., The Architecture of the City. Cambridge. New York: MIT Press, 1982.
- 9. Sergio M. Figueiredo, Sukanya Krishnamurthy and Torsten Schroeder. *Architecture and the Smart City,* New York: Routledge, 2020.
- 10. Vidler, Anthony. "The Third Typology" In *Oppositions*, 13-18. New York: Princeton Architectural Press. edited by K. Michael Hays, 1999
- 11. Vittorio Aureli, Martina Tattara "Production/Reproduction: Housing beyond the Family" in *Harvard Design Megazine No. 41 Family Planning. 2015*
- 12. Vittorio Aureli,"Labour and Architecture" in Log n.23 pp 97-118. Anyone Corporation. 2011

Images:

- [1]: student production
- [2]: student production
- [3]: From the book: Koolhaas, R., Mau, B., Sigler, J. and Werlemann, H. *Small, Medium, Large, Extra-Large*. 336-350. New York, N.Y.: Monacelli Press, 1998.