# **AR3A160**

# Lecture Series Research Methodology

# **Student**

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# The role of artefacts in the research process

#### intro

As far as I am concerned, research methodological awareness is one of the milestones of designing, since it gives continuity in the narrative from the creative process to real life. It is not possible to understand architecture without knowing the methodology which led to it. Research can explain the development of the design's aim during the creative process, based on context, personal attitude and previous education. I would say that the methodological approach of architects is telling more about their architectural approach than the final outcome. Moreover, different kinds of research lead to different design approaches and completely different outcomes. Consequently, every architect needs to shape his/her methodology before starting the design process in order to develop it according to the circumstances.

Within the lecture series, Eireen Schreurs' speech on materiality was the one that inspired me the most, since before I had always limited my research to abstraction and theory but I now realize how a well-structured methodology can also cover the more pragmatic aspects of projects. I have always been interested in the research part and I find it a fundamental step within the design process. Understanding that the research can go further than being just the first input of the project has been helpful as it allowed me to maintain a coherent narrative until my P1 in "Interiors Buildings Cities". I started constantly looking back at my previous actions in order to build a next step between the project and the research, which I am now trying to merge in one object.

I started to realize that architects can easily get lost in their own research since it usually touches a wide range of cultural fields. Consequently, it is important to produce artefacts (drawings, models, essays, and every other kind of media object) that represent the milestones of the research. Something which is debatable and readable by external eyes. Every step will have physical features and it will produce a sequence of reactions and interpretations. How and why does the production of archives of artefacts improve the design process? As an example, the "Interiors Buildings Cities" chair asks for a series of artefacts from the research to the project and asks for a wide documentation of all of them within a Project Journal. The first design assignment this year was about creating a "city room", a public room without context and function as research project for the final architecture exercise in Antwerp. It has not been an ordinary sequence of developing a project; due to that, I realized how the production of artefacts is crucial in order to be able to use the research as a solid part of the project.

### Research-methodological discussion

My research approach starts with preliminary socio-historical readings about the context in which I am operating, along with an investigation on the overall topic of my future project; I build theoretical bases. Meanwhile, I have always been used to producing a series of artefacts which re-structure my research's steps and make it more understandable through models, drawings, scripts, and pictures. Some of them are secondary artefacts and others are big statements in the process but all of them have a relation between each other since they originate from the same research matrix; they build my personal archives of research. I would say that I have two kinds of archives; an archive of architectural intention (that describes my idea of architecture) and a site/narrative specific archive (the one that I develop in the circumstances in which I am operating).

In the case of "Interiors Buildings Cities" graduation studio, the main research method is "thinking through making" which is very close to the idea of research through design<sup>1</sup>. Due to its nature, this method produces a considerable amount of artefacts as part of the research process; many of which are models.

Before the first design assignment, we had 8 weeks of research studio, in which we investigated the annual theme of the chair, "The intimate city". Weekly, we had to produce a small media object to be discussed with the class: an introductive picture of our idea of intimacy, pictures from the Paris study

trip, a series of drawings from the Milano trip, a research booklet about Milan and a collage-model. Moreover, during this process, I started formulating my personal research literature, with the most influential "Ethics of Urban: the space of politics in the city". This started becoming a consistent part of my research within the annual theme. Furthermore, the first interior design exercise was about developing two models of a "city room"; a public room in the city, an aseptic space without function nor context. In the process of making them, I started looking back at previous artefacts based on the research that took place on site and the theoretical knowledge from my literature. I developed a narrative between all the artefacts that I had produced until that point in order to come up with a proposal. I positioned myself within the idea of creating a political space, based on the notion that "democratizing the polis is inaugurated when those who do not count stage the count, perform the process of being counted and, thereby, initiate a rupture in the order of things"2, through a consistent bibliography. I started from "Ethics of the urban" as reference book and I expanded my knowledge with a connected literature. I wrote a series of scripts on that topic and those were the first media objects of my narrative specific archive. Along with the Milan study trip, I started looking at things through the idea of political spaces combined with "the intimate city" theme of "Interiors Buildings cities". As a result, I was impressed by the Gallaratese housing block by Aldo Rossi and Aldo Aymonino and its political impact on the community that lives there. Consequently, in the assignment of the hand drawings, which asked to dissect an experience of intimate space in Milan, I reflected my interpretation of political space which I stated in my first research artefact (the scripts), so the drawing becomes the second media object in my narrative archive. Making them was part of the research and it allowed me to understand on which architectural gesture I was interested. This way of archiving things influenced me also in the nonarchitectural life; for instance, watching the movie Dogville by Lars von Trier I realized how the condition of proximity between interior spaces was important for my idea of political space, so I started building my small book of references from every field. When we had to produce the first cardboard model of a space without function, I started working within the idea of a political space shaping the architectural space through my new growing archive of artefacts. When the first model was completed, I built a story through photos and a text about how a visitor would experience the space; and I compared it to the definition of political space that inspired me from the book "Ethics of the Urban". The story was comparable to the scripts and images of the space with the drawings of Gallaratese. Comparing the step of the first model to the previous research artefacts gave me a proof of coherence in the design narrative. At that moment, I was ready to produce the last model that gave materiality to the space and reflected my research in an architectural piece. I realized how much this archive led my creative process, which is not a sequential system of logics but more an unpredictable coherent way of using stated and stored information. The last model represents the outcome of my specific research for the assignment but it is also an artefact in my archive of architectural intention; it states my ideal relation between architecture and politics. I use this methodology since it allows me to re-structure my project within the coherent field of my research since every artefact originates from a previous one. It allows me to open new possibilities when I am stuck in the design process. Moreover, every artefact is a proof or a confutation of the research since every research artefact can become object of discussion, which is good to reveal their real potential within the process.

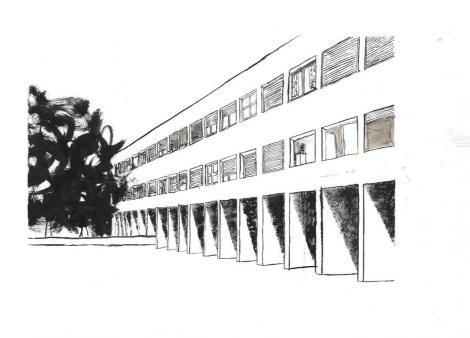


fig 1 Gallaratese hand drawing

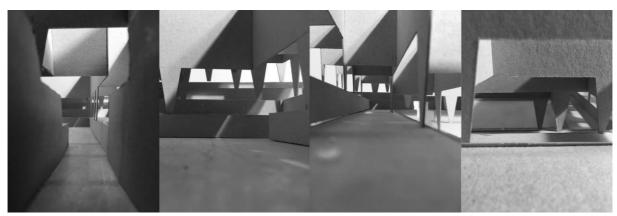


fig 2 story trough pictures



fig 3 final model

I would say that the academic essay "research through designing" explains when this method should be more suitable than ordinary methods such as "research for designing". Some architectural fields such as landscape architecture, which is relatively new, needs an active way of researching that allows to solve design problems and produce research at the same time<sup>3</sup>. "Superstudio: Opere 1966-1978" by Gabriel Mastrigli can be used as relevant literature example to explain how this method produces outcomes that can be seen as a dynamic archive<sup>4</sup>. It is the narration of their practice-based research. They used media objects such as models and drawings in order to test their theory within reality. Their work looks like the development of one big project. The aim of the whole process was to state a problem in architecture, highlighting a story through artefacts such as models and images. In order to explain how the production of artefacts affects this process, model making is an interesting example. The book "Architectural supermodel" explains their role as research methods. Models are media objects that deal with the physical space without a possibility of cultural misunderstanding. They are tools to understand the relations with the context (site models), develop volumes (Design development models), structure (structural models), understand interior atmosphere (interior models) or the light experience<sup>5</sup>. But its meaning has changed drastically over time and it passed from being a research tool to just being a communicative object. Nowadays, this process can be applied to the majority of architectural media objects such as drawings; they are produced without any research aim, but they have become seductive elements. Probably, because obtaining information is faster than the past, architecture practices use fast sources instead of producing their own research.

### Research-methodological reflection

But how and why producing an archive of artefacts was more frequent in the past than now? In the past, the constructive methods did not allow a building to be erected in a few years. For instance, during the Renaissance, the constructive process of a public building was longer than the life of the architect. I will use the example of San Pietro in order to explain the importance of an archive of media objects in the past. The project for the renovation of San Pietro's church by Rossellino started with Bramante's intervention. He knew that the project would never be finished before his death. When Bramante died just a part of the building was finished but he left a huge amount of drawings, models,

and scripts which allowed Raffaello to continue his projects. This does not mean that Raffaello produced an imitation of Bramante's project, but he has been influenced by the first series of artefacts. In the plan of Baldassarre Peruzzi, the influence of the two previous architects is visible; and he left a very significant constructive drawing for the future development of the project. Giuliano da Sangallo worked on a huge model in order to give a complete physical idea of his personal research on the projects<sup>6</sup>. At the end of the building process that lasted for around 60 years, the coherent evolution of the research is extremely visible as a unique body of study, a good example of design specific archive. Especially the series of plans appeared as if they could be made by one architect. The same elements and themes are only slightly modified between each plan.

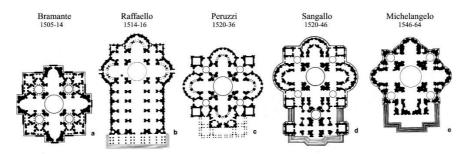


fig 4 chronological development of San Pietro's plans

Nowadays, an architect has no economic need to explain his/her personal research, since the building process is fast. Everything that matters nowadays are the end products which we can easily achieve; the process does not really matter in the contemporary architectural environment. Nevertheless, not everyone forgot this kind of research approach, A contemporary example is the practice Pezo Von Ellrichshausen which has a very wide archive of watercolor architectural drawings (intentional archive) that represents their projects. This graphical research is overlapped with the design research in a sort of cross-domain discipline in which architecture and art can produce a unique piece; that I would argue that could be appropriate in the field of contemporary architecture. Not by chance, the online description of their practice affirms "Pezo Von Ellrichshausen is an art and architecture studio..."<sup>7</sup>.



fig 5 examples of watercolor drawings by Pezo Von Ellrichshausen

I rely to the contemporary way of creating my archival series of intention, which I intertwined with site-specific archives to create a coherent interdisciplinary research. This intertwine enables me to always position myself within the field of every specific research/project and to add knowledge to my personal idea of architecture. The archive of media artefacts forces me to stay close to my first research question. This does not mean that you cannot get lost in your archive; indeed I think you have to do it in order to explore the fields of your research question. The archive set the boundaries of research for your work in which you can always re-structure and keeping the overall meaning coherent.

### Positioning

"An artefact is a materialization of a thought"8. I have been really inspired by this statement during Eireen Schreurs' lecture. If we look at an artefact materialization of a series of thoughts and the series of thoughts is defined by our research, an archive of artefacts is an archive of synthesized research. I think that it points out a lack in the contemporary architectural environment since the architecture project is losing its cultural part. Public buildings are usually under a big economic pressure so they are designed just as objects that absolve their function within an economic framework of rules and functions. Nowadays, also due to the frenetic way of designing, architecture is seen as a series of objects and not as a synthesis of values. The essay "research through design" clearly points out the benefit of these methods in the condition of imminent design and research needs. Consequently, researching through designing is very helpful in the contemporary built environment, in which the economic system is leading the design process' schedule. It regulates the friction between research needs and design needs. It is important to understand the possible dangers that this methodology might carry: it risks becoming self-referential. The "Superstudio: Opere 1966-1978" explains how a research-based practice work can produce extremely coherent archives that change the way of perceiving architecture. On one hand, having a coherent and personal development of a thought is fundamental for me. On the other, an approach like Superstudio's is sometimes dangerous since at some point they implemented and stated ideas through the production of visual artefacts in the only relation with their narrative<sup>9</sup>. Archive of intention and narrative specific archive were not intertwined anymore. In my research, I try to avoid this danger by discussing every important step with experts of parallel architectural disciplines, a sort of cross knowledge review. It is useful in order to build a real network of ideas around your artefacts and understand their role in a wider architectural discussion. I could use as examples the studios of TU Delft, which are specific in that they are researching and all of them cover different fields. Nevertheless, it would be useful to have a cross-disciplinary review. For instance, theoretical courses such as Methods and Analysis could have a cross-domain review with a more pragmatic studio such as "Interiors Buildings Cities"; in this way, both of them will be able to understand how their research can affect other fields of the same discipline.

I think that this kind of research methodology is quite interesting, since nowadays the act of designing is so fast that building up your archive of intentions allows you to have a coherence in the gesture that you add to the public environment. The area in which I grew up is an example of how a speculative fast design can be dangerous to the environment if it is done without a coherence. In Italy during the 80's and 90's there was an economic boom in the building environment which, especially in the region of Veneto, lead to an extremely fast urban development of the countryside. The wide urbanisation brought to an extremely traditional territory a series of buildings that were standing in the space without any relation with the cultural context<sup>10</sup>. The reason of that was the lack of time due to the needs of new buildings. In this case, in which the economic opportunity lead to a fast production of objects in the territory, the absence of a personal archive of intention lead to the diffusion of buildings with no specificity to the territory. According to that, if architects had archives of intention in the moment of lack of time they would have a series of sources to intertwine with the context needs in order to produce coherence between the architectural gesture and the heritage of the context. "Research by design" can be a solution where there is urgency to produce knowledge to solve specific problems at the same time<sup>11</sup>.

In conclusion, I argue that producing artefacts, which represents the steps of your own research as architects, have a main role in producing relevant narratives within a project or a practice. Which can be a research archive for a single project as we have seen in the sequence of works for San Pietro or it can represent the evolution of a personal graphical approach such as the Pezo Von Ellrichshausen's drawings. This method helps the architects to do not get lost outside the interested field of research and to deeply explore the theme or the field in which it is researching. It also helps to develop a practice-based research, since every project will contain a different fragment of different archives so every project will expand the archive of personal intentions and it will explore the potential of a cross-disciplinary approach. According to the general lack of meaning in the contemporary architecture

environment, I would say that it could prevent the unconsciousness in the design approach, which is one of the main problems of contemporary architecture. I suppose that this method will lead me during my graduation since it allows me to produce research and designing at the same time and it regulates the friction between them.

<sup>&</sup>lt;sup>1</sup> Lenzholzer, S., Duchhart, I., & Koh, J. (2013). 'Research through designing' in landscape architecture. Landscape and Urban Planning, 113(0), 120-127.

<sup>&</sup>lt;sup>2</sup> Mohsen Mostafavi, ed., Ethics of the Urban: The City and the Spaces of the Political (Zürich: Lars Müller Publishers, 2017). 48.

<sup>&</sup>lt;sup>3</sup> Lenzholzer, S., Duchhart, I., & Koh, J., 'Research through designing' in landscape architecture. Landscape and Urban Planning, (2013). 120-127.

<sup>&</sup>lt;sup>4</sup> Gabriele Mastrigli and Superstudio (Group), eds., Superstudio: Opere: 1966-1978, Prima edizione, Habitat 7 (Macerata: Quodlibet, 2016).

<sup>&</sup>lt;sup>5</sup> Tom Porter and John Neale, *Architectural Supermodels: Physical Design Simulation* (Oxford: Architectural Press, 2000). 19-31

<sup>&</sup>lt;sup>6</sup> Wolfgang Lotz and Deborah Howard, *Architettura in Italia 1500-1600* (Milano: Rizzoli, 2010). 40-45.

<sup>7</sup> http://pezo.cl/?m=1&sm=1&pn=info

<sup>&</sup>lt;sup>8</sup> Ingold, T. *Thinking through making*. Presentation from the Institute for Northern Culture 'Tales from the North' (2012).

<sup>&</sup>lt;sup>9</sup> M. Tafuri, *Storia dell'architettura italiana* 1944-85, Einaudi 2002, 124-125

<sup>&</sup>lt;sup>10</sup> Francesco Maino, Cartongesso (Torino: Einaudi, 2014). 140-186.

<sup>&</sup>lt;sup>11</sup> Lenzholzer, S., Duchhart, I., & Koh, J. (2013). 'Research through designing' in landscape architecture. Landscape and Urban Planning, 113(0), 120-127.

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