

THE NEW CRAFT SCHOOL

Research to Ceramics and the Development of the Workshop

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INTRODUCTION, IS IT RELEVANT?

In the last two years that I studied at the Technical University of Delft, I never did research how to do research. Nor did I reflect on the methods I applied in my research. Nevertheless, I developed my methods I applied through the feedback I got from my tutors and fellow students. That is why I ask myself: is it relevant to be aware of what kind of methods you are using during your design research? In order to position myself towards methodological awareness, I am analysing the research I am doing for my graduation studio. I hope to find out if it is essential to be aware of the methods you are using. Furthermore, I am curious if it will hand me a system or an approach I can apply in design research for projects in the future. During this research, I will deal with typological and praxeological methods I used to study the material culture of ceramics and the development of the workshop (atelier, vocational schools, factory).

To create a better understanding of how I use specific methods during my research, I will give a small introduction to my graduation course and research topic/question. Within the graduation project of the chair, Urban Architecture 'Craft in the City' the end goal is to create 'the new crafts school' and to become aware of the importance of craftsmanship. This is because, in the last decade's vocational education is having difficulties, due to automation and robotisation. Which results in less vocational jobs and disappearing knowledge in most craftsmanship¹. In order to create the school, students in the graduation course needed to choose a material and craft that is linked to certain craftsmanship. During the first ten weeks, every student did smaller assignments to widen our scope on the subject and to find a material/craft that we found interesting. For me, this was the material and craft of ceramics., I created a personal fascination in the formation of craft workshops through our history, there value in the community and there influence in our social network. These topics lead to the research question: *How are the craft workshops developing through our history as a social incubator, in order to create a school for ceramics in Delft?* In the following chapter, I will describe which methods I used to understand the creation of ceramic craft products and how craft workshops are developed through history as a community and there influence in our social network.

II METHODOLOGY FOR MATERIAL CULTURE; A CRAFT AND THE NEW WORKSHOP

In order to answer my research question, two topics need to be researched. The first topic consists of research on the material ceramic, in which I focused on the creation and implementation of ceramic bricks. The second research topic is the development of the workshop (atelier, vocational schools, factory), the community within these workshops, their value in the community, and there influence on our social network. For both types of research, mainly literature is used.

Material culture of ceramics

To gather information for the first research topic, I used typological and praxeological methods to study the material culture of ceramics. For the brick research, I need to explore the production of different bricks and the different masonry techniques used in the Netherlands, explained in the material culture as, the 'manufacture' and 'use'². To create a better understanding of the different tools, bricks, and masonry techniques I will use the typological method 'morphology' to see what kind of shapes, colours, textures and patterns can be created³. Afterwards, I imply the Grid, an analytic tool used in Praxeological methods, to visualise the relations between types of machinery (tools), Products (created by tools), and use (masonry techniques). This typological research represented in a grid is relevant for my design process. It creates an overview of what my craft school should consist of and what it should offer to their students as a ceramic school.

Making of culture 'the workshop'

To research the second topic 'the development of the workshop' I again use typological and praxeological methods to study the material culture of the workshop. In order to record the development of the workshop and corresponding community, I will create a typological timeline with

abstract representations (diagrams) of the workshops in different eras. To gather information about the workshops in different eras, I will look into the different disciplines of the 'making of culture'; anthropology, sociology, and archaeology besides that I will analyse the 'situated practices' and 'tacit knowledge' of the eras⁴. I will do this by using the praxeological method 'observing and mapping' to analyse the social relationships corresponding to the workshops, and the hierarchical power relations within the workshops⁵. The 'observing' part will be conducted by analysing literature; fieldwork of others (archaeologists and anthropologist), historical papers, and books. The diagrams function as the 'mapping' part. They should tell something about; the structure within the workshop, the system the workshops are placed in, and about the current social networks. In order to analyse the spatial relations between these three subjects, I will apply the typological method 'topology'⁶. In the end, the timeline should represent the development of the workshop as a type. This research will be relevant for my design because, in the end, I can extract multiple elements from the diagrams to compose a structure that fits best as a social incubator.

III DIFFERENT TYPOLOGICAL METHODS FOR DIFFERENT RESEARCHES

For both types of research, I use typological methods; for the ceramic research, I use the typological method morphology while for the workshop research, I use the typological method topology. In the following chapter, I will reflect on both methods, their relevance and how I used the different methods to generate a different representation of knowledge. I will describe this by going through two topics; collection versus comparative and concrete versus abstract. This should eventually create an overview and a conclusion.

Collection versus Comparative

Collection versus comparative is a translation of how I generated information for both researches. In which I use morphology to create a collection to generate general information about the subject of ceramics (bricks), while I use topology in order to illustrate the development of the workshop-topology through history. For the collection I looked into the three subjects of material culture; procurement, manufacture, and use⁷. For the brick research, I used the book: *Baksteen in Nederland De taal van het metselwerk* (1991), in which the production process of the brick and the different masonry techniques in the Netherlands are described⁸. Procurement covers the different ways of delving the clay and how the (chemical) composition of the clay influence the type of brick you eventually create. Manufacture explains the different type of machinery; for moulding the clay, drying the brick, and baking the brick and how they influence the type of the brick that is created. While eventually use explains how the different types of bricks are implemented in the building environment and what types of masonry techniques there are. The morphological aspect of this research is that I search within the type of ceramic bricks to the systematic approach that influences the different shape, colour, texture, and patterns of the brick⁹. For the comparative study, I looked at workshops from the prehistory (5000 BC.) till now. I looked at the 'biography of things' within the material culture of the workshops to get an idea how these systems worked¹⁰. To research the workshop from the prehistory, I used the book: *Knowledge Networks and Craft Traditions in the Ancient World* (2014)¹¹. Which explains the 'flow of exchange' in that era by archaeological and anthropological research. Researching these flows of exchange show how people lived because people are related to items¹². Furthermore, as explained by Sibyl Moholy-Nagy in her book *Native Genius in Anonymous Architecture* (1959), the private history of cultures are translated in their buildings¹³. For the period between the Greek empire and the Industrial Revolution I looked into the 'value systems' of the workshops, to get a better understanding of the hierarchical system within the workshop and the relation between workshops (or guilds), politics and flows within the community (the community where the workshops are based in)¹⁴. For this research, I used the book *The Craftsman* (2009) and the encyclopaedia *The Oxford Classical Dictionary* (2012)^{15,16}. In the end, I created from each era several topological diagrams, as shown in figure 1, in

order to compare the workshops which each other. In next subchapter I will explain more about the creation of these diagrams.

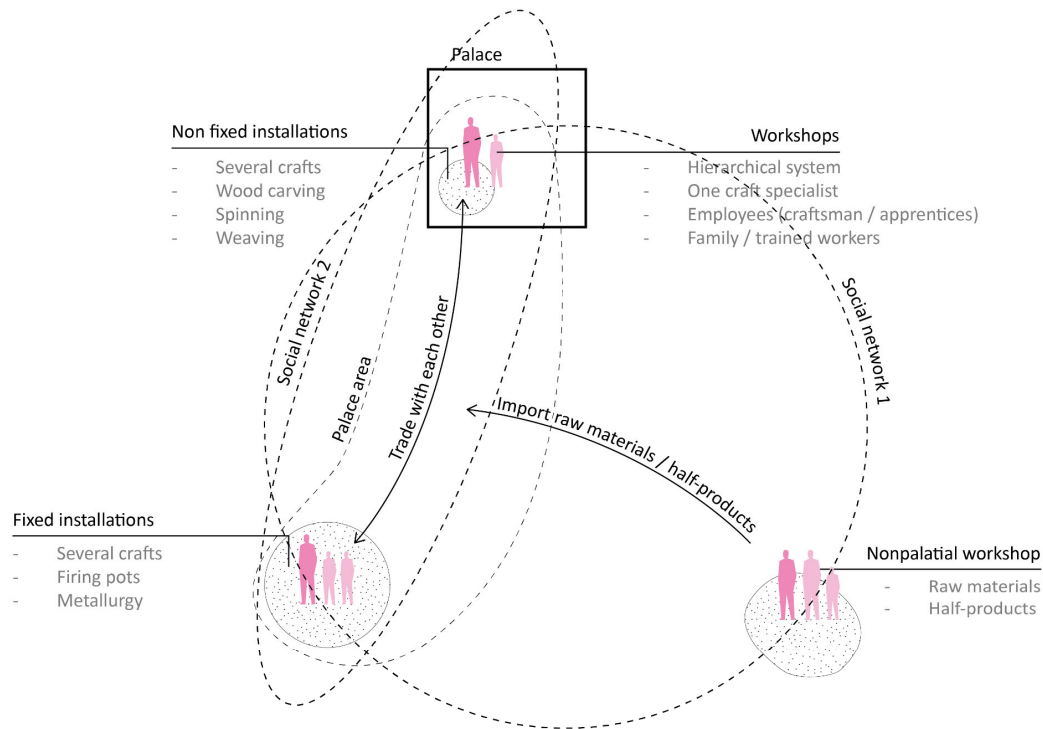


Figure 1, Workshop within the Tiryns Community, Late Bronze Age (1200 BC.)

Concrete versus Abstract

In concrete versus abstract, I will explain how I translated the generated information in two different kinds of systems. In which I translated the morphological collection type in a concrete grid which represent a direct translation of the facts about ceramic bricks. While the representation of the topological comparison will be translated into an abstract timeline of the development of the workshop. The concrete information will be represented as a Grid like the GAMMA (Groupe d'Architectes Modernes Marocains) did with the CIAM 9, 1953¹⁷. This Grid should create an overview of the whole system that is involved with creating and implementing ceramic bricks. This Grid eventually will be presented in a Leperello style (figure 2). The diagrams in the Grid are mimesis of the discovered facts, almost an imitation of the reality, as Durand did in his drawing *détails, des orders en général*¹⁸.

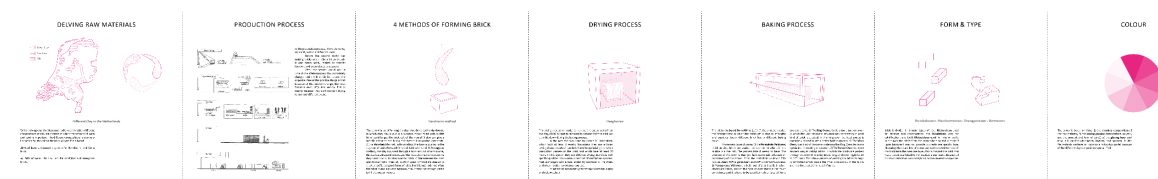


Figure 2, Leperello production process Brick

The information gathered in order to make a comparison between the workshops of different eras will be translated into abstract diagrams (figure 1). The abstract diagram already exist from the 18 century as a classical representation as I applied for the ceramic research¹⁹. But the diagram I developed for the research to the workshops is more related to the diagrams introduced at the end of the 20 century, which should explain, analyse, organise and generate beyond representation²⁰. In order to do this, I applied the principles of 'transformative composition' explained by Quatremère, Durand, and Semper which consist of invention, arrangement, and style²¹. As shown in figure 3, I arranged the workshops of different eras in a chronological order to see their development. I used the same style for every era in order to make a comparison between them. From this, I will formulate the system the new craft school should consist of which is based on systematic research which brings us to the invention.

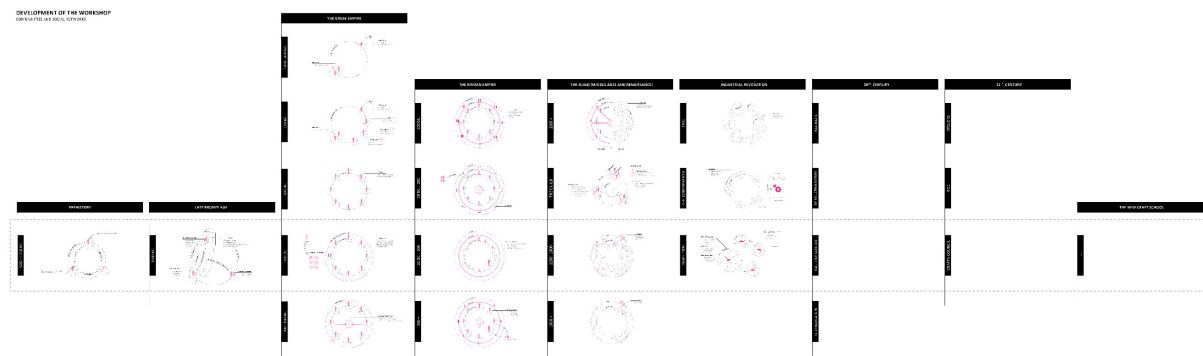


Figure 3, Diagrammatic timeline development of the workshop (work in progress)

In the following chapter, I will explain the relevance of my research, in relation to my design and the location (Delft) where the new craft school should be located. Besides that, I will clarify my position towards methodological research.

IV POSITIONING THE RELEVANCE FOR MY DESIGN AND TOWARDS METHODOLOGICAL RESEARCH IN GENERAL

By reflecting on the research methods applied in my design research, I will position myself in two ways. The first is the relevance of the applied research methods I used for my design research, and the second one is about my position towards methodological research in general.

Relevance for my design

The two sub-researches I did in order to answer my central research question where at the end relevant for my design. The morphological study towards ceramic bricks resulted in an overview which shows everything possibly needed in a craft school where they practice the craftsmanship of ceramic (brick). While the topological study towards the development of the workshop shows how workshops were functioning as social systems/communities through our history, by combining these findings, I can confirm what kind of machines, tools, and spaces are needed for the new craft school. By extracting elements from previous workshops, I can formulate the social system the new craft school should consist of. Integrating this on a location in Delft shows me that I have to focus on the connection of my new craft school with the existing history of ceramics in Delft. The new craft school should be a social incubator not only for the people who go to school there or live in the neighbourhood. The new craft school should also be a connector in between the ceramic ateliers, museum (De Porceleyne Fles), workshops, and students (of the new craft school) in Delft.

While reflecting on the lectures and literature that influenced my development, I think the lecture and literature about material culture of E. Schreurs were crucial for my research. Because they explained by 'making of culture' which approaches I could apply to reconstruct workshop from the past

by looking into archaeological and anthropological literature. Besides that, it showed by 'material culture' how I should approach the research to the craft of ceramics. Furthermore, the lecture about types and typology from R.A. Gorny made me more conscious of what I am doing. Before I wrote this essay, I was not aware that my methods felt under a methodology.

General position towards methodological research

After being confronted with the methods, I applied during my research. I can position myself towards methodological research. I think for the architectural profession, it is crucial to be aware of which research-methods you are using. I think If there is a better awareness, the result of the used methods more often results in desirable outcomes. Aldo, I am not sure if in practice, architects (and students) are knowingly using certain methods to come to certain conclusions. For me, for instance, while doing my research, most of the time, I am not consciously aware of the methods I use. At least I would not say before starting; I am going to use these methods. On the contrary, I think the use of certain methods develops during your research. Only by reflecting after and during the research-process, I can link it to certain research-methods and in that sense create a research-methodological awareness. While reflecting (by doing this essay, for instance), I become more aware of the methods I used, in which way, and what kind of results it gave me. I think this gives a certain head-start for projects and researches in the future because consciously or unconsciously you know how to approach certain questions before you start researching. So I think these kind of courses as AR3A160 Lecture Series Research Methods, are really important for the architect (and student) in order to develop their profession by implementing and updating research methods.

V NOTES

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