

**CA<sup>2</sup>RE, the Conference for Artistic and Architectural (Doctoral) Research  
Aarhus School of Architecture / 13-16 April 2018**

Title:

"Grounded Theory as method; Exhibition Design as mean"

Affiliation of Author:

Angela Gigliotti Ph.D. Fellow Aarhus School of Architecture, Denmark; External Lecturer, DIS Copenhagen, Denmark; Ph.D. Visiting Candidate Architectural Association School of Architecture, London, UK; Architect, U67 – Founder ([ag@aararch.dk](mailto:ag@aararch.dk))

Keywords:

Architecture, Labour, Qualitative Method, Denmark, Practices

Full Paper (7000 words)

Introduction

The relationship between the modes of production of architecture and the dominant economic system has been crucial in the research field of 'Architecture and Labour'. The professionalism in architecture is a recent concept that reached dissimilar phases in each countries', whose definition oscillates between "a benevolent profession, a market practice, or a field of cultural production".<sup>ii</sup> As example of how controversial - but even close, real and urgent is the topic - we could consider the arduous rapport between money and architects. For the majority of professions, money is the abstract medium to exchange a service. Some architects, instead, have a sense of existential "guilt" in asking money, that results in negotiating conditions which are usually below what they deserve.<sup>iii</sup>

However, architecture is a profession that needs money to be realized and, being a liberal profession, it is finalized for the production of an economic turnover<sup>iv</sup>. Focusing on the mode of production within the drafting rooms: on one side, the architectural historians have debated the organization of practices according to the specific labour organizations (atelier-based, Fordism-based, corporations, ...); on the other side, practitioners have challenged economic shifts using new mechanisms and strategies for procurement.

This paper emerges from an ongoing Ph.D. research "The Labourification of Work: behind the scenes of the contemporary modes of architectural production in Denmark"<sup>v</sup> in the field, and it has been crucial in conveying issues related to the methodology in a chapter of the final monography. In relation to the content, it is framed in a section of the dissertation related to how the Danish architectural practices have been affected by a series of events in the political and economic scene of the country (1993-2016). It focuses on the qualitative method deployed in the section, a Grounded Theory method, concluding mentioning a dissemination narrative used by the author to deal with big set of data collected throughout her scholarship. The choice of this specific method has to be considered together with two factors. On one side, the limited duration of a PhD research in Denmark that covers three years, of which just one has been dedicated to this section. On the other, its consistency in regards to the methods favoured by scholars in contemporary research endeavours, that are mainly qualitative: case studies, grounded theory and ethnography (Cuff, 1991; Yaneva, 2009).

As mentioned, this paper frames some events that, in the recent economy of Denmark, have played a role in the definition of the modes of architectural production and its labour organization. The 1993 was a crucial year, after what in Denmark is known as the late-80s crisis: it was the year of both the entry into force of the flexicurity policies<sup>vi</sup> in the Danish Welfare State, with an undeniable success<sup>vii</sup>, but also of the signature of the Maastricht Treaty, crucial for the international regulation of Europe aiming to the free circulation of goods, people, capital, service. These two events crucially defined the so-called Neo-Liberal turn and in Denmark created a shift in the labour market, towards asymmetrical conditions within the architectural practices.<sup>viii</sup>

In order to offer a close up on how the Grounded Theory method has been used in the research and to address the conference' scope; this paper will skip an overview about the relevant facts occurred in the timespan here in subject that could be read elsewhere by the same author<sup>ix</sup>.

Also, it's important to mention here in the introduction, that, at the time of the publication, the method has been still ongoing. All the data have been collected and a preliminary side-analysis of data collection has started but the data decoding, and the following generation of the theory, are phases that will be developed after this publication and therefore are not part of it yet. So the reader can expect to read here about the method; to instead get an in-depth elaboration of the data collected and an understanding of how contemporary challenges have been faced by Danish architectural practices using several strategies and forms of resistance, the reader will have to wait a following paper, because this is not the subject here.

The structure of this contribution is divided into five sections: the Section 1 relate to "Grounded Theory (GT): Cases Identification" with sub-sections 1.1 about "Cases Screening and Selection" and 1.2 about "Recruiting respondents"; the Section 2 refer to the "Data Collection" with a sub-section 2.1 about the "Evolution of Initial

Questions: an example” ; the Section 3 relate to the “Ethical Guidelines”; the Section 4 conclude the paper commenting on the use of “Exhibition Design as dissemination narrative”

### 1. Grounded Theory (GT): Cases identification

In order to identify the cases to involve in the GT method the author identified some preliminary criteria of evaluation and case screening. The point of departure was related to a lack of information on the number of architectural enterprises specifically for the Danish environment. In Denmark in fact, since the profession of architecture is not protected, the number of the architectural companies is uncertain. Everyone could in fact register a new business under the industry code 71.11.00, and therefore also the registration to the different associations and unions that exist is on a voluntary basis. To give some numbers on the uncertainty of information, according to “Statistics in Denmark” there were 3,665 registered architectural firms (2015) and 3.518 (2008). However, according to the national register of the company (CVR) there were 2.432 registered architectural firms and these have 2,457 offices around Denmark (08/2017). When referring to European data instead, ACE recognizes that there are 1,422 practices (2016) and 727 practices only, in 2008. Considering instead the Danish Association of Architectural Firms they had 635 (2016) and 698 active members in 2010. Therefore, it was necessary to choose some sources from which the case screening could have started relating more on the content than on quantitative criteria. The research started then on 6 valuable sources that were divided in two kinds: research projects and cluster programs.

In regards to the first the author has considered academic and non-academic scholars that in the previous 10 years investigated Danish architecture with a particular focus on the practices, so a similar subject in relation to the author’s research, even though with different research questions and timespan.

First, in 2007-09 Tine Nørgaard and Anders Høyer Toft developed an academic research named “The architectural cluster in Aarhus: A study of the history of the cluster and current status” in which the argument was related to the identification of Aarhus as an economic cluster favourable for architectural companies. To do that they built a genealogy of the architectural businesses in Aarhus, dating back to the foundation of the Aarhus School of Architecture in 1965.

Second, in 2012 Kristoffer L. Weiss and Kjeld Vindum published the book “The New Wave in Danish Architecture” that could be seen as the manifesto of a gained awareness among Danish architects of their international success.

Third, in 2016 the catalogue for the Danish Pavilion at 16<sup>th</sup> La Biennale of Venice – Architecture edited by Boris B. Jensen and Kristoffer L. Weiss “The Art of Many – The right to space”. The aim of this latter is to provide a state of the art of, at that time, contemporary architectural Danish practices focusing on the main tendencies and lines of works. The outcome is a choral presentation of a substantial number of projects collected through an open call to practisers and students of architecture who have worked in Denmark.

To conclude on this first type of source: while the first one addressed the local scale of Aarhus focusing on the organization of the labour within practices behind their built outcomes; the others focused on a national scale using the projects to highlight current topics in Danish discourse.

As mentioned before, the second type of sources are related instead, to cluster programs, so those programs who are aimed to support a particular group of companies that have some common features to be sustained and promoted. The common ground is usually based on geography, economic aid and networking. First, the “Wild Card” program supported by the Danish Association of Architects that “puts the spotlight on the young architects and makes it easier to invite newly established companies to the smaller tasks and invited architectural competitions” (Akademisk Arkitektforening Wild Card Statement, 2018). The requirements to be admitted in the program are related to: the company should be VAT-registered; a maximum of 5 years of establishment of the firm; at least one graduated as architect under the EU regulations; at least one architect member of the Danish Association of Architects.

Second, “The Architectural Project” program that, even though it was stopped in the Spring 2018 after the completion of this research’s phase, was “a cluster organisation for companies, local authorities, and research and teaching institutions, that worked on creating growth and jobs in Danish architecture and construction.” (TAP Statement, 2018). To be admitted in the program there was a subscription fee.

Third, the “Internship” program supported by the Aarhus School of Architecture for its students in connection with a number of practices that can host the students for a period of time recognized by the School. The program consists of 4 weeks in January when the students are in their third year of the Bachelor and one semester in their first year of the Master.

To conclude on this second type of sources: while the first and the third one are national program, the second one was only related to Aarhus; all of them provide information related to those Danish practices actively engaged in cluster.

The initial cases identification started then from 234 companies extracted from the 6 sources. The listing was supported by the use of a chart in which each companies was registered under: the date of establishment, the location of each office (at least one in Denmark) and a personal self-statement as presented on each company website. This recording scaled down the cases identification: 41 were in fact foreign practices that worked in Denmark while other 6 had insufficient materials to be recorded in the screening. Any occurred overlapping between

the sources instead, was registered just once, but the overlapping was noted as a relevant information. A total amount of 187 practices was finally identified.

### 1.1 Cases Screening and Selection

The cases screening started as an operative phase using the identification chart. Through this latter, a deep analysis of the self-statement text was made recognizing a strong relationship between the use of language and the procurement of work.<sup>x</sup> Each text was then copied and pasted into two plug-ins useful to analyse and to visualise the lexicon used by the company to describe their approach and to promote their service considering the frequency of the words used by them. The aims of this approach were: first, to get an understanding of each case and its relevance for the study; second, to identify in the screening a number of “families” that the author named “shapes” in which practices could be grouped according to similarities.

The “shapes” were generated through systematic comparison of the 187 cases inspecting the lexicon used comparing the self-statements written by each practices. So, in order to cluster the outlined diversity within the 187 companies the author introduced 10 labels for those “shapes”, meant to recognize and identify specific features in the modes of production of the companies.

Here a list of the shapes that were identified and introduced in the screening (alphabetical order). “*Activists Architects*” are the ones that work mainly on self-initiated actions in a specific setting being able to procure work and create a commission finding investors and potential clients. “*Consultancy-based*” are the ones that work mainly as advisors of the public sectors investigating the feasibility of specific development initiatives or writing the brief for future competitions. “*Generic Scandinavian*” are the ones that rely heavily on the export of services based on a cultural common-ground that relates to a specific geographical origin; able to brand their modes of productions in the wider international peak of Denmark. “*Kitchen Architects*” are mainly start-up founders that just need a light infrastructure (a laptop and a Wi-Fi mainly) to work so they are very flexible and adaptable in terms of workspace. “*Label Architects*” are highly specialized companies that work as outsourced for producing specific energetic or technological certifications (BIM, C2C, LEED, DGNB, ...). “*Post-it Architects*” are the ones that consider themselves as facilitators, very focused on the process of development of the projects and to the empowerment of the involved parties. “*Research-based*” are the ones who split the companies in a branch that deals with construction, and therefore with the outcomes of architecture; and another branch in which through fund-raising they develop independent research. “*Sons of the Welfare State*” are the ones whose companies were funded in the blossoming years of Welfare Architecture (1945-75) and still today they are relying heavily on being heirs. “*Total Designers*” are the ones that design in a cross-scale approach from product design to urban planning. “*Turnkey Architects*” refers to those who enter in the last phase of a project from the technical phase to the hand-in of the keys to the client, so sometimes they are not initial authors of the concept and they tend to have a product-based approach to architecture.

The Cases selection was supported by the matching of specific shapes for each of the cases. It has to be said that each of the companies may be classified with one or more “shapes”; however, having recognized them is helpful to cluster a number of companies as representatives of each shape. From these clusters a number of 3 representatives have been selected for each “shapes” considering which ones were more relevant and accessible for the author’s research project. The criteria for the selection are related both to the evolution of some the actual practices in connection to their ancestors<sup>xi</sup> but also to the existence of unconventional modes of architectural production. Some of the practices have been considered having a direct tradition of fusion or taking over of practices founded in the “Golden Years” of Welfare Architecture or some others have an indirect connection being mentioned as “moral heir of the Welfare Architecture”<sup>xii</sup> by influential scholars such as Carsten Thau; some are multi-disciplinary teams who have been crucial in bottom-up social and urban transformation empowering citizen to participate in the process; some are practices who procure work investing in non-academic research; or promoting a cultural program using magazine, gallery and artistic approach; or designing architectural prototype; or self-initiating projects to raise public attention. The heterogeneity of the selected cases is reflected also in their business size: they range from having a clear organization chart and more than 50 employees to one employee only as director.

### 1.2 Recruiting respondents

An initial approach with the 30 potential respondents was made sending a first email by the author to the contact details provided in the companies’ website. For each practices it was relevant to contact different figures according to each specific cases (founders, directors or CEO). It’s important to mention a specificity of the Danish architectural environment, related to the fact that all the personal contacts of the employees, without difference of roles, are usually disclosed on the company website, and this allow an easier direct-contact with the relevant potential respondents. The introductory mail described the content of the research but also presented the outcomes of the first phase of the research, mentioning a high international visibility of the author’s research and the possibility of publication and exhibition of the results in order to gain the attention of the readers. It should be mention that the

author's "credentials", as a researcher who also had a background as educator and architect was significant in getting access to some of the cases.

Out of the initial 30 practices, 15 expressed a positive interest in the project while the others didn't answer to the call. Those who were interested received a more detailed presentation of the requested interview and method. First, the scope of the interview was clarified as the "qualitative support of a dissertation on contemporary Danish Practices and trends in architecture labour"<sup>xiii</sup>. Second, the structure of the interview was presented through 7 sections: 5 of them under the title of "Specific" related to the practice workflow (Presentation of the Practice; Organization of the Labour; Organization of the Strategies and Mechanisms of doing architecture; Organization of the Workspace) while 2 of them under the label of "Generic" about the framework and internationalization of architectural labour (Denmark and Abroad; Welfare State and EU Policies for Architecture). Third, a request to audio-record the interview and to document the visit with the use of photographs of the workspace, shared by the respondents with accompanying credits; but also the production of a visualization of the current workspace by the interviewer. Fourth, an invitation to find a preferred date and time to meet in the office.

To this mail the author got the availability of 11 cases out of 15; their interest in the study and positive answers determined the number of interviews undertaken: in the end at least one representative for each "shape" was interviewed except for one of them for which two companies agreed to participate. In total 16 respondents were interviewed into 11 sessions. It's relevant to mention that the association made by the interviewer between each "shapes" and the respondents has been undisclosed to the respondents in order not to influence them in their answers.

## 2. Data Collection

As agreed with the practices, the interviews were semi-structured, as an open-conversation, and followed the GT principles of elaborating on each interviews before proceeding to the next one. This means that from the first to the last interviews, the initial questions evolved and some of the interviews' sections were swapped or revised; relying on the experience gained in conducting the previous ones. Having an interview scheme allowed for comparison between respondents, but also enabled the interviewer to be flexible to follow respondent interpretations and still be able to collect the needed information for the research. Each interview was prepared in advance backing the questions with data and anecdotes specifically chosen case by case. The interviews were scheduled in the practice workspace across 4 months, going from December 2017 until March 2018. The data collection used a toolkit composed of several tools (Fig.1). An interview scheme specifically adjusted as above-mentioned. A logbook, from which after each interviews the set of pages used by the respondents were extracted and catalogued; this allowed each respondents to sketch freely while answering to some of the questions without being influenced by the answers of their colleagues. An organization chart that the respondents were asked to fill in using some coloured dot stickers, while talking about the labour organization of the practice. Ten cards with double side tags: on one side the names of a specific "shape" and on the other the corresponding questions to help the respondents understanding the concept behind the given name. (Fig.2)

### 2.1 Evolution of Initial Questions: an example

After the agreed one-week refusal of the consent's signature all the interviews have been processed and the transcript was made following two different style: the information given by the respondent were reported without any cut while the questions by the interviewer were summarized in order to speed up the process of transcript. The transcript started in February 2018 and proceed until March 2018. On side of the interviewing process, as GT prescribe, some notes and first analysis have been made in order both to start the writing process and to develop the interview scheme.

It could be useful to mention here, as example, an issue that resulted to be crucial in the elaboration of the argument and that also it could be considered a good case of shaping the 11 interviews one after the others. In particular, the set of questions prepared by the interviewer in the interview scheme were concerned on the reception of European Union legislation in the Danish procurement system: if and how was it influential for the workflow of the practice itself? In order to avoid any "political" statement but also to avoid a possible hindrance in answering, each respondent was asked to comment a quote by a Danish architect, Pedersen who mentioned<sup>xiv</sup> "EU plays a key role as a core institution that affects the framework of how architecture is produced. In our profession, knowledge and commitment are often watered down because of the cumbersome process of EU procurement rules. That doesn't make you a victim, that's just the way the rules work and force you to work". This quote was used to trigger some reactions and start building a conversation on the topic asking more direct questions to the respondents. However, all the first respondents comment the quote saying that it was undeniably true but, the dialogue that followed, helped the interviewer to realize what was instead the point in question. The first 4 respondents, while answering, showed a dissatisfaction on the local political system and also they questioned if the superimposition of international agreements on local dynamics have created or not new opportunities of

procurement. So the interview scheme was revised and rather than asking whether the fulfilment of the European prerequisites for procurement have interfered with the modes of production and procurement, that resulted undeniable, two were the new triggering aspects inserted. First, what was the role of the Danish Welfare State in regards to Europe when adopting the requirements in their local legislation of procurement; second, whether the investment done in acquiring new knowledge by the practice about international procurement were deserving. It's important to mention that this qualitative research followed a previous research phase on another timespan 1945-75 as before mentioned in which instead the Welfare State had a central role for the building sector allowing the blossoming of many architectural practices, behaving as a client for them. The knowledge of the other timespan was helpful to interpret the data collected using the qualitative method.

### 3. Ethical Guidelines

It is necessary to expand on the ethical guidelines<sup>xv</sup> used during the interview. As mentioned, a complete documentation of the research scope together with a request to audio-recorded were sent before scheduling the dates. So, all the 11 cases, aware of the research project's scope and context, agreed to be recorded in advance. However, immediately after the interview and before proceeding with any transcription, a formal declaration of consent to take part in the research was sent to the responsible respondent for each case. The decision to send the formal declaration after the interview was made because there was a need by the interviewer to formalize the procedure; there was also a need to establish a mutual trust between the respondent/s and the interviewer in a personal meeting before asking to fill in any forms that could have the opposite effect of distrust. Rather than defending the rights of the respondent, in fact, it could alarm and overwhelm the respondents creating unnecessary anxiety.

The consent to take part in research include three parts: a formalization of some of the things that were mentioned orally at the beginning of each interview; a confidentiality option to be agreed; some information on the future access of the data.

Regarding the first one, it includes: a declaration of voluntarily agreement to participate in the research study. A one-week period of refusal after the signature of the consent before the transcription will start, in which case the material would have been deleted. A confirmation that the purpose and nature of the study were explained in writing (through the emails mentioned before and the "Index Room" booklet (Fig.3) that was handed in during the interview to each respondent containing a teaser of the first phase of the research). A ratification that the respondent had the opportunity to ask questions about the study and that understood not to benefit directly from participating in this research. A validation of the audio-recording consent and of the transcription consent to the interviewer and an assistant.

About the confidentiality options: the first one was related to the disclosure of the identity of the respondents in any research results; while the second one, was related to the anonymity of the identity of the respondents and of the people mentioned and in case the possibility to publish disguised extracts in any research results.

About the safekeeping of the data: the original audio recordings will be retained in the interviewer's office in a private and secured drawer until the exam board confirms the results of the researcher dissertation. In addition to that a transcript of the interview will be retained for two years from the date of the exam board.

Regarding the access, under the freedom of information legalisation the respondents are entitled to access the information they have provided at any time while it is in storage as specified above. The transcription will be always open for the respondents' consultation under request to the researcher.

To conclude it should be mentioned that all the 11 cases signed the consent opting for the full disclosure of the data collected.

### 4. Exhibition Design as dissemination narrative

To conclude the paper, it's worth to do a reference to the dissemination plan of the research. Two installations so far have been used by the author to deal with the dissemination of big set of data collected throughout her scholarship.

The definition of big data in the field of computing, it refers to

"extremely large data sets that may be analysed computationally to reveal patterns, trends, and associations, especially relating to human behaviour and interactions. Big data challenges include capturing data, data storage, data analysis, search, sharing, transfer, visualization, querying, updating and information privacy."<sup>xvi</sup>

A common denominator throughout the research has been the collection of a large amount of hands-on data on which basing the induction of theory. The use of exhibition design has been fundamental to visualize and grasp at once a large amount of data, but it results also successful to disseminate the research to a wider audience of non-expert of the field. The first installation named "Index Room" condensed the big data related to the archive review (Fig. 4). It followed a classification of each project published in Arkitekten Magazine across 1945-75. 41 volumes in total were collected by the author: 11 monthly and weekly editions and 19 bi-monthly ones. Afterwards, a scanning session was needed to digitalise all the information acquired: 82 hours after, almost 11 days, the materials were digital and transformed into searchable files. An analysis was conducted afterwards, related to the classification of

each project published to get an overview of the quantity of production of architecture in that time-span. Each project published in the 31 years of the magazine was classified into Excel sheets for a total of 3809 rows and 10 columns. For each one an index card has been produced with 10 information (Fig. 5): the year of publication; the name of the author; if any co-authors; the issues in which it was published (noting if weekly edition or monthly one); the project name; its location; eventual competition ranking; specific class of belonging; year of design when mentioned; the client. More than 4600 cards were indexed and exhibited into a physical archive for a total 15 kg of paper card hanged on a white lacquered ring steel (Fig. 6). This installation transformed an archive review method into a physical display. But, if "Index Room" was an occasion to disseminate the first phase of the research, "Red Tapes" was a second installation designed to disseminate the GT method presented in this paper (Fig. 7). The name refers to an idiom used to indicate the "excessive regulations and to those formal rules that are considered redundant and bureaucratic and, since asking for a rigid conformity, they risk to hinder and prevent action and decision-making"<sup>xvii</sup>. It is an installation that works as a media to visualize GT as research method, it asked to the visitors to make a shift in the mind-set to see things in scale 1:10. It shows a synopsis of 11 shapes drawn on the ground that represent the different workspaces of the 11 respondents involved in the GT in a drawing of 8x4 m (Fig. 8). A miniature book (4,2x5,5x4 cm), that collects in 666 pages, 116.127 words printed in 5 pt and exchanged in the 1312 minutes of interviews that have been transcribed in 266 hours, almost 1,5 months (Fig. 9). This condensed book was laid on a miniature table in scale 1:10, stretched in its height, that represents the minimal work station of an architect even when located in complete different settings (Fig. 10).

The dissemination plan uses installations, but not exclusively. The installations in particular are not finalized to the development of an iterative research by design and therefore a project as outcome of the research but they are used as a supporting mean. Therefore, behind the decision to use this narrative, there is a strong belief that the interaction of theoretical arguments together with the design of an exhibition, and therefore the occupancy of a physical space along with a facilitate interaction with a broad audience, are powerful experimental fields when doing research in architecture (Fig. 11-12).

i The elaboration of this argument derived from a literature review on the topic and particular acknowledgements should be made to the conversations with Pier Vittorio Aureli and Maria Giudici while Visiting at the Architectural Association School of Architecture; to the reading of the book "Building in Time" by M. Trachtenberg in which L.B. Alberti is identified as the key figure in the shift towards professionalism in architecture; to the "De Re Aedificatoria" in particular in the book VI and IX mentioning some of the contemporary topics that relate architect and money.

Regarding the Danish context instead, the conversation with Thomas Bo Jensen and Troels Rughjerg have been crucial to trace back a similar shift; as well the reading of "P.V. Jensen-Klint" by Thomas Bo Jensen and "Gottlieb Bredesbøll: Denmark's first modern architect" by Peter Thule Kristensen crucial to understand the birth of professionalism in architecture in Denmark and its relationship towards craftsmanship.

ii Franch, Kubo, Miljački, Schafer, Office US Atlas (Zürich, 2015), 26.

iii in "Work" by Peggy Deamer in MONEY, PERSPECTA 47 The Yale Architectural Journal, (2014), 27-39.

iv the author refer to the fact that architecture is considered among the "liberal profession" but to be named like this and not be considered an hobby need to produce an income as autonomous work. Referring to Hannah Arendt talking of the beginning of liberal profession "said that since payment for their services was voluntary, the liberal professions must indeed have attained a remarkable perfection in the "art of making money" (128, Arendt, The Human Condition, 1958). She referred to the Plato conception of the "art of making money". On the other side if architecture is not paid it should be intended as an hobby so as "every activity unconnected with labor" (128, Arendt, The Human Condition, 1958).

v Angela Gigliotti is PhD fellow at the Aarhus School of Architecture, Denmark (Fall 2017-Spring 2019; Supervisors: Walter Unterrainer and Charlotte Bundgaard) and Visiting PhD Candidate at the Architectural Association, School of Architecture London, UK (Spring 2018; Supervisors: Pier Vittorio Aureli and Maria Giudici). The nature of the work in architectural profession is a crucial point of departure that this research addresses. Scholars have extensively focused both a genealogy of the main exporters of modes of production and, also, those cases where the friction between labour and work has been more evident. However, the cases of the knowledge-importers instead, and Scandinavia as one of those, have rarely been discussed. In this latter an investigation of the profession in relation to the economic system has not been a priority of scholars yet, concerned instead on the works of the architects, as welfare outcomes. The research aims to occupy this niche: to investigate the relationship between the Danish Welfare State and the contemporary modes of architectural production to unveil which are the mechanisms that the architectural practices (*tegnestuer*) have deployed to face economic junctures. The thesis addresses two time-spans. The first one, after the WWII (1945-75) covers the Trente Glorieuse and the production of the architects blossomed under the Great Optimization. The second one concerns the recent Neo-Liberal turn (1993-2016) focusing on: the national policies aimed to a flexible labour market; the supranational agreements of the European Union related to the free circulation of service; and, the adjustments to public procurement below the EU threshold. In both time-spans, the call to efficiency and standardization and the consequent division of labour will be addressed. Using a mixed method, the research defines how global and local influencers have shaped the Danish architectural modes of production and which are the current mechanisms developed by the offices. The argument sustains that after the WWII, the influences on architectural profession were direct and boosted its blossoming intentionally ("hidden recipes"); while in Neo-Liberal times those have been indirect and perceived as brakes to the architectural profession ("red tapes").

vi In 1993 Denmark saw the introduction of 'flexicurity' policies in the labour market, which are based on the possibility of hire and fire in the labour market with total flexibility being sustained by a structure of security benefit for the workers. This delineated a crucial change in the labour market, and so, also in the architectural labour conditions. Generally speaking, the main difference was that the possibilities for employers to hire and fire, according to needs, were coupled with an active security system for employees: a relative shift "from a passive safety net in the unemployment to an active trampoline in the labour market". See more in Cox R. H., "From Safety Net To Trampoline: Labor Market Activation in the Netherlands and Denmark" in Governance 11 (1998), 397-414

vii The "flexicurity" shift in policies had some positive effect and it could be translated in numbers with a fall in the unemployment in, the whole labour market (age 25-74) from the 12,4% to the 5% in 2001 (the lowest level since 1976) decreased to 2% in 2008 (b.Crisis). In 2008 in spite of the financial crisis, the Danish firms came out of 2007 with historically good results. In 2012 when the above mentioned crisis fully reached Denmark the unemployment touched the 6,5% (a.Crisis). See more in Statsbank - Statistic Denmark "Byg1: Number Of Persons Employed In The Construction Industry By Industry (Db07), Kind And Seasonal Adjustment". See the data: <http://www.statbank.dk/statbank5a/default.asp?w=1920>

viii The flexicurity brought a flexible labour market and a more neo-liberal direction, but despite other countries that witness the same turn, what has happened in the architectural practices in Denmark is unique. It has to be mentioned that in Denmark the working conditions of the wage-earners are regulated by collective bargaining between the representative bodies of both parts and this lead to the fact that almost the 80% of Danes are unionized. Also in the architectural practices, employers usually use a shared ladder to establish the salary of each employee. This means that there is not a negotiation on salaries, but what instead is negotiable are the fees paid to the architects for each commission and these get strongly affected by the neo-liberal turn, fully in line with the other countries. The asymmetrical situation therefore is that the architects as employees are highly guaranteed but the architects as employers are not.

ix in "The architectural practices and the Danish Welfare State: a changing open relationship" by Angela Gigliotti in "Emerging Architectures / The Changing Shape of Architectural Practices" edited by Walter Unterrainer, (2018), 74-81.

x The consideration of the relationship between language and capital has to be referred theoretically to a group of scholars in political theory who wrote extensively about it. Mainly see: Christian Marazzi (2008) and Paolo Virno (2004).

xi A first phase of the research was related to the timespan 1945-75 known as the Golden Years of Welfare State. During this phase the focus was on the production of the architectural practices in relation to the blossoming economy of the Welfare State. That phase was conducted using an archive review of the magazine Arkitekten.

xii Carsten Thau "Liberation, the Death of Utopia and the Big Community Machine" in Jensen B.B., Weiss L., (2014), 27-39. Boris Brorman Jensen, Kristoffer Lindhardt Weiss, 'Art of many - The right to space'. (Copenhagen, 2016), 196-205

xiii From the first mail sent to 30 potential respondents by Angela Gigliotti on the 15th November 2017

xiv Johannes Pedersen (NORD Architects) in Jensen B.B., Weiss L., (2014), 27-39. Boris Brorman Jensen, Kristoffer Lindhardt Weiss, 'Art of many - The right to space'. (Copenhagen, 2016), 486-493

xv It should be mentioned that the research environment that host the research, the Aarhus School of Architecture, has not an ethical committee or any requirements for approval of the guidelines in advance; so any initiative has been individually taken by the author studying on the literature similar scholar behaviour in respect with the ethical consideration mentioned in the PhD Plan and approved by the PhD Committee.

xvi From Wikipedia 2018: [https://en.wikipedia.org/wiki/Big\\_data](https://en.wikipedia.org/wiki/Big_data)

xvii From Wikipedia 2018: [https://en.wikipedia.org/wiki/Red\\_tape](https://en.wikipedia.org/wiki/Red_tape)

## Bibliography

- AA.VV. (2008-2016) Sector Review: The Consulting Engineering and Architectural Groups. A Swedish and International survey. Ed. Svensk Teknik och Design
- AA.VV. Arkitekten Magazine 1945-75, The Danish Architectural Press
- Abrahamson P., (2005). The wobbly pillar revisited theorizing welfare state and housing policy: the case of Denmark. Presented at the European Network for Housing Research International Conference, Reykjavik, Iceland.
- Alberti, L.B., (1450) De re ædificatoria, in the version of Giontella, V., (2010) L'arte del costruire. Bollati Boringhieri, Torino.
- Albertsen, N., (2016) Transformations of the welfare city in Denmark 1960-2016 Five socio-spatial panoramas. Aarhus School of Architecture.
- Albertsen, N., (1996) Architectural Practices: Habitus, field and cultural capital. Presented at the "Occupation and Professions" Conference at the University of Nottingham
- Andersen, J.G., (1997) The Scandinavian Welfare Model in Crisis? Achievements and Problems of the Danish Welfare State in an Age of Unemployment and Low Growth. Scandinavian Political Studies 20, 1-31.
- Andreola F., Sullam M., Villa R.M., (2016) Backstage. L'architettura come lavoro concreto ed. Franco Angeli, Milano, Italy
- Arts, W.I.L., Gelissen, J., (2002) Three worlds of welfare capitalism or more? A state-of-the-art report. Journal of European Social Policy 12, 137-158
- Aureli, P.V., (2012). The Project of Autonomy: Politics and Architecture Within and Against Capitalism, ed. Princeton Architectural Pr, New York.
- Aureli, P.V., (2011). The Possibility of an Absolute Architecture. The MIT Press, Cambridge, Mass.
- Aureli, P.V., n.d. Intellectual Work and Capitalist Development: Origins and Context of Manfredo Tafuri's Critique of Architectural Ideology, in: The City as a Project.
- Aureli, P.V., n.d. Production, Reproduction, Housing beyond the Family.
- Avermaete, T., Heuvel, D. van den, Swenarton, M., (2014) Architecture and the Welfare State. Routledge, London; New York
- Andrachuk J., Bolos C.C., Forman A., Hooks M. (2014) MONEY Perspecta 47. MIT Press; Cambridge
- Bernstein, P., Deamer, P., (2010). Building (in) the Future: Recasting Labor in Architecture, 1 edition. ed. Princeton Architectural Press, New Haven : New York.
- Boel B. (2003) The European Productivity Agency and Transatlantic Relations 1953-1961, ed. Museum Tusulanum Press
- Cayer A., Deamer P., Korsh S., Peterson E., Shvartzberg M. (2016), Asymmetric Labors: The Economy of Architecture in Theory and Practice., ed. The Architecture Lobby
- Cox R. H., (1998). From Safety Net To Trampoline: Labor Market Activation in the Netherlands and Denmark. Governance 11
- Cox, R.H., (2004). The Path-dependency of an Idea: Why Scandinavian Welfare States Remain Distinct. Social Policy & Administration 38, 204-219
- Deth, J. van, (2000) The Survival of the European Welfare State. Routledge, London ; New York.
- Cuff, D., (1992). Architecture: The Story of Practice, 1st edition. ed. The MIT Press, Cambridge, Mass.
- Drucker, P.F. (1946). Concept of the Corporation, Revised ed. edition. ed. Transaction Publishers, New Brunswick, N.J., USA
- Einhorn, E.S., Logue, J., (2010) Can Welfare States Be Sustained in a Global Economy? Lessons from Scandinavia. Political Science Quarterly 125, 1-29
- Ervik R., Kildal N., Nilssen E. (2015) New Contractualism in European Welfare State Policies ed. Routledge, London, UK
- Esping-Andersen, G., (1990) The Three Worlds of Welfare Capitalism, ed. Princeton Univ Pr, Princeton, N.J., USA
- Esping-Andersen, G. (1996) Welfare States in Transition: National Adaptations in Global Economies, 1 edition. ed. SAGE Publications Ltd, London ; Thousand Oaks, Calif.
- Franch E., Miljački A., Minguez Carrasco C., Reidel J., Schafer A., (2017) OfficeUS Manual Lars Müller Publishers, Zürich, Switzerland
- Franch E., Kubo M., Miljački A., Schafer A., (2015) OfficeUS Atlas (Repository) Lars Müller Publishers, Zürich, Switzerland
- Franch E., Kubo M., Miljački A., Reeser Lawrence A., Schafer A., (2014) OfficeUS Agenda (Catalogue) Lars Müller Publishers, Zürich, Switzerland
- Gay, P. du, Morgan, G., (2014). New Spirits of Capitalism?: Crises, Justifications, and Dynamics, ed. OUP Oxford, Oxford.
- Hitchcock, H.-R., (1947), The architecture of bureaucracy & the architecture of genius. Archit. rev. (Lond.). Architectural review. 101, 3-6.
- Jensen B.B., Weiss L., (2016) Art of many - The right to space. Ed. Danish Architectural Press, Copenhagen, Denmark
- Jensen, T.B., 2009. P.V. Jensen-Klint, 1 edition. ed. Routledge, London.
- King, S., Stewart, J. (2007). Welfare Peripheries: The Development of Welfare States in Nineteenth and Twentieth Century Europe, ed. Peter Lang AG, Internationaler Verlag der Wissenschaften, Oxford ; New York.
- Kristensen, P.T., 2013. Gottlieb Bindsøll - Denmark's First Modern Architect. København.
- Kongshøj Madsen P., (2005) How can it possibly fly?: The paradox of a dynamic labour market in a Scandinavian welfare state. Presented at the CARMA, Aalborg Universitet, p. 38.
- Lazzarato M., (1997) Immaterial Labour. in Radical Thought in Italy: A potential Politics, ed. University of Minnesota Press, Minneapolis, pp. 132-146
- Marazzi, C., Hardt, M., Conti, G., (2008). Capital and Language: From the New Economy to the War Economy. Semiotexte, Los Angeles, California
- Mattsson, H., Wallenstein, S., (2010). Swedish Modernism: Architecture, Consumption and the Welfare State, ed. Artifice Inc, London.
- Nørgaard T., Toft A. (2009) Arkitekturklyngen i Århus: En undersøgelse af klyngens historie og aktuelle status, Aarhus School of Architecture
- Prak, N.L., (1984). Architects: The Noted and the Ignored, First Edition edition. ed. John Wiley & Sons Ltd, Chichester West Sussex; New York.
- Raauge K. M., Vindum K., Kristensen P.T., Lotz K., Pagh J., Ulv Lenskjold T., Jerl Jensen M., Ahnfeldt-Møllerup M. (2017) Forming Welfare, Research project at KADK The Royal Danish Academy of Fine Arts School of Architecture, Design and Conservation, Copenhagen
- Raumplan (2017). Capitalism is over: but it used to be so cool, Exhibition for the Milano Design Week 2017 at Cascina Cuccagna, Milano, Italy
- Tafuri M., Dal Co F. (1976) Modern Architecture, History of World Architecture, ed. Electa, Rizzoli, Milano, Italy
- Thau C., Vindum K. (2004) Arne Jacobsen, ed. Danish Architectural Press, Copenhagen, Denmark
- Trachtenberg, M., (2010) Building-in-Time from Giotto to Alberti and Modern Oblivion. Yale University Press, New Haven, Connecticut
- Unterrainer W. (2018) Emerging Architectures / The Changing Shape of Architectural Practices, ed. Arkitektkolens Forlag, Aarhus, Denmark
- Virno, P., (2004). A Grammar of the Multitude: For an Analysis of Contemporary Forms of Life. Semiotext, Cambridge, Mass ; London.
- Westergaard-Nielsen, N. (2008). Low-Wage Work in Denmark. Russell Sage Foundation, New York.
- Weiss K.L. and Vindum K. (2012). The new wave in Danish Architecture ed. Danish Architectural Press, Copenhagen, Denmark

## List of figures

- Fig. 1 - Behind the scenes: the interview toolkit
- Fig. 2 - Behind the scenes: the ten "shapes" cards
- Fig. 3 - "Index Room": the booklet (ph.Luca Tenaglia)
- Fig. 4 - "Index Room": the archive (ph.Luca Tenaglia)
- Fig. 5 - "Index Room" installation at "Capitalism is over", Milano Design Week 2017 (ph.Luca Tenaglia)
- Fig. 6 - "Index Room" installation at FORSK!
- Fig. 7 - "Red Tapes" installation at FORSK!
- Fig. 8 - The 1:10 workspaces
- Fig. 9 - The 1:10 working desk
- Fig. 10 - The 1:10 book
- Fig. 11 - "Index Room": the audience (ph.Luca Tenaglia)
- Fig. 12 - "Red Tapes": the audience

(All the figures otherwise mentioned are by OFFICE U67 ApS)





