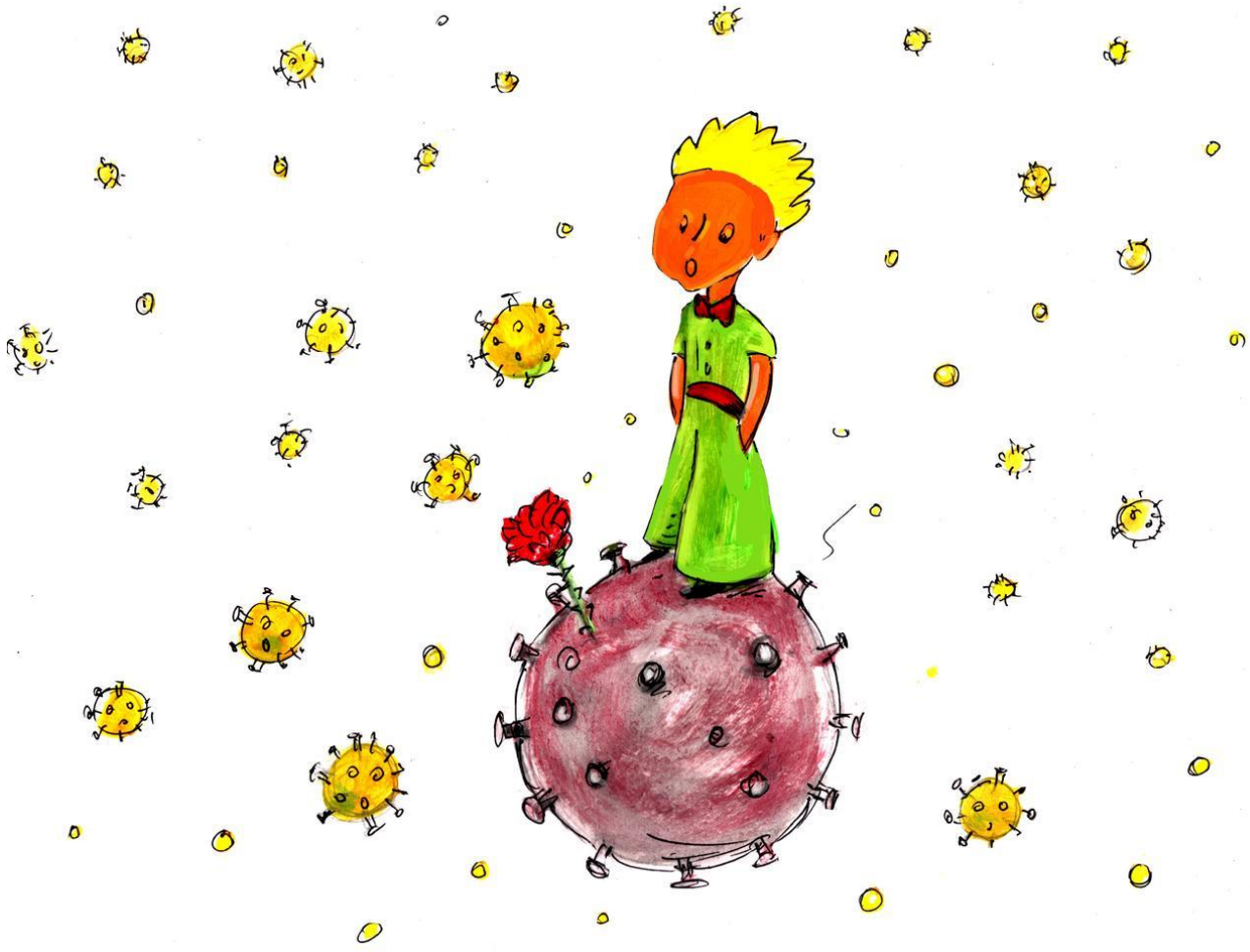
The Pandemic Turn?

- A Case Study of "The Digitalization of Everyday Life"



Drawing: Florian Balaban: The little Prince standing on a Corona-globe

Techno-Anthropology - Aalborg University Copenhagen, Department of Planning

Johan Irving Søltoft (20192160)

AALBORG UNIVERSITY
DENMARK

Title: The Pandemic Turn? – A case study of "The Digitalizing of Everyday life"

Semester: 10th
Project period: February 1th, 2021 - May 4th, 2021
ECTS: 30

Number of pages: 53 (127.753 Characters)

Supervisor: Anders Kristian Munk

Students: Johan Irving Søltoft (20192160)

Abstract

This dissertation will be a study of how Corona has affected social science practices. To investigate this, the Danish "Digitalization of Everyday Life" project initiated during the first Covid-19 lockdown in Denmark, will serve as a case study, inspired by Bent Flybjerg and analysed with theoretical inspiration from Bruno Latour and *ANT* as a way of studying "science in the making".

Through the "Digitalization of Everyday Life" project, it will be described how the Covid-19 pandemic led to new methods being developed and how earlier methods are being re-thought, such as the archive. This process can be described by documenting how different actors allied themselves by forming new networks, both on a macro as well as a micro scale.

To investigate how the Covid-19 pandemic has led to various topics within social science that were previously "black boxed" to suddenly become re-opened. This dissertation will therefore examine whether a paradigmatic shift in social science has occurred, a pandemic turn?

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Introduction

March 11th, 2020: Liverpool vs Atletico Madrid. A packed Anfield stadium shakes before the start of the match. The 52.000 supporters are singing the iconic song "You will never walk alone". The match starts, but as always, I have a hard time keeping focus, so I take out my phone and start checking the news: "The Danish Prime Minister Mette Frederiksen holds a press conference concerning Covid-19!". I change to the Danish TV channel DR1, where Mette Frederiksen's speech has just begun; I am glued to the TV when Mette Frederiksen announces, "Denmark is shutting down". I switch back to the football match, but it is not the same as before - within 30 minutes the context has changed; I am suddenly deeply outraged by the many spectators at Anfield stadium, and as if there is no end to the tragedy, the match goes into extended playing time. I have seen enough and turn off the TV. I cannot help but wonder; what if they had just “walked alone”?

Two weeks later, I was contacted by Associate Professor and Head of TANT-lab Anders Munk from AAU, who asked if I would like to participate in a research project on how the Corona crises disrupted everyday life, prompting citizens to find ways to re-order their lives digitally. The Velux Foundation had issued a call for emergency research in relation to the developing Corona situation. In this context, Professor and Head of Centre of Technology in Practice Brit Ross Winthereik from ITU and Anders Kristian Munk from, presented a joint research project: “The Digitalization of Everyday Life” (subsequently abbreviated to DEL). Within this project, Winthereik and Munk had respectively assembled a team of 7 student assistants and 11 research assistants from AAU and ITU.

The main purpose of the DEL project was to create a digital archive that could document the Danes' use of digital technologies during the Corona lockdown. This builds on a basic hypothesis that digital technology would play a major role for citizens during the lockdown. The archive was not intended as a conclusive analysis of citizens' use of digital technologies during the national lockdown, but as an archive of documents that could be used by researchers in the future. The remarkable thing about this collection of documents was that it was launched without an actual research question, which is very unusual in the academic world. However, the project leaders had some hypotheses that the use of digital technology during the Corona lockdown could lead to inequality, but also innovation. In

this unknown void, the task was then to collect data: "collect, collect and collect" as Brit Winthereik stated. (Kjærulff, 2020: Podcast, Corona-eksperimentet, part 1).

The DEL project was initiated by a short test period where different explorative methods were tried, tested and discussed. This very open and experimental approach could be attributed to the fact that the project had to be started on a very short notice, as there for example was no complete analytical strategy, theory or model at the first meeting.
However, four protocols quickly came to serve as the cornerstones in the study of the Danes use of digital technological during the national lockdown. These protocols were: a) the Interview Protocol, b) the Online Observations Protocol, c) the Digital Method Protocol and d) the Mobile Ethnography Protocol. Even though these four protocols were initiated, and empirical data began to be collected on the basis of these, the DEL project did not stop developing new strategies. For example, one of the research assistants made a Tinder profile, to find informants that would be willing to talk about dating during Covid-19:

> "After swiping my fingers tired on Tinder, we have now reached almost 400 matches (!), Both men and women. I'm actually a little worried about what we should do with all those informants…" [Own translation] (Microsoft Team: Internal dialogue between researcher).

The research assistant ended up sending a message to each of the matches and asked if they wanted to participate in an interview about Corona and dating. However, Tinder found this behaviour suspicious, and it was not long before the profile was suspended. This is only one example of how the DEL-project dynamically evolved while the project was running.

The start-up process for the project was therefore a process of initiating, developing and debating methods and theories all at the same time. However, the initiation process of methods began to gradually slow down, and research assistants and student assistants were assigned different roles within the four protocols. The four different protocol team groups now began to have several internal meetings on a weekly basis, and a weekly joint meeting across all team groups that lasted one hour, which all took place through Microsoft Teams.

During this initial period a lot of time was spent orchestrating how the different leads or data should be shared between the groups in this digital environment. Therefore, an excel sheet was created where the different groups could register new informants or events that could be of interest. However, this way of sharing leads through the excel sheet did not work smoothly from day one, because several different ways of registering a lead had been invented across the groups. This was also due to the fact that people came from two different universities, ITU and AAU, and in AAU case a university with two different departments: one in Copenhagen and Aalborg. There were therefore many different new acquaintances and working methods that had to be united under one banner.

It took time before a unifying way of registration of leads was acquired – and in order to smooth this process it was decided to appoint a focal person in each protocol to ensure a higher degree of coherence while registering the data in the excel sheets.

After the first one and a half month, more and more of the empirical material collected in the four different protocols began to resemble previously collected data, both in content and form. At that stage of the project, a new perspective on how to gather leads was introduced. The so called "Spearfishing Leads". This refers to leads about informants, who had generated scarce data initially, but yet raised an interest to the researcher, either through interviews, digital leads or articles, for example people with a disability, sex workers or high school students. The last month of the empirical gathering process thus focused on these new leads, and how to either gather informants or attend events surrounding these topics.

After the empirical collection phase was completed, a new phase started transcribing the more than 230 interviews, and more importantly the development of an archive was initiated. In this phase of the project the focus was on developing a method of how to make an archive that could be used as an information bank, that subsequently could be used by researchers at a later stage in order to better comprehend and analyse the consequences of the lockdown. The archive was the end product of the DEL project, which showcase all the empirical material the project had collected as a result of the Covid-19 crises.

Problem Field – A Possible Pandemic Shift in Social Science?

This dissertation will be an exploration of Covid-19 and the subsequent lockdown and its consequences for social science research practices. The study is based on a hypothesis that the Corona crisis led to a great rupture for citizens, which inevitably also has affected the academic world. A rupture and a moment, where there was an opportunity to rethink theoretical understandings and frameworks, that have not been questioned for a long time in academia.

This hypothesis will be investigated through a detailed study of The Digitalization of Everyday Life, where I through a case study of the DEL project will examine the choice of methods and theories through the various work processes and negotiations that arose throughout the project and its final product, the archive. The hypothesis also builds on my personal observations I did through my work as a student assistant at DEL and throughout my exploration of the DEL project, where I witnessed several episodes and discussions where methods and theories of social science suddenly were re-opened and re-thought.

A major actor in connection with the Covid-19 crisis effect on the practice of social science was the government's legislative intervention which, among other things, imposed national lockdown(s). This meant that researchers could no longer work at universities but had to work from home, which in turn led to a higher degree of use of digital technologies as compared to the reality prior to the outbreak of the pandemic. In fact, the DEL project could not have been completed without the use of digital technologies. All meetings were held on *Microsoft Teams*. In the digital method protocol, digital technologies were *the* way in which new leads, traces and areas of interest were found. In the interview protocol all interviews were conducted on the digital platform, especially the digital platform *Whereby*. The online observation protocol took place in a huge array of different digital platforms: Facebook, YouTube, Instagram, Twitch, Zoom & Skype. Thus, the extent of the use of digital technologies in the DEL project was both a tool, that affected the workflow of researchers and the methods used.

The profound consequences on everyone's daily life of the Corona crises also directly affected the researchers' own everyday lives. This led to internal debate in the research group about how to study something you yourself is an integral part of. These considerations resulted in researchers beginning to turn their focus inward and assess their own lives as empirical material, which led to the use of

auto-ethnographic methods as an integral part of the participant's observation protocol. A move towards auto-ethnographic methods, which also can be observed in several other social scientific projects during the pandemic (see for example Utoft, 2020: Endo, 2021: Katila, Gan & Goodwin: 2020: Roy & Uekusa, 2020).

Other observations in the DEL-project was the debate around participant observation. The digital participant observation sparked discussions on fundamental concepts on methods of participant observation. How should participant observation be performed digitally? A question that would not have had the same relevance if the DEL project had been able to make physical participant observations.

Finally, there is the archive, which DEL constructed as the end result of the research project. The mere notion of an archive leads to associations of 19th century science archives. The archive did not use traditional categorisations such as gender or work status but focused instead on challenging pre-conceived ideas by structuring the archive around similarities in computer-generated semantic patterns. The establishment of an archive as the end result could also be seen as a side effect of the Velux Foundation's focus on a data collection. The donors were primarily interested in a data collection in order to ensure data that at a later stage could be analysed and contextualized. DEL's product, the archive, can therefore be seen as a rather unique trend within social sciences and humanities, which leads to the question: Can the re-introduction of an archive be comprehended as a re-interpretation of an archive in modern social sciences?

These observations made throughout the case study of DEL made me consider how this case could be a prime case to provide concrete empirical examples of how Covid-19 affected social science. Hence my research question will read as the following:

Research Question:
How and with what consequences has the Covid-19 pandemic affected the social sciences?
Explored through a case study of Digitalization of Everyday Life project.

Theory: Science in The Making

This dissertation will draw theoretical inspiration from Bruno Latour's *ANT* and methodical consideration from Bent Flyvbjerg. I will argue that a combination of Flyvbjerg's understanding of case studies as a way to study how a phenomenon is developed in practice (Flyvbjerg, 2006: 235), and Latour's theoretical understanding that daily activities can contribute to an understanding of how networks are constituted, can supplement each other well (Latour & Woolgar, 1986: 40).

Inspired by Latour, I will focus on the creation of DEL, as a study of "science in the making" (Latour, 1987: 4), to examine and document the many different choices made through the process that were crucial to the outcome of this project. The idea stems from the fact that research must be investigated in the making, not after it has been "black boxed", as Latour describes it (Latour, 1987: 4). Latour illustrates it with the two faced-Janus, where the "Science in the Making" is Janus, in his transformation in becoming his later I, the "Ready Made Science" (Latour, 1987: 4).

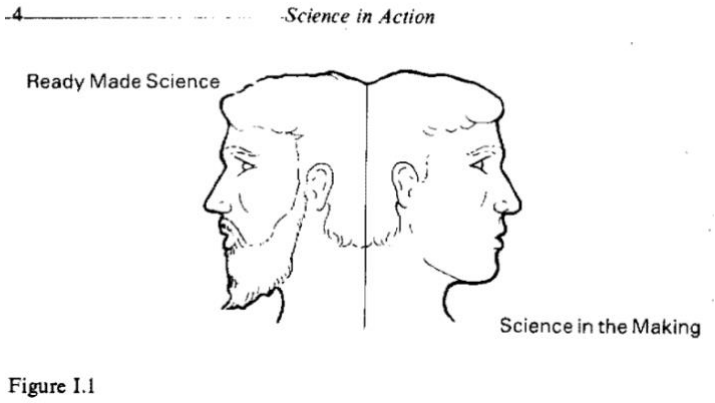


Figure 1: Janus Face: Ready Made Science vs Science in the Making

This dissertation will, therefore, not be a precise chronological description of how the different episodes happened or an attempt to describe what "really happened" (Latour & Woolgar, 1986: 107). Instead, it will be an exploration of how discussions and method selections during the DEL project contributed to the outcome by illustrating how a network of human and nonhuman actors emerged and enabled a specific form of archive to be created.

Actor Network Theory

Latour's *ANT* is characterized by amodern ontology, with the dissolution of the subject/object dichotomy, that is present in most modern philosophies (Hornborg, 2019: 95). Within an *ANT* framework, the world is constituted as being sets of heterogeneous networks of actors. These actors are not defined *a priori* and must be revealed through their interactions with other actors. Furthermore, the amodern approach makes no distinction between human actors or non-human actors (Law, 1992: 381-383). This way of understanding the relationship and connections between both human and non-human actors enables an understanding of how the social and natural world is in a constant development of networks changing relationships. This theoretical understanding is applicable to the case of DEL, as the project illustrates how technologies and people form a relationship in the attempt to overcome barriers, such as physical distancing, i.e. working from home through the means of digital technologies. Another important aspect of these human and non-human networks is, according to Latour, that networks create power and dominance in the process of becoming stable: "Power and domination are the words given to those stabilizations and not an account of their coming into being, "as Latour puts it (Latour, 1990: 123). Networks can therefore function as a key to examine the processes that take place when stability is built (Latour, 1990: 129).

To illustrate these processes, I would like to draw attention to the classic example of *ANT* and how the 'mundane' technology of the heavy hotel key, is a story of how humans and technologies through series of translations come together to form a solution to a controversy; A hotel manager has trouble collecting guests' keys when they leave the hotel. This results in several actions from the hotel manager, first oral reminders, then written, and finally a heavy metal block added to the key, and with each action, the behaviour of the guest's changes (Latour, 1990: 107). The example shows how non-human actors play a role effecting humans. The network constructs domination, knowledge, technology and/or different positions in a controversy. Latour argues that science should not be understood as a realistic description of the *real* world, but instead representations of the world, that come to be *real* through a translation of actors in a network (Latour, 1999: 58).

The description goes on to show how the translation of the key, a non-human actor, has a strong and tangible effect on human customers. This is a very simple example that illustrates the approach of *ANT*. However, Latour has also used the same theoretical framework to study much more complex networks, as for example seen in his work *The Pasteurization of France* (1984) where he investigates Louis Pasteur, and how he allied himself with different actors such as practitioners, physicians,

bacteriologists and colonial interests to create a network that allowed for a vaccine to be produced (Latour, 1988). The example with Pasteur also shows that macro and micro networks are connected: "The socio-technical world does not have a fixed, unchanging scale, and it is not the observer's job to remedy this state of affairs. The same innovation can lead us from a laboratory to a world and from a world to a laboratory" (Latour, 1990: 119). Inspired by this tradition, I will examine the DEL project as an example of a case in the larger social science tradition.

The processes of human and non-human actors in DEL

To illustrate how the *ANT* theory can contribute to the understanding of the DEL project, I will map some of the actors involved in the research project to give an overview of actors who have been crucial in creating the research network's actions (See figure 2).

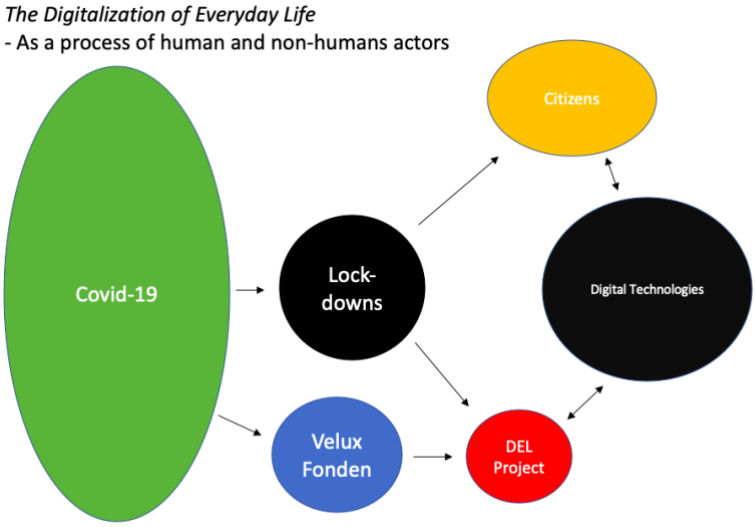


Figure 2: Human and non-human actors in the process of creating the DEL project

This figure shows some of the main actors in the creation of the DEL project, and how both human and non-humane actors played an important role. Corona affected the Velux Foundation, which responded with urgent grants. Simultaneously the Danish government issued a national lockdown as a consequence of the Covid-19. This national lockdown led to Danish citizens having to use digital technologies to be able to work from home or communicate with friends. The DEL-project was launched due to these circumstances. In the DEL-project, the digital technologies played a major role because all interactions between the various researchers and the informants were digital.

Method: "The Digitalization of Everyday Life" as a Case Study.

The method that will be used to investigate the DEL project will be through a case study, which will make it possible to provide concrete examples of the possible shifts and discussions that took place during the initial phase of the first Corona lockdown, to shed light on how social scientific traditions have been ordered and reordered due to the Covid-19 crisis.

Flyvbjerg describes that "the advantage of the case study is that it can 'close in' on real-life situations and test views directly in relation to phenomena as they unfold in practice" (Flyvbjerg, 2006: 235). In the DEL-case the 'real-life situations' will be examined through the different empirical material collected during the research phase. The empirical material of the four different protocols that came to form the cornerstones of the project will be the key. The descriptions of these will be based on the discussions I myself was part of as a student assistant on the DEL project, and through a description of the internal dialogue that arose between the various researchers who were associated with the project. Many of these discussions were written down as posts on the digital platform *Microsoft Teams* and almost in and by itself constitutes a raw archive. The focus will be on the discussions on methods that were used and re-thought during the design of the four protocols. The access to this empirical material on the different strategies of the project and how it unfolded, gave me a unique opportunity to investigate "science in the making" by giving concrete examples of the way in which social science was affected by the Corona crisis.

Originally the case study method stems from academic disciplines such as medicine and psychology (Becker, 2017). One of the most prominent examples is Sigmund Freud's studies around the turn of the century. Freud's studies on *Dora*, *Little Hans* and *Wolfman* are key examples of case studies on explorations of phenomena such as hysteria, anxiety and neurosis (Flyvbjerg, 1988: 3: Clark, 1981). Case studies have evolved over time and moved into other disciplines than medicine and psychology, among others social science. However, the introduction of case studies within social science has not been without criticism. Often case studies has been criticised for being too generalizing on the basis of a single case: ""You cannot generalize from a single case", some would say "and social science is about generalizing""(Flyvbjerg, 2006: 219). This critique was primarily prompted by social scientists who were inspired by the natural science ideals (Flyvbjerg, 2006: 225). However, as Flyvbjerg points out, several examples exist of natural scientists that have conducted their theories from a single case. A case in point for example is Galileo's rejection of Aristotle's law of gravity, which "…was not

based on observations "across a wide range," and the observations were not "carried out in some numbers"" (Flyvbjerg, 2006: 225).

A case study is not a single method but varies according to the case in question. Flyvbjerg presents different cases and strategies for selection of samples and cases within social sciences, for example critical cases, extreme/deviant cases, and paradigmatic cases (Flyvbjerg, 2006: 230). It is the paradigmatic case study on which this dissertation will be based. However, a paradigmatic case study is difficult to identify, as Flyvbjerg points out, because "the paradigmatic case transcends any sort of ruled-based criteria. No standard exists for the paradigmatic case because it sets the standard" (Flyvbjerg, 2006: 232).

Examples of paradigmatic cases are for instances, Clifford Geertz' research "in "the deep play" of the Balinese cockfight," and Michael Foucault's "European prisons and the "*Panopticon*"" (Flyvbjerg, 2006: 232). Thomas Kuhn's research in *What is scientific Revolution* (1987) is likewise a paradigmatic case study, which shows how natural scientists' practice and skills "are organized in terms of "exemplars"", which can be studied by historians of science (Flyvbjerg, 2006: 232). It is Thomas Kuhn's paradigmatic case and research that comes closest to my own case and ambition to study the DEL-project, to describe the social scientists' concrete practice as an investigation of the hypothesis that Covid-19 crises have caused a pandemic shift in social science, and that a new school of thought could be under development.

In relation to examining DEL as a case study, I find it necessary to describe my role in the project. I was involved in the project DEL as one of the student assistants from March 2020. I was part of the digital method protocol, which focused on finding leads, informants and new contexts for the other three main protocols. I attended weekly meetings within this group, where we discussed how the process went, and issues that arose as a result of our work. Subsequently, I got my contract extended and helped transcribe interviews, my involvement in the project ended December 2020.

I would like to frame my participation in DEL within the participatory observation method. The aim of the participatory observation: "…is to enter as deeply as possible into the social and cultural field one researches," as anthropologist Thomas Hylland Eriksen states (Eriksen, 2001: 26). My role in the DEL project as a student assistant gave me a great emic understanding of the discussions, debates and processes that happened throughout the project. As Flyvbjerg writes, "advanced forms of

understanding is achieved when researchers place themselves within the context being studied" (Flyvbjerg, 2006: 236). This situation could, however, also be criticised for lacking a critical proximity to the project, as it could lead to a lack of an etic understanding of the project. (Eriksen, 2001: 36). This criticism has been raised to case studies in general, where it has been argued that observants conducting case studies often suffers from a pre-existing bias (Flyvbjerg, 2006: 234-235). However, as Flyvbjerg points out, the researcher making case-studies often ends up casting off their own pre-conceived notions and ideas. Something I also have experienced through my case study, where perceptions and ideas I had about the project in the beginning has been revised on several occasions during the research process. This happened also through using different grips to create distance from my own experiences.

Playing the stranger & reflexive writing

One of these grips and methods was inspired by Shapin and Schaffer's book *Levithan and the Air Pump.* The book deals with the debate of experimental laboratory approach in natural science in 1660s between Thomas Hobbes and Robert Boyle. In this study Shapin and Schaffer describe their own methodological approach as a place where they assume a stranger's gaze, without being a stranger:

> "We need to play the stranger, not to be the stranger (…) We wish to adopt a calculated and informed suspension of our taken-for-granted perceptions (…) By playing the stranger we hope to move away from self-evidence" (Shapin & Schaffer, 1985: 6).

Shapin and Shaffer go back almost 400 years in history to investigate a crucial era when natural science was up for debate, illustrated through the controversy that arose between Hobbes and Boyle. This investigation has, despite the big difference in time, some similarities with my research on the DEL-project and social science, which investigate the hypothesis that due to the ruptures caused by Covid-19, the present could also be an era where social science is re-thought and up for debate again. It is due to these similarities in my approach towards the project DEL, that I seek inspiration by playing the stranger, and why I see it as a useful method of getting a critical distance to the project.

Another grip and method I have used to gain distance to the DEL-project was by applying a reflexive writing process. The reflexive writing process is inspired by a chapter in *Using Social Theory* written by Nick Bingham. It unfolds the process of writing and writing reflexively, one of the examples

Bingham uses is Howard Becker's classic study in *Writing for Social Scientists* (1986), describing a general academic tendency, which several researchers and students have as an ideal writing method:

> …if you think clearly you will write clearly. They thought they had to work everything out before they wrote Word One, having first assembled all their impressions, ideas, and data and explicitly decided every important question of theory and fact. Otherwise they might get it wrong (Bingham, 2003: 146).

According to Becker this writing method is problematic, and he recommends another method: "write early and write often" (Bingham, 2003: 146). What this method offers is an opportunity to reflect upon the reasonings for why and how, you have shaped and formed your writing style. (Bingham, 2003: 146). By writing text early in the process, I was forced to look at my own descriptions again, and during this process it became apparent to me how I in the beginning of my research often shaped and formed arguments characterised by discussions and definitions that reproduced ideas from the DEL project. Beginning to reflect upon this, I began to see it as a method of going back and forth; a process of writing and rewriting and accepting the limited thought or reflective capacity that I had at that point in the study, thus distancing myself from the DEL-project.

Through this process I also became more aware of my own writing style. A focus, which also became clear to me by reading Latour and Woolgars studies in the Roger Guillemins laboratory at the Salk Institute in the book *Laboratory Life* (1978). Latour and Woolgar are documenting all of the ways in which different processes in the laboratory occur, as they are almost ignorant about laboratory work. For example, seen in the closing paragraph of the introduction to the laboratory:

> ”A Philippine cleaner wipes the floor and empties the trash cans. It has been a normal working day. Now the place is empty, except for the lone figure of an observer. He silently ponders what he has seen with a mild sense of bewilderment . . . (Observer's Story)” (Latour & Woolgar, 1986: 17).

An almost “naive” way of writing, which is remarkable, taken into account that Latour and Woolgar spent two years, as part of the field work, in the laboratory writing the book. One could imagine that they could have written the content of the work process in the laboratory in a very different and skilled

manner, but it is clear they have actively chosen this “naive” way of writing. This writing style has been an inspiration to me, as playing a stranger in the DEL-project.

Another method used to ensure a greater distance to my direct involvement in the DEL-project has been to think in metaphors or to put myself into other observer’s view or other situations reminiscent of the issue I was investigating in the DEL-project. It was a way to shed new light on the characteristics of the DEL-project, which is a method also inspired by Bruno Latour, who argues: “It is crucial to be able to shift easily from one observer to another” (Latour, 1990: 124).

These grips: playing a stranger in a familiar space, using writing as a critical instrument to examine and become aware of own prejudices and quick conclusions, using metaphors, and insisting on a naive approach were the methods I used to keep the case “open” to investigate my hypothesis that a pandemic shift could have occurred within social science.

Funding during Covid-19

To understand how the Covid-19 crisis has affected research in the social sciences, it is relevant to start looking at how the Covid-19 crisis has changed the procedures for funding support and fund applications within social sciences. This can provide an insight into the political and institutional practices surrounding the DEL-Project. The project received 1.238.160 DKK from Velux Foundation, which was the largest grant given among the many different projects the Velux Foundation supported in relation to the Corona crisis. The Velux Foundation is among the ten largest foundations in Denmark and have in recent years had a special focus on research in the social sciences and humanities (Andersen, 2017: 162). About a week before, the Prime Minister of Denmark, Mette Frederiksen, gave her speech in which she announced the first Danish lockdown, The Velux Foundation issued a notice (on March 3, 2020), which called for emergent research in Corona-related fields with regards to humanities studies and social science data collection projects:

> "The VELUX FOUNDATION wants to help ensure that unique quantitative and qualitative data that can only be collected while the Corona crisis is taking place is not lost. It is important that this data is collected immediately and made available to subsequent humanities and social science research projects that can contribute with original knowledge about the consequences of the crisis for people and society.
>
> We therefore open up for urgent processing of applications for the initiation of such urgently needed data collections" [Own Translation] (Velux Foundation: Covid-19-Dataindsamling).

There are four issues that are interesting in relation to this notice made by The Velux Foundation. Firstly, the focus on 'speed' and 'emergency', secondly, the demand to ensure data collection, thirdly, it was not restricted by any specific goals. Fourthly, the emphasis on the importance of data collection as a contribution to future and subsequent research projects. Indirectly there is therefore an in-built hypothesis, that this lockdown is going to have significant effect on society, not only during the lockdown, but also in the longer run.

The Velux Foundation was not the only foundation being preoccupied with the Covid-19 crisis from an early stage. When looking at the larger landscape of both state and private foundations in

Denmark, there was a broad interest in researching the crisis, which led to opportunities of urgent support to exploratory research projects during the first wave of Corona. Among the foundations were, for example the Novo Nordisk foundation, Det Frie Forskningsråd, Carlsberg Foundation and Innovation Foundation. It is interesting to look at the wording of the various foundations' notices because there are several similarities. For example, there is a general focus on speed and emergency:

> Novo Nordisk: "The projects must be able to be initiated immediately" [Own Translation] (Novo Nordisk Foundation).
>
> Danmarks Frie Forskningsfond: ”It is crucial that the research is initiated immediately upon receiving the grant” [Own Translation] (Danmarks Frie Forskningsfond).
>
> Innovation Foundation: "The government has allocated extra funds for urgent treatment of new research- and innovation projects that can uncover the consequences of COVID-19" [Own Translation] (Innovationsfonden).

This focus on emergency is not normal for grants allocated by foundations, and therefore quite unique. Furthermore, the focus on this specific crisis as a research topic, which have essential significance for future scenarios, is also a recurring theme for the large foundations:

> Novo Nordisk: "[The research]… must be of such a nature that knowledge from the projects is made available and can be utilized in similar situations in the future" [Own Translation] (Novo Nordisk Foundation).
>
> Danmarks Frie Forskningsfond: “… research that contributes to knowledge that can be utilized in later stages of the Corona effort” [Own Translation] (Danmarks Frie Forskningsfond).
>
> Carlsberg Foundation: ”… we are of the opinion that a science-based approach to the crisis and its consequences will better equip us to deal with and get through a similar crisis in the future” [Own Translation] (Carlsberg Foundation).

It is also noteworthy that the large foundations did not consider the Corona crisis to be only a matter for medicine and the health sector, but also a matter for many other academic fields, including social sciences. Within the large foundations there were a special and general interest in *social behaviour*. Due to this focus on social behaviour, there also seemed to be an indirect interest in studying the Corona crises as a way to support the development of research methodology for other crises - crises that have yet to come. The huge grants could therefore be interpreted as an indirect indicator of the foundations perception and understanding that research related to the Corona crisis, could develop instruments and methods, which could prepare researchers (and society) for future crises.

Furthermore, it is interesting to observe that the Velux Foundation's grant was not restricted by specific intentions or goals, because private grants have been criticised of limiting the researchers and their research freedom. Professor Emeritus Heine Andersen has argued that private foundations are gaining more and more power in relation to directing research in specific directions, which he sees as a direct attack on the freedom of researchers (Andersen, 2017: 160-167). He exemplifies his criticism by an account of how Novo Nordisk Foundation, the largest foundation in Denmark, donated 885 million DKK to University of Copenhagen to establish a metabolism centre. According to Andersen, this donation to University of Copenhagen would not have been granted, if the university had written in the application that the intention was to use the funds to find a cure for diabetes, due to fact that Novo Nordisk is making most of their money on insulin, thereby jeopardizing their own economic interests by such research (Andersen 2017: 164). However, economic and political control on how science is produced and conceived is not a new tendency in academia. As already described Steven Shapin and Simon Schaffer detected the controversy between Thomas Hobbes and Robert Boyle in 1660s, which illustrates a highly political situated discussion showing that the winner of the controversy was depended upon politically strong allies:

> "… their characteristic forms of intellectual product depend upon the political success of the various candidates in insinuating themselves into the activities of other institutions and other interest groups. He who has the most, and the most powerful allies wins" (Shapin & Shaffer, 1985: 342).

Another classic example within Science, Technology and Society Studies (STS), that has already been mentioned earlier is the research of how Louis Pasteur invented the vaccine (Latour, 1988),

which also shows how: ”Pasteur's public posture on the issue seems to reveal a quite high degree of sensitivity to reigning socio-political orthodoxies” (Farley & Geison, 1974). These political and economic interests are not explicitly present in the notice of the Velux Foundation in relation to the Covid-19 crisis, on the contrary; there was a very open and unlimited approach as to how to explore the crisis. However, the Velux Foundation's demand of a data collection became of great importance to the DEL project because it came to shape and manage the DEL project's final result; the archive.

In summary, a general new approach initiated by the major foundations can be observed. Firstly, there is a focus on speed and emergency in relation to research, secondly a general notion that an open exploration of the Corona-19 crisis could benefit society and prepare us for future scenarios. Thirdly, there are were few restrictions on how this exploration should take place.

As seen in the previous illustration with the main actors that led to the creation of the DEL project (figure 2), Covid-19 caused the Velux Foundation to react with large funds to investigate the pandemic. The researchers in the DEL project responded to this call and accepted the premise of documenting without an actual problem formulation. In fact, researchers saw it as an opportunity to test digital methods in a whole new way and on a whole new large scale. This network shows how the foundation and the researchers interacted, which raises the question of whether the foundations' new approaches to research have contributed to a rediscovery of theories and methods in the social sciences, a pandemic turn in research?

The theoretical framework of "The Digitalization of Everyday Life"

In the DEL project there is a special focus on digital technology in everyday life among Danish citizens during the crisis. This interest in citizens use of digital technologies in social science is far from new. Anthropological studies of citizens' digital technology use can be traced back to the 1960s (Hymes, 1965). The anthropologist Tom Boellstroff wrote in 2008 that "humans have always been virtual" (Boellstroff, 2008). Other notable scholars such as professor of philosophy Luciano Floridi, introduced the neologism ""onlife" refer to the new experience of a hyperconnected reality within which it is no longer sensible to ask whether one may be online or offline" (Floridi, 2015: 1). However, this focus on digital technologies have gained extra focus during the Corona crisis, due to the international shutdowns that caused digital communication technology to expand to a level not seen, or experienced, previously.

To study how digital technology has affected citizens' everyday life, the DEL-project drew inspiration from the theoretical framework of Sarah Whatmore, and her use of the term "ontological disturbances" (Whatmore, 2009: 587). The term draws on theoretical reflections from Michel Callon's "*Hot situations*" (1998), Bruno Latour's "*Matters of concern*" (2003) and Isabelle Stenger's "*Experimental events*" (2005). Sarah Whatmore describes it as the following:

> "… moments of ontological disturbance in which the things on which we rely as unexamined parts of the material fabric of our everyday lives become molten and make their agential force felt" (Whatmore, 2009: 587).

With this theoretical framework as a springboard, the DEL-researchers started to reflect on whether this ontological disturbance could also be a movement with new democratic possibilities, where digital citizens could active participate in the design of the digital systems that would affect the organisation in the home and the contact with state authorities and institutions (Winthereik, Neergaard, Munk, 2020: 71).

These democratic considerations were also inspired by Christopher M. Kelty, who argues, that participation possesses a grammar, that we have yet to understand, and until we gain a better understanding of that grammar we will continue to produce "too much democracy in all the wrong

places" (Kelty, 2017: 78), and he continues that participants are "very much depending on the speaker, the context and the moment in history" (Kelty, 2017: 78).

These theoretical frameworks, ontological disturbances and the question of grammar of participation, made me reflect upon similar discussions during the French Revolution. For example the "*Declaration of the Rights of Man and of the Citizen*" (*Déclaration des droits de l'homme et du citoyen*), which was a fundamental charter of human liberties, containing the principles that inspired the French Revolution and drafted by the French National Assembly served as a preamble to the 1791 Constitution.

This charter and the historical events have generally been seen as a moment in history where the elite was overthrown, and citizens gained more participation in the creation of new rules. As written in article 1 of the Human rights declaration: "Man [Les hommes] are born and remain free and equal in rights. Social distinctions can be founded only on the common utility" (Kristensen: 1989: 11). However, Olympe de Gouges, a women rights advocate, wrote a letter in 1791 pleading for a change in the declaration's grammar to include women, [femmes]. She wrote: "A Woman is born free and lives equal to man in her rights. Social distinction can be based only on the common utility" (Levy, 1979: 90). Olympe de Gouges attempt to include women in the declaration was in vain, instead she gained powerful enemies, which led her to be executed by the guillotine at Place de la Concorde in 1793. This extreme historical case, illustrates how grammar, quite literally, can have great significance in the understanding of participation, and the case also shows how ontological disturbances can lead to everyday structures becoming "softened", which can enable the creation of a new grammar for participation, or the opposite 'execution' in the case of Olympe de Gouges.

This historical example can also help to illustrate the DEL-project, which had a hypothesis that this movement of ontological disturbances caused by the Corona crisis, could be a moment where democratic participation was reordered and up for new debate. However, the DEL-project's hypothesis was not blind to the possibility, that not everyone had the same opportunities to participate in defining a new grammar for community participation, as illustrated by the example of Olympe de Gouges from the French Revolution. Therefore, the DEL-project was also sceptical about whether this situation was exclusively positive, because it was hard to predict whether situational participation was solely good or bad (Kelty, 2017: 77). These theoretical considerations were some of the

underlying cornerstones of the empirical study carried out by the DEL-project and the associated researchers.

Self-reflectivity, Auto-ethnography and Covid-19

The large scale of the Corona crises also influenced researchers' own normal everyday rhythms, and rituals were affected. Current research processes and practices were therefore also disrupted. Britt Wintererik described it as a time when the work process, which now only took place via the digital platforms, became far more efficient, but at the expense of more informal conversations with colleagues (Kjærulff, 2020: Podcast, Corona-eksperimentet, part 1). One of the research assistants also described how he lives in a collective with eight people, where at one point one of his roommates had to go into isolation, at the same time he was conducting interviews with informants about Covid-19 (Kjærulff, 2020: Podcast, Corona-eksperimentet, part 3). Covid-19 therefore became both a research object but was at the same time something that deeply influenced the researchers' own everyday life. This duality was therefore an important criterion throughout the DEL project.

Qualitative research is often described as a method for giving voices to others, as Rothman puts it: "In qualitative work, we often strive to give voice to people who might not otherwise be heard. We quote, describe the person, the setting" (Rothman, 2007: 12). However, as Rituparna Roy and Shinya Uekusa argues, there are times when researchers obscure or forget that their daily life is also part of the society explored. In the same vein Francis & Hester argue: "...the researcher is as much a part of the social world as anyone else." Scholars such as Roy and Uekusa have therefore advocated for auto-ethnography during the Covid-19, as a way to keep collecting and analysing data during the pandemic, and reflections of academic's own experiences or auto-ethnographic accounts have increased during the Covid-19 pandemic (Utoft, 2020), (Endo, 2021), (Katila, Gan, Goodwin: 2020), (Roy, Uekusa, 2020). Similar discussions about personal experiences and how Corona affected the researcher's own life constituted a major part of the beginning of the DEL-project. It was openly discussed and reflected upon how Covid-19 had led to the use of different digital technologies in their own life.

However, the auto-ethnography has also been criticised for its non-accountability, non-generalizability, and non-representativeness as well as its potential for narcissism and self-indulgence (Roy, Uekusa, 2020: 388). "The other limitation is that, since auto-ethnographic research

is often produced by scholars who are generally in a privileged situation, they are not always representative of the mass of the population" (Roy, Uekusa, 2020: 389). This was also a big discussion on the DEL-project and was also one of the reasons for the introduction of the digital method protocol, which acted as a kind of obstruction for the researchers own experiences and ideas about the effects of the Covid-19 pandemic. This will be described in much greater detail in the following sections.

These social scientific traditions and methods had during the Covid-19 taken on a whole new and active significance. Researchers had to recognise themselves as part of the social world, at the mercy of the same pandemic as everyone else.

The Four protocols

The inspiration from theoretical theories and the research on experiences, influenced the creation of the four protocols, which became the keys to collect the data. The four protocols were as mentioned earlier; a) the Digital methods protocol, b) Interview protocol, c) participant observation protocol and d) Mobile Ethnography Protocol. See figure 3

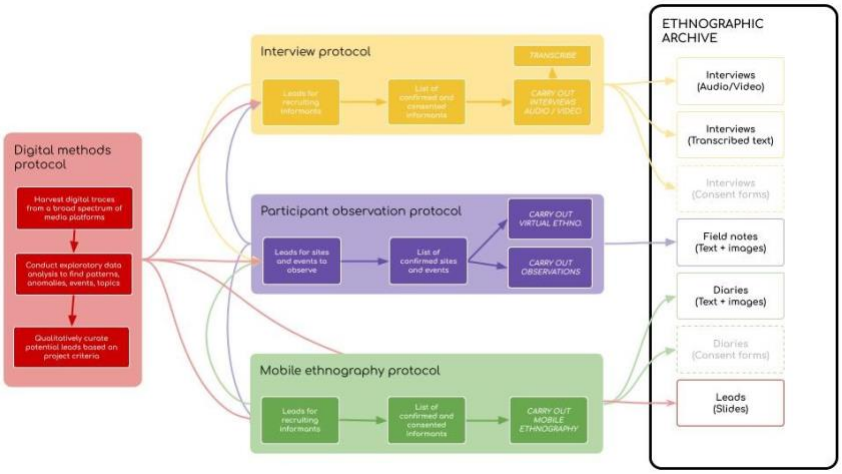


Figure 3: Four different protocols (Winthereik, Neergaard, Munk, 2020: 73).

As illustrated in the figure, the four protocols were linked and entwined, and the three protocols: Interview protocol, Participant observation protocol and Mobile ethnography protocol were all influenced by the leads and contexts produced in the Digital methods protocol. All four protocols were collected in an ethnographic archive, where the interview protocol contributed with interviews (audio/video) and transcribed interview text. The participant observation protocol resulted in field

notes both as text and images. The mobile ethnography protocol contributed with ethnographic diaries in form of both text and images. The digital methods protocol, resulted in a visual PowerPoint that illustrated all the leads found through the course of the project, both observed and unobserved. The four protocols resulted in a data collection consisting of 230 interviews, 80 online observations, 145 digital leads, and 60 mobile diaries, which was compiled into one big archive (Winthereik, Neergaard, Munk, 2020: 72).

In the following section a description of each of these protocols will appear, and in each of the sections there will first be a description of the protocol, then there will be a description of the work process, and the issues that were raised throughout the process and finally, there will be a summary and perspective on how these specific examples of the DEL-project could contribute to an understanding and investigation of whether a pandemic shift has taken place within social science.

Digital Methods Protocol

The digital method protocol's first task was to establish a digital research field during the first Corona lockdown, where the researchers were uncertain of how to define the field. The idea presented by the DEL project was that by establishing a digital field of research, events and informants could be traced. The digital method protocol's goal was therefore, to create a field of interest that could be observed more in-depth by the ethnographic protocols: The Interview Protocol, Mobile Ethnography protocol and Participant Observation Protocol.

The idea behind the use of digital methods in an ethnographic project was inspired by theories and methods of Bruno Latour, Tommaso Venturini and Anders Kristian Munk, one of the project managers, who had experience with digital methods from previous ethnographic projects. The benefits of digital methods are according to Venturini, that digital methods can be used as a way to explore, raise questions and visualize controversies (Venturini, et. al., 2015: 3). Digital method can therefore be a tool to discover new ethnographic patterns that probably would not have been apparent otherwise. Digital methods can also be helpful in avoiding ethnocentrism, as the method is not based solely on the ethnographer's presumed ideas about how Corona affects citizens. Instead of relying solely on ethnographers' own ideas about what might be interesting to follow, digital tools are used to gather digital empirical data that can "reveal" which actors are relevant to follow. Digital empirical data is source material that is made possible and conditioned by one of the web medias, in this case social medias, such as Facebook and Twitter (Birkbak & Munk, 2017: 28).

The use of digital methods has been used to explore a variety of things, for example the project "What's Cooking on Thanksgiving", which studied American food culture in the days leading up to Thanksgiving (Birkbak & Munk, 2017: 27-28), or a study of obesity in United Kingdom, through analysing 82,449 Instagram post (Munk, et. al., 2016). However, using digital methods to investigate a crisis on the scale of a global pandemic, was a task that had not been attempted before by any of the researchers in the digital protocol group.

The DEL-project's aspiration was therefore to combine the quantitative onlife traces gathered by the digital method team with more qualitative ethnographic methods. Munk describes this idea as a quali-quantative complementarity analysis: "Interpreting insights from a quantitative analysis of onlife

traces by situating these insights qualitatively in the everyday environments that they claim to reflect" (Munk, 2019: 162).

The use of digital methods on this scale was completely new terrain to the digital method team, and no one had an exact idea of how this could be done. This situation led to an atmosphere of great enthusiasm, which could be characterised as playfulness, and as one of the research leaders expressed it at one of the weekly meetings: "This is a unique opportunity to test a whole lot of different digital methods. This should be a fun process" (observation notes). This atmosphere was also important for us who worked as study assistants in the digital method protocol, as we were encouraged to think in creative solutions on how to create or rethink digital methods when attempting to establish the field and finding new leads or informants.

This protocol will be examined by providing concrete examples of how the methods and ideas evolved over time through various discussions. In a field of research that was not yet clearly observable. The focus will be on new interpretations of methods within social sciences in a pandemic era.

Work Process: Testing Digital Tools

One of the first methods used in the digital method protocol to observe the Corona crises' effect on citizens in relation to use of digital technologies was "Google Search Trends", where a scraper was built. This scraper took the top 20 trending search terms in Denmark. Afterwards a researcher from the team looked into each of the trending terms, to investigate whether it would be relevant to examine these trends further, and furthermore to register how the trends changed over time, according to what people searched for on Google. The method had previously been used by some of the researchers in other projects as a way to generate leads, that reached a broader audience. The researchers found this method useful for identifying major trends and themes. However, the first issue that the researchers faced by using this method, was that the leads were often too broad a description of the effects of the Corona crises, to the degree that it at times did not generate new leads or contexts, but instead confirmed already established preconceived ideas about the effects of the crises, contrary to what the protocol was initiated to do.

There was therefore a general discussion in the research group on how to make or re-design digital tools, which could generate more actionable leads that the ethnographic groups and research groups could proceed with.

In this attempt to generate more actionable leads the digital method protocol initiated the "Bing News Search" method. One of the researchers created a python script called the Bing website's Application Programming Interface (API), which collected newspaper articles about Covid-19. Newspaper articles in over 80 different towns and cities were traced and filtered for a specific and limited period. Afterwards the data output was visualized in the program Tableau, to create an interactive user interface. (see figure 4)

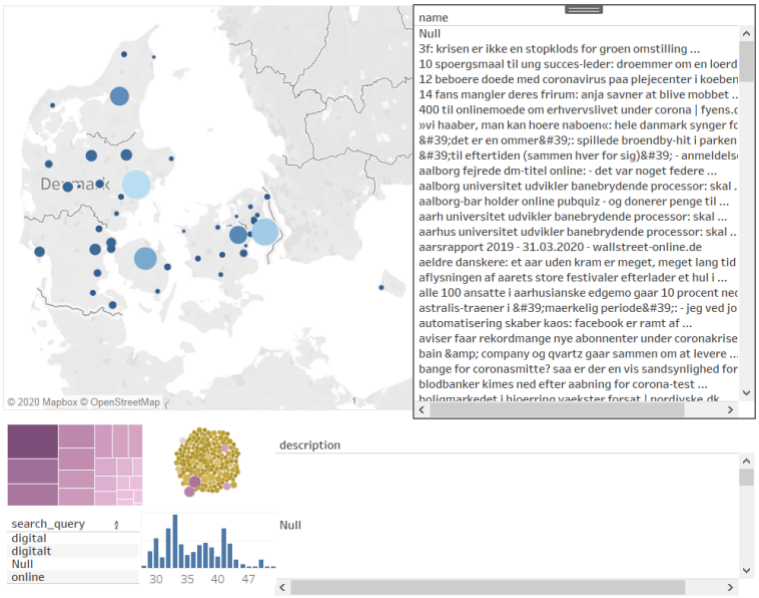


Figure 4: *A interactive Tableau dashboard, that illustrate newspaper articles, with the keyword "online" or "digital" and where in Denmark the articles has been published.*

Tableau allowed the researchers to create a geographical map of all the articles published in the individual towns and cities in Denmark for the specific period. For example, an article in *Jydske Vestkysten*, described how a young saxophonist from Ribe gave a live Facebook concert every day during the lockdown, another article from *Fyens Stiftstidene* described a choir leader who created a new online choir, where 200 people were singing together separately. These concrete actionable leads were then passed on to the group responsible for online observations.

Another method created was a Twitter dataset. This dataset, called Twitter API, collected data through different search queries of hashtags such as “coronaDK”, “Denmarklukkerned”, “samfundssind” and “støtlokalt”, which provided a huge dataset. The problem with this enormous dataset was that it was difficult to visualize. This raised the enquiry within the digital methods group, of what kind of questions that should be explored within the dataset. This required considerations, explorations and selection of the data, which resulted in a phase, where the data were cleaned. The cleaned dataset was then transferred by the researcher(s) to the data program *Gephi*, that enabled a visualization of a network on how the different hashtags related to each other. This can be exemplified in Figure 5:

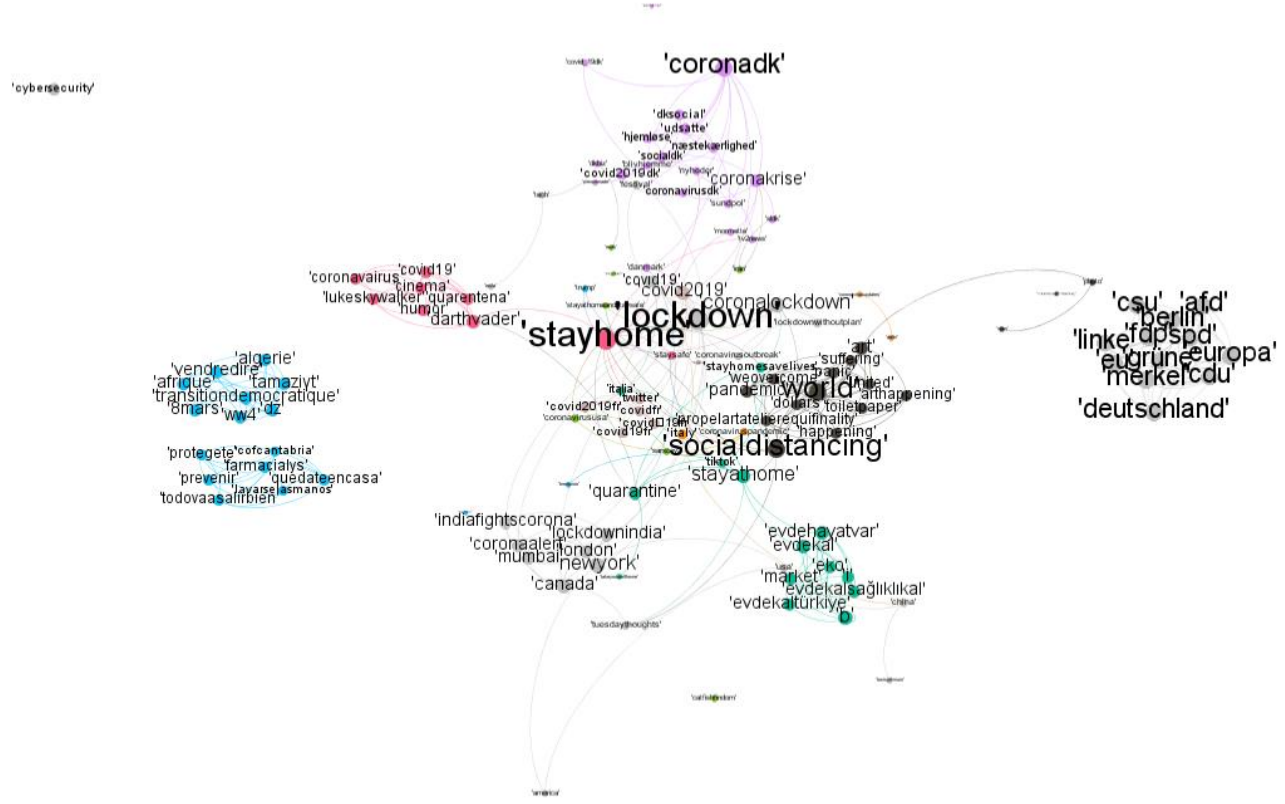


Figure 5: Monopartite co-occurrence network created in Gephi. The digital data is from hashtags scraped from Twitter.

The figure illustrates different hashtags creating a network of different discursive patterns. For example, the pink cluster at the top of the figure illustrates different hastags, about “Dksocial” “udsatte” “hjemløse” “næstekærlighed”, which could be seen as a visualization of a debate about the homeless and how their lives are being affected by Covid-19 during the national lockdown.

This process shows how the researchers directly select data in the huge data stream to get the relevant information. However, figure 5 did not tell the researchers what the context was for the different debates. To investigate this, the leads were passed on to the researchers in the interview, observation and online protocols, who investigated the debates ethnographically, which in the project was described as a quali-quantitative complementarity analysis.

The pink cluster was much debated, because in relation to the homeless, methodological limitations also became apparent for the researchers, due to the fact that most homeless people do not have access to a computer where a possible interview could be held. This indirectly also raised questions about the degree of representation in the DEL-project's inquiry. Another related issue was noticed and became apparent, after around two months of generating leads as many of the leads began to resemble each other. Leads about academics, university students, and yoga classes had become common. This led to discussions about what type of people and events the digital method group had found so far, and questions were raised, if the digital methods implicit have bias towards actors who had a central role in either the general debate, or in sub-cultural groups on social media, i.e. a collection of the strongest actors in the various networks. Munk later stated that the team in the digital protocol began to get the impression that the powerful actors on the digital platforms were often people who had prior knowledge of the digital media, and not necessarily people who were the most qualified (Kjærulff, 2020: Podcast, Corona-eksperimentet, part 1). These questions were raised in a broad discussion between the four protocols, which led to considerations about how other leads could be found concerning more diverse or marginalised actors. This debate sparked a shift in how leads were found, and the project entered a new stage.

Spearfishing Leads

Discussions about how the project could reach wider into marginalised groups that had not previously been "captured", resulted in the launch of a new method: Spearfishing leads. This method was unlike the previous digital methods, which had caught leads in a large fishing net.

This method was now initiated on the basis of information passed on to the digital team from researchers from the mobile and ethnography teams. The way the project had worked so far had now been reversed. The method had so far been that leads came from the digital team and passed on to the other teams, now it was information from the other teams that the digital team investigated.

Spearfishing was therefore a method where the informants were already defined in advance and were directly searched for. The spearfishing lead focused more on marginalised groups as for example unemployed, people with physical disabilities, people in the therapeutic process, sex workers, high school students especially first- and second-year students and Muslims celebrating the Ramadan, which was held during this period. The introduction of spearfishing leads therefore signified a new way to search and find informants in the digital method protocol. The figure below shows an example of how a spearfishing lead was investigated. It is an illustration of a network of ten different high school Facebook sites, and how these high schools communicated with their students:

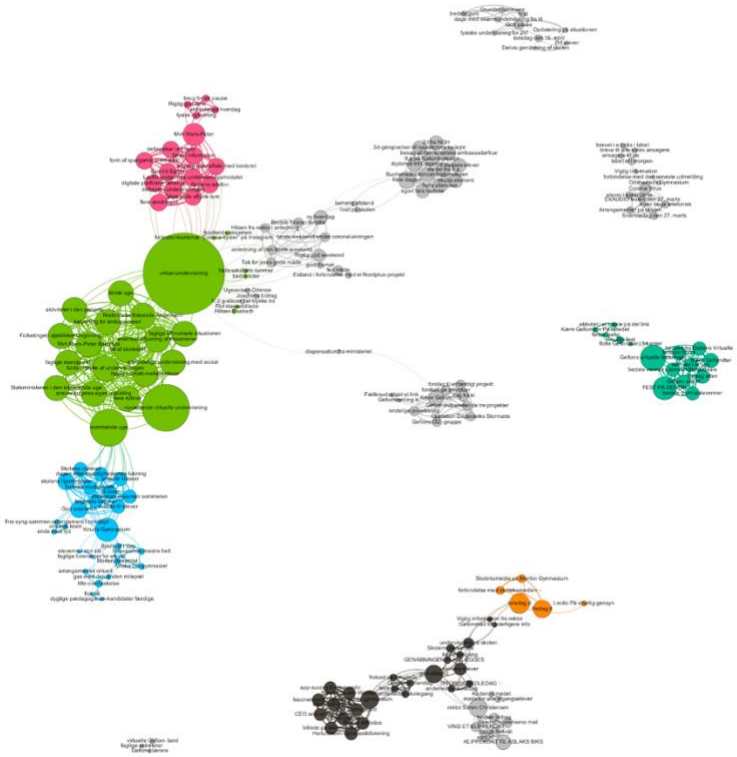


Figure 6: Monopartite co-occurrence network created in Cortext and visualized in Gephi. The network has been created from digital data scraped from ten high schools, using the program Facepager.

This spearfishing illustration shows some of the specific discussions that unfolded during the first lockdown at ten different high schools in Denmark, for example discussions about holding virtual parties, and the principal's message to the students that during the lockdown they had to be "responsible for own learning." In this specific case the spearfishing was followed-up with interviews of some of the students from the ten high schools, conducted by researchers in the interview protocol.

Thus, a shift in the way data was collected in the digital protocol could be observed. From capturing data with large fishing nets, the capture of data was now more targeted and pre-selected through the introducing of the spearfishing method. It also showed how quali-quantative complementarity analyses was made in practice, as relevant information was shared across the ethnographic and digital teams, and not only from the digital team to the ethnographic teams.

”Just Observe” and Attentional Obstructions

To situate these processes and discussions that occurred throughout the digital methods protocol, I want to turn the attention to a lecture held by Bruno Latour twenty years ago at *École des Mines de Paris*, about cartography of controversies. Because cartography of controversies could be seen as the predecessor to what today is known as digital methods. During Latour's lesson he famously stated: "Just look at controversies and tell what you see" (Venturini, 2010: 258-259). An immediate easy task at first glance, except for two small problems "just" and "controversies", as Venturini points out: For "as often in Latour's discourse, the smallest word carries here the greatest meaning" (Venturini, 2010: 259). Because the method: "Just look at controversies and tell what you see" does not entail researchers with established and grounded theories or methods, quite the opposite. It is an invitation to use every tool and method, and even connect these in new ways. This is in many ways, reminiscent of the situation the researchers faced in the DEL-project: 'Just go out and observe'.

These challenges are to a certain extent similar to the discussions shown in the movie *The Five Obstructions* by Jørgen Leth and Lars von Trier. The film is an attempt to uncover "film in the making". During the movie Lars von Trier gives Jørgen Leth the task, they called it "punishment", that there must be no obstructions or rules in his next film, after which Jørgen Leth immediately exclaims: "That is diabolic. I don't like that. I can't make a movie without having some obstacles" (Trier & Leth, 2003: 46:09). This was more or less the same situation faced by the team of researchers in the digital methods group, having no obstacles.

The digital method protocol had no built-in obstructions in the first months of the project. It was one of core premises of the digital method group, partly to be as open in their study as possible, but also because the digital protocol acted as a kind of large sieve, where less relevant information was sifted away before data was passed on to the ethnographic teams. The Digital method team thereby acted as a kind of pre-built obstacles for what the ethnographic teams should explore.

The tables then turned with the introduction of the spearfishing leads, because these leads were presented by the researcher from the ethnographic protocols. Thus, the ethnographic protocols suddenly presented obstructions about what the digital method protocol should search for. The different protocols therefore shifted to obstruct each other throughout the process.

The introduction of spearfishing could also be seen as a countertraction to a general critique of *ANT* raised by for example, Susan Leigh Star. She asks, is *ANT* "too managerialist, that is too focused on the managers, the leaders and the powerful within science and technology? What about the marginalised?" (Star, 1990). The introduction of spearfishing in the digital method protocol can therefore be seen as a way of selecting data so that marginalised groups had its impact on the overall picture of the Danes' use of digital technologies and behaviour during the Corona lockdown.

The first half of the digital method protocol was therefore mainly inspired by Bruno Latour and his *ANT* network theory, where focus was on large scale digital fishing, with the goal of trying to identify an unknown field. Whereas the other half had more focus on specific actors who were not the most powerful actors in the network, such as sex workers and homeless. An approach that can be seen as influenced by critics of *ANT* by Susan Leigh Star.

The digital method protocol was significant in its almost playful approach to this extreme situation. For the researchers it was an opportunity to try out many different digital methods and see how well suited these different methods could be used during a large-scale crisis. A huge array of different exploratory ways of observing online traces and data, was initiated. Along the way many methodological, analytical and qualitative choices were made to collect data about the Danes' use of digital technologies.

By not relying on predefined research questions, but instead collecting data through the use of digital methods to investigate the complex and diverse contexts the Corona crises had caused, the digital method protocol could therefore be seen as part of a new social scientific way of trying to uncover a large-scale crisis.

Interview Protocol

The section on the interview protocol, will be an investigation of how the different leads identified through the digital method protocol were studied, more in-depth by through using ethnographic methods, and how these methods and initiatives were changed due to the Corona lockdown. This is the case especially in connection with the practice of contacting informants, and the actual interview situation that was conducted via digital technologies. The focus will also be on the interview guide, and how these questions and answers affected the project's final documentation.

These questions will be investigated through describing the different stages and processes of the interview protocol. In the start-up phase, the development of the interview guide was in the forefront. This work was followed up by a process where the focus was on contacting informants and making as many interview appointments as possible, and the final phase where the focus was primarily on conducting as many interviews as possible.

The Interview Guide and demographic data

The interview guide, which was compiled consisted of 18 general questions, with accompanying sub-questions. The interviews lasted on average between 30-45 minutes, and the interviewer made the informants aware from the beginning that all interviews will be anonymized. The interview guide was designed in both Danish and English, so it was possible to interview non-Danish-speaking citizens as well. To describe the interview guide, an illustration created by one of the research assistants can be seen below, which gives an overview of how the various questions were thought in the larger context.

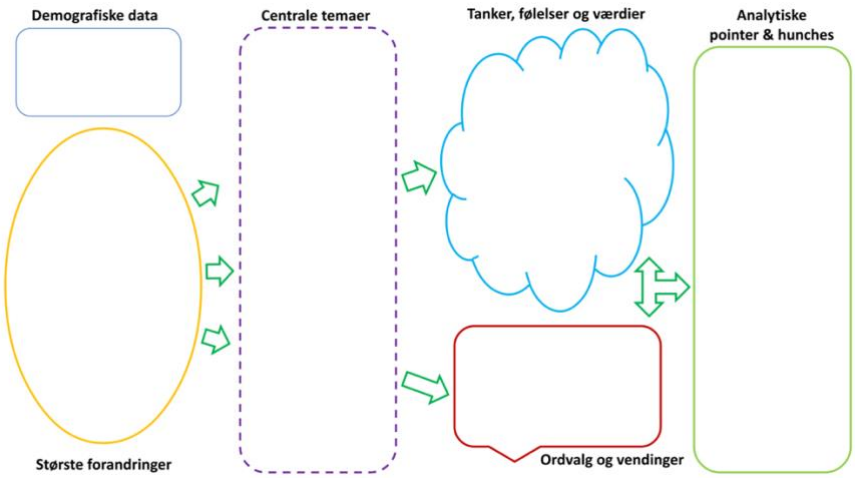


Figure 7: *A illustration of how the different interviews questions was seen in a context, and what the interviewer should pay attention to.*

The figure shows the intention, that the questions about the central theme, the use of digital technologies, could be answered in many ways. Hence, the interviewer did not seek a concrete answer, but was open to thoughts, feelings, and values and that the interviewer should be aware and responsive of word choices and phrases, that could lead to analytical points (Rowley, et. al., 2012: 94-95).

In the interview guide, a question was raised about demographic data as seen in the figure. The question was: "Tell me a bit about yourself" followed up by "How old are you? Where do you live? What do you do - do you have a job, are you studying? How many live in your household?". Here the informants describe their gender, age, work and family relationships. The demographic data was in the beginning of the project intended to play a large role but was during the course of the research phase toned down. In the final archive, the informants are not categorised based on a classic categorisation of population groups, such as "gender" or "education". The reason for this change can be read as an effect of the extent of the Corona crisis, "ontological disturbances", which thus also had an impact on the classification system. Instead, the researchers changed the classifications in the archive focusing more on ideas or discussions due to a concept that a firefighter could have experienced the same as a nurse or a high school student.

The following questions in the interview guide was primarily about change in everyday life and use of digital technologies, such as: "Tell me about the biggest change in your everyday life that you have experienced during the Corona-pandemic", and "Have you made use of any digital platforms during this time of crisis to keep a hold on your everyday life?"

The interview guide was therefore in itself not appreciably different from general and non-digital ethnographic questionnaires.

Contacting the Informants

The informants for the interviews, were found through the digital leads, online digital observations and through personal networks. Particular digital platforms such as Facebook, Twitter, LinkedIn,

became important tools for contacting informants. There were different ways of which informants had their first encounter with the research project. This varied according to which of the protocols contacted them. The first contact the informants made with the project could look like the following, which was a standard letter based on the premise that one of the research assistants from the observation protocol had participated in an event, and subsequently wanted to interview a participant:

> Dear [X]
> I'm writing because I recently attended the [XXXX] event that you [were a part of].
>
> I participated because I am part of a research project that examines everyday digitization during the corona crisis. In short, the project traces ethnographic material picturing how digital media plays into the change that the lockdown and the gradual reopening of Denmark entails. You can read more and give consent to participate here: https://deltagelsensgrammatik.itu.dk/.
>
> In that regard, I think [the event the other day] was particularly interesting, and would like to hear if you would like to share your experience of it in an interview?
>
> Such an interview will typically last between 30 and 45 minutes and take place via Whereby - a service that works like Skype but does not require you to download a program. I will send you a link when we have made an appointment. To participate, you must be connected to the Internet. If you are not comfortable with the interview taking place over Whereby, then let us know and we will find another solution. The interview will be recorded - but only audio, not video.
> [Own translation] (Microsoft Teams: Unpublished template for recruitment of informants).

Another first encounter with the project, could be through Twitter, where the research assistant from the digital protocol, had made a Twitter bot. The bot automatically sent out the message "would you like to participate in an academic study of everyday digitization during the corona crisis":

Figure 8: *An example of how the DEL project utilized the Twitter Bot.*

These examples only constitute two of several other ways in a wide network of how the project team contacted informants to participate in the project, resulting in over 230 interviews.

The fact that all informants were contacted digitally either via email, or through social media is significant for how the first encounter between the interviewer and the informant unfolded. If one think about a classic field study, where an ethnographer is out in the field and through an organic participation in the physical space will end up interviewing different participants, the DEL-project differed significantly, as the interviewer in most cases had more information about the informant, than the informant had about the interviewer.

The interviewer had information about the informant either through having participated in an event, or through the digital leads, as seen with the example of the Twitter Bot. Whereas the informant in most cases was not at all aware that they were in the process of being screened to participate in an interview before they received a message from a researcher of the DEL-project. This digital way of contacting and finding informants is not new in the social sciences. However, new methods of

initiating contact with informants were innovated through the DEL-project, the Twitter Bot is a good case in point.

Digital Interviews and technological actors

The interviews were, as previously mentioned, mainly conducted on the digital platform *Whereby*. *Whereby* was used, because this program did not require an app or any software to be downloaded. It therefore made it easy for the participants to connect to the digital platform, because the participants did not have to use time to download a program beforehand. This digital form of communication also meant that the interviewer and informant could communicate no matter where in Denmark they were placed, breaking down physical barriers which of course is inherent in digital commutation.

In *Whereby* the interviewer and informant could see and hear each other. However, only the sound was recorded by the interview team. The fact that the interview situation took place digitally meant that digital actors were at stake while the interview was conducted. Important digital actors such as the internet and the digital platform itself *Whereby,* played a major role by being the tool in which communication took place. The digital actors also mediated the conversation between interviewer and informant. This became apparent when there were technical issues with *Whereby* or the Internet. In the quote below, the informant forgets to unmute herself when she herself had to speak. Which is a clear sign of a factor that would not be present in an interview that took place physically in the same room.

> "I: Hov, hello? Now I cannot hear you, hello?
> P: Yes, I'm there, can you hear me?
> I: Yes, now I can hear you again.
> P: Yeah, I just forgot to press, sorry.
> I: There is also a lot to keep track of
> P: It's a little frustrating"
> [Own translation] (Doc: 200505_RONJA_WB).

These digital actors, as here with the mute/un-mute button, were also present when the Internet connection was unstable:

> I: Sorry I'm interrupting you, but you're lagging. I cannot hear what you are saying.

P: Ok. is it fine now?
I: It's a little better now, but I'm wondering if we should try without video, if maybe the sound gets a little better that way. I could not hear what you said at all.
P: Ok. Is it better now?
I: I can barely hear what you're saying. Please try again.
P: [ed. long pause] [inaudible 06: 06]
I: What did you say?
P: Can you still not hear anything?
I: I think it's getting a little better now. Let's try again
[Own translation] (Doc: 20200605_JONAS_N).

These short excerpts from interviews show that there was a collaboration around the digital media between informant and interviewer. This kind of collaboration can also be seen in the quote below from a conversation where the connection between informant and interviewer was severed, resulted in them using a cell phone in an attempt to resolve the disconnected connection:

I: Hello? [talking on the phone] Hi, well I sometimes think that what can happen when you are on the program on your phone, when the screen then goes black, or goes into hibernation, it stops the call. So, I think you should click the link again…

… Yes, otherwise try to turn off the link and then press it again so that it opens again, it may help. I do not know (laughs). Yes, then you can just press join meeting. Yes. Yes, cool, thank you.
Hello? Yes, now I can hear you.
[Own Translation] (Doc: 20200505_RONJA_WB).

These digital actors, such as *Whereby*, Internet connection and mobile phone, made it possible for interviews to be conducted during the Corona lockdown, and for informants from all over Denmark to be interviewed. The digital actors also had an impact on the interview itself, which occasionally interrupted the conversation, but the digital actors also created collaboration between the interviewer and the informant, and as can be noticed from the examples, the interviewer was also often given a role as the digital supervisor. The important role that digital actors played in interviews could also be seen as indicator of how crucial digital technology could become for social sciences in the future.

From this review of the interview protocol, trends towards a digital sharpening of previous methods could be observed. For example, how the contact was established and the interview situation itself played out, where digital actors had a crucial role. The interaction between the researchers, the participants and the digital media showed that the non-human digital actors entailed a mediation between the researchers and the participants. This led to a sort of new role for the researchers; namely that of a digital tutor or supervisor. These human and non-human interactions can be read as an acceleration of digital technologies used in the social sciences, and also as a modulation of the social sciences when faced with major upheavals.

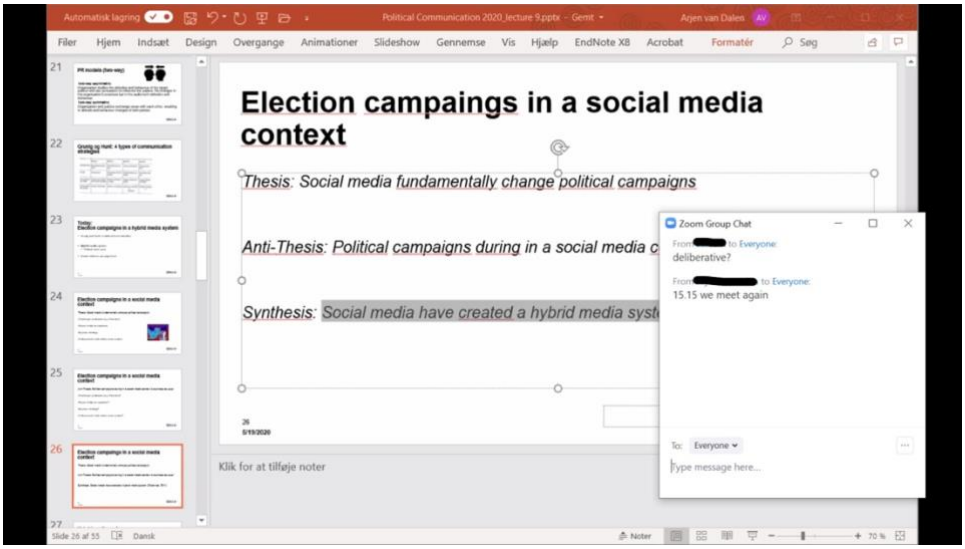
Participant observation Protocol

In this section on the observation protocol, there will first be some examples of what was observed. Next, methodological questions about the role of the ethnographer during a pandemic that also affected the ethnographer herself will be examined. Discussions about the challenge of digitally observing will also be explored. In addition, there will be a focus on discussions and considerations on how observations should be classified, and finally, the introduction of an Excel sheet will show how non-human actors contributed to the workflow of the DEL-project.

The various online events were mainly found though the Digital methods protocol. This was to ensure that the events observed reached beyond the researchers' own media sphere and circle of friends. An example of an event found through the digital method protocol, and later observed by the observation team, was a gin tasting event:

Example of participant observation protocol: *Gin tasting; We were sent a tasting package before the event. It helped to create a cozy prelude to the tasting itself and made me start to look forward - and prepare - for the tasting already a few days before* [Own Translation] (Document 20200507_JONAS_AUTO_VIRTUEL_GINSMAGNING_43).

The hypotheses presented by the DEL-project was that by observing virtual situations, one could gain an insight into a time in which virtual togetherness was being innovated by people around the world. Another observation was university lectures, for example the following lecture from the University of Southern Denmark on Political Communication:



"*The professor announces the break orally. [He also] sends [the pause message] on the chat. Possibly allowing any students who are not actively listening [to] know that there was a break? The silence subsides after the break is announced, and fills the meeting for 15 long minutes, until the professor turns on the webcam and microphone again, and starts the second half of the lecture*"
[Own translation] (DOC: 2020519_Jonas_Lecture_Politisk_Kommunikation_SDU_135).

As illustrated by the two examples above, researchers from the participant observation group took on different roles, depending on the events they observed. At times, they were active participants and in other events passive participants. Furthermore, some of the observations were based on ethnographers' own experiences at the events, inspired by methods of auto-ethnography. A total of 80 events were observed by the observation protocol.

Work process: Discussions about methods of digital participation

In the beginning of the development of the participant observation protocol, one of the discussions was, what happens when we move methods of participant observation from a physical field to a digital one? The discussion focused on how to define participation when observing digital events. For example, whether observations should be observed while the event took place or could be observed afterwards on for example a YouTube video. A question raised by one of the research assistants:

> It feels weird to ask about as an anthropologist, but now that we have moved our field online, does our observations have to be at a live event? I mean in order to make "participant" observation… (Microsoft Team: Internal dialogue between researcher).

Another question was raised whether it was important, that the observer was actively involved in the event, again raised by one of the research assistants:

> … but If I for example is streaming a live session from the church, I do not think I would have a chance to interact with the field other than being present. What are your thoughts? Thanks (Microsoft Team: Internal dialogue between researcher).

Brit Wintererik, one of the research leaders on the project, responded and argued that participation in the "participant observation protocol" was defined as *being present* during a live event. In this general question concerning participant observation, she argued that this problem applies not only to digital observations, but also to observation in general. She had previous done studies in medical practice, where she did not play a major active role, but was still participating through being present and observing:

> "Hi, participating in this context will mean being present, and you are right, these are not all events you can get a role in, but that also applies to offline / analog fieldwork. When I did participatory jobs in medical practice, it was also quite limited what I could offer. Fortunately, enough - patients would probably say  . When it comes to live events, you can say that your participation is not fundamentally different from many of the others who are 'present' (or 'on time')" [Own translation] (Microsoft Team: Internal dialogue between researcher).

Anders Munk, the other research leader of the project, further added to the discussion, that instead of seeing researchers' possibly limited opportunities to interact in a given digital event, he saw the chat feature as an important actor of that field being observed, and a possibility for the observer to be active:

> "Your opportunities to interact may also be part of the field. If you stream a live event but have the opportunity to comment in the feed while it is happening, then a dynamic element has been added" [Own translation] (Microsoft Team: Internal dialogue between researcher).

These questions and answers show how the crisis contributed to fundamental discussions about ethnographic fieldwork and auto-ethnography. The new context also added new actors into the network, such as chat features that suddenly played a role in how to be an active participant in an event.

How to categorise and understand the different observed events

As time went on, more and more events were observed, which raised questions on how the different events should be understood in relation to each other. At a workshop held by the project, where various associate professors and professors for AAU and ITU were present, a figure was produced in which all the different events observed at the time were categorised and visualised:

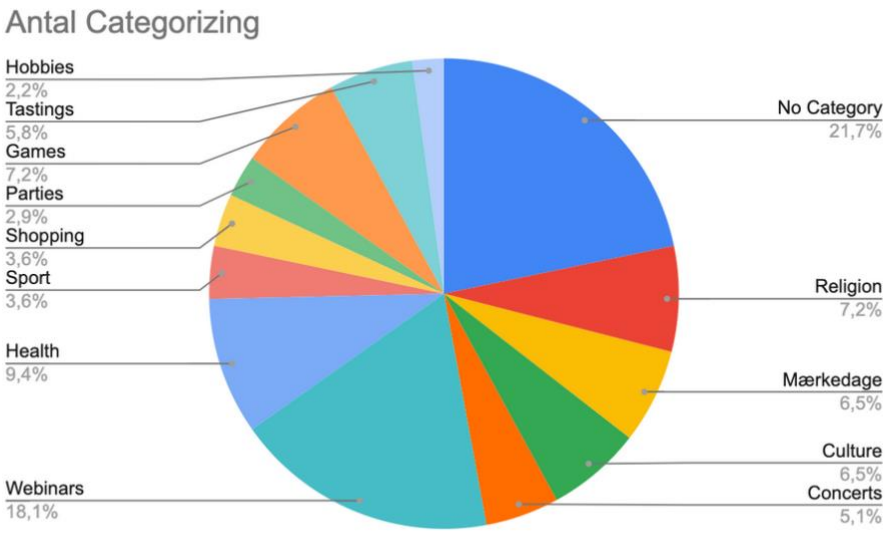


Figure 9: *Different categorizing's of the events observed, showcased at a workshop held by the DEL project.*

Some of the comments on the figure were, that the advantage of this categorization was that it gave a quick overview of what kinds of events had been observed. However, there were also several who pointed out that it might be more interesting to examine how events could be categorised as the same, but still be vastly different in context. For example, there were many online events involving virtual bingo, during the first lockdown, but the way the various organisations held these virtual bingo sessions, were very different. For example, *Absalon*, a cultural centre in Copenhagen known for holding weekly quizzes and community events, moved their bingo, which normally took place in a physical space, into a virtual one. Whereas *Blume*, a flower shop in Grindsted, held bingo, an event

that was not common practice for this store. Bingo could be categorised in the same genre, but the Corona crisis had caused the game to provoke different processes, was the argument.
It was also argued if for example "games" was created as a category in the final archive, then the category would probably channel researchers to look for similarities between actors who may not have much in common, even though they are categorised under the same category.

It was therefore discussed how to challenge these preconceived ideas, and instead focus on semantic patterns as a way to structuring the archive. This shift in approach, was probably inspired by a "multiple perspective." Annemarie Mol argues that "ontology-in-practice is multiple" (Mol, 2003: 157), she writes:

> "If practices are foregrounded there is no longer a single passive object in the middle, waiting to be seen from the point of view of seemingly endless series of perspectives. Instead, objects come into being – and disappear- with the practices in which they are manipulated. And since the object of manipulation tends to differ from one practice to another, reality multiplies" (Mol, 2002: 5).

This underlying perception of how reality multiplies influenced and coloured the conversation and came as something new to shape the project and the final structuring of the archive, from being ruled by classic categories, to opening up a multiple perspective. This shift in approach also illustrates that the development of the archive was not stable, but a process of reflections that developed on the basis of theories, and the collected empirical data.

Organising Through Excel

At some point in the work process, an excel sheet was introduced. The background for this was a need to coordinate the many observations; who was in the process of observing what, and who had already intended to participate in a given event. This confusion about who did what, was also reinforced by the fact that everyone worked from home. The online working environment made it difficult to keep track of who did what. In the beginning research assistants and student assistants from the digital method protocol began to share events, one by one, to ensure that the events found were observed:

> ”Who is going to Støvring Havnebyfest to play online bingo tonight, Thursday, at 19.00?
> https://nordjyske.dk/nyheder/online-bingo-som-hjaelp-til-stoevrings-butikker/5304a81a-b7eb-4cb3-bbce-49949c1dee65
> (we need to find a better way to continuously share Leads when an event suddenly arises like this, possibly just its own Leads Channel)” [Own translation] (Microsoft Team: Internal dialogue between researcher).

This method was still unstructured and at times created even more confusion. It was therefore suggested that an excel sheet be created, where all events should be listed including both events already observed, and upcoming events:

> ”I definitely agree that we should have some way of sharing events/leads that are upcoming.... Maybe it would also be good to have an excel sheet or something, so we have an overview what others are doing? (Microsoft Team: Internal dialogue between researcher).

This Excel sheet, which provided an overview of the various observations, was created shortly after. The main function was to convey data between the observation group and the digital method group, a mediator. See the illustration of the Excel sheet below:

	Event-name	Date of event (MM/	Time/Reoccurence	Link	Registered by	Observer (done or schedule	Observed? Y/N
59	SFU Odense højtlæsning	05-05-2020	19.00-20.30	https://www.facebook.com/e	Alberte	Jonas	Y
60	Urban Sustainability CPH:Designing Sustainable Citi	05-05-2020	19:00	https://www.facebook.com/e	Georgios Natsios	Georgios	Y
61	Webinar: Hjemløshed som socialt problem	06-05-2020	14.00-15.00	https://www.facebook.com/e	Laura	Emil	y
62	Digitalt borgermøde: Byudvikling omkring Granskov	06-05-2020	19:00-21:00	https://www.facebook.com/e	Anders Kristian Munk	Jonas	Y
63	Webinar: Food Waste and the Circular Economy – E	06-05-2020	16:00-17:30	https://www.eventbrite.com/	Katja DN	Georgios	Y
64	Brodie Sessions: Livestream festival	06-05-2020	20:00. kører også d. 7, 14, 15	https://gaffa.dk/nyhed/14317	Emil Buch Jacobsen	Lotte	Y
65	LION BABE Performance: Denmark, Around The Wo	06-05-2020	21:00-22:00	https://www.facebook.com/e	Katja DN	Katja	Y
66	Online PhD defence: Co-designing Age-Friendly Citi	07-05-2020	13-16	https://www.facebook.com/e	Lara Reime	Lara	Y
67	Virtuel ginsmagning	07-05-2020	20.00-21.00	https://www.facebook.com/e	Alberte Bau Larsen	Jonas	Y
68	Virtuel musikleg, Odense biblioteker	07-05-2020	9.30-10.00	https://www.facebook.com/e	Alberte	Lara	Y
69	Distribute 2020 - virtual conference	07-05-2020	-5/9/2020		Lara	Lara	Y
70	Online concert from Kristian's living room	10-05-2020	21:00 (recurring)	https://www.facebook.com/e	Anders Kristian Munk	Lara	Y
71	Diabetes og psyken under coronapandemien	11-05-2020	16:00	https://www.videncenterfordi	Ann-Sofie Thorsen	Jonas	Y
72	Virtuel Violin / Fiddle Workshop #8	11-05-2020	16:00-18:00	https://www.facebook.com/e	Mads S. Christensen	Katja	Y
73	O-Night: Not your usual Zoom meeting!	12-05-2020	21:00-00:00	https://www.facebook.com/e	Georgios Natsios	Georgios	Y
74	Online skrivesession: Dokumentering af flexwerker	12-05-2020	11:00-11.45	https://www.facebook.com/e	Ronja	Katja	y
75	Hjertemotion LIVE	13-05-2020	11:00-11:30 (gentages hver d	https://www.facebook.com/p	Emil Buch Jacobsen	Morten	Y
76	Go Cook – Svensk Pølseret - Livestream	13-05-2020	17:00 -18:00	https://www.facebook.com/G	Johan Irving Søltoft	Lara	Y
77	Student Life at UCN – Webinar for New Students 20	13-05-2020	14:00-16:00	https://www.facebook.com/e	Georgios Natsios	Lara	Y
78	Online mindfulness	14-05-2020	16:00	https://www.facebook.com/e	Johan Irving Søltoft	Lara	Y
79	Phlake private release concert for selected fans	14-05-2020	evening	no event	Katja DN	Katja	Y
80	Den digitale japanske café - KU	14-05-2020	13.00-17	https://www.facebook.com/e	Johan Irving Søltoft	Laura	Y
81	eDNA – Webinar om nye værktøjer til naturovervåg	15-05-2020	11:00 - 12:00	https://www.niras.dk/arrange	Johan Irving Søltoft	Lara	Y
82	Forelæsning: Politisk kommunikation - SDU	19-05-2020	14:15-16:00	https://syddanskuni.zoom.us/	Jonas	Jonas	Y
83	MS, Sammen mod racisme filmvisning og samtales	28-05-2020			Laura	Lotte	y
84	Crossfit	01-12-2020	everyday	https://www.facebook.com/b	Johan Irving Søltoft	Jonas	Y
85	Yoga Flat - Livestreamed Yoga	01-12-2020	A new livestream schedule is	https://www.facebook.com/y	Johan Irving Søltoft	Katja	Y
86	Saxofonist giver gratis koncerter	01-12-2020	Everyday: 15.00	https://jv.dk/artikel/daglige-ko	Johan Irving Søltoft	Lotte	Y
87	Virtual Jewish tour of Copenhagen	43970	17:00-18:00	https://www.facebook.com/e	Georgios Natsios	Anestis	Y
88	Online Kor	27-05-2020	19:00-21:30		Morten	Morten	Y

Figure 10: *The Excel sheet, which was used to keep track of all events that were observed and upcoming events.*

However, the communication through the excel sheet across the groups was not without problems initially, as different ways of registering events were formed across the two protocol groups. As seen by this post: this process ended with a single person being responsible for coordinating the information in the excel sheet: ”Dear Digital methods, I have a feeling that some of you are using the 'channels for recruiting' sheet differently than what I think is the right way…” (Microsoft Team: Internal dialogue between researcher).

To improve collaboration across the groups, a few researchers were then given the role to to act as a kind of bridge between the different groups to ensure a more streamlined approach.

> ”Hey fellow 'observers'!
> I've just had a meeting with the DM-team [Digital Method]. We discussed whether I should try to act as bridge between our two teams, so to speak, so that we could coordinate our efforts and hopefully make the most out of our time. What do you think about that? (Microsoft Team: Internal dialogue between researcher).

This process ended with a single person being responsible for coordinating the information in the excel sheet, as a kind of manager.

To illustrate this process, I see it beneficial to return to Latour’s classic example of the hotel key, because through this simple example, Latour shows how a network of human and not human actors interact and shape each other (Latour, 1990: 107). If we use Latour's example with the hotel key and transfer it to the excel sheet in the DEL project, we can follow the *program of action.* First the researchers and student assistants wrote a post at *Microsoft Teams* page. This was not the most effective action, because the *Microsoft Team* pages were also used for many other issues, in which the various events drowned in the large amount of information that was posted. The next action was the introduction of the Excel sheet, this greatly improved the communication between the two teams, because the events found in the digital method group now had a designated place to be registered, and the observation group now knew where to look for new events and leads. However, new issues arose in regard to how to register the different leads correctly, which led to the last course of action, that a form of “manager” was appointed, who could function as a bridge between the various groups. This process can, inspired by Latour's model of the hotel key, be illustrated as follows:

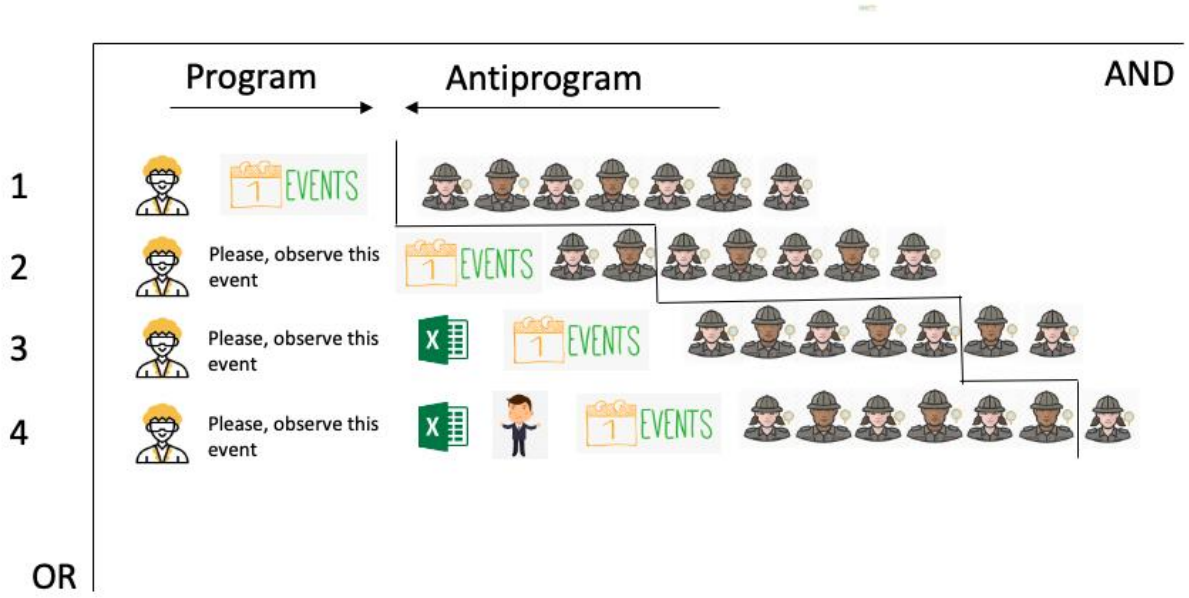


Figure 11: *A reinterpretation of Latour's classic example of the hotel manager and the hotel key, within the context of the DEL project.*

In version (4), the digital method and participant observation protocol are almost in complete agreement, in how the events should be registered and observed. Thus, several steps were taken to bring the two protocols together, where both human and non-human actors allied themselves to create a network. An example of a chain of events in which the messages were not only transmitted, but also translated into a certain behavior (Latour, 1990: 106).

This analysis of the participant observation protocol shows that fundamental ethnographic questions about how to observe were up for discussion due to the Corona crisis. It also showed that the researchers themselves were affected by the pandemic, and that they therefore included themselves as research objects in the documentation of the crisis. In addition, the collected empirical data led to questions about whether common classification models could be used, and a more open multiple perspective was selected. Finally, the study showed that networks were created in a collaboration between human and non-human actors.

These observations could again be indicative of where social science is heading, where a greater focus on openness to the classification of empirics will emerge. It could also show that in the future researcher, will most likely use far more digital technologies and that these technologies directly and indirectly will influence the research.

Mobile ethnography protocol

In this section, the mobile ethnography protocol will be examined. First, an introduction to the protocol, seen in a larger mobile ethnographic scientific perspective will be presented. Next, the use of the app *MyInsights* will be described and the possible biases associated with the app will be investigated. Finally, a summary of the different processes that occurred throughout the mobile ethnography protocol.

The data in the mobile ethnography protocol was generated through the app *MyInsights*, where 60 respondents over 14 days were asked to write a text and take photos of their everyday life during the first Corona lockdown. It was called a mobile dairy. The quote below is an excerpt of the message that all participants of mobile ethnography received via the app *MyInsights*:

> "Throughout the process, we will ask you to regularly update a diary, where you must upload images that say something about how you use digital technologies and media in your everyday life during the corona crisis. You can also upload screenshots showing what you are doing on your smartphone, tablet or computer. What you upload does not have to be new and different. You have to focus on what means the most for you, in your everyday life - whether it is in relation to work, study, leisure or something completely different"

The respondents had therefore firstly to record what digital technologies they used every day, and secondly document some of the most important everyday experiences they had during the Corona lockdown. The informant therefore had to write in their diary every day, but also got more thematic follow-up, such as "How do you keep in touch with your friends and family?". The picture below is an example of an answer from one of the respondents to the latter question:

"Typical picture of how I meet friends and family during Corona. Walks. And not with everybody. Only one person at the time"
[Own Translation] (DOCUMENT LERY/ SEGMENT LERY_1940_POST_DAG6_02-05-2020).

These uploads of text and pictures to the *MyInsight* app, were then moderated by four researchers in the mobile ethnography protocol. After 14 days, the diary project ended with an interview about the various experiences the respondents had had.

Mobile ethnography was chosen by the research of the DEL-project, because it was a useful alternative to more conventional ethnography at a time when it is necessary to be physically separated. A way to make participatory observations from a distance, and to observe how people were not exclusively bounded to their homes but developed new mobility patterns in a country that experienced national lockdowns.

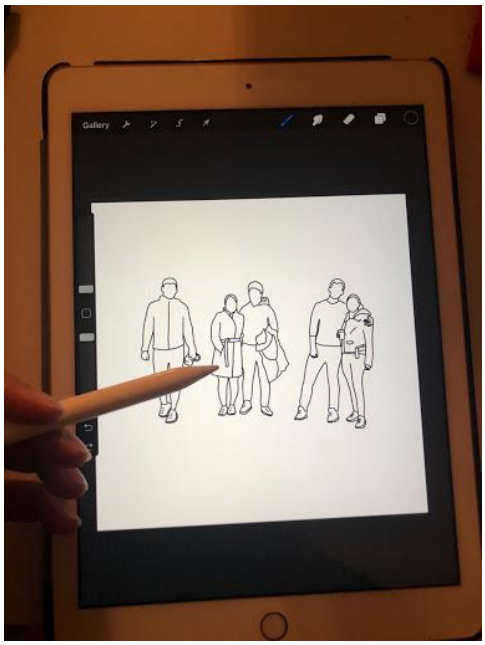
Mobility has become an important part of many scholars' ethnographic practice. Anthropologists, such as George E. Marcus and his idea about multi-sited ethnography, introduced in the article "Ethnography in/of the world system: The Emergence of multi-sited ethnography" (1995) has in this context been significant. However, the communication technologies were not something that Marcus accounted for when developing the concept of multi-ethnography, as his theory was conceptualised over two decades ago. Thus, Marcus' theory did not account for technologies such as communication technologies and how they might impact the ethnographic field site (Ahlin & Li: 2019: 4).

In the DEL-project the communication technologies such as phones and the app *Myinsights*, became important actors, and were seen as a possibility to study mobility, and the mobile ethnography protocol can be seen as an attempt to accommodate this mobility aspect in a time of crises.

The app MyInsights and bias

The obvious advantage of using the *MyInsights* app was that it was possible to perform field work without being physically present in the field. Another advantage was that the researchers could gain a direct insight into respondents' private daily lives. In addition, the technology was mobile, and could thus follow the respondents wherever they went.

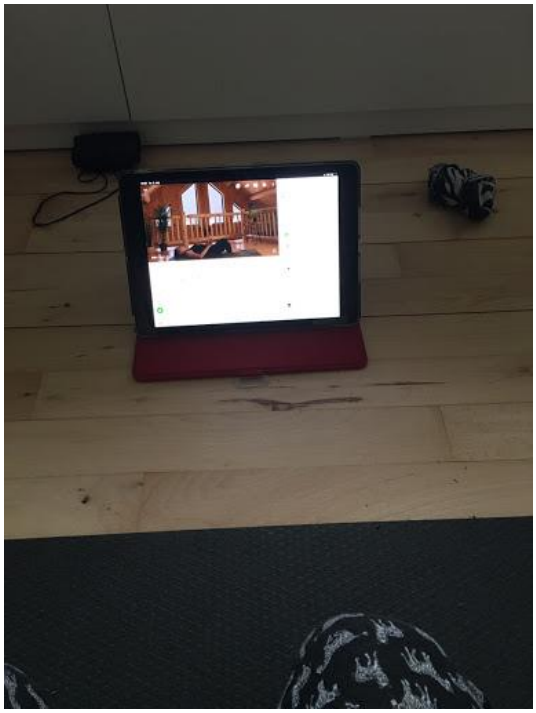
However, there were also disadvantages in using this technology. One of the disadvantages was that the respondents alone had control over what was uploaded. Another problem was that the context of the submitted material was lacking, as the ethnographers themselves had not been present in the given moments. This was, however, remedied by the ethnographers being able to ask in-depth questions about the uploaded material. Some typical feedbacks were directly related to technology and its use.



"My iPad has replaced almost all of my paper use. This applies both to drawing, but also to writing notes for lectures or diaries"

[Own Translation] (DOCUMENT MIVA/ SEGMENT MIVA_1039_ENTRY_05-05-2020).

There were also bias related to the app, as it could be a technological challenge for some of the respondents. For example, an older woman who did not feel she was technically good enough to use the app (Kjærulff, 2020: Podcast, Corona-eksperimentet part 3). here were also examples of respondents being influenced by the app, so it came to influence actions in the respondents' lives. As several informants described how the use of the app *MyInsight* had made them more self-aware of what they were doing in their everyday lives, thereby influencing what they posted on the mobile diary (Kjærulff, 2020: Podcast, Corona Experiment part 3). This type of activity could for example be exercising by doing yoga.



"Morning yoga on YouTube"
[Own Translation] (Document ANGR/ SEGMENT ANGR_790_ENTRY_02-05-2020).

This example also show that mobile ethnography could illustrate how hobbies or leisure in many cases were transformed into the digital space. It also shows how the app functioned as an actor, which mediated and transformed the informant's behaviour in relation to what the participants uploaded.

Mobility during Covid-19 and the analogue life:

An interesting trend occurred in the uploaded material as many of the informants wanted to showcase their analogue life. So even though the project was mainly about a digital transformation, the data material, which was collected in the mobile ethnography protocol, was very much influenced by analogue objects, walks and nature images. For example:

"My garden is better than happy pills"

[Own translation] (DOCUMENT HANI/ SEGMENT HANI_268_ENTRY_27-04-2020).

This picture shows a piece of garden. In the image, there is no focus on a particular technology, only indirectly, as the picture was taken with a camera.

The Corona crisis also characterised a time when people's previous movement patterns were suddenly rethought and came up for revision. Many citizens gained new interests, especially in nature and green areas. This point can be illustrated by this example showing a trip to Amager Fælled:

"Trip to Amager Fælled. We often go on trips on the weekends. Before Corona it was both nature, museum, library, amusement park etc. now primarily nature"
[Own translation] (DOCUMENT ANGR/ SEGMENT ANGR_2026_POST_DAG7_03-05-2020).

The Mobile Ethnography Protocol provided not only insight into how technologies were used during this period, but also the opportunity to gain an insight into how people physically moved during a period in Denmark when the country was closed down.

The many uploads of walks in nature could in relation to mobility also be interpreted as a reaction to the digital everyday life, but it could also be interpreted as a conscious desire of the respondents to showcase their lives as active and mobile.

The description of the mobile ethnography protocol showed the great advantages of digital ethnography, as it gave researchers an opportunity to gain an unfiltered insight into the lives of Danes and their use of digital technologies in a situation where the country was closed. It also featured a network of human and not human actors, researchers, respondents, mobile phone and the *MyInsights* app. *MyInsights*, as a digital actor, not only acted as a mediator and transmitter of information, it was also translated by the respondents to behave in a certain way.

The Archive

It is now described how the DEL project both came up with new methods, but also rethought previously used methods in response to the pandemic. As a starting point, the project did not rely on a predefined- or motivated research question, but instead used digital methods, to investigate a field that was unknown and not previously explored. Furthermore, it could be observed how far the researcher went to obstruct their own pre-defined ideas about the pandemic. This became apparent by the different protocols shifting approaches and methods. Such a shift was seen in the interview guide, which most likely initiated with an idea that demographic data was a helpful categorization of the data collected, but later deselected because it was assumed, too restrictive and narrowed understanding the scale of the crisis. Similar efforts could be seen in regard to the classification of the events observed by the ethnographic teams, where there was a great focus on how the different events could be seen in relation to each other, and not as separate categories.

These shifts, efforts and initiatives were of great importance for how the final product of the DEL project was constituted: the archive. This was mainly due to the researchers' approach to the covid-19 crises, which was seen as a radical event, and in order to generate knowledge about this period, the DEL project raised a need to innovate the social scientific archive, so it would not reproduce previous classifications, but instead create an archive that was more open and exploratory in its approach.

In the following, there will first be a focus on the history behind the archive of the social sciences. Next, there will be a description of the archive as it came to work, and the reasons why it took this form. Then the archive will be compared to a police investigation, and finally a summary seen in a future perspective.

The return of the archive in modern social science

The archive originated thus from the idea that the corona crises could be seen as a radical event and defined through a "before" and "after", as the project managers put it (Winthereik, Neergaard, Munk, 2020: 71). I therefore wish to explore this "before" and "after" by looking back at the history of the social sciences to look for similar documentation projects. At the turn of the century, documentation was considered paramount by historians:

> History is done with documents . . . Lacking documents, the history of immense periods of the past of humankind is forever unknowable. For nothing can replace documents: no documents, no history" (Langlois & Seignobos, 1898 in Eskildsen, 2008: 451).

This quote illustrates how historians have celebrated documents as building blocks and objective knowledge. However, this kind of archive creation or archiving is not something that is seen very often in modern social science. Within this context it is also interesting, that The Velux Foundations emphasized the need for documentation or data collected during the corona crisis:

> "The VELUX FOUNDATION wants to help ensure that **unique** quantitative and qualitative data **that can only be collected** while the Corona crisis is taking place **is not lost**" [Own emphasis & translation] (Velux Foundation: Covid-19-Dataindsamling).

To find similar cases in history it is tempting go back to Leopold Ranke and the tradition he was instrumental in forming in the early 1800s, which has since been called the archival turn (Eskildsen, 2008: 425). In 1827 to 1831 Ranke travelled through Germany, Austria and Italy, in his search for documents and archives. Through these travels he created a new model for historical research, a model in which Ranke proclaimed that the "trained historian could forget his personal predispositions and political loyalties, and write objective history" (Eskildsen, 2008: 425). "The goal is to bring the complete truth into present" (Ranke, 1868: appendix 1, 4. in Eskildsen, 2013: 19). The idea and search for universal truth or complete truth has become a characteristic of the thoughts of the age of Enlightenment. This is also seen in the philosopher Immanuel Kant's idea about synthetic a priori knowledge, truths that the individual has yet to recognize as truths, a truth that transcends the individuals experience (Guyer, 1980: 207). This idea, about synthetic a priori, have since been criticized, perhaps most well-known by Michel Foucault in his book *The Order and Things* (1966), where Foucault disputes against Kant's notion of *a priori*, and instead introduces the term *historical a priori* (Foucault, 2005: 375 ff.), arguing that epistemes have different own sets of ordered ideas and values about how the world is constituted. Simultaneously with Foucault, Jacques Derrida, another influential scholar of the French philosophy, developed his ideas. Derrida argued in *Archive Fever*

that “the (process of) archivization produces as much as it records” (Derrida, 1996: 17). Thus, he pointed out that the creation of an archive is both a documentation but also an archive of experiences and interpretations in a given time and context.

Derrida’s theories play an important role in the DEL-Project’s understanding of an archive. The researchers of the DEL-Project were aware of the scientific tradition of the archive and its issues and problems, and they pointed to Derrida’s argument in *Archive Fever*. “With this in mind - that the creation of an archive both documents and produces a reality - it was important that we could remain open to surprises” [Own Translation] (Winthereik, Neergaard, Munk, 2020: 74).
Therefore, in the construction of the archive, it became not only a matter of recording the informants' experiences of digitization during the corona, but it also became important to reflect on what kind of knowledge the archive would produce.

Datascape Archive

That the archive should be kept open for surprises can be seen directly when the researchers / user first opens the archive. As what meets them is a search box, where the user can search for a specific word, very similar to searching on Google, and all text segments from the archive that contain that word appears. The user can then click on one of the quotes or pictures that can take her/him to a new user interface that displays the entire interview. Whereas no direct overview or guidelines are apparent, in the researchers first interaction with the archive. The image below shows the archive's digital opening page:

Figure 12: *What the user first meet when opening the digital archive: the search box*

In connection with a keyword search, is it also possible to choose between different filters that describe the informants. The filters are: "job", "region", "age" and "household". Under these filters you can find subgroups such as under the "job-filter" there are the categories: "employed", "student" and "unemployed", and also under the “household-filter”, you can find the categories: "Living with others" , "Living alone" and "children living at home". The same applies to regions and ages that have similar subgroups. Thus, the demographic categorization is also present in the archive, but only through sub-filters.

Other categories that are often used in surveys such as "gender", "ethnicity" and "education" are not available filters. However, education is mentioned indirectly in the category "job" where "student" is a sub-filter. The archive can therefore not provide information on how many of the informants have a higher education, or how many of them are women. The four filters "job", "region", "age" and "household" also do not illustrate how many informants are included in a given search. For example, if "sports" is searched, with a subcategory "employed ", 20 results will appear. These 20 results show snippets of text where the word "sport" is included, but it does not show 20 different "employed" informants talking about sports. The archive thus does not contain an overview of how many informants are included in the respective filters.

The archive is also built on a machine tagging. This mechanism was created by one of the research assistants, who went through all 13,084 text segments, and ran a computer-generated semantic analysis, that tagged the different text segments, with entries as for example "Corona", "Bedroom" or “Zoom”. These tags allow researchers to access the archive from various entry points. Instead of typing words in the search box, the researchers can explore the archive through the machine generated tags. However, these machine generated tags only focus on what is explicitly named in the text. To challenge this notion, another language processing method was used, the “doc2vec model”. This model analysed larger text segments and related a text segment to other text segments in the same semantic space. This enable that the researcher can focus on larger pieces of text and look for similar semantic patterns. For example:

> *P:* I have had quite a hard time navigating the whole thing, and have felt more stressed than one usually does, as I mentioned I do not have that transport time where you can just relax a bit, I think.

> [Own translation] (DOCUMENT 2020528_LAURA_LOMA_VME).
>
> *P:* ... I think the change that has happened is that usually when I was at home and was on the computer, it was purely leisure time pretty much. Now it has actually become work
> [Own translation] (DOCUMENT 20200421_MORTEN_SA).

These two examples are from two different interviews with two different participants, and they do not use the same words, but they are nevertheless connected in the archive due to the similar semantic pattern, because they both talk about working from home, and how that changed their working rhythms.

The structure of the archive is therefore created as a structure where the data can be explored in new ways, created as an exploratory space, that can evolve over time. It is therefore not based on classic categorizations, but instead based on words and semantic similarities across the many documents.

A police investigation

The archive is thus constructed in a way where the focus is not on individuals, but on the similarities between different narratives, which form patterns. To some extent the archive is constructed almost like a police investigation. The police are not interested in the individuals but use the individuals as witnesses to solve a crime. The various police investigators collect witnesses' statements and at the same time other officers looking for traces and take pictures of the crime scene. As in the case of the Covid-19 crisis, the collection of documents has to happen a short while after the "crime" is committed. The police officers then take these accounts back to the police yard where the various data material is gathered, and the investigation begins. This phase is characterized by the fact that the police constantly have to cross-check their information, which in turn leads them back to the crime scene, or to new places. This mapping of evidence and data material then creates a collective narrative or a network that paints a picture of the crime, in this case the Covid-19 crisis.

This police investigation metaphor is also useful, when looking at researchers who subsequently will be using the DEL's archive. In can be compared to a police investigator, who has been suspended from the case and then a new investigator is taking over the case. The new officer does not have the contextual experience of how the case was collected, but instead only the different human and non-human data material collected before by the officers who were in charge of the case.

This way of structuring an archive is therefore a new way of producing and presenting documents. It was created with a conscious intention to challenge the user/researcher to reconsider their own predefined ideas. The idea of obstructing preconceived ideas is not new. This was one of Ranke's goals that the trained historians could look at archives and forget his personal predispositions and political loyalties. DEL's archive can therefore be seen as a modern interpretation of Ranke's model of archiving: forcing researchers to disregard personal dispositions and political loyalty and produce new historical knowledge.

In the creation of the archive, a network was created on the basis of past social scientific reminiscences and by counter-discourses, by foundation money, by digital methods, and by researchers. This network was created in the wake of a sudden and acute emergency, the corona crisis. Bruno Latour has called the corona crisis a "a dress rehearsal" (Latour, 2021), by which he indicates that the current crisis could be seen as a test or a foretaste for the crises to come in the future, climate crises, emigration crises. The rapid creation of the DEL-archive can therefore be seen as an example of social scientific practice documenting an unknown field, in the midst of the crisis. A premise that social science is likely to face soon again.

Conclusion

The Covid-19 pandemic caused an upheaval that came to re-define methods and theories in the social sciences. This re-thinking of the social science was created in the wake of a sudden event, and by virtue of new translations and transformations, established in a network of foundations, government, digital technology, citizens and researchers. These human and non-human actors created a process of re-thinking aspects of social sciences due to new alliances of actors, which stabilised new networks.

The pandemic reopened the "black box" of social sciences. The context had changed and paved the way for new social science practices. Several observations point to this. Firstly, the Velux Foundation (together with several other foundations in Denmark) focused on rapid and urgent action to document this crisis. The Velux Foundation did not give specific instructions on how this documentation should be carried out, but it was clear that both Velux and other foundations saw the pandemic as a rupture that needed to be documented and archived for future learning. This approach is remarkable, as research projects otherwise almost always have a pre-defined research question, that must be examined before a foundation will even consider supporting a project.

Secondly, another aspect of the new reality that occurred with the pandemic was that the researchers agreed on the premise of documenting without having an overall problem formulation. In the DEL project, the researchers defined the pandemic as an ontological disturbance, an unknown field with a *before* and *after*. In this context, they saw this approach launched by the Velux Foundation as an opportunity to examine new exploratory ways, with new methods, without being guided by a particular problem formulation.

Thirdly, by collecting data using digital methods to explore the complex and diverse context(s), a strong network of human and non-human digital actors was created. Nearly all informants were found through digital platforms and all interviews were conducted digitally. In the interview protocol were digital actors such as *Whereby* and internet connection, which resulted in the interviewer having to take on multiple roles; both as an interviewer but also as a digital technology tutor in relation to the informants. In the mobile ethnographic protocol, *MyInsights*, not only acted as a mediator and transmitter of information but was also translated by the respondents to behave in a certain way. Internally in the research project's network, non-human digital actors were also playing a role. This was seen in connection to the Excel sheet and Microsoft Teams, where the program of action resulted

in a new syntax and an agreement between human and non-human actors on how observations were to be noted. This network between human and digital actors is not new in the social science, but the proportions and strength of this network have reached new heights in the DEL project.

Fourthly, the archive which was the final product of the DEL project consisting of documentation of the Danes' use of digital technologies during the Corona crisis, was being created in a network of macro networks and micro networks. A macro network of social scientific traditions and by counter-discourses, foundation funds, digital technology, the Danish government, citizens and a pandemic, and on the other hand a micro network in the DEL Project of digital apps, excel sheets, social media applications, mobile phones, researchers and informants. The macro and the micro-network both related and influenced each other. These networks created a return of the archive from the 19th century but with a new aim, that did not invoke a truth, but an archive that should be open to new interpretations and contexts.

These observations from the DEL project could also be significant for the social sciences in the future. For example, the digital methods as a way to uncover other large-scale crisis. The human and non-human digital networks can also be read as a general acceleration of digital technologies in the social sciences. In the DEL project there was a greater openness to the classification of empirical data, which also can be seen as an indicator of new classifications models in the social science in the future.

These new social scientific practices that have been transformed can be seen as a shift caused by the pandemic. The context has suddenly changed, the syntax has transformed, the alliances have been displaced, which has paved the way for new trajectories in the social sciences, a pandemic turn.

References

Ahlin, T., & Li, F. (2019). From field sites to field events: Creating the field with information and communication technologies (ICTs). *Medicine Anthropology Theory, 6 (2),* 1-24.

Andersen, H. (2017). *Forskningsfrihed–ideal og virkelighed*. Hans Reitzels Forlag.

Becker, H. S. (2017). 'Social observation and social case studies'. In *Sociological Work*, 75-86. Routledge.

Bingham, N. (2003). 'Writing Reflexively'. in Pryke, M., Rose, G., & Whatmore, S. (Eds.). *Using social theory: Thinking through research*, 145-162. Sage.

Birkbak, A., & Munk, A. K. (2017). *Digitale Metoder*. Hans Reitzels Forlag.

Boellstorff, T. (2008). *Coming of age in second life: An anthropologist explores the virtually human*. Princeton University Press.

Callon, M. (1998). An essay on framing and overflowing: economic externalities revisited by sociology. *The Sociological Review, 46 (1),* 244-269.

Carroll, N., & Conboy, K. (2020). Normalising the "new normal": Changing tech-driven work practices under pandemic time pressure. *International Journal of Information Management*, *55*, 1-6.

Clark, R. W. (1981). *Sigmund Freud*. S. Fischer Verlag.

Cresswell, T. (2006). *On the move: Mobility in the modern western world*. Routledge.

Guyer, P. (1980). Kant on Apperception and "A Priori" Synthesis. *American Philosophical Quarterly*, *17*(3), 205-212.

Derrida, J. (1996). *Archive fever: A Freudian impression*. University of Chicago Press.

Endo, R. (2021). On Holding Various Truths to (Not) Be Self-Evident: Leading During the Dual Pandemics of 2020 as a Racialized Body. *Cultural Studies↔ Critical Methodologies*, *21*(1), 116-121.

Eriksen, T.H. (2001). 'Fieldwork and its Interpretation', in *Small Places, Large Issues: An Introduction to Social and Cultural Anthropology,* 24-39. Pluto Press.

Eskildsen, K. R. (2008). Leopold Ranke's archival turn: location and evidence in modern historiography. *Modern Intellectual History*, *5* (3), 425.

Eskildsen, K. R. (2013). Inventing the archive: Testimony and virtue in modern historiography. *History of the Human Sciences*, *26* (4), 8-26.

Farley, J., & Geison, G. L. (1974). Science, politics and spontaneous generation in nineteenth-century France: the Pasteur-Pouchet debate. *Bulletin of the History of Medicine*, *48* (2), 161-198.

Floridi, L. (2015). *The onlife manifesto: Being human in a hyperconnected era*. Springer Nature.

Flyvbjerg, B. (1988). Case studiet som forskningsmetode. PHD. Aalborg University.

Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative inquiry, 12* (2), 219-245.

Foucault, M. (2005). *The Order of Things*. Routledge.

Francis, D. & Hester, S. (2012). *An Invitation to Ethnomethodology: Language, Society and Social Interaction*, Sage Publications.

Hornborg, A. (2017). Artifacts have consequences, not agency: Toward a critical theory of global environmental history. *European Journal of Social Theory, 20*(1), 95-110.

Hymes, D. H., ed. (1965). *The Use of Computers in Anthropology*. Mouton.

Katila, J., Gan, Y., & Goodwin, M. H. (2020). Interaction rituals and 'social distancing': New haptic trajectories and touching from a distance in the time of COVID-19. *Discourse Studies*, *22* (4), 418-440.

Kelty, C. M. (2017). Too much democracy in all the wrong places: toward a grammar of participation. *Current Anthropology, 58* (15), 77-90.

Kristensen, J. E. (1989). *Menneskerettigheder: filosofisk, juridisk, historisk, politisk*. Akademisk forlag.

Latour, B. (1987). *Science in action: How to follow scientists and engineers through society*. Harvard University Press.

Latour, B. (1988). *The pasteurization of France*. Harvard University Press.

Latour, B. (1990). Technology is society made durable. *The Sociological Review, 38* (1), 103-131.

Latour, B. (1994). On Technical Mediation. *Common Knowledge,* 3 (2), 29-64.

Latour, B. (1999). *Pandora's hope: essays on the reality of science studies*. Harvard University Press.

Latour, B. (2004). Why has critique run out of steam? From matters of fact to matters of concern. *Critical inquiry, 30* (2), 225-248.

Latour, B. (2021). Is this a dress rehearsal?. *Critical Inquiry, 47* (2), 25-27.

Latour, B., & Woolgar, S. (1986). *Laboratory Life. The Construction of Scientific Facts*. Princeton University Press.

Law, J. (1992). Notes on the theory of the actor-network: Ordering, strategy, and heterogeneity. *Systems practice*, *5* (4), 379-393.

Levy, D. G. (1979). *Women in revolutionary Paris, 1789-1795*. University of Illinois Press.

Marcus, G. E. (1995). Ethnography in/of the world system: The emergence of multi-sited ethnography. *Annual review of anthropology*, *24* (1), 95-117.

Mol, A. (2002). *The body multiple: Ontology in medical practice*. Duke University Press.

Munk, A. K. (2019). Four styles of quali-quantitative analysis: Making sense of the new Nordic food movement on the web. *Nordicom Review*, *40* (1), 159-176.

Munk, A. K., Abildgaard, M. S., Birkbak, A., & Petersen, M. K. (2016, July). (Re-) Appropriating Instagram for Social Research: Three Methods for Studying Obesogenic Environments. In *Proceedings of the 7th 2016 International Conference on Social Media & Society* (1-10).

Parra, C. M., Gupta, M., & Mikalef, P. (2021). Information and communication technologies (ICT)-enabled severe moral communities and how the (Covid19) pandemic might bring new ones. *International Journal of Information Management*, 57, 1-16

Rothman, B. K. (2007). Writing ourselves in sociology, *Methodological Innovations*, 2 (1), 11-16.

Roy, R., & Uekusa, S. (2020). Collaborative autoethnography: "self-reflection" as a timely alternative research approach during the global pandemic. *Qualitative Research Journal*, 20 (4), 383-392.

Rowley, J., Jones, R., Vassiliou, M., & Hanna, S. (2012). Using card-based games to enhance the value of semi-structured interviews. *International Journal of Market Research*, 54 (1), 93-110.

Shapin, S., & Schaffer, S. (1985). *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*. Princeton University Press.

Star, S. L. (1990). Power, technology and the phenomenology of conventions: on being allergic to onions. *The Sociological Review*, 38 (*1),* 26-56.

Stengers, I. **(**2005). 'The cosmopolitical proposal'. In Latour, B. and Weibel, P. (Eds.). *Making things public*. MIT Press, 994–1003.

Utoft, E. H. (2020). 'All the single ladies' as the ideal academic during times of COVID-19?. *Gender, Work & Organization*, *27* (5), 778-787.

Venkatesh, V. (2020). Impacts of COVID-19: A research agenda to support people in their fight. *International Journal of Information Management*. 55, 102197.

Venturini, T. (2010). Diving in magma: how to explore controversies with actor-network theory. *Public understanding of science*, *19* (3), 258-273.

Venturini, T., Ricci, D., Mauri, M., Kimbell, L., & Meunier, A. (2015). Designing controversies and their publics. *Design Issues*, *31* (3), 74-87.

Vokes, R., & Atukunda, G. (2021). Fieldwork through the Zoomiverse: Sensing Uganda in a Time of Immobility. *Anthropology in Action*, *28*(1), 73-78.

Whatmore, S. J. (2009). Mapping knowledge controversies: science, democracy and the redistribution of expertise. *Progress in Human Geography*, *33* (5), 587-598.

Winthereik, B. R., de Neergaard, K. P., & Munk, A. K. (2020). Når virkeligheden rystes i sin grundvold–effekter af nedlukningen. *Samfundsøkonomen*, *2020* (4), 70-76.

Websites:

Carlsberg Foundation: Carlsbergfondet uddeler 7,4 millioner kroner til humanistiske Covid-19-forskningsprojekter: Avaliable at: https://www.carlsbergfondet.dk/da/Nyheder/Nyt-fra-fondet/Nyheder/Carlsbergfondet-uddeler-7_4-millioner-kroner-til-humanistiske-Covid19_forskningsprojekter (Accessed 10. April 2021)

Danmarks Frie Forskningsfond: Corona relateret forsknings opslag 2020: Avaliable at: https://dff.dk/dff_coronarelateret_forskni ng_opslag_2020_dk.pdf (Accessed 22. March 2021)

Novo Nordisk Foundation: Støtte af projekter der søger at afbøde de sunhedsmæssige konsekvenser af coronavirus (COVID-19) epidemien I Danmark: Avaliable at: https://novonordiskfonden.dk/en/grants/stoette-af-projekter-der-soeger-at-afboede-de-sundhedsmaessige-konsekvenser-af-coronavirus-covid-19-epidemien-i-danmark/ (Accessed 10. April 2021)

Innovationsfonden: Innovationsfonden skruer op for kampen mod COVID-19: Avaliable at: https://innovationsfonden.dk/da/nyheder-presse-og-job/innovationsfonden-skruer-op-kampen-mod-covid-19 (Accessed 22. March 2021)

Velux Foundation: Covid-19-Dataindsamling: Available at: https://veluxfoundations.dk/da/corona-relaterede-dataindsamlingsprojekter (Accessed 22. March 2021)

Podcast:

Kjærulff A. (2020). Podcast: Corona-eksperimentet: Nød Radio. Colloboration with Digital Velfærd, ITU og Teknoantropologisk Laboratorium, AAU: Part 1 & 3. https://soundcloud.com/garagen/sets/corona-eksperimentet (Accessed. 30. February 2021)

Movie:

Trier, L., & Leth, J. (2003). *The Five Obstructions*. Zentropa Real ApS