WHO CARES ABOUT THOSE WHO CARE? DESIGN AND TECHNOLOGIES OF POWER IN SWEDISH ELDER CARE

CAMILLA ANDERSSON, AALTO UNIVERSITY, CAMILLA.ANDERSSON@AALTO.FI

RAMIA MAZÉ, AALTO UNIVERSITY, RAMIA.MAZE@AALTO.FI

ANNA ISAKSSON, HALMSTAD UNIVERSITY, ANNA.ISAKSSON@HH.SE

ABSTRACT

Design is increasingly recognized as an instrument of power. We explore power in the context of the Swedish welfare state and care institutions, which undergoing political and structural reconfiguration new technologies introduced. Our aim is to better understand the effects of designed technologies within care institution and over care workers. Through our research, we have identified deviances, or gaps, between institutional policies and daily working practices, in which workers must cope within a grey zone of legality. Against this backdrop, we bring together and discuss concepts from philosopher Michel Foucault and sociologist Dorothy Smith in order to frame issues of power relevant to design. We elaborate upon these issues through a discussion of our project set in Swedish elder care institutions. Three 'research through (critical) design' examples illustrate ways and extents to which power is exerted over care We discuss workers effects upon their subjectivity, including how their knowledge and agency can risk being ignored or overruled. Ultimately, we argue for design research to examine and articulate the (powerful) role of design in such contexts. We see this as a form of

'De-Scription' and active 'mapping' that can open up for wider debate and reconfigurations of power.

INTRODUCTION

Design is increasingly recognized an instrument of power, in which there is a fine line between 'control' over and 'care' for people and populations (Keshavarz 2017). Kim Dovey (1999) articulates three ways in which design artifacts exert power: as force, coercion and seduction. As force, according to Dovey's argument, design can enable or disable through physical or technical means, for example in the form of a prison. As coercion, design may operate through more subtle forms of domination, intimidation or manipulation, in which there may appear to be choice and free will. As seduction, design operates upon the interests and desires of the subject, shaping perceptions, cognitions and preferences. Dovey's trifold distinction illuminates multiple ways and extents to which artifacts can mediate or exert "power over" others.

Design, in this sense, is an ideal instrument of state power. The Swedish welfare state is a historical example, in which modern design was mobilized in the rapid transformation of a previously agrarian nation to a particular, social democratic model of labor market and consumer-citizen. Helena Mattsson and Sven-Olov Wallenstein argue (2010, p.8), "the production of such subjectivity, together with the various forms of 'governmental' apparatuses (in Foucaults's sense of the term...) that it requires, can be taken as one of the essential outcomes of the first phase of modernism in Sweden, and in order to achieve this it forged a plethora of new technologies that set it on a particular track." They describe such apparatuses, or 'technologies', understood in the wide sense of Foucault as designed artifacts. This includes mass project of social engineering through (sub)urban plans, housing programs and building typologies, which we might understand through Dovey as forceful or coercive, as well as powerful, seductive and highly-successful

1

imaginaries projected in the first manifesto of Swedish modernism *acceptera*, communications campaigns and major exhibitions.

The power of design is detailed and complicated by social studies of technology and design. On one hand, sociologists such as Langdon Winner (1995) study the "political ergonomics" of urban plans and architecture, how they control crowds and behaviors. Susan Silbey and Ayn Cavicchi (2005) detail how national traffic law is enforced through designed transport infrastructures, street signage and even the vehicle seat-belt systems that exert direct control over bodies. On the other hand. sociologists challenge simplistic social determinism, in which a "docile subject," citizen or consumer should merely comply with policy inscribed into form. Madeleine Akrich's study (1992) of 'technology transfer' from France to African countries reveals how regulations inscribed into electricity systems were received within communities in ways that produced "non-users" and "deviants." Akrich thus called for further studies, or 'De-Scription' of the ways artifacts control users as well as the agency of said users, which is revealed in gaps between intended and actual use. In Dovey's terms, we might understand this as the gap between designs "power over" and users' "power to."

Our research addresses issues of design and power in the context of Swedish elder care. Historical extensions of welfare state policy and 'duty of care', care institutions are today undergoing political and technical changes, including an increasingly digitalized array of 'governmental apparatuses.' We study care work in this context, in which power 'over' care workers is exerted in different ways affecting their subjectivity and 'power to' do their work. Given the power of design, we argue that designers have more options available than merely affirming or critiquing predominant power relations (Dunne & Raby 2013). Our approach resonates with Akrich's call for 'De-Scription', in that we study power relations in specific institutional contexts and practices. Beyond mere study, we also respond to Dorothy Smith's call for 'mapping' (2005a) relations of power and domination so as to be more visible for those involved. Theoretically, we draw together Foucault and Smith to conceptualize how power works, which we then elaborate through 'research through practice' in our case of elder care.

Foucault and Smith on Power

Foucault aimed to produce "a history of the different modes by which, in our culture, human beings are made subjects" (1982. P. 326). This involves "technologies of power," in which 'technologies' refers to "a raft of techniques" comprising knowledges, practices, artifacts, calculations, statistics, etc. (Barry 2001). These are complemented on an individual, or even 'subindividual' (Kelly 2009), level by "technologies of the

self," which signify the internalisation of power relations as self-discipline or policing. Through technologies of the self, individuals "effect by their own means or with help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and a way of being, so as to transform themselves" (Simons 1995 p. 34). Foucault's philosophy developed through analyses of microgovernmental institutions such as prisons and hospitals. In The Birth of the Clinic (1973), Foucault analysed institutional changes, including modern technologies of administering, observing, diagnosing and caring. He investigated how subjects are produced, including those designated 'doctor' or 'psychiatrist' and those disciplined to be 'healthy', 'sane' or 'normal', thus also producing the deviants.

Foucault, sociologist Dorothy Smith Alongside contributes to understanding relations between macromicro or structure-action dualisms in political philosophy. Mirja Eila Satka and Caroline Skehill compare in more detail the contemporaneous scholars. Notably, Smith's concept of "ruling relations" is similar to power relations in Foucault. She explains 'ruling relations' as "the complex of extra-local relations that provide in contemporary societies a specialization of organization, control, and initiative. They are those forms that we know as bureaucracy, administration, management, professional organization, and the media... that intersect, interpenetrate, and coordinate the multiple sites of ruling" (Smith 2005b, p. 6). Through 'archaeological' or 'genealogical' research methods, Smith and Foucault investigate power and macro-social forces through careful analysis of the micro-social practices within institutions. Ordinary practices are seen as the nexus between between macro-discourses such as health or macro-objects such as 'population' (f.ex. health status appearing as population statistics) and the micro-social subjects (f.ex. caregivers and care recipients).

Smith's emphasis on *ruling* (rather than mere power) relations, emphasizes the issue of domination or "power over." The intention is clear in relation to her normative (i.e. feminist and activist) stance within sociology. Her institutional ethnography elucidates the knowledges and experiences of subjects in their daily work and life, including "other forms of knowledge, notably knowledge from experience" (Smith in Satka and Skehill p. 8). Thus, in articulating power within institutional contexts and practices, she accounts not only for 'power over' through technologies but also for the embodied knowledge, subjectivity and agency of those who might otherwise be overruled, i.e. their agency and 'power to'. In this paper, we explore 'care' beyond specific institutions and work domains but also as a sensitivity to changing conditions of such work and workers.

Drawing on Foucault and Smith, we conceptualize power as 'governmental apparatuses', including a 'raft of techniques' including designed technologies, which discipline populations and people in many forms, including those which force, coerce and seduce by design. We explore the roles of design in shaping subjectivity, understood as a process of discipline but also in relation to other knowledges and embodied experiences coinciding in everyday institutional practices. In addition to macro-power structures, microrelations within care institutions can reveal the multiple and potentially conflicting forces evident as multiple technologies come together in the everyday work of caregiving. In this paper we use the concept of "technologies" in two senses – one in the philosophical sense as in Foucault and Smith, a "raft of techniques" and "technologies of power" and another in the more colloquial sense of "designed technologies" as practical and technical artefacts.

Thus we ask here: How can we understand power in relation to the various "designed technologies" incorporated within everyday care work? In what ways do these exert 'power over', (in the first sense, "technologies of power") and in what ways or to what extent are the capacities or 'power to' of subjects implicated?

POWER IN THE CONTEXT OF CARE

This research is part of a project on Swedish elder care funded by the Swedish Governmental Agency for Innovation Systems (Vinnova) conducted as a collaboration between researchers and the Swedish Association of Local Authorities and Regions (SKL). Within an overall project aim to stimulate innovation and gender equality in the elder care sector, this article focuses changing care work. We drew upon Smith's institutional ethnography and dialogical methodology (Andersson et al., 2017), to conduct ethnographic research of daily staff including workers in care facilities and a home-help service. Thereafter rich descriptions and interpretative accounts took form as sketches and artifacts. The case, the setup and the methods of the practical study is reported in detail within a previous publication (Andersson et al., 2017), which details the sketches and artifacts as 'discursive' objects articulating work dilemmas through visible and tangible forms created to facilitate discussion with various stakeholders. In addition to care workers, municipal and institutional partners, stakeholders include design researchers addressed through our research publications. In this paper the contribution is not practical as in the previously reported case, rather it is in philosophically contextualising and critically reflecting on the case. Therefore within the broad field of design research this could be understood as a paper in the genre of critical design studies. We theorize and illustrate the power dimensions of care work, illustrated and discussed through accounts of three discursive objects.

Our research focus, care workers' conditions and power relations in Sweden, is situated within the liberalizing Swedish welfare state and care sector since the 1990s. This represents a major shift from the century-old model studied by Wallenstein (2010), the Social Democratic "The political concept of People's ("folkhemmet") with 'the family' as an idealized model of collectivity and equality engineered through Swedish modernism. The structural conditions for providing elder care have changed with new forms of organization dominated by New Public Management. This means that ideas are taken from the market and industry and that rationalization, efficiency and technology have been turned into core values in the elder care sector at a time when the population is rapidly aging (cf. Anderssson 2013). In this context, we argue that there is a need to contextualize care politically, and that the power relations of care should be examined and discussed.

Mind the Gap - 'Text' and 'work'

In dialog with the care workers complemented with field studies it became evident that new technologies implemented in everyday care work introduced many difficulties and devious practices to cope. These deviances were on the brink of il/legality but seemed to be silenced or supressed in a collective conscience. Thus, a gap was revealed between intended and actual use of the devices, which resonates with the terms of Akrich's study. However, examining many such practices and experiences, it seemed misleading to reduce this to a design problem of inscribing the device or, perhaps worse, a problem of subjects labelled nonusers or deviants. The problem surpassed that of design or use - it involved more profound differences regarding power (evident also in Akrich's study when considering the socio-political distance between French corporate producers and unconsulted locals within former African colonies). Beyond a mere technical issue, the gap helped us pinpoint issues of power.

Through Foucault, we might observe how technologies of power and of the self (including self-discipline that silence borderline il/legal practices) make subjects into workers. Through Smith, we might articulate the gap in terms of power differentials between ruling and experiential knowledges at work. Apart from institutional accounts of work, accounted within institutional policy, organizational charts. iob descriptions, and generic procedures, she seeks experiential accounts. Smith warns of "being misled by institutional conceptions of work, such as that which equates with paid employment. Ordinary uses of the concept of work easily deflect us. It is what people do, the time it takes to do it, the conditions under which they do it and what people mean to do. It suggests there are skills involved; that people plan, think and feel and that what others are doing and what is going on is refracted by the perspective of the doer's activity" (Smith 2005a pp.161-162).

Thus, in order to explore power relations, we began to identify and articulate the gap or, in other words, deviances between official policies - what Smith calls the text - and daily working practices - or work - that caregivers developed to cope within a financiallystrained sector governed by different political rationales and technologies than before. By 'text', Smith refers to technologies within and across institutions (i.e. multilevel and "translocally") that mediate ruling relations across space and time, for example reproducible media such as a written statement, architectural drawings, instructional video etc. that regulate practices. Texts are what produce institutional stability through standards of conduct, differentiated subjects and coordinated practices (Smith 2005a). In the context of Swedish elder care, we interpret text to include national health policy and law, declarations and decisions and regulations concerning the elderly, union agreements concerning conditions of work, media depictions of the elderly or care workers, etc.

In the SKL project in addition to these texts, we sought insight through experiential accounts of 'work'. We were particularly interested in work practices where there was no protocol to prescribe action or a gap between prescription and normal activity. In terms of the rule of law, these practices were in a grey zone, performed as loophole tactics, devious evasions, or even legally questionable. Yet, these were practices that emerged necessarily in conditions that could not be fully governed by texts. For example, such practices proved to be the only way to cope with an increasing workload in which neither technologies nor resources were sufficient. Further, practices surpassed coping, suggesting other forms of emergent, experiential knowledge (and, perhaps even 'inventiveness' or 'innovation' see Barry 2001) that might too easily be ignored or overruled. To bring these gaps to life, we will elaborate upon three illustrative 'stories' identified from within ethnographic accounts. We further illustrate with sketches and artifacts developed as "discursive objects" intended to make power relations visible and available for debate.

ARTICULATING THE GAP IN CARE WORK – THREE ILLUSTRATIVE EXAMPLES

In order to critically reflect more philosophically and deeply on "technologies of power" in relation to "designed technologies" in the context of health care, from the previously conducted and reported study we have selected three examples for the purpose of this

paper. We present three discursive objects that were developed by two of the main authors and others (see acknowledgments section) in a collaborative project created in a Research and Critical Design approach. As following the logic of Critical Design these examples are not intended as products to be produced or to solve a problem, but rather to visualise a "problematic" (in the philosophical sense of Foucault and Smith).



Figure 1: The Client Generator

The Client Generator

This was a story that staff at a home care service unit recounted concerning a technical system that had been implemented in their organisation. It was a route optimising system that would plan the sequence of visits they would make during the day. The system was developed for the transportation sector i.e. cargo trucks on straight motorways, but for the home care staff using bikes topographical conditions and weather conditions were crucial for the time it took to cover particular stretches. This means that the time the system prescribed to move between client A and client B would often not correspond with the time it actually took the staff

So to use Smith's concept, what work meant for these people in this context was that weather conditions or the state of the client on a certain day would affect the schedule. The extent of work wasn't properly charted and taken into account when developing and implementing the digital system. Consequently the system would not be accurate in its estimation of time, and when the staff exceeded the prescribed time it would be reported as 'deviances'.

We suggest that the route optimising system becomes *text* in that it is a trans-local system coordinating the staff of home care in time and space in a standardising operation. This story highlights a gap between the actualities of *work* in reality and of the prescriptions of the system, the *text*, and as in all the examples below this gap led to alternative practices.

We understand the route optimising system as a technology of power in Foucault's sense, monitoring the staff in a standardised way to maximise the production of social service. The example points to a clash between interpersonal relations and meticulous digital systems where human variations become 'deviations' and which through the implementation of this system ultimately constructs the staff as 'deviants'.

The staff responded to the digital system by making up clients on the topographically or otherwise challenging, stretches in order to make the system produce a route correlating to current conditions. These made up clients would then be fed into the route optimising system in order for it to be usable in sequencing their visits and laying out a schedule for the day, thus avoiding 'deviations'.

We visualised the existing practice transforming it into a technical device that produces a printed card (fig. 3) with a made up client, which could then be manually fed into the system. We suggest that the visualisation contributes to Akrich's 'De-Scription' of how artifacts control users in that it makes visible how the system makes the staff 'deviants'.





Figure 2: Sketch of *Client Generator*. Figure 3: Card produced by *Client Generator*

The 'hack' the development of this alternative practice is performing might be understood as forming part of self technologies internalising power. Rather than changing the system this practice is operating within it, creating an unofficial space where the gap between text and work can be momentarily reconciled, thus upholding, rather than contesting the system. The act of hacking the digital system is still outside protocol, and they remain the 'deviants'.

We suggest that the practice of making up a client is the consequence of structural problems of Swedish elder care with a scarcity in resources, both in terms of lack of staff and lack of monetary resources. We would like to argue that through the operation of turning a protocol breaching, unofficial practice into a physical artefact we repoliticise the suggested apolitical nature of technical devices (Barry 2001) by showing the policing nature of the route optimising system.

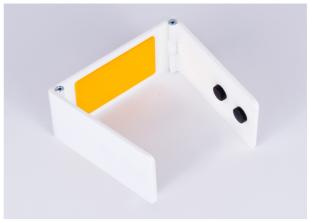


Figure 4: The Elevator Stopper

The Elevator Stopper

This story unfolds during the night shift at an elder care home where the number off staff on duty is reduced to a minimum. To prevent the elders with dementia to get lost in, or leaving the elder care home at at time when there is not enough staff to monitor them, the staff resorted to taking the elevator down to the basement where they would tape the sensors of the elevator doors. This way the elevator doors couldn't close and the elevator was held in the basement. Consequently the elders couldn't use the elevator to get lost in other floors of the building.

The *text* in this case is the law prescribing that people with dementia cannot be locked in in an elder care home to prevent them from wandering off and get lost. The discrepancy between the text and the actualities of everyday *work* where people with dementia do wander off and where staffing is so low that it becomes a dilemma how to protect the elderly from harm is what produces the practice of stopping the elevator, a practice on the brink of legality. There is no official protocol that can help the staff solve this dilemma.

Making an artifact visualising the existing practice of stopping the elevator, and the exercise of the design practice of putting a logotype on the artifact offered interesting means of tracing power up the line (Kelly 2009). This tracing contributes to the *mapping* of the institutional complexes and the ruling relations that Smith's theory offers (Smith 2005a). The logotypes (fig. 5) represent three different power levels in Swedish elder care and through trying them on the artifact we could discuss where the responsibility for the structural problems causing this situation might belong. We believe that by making this artifact / discursive object we both expose the structural nature of the problem and suggest that responsibility should be taken from the shoulders of the people on the floor and placed on a level where it could be solved, be it administratively or politically.



Figure 5: Logotypes on Elevator Stopper

As with all the stories we were told this was a practice that was a well known secret. It corresponds to Foucault's words of self technologies as something performed with others affecting their bodies, thoughts and conduct (Simons 1995). As one of the informants said when she saw this practice given physical form and thereby bringing it out in the light: "Now you are lifting the responsibility for this from my shoulders upwards in the hierarchy where it belongs." We suggest that by unravelling this practice and by offering means to reposition accountability we are making the map Smith describes as a way to make research speak back to the people that informed the research and offer paths for reconfigurations of power.



Figure 6: The Care Song Radio

The Care Song Radio

This was a beautiful story of a woman describing how singing was a vital part of her job. One particular woman affected by dementia would become very worried and anxious when our informant entered her apartment. This anxiety would make it impossible for the informant to help the elderly woman with her daily routines. To ease the woman's anxiety the informant would sing this particular song that she had noticed calmed her down.

The gap between *text* and *work* in this case lies in that the text (needs assessment by a public care manager) assigns precise time slots to each client within which certain prescribed tasks are to be performed. If the client is anxious it could take longer to f.ex. feed them, change

diapers etc. Failure to finish the set tasks within the prescribed time slot must be reported as deviances. Where there are digital systems that the staff logs in to at arrival and logs out when they leave deviations are automatically reported. We understand these technologies as forming part of a web of 'governmental apparatuses' thus contributing to the aspirations to standardise elder care and ensure maximum productivity.

This discursive object wants to problematise the notion of productivity. The dominating discourse is that Swedish elder care should be salvaged by technology. But the actualities of *work* related to people in vulnerable positions, such as elderly people, describes a reality where the state of the client could vary from day to day, affecting the time it takes for the staff to help them. Knowledge acquired by experience and intuition common in care services risks being displaced in favor of technological knowledge. In this case that implies both in monitoring and registrering the exact position of the staff in time and space as well as when constructing and implementing the policing technology.

This discursive object is turning the simple interpersonal act of singing to calm the elderly into technology. Many of the tasks formerly performed by people are suggested to be replaced by technology due to the decrease in population where fewer people are to take care of an ageing population, which means that care must become more efficient. A song sung by a person is most certainly cost efficient. The Care Song Radio aims to make visible the complexity of assessments made when singing a song, adapted to a particular person, thus problematizing the image of technology as cost efficient. The complexity of the levers and buttons at the back of the radio also aims to highlight the extent and depth of knowledge acquired through care, which risk being overlooked in the implementation of technology in care.



Figure 7: The front of the radio is simple and easy to operate for a person with dementia or a care worker pressed for time. The back of the radio is complex visualising the amount of information intuitively handled in singing a song interpreted as buttons and levers in a machine.

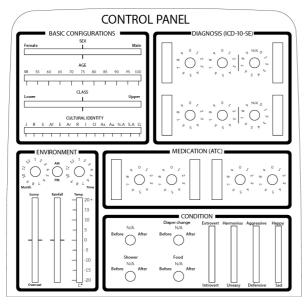


Figure 8: The back of the *Care Song Radio* allows configurations based on class, gender, cultural background, medication, time of day, weather etc.

DISCUSSION AND CONCLUSION

Smith's concepts of 'text' and 'work', which, while mirroring Akrich's distinction, have proved effective for our institutional analysis and evade the terms macromicro that might be too easily in design be reduced to spatial scale. The 'discursive objects' articulate the gap, making visible experienced difficulties as general texts meet the lived reality of care work that is also intertwined with many other bodies, relations, forces and circumstances. The *Elevator Stopper*, for example, reveals how care workers cope in the context of conflicting regulations. Regulations of building fire and safety conflict with those of 'duty of care' over elders, and the 'discursive object' opens for debate where and with whom responsibility lies. The Client Generator expresses more devious activities (even 'inventive' or 'innovative' capacities), in which care workers literally (re)produce themselves. The Radio makes visible the tacit knowledge gained through long, embodied, situated and social experience, knowledge of workers that can be at odds with or even overruled within predominant policy and management technologies. Thus, care work is revealed as manifold, evolving and potentially deviant practices of coping, inventing and deviating.

In the gaps, we explore the power relations at stake. On one hand, a gap marks a nexus between macro-discourses and texts (f.ex. 'care' and 'population') and micro-social practices (caregivers and work). At this nexus, technologies of power and ruling relations are experienced and negotiated, local oppositions can resonate across scales. 'Discursive artifacts' make visible how 'ruling relations', 'power over' is exerted

through texts, technologies and even self-discipline. As Dovey argues, designed technologies force, coerce and seduce.

On the other hand, power is not only disciplinary but also productive and reversible. Thus, gaps can reveal that care workers are not only produced as subjects but that they embody and produce 'other forms of knowledge.' Colebrook (2002 p. 544) further argues that "subjects are not victims but modes of power, and, as such, subjects are also possibilities for the reconfiguration of power's dominant logic." Subjects always have capacity or 'power to' act within ruling relations. Though power according to Foucault is ubiquitous and impossible to escape, it can be identified, differentiated, reversed and wielded. Indeed, potential reversibility and redistribution of power is fundamental in Foucault (in Kelly 2009 p. 76): "[Power relations] are not univocal; they define innumerable points of confrontation, of hotbeds of instability, each of which carries its risks of conflict of struggles, and of an at least temporary inversion of the force relation. The reversal of these 'micropowers' does not, then, obey the law of all or nothing."

Care workers, as evident in the SKL project, also exercise power. In relation to our conception of power, this is not only a matter of outright resistance or all-ornothing revolution, but everyday practices of coping, inventing and deviating. Thus, power can come from below, through manifold and micro-social relations. The gap arguably marks a nexus and or a "wide-ranging effects of cleavage that run through the social body as a whole" (Foucault 1978 p. 94), the political problematic of elder care work articulated in our project and made visible by the 'discursive objects'.

Smith argues that mapping the accumulated knowledge from institutional analyses will build an image and a critical understanding of Western capitalist society, its changing structures and effects on people in their everyday lives (Smith 2005a). In our case, when the practices of care-workers were tacit and unrecognized, technologies of power may have been perceived as productive by authorities and care workers as consenting. Instead, our research revealed how, under ever-increasing pressure of time, scarcity of resources and rapid digitalization, the staff were struggling to reconcile their work and achieve some kind of equilibrium through their manifold practices. The gap between 'text' and 'work', i.e. institutional and experiential accounts, became evident. Nor were the gaps merely something to be closed or bridged. As in the case of Akrich's study, our context of elder care is characterized by social distance between authorities (including decision-makers, technology-developers and designers) and care workers (who are disproportionately female, of color and working- or lower class) that cannot be ignored nor reconciled. Thus, through Foucault, we seek to explore and contribute to understandings of power in general and, through Smith,

of the knowledge and struggles evident within specific experiences, practices and subjects.

Exploring and confronting power relations need not threaten authorities. Indeed, care institutions have an interest in understanding and incorporating 'other forms of knowledge', as argued by Satka and Skehill in their context of social work and vulnerable subjects. We would argue strongly for this within a welfare state context and 'duty of care'. Swedish foundations such as Vinnova invest in innovation beyond the technocentric, under a feminist government and through their gender equality program that funds our research (Andersson et al., 2017). Furthermore, and in general, governments and institutions are no longer merely disciplinary. As Thomas Lemke argues (2001 p. 201): "Neoliberal forms of government feature not only direct intervention via state apparatuses but also indirect techniques for leading/controlling individuals (and collectives such as families, associations, etc.) without at the same time being responsible for them." Liberalizing and deregulating governments necessarily need understand and rely more on individuals. This is reflected in increased accounting for individuals (f.ex. through 'data-driven' and New Public Management techniques), in 'empowerment' priorities and programs promoting "self-care" (as theorized by Foucault) at an institutional, family and individual level. Thus, we arrive full-circle to the fine line between 'control' and 'care' (Keshavarz 2017) motivating this paper.

Conclusion

The contribution of this paper is to the philosophising and critical discourse around the practical work that happens in design, design research and HCI on practical technologies. In order to do this philosophical and conceptual work we introduce new terminologies like "technologies of power", which should not be understood in a practical or instrumental sense as in medical machines, but in terms of how power is instantiated and exerted through specific artefacts or "raft of techniques".

We argue for design research to further explore the (powerful) role of design. We argue for this in general, though the need for political contextualization is particularly acute in contexts, such as elder care, that are characterized by macro-politics, social distance and 'duty of care.' The contribution of this article is primarily theoretical (the project is reported in more detail elsewhere, see Andersson et al., 2017), and we have attempted to re-frame and further develop concepts of power for design research. Thus, we have explored Foucauldian notions of power beyond typical design research preoccupation with disciplinary forms of power and micro-scale spatio-material manifestations. We echo and expand beyond Akrich's call for 'De-Scription' of power relations in the design and use of

artifacts through Smith's call for 'mapping' (2005a) on an institutional scale and for discursive purposes. Smith argues that by making visible micro-social problems and tracing these through the text into the institutional complex and, thereby to ruling relations, researchers can produce a map that can be used for increasing shared understanding both among and of those most affected (i.e. beyond research communities to subjects of research). Indeed, she argues that making visible through maps can open for debate and potential realignment or redistribution of power. Our future publications will reflect upon the communicative purpose and effects of 'discursive objects' in the SKL project.

Given the power of design, we argue that designers have more options available than merely affirming or critiquing predominant power relations (Dunne & Raby 2013). In the SKL project, sketches and artifacts were created in the genre of 'norm critical' or 'critical design', through which we conducted speculative modes of 'research through design' as well as discursive purpose of "design for debate" (Mazé 2007). While we would argue that our theoretical contribution is much wider than critical design, we particularly note and directly address the rising critique of critical and speculative design for lack of reflexivity regarding power, privilege and positionality. 'Research through (critical) design' has, in the SKL project, suggested for us a potential to redirect (powerful) design modalities to answer the call of Smith for purposes of 'mapping'. Nevertheless, we are also acutely aware of the power of design, critical or otherwise, to 'seduce'. Further, we are aware of the risk for research and knowledge production in general to render experiences, subjectivities and phenomena thinkable that there is a consequent risk that it becomes available for disciplinary purposes. Such (power) issues in critical design and design research will be further discussed in future publications.

ACKNOWLEDGEMENTS

This paper is authored by Camilla Andersson, PhD student, Aalto University, with Professor Ramia Mazé, Aalto University and Anna Isaksson, assistant professor in sociology, Halmstad University. It is based on the work of the project team consisting of Emma Börjesson, project coordinator at the Centre for Health Technology Halland (HCH), Anna Isaksson, assistant professor in sociology, Halmstad University, Karin Ehrnberger PhD in design and Gender, KTH, and Camilla Andersson, PhD student, Aalto University.

Camilla Andersson has had the role of design director and co-designed with David Molander, M.Sc. in Mechanical Engineering (KTH) and Industrial Design student (Konstfack), responsible for gestalt, model making and photography.

REFERENCES

- Akrich, M. 1992. The De-Scription of Technological Objects. In: Bijker, W. & Law, J. eds. *Shaping Technology/Building Society*. Cambridge, MA: MIT Press, pp.205-224.
- Andersson, C., et al., 2017. Materializing "Ruling Relations": a Case of Gender, Power and Elder Care in Sweden. *Nordes* 2017. **7**(7), pp.1–9.
- Andersson, K. 2013. Freedom of choice in Swedish Public Care of the Elderly: A care worker perspective on the challenges of care and care work. In: Gunnarsson, Å. ed. *Tracing the Women-Friendly Welfare State*. Stockholm: Makadam, pp.170-189
- Barry, A. 2001. Political Machines. London: Athlone Press.
- Colebrook, C. 2002. Certeau and Foucault: Tactics and strategic essentialism. *The South Atlantic Quarterly.* **100** (2), pp.543-574.
- Dunne, A. & Raby, F. 2013. *Speculative Everything:*Design, fiction, and social dreaming. Cambridge:
 MIT Press.
- Foucault, M. 1982. The Subject and Power. In: Faubion, J. ed. *Essential works of Foucault 1954-1984*. *Vol.3*. England: Penguin Books, pp. 326-348.
- Foucault, M. 1978. *The History of Sexuality*. Trans. Hurley, R. New York: Pantheon.
- Foucault, M. 1979. *Discipline and Punish: The birth of the prison*. Trans. Sheridan, A. New York: Vintage.
- Foucault, M. 1994. *The Birth of the Clinic: An archaeology of medical perception.* Trans. Sheridan, A. New York: Vintage Books.

- Keshavarz, M. 2017. CARE / CONTROL: Notes on compassion, design and violence. In: Nordic Design Research Society conference, Oslo: Nordes.
- Dovey, K. 1999. Framing Places: Mediating power in built form. London: Routledge.
- Kelly, M. 2009. *The Political Philsophy of Michel Foucault*. London: Routledge.
- Mattsson, H., & Wallenstein, S-O. 2010. Introduction. In: Mattsson, H., & Wallenstein, S-O. eds. *Swedish Modernism: Architecture, consumption and the welfare state*. London: Black Dog, pp.6-33.
- Mazé, R. 2007. Occupying Time: Design, technology, and the form of interaction. Stockholm: Axl Books.
- Silbey, S., & Cavicchi, A. 2005. The Common Place of Law. In: Latour, B. & Weibel, P. eds. *Making Things Public: Atmospheres of Democracy*. Cambridge, MA: MIT Press, pp.556-563.
- Simons, J. 1995. *Foucault & the Political*. London: Routledge.
- Smith, D. 2005a *Institutional Ethnography: A sociology for people*. Oxford: Alta Mira Press.
- Smith, D. 2005b Texts, Facts and Femininity: Exploring the relations of ruling. London: Routledge.
- Wallenstein, S-O. 2010. A Family Affair: Swedish modernism and the administering of life. In: Mattsson, H., & Wallenstein, S-O. eds. *Swedish Modernism: Architecture, consumption and the welfare state*. London: Black Dog, pp.188-199.
- Winner, L. 1995. Political Ergonomics. In: Buchanan, R. & Margolin, V. eds. *Discovering Design: Explorations in design studies*. Chicago, IL: University of Chicago Press, pp.146-170.
- Lemke, T. 2001. 'The birth of bio-politics': Michel Foucault's lecture at the Collège de France on neoliberal governmentality. *Economy and Society*, **30** (2), pp.190-207