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MATERIALIZING “RULING RELATIONS”: A CASE OF GENDER, POWER AND ELDER CARE IN SWEDEN

RELATIONS

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ABSTRACT

This paper reflects upon our critical (feminist) design research approach developed in response to the Swedish Governmental Agency for Innovation Systems (Vinnova)’s innovation program on equality. As a pilot of the program, the subject of our research is equality within elder care work, a female-dominated employment sector with particular gender and power dynamics. We have responded to this program and sector by rethinking our research methodologies and critical design research method. Inspired by institutional ethnography and the concept of ‘ruling relations’, our research approach involves critical design to materialize structural inequalities manifested within the everyday micro-practices of care work. Stories and sketches (as ‘material theses’) were generated through qualitative fieldwork involving ‘research through design’ processes to observe, document, explore, interpret, discuss and communicate gendered practices of elder care. Three themes emerged along the way, which articulate ruling relations revealed within elder care work. This research case is reported here along with reflections about the potentials of critical design as a (feminist) research approach capable of more critically interrogating power and positionality within design and innovation. From

our perspective, equality as a policy and subject of research – including design research – calls for critical (and feminist) theoretical and methodological development.

INTRODUCTION

The webpage of the Swedish government states: “Sweden has the first feminist government in the world, which means that gender equality is central to the Government’s priorities - in decision-making and resource allocation” (Government Offices of Sweden 2014). This gender equality policy has an overarching aim that “women and men are to have the same power to shape society and their own lives” (ibid). ‘Power’ is further defined to include both representation and influence within decision-making as well as equality of work opportunity and conditions in paid work. The implications of this governmental policy are profound and far-reaching, not least in research, as one important area of governmental resource allocation.

In research, this calls for revisiting how we frame research, what we study and how we do so. This call has been heard by national foundations for research – for example, the Swedish Governmental Agency for Innovation Systems (Vinnova), which has funded the research reported here, now has an explicit aim to use equality as a driving force for innovation (Vinnova 2011, Vinnova and SKL 2016). For us, as researchers, we are rethinking foundational issues within research, including what, or who, is the subject of research as well as our theories and methodologies. As a subject of research, for example, the elder-care context is notable from the perspective of gender and power. In Sweden, elder care is a female-dominated sector with particular gender (as well as class) dynamics.

In addition to elder care as a relevant subject of research, the issue of gender and power also has profound implications for the theories and methods through which we research this subject. From a standpoint in feminist, post- and decolonial theories (f.ex. Harding 2006), we must dig deeper into the worldviews, structures and concepts through which such inequities came to be and continue to be sustained even today. From this perspective, gender is not, or, at least, not only, a women's issue. Gender inequity is a virulent and prevalent symptom of larger structures of domination, or "ruling relations" (Smith 1987) that affect very many people that do not conform to the particular biological, ideological, class and cultural norm of those few in power. Gender, thus, is not only an issue attached to individuals, it intersects with other 'power'-ful patterns of social relation, such as race and class, that further stratify and structure ruling relations within our societies. In these ways, feminist theories in research, address issues at stake for many people and institutions. Further, a feminist theoretical standpoint in research also problematizes (in the sense of 'problématique' articulated by Foucault) the underlying assumptions and worldviews embedded in research epistemologies and methodologies.

This paper reports and reflects upon part of our research assignment concerning elder care in Sweden, in which we develop a feminist approach to research within Vinnova's innovation program on equality. More specifically, we outline our design research perspective within the project as rethinking 'critical design' methods. Thus, gender and power inform the choice of subject in our project, our research methodologies and our method of critical design. Our interpretation of the assignment involved reconsidering our research methodologies from two perspectives, institutional ethnography and critical design, developing into a hybrid research methodology involving stories and sketch-artifacts. The paper will recount some relevant aspects of the research process informed by this methodology and five sketch-artifacts, which collectively clarify and elucidate 3 higher-level themes.. These themes emerged during the research process and build on the 'stories' told to us by women on the ground in elder care, and are articulated in, and further explored through the sketch-objects (conceptualized as "material theses"). The three themes are *systems-level critique*, *top-down technique* and *technification of interhuman relations*. Our intention is that these becomes as 'power'-ful as otherwise dominating (unequal and unjust) structural discourses.

RESEARCH ASSIGNMENT

This research was set up as a pilot to explore how Vinnova's innovation program could stimulate the public sector in response to the national gender equality policy. The program is a cooperation with the Swedish Association of Local Authorities and Regions (SKL), and our assignment focused on two 'model

municipalities' selected by SKL because of their interest in, and capacity to, work actively with gender issues. Within the general subject of innovation in care services for the elderly, we were asked to look at 'gender mainstreaming'. For SKL, this focus was primarily instrumental, in which every decision should be evaluated regarding gender consequences, including both official decisions within the public authorities as well as informal decisions enacted by staff in everyday treatments and interactions with patients. For us, the policy implied larger issues of power and gender, including structures underlying official and informal everyday interactions.

Our first step, was to reframe the design 'problem' by critically rethinking some assumptions and worldviews potentially underpinning the innovation program itself. For example, there seemed to be a strong focus on technical solutions. Such a focus can imply assumptions and particular ideas of what constitutes progress (including a history of ideas that is predominantly male- and Western suprematist, see Harding 2011). Furthermore, within the everyday context of public-sector elder care, technical solutions can entail a lot of expense and resources to move from idea to an innovation. If the goal is to stimulate innovation in a socio-economically strained female and immigrant-dominated sector, we felt it was necessary to problematize such assumptions. We began to hypothesize that part of the gender and power problem might include techno-centrism and that reframing 'innovation' itself, and what that could entail in this sector, was important. We were struck by the dynamic – and tension – between the high-level discourse that seemed techno-centric and the strained realities of a sector on its knees and employees straining to sustain everyday practices on the ground. Our next step was to query our own research methodology.

(CRITICAL DESIGN) RESEARCH METHODOLOGY

Our methodological approach reflects the backgrounds of our team as a mix of research traditions informed by critical and/or feminist theories. Through mixing two approaches, we attempt to perform the tense dynamic between macro-structures (in this case, sociology as typically concerned with structures here becoming more grounded and embodied) and everyday micro-practices (design as typically human-scale and -centric here becoming more articulated concerning structures of gender and power). Thus, in relation to traditions of sociology, we orient towards a more grounded and embodied approach to qualitative research sensitive to marginalized perspectives and articulating voices often unheard or unrecorded. Further, in relation to traditions of design research, we reformulate critical design methods, in which larger structural issues of gender and power are acknowledged in the positions and processes as well as the materializations of research.

STUDYING 'RULING RELATIONS'

Methodologically, our work has been inspired by institutional ethnography, as developed by Dorothy Smith in the 1980s and later by others (DeVault 2006). Smith (2005) argues that institutional ethnography can be seen as an alternative sociology, which has as a primary objective to make visible societal relations of power and inequalities reproduced through the daily practices of ordinary people. Smith (1987) describes how what people do, say and think is intertwined with society's ruling relations, and she demonstrates how these relations are clearly gendered. She discusses examples in which worldviews, social structures and implementations of capitalist ideology are gendered. For example, through modern capitalist development in the West, women came to dominate the private sphere of family life and care, and, consequently, were less represented, excluded and silenced in public life, industry and the political arena. Thus, women's experiences and voices become marginalised within the societal structures of Western society, including those worldviews, imaginaries, and symbols that continue to structure our societies today despite increased gender representation. Articulating persistently unequal structures as "ruling relations", she further analyses these within societal institutions, such as the state and media.

In order to become sensitive to ruling relations within institutions such as public care services, we follow Smith in trying to attend to the experiences of women and care workers. The stories of women, Smith argues (1987), have often been excluded in mainstream sociology but are crucial sources of understanding of how ruling relations shape and circumscribe people's lives. Unaware of the relations governing their decisions, actions and thoughts, women can unconsciously be part of the ruling relations thus reproducing different forms of power and inequality. Following Smith, we also adopted methods of institutional ethnography, in which daily practices within institutions were studied through observations, interviews and 'research through (critical) design'. Thus, we conducted research with and for those workers that the innovation program aims to affect, and we have articulated their embodied experiences and voiced perspectives here as 'stories'.

CRITICAL DESIGN METHODS

Critical design can build and constitute a kind of theoretical development through its own modes and methods of operation, a kind of research that happens through, and from within, design (Mazé and Redström, 2009). While we recognize long traditions of critical practice in a variety of adjacent disciplines (Mazé 2007), in research, 'critical design' often denotes a particular genre associated with Anthony Dunne and Fiona Raby. In Dunne's doctorate, "objects were produced in the studio as "design", but in the sense of a 'material thesis' in which the object itself becomes a

physical critique," or "conceptual modeling' involving a critique of existing approaches to production/consumption communicated through highly considered artifacts" (Seago and Dunne 1999: 16-17). Such material theses, aimed at "design for debate" rather than prototypes aimed at mass-production, can be understood as "genotypes" intended to generate and provoke communication (Dunne 1998).

Despite the discursive claims of critical design, related research and design practices are often object-centered. In early critical design, this was reinforced by critical objects displayed within the gallery setting, objects that were fixed, static and conserved behind glass or on pedestals to be contemplated at a critical distance. Potential for debate, communication and discourse seemed confined to visitor encounters, art criticism or journalism. Not only the discursive limits but the elitism of audiences in such settings has been critiqued and expanded in various ways (Ehrnberger 2017, Kerridge 2015, Mazé 2016).

Still, design and/or research processes before, behind and leading up to eventual critical objects are scarcely documented nor discussed (with some notable exceptions, Kerridge 2015, Bergström et al 2009). In this paper, we explore the hybrid research methodology and how this enriched and developed the process behind and before our 'material theses'. As 'material theses', we include a span of material and 'designerly' modalities such as drawing, CAD-modelling and artifacts designed within ongoing discursive processes (rather than as final objects subject to critical reflection). To articulate such critical design as a research activity embedded within our hybrid methodology, we use the term 'sketch-artifact' (partly related to the discussion in Tharp & Tharp 2013). From our perspective, a critical theoretical shift to feminist theories to orient design also requires a shift in rethinking not only the objects of critical design but designing itself, including the discourses and critical subjects engaged before and behind the objects produced.

CASE: MATERIALIZING RULING RELATIONS IN ELDER CARE PRACTICES

Our approach reported here is informed by Smith's institutional ethnography paired with 'research through design'. Our research methods, more specifically, involved observational visits (6) and interviews (20), documented in various ways including in the form of some 25 sketches. Half of the interviews were with daily staff, i.e. nursing assistants, the other half with staff on various levels within the organizational hierarchy. We visited 1 office providing home-help service and 3 homes for elderly in 3 cities in Sweden. The 'model municipalities' made introductions so that we could interview staff and visit facilities. Half a day was spent in each visited care facility, where we

collected oral articulations of care practices as well as visual ones, documented through photographs (omitted here for anonymity) and sketches. During observations and in the interviews, we asked the informants to tell us about their work practices, what difficulties looked like and how they overcame these difficulties. In this way, we wanted to listen to the *stories* of the people on the ground, in contrast to the dominating technocentric discourse. These stories revealed fundamental problems on a structural level, which the staff handled in the most ingenious ways.

The ad-hoc solutions, as told to us in the interviews, were recorded as *sketches*. Sketches were made during or after the fieldwork, and were then discussed, and selections were made within the research team through the filter of our research frame and standpoint. During sessions with care workers, sketches were used to externalize documentation and interpretation, and the sketches seemed to open up for reflection. Interviewing and sketching fuelled a continuous dialogue among the interviewees, the main author (who sketched) and the research team. This dialogical process elicited more and more hidden stories. In the first interviews, it was difficult to elicit the tacit (or suppressed) experiences that we were looking for - a breakthrough was an early sketch that we had made of a popular media article. The sketch sparked a myriad of related stories they wanted to share. We surmise that earlier difficulties were due to the fact that many of the daily solutions can occupy a 'grey zone' of il/legality, and, because they are not recognized or are punished, staff have come to suppress their own experiences. The more sketches we could show, the more stories we got. Thus, sketching activity acted as a catalyst in a process of revealing their tacit knowledge, mutually recognizing their ingenuity, and materializing their concealed practices.

During the process, we tested our accumulating data and interpretations with informants. Half-way through, at a stage when we had an idea of where we were heading with the collected stories, we presented the sketches and a rough outline of the framing of them in relation to our research. One particularly notable (but typical) reaction was one person said that seeing the *elevator stopper* (presented below) was a relief; she felt it lifted the responsibility of actions within the 'grey zone' off her shoulders and pushed it upwards in the organisation. This was when we concluded that it was these *concealed practices* that illustrate well the gap between technocentric discourses and everyday practices. It was a point of convergence between our interpretations and their experiences, which opened up the next stage of our research.

Out of the 25 sketches, we chose to develop those that best articulated the structural 'problématique' that necessitated worker's *concealed practices*. Forms of material theses were further detailed to explore emerging themes within our process of analysis, in an

iterative process of inscribing layer after layer of information into the materialization. The transformation from story to materialization was not difficult, since it built literally on work practices of the care workers. To make the objects "function", a process was initiated to better understand the phenomenon behind concealment. Further research included returning to informants. Each button or lever represents mutual understanding and careful deliberation of the theme. For example, each and all of the buttons, wheels and levers are bound into a process of reciprocal learning for all of us. These various modalities (and materialities) of discourse were central to our own process, and allowed us to continually validate, learn from and with the care workers

FIVE MATERIAL THESES

Five out of the 25 sketches were further detailed and are presented here. As 'material theses', these represent our three overarching themes, materializing structural problems which we believe are crucial to address in the coming innovation program if the governmental equality policy is to be addressed. Each material thesis is described below in terms of point of departure in one or several stories told to us by the workers, and the tension between an experienced structural problem and everyday practices adapted to solve, sustain or survive in response. Some more specific aspects of the design process behind are also indicated. Even though the theses can appear to be products, for us this 'productification' can be understood as a kind of design argumentation (ie. 'political rhetoric' (Mazé 2007), deployed within an ongoing discursive process, which still continues. Each sketch-artifact anticipates potential interpretations and actions of users, although the sketch-artifacts are not produced for the market, nor to be prototyped and tested with users. Rather, as 'material theses', the images and the physical models of the sketch-artifacts act as rhetorical materializations to orient discussions, not only with users but as we negotiate with diverse stakeholders involved in developing four new projects within Vinnova's innovation program.

THE ELEVATOR STOPPER

Evident in nearly all the stories were fundamental inadequacies in the overall structure of elderly care. Some examples were particularly evocative:

The first story is about the dilemma of clients with dementia leaving their apartments or rooms and getting lost. It is against regulations to lock their doors, and there were many stories of ingenious ways in which the staff managed to keep track of the elders. The story we chose to embody in sketch is one exposing the full dilemma. We were told how, at night, when less staff are on duty, they would use tape to cover the elevator door sensor. This way, the elevator would stay open on the basement floor and prevent the elders from getting lost in, or even leaving, the building. In our sketch, the

existing practice was embodied in a small device that can be carried in the pocket of the staff uniform. It folds up and can be attached to the elevator door, blocking the sensors and that way preventing the elevator doors from closing and the elevator to function. This story sheds light on a concealed practice, something in a 'grey zone' of what is legal, which is amplified in the sketch.

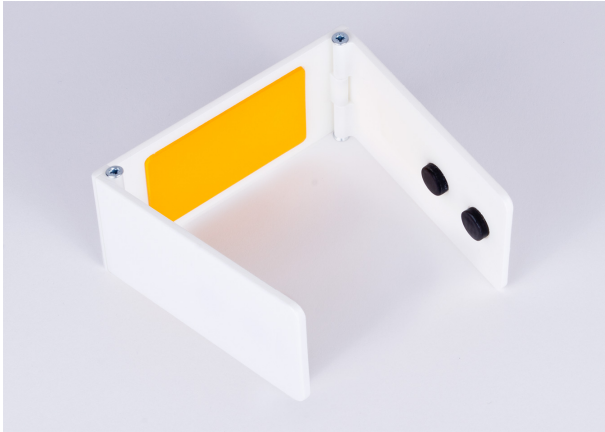


Figure 1: *Elevator Stopper* prototype.



Figure 2: *Elevator Stopper* folded in pocket.

THE ADMINEST AND RESTNEST

The second story is from a nursing home where the staff room was very small, and doubled as a meeting room for relatives and family. In the tight space, there were two computers, we were told how there was usually someone doing administrative work whilst others were trying to rest. The door to the room was glazed, and often there would be elders standing outside looking in. Staff also told us how they would take their breaks in the dayroom together with the elders to avoid worrying them. There were also several accounts of arranging work spaces in the corridor where staff could keep an eye on all the rooms simultaneously while doing administrative work.

Two sketch artifacts evolved in response to stories of ad-hoc spaces set up to monitor the elders simultaneously while doing administrative work, and of inadequate spaces for rest:

The AdmiNest is an adaptation of the existing corridor 'office' arrangement, materializing the panopticon-like expectations of that setup. Our version is a mobile "room" on wheels equipped with a periscope-like device to simultaneously allow visual supervision and privacy. It is sound-proof with a sound sensor alerting the staff of sudden noises outside. The ambiguity of a closed and insulated space with maximum surveillance highlight the demands placed upon staff to always be available along with little room to recover physically and emotionally.



Figure 3: *AdmiNest* illustration of interior.

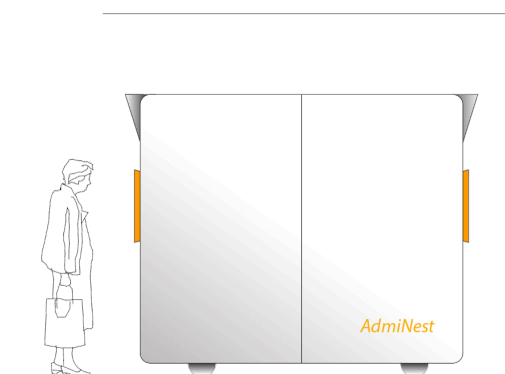


Figure 4: *AdmiNest* illustration of exterior.

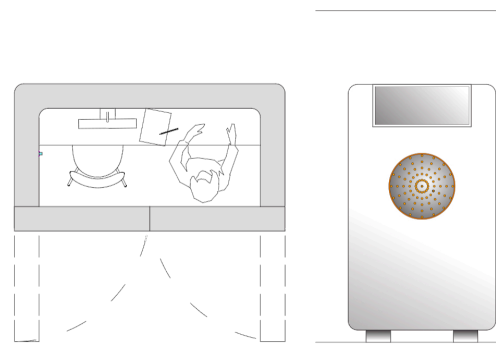


Figure 5: *AdmiNest* plan and exterior

The RestNest is a version of this with two beds for staff to rest. The design features highlight the contradictory demand for staff to be available always and everywhere along with right of staff and their physical and emotional need to rest and recover.

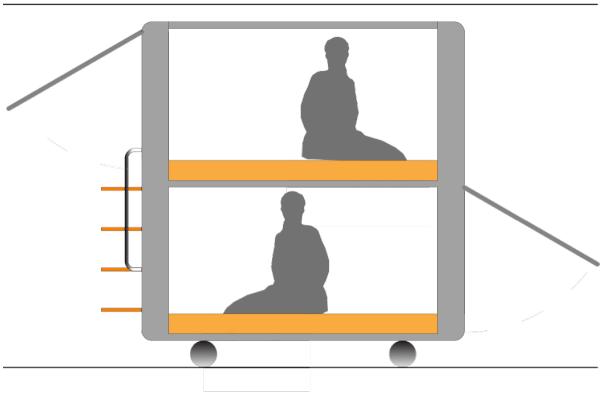


Figure 6: *RestNest* illustration of interior

THE CLIENT GENERATOR

We were told many stories about IT-systems imported from work sectors vastly different from the elderly care sector, systems that made their job more complicated rather than being a helpful tool. One told us about an IT-system newly installed in the public home-help service, a route-optimizing system laying out the optimal route between elderly clients during the working day. Staff visit many homes every day, so this might seem like a good idea. Originally developed for cargo traffic with trucks, however, this IT-system was directly transferred to a female-dominated sector of elder care. Getting from point A to point B with a cargo truck differs from moving around on a bike or walking, in which there are topographic, human and climate factors. Consequently, the system can't provide routes corresponding to the reality of this sector.

To explore the issue of simplistic tech-transfer from one sector to another with different preconditions and needs, we were inspired by how the staff “invented” clients to circumvent the IT-system. They would invent a client with a fake social security number, add them as stops on routes, which allowed the staff extra time to manage an uphill route. Our sketch Client Generator materialized how the staff tried to alleviate the burden imposed by the IT-system through their ‘grey zone’ invention. In the sketch, staff would receive a printed ID card of an “invented client” which they could feed into the IT-system. The sketch articulates an ironic conflict between a high-tech digital system which does not work without this laborious manual manipulation embodied in the analogue, manual Client Generator.



Figure 7: *Client Generator* prototype.

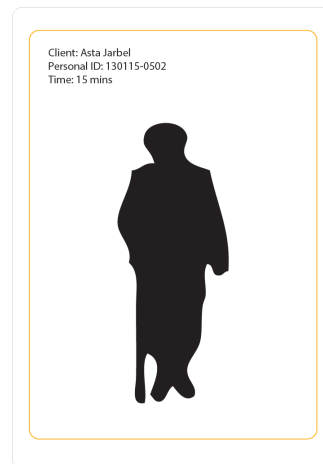


Figure 8: Printed “Client” with ID-number.

THE RADIO

In analysing many of the stories, we were struck by the efficiency of many of the “manual” things staff did in comparison to costly and complex technical devices that did not serve the purpose intended. One particularly poignant example was a caretaker in home-help service who had discovered that she could calm an elderly woman with dementia if she sang a particular song, which then allowed her to complete the chores she was assigned.

To explore the tension between such cost-efficient inter-human practices and the ongoing process of replacing this with technological solutions, we turned the example of the song into the form of a radio. The radio generates a song tuned to the needs of each person. The sketch visualizes the complexity of assessment and judgment behind the care given to the elders, which is often invisible and under-valued. In our material thesis, the front of the radio is very simple with only one button that, when pressed, plays one song and then turns off again. The back, in contrast, has a myriad of wheels and

levers, to articulate the complex reasoning that staff do every day. Thus, the radio expresses the tacit knowledge that a caretaker gains through seeing and getting to know someone over a long period, including how they react to a rainy day, to taking a shower or being fed, as well as their diagnosis and medication.



Figure 9: *Radio*. Simple front and complex back.

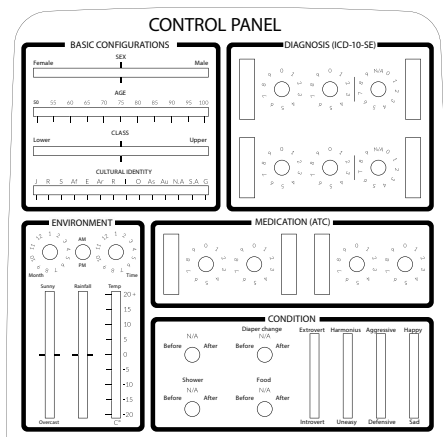


Figure 10: Graphic representation of back of *Radio*.



Figure 12: *Radio* in context

DISCUSSION OF THEMES

Analyzing the stories, we began to cluster sketches along three emerging themes. These themes frame structural level problems, in response to which

strategies can be drawn up as Vinnova's innovation program is further developed.

SYSTEMS-LEVEL CRITIQUE AS MATERIAL THESIS

The Elevator Stopper and the AdmiNest both embody existing practices that are consequences of a lack of resources. The Elevator Stopper visualizes a practice that will not be found in any handbook or recommendation on routines, since it is a practice on the brink of legality. The act of preventing elders with dementia from disappearing inside or outside the building cannot be formalized since it is illegal to lock people in but, in reality, the risk of people disappearing must be minimized somehow. Thus, every measure exists in a juridical grey zone. Further, the AdmiNest and RestNest both address conflicts in employee rights and health with the heavy responsibility felt by staff and formal work demands. These sketches amplify these grey zone practices and labor conflicts, raising larger questions that should be dealt with on a much higher level but that, instead, are pushed downwards and end up on the shoulders of individual workers.

TOP-DOWN TECHNIQUE AS MATERIAL THESIS

The Client Generator illustrates how a digital system intended to optimize and ease workload, instead becomes an extra burden due to extra manual labor of inventing and adding fake clients to the IT-system simply to make it function for the elder-care sector. The sketch suggests the danger of transferring (digital) systems from one sector to another without investigating, or recognizing, everyday working conditions. A hierarchy becomes visible here, in which the inventions of a high-status and male-dominated IT sector are unthinkingly imposed on a low-status female-dominated sector without considering their needs, ingenuity and work conditions. The sketch embodies a strategy to make those who implemented the IT-system take responsibility for the subsequent problems caused, in this way relieving carers of the labor and ethical burden of doing something they felt was against protocol.

TECHNIFICATION OF INTERHUMAN RELATIONS AS MATERIAL THESIS

The Radio is perhaps the most nuanced of the material theses presented here. In the contrast between the simple front and complex back, we expose the prospect of 'technifying' more and more of the work now done by carers, for example as robotic and other imminent technological innovations in the healthcare sector. The sketch makes visible the profound knowledge upon which care work depends, knowledge that is tacit, experiential and inter-subjective. This knowledge manifests even in the simple human act as singing a song, which would demand countless buttons and algorithms in a technical solution. As a physical artefact, the Radio encourages inter-human interaction and visualizes the depth of knowledge and experience embedded in this everyday practice, also

communicating back to staff the complexity and value of their work.

CONCLUSIONS

In addition to knowledge gained about the gender and power dimensions of work in the elder-care sector, discussed through the themes above, this case has spurred our development of and reflections on critical (feminist and design) research methodologies. Our approach combines critical qualitative and design methodology, through which we attempt to perform the tense dynamic between macro-structures (in this case, sociology as typically concerned with structures here becoming more grounded and embodied) and everyday micro-practices (design as typically human-scale and -centric here becoming more articulated concerning structures of gender and power). Thus, in relation to traditions of sociology, we orient towards a more grounded and embodied approach to qualitative research sensitive to marginalized perspectives and articulating voices often unheard or unrecorded.

Further, in relation to traditions of design research, we reformulate critical design methods, in which larger structural issues of gender and power are acknowledged in the positions and processes as well as the materializations of research. Critical design has been criticized on many fronts, including blindness to gender- and class issues (Prado 2014). But rather than leaving this as a critique of critical design, we explore how critical design methods could be reframed in relation to other critical methodologies, ie. institutional ethnography. Our experience working with critical design is that sketching activity and sketch-artifacts took on agency within our research process, acting as catalysts that reconfigured and redirected the process. In complex and interwoven performance of fieldwork involving stories and sketches, our research methods (and experiences within our research team and with our informants) were fundamentally transformed and themes emerged along the way. We experienced a kind of mutual learning, in which the 'designerly' methods performed a kind of basic research (critical material practice and not only critical hermeneutic practices in research, see Allen 2000).

A further critique of critical design is narrowness and elitism of its contexts of discourse. This is clearly different in both the objects (sketching process) and subjects (workers) within our critical design method. Thus, we prefer terms such as material 'thesis', which articulates not only a structural critique but also a hypothesis within the artefacts, an opening for debate on many levels and for the multiple audiences addressed in our case. This paper reports only on the pilot phase, and our outcomes will be the basis for further development of Vinnova's program as well as for further research, design and innovation. As we move into this next phase, we are conscious also of the ethical dilemma in

revealing the 'concealed practices' of vulnerable subjects, materializations of which will now enter into research discourses (such as this conference) and other structures dominated by 'ruling relations' that might interpret and use outcomes in unintended ways. Approaching this may be our next critical (feminist) challenge.

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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.

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