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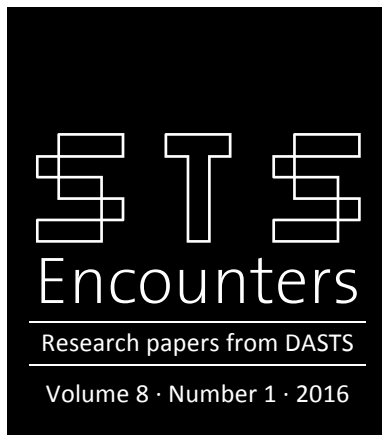
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## Different generalizations of the elderly in design of welfare technology

Marie Ertner

**DASTS** er en faglig forening for STS i Danmark med det formål at stimulere kvaliteten, bredden og samarbejdet inden for dansk STS-forskning samt at markere dansk STS tydeligere i nationale og internationale sammenhænge.

# Different generalizations of the elderly in design of welfare technology

Marie Ertner

## Abstract

*This article explores problems of representing the elderly in a User Driven Innovation (UDI) project developing welfare technology. Drawing on Helen Verran's concept of the dual logics of generalization I attend to differences in enactments of the elderly. I engage with situations where the objects we study do not seem to 'fit' with the categories available or when they seem 'more than one, but less than many', and I relate these issues to two different logics of generalization.*

*The contribution of the paper to design studies, and designers who experience difficulties inscribing the elderly into design, is that it shows how Science and Technology Studies (STS) can be useful in order to better recognize differences between different enactments of an imagined user, in this case the elderly.*

*The contribution of the paper to STS is a discussion of how I as an STS-informed ethnographer was invited to participate in a user driven innovation project. Based on my reflections on this role, the paper reflects on the ethnographic account as a tool with particular qualities and limitations when inhabiting a position as mediator between users and an innovation project.*

## Introduction

The problem that I circle around in this paper is not a new one. The situation of participating as an ethnographer in settings where the ethnographical insights and accounts are expected to deliver more or less straightforward recommendations for design has been described and discussed in many terms (Andrew Crabtree, Rodden, Tolmie, & Button, 2009; Dourish, 2006; Suchman, 2002, 2011;

Winthereik & Verran, 2012). Recently Torben Elgaard has coined this form of participation *intervention-as-composition* to sharpen the focus on how participating in projects as mediators, middle managers or negotiators between two or more parties, provides a strong stimulus for *re-versioning* key conceptions of the STS researcher and adapting those to the agendas of the project (Elgaard 2012). Similarly, I found it difficult to balance my own ideal frames for conceptualizing the elderly with those circulating in the project. More specifically, I was struggling with how to study the elderly in ways that would remain sensitive to particularities, diversity and relationality, and at the same time have potential for intervening in a design project.

But first some background. The situation, in brief, is this; Denmark, along with many other countries around the world, is undergoing demographic changes due to the fact that the average age of the population is going up. This changed demography is often termed population ageing. While life expectancy rates are going up, birth rates are going down. The problem, as it is described in policy documents, is that this demographic situation poses severe challenges to the Danish welfare society and public healthcare in particular. Alternative ways of managing healthcare and eldercare are being pursued and welfare technology is assumed to be a promising solution to the main concern; to save money on healthcare while maintaining the same level and quality of services provided (The Danish Government platform 2011<sup>1</sup>).

In the realm of this framing of the problem-solution narrative, a number of innovation projects have been launched in Denmark to provide solutions, mainly technological, to deal with the challenges of 'the ageing society'.

At the heart of these endeavors are different concerns regarding national economy, quality of healthcare and eldercare services pro-

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[http://www.stm.dk/publikationer/Et\\_Danmark\\_der\\_staar\\_sammen\\_11/Regeringsgrundlag\\_okt\\_2011.pdf](http://www.stm.dk/publikationer/Et_Danmark_der_staar_sammen_11/Regeringsgrundlag_okt_2011.pdf)

vision, and the quality of life of the elderly people. Project Lev Vel (Live Well in English), a user driven innovation project (UDI henceforth) organized within a public-private-research innovation model, is such a project. I participated in the project as an ethnographer with the responsibility of conducting user studies.

Ethnography was the primary method for representing and involving the elderly in the process of designing welfare technologies, and as such I and other researchers participated in the project as 'mediators' between users and the project (Jensen, 2012a). My role in the project was to produce user insights by carrying out ethnographic and qualitative studies of intended users, and as such I, along with other partners doing user studies, carried the responsibility of informing the design activities and the development of technological objects.

To understand the role of the ethnographer, it is important to note that the design process was divided into separate phases. Each phase comprised one or two workshops working as hand-over sessions. The partners communicated intermittently between and in the workshops, but the majority of the work was conducted under the direction of just one or few partners. In the first phases, the ethnographers carried out user studies, which were then handed over to the rest of the project in the form of documents or workshop presentations. Secondly, the design partners were then expected to use this research as springboards for developing design concepts and prototypes. When the prototypes were presented in later phases, the ethnographers were responsible for contributing with user knowledge that could help designers develop their prototypes further. As the project was mainly concerned with the so-called 'self-sufficient elderly' and knowledge about their motivation for staying active and self-sufficient, we (the ethnographers) were encouraged to conduct our studies among partner organizations, which were mainly activity centres and sports organizations.

I decided to focus my study around activities in a fitness center in Vanløse, a small neighbourhood in the outskirts of Copenhagen,

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where several activities and classes were explicitly directed towards elders or 'senior members' as they were referred to. I carried out ethnographic studies in a weekly fitness class, senior-switching<sup>2</sup>, doing participant observations, informal interviews and focus groups with some of the participants in the class.

In correlation to the overall aim of the innovation project; to increase the quality of life for elderly people by stimulating their social, physical and mental well-being, my initial task was to produce knowledge about what motivates 'the self-sufficient elderly' to stay socially and physically active, and what are their needs in order to remain motivated and self-sufficient. Gradually, I experienced difficulties of living up to these requirements. During my encounters with the people from the fitness center it became more and more unclear to me who the elderly were, and what kind of account could fruitfully intervene in the design process without contributing to a reductionist and simplistic characteristic and categorization of 'the elderly'.

My initial concern had been to identify potentially stigmatizing stereotypes of the elderly within the project. I thus wanted to find and propose a way for the designers to better align the human user 'out there' with the users they were inscribing into the welfare technologies being developed (Akrich, 1992). However, I soon realized that the accounts I could propose might not necessarily be more relevant, interesting or valid than the knowledge about the elderly, which already existed within the project. Moreover, my double role of generating understandings of the people I encountered during my studies, and at the same time contributing as 'composer' of the design project (Jensen, 2012a) produced different tensions. In order to progress with its planned process of activities, the project needed knowledge about the users, which could be inscribed into the design of welfare technologies. I, on the other hand, had trouble locating the

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<sup>2</sup> Senior switching is a style of exercise, which combines strength training on machines and various forms of cardio workout. Participants switch between floor and machine exercises.

elderly and in particular I had trouble identifying those who would benefit from the welfare technologies envisioned by the project in the future. The elderly I met in the fitness center did not immediately lend themselves to be studied and understood in terms that could easily be translated into design and technology.

During my encounters with people in the fitness center, I often experienced situations where my informants would react with what could seem as subtle resistance to my questions and purpose of being there in the fitness center. On several occasions I found myself in the awkward situation where their in-jokes and outbursts of laughter over something I had said (without trying to be funny), interfered with my agendas. These frictions did not immediately seem to have anything to do with their role as intended elderly users of welfare technology, or then again, maybe it did. These occasions of subtle tensions and frictions in our encounters eventually made me think that things were more complicated than what the framework for my inquiry would immediately enable me to grasp. There seemed to be both a match and a mismatch with the category 'elderly' and the people I met in the fitness center. This was profoundly complicating my task of identifying the so-called unarticulated needs and potentials for welfare technology, which the elderly were assumed to have. I felt caught in-between proposing new stereotypes to be adopted by the designers or finding myself in a situation where my detailed ethnographic descriptions would circulate in the project without being noticed by the designers at all.

This paper is an attempt to deal constructively with that situation by looking towards current discussions in STS (and anthropology) about representation and intervention<sup>3</sup>.

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<sup>3</sup> Intervention has been a central locus of debate within STS in recent years (See for instance the special issue on 'Intervention and representation' in *Science and Technology Studies* 2012 (Jensen, 2012). Even though a highly debated notion, issues of intervention have been said to characterize a second generation of STS ethnographies (See Hess, 2001).

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The outline of this paper is as follows: first I briefly outline and discuss ideas in STS about users, representation and intervention. In particular, I focus on Winthereik and Verran's reflections on ethnography and intervention based on Verran's concept of the dual logics of generalization. Second, I use Verran's understanding of the different logics of generalization to analyze differences in the way the elderly were generalized within the project and in the senior fitness class in which I carried out my ethnographic user studies. Based on this study, I propose an embodied account of the elderly, which among other things forces me to re-inscribe my own body and ageing in the text. Finally, I discuss the political and ethical implications of the way that the elderly are studied and generalized in user driven innovation of welfare technology. Based on the analysis, I reflect upon the use of ethnography as a method to represent 'users' in design and discuss alternative ways for ethnography to intervene in a design project.

### Figurations of 'the user' in STS

A common axiom in STS is that technological design happens through processes of inscribing knowledge and visions of the world, or programs of action, into material form (Woolgar 1991, Akrich 1992, Latour 1992, Suchman 2002). A central concern has thus been the relation between the designers' imagined user and the embodied user.

"(...) we cannot be satisfied methodologically with the designer's or user's point of view alone. Instead we have to go back and forth continually between the designer and the user, between the designer's projected user and the real user(...)" (Akrich 1992: p. 208-209).

STS has raised the issue that despite commitments to represent users, much technology design fails to represent users adequately. In

some cases this may result in design, which projects the gendered needs, desires and preferences of the designer onto the user (Oudshoorn & Pinch, 2005; Oudshoorn, Rommes, & Stienstra, 2004). Instead of focusing on the user as present or not present within the processes of design, it is argued that the user should also be understood in a semiotic sense, as a figure in the designer's imagination (Ibid). The relation between the designers imagined user and the real user is seen as key to understand the success and failure of technology. In this light, the 'failure' of design does not stem entirely from the inability to understand the concerns of real people 'correctly', but is as well due to a blindness towards project politics that create particular possibilities for action through the figuring of users (Akrich, 1992; Latour, 1992; Oudshoorn & Pinch, 2005; Oudshoorn et al., 2004; Suchman, 2007).

These discussions within STS and design research on ethnography played a central part in my initial approach to participate in doing ethnographic user studies within a user driven design project. Even though this body of literature introduces useful resources for understanding the elderly as being enacted by and inscribed into technology in particular ways, it still maintains the idea of a homogeneous user existing out there. The claim that users can and should be inscribed 'correctly' in welfare technologies under development did not seem to get to the heart of the problems I experienced in my attempts to represent the elderly. Also, it did not help me intervene in the main narrative of the project, namely that the elderly have certain unarticulated or even un-recognized needs for welfare technology, and the task of the ethnographer is to uncover those needs. This apparently uncomplicated arrangement of causalities did not seem sufficient, among other things because it implicitly took for granted ideas about 'the elderly' as a unity.

On the other hand, approaches to understand the elderly as a social construction did not seem satisfying either. On some occasions 'ageing' certainly seemed very real, embodied and material to my informants – as well as to me. And the elderly were also real to my

designer colleagues many of whom worked with and encountered elderly people on a daily basis. The elderly and ideas about their specific needs, situations and motivations were deeply embedded within the design project's 'program of action' (Latour 1992). Merely deconstructing the elderly would render their work meaningless. The question for me was how to live with both kinds of stories; how to acknowledge both universality (the elderly in an abstract sense) and particularity (the situated elderly)?

## Disconcertment and generative critique

"how to talk about something, how to name it, without reducing it to the fixity of singularity? How to talk about objects that are more than one and less than many? How to make a difference in ways that go against the grain of singularity, simplicity or centring?" (Law 1999: p. 10-11)

These concerns, formulated by John Law, seem to sum up exactly the dilemma I was in. Law proposes that we pay attention to the complexity of tension and resist the simplicity and fixity involved in processes of naming (Law 1999).

Winthereik and Verran suggest a similar attention to the tensions that become visible in transient moments of disconcertment in the encounters between different knowledge traditions (Winthereik & Verran, 2012). Disconcertment is important, Verran argues, because it alerts us that here is an occasion for telling different stories (Verran, 2001; Winthereik & Verran, 2012).

In Verran's studies of mathematics teaching in Nigerian classrooms her own disconcertments with some teachers' methods for teaching math becomes an occasion for thinking about different logics of generalization.

Upon studying some of her Yoruba colleagues teaching their students how to measure body length, Verran notices how English and

Yoruba number systems operate with two different logics of generalizing; a one-many and a whole-parts.

English language numeration is based on one-by-one addition in a regular and linear progression (Verran 2001). Length is measured with a meter, and thus achieved by adding up centimeters to one whole of length as linear extension. This generalizing logic, enables abstracting from many entities, centimeters, to one unified whole, body length, and thus makes general claims about the unity of length.

The one-many generalizing logic starts out by taking for granted that body length exists prior to being measured, and as such implies the idea that there is a given unity of some kind of entity (Verran 2001).

In contrast, Verran observed how some Yoruba speaking teachers were doing length in a different way, by winding a length of string around a piece of 10 cm card, then counting the number of full lengths and multiplying by ten. In this enactment of the measuring exercise the notion of length as extension is reversed with the idea of multiplicity as constitutive of length. Here, the 'English' idea of length as a quality residing in the body of the object being measured, and as such existing as a linear, ordered and singular whole, is contrasted by the notion of length as contingent upon the multiplicity. In this version, the whole does not exist prior to its parts. The whole, the value of length, can be achieved by multiple ways of combining parts, and as such length is constituted by emergent parts forming the whole. In this way of generalizing, the whole is rendered an accomplishment of ordering practices, rather than a naturally existing entity. Winthereik and Verran define this whole-parts logic as embedding a situating moment (in contrast to an abstracting moment) by representing its here-now 'by first building this world' (Winthereik & Verran 2012: p. 40). In other words, the one-ness of length is not taken for granted in Yoruba quantifying logics, which refers to the world as constituted by sortal entities – contingent and almost incidental upon the situation. Verran notices how this way of

doing length is both the same and different from the exercises laid out in the English curriculum.

The whole-parts logic thus generalizes from emergent parts (i.e. a piece of card and a line of string) that never add up to one coherent unity but form only vague wholes (Ibid) (i.e. length as an accomplishment of specific, situated procedures of ordering sortal entities).

The distinction between 'Yoruba' and 'English' ways of doing length was important in order to acknowledge the Yoruba mathematics curriculum on equal terms as the English. However, generalization is also at work in the stories told about these different knowledge traditions and while Verran describes the differences inherent in African and Anglo-American quantifying logics, she becomes concerned with how her own stories themselves employ generalization. She is concerned with how her separation of different logics explains away the disconcertment and contributes to a reproduction of boundaries between 'English' and 'Yoruba', 'traditional' and 'modern'. The foundationism of her relativist account, generalizing from social practices to abstract number logics does much the same work as universal accounts of numbers (generalizing from natural essence to abstract categories); it fixates boundaries and thus remakes the naturalness of historical structures of domination evolving around the very distinction of 'African' and 'Western' thought. Verran argues that neither universalizing accounts, which only accept one method for doing length and quantification, nor relativist accounts emphasizing the socially constructed nature of numbers and quantification, allow for generative analyses of different knowledge traditions. Moreover both approaches miss the central point; that the logics are not mutually exclusive, they co-exist. Disconcerting moments constitute in them an irresolvable tension between sameness and difference, which "alert us that here is an occasion for writing generalizing stories that work as a 'loosening agent' and help prevent further hardening of categories"

(Winthereik & Verran 2012: p. 39)<sup>4</sup>. These “fleeting experiences, ephemeral and embodied” (Verran 2001: p. 5) become clues for how we might write different stories, which generate new possibilities for answering moral questions of how to live (Verran, 1999). Instead of explaining tension away, disconcertment points to a here-now that might allow us to escape the explanatory repertoires of foundationism.

Doing ethnographic work in ‘good-faith’ has to do with finding the relevant here-now in which the possibility of both ‘seeing and seeing through’ (Verran 1999) becomes possible; “alerting oneself to good faith is alerting oneself to the possibility of a double-vision” (Winthereik & Verran 2012: p. 38). Up against an understanding of ‘the field’ as a bounded whole and the ethnographer as mapping (as accurately as possible) that whole, a *here-now* works time and place together. In that sense, bodies, age and other objects emerge through their situated interaction with each other and the places, the here-nows, in which the interaction is located (Brichet & Winthereik, 2010).

In that sense, ethnographic stories are always political since they make and work boundaries and relations and thus are generative of the actors and situations they are about (Winthereik & Verran 2012).

Thinking about the difficulties of representing the elderly in terms of the dual logics of generalization shifts the focus away from a pre-occupation with ‘alignment of real and imagined users’, towards a sensitivity to the interventionist potential inherent in different stories.

Following Winthereik & Verran, I began taking an interest in the project too, and noticed how stories about the elderly would generalize differently. In the following I use their concepts as guiding ‘tools’ for dealing with the tensions involved in studying the elderly.

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<sup>4</sup> Similarly Christine Hine points to ‘adequate stories’ as stories that are agential in the sense that they have the capacity to surprise, challenge or offer new insights (Hine, 2007; Winthereik & Verran, 2012).

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## Two (foundationist) accounts of the elderly within the project

Throughout the project Lev Vel two stories about the elderly are told. One story tells about the elderly as a group characterized by certain common characteristics and needs based on the fact that they are elderly. The other story claims to speak on behalf of the elderly by stressing that the elderly do not see themselves as elderly. This account implicitly problematizes the project for using categories that the elderly do not themselves identify with.

The first account is deeply embedded within the project documents and reproduced in the structure of the project.

“Within the next 30-40 years it is expected that there will be 400.000 additional elderly than today. These elderly will differ profoundly from earlier generations in terms of education, life conditions and economic resources. They will also differ in terms of changed needs and life demands. The ageing society embeds a long list of complex and mutually related problems.” (Lev Vel Project application: p. 3, my translation)

The future elderly of the ageing society is profoundly different than elderly in the past. They have specific needs and life demands with certain inherent problems. On this basis the central aim of the project is described as the task to “*uncover user needs in relation to existing public services - user needs that are not yet met and remain unacknowledged by the users*” (Lev Vel project application: p. 4, my translation)

In project documents the elderly is presented as a group, which is bounded by the common qualities of being self-sufficient, elderly and having certain problems and undiscovered needs. This story resembles universalist accounts of the world, since it articulates the elderly as naturally existing, bounded entities with inherent quali-



ties, which are the given foundation for symbolic practices of representation and categorization (Verran 1999). The abstract category of the elderly is taken to be representative of a group of elderly people. Within this frame, user studies are organized as a process of deriving knowledge about the elderly, generalizable from the particularities to the whole, which can then inform the design of welfare technologies.

In practice, within the design and innovation project, the picture is a bit more complex. Heterogeneity is emphasized. The project partners meet at pre-organized workshops to discuss the central questions; who are the elderly and what do they need. On these occasions, stories about groups of elderly with certain needs, but also varying needs, are told.

“Two social workers from different organizations are discussing their experiences of what motivates ‘the elderly men’ to be socially active. They both articulate the elderly men as being a bigger challenge in terms of motivating to social interaction than ‘the elderly women’. One social worker is explaining that the elderly men associate social activities with the stigma of loneliness and thus tend not to participate in social events. But when the event is called ‘fried pork and parsley gravy day’ or ‘herring and schnapps day’ the men show up, she says. A social worker from another activity centre (surprised) proclaims that she does not recognize this picture at all because the men she sees in her work are very concerned with healthy food and a healthy lifestyle. The minute taker says that she will just write both insights down and a comment that it is very different what motivates the elderly to social activities. The others nod and the discussion moves on to another topic” (Project Lev Vel, workshop 1, my translation).

In this example a process of detailing or separating the elderly into more specified subgroups is taking place.

Similar to the project documents, this story generalizes by abstracting singular here-now's into general claims about the elderly. This implies a fragmenting of the group into smaller parts or subgroups. During this process the overall unity of the elderly is constantly assumed, since the figure ‘self-sufficient elderly’ works as a tacit precondition that exists independently of and before the particularities. The elderly thus emerges as a mosaic of many mutually exclusive subgroups that add up to form one diverse but coherent group of ‘self-sufficient elderly’. While the diversity within this group is emphasized, the assumed boundaries between the many subgroups as well as between the elderly and ‘others’ are maintained.

Other accounts report how “the elderly do not see themselves as elderly”. In these accounts the category ‘elderly’ does not derive from a biological fact, but is socially and historically constructed. That “the elderly do not see themselves as elderly” is assumed to express a form of resistance towards the category and the negative connotations associated with it. The ‘elderly’ thus becomes an abstract category, which the individual people can then identify with or resist. The foundation for this account is then the elderly's experiences of and views on the category.

The observed resistance towards the category is understood as an issue that has to do with signification and naming and the category becomes a symbolic actor that does not participate in the make-up of the situations in which it acquires its relevance. On this ground, the relevant action for the ethnographer, analyst or designer is to avoid negative categorizations and make use of an alternative vocabulary. Senior, younger elderly, older adults, the self-sufficient elderly – the list is long - are proposed as possible alternatives. This pre-occupation with terms renders the issue at stake as having to do with the positive or negative connotations related to certain labels. While some categories might indeed carry more positive connota-

tions than others, this perspective does not challenge the actual, material boundaries performed by age-related categories. Rather it might contribute to further 'othering' of the elderly.

Initially, I found myself involved in what Verran calls a foundationist mode of analysis. I wanted to juxtapose the stories told by the innovation project with the experiences of the elderly to show how ageing and quality of life is profoundly different and more nuanced in the practices of everyday life. However, as Verran argues, this kind of analysis explained the tension away by relating the observed difference to different foundations; essences and social practices, hereby maintaining the distinctions I had indeed set out to overcome.

In the following I explore another mode of generalizing the elderly by paying careful attention to the moments of disconcertment in an encounter in the fitness center.

## Encountering the elderly in moments of tension and laughter

Liselotte, Gitte, Mona and most of the other women from the fitness class senior-switching look at me with amusement, when we gather around the round coffee table after one hour of exercising. "So what do you think, was it hard?" Liselotte asks me and obviously tries to suppress a giggle as she looks at my glistening forehead and deep red face. "Yes, it was hard" I say "surprisingly hard". Birgit goes on to ask me about the research I am doing and my reason for being on this senior exercise class. I respond "Well, the project is called 'The meeting place', and is about developing meeting places for social and physical activity for elderly people..." I do not get to finish my sentence before all the women burst out in laughter and look to one another with humour in their eyes. I start laughing a little bit too, while I think to myself "What is it that's so funny?".

The awkward situation is very brief as the women quickly regain composure and stop laughing. Liselotte's face is changing into a

more serious expression as she looks at me again and reassures me that physical activity is very important when you are ageing.

"It is very important to be physically active when you are ageing. Studies have shown that our brain cells regenerate every seventh year. Did you know that? So in principle we don't have to age. In theory it should be possible to find a way of stopping the ageing process. You should read about this, you can use it as a reference in your project. Henning Kirk. Do you know Henning Kirk? No. Well, remember to read Henning Kirk, he is a very famous ageing researcher" she says while pointing a finger towards me like a reproving school teacher (again I spot this suppressed giggle in her face, is she serious or not?). Liselotte and Gitte continue speaking about all the things they do to stay fit and healthy.

As they stand there and quarrel (to their own amusement), while giving me different advice on what I ought to do in order to get a more fit and healthy body and how to train my brain, I forget my purpose of being in the fitness centre, and start worrying about the exercise I almost never do and the ailing condition that my neglected body must be in.

I was confused and puzzled with the way that these women took over the situation and turned the power relations that my participation relied upon upside down. The women obviously felt amused with the shifting of roles and relations between us, and maybe also a slight of pity for what I can only assume was seen by them as my ignorance and simplistic understanding of them and their lives. The kind of difference that I saw enacted in this situation, how the way that the elderly emerged in this encounter differed from my ideal plan of the research, is hard to explain.

In this situation it became complicated to ascribe certain characteristics to the elderly as it was my initial task. It seemed equally problematic to deconstruct the category 'elderly' and say that age is merely a social construction. The women unraveled in a very subtle way any simple, fixed understandings of ageing and the elderly, but without denying the reality of these conditions. They made it possi-

ble to both see ageing and see through it at the same time. The women were doing ageing in a different way than I expected. I asked questions about what it means to age and who the elderly are. They responded with laughter, by pointing to the ageing researcher Henning Kirk<sup>5</sup>, by evoking my own body as being in a process of ageing. They made it obvious that my version of ageing and the elderly was somehow both different and not different than theirs. Based on this the question of who 'needs' technologies for motivating physical activity was similarly turned upside down. In this moment it became obvious how my version of the elderly was an accomplishment of a particular way of generalizing from one to many – from an abstract category to concrete persons. They showed me a different logic of doing the elderly where it was uncertain what the relevant parts are and how they come together as a whole. Or what it means to be 'elderly' and who the elderly are. Much like bundling and winding string around card to come up with length, they bundled and wound emergent parts into a different whole of 'ageing' and the elderly; my exhausted breath, Henning Kirk, the fitness center among others, which connect only partially into an ephemeral, vague whole of the elderly. It became obvious how my field 'the elderly' came in to being as a consequence of my own and the projects' performance of it as a bounded whole defined by chronological age. Deeply related to chronological age is the ageing of the body. Even though rhetorically 'the ageing body' was absent in the project, it was initiated based on a concern with ageing, decaying and care-demanding bodies. In that sense it was the abstract idea of the bodies of the elderly that provided the foundation for the project and the central object of concern.

In this situation it was my body, which was evoked and related to their version of 'ageing' and the elderly. My body was brought into

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<sup>5</sup> Henning Kirk is a Danish ageing researcher and author of popular literature on how to sustain cognitive and physical abilities in old age. Among other books, he has authored 'Abolish old age – stay adult' (Kühlmann & Kirk, 2012) and 'How to keep your brain going' (Kirk, 2013).

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attention as being in the process of ageing and decline and I was the one needing help from them.

From starting out initially inhabiting a position where my body and my own ageing was irrelevant I suddenly became the center of attention. From this comfortable position of removed, disembodied and un-problematized actor, I was tossed into the residual position in which my bodily condition, my everyday practices, my motivation could be scrutinized and problematized by the people I was supposed to study and potentially 'help'. The residuality of being 'elderly' crept into my body, and I was no longer part of the 'age-less' team of project members looking out from a centralized position towards the elderly existing somewhere in the margin. Doing the elderly by generalizing from a one-many logic was making up the boundaries between them and us. They showed me how what the elderly is, depends on how the elderly are generalized in a specific here-now. And they also made me aware of the residuality of being made part of the elderly, which is deeply infiltrated, tacitly or outspoken, with notions of bodily decay, fragility and vulnerability.

Trying to pay attention to their laughter gave me clues that there was something about the premises for my presence in the fitness center that created a sort of friction. The understanding of the elderly, which I arrived with and the consecutive aim of developing social meeting places embeds a version of the elderly which provoked an immediate outbreak of laughter among these women. My version of the elderly diverged in ways that apparently was not completely same or different to their version – if it was as simple as that, words instead of laughter could just have corrected my mistakes. It seems, in retrospect, that the one-many generalization of the elderly, which I and the project operated with, was so profoundly simplistic compared to the multiple and complex interweaving of bodies, categories and identities at stake in a single here-now where the elderly becomes enacted.

What immediately sounds like a neutral and morally 'good' statement of intent "we are developing meeting places for the elder-

ly” already embeds distinctions and judgments. In order for ethnography to intervene in e.g. a design project by telling stories that have capacity to surprise, challenge or offer new insights (Hine 2007), it becomes relevant to go beyond foundations. Attending to the tensions revealed in a moment of spontaneous laughter and disconcertment allows us to keep the space open for exploring and questioning the moral agendas of our projects. This might in turn inspire us to re-phrase the questions that we set out to explore and the problems we set out to solve.

### **Disconcertment as alternative starting point for ethnography & design**

During his study of contemporary Afro-Cuban divination, anthropologist Martin Holbraad receives the contention from an oracle, conducting a divination for him, that he is prone to impotence (Holbraad, 2009). Rather than seeing this as a prediction, Holbraad understands this statement as transformative in scope and effect; the oracle’s statement creates new relations and thus re-invents and transforms the object that it is about, in this case Holbraad himself.

Ignoring for a moment the ontological implications of Holbraad’s understanding of divinatory truth claims, I cannot help being amused with the striking similarity of this situation and what happened to me in the fitness center. It was as if the women in the fitness center were making the same contention of impotence about me and the project. Their laughter seemed to say, indirectly, that the project and I were impotent. Their laughter seemed to suggest, that there was something inappropriate or flawed about the premises of the project of developing social meeting places for the elderly and my purpose of being in the fitness center. They were both elderly and not elderly. Instead of acting as ‘informants’ representing the elderly they transformed me from a neutral, disembodied and ageless observer to someone based within a certain body, also in process of ageing, and from where a particular understanding of the

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world was possible. They pointed to different emergent parts such as my exhausted breath, my body and its condition of decay and ageing, Henning Kirk, working life and lack of time and motivation. In this moment I was more ‘same’ to my own category of the elderly than they were. What was transformed was not only me, but also the category ‘elderly’, enacted as contingent upon partial relations between emergent entities that only add up to a vague and ephemeral whole. In this situated version of the elderly, not based on fixed entities such as chronological age, grey hair or wrinkles, the category contained me and excluded them. I became the elderly.

This transformation, the application of ‘ageing’ to my own body, evoked the residual category ‘the fragile elderly’. Star and Bowker describe residual categories as that which is left out or made invisible when a classification is built (Star & Bowker, 2007). The entanglement of residual categories and invisibility means that there are profound political and ethical implications of categorization. In the project documents ‘the fragile elderly’ has been rendered invisible due to the rhetorical shift from ‘the elder burden’ to ‘the self-sufficient elderly’ (in the project Lev Vel and in welfare technological discourses more generally), but nevertheless it works in the background and is evoked vis-à-vis ‘the self-sufficient elderly’.

The women’s behavior frustrated me - it even annoyed me. They did not behave as they should; a condition for carrying out my research was that they accepted the pre-defined categories and roles; they were the elderly and they had bodies, my age and my body should not matter. There was a certain irony in how the often referred to relativist statement; “the elderly do not see themselves as elderly”, also became true of me in this situation. In their version I might be elderly, but I was also Other. This situation of being both same and different from the category, made me feel part of a residual category - I belonged neither here nor there, or in both places at the same time.

Two points come to my mind based on this; one has to do with how the category ‘elderly’ evokes invisible residual categories such

as ‘the fragile’, and that the category ‘elderly’ itself creates experiences of residuality in terms of being too limited to adequately represent the lived experience (Star & Bowker 2007). The other has to do with how the project of designing welfare technologies for the elderly, and in turn studying the elderly for this purpose, is based upon the creation of distance to or a profound othering of the elderly.

Holbraad talks about a tendency in anthropology to treat negation as the cause of alterity (2009). In that sense what makes our objects of study ‘different’ is that ‘they’ are different from ‘us’. This kind of ‘negative projection’ is flawed, it is argued, since it implies that our understandings of ‘them’ are based on our own conceptual frameworks. A similar ‘muddle’ of projection seems to be at stake in the case of project Lev Vel. The project sets out to improve the quality of life for the elderly and thus go out to study ‘their’ specific needs and wishes for welfare technology. The premise of this aim is the categorical separation of the elderly from ‘us’. Only on the basis of these fixed distinctions, can assumptions be made about the elderly and their particular needs for welfare technology. This negative projection is made possible by a one-many logic of generalizing the elderly, which fixates external boundaries and evokes ‘us’ as opposition.

The problem with projection is that what is inherently ‘our’ knowledge (situated and embodied) becomes universalized as ‘everybody’s knowledge (removed and disembodied) (Holbraad 2009). In relation to design, anthropologist Lucy Suchman has, following Haraway, problematized the notion of ‘design from nowhere’ (Suchman, 2002):

“Within prevailing discourses anonymous and unlocatable designers, with a license afforded by their professional training, problematise the world in such a way as to make themselves indispensable to it and then discuss their obligation to intervene, in order to deliver technological solu-

tions to equally decontextualized and consequently unlocatable users” (Suchman 2002: p. 95).

Suchman argues that from this stance of ‘design from nowhere’, design loses track of the social mediations involved in technical production and thus makes it impossible to locate responsibility for it (Ibid).

This point is central to my argument. The project starts out with ‘what we already know’, which provides the indisputable, transcendental and universal knowledge from which ethnography and design can depart. The configuration of the elderly as a social group with inherent qualities (such as being self-sufficient), needs (such as needing welfare technologies to stay self-sufficient) and wishes (such as wishing to enhance their social and physical activity) is achieved through a particular way of generalizing. The systematic neglect of other possible ways of generalizing the elderly creates a position of ‘design from nowhere’.

Since responsible design has to do with allowing multiple voices to emerge, it is necessary for design of welfare technology, and UDI more generally, to find an alternative stance for design. Here Suchman proposes the alternative stance of *located accountability*, which is about *partial, locatable, situated* and *critical* knowledges (Suchman, 2002). Design has to be located and become answerable for ‘how we learn to see what’ (Suchman following Haraway, 1991). It is not until the moment in the fitness center, where I myself become a body and a body in process of ageing and decaying, that I see how the category of the elderly was made (by me and the project) and how, importantly, it is making us.

Paying attention to disconcertment is exactly about re-inscribing and locating the researcher in the text with the researcher in the flesh and allowing ourselves to ‘touch the world and be touched by it’ and represent the process through which this happens (Brichet & Winthereik, 2010). The consequences of partial and situated knowledge is not, as Holbraad’s article concludes, that “all we [an-

thropologists] have to go by are our misunderstandings of others' views" (Holbraad 2009: p. 91). This focus on different views maintains the foundationist distinction between 'us' and 'them' and leaves us in the position, which Verran problematizes, where we have to choose which view to go with (Verran 1999, 2001). Similarly, it reproduces the opposition between understandings and misunderstandings, which is not generative in order to comprehend complex situations where difference is not mutually exclusive, but where different logics might co-exist or boundaries between people, bodies or views be in flux. Rather than going to 'the field' to find situations that falsify our conceptual understandings, it must be possible to find a ground in between understanding and misunderstanding, potency and impotence. I suggest that the value of an ethnography that seeks to intervene in e.g. a design project lies exactly in its capacity to go beyond 'different views' and let our bodies, categories and identities be moved and transformed by the people we study. This might be a way of avoiding projections of 'the other'. The criteria for 'adequate' ethnographies is not then necessarily about correcting our misunderstandings (this seems to suggest that our informants are oracles, which they are not) but about attending to the awkward, embarrassing, disconcerting moments, that enable the possibility of telling different stories where we become accountable for what we know and how we come to know it. Acknowledging our own impotence is not necessarily about doing away with possible potency. It is about finding ways to stay in the moments of tension and resist the propensity to explain it away. Similarly the generative potential of ethnographic accounts developed in the realm of a design project is not necessarily about confirming existing conceptual stereotypes or developing new ones. Ethnography has a certain capacity of telling located, embodied stories that talk back to our pre-conceptions by making visible 'how we learned to see what' and how we might see it differently. It has the capacity to stay in moments of tension, where it becomes possible to understand lateral connections between ethnographical observations, design agendas, inform-

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ants' and others' views and practices. Where to go from there is not a matter of fact, and the assumption that ethnography can *guide* and *direct* design might promise more than it can bear. By attending to moments of disconcertment, different logics of generalizing and their implied politics become visible. I suggest that embodied ethnographic accounts can contribute to design by providing a basis for located accountability in design practice.

## Conclusion

The paper has illustrated how seeing the elderly as a generalization renders visible the different logics involved in practices of doing the elderly within user driven innovation of welfare technology. UDI projects have the capacity to generalize 'users' from at least two different logics; a one-many and a whole-parts logic.

In the two empirical cases presented in this paper (one from a UDI project and one from a senior fitness class) different logics of generalizing the elderly were employed. In the UDI project, the elderly were generalized from a one-many logic, while in the fitness center the elderly were generalized as a vague whole constituted by emergent parts.

Taking the premise of design as inscription of knowledge into material artifacts (Akrich 1992, Suchman 2002), a relevant question for responsible design of welfare technology is how the elderly become generalized, by whom, and with what effects. The observed tensions between different logics indicate that the UDI project was based on 'design from nowhere', which removes the location and working relations involved in knowledge production and thus universalizes a particular generalization of the elderly. This paper suggests that attention to moments of disconcertment might be a way of producing situated knowledge and provide a located, embodied and responsible alternative to the removed researcher in UDI that – despite its claims to do otherwise – often ends up as 'design from nowhere'. The value of ethnographic accounts that incorporate an irre-

solvable tension of sameness and difference might be a capacity for presenting stories that resist contributing to further hardening of categories and boundaries. In that sense, it becomes possible to write generalizing stories about the elderly that escape foundationist frameworks of interpretation.

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