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Relational Design

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Abstract

There is a mismatch between the way public services are designed, and the chronic dilemmas of the welfare state. Through two case studies we show how tool-dependent, instrumental and systems-oriented approaches fall short in tackling these dilemmas, and how the there is a need for a new, relational turn in design. Relational design takes into account interdependencies and dynamic situation of society, and calls for a new design vocabulary that discusses and approaches the relational aspects and opens up for a more situational and sensitive design agency.

Keywords: relational design, relational welfare, design theory, service-oriented design, sustainability

1. Introduction

'Relational approaches' have found their place within several disciplines, including relational geography, relational thinking in education, relational sociology and psychology as well as relational urban planning and relational design in architecture (Bosco, 2006, Gold, 2005, Healey, 2006, Crossley, 2010). Common for these approaches is that they look for new alternatives to conceptualize, by working increasingly open-ended, mobile, networked, context-specific and actor-centred. Relational approaches further consider and describe complex contexts and interactions and interdependencies, without reducing these to isolated and reductionist phenomena. In this way, a relational approach is a holistic approach and philosophy, and an anti-thesis to Cartesian, behavioural-economic or reductionist thinking. In relational sociology it is argued that neither individuals nor 'wholes' should take precedence, but rather evolving and dynamic networks of interactions and relations. In relational theory human beings are seen as part of a network of relationships, continually motivated, from birth, by the need for a relationship that shapes the internal perception of external experiences (Deyoung, 2015).

In a relational way of thinking, a well-designed service in the welfare state facilitates and aims at situations in which meetings between people and services contribute to people functioning in the best possible way given their context and situation; their immediate environment, in their everyday life and in interaction with a community (Cottam, 2011). It acknowledges that people's life situations are dynamic and interdependent. A relational approach can be said to belong to a social-feminist tradition as it radically challenges our way of thinking and theorizing (Haraway, 2006). A social-feminist tradition asks for radically new ways of conceptualizing how we understand knowledge away from the duality historically associated with scientific research, such as body-mind, and system-organism. A relational approach also deals with agency, but not understood as 'how will the designer relate to the world and the artifact in 'designerly' ways. This concept of agency is criticized by relational thinkers to be too individual focused and rather proposes a conceptualization of agency as relational. Following agency is something that "*emerges from our emotional relatedness to others as social relations unfold across time and space",* rather than "*resting on the reflexive monitoring of action or the reflexive*

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deliberation on structurally defined choices". In that the relational approach in design brings an understanding of *"agents as located in manifold social relations",* challenging the duality of the *designer* as manager or facilitator of the *design* (process).

In this paper, we introduce the need for a new, relational turn in design. We do this by discussing the role of the design practitioner, the emergence of problem-solving focused and tool dependent approaches. We describe through two illustrative case studies how current service design approaches fail to create proposals that consider the relational aspects that cause the root dilemmas of 'the welfare state'.

2. Rationale

Two design trajectories can receive the main credit for bringing 'people' into the design process: Human Centred Design (HCD) and Participatory design or 'co-design'. HCD has emerged as a result of a realization that testing interfaces with 'users' inevitably will give us better products *and* competitive advantage. Co-design has represented an alternative and more political trajectory, emerging from a political landscape in which 'people' should be dedicated power in the design process. Both trajectories have influenced the education of designers, requiring that we know how to approach and understand people's perspectives. Participatory design approaches originally, in the Scandinavian co-design trajectory, brought values to design that were meant to renaissance in particular the issues of power and collaboration in design, bringing sociological perspectives into the process. However, we observe that even these approaches have increasingly been 'toolified' in the last decade, moving them into the described duality of the designer versus the world; leaving behind the tacit ability to work through design creatively and situationally with people and context. This is perhaps largely due to the popularity of design tools and design thinking in business management practice and organizational theory. In participatory design, the designers' role has moved more towards facilitation than management of a design process, in which designers have to meet the interests not only of the 'end users' but also of the main stakeholders and actors that can impact the outcome. Participatory design hence differs from the origins of HCD, as participatory design belongs to the idea that meetings between people and also direct representation is necessary and cannot be replaced by the designer's *interpretation.*

Another useful way to categorize design (scholars) is to position designers and design activities somewhere between a discourse regarding design as problem solving and the ones regarding design as sense making (Krippendorff, 1989, Dorst, 2004). As many design schools have emerged from engineering faculties, with strong links to the ICT industries, it is evident that HCD and user testing has a strong tradition, while participatory design has been taught traditionally in the frames of social design, design for development, or in design within the health sector. Co-design approaches that belonged to the people-centred and sense-making trajectory, have during the last two decades been slowly pulled into a problem-solving paradigm. For example, a step-by-step approach to design has emerged through the popularization of design by larger corporations such as IDEO and Stanford D-school. The idea that 'everyone is a designer', has further led to design quickly becoming re-wrapped, branched into multiple directions. Design thinking principles has for example emerged also from organizational theory and business administration. Today, fewer graduates will introduce themselves as a 'designers' but instead will label themselves as 'service designers', 'interaction designers', 'UX designers' and so on. This development has also moved design practice and popular design discourse into the direction of 'design as problem solving'.

There are indeed many benefits of making design accessible to various disciplines and problem-solving situations. However, this commercialization of *the design process* has led to an increase in design frameworks reproducing a step-by-step approach, for example the four-step double diamond process. This brings a risk that the designer more seldomly get time for the *meaning making*, which includes reflecting, mediating, and exploring the material by herself or with others (Schön, 1987). A less 'tool-dependent' process would be one in which the designer will have developed a more mature ability to 'think in action', apply 'tacit knowledge' and creative confidence. This is also in line with the goals of higher education, in which an experiential approach combined with theory and testing leads to an ability to experiment and apply knowledge through a combination of tacit knowledge and theory (Kolb

and Kolb, 2005). At the same time, there is an increased need for the designer to work with multiple actors, people, networks, and uncertainties, making it understandable that tool-oriented frameworks are attractive.

Service design is perhaps the most attractive and fastest growing branch of design and service design concepts and processes are the most purchased innovations in Norway. Service design origins from the banking sector (Shostack, 1982), and service design frameworks have been developed for designing the "immaterial" as well as products. Service designers make human interactions tangible, separating them into value flowing between 'touchpoints' across different 'swim lanes' structuring individual human activities through 'personas'. The influence of behavioural economics and Service Dominant Logic is also in line with the problem oriented and path dependent, systematic way of thinking (Vargo and Akaka, 2009). A service design (process) is on the other hand expected to be human centred, visual, holistic, evidencing, and co-created and in line with the objectives of Nordic public sector objectives for future welfare services (Stickdorn et al., 2018).

We recognize that the argument for holistic, or human-centred perspectives is not radical. We use Service design cases as examples, to describe further why and how a *relational* turn, as have emerged in other disciplines, is needed - despite the existing holistic and human centred approaches.

2.1. Dilemmas of the welfare state as an argument for relational design

While Service Design approaches grow in popularity, there is a growing opinion that the challenges of a welfare state are larger and more 'wicked' than what can be solved by the conventional service design frameworks. Norway is based on a welfare state model; meaning that citizens have equal rights to proper services including for example education, social support, mobility, and housing, based on everyone working and paying taxes. Services are the fundamental infrastructure of a welfare state.

Hilary Cottam describes the dilemmas of the welfare state in the way that our services are designed with a provider-recipient framework (Cottam, 2011). In this mindset, one side of the service blueprint is the 'sick' or 'needing' while the other side is the service provider 'prescribing the right medicine'. Cottam describes an image of a welfare system that has split the responsibility for meeting people's complex and chronic needs by individual and disconnected services. In this new system, it is difficult to find out who is accountable for making sure that the many involved service institutions help the individual improve their situation. She uses the example, that more people today die of loneliness than smoking, and that our current welfare services are not designed for these chronic situations. Another description of unsustainable paths that call for radically new approaches, is how people that grow up in low-income neighbourhoods, have a lower sense of efficacy. This means that they do not believe that they are in a position to influence their own living standard, health or societal development (Rosenbaum et al., 2002). Unless we work on developing design concepts that influence *how people perceive their own role*, and how we strengthen communities and networks rather than only individuals then we are unlikely to solve any of the dilemmas of the welfare state. There is a disconnect between the services provided and the persons need for human aspects that can build agency within their networks.

Nordic welfare states and service providers are aware of the need for new mindsets to meet this burden of chronic illness, poverty traps and lack of access to equal services. During the last two years, the word 'relational welfare' has therefore made its way into public strategies of Danish and Norwegian cities and municipalities. The municipalities that have chosen this as a part of their strategies explain that it is in line with their overall vision to move away from the provider-recipient mindset and into a new paradigm where the citizen is an active and engaged part of the services. However, there are few clear examples of what the transition towards a 'co-created society' looks like and what it means to the service providers, decision makers and people (von Heimburg et al., 2021).

3. Two service design examples

We have chosen to present two design projects, as an illustrative case study approach to describe the gap in current design approaches (Yin, 1998). Both cases represent design efforts that have ambitions that are related to the dilemmas of the welfare state discussed above. We discuss the challenges that

we encountered, in a qualitative, chronological, and ethnographic form, meaning that we acknowledge our role both as designers (inside) and the need to reflect upon the process as seen from the outside.

3.1. Example I: Designing for health literacy in orthopedy services

Providing, receiving, understanding, and applying reliable health information, also known as health literacy, should enable patients to make use of health services in a sensible manner (Kickbusch et al., 2013). According to a recent survey, every third person in Norway has a lack of health literacy and almost half of the population is not able to consider information they receive about health issues (Le et al., 2021). Modern medicine is becoming an increasingly difficult field to navigate, which further reinforces the need to increase the health literacy of the population (Hem, 2020). This was the starting point of a project initiated by orthopedic clinicians specialized in hip replacement at Inland hospital in Norway, who wanted to minimize the risk of misuse of services and maximize the results of hip surgeries post-surgery. A research and development project «Helsekompetanse+» was led by Inland hospital together with NTNU, a design/tech company Inventas and a municipal general practitioners (GPs) office. This is a first stage project funded by 'Regional research funding of Innlandet' initiated to explore and define a concept to move along with in a later stage two proposal. The general problem statement that was explored was *how can we improve the dialogue and information sharing between patients and health services before, during and after surgery*. To research this, we made use of a service design framework with a relational turn, unfolding the relation between the different stakeholders involved in information sharing, communication, and provision of health service to patients and next of kin. The design process is illustrated in the figure below.
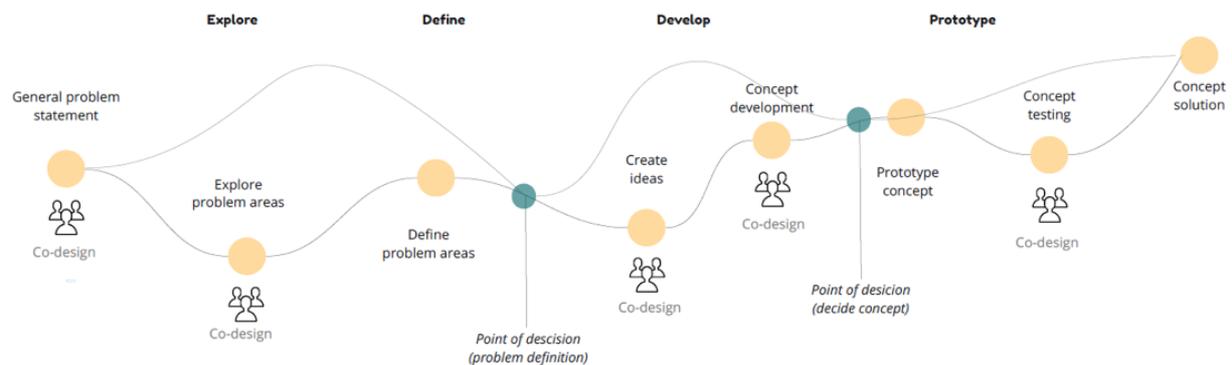

Figure 1. Design process and phases

To investigate the current processes, actors, channels and needs for information more thoroughly, a design anthropologist from NTNU (the second author of this paper) and a designer from the local company engaged relevant stakeholders in a co-design process. This started with a mapping of health journeys together with multiple stakeholders: people who were waiting for surgery (3), people who had recently gone through surgery (3), relatives (1), general practitioners with experience from hip surgery patients (2) and orthopaedic surgeons (2). This was done through interviews in the first explorative phase and provided an understanding of the current state of patient user journeys. From this the designers developed key insights, archetypes and selected primary archetypes based on need for information and digital savviness for the further development process. Designers then continued the design process with the different stakeholders adding physiotherapists (2) to the list to create and select ideas, develop concepts and finally to test the concept as a digital solution. Altogether 15 people, including the design anthropologist and digital designer were involved in the co-design process at different stages. The points of co-design throughout the process is indicated in the illustration in Figure 1 above.

In the explorative phase we found that: (1) the first consultation with the surgeon is crucial, (2) patients bounce back and forth between different health service professionals, and (3) it is hard to reach out to the right patients at the right time with the right information. Prior to the first orthopaedic consultation the surgeons have little or no information about the persons subjective assessment of their own health and their knowledge about their own condition and how to improve it. The first face-to-face

consultation provides patients with verbal information and a take-home information pamphlet. Verbal information is often hard for the patients to remember, process and make use of for their own good. Moreover, the pamphlet is easy to forget or misplace and provides limited information. Patients know little about what awaits, and this makes it even more difficult to prepare and make good choices for themselves. The first meeting with the surgeons has an impact in that it provides information that could prepare the patient for what awaits but mostly because it establishes a relation between them. A man waiting for hip surgery were clear about the role of the surgeon in his health journey: "*The surgeon plays an important role in calming the patient*". All those interviewed told stories about this first consultation and enhanced the significance of the meeting with the surgeon as a trust-building event that assured them during the process and on the medical expertise. However, prior to this meeting they had already been through a rather long and often complex journey through the health system, bouncing back and forth between different health service professionals. Patients often experienced getting 'stuck' at some point in the health journey awaiting doctor appointments, referrals, x-ray consultations, and physiotherapy training without advancing. As a result, many of them had experienced an aggravated condition including pain, reduced mobility, and some mental depression. Despite these challenges several of those interviewed were concerned with highlighting the good *relationships* they had established to health personnel they had met along the way. Several stories were told about people in healthcare going out of their way to try to improve their patients' situation. A woman with a background in health services who had recently undergone hip surgery were explicit about the role of relationships for patients; "*Relationships are crucial for what you can achieve next and for the patient's experience of security*". In fact, we found that patients with established and solid relations within the health sector were less insecure about what awaited them and how to make the most of their situation.

During mapping of health service journeys, we found that the time in between the physical meetings with public health services and after surgery as a space of opportunity where patients themselves can do much to improve their physical and mental health. However, this was also a period when it was difficult to reach out with health information adapted to the different health journeys and a period where patients themselves struggled with finding knowledge that could aid them in making good choices for themselves in their everyday lives. As uttered by a woman who was waiting for surgery and tried to find information online: *"I have googled a bit but am afraid of what I will find"*. This led us to a problem definition and design challenge based on the "how can we" method: *"How can we ensure that users are well enough informed, in a good enough way, adapted to their needs reinforcing the relational aspect?"* Also, it led us to explore how people's social capital and socially dynamic perspective could be considered when framing the problem and working to improve the patients experience and sense of efficacy at the same time as providing them with information. In prioritizing concepts in the development phase, the opportunity to further develop the solution to take care of the relationship between healthcare professionals and patients was a crucial factor for selection.

3.1.1. Relational aspects and experienced gap in the design approach

Establishing and / or maintaining good relationships during a health journey is not a given but was important to the patient when they arose. Trustworthy and useful communication and relationships give patients a sense of security and a place to turn to for health information and advice based on their own needs and the health service's assessment of their health. A typical service design process as expected by the original design brief, could typically end with a better designed information portal. However, in order to propose designs that can meet people in their different life situations and contexts identified, it became clear that would need to safeguard the *relational* perspective. Questions that remain are: *how do we bring the essence of this dynamic and evolving relationship forward through the design challenge? And not least - how do we ensure that the design works to support, rather than reducing the value of these relationships?* Answers to this will be sought out in a stage two of the research project when developing the concepts further.

3.2. Example II: Designing for community engagement in low-income housing

There are several economic and social benefits associated with owning your own home in Norway. However, an increasing proportion of citizens cannot afford to pay the entrance fee to an owned home

and are therefore referred to a life as tenants in an expensive, and often poorly functioning, private rental market (Tranøy et al., 2020). Some citizens qualify for the municipal's public offer, which usually is based on temporary contracts and a regular rent which is approximately equal to the rental cost in the private market. The housing market can hence be regarded as one of the dilemmas of the Nordic welfare state, as the quickly increasing gap between those who can access the owners' market and those who stay in the private rental market strongly contributes to increased inequality and unsustainable futures that are in conflict with the equality principle carrying the welfare state model (Galster and Wessel, 2019). A third hosing sector looks for new models of citizen engagement in which public, private and non-for-profit organizations propose alternative pathways towards home ownership. The Housing Association 'Boligstiftelsen' in Trondheim decided to explore new ways of realizing the third housing sector, by organizing how people live together and contribute in accordance with their competence and capacity.

Boligstiftelsen aimed at a situation where the dwellers take more part in activities and maintenance, in return for lower pay and access to central and quality housing. In other words, the image they presented was a modernized community-based approach, in which bottom-up approaches were welcomed. In this image people contribute by being engaged in providing the services needed for others, and in return could achieve a lower rent and experience empowerment, community, and well-being. Funding from 'Husbanken' for the research project 'Socially sustainable housing', allowed for the exploration of new ways of a more socio-economically sustainable living (Narvestad et al., 2021). A co-design approach was chosen, with service design elements to identify, communicate and visualize the needs of the dwellers. One of the co-design processes had focus on a building Boligstiftelsen owns in Trondheim. A team of three designers consisting of an expert in co-design, an urban planning graduate student and a design researcher (first author of this paper) oversaw the co-design and of bringing in human centred aspect. Boligstiftelsen was largely in charge of briefing the design team about their objectives.

Due to Covid-19 restrictions, the insight phase consisted of combining go-along interviews, small focus groups and digital workshops (Kusenbach, 2003). Go-along interviews is an ethnographic approach in which the researcher walks alongside, takes a drive with, or bikes alongside the respondent. Go-along interviews provide an opportunity to walk around and get to know the informant, while directly engaging the informant with the space. It was necessary to understand not only the dwellers' perspective, background and resources, and their relationship to each other, but also their relationship with the surroundings. *How do dwellers regard and make use of the building, the outside area, the neighbourhood? How do they perceive their role as a part of the community in the building, and which problems and potentials did they see?* The combined insights about the dwellers were translated into six different 'personas' as a way of suggesting a problem definition. However, during the development of the different 'persona', we discovered that there was a disconnect between the housing associations' expectations of the dwellers and the dwellers own understanding of challenges and needs. During early discussions, it was expected that many dwellers would have a keen interest in contributing with maintenance of buildings and property. However, the findings indicated that these all had different backgrounds, complex life situations and challenges, and that the challenges had more to do with their *relationships* over time. The relationships being with other dwellers, and with the house owner and janitor, the need for connecting with their family outside the building, and so on.

Previous life stories influenced the dwellers expectations and needs, as well as their ability to contribute in such an engaged manner. Language was an additional relational barrier that influenced the community and the experience of many people in the building split between Norwegian speakers and minority languages. In other words, few concerns were related to the 'community building' project. Only a few of the dwellers expressed a clear interest in contributing with some sort of own activity. The output during the insight and problem definition phase at the beginning of the project, were much more nuanced than the expectations of stakeholders, perhaps even including us as designers. The assumption, that low-income dwellers want to contribute to maintenance and community activities, is a very functionalist and perhaps instrumental view and a misunderstanding of the role that participation and design agency plays. Instead, it turned out that the challenges expressed had to do more with relations *between* people than the role of certain people or groups of people. Also, the concerns expressed an evolving and dynamic view of community building, while the design tools assumed a static view of

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who 'the dweller' was. The issues raised by dwellers were much more connected to relational concerns, their relationship with others in the building and their perception in the context of others. They were impacted by previous experiences of other dwellers and the impression they had, and how to communicate well. To adapt the design process to this relational challenge, we decided to design a digital workshop with the relational aspects in mind.

Reaching the aim of the project of increasing the social sustainability and engagement issue, demanded that we look both at the relationship *between* the dwellers themselves and between the other stakeholders and the dwellers. Common for all the interviews was that each dweller has an idea of who 'the others' were and how problems occurred due to other people's behaviour. Pinning down each person's character through a 'persona' therefore didn't solve the question of an evolving and dynamic community. To solve this, we decided to place personas that were quite opposite or very different next to each other on a wall and then facilitated a reflection process with the key stakeholders. Finally, in the conceptualization phase we brought stakeholders together to develop organizational structures that could not only create engagement and help improve the physical surroundings and services connected to the building, but also to discuss how common community projects could improve the relations between people in the buildings, considering that some might be more likely to contribute in community engagement interventions than others, and to create an understanding between the stakeholders on how the building association could plan to take into account these aspects in future organization. These included the housing association, the municipality, urban design researchers and architects.

3.2.1. Identified relational aspects missing in current design processes

The adapted approach, playing with opposites and unexpected characteristics of the people and relationships amongst the dwellers, enabled actively and situationally adjusting the design process to relational concerns. This approach led to several proposals and challenges being discussed. Issues that were discussed included *how to organize and build good relationships early, to avoid conflict, how to create ownership, and mattering.* Examples that emerged were language courses and rental contracts that include roles and responsibilities to improve the community feeling so that people *wanted* to participate. However, we experienced that the design approaches (co-design or service design) did not offer concrete theory or advice on how to address these relational issues during a design project. While one could work hard to develop personas or descriptions of 'user groups', their relationship to others and the dynamic nature of people in networks, seemed to be more important than the personalities, needs or desires. We experienced that these relationships were the key 'design material' yet our design approaches did not cover these. While service design talks about 'interactions' in a linear sense, these could not capture the evolving nature of people's relationships in the buildings that we studied, and therefore there seemed to be a possibility that the suggestions developed would be outdated or insufficient unless we explore an approach taking relationships more into account. This gap is also absent in discussing our role in the design process, as constantly navigating, and building better relations with the stakeholders and to understand how each stakeholder communicate and relate to each other and with us during the process. Stakeholder mapping and interest analysis also didn't cover these relational aspects, even though relevant for the situational understanding.

4. A relational turn for design: discussion

During our analysis of the work with the two cases, one of orthopaedic patients and the design of socially sustainable housing, we identified some gaps in the conventional (service) design or participatory design approaches, that we think are relevant when building a common ground for relational design. There are two main directions that we believe designers and design researchers could explore, and that would provide more radical and relevant examples of how a future sustainable society can look like, than what the approaches until now have shown.

4.1. People as parts of social networks instead of individual users

During the design process with the stakeholders and dwellers in Trondheim, it became evident that a straight- forward service design approach with personas and user journeys were not sufficient. Our experience with this process, told us that the conventional service design approach where we divide people into individual 'user journeys' was not appropriate for illustrating these relational aspects. This reflection was supported by feedback we received after the workshop. Many of the workshop participants had not thought about the fact that the dwellers that were going to organize common activities, could have such differing viewpoints and life situations. To come up with convincing new models for organizing 'bottom up' initiatives, we would have to work on understanding how to develop good relations not only between the different people living in the building, but also between the dwellers, the housing association, and the municipality. Now, the municipality sees their role as providers of social housing for people that need access to social services, while people living with too low income to access the housing market have no legal rights for public housing support. Reducing a group of people into one persona could not illustrate that social sustainability and community engagement was dependent on quite different people collaborating and wanting to help each other. Instead of sticking to the toolkit, a lot of improvisation was needed to get to the real issues in this case. We had to find more ethnographic tools, including the go-along method, in which we built trust with people. We had to find out how they see each other. We had to negotiate with the stakeholders on what the terms were and involve different actors with long term experience into how they had shaped alternative living forms. More questions emerged than answers. Do people that turn to a housing association for help with housing, expect to be a receiver of services? How do we build good relationships between people speaking different languages? How do people in vulnerable positions feel safe in an apartment building with many different people? How can the surroundings be designed in ways that make them feel safer and more likely to take part in daily activities? How do we organize in a way that builds trust, and how do we reduce conflicts when very different people are asked to do work or activities together for the community?

4.2. A relationship focused rather than a tool-dependent design process

During the co-design process, there is an expectation of designers working rapidly and with 'lots of post-its'. However, we saw in the housing case that several questions needed longer discussion and reflection. To design in a relational manner, we need to design in ways that takes communities and their resources and relationships into account rather than always focusing on individuals. This is also in line with the relational welfare strategies of our cities. How do we do this? Cottam says that we need to put people in the centre of and have them be decision makers directly impacting the changes and objectives of the service efforts(Cottam, 2011). However, we also need to work more flexible, building relationships with decision-makers, policy makers, family members, and the context in which people thrive and function. Co-design is further interpreted in the relational manner rather than tools-oriented, in which the relationships created during a co-design process will put actors in a position to influence future visions and contribute to providing the best possible life and society within the space of opportunity created in the co-design process. A good co-design process also depends on the designer maintaining a good relationship with people and actors from the very beginning. To achieve this, decision makers, service providers, target groups and important communities and resources around these must be involved in the solutions while looking at strong and useful relationships as a goal throughout the design process.

4.3. A new design vocabulary

Whilst working forward with the health information challenge in the first example, it became clear that there was a lack of shared vocabulary, and tools or methods, that could ensure a relational dimension in process and output. We made use of archetypes and patient user journeys to proceeded with ideation workshops and ultimately proposing a concept solution of a semi-personalised digital information channel for the Inland Hospital. However, this relational dimension was difficult to bring into the design process and to *connect* with the health literacy issue. This might be because the designer

focuses too much on touchpoints and sequencing, and not on the relationships, what falls *between* these. New vocabularies can be inspired and developed through a deeper design discourse between designers working with co-design, service design or social design, and by bringing in theoretical perspectives from relational sociology to develop radically new lenses of understanding. We observed through our work that participants in design-led processes have an expectation that designers use certain tools such as 'persona' or 'user journeys'. Yet the dilemmas of the welfare state introduce challenges that are fundamentally 'relational'. In the first example about persons with hip-pain, we saw that while the design process often ends with a 'product', the real challenge is to improve the dynamic relationship between people, their networks, and the *people* that they meet in the health service. This further requires that designers focus on people's relational *ability* to understand the information given, and to navigate systems in an empowered way. Improving 'touch points' does not give us this holistic perspective on how people and their networks *cope* with the increased need for assistance. Therefore, a new design vocabulary also needs to bring in human *resilience* factors. This resonates with the findings of the second example, in which we experienced that the challenges of socio-economic sustainability had to do with understanding that people are complex, dynamic, real and also a result of their relations to others. Understanding that even though it is a wish that people with low-income contribute more to the community, 'they' are people that move between different life situations and have different social capital impacting their decisions and opportunities. In both examples, we lacked a design vocabulary allowing us to explain *how* we worked to adapt to this dynamic exploration, and service design tools fell short of running these processes.

5. Conclusions and further work

While HCD and participatory approaches have placed people at the center of a design process, the tools that have emerged in popular discourse have failed to bring in the fact that many problems in life are relational. Human inability to deal with climate change, poverty or war are to large extents worsened or improved by our inability or ability to work in relation with others and understand the other. A relational approach is not limited to health care or social services but can also influence how we design for example future transport, education, and work. A relational approach is to establish authentic and mutual connections, through our work as designers. This requires us to return to tacit knowledge, exploratory forms and bold attitudes, while focusing on how we act in collaboration with people in the design process. Taking a relational perspective further puts the designer in a situation in which tacit knowledge, designerly ways of knowing and doing, and a situational approach is key instead of systems-oriented or step-by-step approaches. A situational approach involves a philosophy that requires exploring the opportunities that arises in any given situation (Braathen et al., 2012). This implies that we need designers that both have creative confidence, skill *and* sensitivity to understand their own role in the (co)design situation and in a historic perspective. In this historic perspective, it is time to challenge the perspective of structure and autonomy and replace it with relational agency and relational design competency.

In this paper we have argued that following three principles of relational design, *from the beginning of a design process,* can enhance the likelihood that designers can influence crucial challenges to quality of life for humanity. This relies on our ability to see that these complex dilemmas are relational and that we need to change our vocabulary to target and design with relationships in mind and become more dynamic and situational in our design practice. We call for designers to help us build this new vocabulary: through experimentation, boldness, creativity and the described ability to understand people as parts of networks instead of 'personas' or individual stakeholder needs. In our work, a collaboration with the Inland Hospital will continue, as well as with Boligstiftelsen, who are continuously bringing in findings from relational approaches into their work to provide socially sustainable housing in Trondheim. We expect to publish on the final outputs of these relational design approaches one we have reached the final designs, so that we can evaluate to which extent relational approaches can bring something new, more sustainable, and in line with the complex dilemmas described, to the final proposals.

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