Christian Bason

LEADING PUBLIC DESIGN:

HOW MANAGERS ENGAGE WITH DESIGN TO TRANSFORM PUBLIC GOVERNANCE

Doctoral School of Organisation and Management Studies

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How Managers Engage with Design to Transform Public Governance

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Foreword

This thesis is the culmination of an academic, professional and personal journey, where I have become increasingly intrigued by the contribution of design to innovation in the public sector.

As a public manager, what might it take to engage with design approaches to enact change, not only in discrete projects, but on a wider scale? What are the implications and responsibilities for public managers, and the meaning with which they conduct their jobs? This curiosity has led me to take on an academic challenge, where since mid-2010 I have conducted this Ph.D. project to explore in detail the significance of design work for public managers and for the future of public governance. It has been a unique opportunity to do this while taking responsibility for other tasks and opportunities, first as director of the innovation team MindLab, and later as CEO of the Danish Design Centre. It has also been a bit overwhelming, and certainly something I could not have done without tremendous support from many quarters.

With these acknowledgements, I wish to thank the many people and friends who have accompanied me, and in numerous ways given me the energy and possibility to pursue what has become this thesis. First of all, I wish to thank my thesis advisor, Robert Austin, originally with Copenhagen Business School (now Ivey Business School), who has guided the development of the thesis from the start. Also, I am indebted to co-advisors Rafael Ramirez of Oxford University's Saïd Business School, Banny Banerjee at Stanford University and Dick Boland at Case Western Reserve University's Weatherhead School of Management. A warm thank you to Eduardo Staszowski at the New School University's Parsons School of Design, with whom I conducted a visiting scholarship. Along my academic journey I have also been extremely grateful for inputs and ideas from Richard Buchanan, also at Case Western; from Sabine Junginger at the Hertie School of Governance, Roberto Verganti at Milan Polytechnic, and from Stefan Meisiek, Daved Barry, Daniel Hjorth, Dorthe Pedersen, Carsten Greve and Lotte Jensen at Copenhagen Business School.

A range of people in my professional network have been instrumental in enabling this work. From the outset, Betina Hagerup of the Danish Business Agency and Helle Vibeke Carstensen, then at the Ministry of Taxation, who both sponsored MindLab, were supportive of my plans.

Abstract in English

In recent years, design has emerged as an approach to shaping public policies and services across industrialized and emerging economies. International institutions, national and local governments, foundations, philanthropies, volunteer and community organizations, and educational institutions at all levels have taken up a variety of approaches inspired by the field of design, often in response to growing pressures to innovate. But how these approaches influence public innovation – how they change the roles of public managers, how they help managers generate new ideas and solutions – and whether, as some have suggested, they might signal the rise of new governance models or paradigms – these issues have not, with perhaps a few exceptions, been rigorously explored.

In this thesis, I explore these issues by examining the experiences of public managers who have pioneered the use of design approaches. More specifically, I confront three questions:

- *Characterizing design practice:* Within public sector organizations, what does the application of design approaches entail? Why do public managers look to and commission design, and what tools, techniques, processes and methods are brought into play?
- *Design as change catalyst:* How do design approaches, if at all, influence how public managers engage with their problems and opportunities for innovation? To what extent do design approaches help public managers achieve the changes they are striving for, and why?
- *Emerging forms of public governance:* What form and shape do the outputs resulting from design approaches take? What are the links between design approaches and the emergence of new types of public solutions and governance models?

To seek answers to these questions, I have employed a methodology based on comparative analysis of 15 case studies of public sector projects in which managers applied design approaches, across five countries (DK, UK, FIN, AUS and US). Inspired by grounded theory research, this has been a largely inductive, theory building exercise, which has relied on

personal interviews, observation, and archival data examination as data sources. In-depth analysis of individual cases and subsequent cross-case analysis has resulted in the identification of concepts, causal relationships, and patterns that transcend individual cases. The dual aims that have guided my methodological choices are 1) to contribute to a 'nascent' theory of the use of design in public management, and 2) to enhance practical understanding of how design approaches are used in the public sector. Application of this methodology has led me to findings that correspond to each of the three research questions.

First: Design practice in the public sector can be characterized in terms of activities along three dimensions:

1. *Exploring the problem space*, which involves a range of ethnographically-inspired design approaches, including field work and visualization of user processes;
2. *Generating alternative scenarios*, in which graphical design approaches and creativity inducing methods are used to enable collaborative ideation and concept development; and,
3. *Enacting new practices,* which involves the use of prototyping and user testing to render possible solutions more tangible, and also various ways of envisioning idealized (future) situations.

These dimensions of activity were discernible in all 15 cases, though to greater or lesser degrees. In addition, the tools and ways of working systematically and collaboratively that design provides appear to resonate with a contemporary conversation that suggests that the future of public governance should be more "collaborative" and "citizen-centered".

Second: I found six types of engagements with design, which can be understood as patterns of attitudes and behaviors among public managers, which were observed when design approaches were used in the organizations studied. These engagements are expressions of *what happens between managers and design processes* as the latter unfold. The six engagements I found are:

1. *Questioning assumptions*, which includes an *a priori* tendency to seek out ways of questioning one's own assumptions as a manager, as well as a design-inspired tendency

that encouraged and enabled a manager to ask new questions about "what is going on" when her or his organization interacts with its users.

2. *Leveraging empathy*, which concerns the propensity of managers to seek and use "empathic data" generated from ethnographically inspired design techniques, in order to initiate processes of change in their organization.

3. *Stewarding divergence*, which refers to the ability to open, and keep open, space and time amid an organization and its routines to allow a diversity of ideas to emerge, linger, and flourish, while also maintaining for the staff an overall sense of direction and purpose.

4. *Navigating the unknown*, which concerns the ability of managers to handle constructively the insecurities and worries that design processes, with their inherent ambiguities, prompted in their own minds and in the minds of staff members.

5. *Making the future concrete*, which is tightly connected to the design practice of prototyping and testing possible solutions together with end-users, staff, and other stakeholders.

6. *Insisting on public value*, which reflects an orientation toward the outcomes of the organization's activities and a dedication to producing multiple kinds of value, such as productivity gains, but also, very importantly, value for citizens or other constituencies.

I show how these six engagements roughly correspond, in pairs of two, to the earlier identified three design dimensions. It appears that particular design approaches influence managers' engagements, and that certain management attitudes and behaviors at least in part determine how significant the use of design approaches turn out to be.

Third: I have inferred a relationship between the use design approaches and the characteristics of a possibly emerging public governance model. Managers who use design approaches seem inclined toward governance that, in comparison to historical public management approaches, is more:

- *Relational*, in terms of a distinctly human and often longer-term perspective on the role of the public organization and its impact on the outside world; often this implies a reframing of the kind of value the organization is supposed to bring to citizens and society;

- *Networked*, understood as a model of governance that actively considers and includes a broad variety of societal actors to achieve public outcomes, including civic actors not often considered in past governance models;
- *Interactive*, exhibiting increased awareness and more explicit use of (physical and virtual) artifacts in mediating purposeful interactions between the organization and citizens and other users and stakeholders; and,
- *Reflective*, which is to say driven by a more qualitative, emphatic, subjective, and complex understanding of the organization's ability to enact change.

In a more speculative discussion (that is nevertheless consistent with my findings), I propose that this set of characteristics might collectively be termed *human centered governance*. While I do not argue that these characteristics constitute a fully-fledged governance model by themselves, they can be considered a coherent variation that could be part of emerging "new" public governance models. A human centered governance perspective would, I suggest, emphasize bottom-up and highly differentiated processes; and it would appear, relative to traditional governance models, to be more "skeletal", or even under-prescribed. It would, also, place more emphasis on future making than on the analysis of choice between already formed alternatives that has been the focus of traditional public administration thinking. This, it would, perhaps, be a more radical perspective, one that challenges the governance legacy that public managers have inherited from more analytical traditions. To what extent might public organizations leveraging design approaches come to counter balance more traditional analytically focused orientations? Only time will tell.

I conclude this thesis by suggesting a range of implications for research and practice. As is perhaps always true with this type of research, I have probably raised more questions than I have been able to answer. It will be interesting to follow in the coming years how the field of design continues to influence and impact public sector innovation.

Dansk resumé

De senere år er design vokset frem som en tilgang til udvikling af offentlig policy og service. Internationale institutioner, nationale og lokale regeringer, fonde, frivillige organisationer og uddannelsesinstitutioner har på alle niveauer grebet en række tilgange med inspiration fra designfeltet, ofte som reaktion på et stigende pres for innovation. Men hvordan disse tilgange i praksis påvirker offentlig innovation – hvordan de ændrer offentlige lederes roller, hvordan de bidrager til at skabe nye ideer og løsninger – og hvorvidt, som nogle foreslår, tilgangene signalerer fremkomsten af nye styringsmodeller eller paradigmer – er spørgsmål som endnu ikke, med få undtagelser, er blevet grundigt belyst.

I denne afhandling udforsker jeg disse emner gennem en undersøgelse af hvordan offentlige ledere, som har prøvet at anvende designtilgange, oplever dem i praksis. Mere konkret stiller jeg tre spørgsmål:

- *Karakteristik af design praksis*: Hvad indebærer anvendelsen af designtilgange i offentlige organisationer? Hvorfor vælger nogle offentlige ledere at anvende eller bestille designtilgange, og hvilke værktøjer, teknikker, processer og metoder følger med?
- *Design som forandringsagent:* Hvordan påvirker designtilgange, hvis overhovedet, hvordan offentlige ledere forholder sig til udfordringer og muligheder for innovation? I hvilken grad bidrager de til, at offentlige ledere kan opnå de mål de ønsker, og hvorfor?
- *Nye styringsformer:* Hvilken form tager de resultater der opstår fra anvendelsen af designtilgange? Hvad er samspillet mellem designtilgange og fremkomsten af nye typer offentlige løsninger og styringsmodeller?

For at belyse spørgsmålene har jeg gennemført en analyse af 15 cases bestående af projekter i organisationer hvor offentlige ledere har anvendt designmetoder, på tværs af fem lande (DK, UK, FIN, AUS og US). Inspireret af *grounded theory* som metodisk tilgang har der været tale om en fortrinsvis induktiv, teori-byggende proces baseret på personlige interview, observation, og gennemgang af sekundære kilder. Udforskningen af først de enkelte cases, og dernæst en tværgående analyse, har resulteret i identifikation af koncepter, årsagssammenhænge og mønstre der rækker på tværs af projekterne. De to hovedformål som har guidet mine metodiske valg har

været 1) at bidrage til teoriudvikling om anvendelsen af designtilgange i den offentlige sektor, og 2) at styrke den praktiske forståelse af hvordan designtilgange kan bruges i offentlige innovationsprocesser. Min metodiske tilgang har ført til nye indsigter i forhold til hver af de tre forskningsspørgsmål.

For det første: Design praksis i den offentlige sektor kan karakteriseres i form af aktiviteter på tre dimensioner:

- *Udforskning af problemrummet,* hvilket involverer en række etnografisk inspirerede designmetoder, herunder feltarbejde og visualisering af brugerrejser og –processer
- *Skabelsen af alternative scenarier,* hvor grafisk design og kreative metoder bruges til at fremme mere åbne samarbejder om idé- og konceptudvikling, og
- *Konkretisering af fremtidig praksis,* hvilket involverer brug af prototyper og brugertest for at gøre mulige løsninger konkrete, samt skabelsen af forskellige former for idealiserede, visionære fremtider.

Disse dimensioner kunne konstateres i alle 15 cases, om end i varierende grad. Desuden ser det ud til at de systematiske og samarbejdsorienterede metoder og arbejdsprocesser som er knyttet til designtilgange er i samklang med aktuelle diskussioner om nye "samarbejdsdrevne og "brugercentrerede" styringsmodeller.

For det andet: Jeg fandt seks typer af engagementer med design, som kan forstås som holdnings- og adfærdsmønstre blandt offentlige ledere, som kunne observeres hvor designtilgange blev bragt i spil i de undersøgte organisationer. Disse engagementer er udtryk for *hvad der sker mellem offentlige ledere og designtilgange, når metoderne foldes ud.* De seks engagementer jeg fandt er:

- *Udfordring af egne antagelser,* hvilket omfatter en tilbøjelighed blandt lederne til at sætte spørgsmålstegn ved egne forestillinger, såvel som en design-inspireret tilskyndelse til at udforske og forstå "hvad der foregår" i mødet og interaktionen mellem den offentlige organisation og dens brugere

- *Brug af empati som løftestang*, som handler om at lederne bevidst søger og bruger "empatiske data" skabt gennem etnografisk inspirerede designmetoder for at igangsætte forandringsprocesser i deres organisation
- *At give rum til afvigelser,* hvilket er evnen til at åbne og fastholde tid og rum i organisationen, midt i dens øvrige rutiner, for at lade en diversitet af nye ideer at vokse frem og blomstre, alt imens medarbejderne gives en overordnet fornemmelse af retning og mening med processen
- *Navigation i det ukendte*, som omhandler ledernes evne til at handle konstruktivt trods de usikkerheder og bekymringer som designprocesserne, med deres iboende modsætninger, skaber både hos dem selv og hos deres medarbejdere.
- *At gøre fremtiden konkret*, som er tæt knyttet til de designtilgange der omhandler prototyper og test af mulige løsninger sammen med slutbrugere, medarbejdere og andre interessenter.
- *At insistere på offentlig værdi*, hvilket reflekterer en orientering imod effekterne af organisationens aktiviteter og en dedikation til at producere forskellige former for værdi, herunder produktivitetsgevinster, men først og fremmest positiv forandring for borgere og andre slutbrugere.

Jeg viser hvordan disse seks engagementer groft sagt korresponderer, i par af to, med de tidligere identificerede tre design dimensioner. Det viser sig at bestemte designtilgange har indflydelse på ledernes engagement, og at bestemte ledelsesholdninger og adfærd, i det mindste delvist, afgør hvor betydningsfuld brugen af designtilgange bliver for organisationen.

For det tredje: Jeg viser en sammenhæng mellem brugen af designtilgange og et sæt karakteristika ved en mulig, fremvoksende ny offentlig styringsmodel. Ledere som anvender designtilgange lader til at hælde mod en måde at styre organisationen på, som sammenlignet med mere klassiske styringstilgange, er mere:

- *Relationel*, forstået som et distinkt menneskeligt og ofte længere sigtet perspektiv på den rolle, den offentlige organisation spiller og på dens betydning for den omkringliggende verden; ofte indebærer dette en ny rammesætning af den værdi organisationen bør skabe for borgere og samfund

- *Netværksbaseret*, i kraft af en styringsmodel som aktivt forholder sig til og inkluderer en bred vifte af samfundsmæssige aktører i bestræbelserne på at skabe forandring, herunder civilsamfundsaktører som ikke ofte tænkes med i traditionelle styringsmodeller
- *Interaktiv*, ved at udvise øget bevidsthed og mere konkret anvendelse af (fysiske og digitale) artefakter i at mediere bevidste, gensidige interaktioner mellem organisationen, borgerne og andre brugere, og
- *Refleksiv*, hvilket vil sige den løbende styring er karakteriseret ved mere kvalitative, eksperimenterende, empatiske, subjektive og komplekse forståelser af organisationens evne til at skabe social forandring.

I en mere spekulativ diskussion (som ikke desto mindre er konsistent med mine resultater) foreslår jeg at disse kendetegn tilsammen kunne kaldes for "offentlig styring med mennesket i centrum". Jeg argumenterer ikke for at de fire karakteristika udgør en fuldkommen styringsmodel i sig selv, men at de kan ses som en sammenhængende variation der kunne udgøre en del af de fremvoksende "nye" offentlige styringsformer. Et styringsperspektiv som sætter mennesket i centrum ville, foreslår jeg, udgøre en *bottom-up* tilgang kendetegnet ved yderst differentierede, eller personaliserede, processer. Sammenlignet med andre modeller tegner dette perspektiv til at være mindre specificeret og løst struktureret. Det ville også lægge større vægt på skabelsen af nye fremtider end på analysen af valg mellem eksisterende alternativer, som ellers har præget megen tænkning og praksis indenfor traditionel offentlig administration. Dette ville – måske – udgøre et mere radikalt perspektiv på offentlig styring og ledelse: Et perspektiv som udfordrer den styringstradition som offentlige ledere har arvet. I hvilken grad vil offentlige organisationer som bringer designtilgange i spil kunne danne modvægt til mere traditionelle, analytisk orienterede måder at styre på? Det kan kun tiden vise.

Jeg runder afhandlingen af ved at foreslå en række mulige implikationer for forskning og for praksis. Som det nok altid er tilfældet med denne type undersøgelser rejser jeg sandsynligvis flere nye spørgsmål end jeg har været i stand til at besvare. Det bliver interessant de kommende år at følge hvordan (og hvorvidt) designfeltet kommer til at præge og påvirke innovationen i den offentlige sektor.

Contents

Introduction: Design as a vehicle for exploration[1]

> *To see that a situation requires inquiry is the initial step in inquiry.*
>
> John Dewey, *Logic: The Theory of Inquiry* (1938:111)

Scene: I am interviewing a public manager from the Department for Families in South Australia, in the offices of the Australian Center for Social Innovation. We are in a small meeting room on the first floor of an office building in central Adelaide; the table is elevated and we are sitting on café-like high stools. Warm afternoon light is streaming in through tall windows.

The public manager, Carolyn Curtis, describes how she has experienced her full-time secondment for nearly eight months to an externally funded project on how to redesign services for "chaotic families". These are families that are typically characterized by high levels of alcohol abuse, violence, unemployment, and dysfunction. For the past eight months she has no longer acted formally as a manager, but has participated together with a small team consisting of a designer and a sociologist in exploring how such families live their lives, with the aim of finding new opportunities for helping them to become "thriving families". Curtis says:

> *I was trained as a social worker to assess and categorize various social events. Throughout this project I have needed to undo all that. And that is difficult. I have been given the space, time and resources to really reflect on what we have been doing in our agency. We have handled these problematic families as a pre-designed "program", with fixed criteria and no end-user involvement.*

Curtis describes the new families project as a "resourcing model", which she says is radically different from how she has worked during her 10-year career as a manager. By taking an end-user (family) perspective, she says has been able to critically reflect on the results of her agency's work:

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[1] This chapter draws in part on Bason & Schneider (2014) and Bason (2013a)

It is bottom-up, it has end-user focus, and there is no fixed structure, criteria or categories. The work has been extremely intensive. We have focused on motivation and on strengths within the families – identifying the "positive deviances" where some families are actually thriving, even though they shouldn't be, according to the government's expectations. We have focused on finding entry points and opportunities, rather than just trying to mediate risk. It is a co-design, or co-creation approach, and it has been entirely new to me. We are ourselves experiencing the actual interactions within and amongst the families, and breaking them down to examine in detail how they might look different. It is very concrete, capturing what words they use (...) It all looks, feels and sounds different than what I did before. Taking an ethnographic approach is entirely new to me. It has helped me experience how these citizens themselves experience their lives, and has allowed me to see the barriers. I have had to suspend my professional judgment. The whole iterative nature of the project, that it is OK to change, has made me understand how much of what we do is a matter of attitude. In this project, we are capturing their concrete stories, and allowing immersion into their reality. Doing my own ethnography in this way has been a phenomenal journey.

Curtis's words express a range of significant observations. Her experiences, as a public manager of the *Family by Family* project, raise certain questions: What does it mean to "undo" one's practice as a public manager? In what ways has the project been bottom-up and what does end-user focus imply in practice? Specifically, what does a "co-design" approach entail? How does ethnography come into play? What characterizes the "journey", which this manager has taken? Why does the process "look, feel and sound" different than the types of development activities Curtis has experienced before? All of these questions relate to the deeply personal experience of being part of a particular process.

She goes on to elaborate on the significance of the project for the organization she is currently a part of, and the potential for more systemic change:

Today we as administrators meet the families reactively. We are trapped in a culture of risk. I can see we need a mindset change in my profession. We are

forgetting to see the potential. We are lacking openness and passion. (...) During this new project I have had to let go of myself as a manager and leader. Looking back now, I am seeing how the system could be very different. I have made decisions about removing new-born babies from their mothers that I now see weren't at all necessary. That recognition is really painful.

Curtis's story leaves the impression that the application of the methods she describes – user-centered, bottom-up, iterative, etc. – have had an impact not just on herself as a manager and a person, but also, potentially, on her organization's approach to its mission and role. Her experience in some ways even questions some often taken for granted expectations of government: The expectation that public organizations are relatively stable with predictable routines and practices, and that public managers are constrained, or bound, by a range of powerful conditions (Simon 1997): The rule of law, the operating principles of regulations, financial and budgetary demands, the identities, norms and roles of the professions public administration, of social work, of education, of nursing and so forth (Wilson 1989).[2] How is it possible, given the long-standing and embedded conditions that characterize bureaucracies, to disrupt the status quo?

If this brief narrative from a public design project was an isolated occurrence, or a random outlier, these questions would be of limited academic or practical interest. It could be that Curtis has a particular personal characteristic that makes her especially susceptible to the methods and processes that were employed; or, it might be that the particular institutional context of family services in Adelaide, Australia was somehow especially ripe for new insight, disruption, and change along the lines that Curtis describes. It could even be that her project partners – a designer and a sociologist – were extraordinary people who simply have a profound impact on those that they work with.

But it is also possible that there is a more profound explanation consistent with Curtis's sense that she has experienced a new and promising approach to the work of her profession. Examining this possibility is a central purpose of this thesis.

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[2] These presumptions have their origins in the rise of scientific management (Taylor 1911; Fayol 1916) as well as in Max Webers considerations of bureaucracy (Weber 1947).

A global rise of design in government

Curtis's story is one among a growing number of efforts by public sector managers to deploy what are increasingly characterized as *design approaches* to innovation in public sector contexts (Parker & Heapy 2006; Bate & Roberts 2007; Shove et. al. 2007; Bason 2010; 2013a; Boyer et. al. 2011; Cooper & Junginger 2011; Manzini & Staszowski 2013; Ansell & Torfing 2014; Bason 2014). Here, "innovation" in the public sector is considered broadly in line with the OECD's Oslo Manual general definition of innovation as novel ideas that are implemented and produce value (OECD 2005; Daglio et. al. 2015). The rise of design approaches in the public sector is often framed in the context of new forms of citizen involvement and collaborative innovation (Lindqvist et. al. 2011; Bourgon 2008, 2012; Ansell & Torfing 2014). According to Bourgon (2008), citizen engagement aims at opening up new avenues for empowering citizens to play an active role in service design, service delivery and in the ongoing process of service innovation. International institutions, national governments, local government, foundations, philanthropies, voluntary and community organizations as well as educational institutions at all levels are taking up design approaches in various forms (Bason 2010; 2013a; 2014; The Economist 2013; Liedtka et. al. 2013; Mulgan 2014). The organizational anchoring (public or third sector) varies, as does the terminology: Service design, strategic design, macro design, public design, design thinking, human centered design, co-design, and co-creation are among labels used (Meroni & Sangiorgi 2011; Cooper & Junginger 2011; Liedtka et. al. 2013). What is common to all these labels and terminologies, in a public sector context, is that design is considered not in terms of building (architectural) design, object (industrial) design, or space, city and urban planning. Rather, design here refers to a diverse set of approaches to, methods for, and ways of thinking about intentional processes for creating societal change, generally focusing on public policies and services.[3]

In some instances, design capabilities are being embedded explicitly in the structure of government organizations, as in-house units or teams. Within the last five years, the United States, the European Commission, the United Kingdom, Singapore, the United Arab Emirates, Brazil, and Chile, amongst others, have set up their own "innovation labs", "innovation centers",

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[3] Design is defined further in chapter 1. The meanings of some of the key design labels, and other basic definitions used in this thesis are explained in the Glossary in Appendix E.

or "i-Teams" (Bason 2013a; Hassan 2014; Nesta 2014, The Economist 2014). In terms of policy domains, nearly every thinkable corner of public service provision has in recent years been connected to design: Environmental, education, employment, business, finance and taxation issues to health care and mental health and social care at regional and local government level (Parker & Heapy 2006; Meroni & Sangiorgi 2011; Polaine et. al. 2013; Bason 2014a; Manzini 2015).

The enthusiasm for alternative approaches likely derives partly from the growing financial pressures on many public organizations (Bourgon 2011; European Commission 2012, 2013a, 2013b; Osborne & Brown 2013; Christiansen 2014). The global financial crisis of 2008 left many governments and their administrations in difficult situations. Greece, Italy, Spain, Portugal and Ireland have verged on state bankruptcy, thus have been under significant pressure to reform public services, pension systems, and perhaps even transform the fundamental relationship between citizens and the state. Governments in less dire circumstances have been adopted similar or even more radical measures. In the United Kingdom, the government has cut away nearly half a million public jobs since 2010. In the US, some state governments and cities have no funding for basic infrastructure; one major city, Detroit, has declared bankruptcy. The parallels between Britain's "Brexit" and the US election of Donald Trump appear to express powerful citizen reactions to the challenges facing contemporary society, and perhaps even a widespread assessment that governments have failed to adequately address the challenges.

Indeed, the willingness to explore design approaches seems linked to a wide and evolving assortment of policy problems that have not been addressed sufficiently. The attempts to control public finances are happening at the same time that these very same societies are confronting seemingly intractable social challenges, such as chronic health problems, an ageing population, new mobility patterns, growing immigration, unemployment – in particular among young people – and, in some countries, increasing income disparity and poverty. "Wicked problems" (Churchman 1967; Rittel & Webber 1973) are not unique to the public sector, but the label could well be said to describe many of the most pressing public sector challenges. And almost universally, the rhetoric summoned in response to the problems calls for more innovation in government to effectively deal with the challenges, to enable public service organizations to deliver more and better services at less cost (European Commission 2013a; OECD 2014).

A growing body of empirical evidence indicates that design, in its various guises, is being tried by policy makers and public managers across widely different contexts and settings – nationally, culturally, organizationally (Boland & Collopy 2004; Bate & Robert 2006; Boyer et. al. 2011; Cooper & Junginger 2011; Manzini & Staszowski 2013; Lietdka et. al. 2013; Service Design Network 2016). Such applications of design approaches could be considered a reflection of the quest by managers and their organizations, not just to identify new public service or policy "solutions", but also to explore new and possibly better ways of *governing*. By "governing" I mean the overall strategic approach to managing and organizing public bodies and thus, as Hufty (2011) has suggested: the processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions.

Design seems to have become a vehicle for exploration; an exploration that potentially challenges commonly accepted assumptions about public governance and bureaucracy. One might even ask whether design approaches are an expression of a growing "reenchantment" of the practice of public management and policy (Paquet 2009; Parsons 2010:26).

On a more personal note, as a political scientist, I have over the past 10 years or so become increasingly interested in understanding the role of design in a government context. What roles might the methods, approaches and way of thinking of designers play in the context of public sector innovation? My own engagements with design have been multiple. Since 2007, I have authored, co-authored and edited a number of books on innovation and leadership in government, where design methods have featured an increasingly central role (Bason 2007; 2009; 2010; 2014; 2016; 2017); I have led the Danish government's innovation team MindLab, which employed professionally trained designers; and I have served on the European Commission's design leadership board and been chairman of a Commission expert group for public sector innovation. My present job is to run the Danish Design Center (DDC), a government funded institution that aims to strengthen the use of design by business. This Ph.D. thesis reflects a deep interest and curiosity about what design might offer to public organizations and public managers.

My various roles have given me what has been, in essence, a "ringside seat" from which to observe, engage with, and share experiences of the use of design approaches in government settings. On the one hand, this seat has provided me with a unique and advantaged position from which to collect empirical data, and equipped me with expertise that gives me a better chance to arrive at a nuanced understanding of the practices and issues I have observed. On the other hand, one of my roles, as what has essentially been an *advocate* for design approaches, complicates my role as researcher and scholar. Throughout this study, I have worked hard to set aside my advocate role and to engage in a dispassionate, careful, and curious role as an observer, data collector, cataloguer and analyst. I have endeavored to explore my own assumptions and preconceptions, and to be humble and skeptical as to what I am finding and learning. The methodology section of the thesis further details specific steps I have taken to deal with the challenge of such "close-up" research and to avoid the kind of premature "closure" that can develop from preconceptions.

From the perspective of either observer or advocate, however, it seems safe to state that the emergence of design as a potential way to realize societal change points to significant and largely unresolved mysteries for public administration research. It is clear enough that something new is happening. What that is, how significant it is, whether it is everywhere the same, whether there are patterns across different applications, whether similar objectives are sought, and what is being accomplished – all of this is less clear and invites examination; which leads me to the main research question for this thesis:

What happens when managers engage with design to achieve change in public sector organizations?

This general question addresses not only the core of the current and growing debate over innovation in the public sector (Torfing et. al. 2014; Christiansen 2014), but also touches upon an important and rather fundamental issue in organizational change. A paradox, formulated by DiMaggio (1988:12), asks how there can be "changes in work organization that have neither been embraced by dominant organizations in the field nor by organizations to which dominant actors are tied." In other words, how can change happen that is essentially novel and disruptive (Christiansen 1997), which is not a mere extension of current dominant patterns and merely

informed and justified by available "evidence" or "best practices"? What kind of management, or decision-making, approaches underlie such change?

Might it be, as Carolyn Curtis's story seems to suggest, that change in public organizations is made possible through new types of processes, which open up new opportunities and futures? Design on the one hand, and the institutional and governance context of public organizations on the other, can be viewed as two waves crashing against each other, resulting in unpredictable ripple effects. Imagine the (admittedly somewhat cliché) creative, fast-paced culture of designers as it meets the (equally cliché) old-fashioned bureaucratic culture of civil servants. Although both descriptions are stereotypes, there seems to be no doubt that the professionals who typically occupy the two domains – designers, artists, ethnographers and technologists on the one side and economists, lawyers and political scientists on the other – have very different world views and appetites for innovation and change (Michlewski 2014). The relationships between designers and government officials, viewed empirically, are thus not always easy, and are potentially ripe with contradictions, frustrations and conflict as much as with positive change and value creation (Mulgan 2014).

Relationships become more complicated when one considers the context in which they arise. As Hernes (2008) suggests, contemporary organizations can be viewed as "tangled" and "fuzzy". Managers act in a fluid world where the changes they take part in (or create) also changes them (2008:145). Public managers, in the midst of the dynamics of change processes, are witnesses who might, with their stories, help us understand what unfolds and interpret what matters. Recognizing that institutions, including the dominating institutions of public governance, rely on the action of individuals and organizations for their reproduction over time, might it be that this reproduction is challenged through the "rejection" of existing institutions (Oliver 1992:567) and the rebuilding of new ones? Or are current institutions and governance models rather more modestly supplemented, or "layered", with new additions (Weick 2004; Agranoff 2014; Waldorff et. al. 2014)?

Value propositions to explain the positive effects of design have been put forward by many actors, many of whom more or less explicitly claim that design is the "midwife of innovation" (iLipinar et. al. 2009; Brown 2009, Michlewski 2015). The most vocal proponents of design,

however, are usually either official design centers[4] with a mandate to promote design in business and government, or expert groups or committees that have been formally established, often with a positive point of departure, to suggest ways in which design can create more value to society (European Commission 2012). These kinds of advocacy certainly seem to have "paid off in terms of interest" (Mulgan 2014). But is this ultimately a management fad, or is there more to it? Should the rise of design be of interest not only for practitioners of public policy and administration but also to the academic community?

The body of scientific knowledge about the functioning and significance of design processes for changes in public management and governance remains quite thin. Although design is becoming part of the public reform agenda, there is no robust research base about it as of yet; our theoretical understanding of phenomena related to the application of design within public sector organizations fall far short of comprehensive (European Commission 2012; Mulgan 2014). Indeed, one might argue the same for the wider concept of innovation in public services, that it is still under-developed theoretically, despite an increasing volume of literature. This might be partly because much of the public sector innovation literature has drawn on product innovation research (rather than service innovation, which is arguably more appropriate to most public organizations); and partly because the innovation literature has rarely taken sufficient account of the particular political and institutional characteristics of the public sector (Hartley 2005; Osborne & Brown 2013).

Some academic and practical work has been produced in recent years to illuminate design in the public sector (Carlsson 2004; Parker & Heapy 2006; Bate & Robert 2007; Bason 2010; Boyer et. al., 2011; Terrey 2012; Manzini & Staszowski 2013 Liedtka et. al. 2013; Bason 2014). However, none of this work has approached design from the vantage point of public managers, or focused on the implications for governance models. In short, there is a need to get "… a better grasp of how design thinking is used in the public sector to construct interactive arenas and spur innovation" (Ansell & Torfing 2014:239). My contribution to research, then, is not a case of "gap-spotting" to fill in the ever-finer cracks of existing theories (Alvesson & Sandberg 2013), but of proposing something a bit more fundamental, if still quite tentative: By exploring how managers experience their engagements with design approaches, I aim to arrive at a set of

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[4] The author is the CEO of one such body, the Danish Design Center.

conceptual building blocks – heuristics observed or reported in practice, really – from which theory development might emerge. I subsequently discuss how these concepts can be fruitfully related to existing theories about design and governance, and also provide some of my own suggestions of a theorizing nature.

At present, however, there is little formal knowledge available to guide decision-makers in the public sector, to help them engage effectively with design to achieve innovation. The challenges against which design approaches are being applied in the public sector are a heterogeneous collection: From high-level (macro) "policy design" to the more tangible "service design" of human-system interactions, and to "participation design" to help drive citizen and community engagement. As for the relationship between management and design, the question of what it might actually mean to "manage like a designer", as suggested by Boland & Collopy (2004), in a public sector context, is rather open. In fact, almost all of the managers and organizations interviewed in this thesis are experiencing the use of design approaches for the first time. One source of confusion, which the thesis will seek to explore, is our understanding of design actors, or agency: In applying collaborative forms of design in an organizational context, who designs, with whom, and for whom? More specifically, what is the relationship between managers and unfolding of design processes? How do leaders and organizations engage with, or react to, this kind of management "technology"? Might we learn something more generally about how new management technologies are taken up and used by leaders? What does design entail in a public sector context, and how might it matter to changes and transformations that design approaches have been brought into play as a key resource which public managers engage with, as opposed to other methods? What is the significance of the strong visual component and potentially persuasive power of design and multimodal communication (Meyer et. al. 2013; Sanders 2014)? Might one even speak of particular *types* of change being instigated by design? Can we see design approaches as facilitating the creation of new meaning, both for the managers involved and the wider organization on the one hand, and can we identify explanatory power in terms of the resulting outcomes of that meaning-creation (Weick 1995; Verganti 2009; Suddaby & Greenwood 2009; Madsbjerg & Rasmussen 2014)? Could it even be that there are wider lessons for leading and management of change, applicable beyond the public sector to other types of organizations and contexts? These are all questions that essentially relate to the core focus of the thesis, from slightly different angles: The overarching issue is what happens when managers (like Carolyn Curtis) work with, experience, and use design in a public sector setting.

Design is thus still largely an unexplored, marginal phenomenon that may hold important lessons – academically and operationally – for the agenda of innovation in the public sector and (wider still) the question of how to intentionally generate societal change.

1.3   **Research sub-questions**

In seeking to answer my primary research question, what happens when public managers seek to achieve innovation by using design approaches, I will also address the following sub-questions:

1. *Characterizing design practice:* Within public sector organizations, what does the application of design approaches entail? Why do public managers look to and commission design, and what tools, techniques, processes and methods are brought into play?

2. *Design as change catalyst:* How do design approaches, if at all, influence how public managers engage with their problems and opportunities for innovation? To what extent do design approaches help public managers achieve the changes they are striving for, and why?

3. *Emerging forms of public governance:* What form and shape do the outputs resulting from design approaches take? What are the links between design approaches and the emergence of new types of public solutions and governance models?

These three research sub-questions are motivated and elaborated in more detail in the methodology chapter of the thesis.

The study reported herein is based on in-depth, qualitative, personal interviews with public managers who have commissioned and experienced design processes first hand. I interviewed 21 managers across a range of national contexts, six of which were exploratory and 15 were primary case interviews, which are used actively in the thesis. I have also examined secondary documentation relating to the specific design projects, such as process documentation, evaluations, business cases, and impact assessments. My analytical approach draws on grounded theory (Corbin & Strauss 2008), so my emphasis has been on identifying emerging patterns, archetypes, categories, and relationships bottom-up, from within the empirical data. The ambition is to develop what can be characterized as an emerging, "nascent", or at best, "intermediate" theory of how design might contribute to making change in the public sector possible (Edmondson & McManus 2007:1158)

Beyond this introduction, the thesis is structured in three major parts. These parts 1) describe related theory and methodology, 2) extract evidence and insights from data, and finally, 3) suggest a conceptual framework for understanding the relationships between design, management, and public governance, supplemented with perspectives for research and practice.

The figure below illustrates the structure and content of the thesis. The cross-cutting bar is intended to underline how the issue of how management and design practices interact is at the heart across the structure of the thesis.

Figure 1: Structure of the thesis
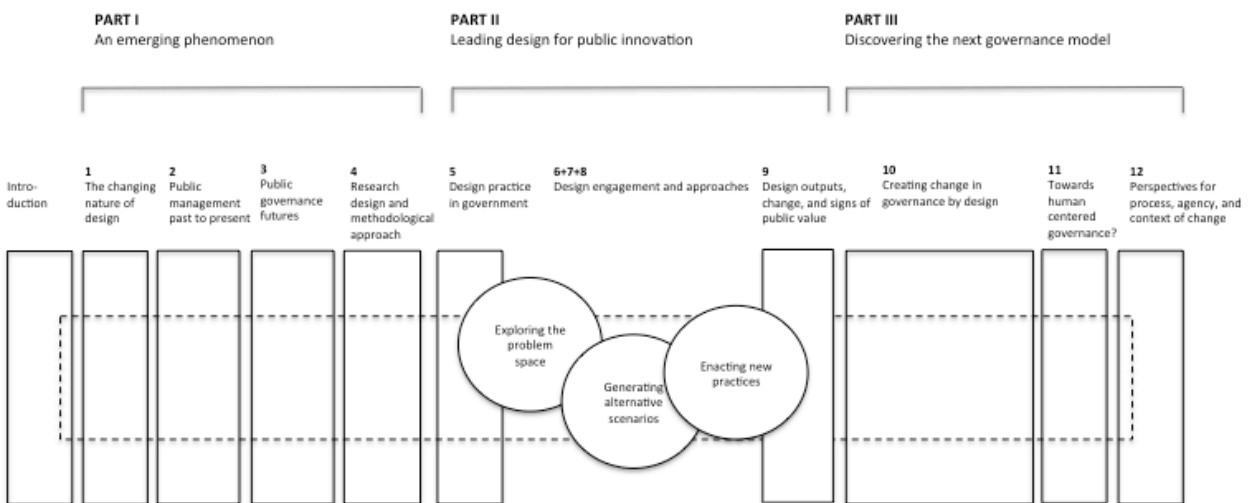
Part I: An emerging phenomenon

In **chapter 1,** I chart the rise of new and more collaborative methods and forms of design, identifying alternative design definitions and briefly examining design history from its roots in craft towards today's use of design as an increasingly recognized approach to collaborative innovation, also in the public sector. As part of this discussion, I reflect on how design in some ways appears to be coming "full circle" to re-integrate production (craft) and user experience, enabled by new technology. The chapter further discusses the concepts of design management

and design *as* management; and I consider *design attitude* as a perspective through which to understand how managers relate to the design processes that unfold in their organizations.

In **chapter 2, I provide a broad overview** of the development of legacy traditions of public administration and governance. Where does the current model of public management come from? What underlying historical ideas and principles have defined its way of approaching public management and decision-making? Additionally, I examine the characteristics of complex, "wicked" problems and discuss the potential implications of different problem types for the way we currently understand the challenges and roles of managers and decision-makers, and the role of design.

In **chapter 3,** I examine the last decade's discussions of public sector innovation and new, emerging models of public governance. I provide an introduction to the landscape of governance models that is currently taking form, not in the shape of a full literature review, but as a way to map the most important dimensions of relevance to the interplay with design practice. The chapter reveals and explores some surprising similarities between the contemporary discussions in governance theory and recent developments in the design profession. The purpose here is to detail and trace the trajectories of these two rather different "waves" of change that are explored across the thesis, in order to see important differences, distinctions, purposes and possibilities.

In **chapter 4,** I present my research design and explain the methodological choices I have made in my study. I also show how methodological choices relate to my research questions, and describe my key data sources. I discuss potential methodological challenges inherent in the design of my research, with particular emphasis on my own stance with respect to my field of study. I have aspired to be transparent about the strengths and weaknesses of being an actor and commentator active within the field of my research, and discuss at length the measures I have taken to build on the strengths and safeguard against the risks.

Part II: Leading design for public innovation

Part II of my thesis presents data and derives findings from interviews with a range of public managers in multiple countries and public policy settings.

Chapter 5 provides an analytical overview of the design approaches and processes that have been applied in the cases I studied. What characterizes the design work I have observed in practice? Which methods and tools have been deployed? *This chapter addresses research sub-question 1.*

In **chapters 6 through 8**, I unfold my analysis of the main findings from the empirical data, focusing on the key concepts that may contribute to our understanding of the significance of design approaches, and how public managers relate to them. A key concept across these chapters, building upon and extending sub-question 1, is the notion of "engagement" between managers and the design methodologies, tools, and processes. Chapter 6 considers design as the exploration of public problems, chapter 7 expands upon the role of design in establishing alternative scenarios, and chapter 8 examines how design appears to facilitate the enactment of new future practices. Each of these chapters includes thorough analysis and consideration of the experience of public managers as they encounter and leverage design approaches. My emphasis is on discerning from interviews, observation, and other data key impressions and behaviors that could be understood as managers drawing on design approaches as they discover and pursue their goals. *The chapters 6 through 8 address research sub-question 2.*

Part III: Discovering the next governance model

Chapter 9 provides an overview of the types of outputs that appear to result from design processes, and tentatively reports signs that public value might have been created via such approaches. It thus builds a bridge between part II and III of the thesis by exploring the initial implications of the use of design approaches in the pursuit of public sector innovation.

Chapter 10 examines the possibility that design might be enabling not only particular new "solutions" or "innovations", but also, potentially, a new emerging public governance model. The chapter explores what seems to characterize the types of changes generated (at least in part) through design approaches. Are there particular patterns? To what extent does it seem reasonable to argue that there is a connection between design practice, management engagement, the outputs of the design work, and an emerging governance model? By drawing on empirical findings of earlier chapters, interpreting the findings with help from extant literature, and also adding some of my own theorizing, I identify in this chapter four key

principles of an emerging "human centered" model. My purpose is not to propose a fully developed model of governance, but to suggest how design-led approaches bring certain dimensions and principles to the fore, which might constitute a sort of skeleton upon which to "flesh out" additional particular practices of governing.

Chapter 11 further expands consideration of an emerging, human centered governance model by discussing its characteristics and contrasting them with past practice. To what extent does the emerging model, and its principles, signify a break away from public sector governance legacies, and how does it compare and contrast to the models discussed in chapter 3? What are the potential contributions of a new approach? I assess how the performance of the model could be viewed in the light of classic bureaucratic governance, and compare its characteristics against the overall landscape of "new" governance models. *These three chapters hereby address sub-question 3.*

Chapter 12 summarizes the key findings across the thesis, and discusses implications for theory and practice through three different lenses: Process, or design; Agency, or management; and Context, or governance. Using each of these lenses, I consider and discuss the essential learnings and contributions to the body of knowledge on design in the public sector, on public management and governance, and reflect on how academics and managers alike could use them.

1.5 **Conclusion: A process of discovery**

I began this chapter with the example of Carolyn Curtis, a public manager who experienced a variety of design approaches in the "Family by Family" project. Curtis's story illustrates what I hope to explore more broadly through 15 cases. How can her journey be understood? What does she do, and what is the role of the approaches she engages with? What are the key elements involved, and what is the wider significance for the project and her organization? In terms of future practices, does Curtis's journey lead to changes that might not otherwise have been possible, and how could those changes be maintained (or not) by the wider governance context? These questions about Curtis' experiences and their broader forms that span all my cases are open and constitute an invitation: To discover for ourselves what it is Curtis seems convinced that she has discovered, and to try to understand what's behind it.

Let us start that journey.

Part I

An emerging phenomenon

1. The changing nature of design

Design is one of the basic characteristics of what it means to be human, and an essential determinant of the quality of human life.

John Heskett, *Toothpicks and Logos* (2002:5)

The cover of the May 26th, 2011 issue of *The Economist* sported an odd headline: "Welcome to the Anthropocene," it said. The cover art depicted an artificially created Earth. The lead article explained: According to geologists, humankind has entered a new era, where the majority of our planet's geological, ecological, and atmospheric processes are affected by humans. Anthropocene literally means "The age of Man"; announcing civilization's entry into the Anthropocene underlines how our species is increasingly shaping our environments, not only locally but also on a global scale, to meet our needs. This shift has been described as a "human turn", an altered state of affairs in which "man has increasingly moved to the center as a creature that has set itself above and beyond, and even reshaped, its natural surroundings" (Raffnsøe 2013:5). This turn has wide-reaching implications for many of our natural scientific disciplines and for our understanding of our role on the planet. "The Anthropocene gives rise to a landscape that is distinct and overarching, and in which the human being holds a new position and a new role" (Raffnsøe 2013:5).

The human turn can be construed from a number of angles – geological, philosophical, and social. An important dimension, a causal factor, is industrial. But the coming of the Anthropocene might also be seen as the culmination of the last several hundred years' *design* of the increasingly human-made environs in which we live: "The capacity to shape our world has now reached such a pitch that few aspects of the planet are left in pristine condition, and, on a detailed level, life is entirely conditioned by designed outcomes of one kind or another" (Heskett 2002:8).

The notion that our planet can be transformed by design is not new. The universality of design is a key strand in much thinking and writing on design. Buckminster Fuller, the futurist, architect

and designer had suggested already in the early 1970s, in Victor Papaneks' *Design for the real world* that "Design is everything" (Michelsen & Engholm 1999). C. West Churchman, in 1971, asserted that "We believe we can change our environment in ways that will better serve our purposes" (1971:3). Norman Potter opens his influential book *What is a designer,* with the statement that "Every human being is a designer" (Potter 2002). When asked about the boundaries of design, the renowned furniture designer Charles Eames famously answered, "What are the boundaries of problems?" (Moggridge 2007: 648). Design cuts across all other human activities as a particular concept that addresses how physical, commercial, social and public outcomes are created. As Manzini (2015) argues, much of this design activity is not intentional. As the digital, social and physical tools for designing are becoming democratized, "everybody designs." Manzini (2015:37) distinguishes between "diffuse design", by non-experts or ordinary people, and "expert design" by professionally trained designers. Likewise, Friedman & Stolterman (2014;viii) argue that design "…is always more than a general, abstract way of working. Design takes concrete form in the work of the service professions that meet human needs, a broad range of making and planning disciplines."

While it can be debated whether design is "everything", it seems beyond doubt that "life in contemporary society is saturated by design" (Simonsen et. al. 2014: 1). But in reaching this saturation point, not least through an explosion of physical objects and expressions, design has also itself begun to undergo significant change. It has spread from a focus on forms and objects to focus as well on services and systems; its practice has changed as ideas about end-user and stakeholder involvement have gained currency; and its impacts have broadened with the rise of new ideas about the contributions of design to the theory and practice of management. At a deeper level, design is changing because the context for design is changing. Design, as a discipline, is being redefined by technological and social megatrends, which have significance for how organizations are run, products and services are shaped, and how value is created. As part of this shift in context, design is finding its way into the public sector.

This chapter provides an overview of the context, history, and development of design, its movement toward "new" forms and meanings, and the emergent application of design in the public sector. It aims to un-wrap definitions and directions and to distill from these a rough inventory of the characteristics or sensibilities that distinguish design approaches. It develops

the idea of design management and the notion of public managers as designers (a theme key to this thesis). Finally I discuss the notion and role of design as a particular "attitude".

Origins and futures of design

The rise of design as a distinct profession was a consequence of industrialization and the rise of mass production, which in turn was driven by developments in technology and in the organization of work (Manzini 2015). In this perspective, design is a key factor linking consumption and new technological opportunities. As designers found ways to create marketable products, which fulfilled people's tastes and demands, they in turn influenced society's culture of consumption. Although the activity of designers in itself may play a somewhat hidden role in society, the resulting artifacts do not:

> *Design and designers are, and have been for many years, a* sine qua non *of the modern commercial system ensuring, through the activities of production and consumption, that people's needs and desires (whether consciously acknowledged or not) are met by the visual and material images and artifacts that enter the marketplace and help us define who we are.* (Sparke 2004:2).

Sparke claims that design is an essential ingredient of modern society, culture, and identity, and that designed artifacts influence how we think about ourselves. Just plainly observing everyday life in our current society, it seems clear that objects of consumption – ranging from the clothes we wear to the mobile phones we carry, to our preferred forms of transportation – are powerful signifiers of our identities. In other words, there has historically been a "close-coupled, recursive relation between the design profession and the [social] structure of capitalist society" (Shove et. al., 2007; 120). Designed products influence how we behave in our daily lives. Fields as diverse as sociology, anthropology, behavioral science and technology recognize that material objects make particular social and practical arrangements possible. According to Shove et. al. (2007) this means that design is a medium through which social and commercial ambitions are materialized and realized.

To understand what design means today, and how contemporary developments in design matter to the public sector, however, we must look back in time to the era preceding industrialization,

and trace a line forward from there to our current and future world of a post-industrial, networked knowledge society. As I will argue, design appears to be coming full circle, essentially reintegrating the processes of creating anew and the processes of (re)producing in numbers , which had been separated by industrialization.

1.6.1 Design and the splintering of craft

Before the rise of mass industrialization, the structure of production was based on craft. The craftsmen – usually organized in guilds – were the conceivers of new products and related services and also their producers. Guilds were partly sustained by law, but even more by "the hands-on transmission of knowledge from generation to generation." (Sennett 2008). Guilds, and the masters and workshops that belonged to them, represented an organization arrangement for tailored (i.e., customized) production. If consumers wished to purchase a new item of clothing, they would go to the tailor, discuss with him the style, fit and, quality, and the tailor would take measurements, before producing a bespoke item. Carpenters would design and produce furniture on a similarly individual basis; and so also would the blacksmith, who shaped pots, pans, and weapons made to order; each product would be unique for its person and purpose, and uniquely characterized by the craftsman's individual trademark variations (Austin & Devin 2009). One might say that production was standardized:

> *In craft production, conception and realization are linked and co-ordinated by the interplay of hand, eye and materials. The fact that the entire process can be accomplished by one person distinguishes its complexity, giving it a human scale and apparent simplicity that allows it to be experienced by both practitioner and observer as a comprehensible unity* (Heskett 1980:7).

Technology changed this. With the emergence and widespread use in the early 1800s of technologies such as the steam engine and harder steel, which could be used to create machine tools as well as replacement parts, it became possible to industrialize the processes of production (Hatfield, 1900). Increasingly, first in England and then in other parts of Europe and North America, traditional craftsmen evolved into larger businesses which engaged in greater and greater scales of production; with the innovations of standardization, the conveyor belt, and organizational and managerial principles to maximally leverage these, mass production was

made possible, and economies of scale significantly drove down the price of individual, though no longer bespoke, products (Austin & Devin 2009).

As a further extension and consequence of industrialization, the work involved in design and production also became decoupled. The processes of designing began to happen not as part of production, but well before production; the notions of design work as distinct from production work, and of a "designer" who did not also produce the final product, came to the foreground. At the same time, the simplicity, or coherence, of the work of the craftsman, began to disappear. As John Heskett underlines, "In mass-production industry this coherence is fragmented, and the complexity of conception and making is exposed by its subdivision into a series of specialized activities." (1980:7). Thus "…design came to be recognized as both an essential but separate feature of commercial and industrial activity, and also a specialist element within the division of labor implicit in mass-production and sales." (ibid. 1980: 105).

The same specialization, in broader terms, came to characterize the division between management and labor. Frederic Winslow Taylor, arguably the inventor of the modern division of planning and execution of labor, suggested that there are ways of planning and managing work functions that are more efficient than others. The role of management was to take over the planning of work, "for which they are better fitted than the workmen" (Taylor 1967), giving the management a distinctive "scientific" role of shaping work activity. This division of responsibilities between the manager and the worker became a fundamental part of management as it emerged as a profession, drawn on by the hunger of business and government organizations for ever greater scale and efficiency, spread by schools of business, management and administration. From the early days of industrialization to the present, management has become ever-more refined as the profession of planning – or, one might say, designing – making decisions concerning not only work, but the organizations, technologies and processes that enable production of goods and services. Driven fundamentally by the benefits and economies of scale and mass production, management has, arguably, enabled a grand material success story over the past hundred years: Ever-more products and services offered at ever-lower and more competitive prices, reaching and improving the material lives of billions of consumers across the globe.

The story of public administration and management has followed a similar trajectory. The rise of capitalist society in most developing nations was enabled by the rise of the state, and not only as the guarantor of basic property rights and securities, including the defence (or expansion) of national territory; the state played a wider role in encouraging the growth of industries, providing educated labor, and, increasingly, accommodating the economic, social and cultural needs of the population. In following this path, public administration followed the same logic as private firms: The role of the manager as planner, organizer and distributor of work grew more distinct as public organizations increased in scale and complexity. Public organizations too sought to harvest efficiencies from scale. Whether it was the establishment of modern health systems, such as the NHS (National Health Service) in the United Kingdom, or the expansion of public education, governments were in many ways successful not only as an accessory to industrial society but as enabler of it -- and as the assurer of work and welfare rights and benefits needed to underpin a socially coherent society. It is true, as political scientist Gösta Esping-Andersen (1990) has demonstrated, that models of welfare have developed very differently across Europe and resulted in quite different mixes of state, private, and social actors, and of centralized versus decentralized or de-concentrated governance. Nevertheless, as I will discuss in more detail in the next chapter, a general pattern of public governance based on roughly similar principles as that of private (industrial) firms, focusing on efficiencies of scale, is a common thread amid all this diversity. For private and public organizations alike, this usually meant that consumers, users, and citizens would generally experience rather standardized, homogeneous, mass-produced products and services, whether new toasters, banking services, or public school classroom lectures and books. As the Director of the Department of Correction in American state of Louisiana has allegedly stated, "The principles of management are the same, whether you're making chocolate chip cookies or incarcerating people" (Downs & Larkey 1986:40).

The similarities between public organizations and private businesses should not, however, be overstated. Public organizations have objectives that go well beyond efficiency, and which might lead to similar effects. For instance, in government, considerations of fairness and equality of access to universal services would typically mean that similar treatment of citizens was not only an efficiency issue, but one of democratic legitimacy and just government (Pollitt 2003). As I will discuss later, such particular roles of government are part of the governance legacy we have inherited and still must relate to today. As this thesis moves forward, the

particular context of public organizations should thus be increasingly clear, allowing for a nuanced consideration of the particular role of design. As the American policy analyst Graham Allison famously suggested, leadership in public and private administrative organizations are "fundamentally alike in all unimportant aspects" (Allison 1986). [5]

What remains is that the role of management activity in organizations was to research, analyze, plan and ultimately decide what should be delivered to whom, when and how. The process of designing appeared to have forever been separated from the process of producing.

Over the last few decades, however, this has begun to change.

1.6.2   *The re-merging of design and production*

Just as the technology of hard steel manufacture enabled the acceleration and scaling of mass production, so have the technologies of telecommunication – in particular the internet and social media – rapidly changed the rules of production and of governance. This has been taking place alongside new societal patterns which increasingly posits individual self-actualisation as a value in its own right; this trend that was first articulated by Daniel Bell (1973) in the early 1970s in the context of the rise of post-modern society but have since become more widespread and arguable characterize much of the "millennial" generation today.

Another factor which appears to add momentum to the role of individual consumers or users is the (re)birth of globalization and increased mobility, meaning not only that people move quicker and more flexibly to new jobs, homes, and experiences, but also that products, services and financial resources flow faster and more seamlessly across borders. But the most powerful influence on today's supply of products and services is technology that propels the individual's – as opposed to the "markets'" or a "segments'"— needs and wants into the foreground. In *The new age of Innovation*, the late C.K. Prahalad and M.S. Krishnan argue somewhat radically that:

> *The focus on unique personal experiences is increasingly permeating industries as diverse as toys, financial services, travel and hospitality, retailing and entertainment … we are*

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[5] It might be noted that according to Downs & Larkey (1986) this quote is ascribed to William Sayre.

moving to a world in which value is determined by one consumer-cocreated experience at a time… (2008: 4).

Additionally, Prahalad and Krishnan suggest that technological innovation, coupled with globalization, means that most firms have moved to global supply chains, challenging the traditional vertically integrated organizational structure, and making their access to specialist resources increasingly multivendor and global. Increasingly, this matters to public organizations as well. Whether it is the global sourcing of Boeing's Dreamliner jet, the technologies inside Apple's latest iPhone, the massive open online courses ("MOOCS") accessed by students, the online healthcare blogs created and used by patients, resources are becoming global.

Even since Prahalad and Krishnan's book, these trends have accelerated. Whereas industrial-era organizations sought to drive down the unit costs of product and service offerings through economies of scale, today's technology allow for fast and cheap customization. This reduces costs and simultaneously allows for personalization. For instance, the supply of three-dimensional printing is becoming more advanced and costs are dropping to the point where "lead user" consumers can afford their own devices; companies are allowing people to (co-)design their own products online and receive them by post; and public organizations are experimenting with digital access to personal records, forms and services, and more "citizen-centric" services such as new standardized models of rehabilitation in social services and healthcare.

The standardization of consumer experience, and the insistence that services and products are co-created in the interaction between people and business offerings, mean that the role of design is changing profoundly again. On the one hand, design activity is no longer focusing as much at achieving standardized, highly replicable products and services which could be produced at scale; rather the role of design is to understand individual needs and desires, and to tailor ever-more fine-grained solutions. It is almost as if the craftsman has returned, heralding the (re)merging of design and production. Austin & Devin (2005) suggest that this certainly is the case for many forms of knowledge work, for instance in software design and development, which is increasingly "returning to craft". Ramaswamy and Ozcan (2014) argue that individual experience is increasingly viewed by firms as an opportunity for creating value jointly by the enterprise and individual stakeholders; the same argument is essentially made by Normann &

Ramirez (1994). Chris Anderson's *The Long Tail* (2008) and Pine and Gilmores seminal work *The Experience Economy* (2011) suggest the same.

As I will also discuss later in this chapter, design is thereby challenged to be more of a catalyst of user experience, rather than a specifier of it. As Prahalad and Krishnan point out, firms increasingly provide platforms around which customers can co-create (or in language used later in the thesis, *co-produce*) their own experiences. They use the example of a Starbucks storefront, where customers can decide not only to pick up their favourite coffee or newspaper, but to stay and study, or have a business meeting. Similar developments have happened with the experience of a book store, at least in North America.

What this seems to imply to design, secondly, is that it becomes concerned with understanding and facilitating social dynamics; with designing focused on a different kind of object. As designers and managers (re-)merge towards craftsmen, their collective role is no longer only to design and make possible the production of unique physical artifacts; their role is to co-design and co-produce unique arenas for user experience (Meyer 2011; Polaine et. al. 2013; Sanders 2014; Manzini 2015).

It should be clear that the public sector cannot have been left untouched by these developments. Built largely on the same logics, organizational principles, and technologies as private organizations, public administrations – in spite of the differences mentioned above – are in the process of adapting to a rapidly changing context. A key aspect of this is the growing recognition that the management, or governance, of a public organization might then essentially be a question of continuous (re)design in order to achieve desired outcomes, rather than of achieving efficiency, or even equality or fairness, through stable, industrially inspired structures designed for scale. Public organizations that have pursued large-scale efficiencies at the potential expense of outcomes for citizens and societies may need to consider whether this is a feasible long-term strategy, politically or even in terms of long term cost. Must outcomes-versus-efficiency remain a necessary trade-off? Recall the experiences of Carolyn Curtis: design work prompted her to question whether there were ways of creating better outcomes for families that also lowered costs.

Even as we note that much of our current world is essentially designed and shaped by humans, and as the context for design has shifted markedly over time, no clear picture emerges of what exactly design is. Richard Buchanan (1990) proposes that design can be thought of as *a liberal art of technological culture*. In this definition, design is viewed as an integrative, supple discipline, "amenable to radically different interpretations in philosophy as well as in practice" (1990:18). As Buchanan suggests, the history of design as well as contemporary developments in design show that design has not one, but many shapes. Part of this challenge, but perhaps also the richness of the term, is that design can be treated "ambiguously both as a process and as a result of that process" (Sparke 2004:3). According to others, design holds substantially more than these two dimensions, so that "design" has so many levels of meaning that it is itself a source of confusion." (Heskett 2002:5).

Heskett points out that since design has never grown to be a unified profession like law, engineering or medicine, the field has "splintered into ever-greater subdivisions of practice" (Heskett 2002:7). In spite of this splintering, which has accelerated during the decade since Heskett's work, some overall patterns in the meaning of "design" can be identified. Friedman and Stolterman (2014:viii) propose that all design professions act on the physical world, address human needs, and generate the built environment. But even such a general definition can be debated. The practice of design in digital and virtual worlds challenges the claim that design professions always moderate our physical surroundings.

For the purpose of understanding what it is to design in the context of this thesis I suggest that design can be viewed as:

1) a *plan* for achieving a particular result or change, including graphics, products, services and systems
2) as a *practice* with a particular set of approaches, methods, tools and processes for creating such plans
3) as a certain way of *reasoning*, underlying, or guiding these processes.

Each of these understandings of design have been, and still are, undergoing significant development, and I address each of those emergent patterns, or "layerings" to use another term suggested by Heskett, relating to planning, practices, and reasoning respectively. The definitions pave the way for considering design more explicitly as a particular approach to management, and to leading organizational change, which I consider in more detail in the final section in this chapter.

1.7.1   Design as plan: Towards the social

The late Bill Moggridge, a co-founder of the design firm IDEO and director of the Cooper-Hewitt design museum in New York, suggests that we look to the famous design couple Charles and Ray Eames for a useful definition of design. According to Charles Eames, design can be defined as "A plan for arranging elements in such a way as to best accomplish a particular purpose" (quoted in Moggridge 2007: 648). Eames hereby highlights the emphasis in design of arrangement, construction of various parts, as well as purposefulness: Design is concerned with achieving a particular intent. Roughly in line with this definition, Herbert Simon proposed in the late 1960s that "everyone designs who devises courses of action aimed at changing existing situations into preferred ones" (Simon, 1996:111). In Simon's definition, the plan has to do with establishing possible actions, again with the intent to change the current order. Whether that intent is for a commercial or a social purpose is left open.

The question of what the design plan is *for*, or what the nature of the intended change is supposed to be, has developed significantly over time in terms of variation and refinement. The objective of design has moved far beyond the creation of physical products or graphics towards services and systems. "Historically, design changed "things". More recently it's changed services and interactions. Looking ahead it will change companies, industries, and countries. Perhaps it will eventually change the climate and our genetic code", claims a recent book about how design is changing (Giudice & Ireland 2014). However, the notion that design addresses a broader set of objectives is by no means new. Donald Schön, in a seminal work, *The Reflective Practitioner: How Professionals Think in Action* quips that "Increasingly there has been a tendency to think of policies, institutions, and behavior itself, as objects of design" (1983:77). While he was sceptical of the risk of blurring the differences and specific properties across professions spanning from architecture and media to policy-making, Schön acknowledged that,

"… we may discover, at a deeper level, a generic design process which underlies these differences." (1983:77).

According to Richard Buchanan, design affects contemporary life in at least four areas: Symbolic and visual design (*communication*), the design of material objects (*construction*), design of activities and organized services (*strategic planning*), and finally the design of complex systems or environments for living, working, playing and learning (*systemic integration*).[6] Elizabeth Sanders and Pieter Jan Stappers (2008) similarly argue that design as a discipline is undergoing a significant transformation, which incidentally places it more squarely at the heart of an organization's ability to create new valuable solutions.

Figure 2: The new shape of design

Traditional design disciplines	Emerging design disciplines
visual communication design	design for experiencing
interior space design	design for emotion
product design	design for interacting
information design	design for sustainability
architecture	design for serving
planning	design for transforming

Source: Sanders & Stappers (2008)

Design is also increasingly embracing "the social". Although not a new perspective for designers *per se*, design was for a major part of the 20th century most closely associated with the growth of capitalist society and as a key enabler of mass consumption.

Ezio Manzini (2011:1) emphasizes that design in the 21st century has followed the evolution of economic thinking in reflecting "*the loss of the illusion of control, or the discovery of complexity*" [original emphasis]. This has contributed to a wide change in design culture that has arguably been under way since the late 1960s, and that could be characterized as design for "social good". Although Herbert Simon has sometimes been criticized for having an overly rational and perhaps reductionist interpretation of design as a "science of the artificial", he too suggested design for social planning. He proposed that there are wider implications of design

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[6] Notes from Ph.D. seminar 2011b

activity, which require careful consideration of issues such as problem representation, data, client relationships, the designer's time and attention, and ambiguity of goals and objectives (Simon 1996:141).

The recognition of social complexity, which can be understood as a characteristic of any highly interconnected system (Colander & Kupers 2014; Pycroft & Bartollas 2014), has interacted with the ambition to design for positive social change to generate multiple new strands of design. These new strands are sometimes discussed as part of the social entrepreneurship and social innovation movement (Mulgan et. al. 2006; Murray et al. 2009; Ellis 2010; Manzini 2015), but they are also very much part of a growing public sector innovation movement (Mulgan & Albury 2003; Eggers & O'Leary 2009; Bason 2010; Boyer et al. 2011; Manzini & Staszowski 2013; Ansell & Torfing 2014; Bason 2014a). One of the foremost observers and documenters of transformation in the design discipline, Elizabeth Sanders, suggests that:

> *Design can bring the foundational skills of visualization, problem solving and creativity to a collective level and seed the emergence of transdisciplinary approaches to addressing the complex issues critical to society today*. (2014:133).

The increasing use of design to address social and public innovation was illustrated in the introduction to this thesis in a range of examples; in chapter 4, I share, using my empirical material, an overview of the policy and service domains in which design is applied in the public sector.

1.7.2   Design as practice: More "co"

If we shift to an understanding of design as practice, or capacity, we can find more definitions to consider. Heskett proposes that design is best defined as "the human capacity to shape and make our environments in ways unprecedented in nature, to serve our needs and give meaning to our lives." (2002:7). Others contend that design practice can be considered the discipline of melding the sensibility and methods of a designer with what is technologically feasible to meet people's real world needs (Norman 1988; Brown 2008; Sanders & Stappers, 2008; Brown, 2009; Halse et. al., 2010; Michlewski 2015). This definition highlights the tools and concrete practices connected to running specific design projects, and shaping new products or services. One might

characterize this as a capability as much as a practice (Heskett 2002; Jenkins 2008; Cooper et. al. 2011).

Design as practice has also developed tremendously in the past few decades. Meyer (2011) notes pragmatically that design must be understood as a set of activities: "methods, approaches and techniques that provide its practitioners with a way of working together in a highly productive way" (2011:188). In terms of ways of working, perhaps the most fundamental shift has been from thinking of the lone, gifted, "heroic" designer as the key agent in design practice, to thinking of design practice as much more of a social, collaborative process. This does not mean that the iconic, gifted designer is no longer a key figure in our Western commercial culture; one might even argue that superstar designers have never been more celebrated. It also does not mean that there is no difference between highly professional expert designers on the one hand, and "everyday designers" on the other (Boland & Collopy 2004; Verganti 2009; Manzini 2015).

However, across business and government significant strands of design practice are simultaneously shifting toward "co": *co*-llaboration, *co*-creation and *co*-design., This shift emphasizes the explicit and systematic involvement of users, clients, partners, suppliers and other stakeholders in the design process and challenges the classic notion of a single, star designer (von Hippel, 2005; Shove et. al. 2007; Sanders & Stappers 2008; Michlewski 2008, 2015; Bason 2010; Halse et. al., 2010; Meroni & Sangiorgi 2011; Ansell & Torfing 2014). Variations such as participatory design and service design, which focus on (re)designing service processes, are rapidly growing (Bate & Robert 2007; Shove et. al. 2007; Brown 2009; Cooper & Junginger 2011; Polaine et. al. 2013; Manzini 2015). In particular, these new kinds of design "for" a variety of purposes are usually associated with a social or collaborative approach where outcomes are co-created or co-designed together with a variety of actors, often taking departure in the perspectives of end-users such as consumers or citizens. In fact, design is increasingly explicitly characterized as "human centered" (Brown 2009; European Commission 2012). This, in turn, has brought more research-oriented activities to design practice, including methods drawing on anthropology and ethnography. Halse et. al. (2010:27) suggests three major strategies that embody the notion of a design-anthropological approach:

Exploratory inquiry: Researching without a prior hypothesis to be tested, but rather aiming at understanding purpose and intent: why, for whom, and for what is a certain understanding directed?

Sustained participation: "No design team will possess all the relevant knowledge by itself", claims Halse et. al.; which suggests that clients and stakeholders must be engaged in a continuous dialogue.

Generative prototyping: Taking problems and solutions as the basic elements of continuous loops of iterations. By experimenting and trying out different thoughts and actions, generative prototypes not only evaluate whether a solution will work, but also whether the understanding is right; this also allows new meanings to evolve within the network of stakeholders.

So, the tools applied for collaborative design include, for instance, methods for creative problem solving, user research and involvement, visualization, concept development, rapid prototyping, test and experimentation, all of which help designers "rehearse the future" (Halse et. al., 2010). In the context of the emerging field of design it also seems clear that the role of the (specialist) designer seems to be shifting, toward process facilitator or coach (Shove et. al. 2007; Sanders & Stappers 2008; Meyer 2011). The degree of change here cannot be underestimated: The traditional role of the designer was to work with a client, either as an external consultant or in a design function within a firm, and to provide design "input" based on a brief or problem specification. In the collaborative mode of design, the role of the designer – while still drawing on his or her professional practices, attitudes and ways of reasoning – is essentially to involve actors, from end-users, to managers, to staff in a process of discovery and co-creation. The following figure, first suggested by Sherry Arnstein (1969) and later developed by Sabine Junginger, seeks to illustrate the span of roles of citizens' engagement with public authorities on a "ladder" from highly subordinate to highly empowered.[7]

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[7] First relayed to me by Ms. Sabine Junginger at a paper presentation at the DMI research conference in London, September 2014.

Figure 3: Ladder of citizen involvement in decision-making

Level	Role of citizen
Citizen control Delegated power	Decision-making *by* citizen
Placation Consultation Informing	Decision-making *with* citizen
Therapy Manipulation	Decision-making *for* citizen

Source: Adopted after Arnstein (1969)

The table illustrates that citizens can be cast into widely different roles depending on the way in which government bodies choose to engage with them.

1.7.3 *Design as a way of reasoning: Design thinking and beyond*

This set of definitions include design as a *mindset* (Sanders 2014), a way of *thinking* (Buchanan 1990; Brown 2009; Martin 2009b), or an *attitude* (Boland & Collopy 2004; Michlewski 2008, 2014). Over the past decade, design thinking in particular has come into common use in business (Brown 2009; Martin 2009b). Roger Martin (2009b) characterizes design thinking as the ability to manage and move between the opposing processes of *analysis*, involving rigour and "algorithmic" exploitation on the one hand, and *synthesis*, involving interpretation and exploration of "mysteries" on the other hand. At the heart of design thinking is thus, according to Martin, the balancing, or bridging, of two different cognitive styles: The analytical-logical mindset that characterizes many large organizations and professional bureaucracies, and the more interpretative, intuitive mindset that characterizes the arts and creative professions. Martin highlights the capacity for *abductive reasoning* – a concept originally developed by the American philosopher Charles Sanders Pierce – which he describes as the ability to detect and follow a "hunch" about a possible solution, bridging the gap between analysis and synthesis (Martin 2007; 2009).

As Piore & Lester (2006) as well as Verganti (2009) have argued, intuition and the ability to interpret information to form new solutions is the "missing dimension" of innovation. Tim Brown also acknowledges this explicitly, referring to Martin's *The Opposable Mind*: "...design thinking is neither art nor science nor religion. It is the capacity, ultimately, for *integrative*

thinking" (Brown 2009). Perhaps the integrative nature of design has best been characterized by Buchanan, who states that design thinking is about moving toward "new integrations of signs, things, actions and environments that address the concrete needs and values of human beings in diverse circumstances" (1990:20). This directs our attention to understanding design as an approach to management, placing it "at the core of effective strategy development, organizational change, and constraint-sensitive problem solving" (Boland & Collopy 2004:17).

The term "design thinking" has, however, attracted criticism. One of the earliest and most vocal advocates of design thinking, Bruce Nussbaum, distanced himself from the term in a widely-read op-ed titled "Design Thinking is a Failed Experiment. So What's Next?" (Nussbaum 2011). In a book called *Creative Intelligence* released subsequently, he argued that organizations needed to foster creativity rather than embrace design. (Nussbaum 2013). Additional critique has come from within the design profession; some argue that the word "thinking" misses the point, since design is as much a practice, even a craft, as it is a particular way of thinking. Professionally trained designers would probably say that they think in action, or "think with their hands", for instance by making or enacting (Sanders 2014). From this point of view, design thinking is considered somewhat shallow. However, there is probably no doubt that the label "thinking" has been instrumental in propelling design, as a discipline, much stronger into the awareness of managers, public as well as private. Design thinking, as a term and as it has been portrayed in a wide range of articles and books, has helped popularise design far beyond the profession and related practices. Michlewski (2015:144) has sought to create some order in the various design "frames" by suggesting that design thinking mainly places itself squarely between *practical* concerns of design professionals on the one hand, and the *epistemic* concerns of design researchers and philosophers. He characterizes design thinking as "a movement that promotes the philosophies, methods and tools that originate in the practice and culture of the design professions" (ibid.: xviii). As such, design thinking can be viewed as a set of heuristic principles and practices derived from design but simplified to become accessible to those not specifically trained or experienced as professional designers.

When I launched my doctoral research, design thinking was a key term in my research interest. However, I have concluded since then that a more broad, open-ended, and perhaps humble and less prescriptive approach to thinking about design seems more useful for the inquiry at hand. For this research, I have chosen to remain open to a variety of interpretations and applications of

the word "design", and be careful to not privilege or too easily accept any essentially derivative concept, such as "design thinking," as authoritative.

In summary, this section has discussed three perspectives, which help define design. As shown in the table below, I have characterized each perspective and how it is undergoing change.

Figure 4: Changing definitions of design

Design defined as	Characteristics	From	To
Plan	Plan for creating graphics, products, services, systems.	Commercial	Social
Practice	Methods for creative problem solving, user research, involvement, vizualisation, concept development, rapid prototyping, test and experimentation.	Expert	Collaborative
Reasoning	The cognitive ability to move between the opposing processes of *analysis*, involving rigor and "algorithmic" exploitation, and *synthesis*, involving interpretation and exploration.	Thinking	Thinking-in-action

These defining characteristics of design will be further explored in this thesis through observation of what actually takes place when design is used in public organizations, and through the practical, experiential lens of public managers. However, two more perspectives need to be considered, which move us further towards the relationship between design, management, and decision-making: Managing as designing, and design as a particular attitude.

1.8 From design management to managing as designing[8]

Boland & Collopy suggest that "Managers, as designers, are thrown into situations that are not of their own making yet for which they are responsible to produce a desired outcome. They operate in a problem space with no firm basis for judging one solution as superior to another, and still they must proceed." (Boland & Collopy 2004:17). On the issue of "thrownness" they refer to Karl Weick (2004) who argues that any design activity must necessarily take place in an

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[8] This section builds in part on Bason (2014a).

environment already ripe with "designed" activities.[9] The role of a designer becomes, then, re-design, not designing, as it were, on a blank slate. The job of management, as designing, becomes one of balancing on-going decision-making with efforts to design (new) practices. Boland and Collopy's edited volume further explores what a design vocabulary, a design "attitude", and design practice might bring to the management profession.

In a chapter in the Boland & Collopy volume, Preston describes the application of design to taxation policy-making, concluding that the approach helped the Australian Taxation Office clarify its policy intent in a more systematic way, and led to a realisation that "(...) our understanding of both user needs and our product range and strategy was even more sorely deficient". Examples like this suggest that public managers may benefit from design approaches; perhaps, even that the manager, as a design leader, could become "the catalyst for transformation" (Jenkins 2008).

Cooper & Junginger (2011:1) state that the intersection of design and management has generated decades of "lively debate" in the design and business communities. What are the relationships between design and management, and between management of design and design management? As new and more collaborative approaches to innovation in the public sector are coming to the fore, this question should be increasingly relevant to public managers. As service design, interaction design, human-centered design and strategic design approaches – in their various shapes and forms – are being applied to public problems, it becomes increasingly important to reflect on how managers relate to these strategies.

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[9] The concept of "thrownness" can be ascribed to the German philosopher Martin Heidegger, who used the term (German: "Geworfenheit") to describe the human condition as being "thrown" into the world".

Figure 5: Paradigms of design management

Function	Design practice	Design management	Design capability
Adds value through...	Aesthetics, product innovation, differentiation	Interpreting the need, writing the brief, selecting the designer, managing the design and delivery process	Humanistic, comprehensive, integrative, visual approaches
Solves problems of design relating to...	Products, brands, services	All aspects of design in the organization, but principally products, brands and service	Change in environment, society, economy, politics and organizations
Develops and fosters design competency along...	Top management, board members, design leaders, design consultants, design team, cross disciplinary design teams	Top management, board members, senior management, design management consultants	Every area of the organization
Achieves objectives of...	Managing design to deliver strategic goals	Managing design to deliver strategic goals	Delivering sustainable organizations in the context of societal and global wellbeing

Source: Cooper & Junginger (2011)

Cooper & Junginger argue that the third paradigm – design capability – is particularly salient in public sector settings, as a reflection of the social and human nature of most, if not all, public policy concerns. A global environment characterized by intractable social, economic, environmental and political challenges calls for an increased use of design-led approaches to problem solving: "Because the skills and methods that constitute design are useful in responding to the challenges facing us today, designing is now being recognized as a general human capability. As such, it can be harnessed by organizations and apply to a wide range of organizational problems." (2010:27).

The question then becomes not only how design approaches are in practice applied in public sector organizations to tackle public problems, but also the evolution of design capability: how public managers themselves "design" in their quest to proactively affect human and societal progress (Boland & Collopy (2004).

This indicates several interesting challenges for the public manager as designer: What kinds of situations do they find themselves "thrown into" and how do they relate to the nature of the type of problem space this entails? How do they in fact judge alternative solutions in order to make a decision and, perhaps most importantly, where do the alternative solutions come from? Of concern to this thesis is, of course, how public managers themselves engage with "design" in their quest to proactively use their organizations to affect human and societal progress.

1.9   **In search of design attitude**

We have seen that design can be viewed as a particular way of reasoning; however, in considering "design attitude" there is more to this perspective on design.

Richard Boland has argued that "The way we narrate the story of our experience to ourselves and others as we engage in a series of events gives meaning to the problem space we construct and the calculations we make within it" (Boland & Collopy 2004:107). This perspective has an important relationship to my approach in this thesis. I am curious about how the public managers I studied tell their stories of innovation and change, which happens to be in contexts where design approaches have been utilised. How do they as managers and leaders think and act as part of that process? How do they "design"? To gain an understanding of this, it will be necessary to take an interest not only in what the managers studied in this thesis do, but in what they intend, or wish to do – and might not always achieve. Here, their underlying beliefs and values cold come to the fore. As I move through my analysis of interviews with managers, it will be a challenge to distinguish their own statements from (where data is available) other sources and the wider context of their actions.

1.9.1   *Defining design as an attitude*

The notion of "managers designing" implies that they go about innovation activities in line with what Boland & Collopy (2004) have called a "design attitude." In a somewhat similar vein, Tom

Peters (1997) speaks of "design mindfulness" as a way to approach problems, questioning what the manager can do to make solutions work better for the organization and/or those around it. Meyer (2011: 197) points out that in change projects building on internal expertise, "every organization has a few of these individuals who may not instinctively self-identify as designers or design thinkers but who display an immediately recognizable set of behaviors that tag them as design minded." Similarly, the public managers I have interviewed for the present research do not think of themselves as designers, but do they perhaps display attitudes or behaviors that are "design minded" – and what exactly do such behaviors entail?

Boland and Collopy define design attitude as the "expectations and orientations one brings to a design project" (Boland and Collopy 2004: 9). They make the point that:

> *A design attitude views each project as an opportunity for invention that includes a questioning of basic assumptions and a resolve to leave the world a better place than we found it.* (Boland and Collopy 2004: 9).

They hereby frame *design attitude* in opposition to a *decision attitude*, which portrays the manager as facing a fixed set of alternative courses of action from which a choice must be made. A decision attitude is suited for clearly defined and stable situations and when the feasible alternatives are well known. The highly influential scholarship of Herbert Simon has, across nearly half a century, framed the role of management in terms of representing problems and making decisions between a set of alternatives. Design attitude, then, would seem to signal a break from that enduring tradition.

Many of the problems facing managers – including public managers – in the current environment have unstable and complex characteristics, which may call for an increased focus on design attitude. By complex characteristics I refer to systems with large numbers of interacting elements; where interactions are nonlinear so that minor changes can have disproportionately large consequences; which are dynamic and emergent, and where hindsight cannot lead to foresight because external conditions constantly change (Snowden & Boone 2007; Bourgon 2011). Not all public problems are like this, but many are. We could therefore ask whether the concept of design attitude can help us understand the role of the public manager as someone who drives innovation, often in complex settings, by taking responsibility, in

different ways, for designing organizational responses to the challenges and opportunities they face? Let us explore in a bit more detail the concept of design attitude before returning to this question.

1.9.2 Five Dimensions of Design Attitude

In a systematic exploration of what Boland and Collopy's notion of design attitude might entail, Kamil Michlewski (2008) undertook doctoral research in which he interviewed a number of design consultants and managers from firms like IDEO and Philips Design and mapped how these people viewed their roles and practices. On the basis of this study he subsequently proposed five characteristic dimensions of design attitude. More recently, he has developed his thesis into a book (Michlewski 2015) and has tested a number of the design attitude dimensions statistically through a questionnaire-based survey administered to a sample of 235 designers and non-designers (174 classified themselves as designers). According to Michlewski (2015), the survey showed a statistically significant difference in the attitudinal dimensions between designers and non-designers.

I describe these attitudinal dimensions in this chapter as a conceptual frame that might provide a useful interpretative contribution to my exploration of public managers' approaches as they engage with design (not as a set of hypotheses I will test). The design attitudes as presented in Michlewskis most recent and developed (2015) work are as follows:[10]

Embracing uncertainty and ambiguity. Michlewski perceives this dimension in terms of the willingness to engage in a process that is not pre-determined or planned ahead, and where outcomes are unknown or uncertain. It is an approach to change that is open to risk and the loss of control. According to Michlewski, really creative processes are "wonky" and often stop-start. The challenge for managers is to not resist, but to allow for the creative process to unfold.[11] One might say that this reflects an acceptance of Boland and Collopy's (2004) point that managers operate in a problem space where there is no clear basis for judging one solution as superior to

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[10] The original (Michlewski, 2008) terminology on design attitudes was a little less straightforward, which perhaps reflects that his recent work (2015) is intended for a wider and also non-academic audience: 1) Embracing discontinuity and open-endedness; 2) Engaging polysensorial aesthetics; 3) Engaging personal and commercial empathy; 4) Creating, bringing to life; 5) Consolidating multidimensional meanings.

[11] Based on email correspondence with author (February-March 2014) and subsequent cross-referencing with the new book (Michlewski 2015)

another. Managers who embrace uncertainty and ambiguity are likely to say "why don't we just do it and see where it leads us?"

Engaging deep empathy. Michlewski finds that designers intuitively "tune in" to people's needs and how they as users relate to signs, things, services and systems. What do people want, what kind of quality of life are they seeking? Using true empathy requires courage and honesty in abandoning one's mental models. Engaging personal and commercial empathy is in Michlewski's interpretation also about listening to better understand the human, emotional aspect of experiencing products and services.

Embracing the power of the five senses. According to Michlewski, designers have a "fondness" for using their aesthetic sense and judgment whilst interacting with the environment. As a third dimension of design attitude, this is not only about "making things visible", or about crafting beautiful designs, but about merging form and function in ways that work well for people, drawing on all five human senses. Michlewski (2015:84) describes it as the ability to "appreciate and use the feedback provided by multiple senses to assess the efficacy of the solutions they are developing". Designers recognize the significance of a range if sensory stimuli and are more likely than over professionals engage consciously with multiple senses in their work.

Playfully bringing to life: To Michlewski this attitude concerns the ability to create "traction" and direction in an innovative process or dialogue. In his research, Michlewski finds that designers believe in the power of humour, playfulness, and bringing ideas to life. At the heart of design practice, he finds, is an attitude that embraces unexpected experimentation and exploration. This dimension is closely related to designers' affinity for creating things, for creatively bringing new ideas to fruition. One designer in Michlewski's research describes this as the process of visualization and rapid prototyping – a core activity of many, if not all, designers. From a management perspective one could view this as the desire to affect change and create value; to see that new ideas about strategy or organization are realized.

Creating new meaning from complexity: Michlewski argues that what is at the heart of designers' ways of doing things is the ability to reconcile multiple, often contradicting points of view into something valuable that works – they use empathy as the gauge. This describes the designer as a person who "consolidates various meanings and reconciles contradicting

objectives" (Michlewski 2008: 5). This reflects an ability to view a situation from a wide variety of perspectives, essentially creating a landscape for exploring further problems. Michlewski defines this process, essentially of consolidating multidimensional meanings, as the managers' ability to operate in an analytical-synthetical loop in order to achieve a balance between the cohesion of the organization on the one hand and external constraints on the other.

These five dimensions were empirically derived through ethnographic research within the design consultancy community; a significant number of the interviewees were themselves trained designers. Most public managers have a professional and experiential background that is vastly different; and their personal characteristics and attitudes are, one should think, unlikely to be similar to that of designers. My aim is not to test the transferability of these conceptual dimensions to the public management domain, but rather to draw on the interpretative prism offered by Michlewski (2008; 2015) and Boland and Collopy (2004) as one amongst multiple reference points in a discussion of my own findings. Some of the more intriguing questions might be: Are managers who choose to engage with design practice (for instance by hiring service designers to develop a particular service or policy) somehow inclined to display something akin to the attitude of professional designers? And further, does the concrete unfolding of a design project lead to more of a design attitude on the side of the manager, essentially enabling the emergence of some degree of design sensibility, or confidence? Such a break from the mainstream understanding of "managing as making decisions" towards "managing as designing" is significant, and underlies the entire emerging paradigm of design as an aspect, or discipline, of management. The broader issue becomes whether managers possess, or can come to possess, the skills, tools and processes that allow them to address problems in designerly ways – or at least to engage with them by using design as an approach? As we will see later across the thesis, the contrast in framing organizational activity in terms of decision-making versus designing has important implications for how managers deal with change.

1.10   **Conclusion: Exploring the boundaries of design**

This chapter has explored what design is and could mean in a management and policy context, and how the discipline is undergoing significant transformations. I have discussed the emerging practices of co-design, service design, and related approaches as a distinct branch of the design profession. Further I have relayed the relatively novel phenomenon – rising over the last decade

or so – of applying design to public services. Finally, I have considered the tentative discussions and perspectives on the relationship between management and design, or managers and designers, which still seem relatively unexplored. A key point here is how the question of design signifies a fundamentally different approach to management than decision sciences.

On reflection, it seems that the design field that is studied in this thesis represents a confluence of a still fragile emerging practice of design, the beginnings of more wide-spread use of design approaches in new (public) contexts, and a lack of clarity on the potential role of managers as designers. In other words, this chapter has illustrated that the thesis is in a range of ways concerned with exploring the boundaries of design. The next chapter shifts to the other wave of change central to this thesis: The rise of public management and the core principles on which our current approaches to governance are built.

2. Public management past to present: How we got here

> *It is both misguided and remarkably premature to announce the death of the ethos of bureaucratic office.*
>
> Paul du Gay, *In Praise of Bureaucracy* (2000:146)

Public organizations – their administration, management and governance – make up the canvas onto which the design practices explored in this thesis are applied. Or, frame things rather more provocatively and forcefully, design approaches can be seen as a wave that crashes into the very different wave of public management, as very different worldviews, two different societal domains, and two different professions collide. Getting some sense of what is happening as a result of this collision requires understanding both waves, and the nature of their differences.

In this chapter, I outline the development of key ideas of bureaucracy, public administration, public management and decision-making. This chapter is parallel to the previous one in the sense that a serious consideration of the role of design approaches in public sector organizations requires a careful description of what characterizes the public sector setting. We must see both "waves" as clearly as possible in order to understand the significance for public managers of the result of their interaction.

First, I examine the organizational and managerial *foundations* that have shaped the administration of public organizations. Ideas about public management have developed in parallel and in dialogue with ideas about management and decision making in general. How have the more general notions of management influenced ideas and practices around public administration and management? What principles underlie public bureaucracies and how did these principles develop and evolve? What objectives, or outcomes, they are intended to achieve? What have been the common patterns in the ways decisions have been made and solutions created throughout the latter half of the 20th century?

Second, I take a closer look at the developments in approaches to decision-making, and the increasingly scientific methods, which were espoused by a range of influential scholars and

practitioners across a major part of the 20th century, and which are part of the management thinking we have inherited.

Third, I consider how the scientific paradigm of management and decision-making began to be challenged from within its own ranks, raising doubts as to whether analytical, rational "optimizing" approaches would always be the most effective in "problem solving". Interestingly, a close look at the history of the development of ideas about public management reveals that worries about framing public management solely in terms of decision making and problem solving evolved quite early, almost in parallel with the frame itself.

Fourth, before concluding, I explore the wider *context* of the challenge of public management at this time in history – in the *Anthropocene*. How might the types of problems that confront mature, post-industrial, "networked" knowledge societies be most usefully described? And what are our expectations about the role of governments in addressing them? As we shall see, we must perhaps consider whether framing the role of governments as "solving" society's problems is too limiting

In the following I use the terms *public administration* and *public management* extensively, so a bit of definitional clarification might be in order before we dive into the chapter.

Public administration comes from the term *ministrare*, meaning: "to serve, and hence later, to govern". It can be viewed as an activity that involves serving the public, wherein public servants carry out policies set by others. Public administration, then, is concerned with the hows of translating policies into practice and the related on-going management. As I will use the term in this thesis, "administration" describes a traditional perspective on the involved tasks, a somewhat narrow, or even mechanistic, view of how organizations are led.

The term management is derived from the term *manus*, meaning: "to control by hand". Public management, in addition to the activities listed above as public administration, thus places more emphasis on the role of managers and their organizing and controlling activities of effectively achieving objectives. As such "management" has become the more modern, contemporary term –with more emphasis on management behavior and action – also in the public sector. Broadly speaking, the question of management concerns "what managers do".

Finally, the term *public governance*, which I considered in the introduction and will discuss in more detail in the next chapter, refers to the contextual arrangements and strategies, which result from the interplay and decision-making between multiple actors involved in problem solving (Hufty 2011). Governance can also be viewed as the context within which administration and management occurs. These terms are also defined in the Glossary, which is in Appendix E.

Now, let us consider the second wave of interest in this thesis. As the former chapter essentially addressed the question "what is design, where does it come from, and how is the discipline changing?", this chapter addresses "what is public management, where does it come from, and how is it now being challenged?"

2.1   **Foundations: The Weberian legacy**

By some accounts, bureaucracy "… appears to be responsible for most of the troubles of our times" (du Gay 2000:1). From everyday media stories to personal anecdotes, and in a large proportion of recent public management literature, bureaucratic organizations are blamed for many dysfunctions of the public sector (Osborne and Gaebler 1992; Pollitt 2003). Indeed, Osborne and Gaebler (1992), among others, have called for the "re-invention" of public organizations. However, as du Gay (2000:146) asserts, towards the end of his contrarily titled book, *In Praise of Bureaucracy*:

> *(…) it is both misguided and remarkably premature to announce the death of the ethos of bureaucratic office. Many of its key features as they came into existence a century or so ago remain as or more essential to the provision of good government today as they did then (…)*

Whether or not one agrees with du Gay that bureaucracy is praiseworthy, the starting point he suggests for discussing public management effectiveness is surely an important one: today's ideas about public bureaucracy came into existence, and developed as they did, for specific reasons. If government is to be "re-invented," "transformed", or "re-designed" then, we must ask not only whether a re-invented, transformed or re-designed substitute can relieve current

frustrations, but also whether the new version can still satisfy the old reasons (assuming they are still relevant). Answering the latter requires that we well understand those old reasons.

2.1.1   Principles of Weberian bureaucracy

Peters (2010:147) suggests that, "Despite numerous changes in the public sector, Max Weber's conceptions of bureaucracy still constitute the starting point for most discussions"; and so it will for my discussion in this thesis. The management and wider governance challenges that the Weberian bureaucracy sought to address provide a foundation for my consideration (in this chapter, and, especially, chapters 10 and 11) of the possible emergence of a new governance paradigm. In proceeding in this manner, I seek to avoid the trap that some have argued that the New Public Management (NPM) fell into by suggesting changes that appeared "to rest upon an insufficient understanding (one might even say failure to understand) that existing patterns had not been developed without practical reason, and that departing from them might have serious costs that necessitated careful consideration beforehand" (Du Gay 2011:25).

The question of how a society should be governed is by no means new. Aristotle treated the question in *Politics*. Thomas Hobbes famously stated that without a strong governing authority, "life of man, [is] solitary, poor, nasty, brutish, and short" (Hobbes 2011). Writing near the end of the 19th century, in a time of great societal and economic transformation, Woodrow Wilson, later a US president, describes the problem with pre-modern governance in his 1887 essay *The Study of Administration*:

> *The trouble in early times was almost altogether about the constitution of government...There was little or no trouble about administration – at least little that was heeded by administrators. The functions of government were simple, because life itself was simple. Government went about imperatively and compelled men, without thought of consulting their wishes. There was no complex system of public revenues and public debts to puzzle financiers; there were, consequently, not financiers to be puzzled. No one who possessed power was long at a loss how to use it. The great and only question was: Who shall possess it?* Wilson (1887:199).

Francis Fukuyama, in *Political Order and Political Decay* adds to this point. He argues that all modern societies were originally patrimonial states, where governments:

> *(…) were staffed with the friends and family of the ruler, or those of the elites who dominated the society. These states limited access to both political power and economic opportunity to individuals favoured by the ruler; there was little effort to treat citizens impersonally, on the basis of universally applied rules.* (Fukuyama 2014:198).

It was against these early despotic administrative systems – in which "the lives and fortunes of all were completely dependent on the whims of a despot whose only law was his own wish" (Wren & Bedeian 2009:229) – that the principles of bureaucracy developed.

The German sociologist and political economist and Karl "Max" Weber's notion of bureaucracy addressed concerns about despotism by formalizing organizational offices and roles. Weber insisted that these be based on competencies explicitly underpinned by rational rules, laws, and administrative regulations. The scope of power, the capacity to coerce others, was to be defined and limited by regulation, and the selection of people to assume positions of power determined in accordance with certifiable qualifications. Weber translated these broad ideas into specific principles; according to Wren and Bedeian (2009:231-232), Weberian bureaucracy is based on the following principles:

- *Division of labor:* Labor is divided so that authority and responsibilities are clearly defined
- *Managerial hierarchy:* Offices or positions are organized in a hierarchy of authority
- *Formal selection:* All employees are selected on the basis of technical qualifications demonstrated by formal examination, education, or training
- *Career orientation:* Employees are career professionals rather than "politicians". They work fixed salaries and pursue careers within their respective fields
- *Formal rules:* All employees are subject to formal rules regarding the performance of their duties

- *Impersonality:* Rules and other controls are impersonal and uniformly applied in all cases.

The impersonal and uniform application of rules is a particularly contested feature of the Weberian bureaucracy. Weber describes the ways in which the ideal official manages "as when the official has "a spirit of formalistic impersonality, *Sine ira et studio*, without hatred or passion, and hence without affection or enthusiasm." The dominant norms are concepts of straightforward duty without any regard to personal considerations (Weber 1947:340). Importantly, Weber's concepts of legal authority and bureaucracy are ideal types: theoretical constructs that do not necessarily find their equivalent in the real world.

2.1.2 Benefits of bureaucracy

To Weber, bureaucracy not only leads to a number of positive outcomes, it is a necessity for the functioning of modern capitalist societies. As such, he argues that capitalist society has a:

> (…) need for stable, strict, intensive, and calculable administration […] which gives bureaucracy a crucial role in our society as the central element in any kind of large-scale administration. Only by reversion in every field – political, religious, economic, etc. – to small-scale organization would it be possible to any considerable extent to escape its influence (Weber 1947:338-339).

Interestingly, Weber's point about "reversion" here seems to imply that if it was technologically possible (and perhaps politically and culturally acceptable) to revert to "small-scale organization", then bureaucracy as he defines it might not be needed. Though it was surely beyond imaginable in the 19th century, it is worth asking today – and we will return to this later – whether technological developments of the late 20th century, especially the emergence of the Internet and new tech-enabled organizational forms, might make such reversion possible? However, as a modern organizational necessity, the Weberian bureaucracy allegedly leads to at least four positive results (Weber 1947; du Gay 2000):

- Efficiency
- Predictability and reliability

- Procedural fairness
- Equality and democracy.

A key benefit is thus the reduction of randomness, risk and unpredictability. An important point to note is that the production of public *outcomes*, understood as changes in the experience or behavior of people, business, communities and societies, does not seem to be considered by Weber as an important result in its own right. In other words, the ability of bureaucratic governance to lead to outcomes such as better health, learning, job creation, growth or a better environment are not centrally considered in Max Weber's writing. Note how Weber (1947:337) argues here, based on "experience", which positive results will follow when a well-functioning bureaucracy is established:

Experience tends universally to show that purely bureaucratic type of administrative organization […] is, from a purely technical point of view, capable of attaining the highest degree of efficiency and […] is superior to any other form in precision, in stability, in the stringency of its discipline, and in its reliability. It thus makes possible a particularly high degree of calculability of results for the heads of the organization and for those acting in relation to it. It is finally superior both in intensive efficiency and in the scope of its operations, and is formally capable of application to all kinds of administrative tasks.

Note that the emphasis here is not least on the ability to "calculate" (or rigorously analyze and predict), the ensuing results of the organization's work that is considered a key benefit of bureaucratic governance. It is notably by rendering administration impersonal and thus separating administration from "private moral absolutism" that the state bureau affects "many of the qualitative features of government that are regularly taken for granted – for instance, formal equality, reliability, and procedural fairness in the treatment of cases" (du Gay 2011:18). According to Weber, the establishment of a bureaucracy does lead to one potentially important societal outcome, in that it "favors the leveling of social classes". He describes this as a virtuous circle wherein the leveling of social classes in turn positively affects the development of bureaucracy by eliminating class privileges, which makes it less likely that "occupation of offices" happens based on belonging to a certain class or by the size of personal means. This

process "inevitably foreshadows the development of mass democracy" (Weber 1947:340). The efficiency of bureaucracy, in other words, is a prerequisite for effective democracy.

2.2   **Refinements of bureaucracy: An emerging science of optimizing decision-making**

Max Weber's concept of bureaucracy was part of a broader movement rooted in academia and practice, which includes, in addition to Weber, other iconic thinkers, such as Frederick Winslow Taylor, Henri Fayol, Woodrow Wilson, and Chester Barnard. While these authors were united in their emphasis on efficiency and rationalization, notable differences in scope and emphasis exist within their writings. Taylor, in 1911, sought to improve industrial *efficiency*, often by seeking out the (sometimes counter-intuitive) "one best way" to accomplish a given task through experimentation and careful observation. His approach led to further structuring of the details of work by specifying how work should best be done, step-by-step. Working independently, but roughly contemporaneously, Fayol, with his article *General and Industrial Management* from 1916 (in English 1949) also proposed principles and formal statements notably similar to those of Weber and Taylor. Where Weber sought to rationalize collective activity partly to offset tendencies toward despotism, for Taylor and Fayol, considerations of efficiency came to the fore. A common theme in the work of all three, however, is the desirability of removing individual discretion from individuals doing the work, externalizing into abstract principles how work is done, and separating planning of work from its doing. Building on this work, practicing executive and scholar Chester Barnard (1938) added richness and nuance to this line of work that increasingly framed administration as a form of science, which could and should be subjected to experimentation to derive normative ideas about what might work better.

2.2.1   *Towards a "science" of public administration*

Herbert Simon's celebrated book *Administrative Behavior*, first published in 1947, opened a new chapter in the study of administration. In it, from the outset, he deliberately connects with the already established tradition of casting administration as a science, aspiring to describe administrative organizations "in a way that will provide the basis for scientific analysis." What is new in Simon's approach, at least in emphasis, however, is his belief that "decision-making is the heart of administration, and that the vocabulary of administrative theory must be derived from the logic and psychology of human choice." It would be difficult to overestimate the

influence of this framing on managerial thinking. Eventually, this work, and its many derivative ideas – a body of thought that would win him the Nobel prize in Economics in 1978 – rerouted the movement toward making administration scientific into a theory of how managers make decisions. Or to be more precise, in Simon's terminology, how managers make *choices* about alternative courses of action (Simon 1997:77). One might also see this movement as a shift towards de- and prescribing not only the structures and procedures of efficient organization, but towards de- and prescribing the procedures needed for the efficient making of decisions. When I write both *de*scribe and *pre*scribe, it is because although there is much focus, especially among the academics, on how managers make decisions, these theories have often been turned into normative systems, approaches and even wide-reaching programs that frame how decision-making *should* be carried out. These movements have significantly, perhaps even overwhelmingly, influenced business and government across the latter half of the 20th century.

Roughly concurrent with the initiative publication of Simon's book, von Neumann and Morgenstern developed seminal work, first published in 1944, that founded game theory as a mathematical discipline (von Neumann & Morgenstern 1994). Fundamental to game-theoretic formulations was a search for *optimal* solutions, equilibria in which multiple rational actors making independent choices might arrive at best individual outcomes via mutual optimization. Although Simon's work explicitly departed from the idea that human actors could optimize, thus that optimization models were descriptive of human behavior, he nevertheless shared with von Neumann and Morgenstern the belief that seeking optimal choices, doing one's best within individual limitations, was normatively appropriate. This notion, that decision-making is essentially about a search for best decisions, influenced much of the subsequent thinking about management.

Operations research, or "OR," which shared with game theory an orientation toward finding optimal solutions, also developed in this time frame. Operations research had its origins in World War II military management efforts, not least as planning the successful conveyance of cargo to Europe in ways that avoided Nazi u-boats (Waddington 1973). After the war, these applied mathematical tools and techniques (and their intellectual descendants) turned out to be quite widely useful. C. West Churchman et. al. explained in 1957 that: "O.R. is the application of scientific methods, techniques, and tools to problems involving the operations of a system so as to provide those in control of the system with optimum solutions to the problems."

(1957:18). Emboldened by the early successes of OR, some proponents envisioned grand expansion of the field into a general, quantitative and rational approach to management and decision-making. For example, George Dantzig, in the early 1960s, ambitiously suggested that *most* societal and public problems could ultimately be stated as mathematical problems. He had developed a general framework that expressed problems in terms of a quantity to be optimized, represented as a mathematical function, subject to a set of constraints, represented as inequality statements involving the same variables. When problems could be thus represented, Dantzig noted that the path to optimal decisions could be "programd":

> *The observation that a number of military, economic, and industrial problems can be expressed (or reasonably approximated) by mathematical systems of linear inequalities and equations has helped give rise to the development of linear programming.* (1998:10)

Dantzig believed that production control and decision-making could eventually be almost entirely automated, leaving only limited roles for "human operators", such as transmitting instructions from the decision-making calculus to the production system. According to Gill et. al. (2007), Dantzig proposed that even very urgent real-world problems could be subjected to system planning, modelling, and optimization. It would just be a matter, he believed, of committing enough people and resources. Dantzig's conception of a "total system" approach to addressing, or in fact "solving," complex problems ranging from investment planning, to engineering design, physical, biological and ecological systems as well as urban planning and transportation, made him a visionary of sorts. However, the idea that it would be possible to model *any* kind of problem in a way that fit well enough into his or similar frameworks, which would subsequently yield to the admittedly impressive mathematical techniques of OR, turned out to be problematic. As I will discuss later in this chapter, this has been a recurrent error of this tradition, to assume that all problems are well suited to analytical, rationalistic, and mathematical approaches (if problem formulators are clever enough).

A high point (or, depending on your point of view, perhaps a low point) for application of this type of rational, optimization thinking came during the Vietnam War, when Ford Motor Company President Robert McNamara was invited to head the US Defence Department by president John F. Kennedy (he later also served Lyndon Johnson in this position, until 1968). As

the Vietnam War escalated, McNamara famously introduced OR related techniques into both war fighting operations and departmental administration. In war fighting, the techniques, which called for maximizing quantities such as enemy "kill ratios," became discredited in time, as they encouraged officers on the battlefield to artificially inflate numbers, and the inflated numbers served badly in planning prosecution of the war (Turse 2013).

2.2.2   *Rise of the policy analyst*

Such analytical frameworks acquired a more enduring foothold in administration, however, in the Defense Department and beyond, in the form of what became known as the Planning, Programming and Budgeting System (PPBS) (Downs & Larkey 1986; Amadae 2003). PPBS was focused, as a policy program, on considering decision alternatives, and eventually presenting thorough, data-driven and highly analytical recommendations to top policy level decision makers, including the President of the United States. At its roots, according to Radin (2000), PPBS took departure in, amongst others fields, microeconomic theory, quantitative decision theory, and techniques from operations research. As such, it shortcut and overrode more traditional approaches to decision making embraced by the military establishment (which made McNamara unpopular in those quarters).[12] Although the assumptions, data, and analysis were made openly available for public scrutiny, the content of the models was ostensibly so incomprehensible that it was often impossible to retrace how the different decision alternatives had been arrived at (ibid. 2003).

In an effort to salvage a systematic approach to management practices into the wider field of policy making, the political science scholar Yehezkel Dror, in 1967, published a *Public Administration Review* article called "Policy Analysts: A New Professional Role in Government". Dror sought to distinguish *policy* analysis from *systems* analysis, and to establish the role of "Policy Analyst" as a particular government staff function (Radin 2000).[13] Although this drew attention to the importance of considering a wider context for decision-making than systems analysis could ordinarily encompass, Dror was still focused on "systematic" tools. However, there was also the notion that an emphasis on futures and a search for new "policy

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[12] Part of the critique was that since McNamara used civilians as policy analysts, relevant military knowledge and judgment was not taken into account (Amadae 2003).

[13] As a curiosity, Dror published, in 1971, a book titled *Design for Policy Sciences*.

alternatives" were important tasks of the policy analyst. The question then of course is how to evaluate such different "alternatives" against each other?

The need to evaluate and compare complex alternatives led to the widespread use of another tool that rose to influence in policy decision making: cost benefit analysis (CBA). CBA had been introduced, in a US context, much earlier, in the late 1930s. Starting with the 1939 Flood Control Act the emphasis of CBA was to ensure that the benefits of a particular public intervention could be quantified and assured to not be lower than the estimated costs. But CBA found its way into wide use in the 1960s, applied not only by McNamara in his domain, but also across many others, including water resource planning and quality, recreation travel and land conservation. The important role of CBA in the US, and eventually in much public management practice across the OECD, continues into the present day: The Obama administration installed Cass Sunstein, modern day scholar and author, as head of a regulatory office responsible for calculating the expected costs and benefits of all key policies introduced by the US government (Sunstein 2013).

2.2.3 Design as a scientific discipline?

Interestingly, and as a nod to the parallel developments taking place in the design field, it is worth mentioning that also industrial design in the first half of the 20th century experienced an increased focus on "scientific" approaches to solving (design) problems. Without taking the parallel too far, a case in point is the influential work of industrial designer Henry Dreyfuss, whose design firm in the 1950s introduced *anthropometry*. Based on detailed measurements of "standard" male and female bodies, illustrated as the personas "Joe" and "Josephine", Dreyfuss developed a set of measures, ultimately made public in the book *Measure of Man* (Dreyfuss 1960). Based on data from post WWII military records, this ergonomic data guide could be used to ensure that any design and its functions was fit for the human body. This work, which has come to include both physical and psychological dimensions, is also known as "human factors" and was influential in providing a degree of objectivity to industrial design (Flinchum 1997; Dreyfuss 2003).[14] The work of Dreyfuss reminds us how the field of design can also take on rather scientific, analytical forms even as it is concerned with human experience.

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[14] It could be added that also iconic Danish furniture designer Kaare Klint was among the pioneers of anthropometrics, and the notion of an analytical approach to designing. Already in the 1920s he developed sets of

What I am attempting to demonstrate in this account of the history of the development of public administration thinking is that a movement toward "scientific" approaches established itself rather early and has remained an enduring feature of many dominant approaches to societal problems. In public administration, such approaches have been valued not only for their apparent efficiency, but also for their seeming objectiveness. By representing reality in equations and then turning over the process of solution to the impartial mechanisms of mathematics, it seemed that outcomes would be somehow fairer, free from the biased application of despotic discretion. In this sense, although the methods of OR, systems analysis, and CBA have travelled far from their Weberian origins, they are nevertheless the result of continuation of a line of thinking along a more or less constant trajectory, subsequently embraced by thinkers from Taylor, to Simon, to Dantzig, to Sunstein, and which occasionally leaked over into design practice (e.g., in the work of Dreyfuss).

It should not seem surprising, then, that these ways of thinking shared assumptions and principles, including the following:

- *A single "best" solution can be found.* First, the notion that there is an optimal "solution" that can be arrived at, just as there is in most mathematical problems. This implies that the "solution", in this sense, is pre-existing, "out there" to be found, or chosen. It is a feature of the world waiting to be represented in a way that lends itself to programd solution techniques.
- *Scientific analytical and optimization approaches are the way to find the solution.* Second, the "solution" can be approached to an ever-finer degree by the use of rigorous, data-driven analytic approaches.
- *The power of solution techniques will render human discretion in decision-making less relevant.* Third – still being discussed vigorously today – that with the rise of more advanced analytical technology and computing and processing power, the role of human beings in arriving at decisions will be diminished if not entirely eradicated by artificial means.

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measurements with a particular focus on the relationships between the human body and furniture (Engholm & Salomon 2017).

- *A problem is a problem.* There seems to be the sense that all problems are fundamentally the same, or at least that they will all yield to certain modes of representation; if mathematical, engineering, organizational or societal problems come across on the surface as different from each other, it is a matter of cleverness of representation to make them fit for problem solving.

The contribution and significance of this body of work to the global evolution of modern organization and management – particularly in what might broadly be called the Western circle of advanced economies – cannot be underestimated. Up until today, the framing of decision-making as a mostly rational and analytic endeavor is widespread.[15]

However, as impactful as this tradition was, some of its key proponents were also, and to varying degrees, nagged by doubts about the possible limitations of decision theoretic and problem solving approaches.

2.3   **Simon's last stand: Boundaries of rational decision-making**

To this day, as we have seen, there is a powerful, if not foundational, strand of decision-making in public administration and management thinking that is very much focused on how to arrive at the optimal – even mathematically calculated correct – choice between a set of different alternatives. But there have turned out to be problems with this approach, and its underlying assumptions. In effect, as I will discuss in this section, decision and optimization based paradigms began to strain under the weight of too-grand expectations.

2.3.1   *Between analysis and synthesis*

In his updated and final edition of *Administrative Behavior*, Herbert Simon (1997:77) contends that in essence, the task of decision-making is to *select* between a particular set of alternatives:

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[15] It should be mentioned that the rise of the school of Human Resource Management (HRM), which emerged with the rediscovery, in the 1950s, of the famous 1924 Hawthorne studies, can be viewed as an important corrective to the scientific approach to management and decision-making. The Hawthorne studies should as such probably be treated very carefully in terms of what conclusions can be drawn (Wickstrom & Bendix 2000). However, to the extent that the studies contributed to the idea that relations between management and staff might matter in more ways than purely scientific ones (such as task descriptions or performance metrics), the experiments conducted at Western Electric in Chicago, Illinois, have been extremely influential to this day.

The task of decision involves three steps: (1) the listing of all the alternative strategies; (2) the determination of all the consequences that follow upon each of these strategies; (3) the comparative evaluation of these sets of consequences. The word "all" is used advisedly. It is obviously impossible for the individual to know all his alternatives or all their consequences and this impossibility is a very important departure of actual behavior from the model of objective rationality. (Simon 1997:77).

Many questions arise here: By which process does the "list" come to be? How are future consequences of decisions determined? And how are they (rationally) evaluated? Whereas we may note this point about determining and evaluating all the consequences (essentially a CBA or O.R. style assessment process), what is really significant in this quote is Simon's recognition that rationality is *bounded*: that individual decision-makers will never have access to knowing the full set of possible alternatives, or indeed their consequences. Indeed, a key element of his contribution to numerous fields was the observation that human beings are capable of only limited rationality, and that this fact needed to be taken into account not just in descriptive theories of decision making, but also in making normative recommendations about the best choices to make. The outcome arrived at by two boundedly rational actors attempting to mutually optimize would not necessarily be the same, he pointed out, as the equilibrium arrived at by two perfectly rational actors mutually optimizing; it was folly therefore, he argued, to construct grand theories and normative frameworks upon the unrealistic assumption that actors would behave rationally.

However, this still places Simon in a world of decision-making based on a given, set of pre-existing alternatives. It does not, it seems, open the door to the possibility that a manager might *creatively propose new alternatives* – that he or she might invent new alternatives that do not pre-exist. The awkwardness in Simon's position is that he argues for taking seriously the limitations in a rationalist framework only up to a point, in allowing for realistic human difficulties in choosing between alternatives. But he does not appear to leave scope for vision, imagination, creation – for *designing* in the contemporary sense in which it has mainly been posited in the previous chapter. This highlights an underlying issue: Is management concerned primarily with decision-making to solve problems, or with decision-making to come up with new opportunities? It is possible to think of this as a question of where to place the most

emphasis: one choosing between the options or on creating new options. The difference is important, because choosing between options is a mostly analytical act, whereas creating new options is a mostly creative act. Later in *Administrative Behavior*, Simon addresses this point more or less head on (and here it gets really interesting):

> *Empirical study of decision-making quickly revealed that three basic components of the process were absent from the classical theory. One omission is the process of setting the agenda that determines what decisions will be made at what particular times. The second is the process of obtaining or constructing a representation for the problem selected for attention. The third is the set **of processes that generate the alternative actions** among which the decision-makers choose.* (Simon 1997:122, [my emphasis])

The issues of setting (or framing) the agenda and representing the problem are here suggested as critical in questions of design. However, for the present section, what is interesting is the point raised about *which processes generate alternative scenarios, or courses of action* for the decision-makers to choose between? Simon (1997:126) states that a very large part of managerial activity in an organization focuses on discovering possible alternative courses of action. He goes on:

> *Finding alternatives is sometimes a search of the sort just described for a house or a job. Here the alternatives already exist; they must simply be located. But in many cases, including perhaps the most important, the alternatives for which an organization is seeking do not exist but have to be **created** and **designed.** The task is not to search but **to synthesize**: **to design** [my emphasis].*

Simon suggests that in order to create, or design, new services, products or solutions, a *generator* of alternatives is needed. But what is this generator? Or, what characterizes the process of designing? Faced with the question of where novel ideas and thus options for decision-making come from, Herbert Simon argues that knowledge about the problem space, and past experience of managers, are critical components of putting forward new potential solutions:

> *To the best of our current knowledge, the underlying processes used to solve ill-defined problems are not different from those used to solve well-defined problems. Sometimes it is argued, to the contrary, that solving ill-defined problems involves processes that are "intuitive," "judgmental," or even "creative", and that such processes are fundamentally different from the run-of-the-mill, routine, local, or analytical process employed in well-structured problem solving.* (Simon 1997:128)

To drive home this argument, Simon needs to explain how rational, logical decision-making can sometimes empirically look as if it is highly intuitive. He suggests that apparently intuitive decisions taken by managers, that seem not to apply an explicit logical process, are deceptive. They are not due to intuition or creativity, but are, Simon says, a matter of experience:

> *The ability, often noticed, of the expert to respond "intuitively," and often very rapidly, with a relatively high degree of accuracy and correctness, is simply the product of this stored knowledge and the problem solving by recognition that it permits. Intuition, judgment, creativity are basically expressions of capabilities for recognition and response based upon experience and knowledge. There is nothing more mysterious about them than about our recognizing our friend "instantly" when we meet him on the street, and gaining access to all sorts of information we have about that friend* (Simon 1997:136).

Whenever a manager appears to be "creative," that person simply has access to more knowledge and experience than others, and can use that advantage in a process that is fundamentally analytical, even if it does not appear so. In a sense, people are containers of knowledge, which they leverage to make decisions. Decisions are based on extensive data drawn from empirical induction or on systematic analysis via deduction. There does not appear to be room for abductive thinking, as suggested by the American pragmatist philosopher Charles Sanders Pierce or his modern-day champions such as Roger Martin (2007), in this model. Abductive thinking can be viewed as the ability to propose novel solutions to achieve a certain outcome (Martin 2007; Dorst 2015). Kees Dorst suggests that there is a variant of "normal" abduction, *design abduction*, whereby both the elements needed for the solution, and the solution (patterns of relationships) are unknown and must be invented.

In Herbert Simon's world, there is essentially no room for abduction. He drives this point almost to an extreme when he follows the above consideration with an enthusiastic plug for computerized expert systems, which can provide the human expert decision-maker with knowledge and analysis and become a "partner" with human professionals. The implication would be that by accessing even larger amounts of data and analytical capability would render humans more "intuitive" on the surface, although all that happens is that they become even better experts. [16]

In a private conversation with professor Richard Buchanan, a former colleague of Herbert Simon at Carnegie-Mellon University, I inquired about his understanding of Simon's stance on the question of design proposing new (alternative) visions, driven by human intuition, innovation capability, and imagination. Buchanan answered that he had personally pressed Simon on exactly this issue. Simon's response was that he did not believe in concepts such as "creativity" or "imagination" – at least not in a decision-making or design context.[17]

2.3.2   Fracturing the decision-making frame

Simon seemed to struggle with doubts about the limits of the decision-making model, but he ultimately rejected, or explained away those doubts. Some of his contemporaries were rather more bothered. In particular, C. West Churchman, who would become one of the originators of the idea of ill-defined, or wicked problems (which I discuss later in this chapter), was already hinting in 1957 that there might be limitations to the notion of rational, analytical and mathematical problem solving. In this passage, at least, he suggests that there could be some characteristics of problems where operations research (O.R.) would not be able to deliver the "best solution", or "correct" decision:

> *In some circumstances O.R. cannot specify an optimum decision because one or more of the essential aspects of the system cannot be evaluated within the limitations imposed upon the problem* (Churchman et. Al. 1957:8).

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[16] This perspective is also inherent, even today, in the discussions of artificial intelligence ("AI") and cognitive computing. The creative solution is presumed to be derivable from within the richness of vast quantities of data, given sufficient processing power.

[17] Conversation with professor Richard Buchanan at DESMA (an EU Commission funded program on design management) conference at Gothenburg University, November 3, 2015

With this indication that there could be "limitations" imposed upon the problem, Churchman opens the possibility that some problems could differ in important ways from others. The question that then arises is whether addressing such "problems with limitations" requires a significantly different approach to problem solving and decision-making, or whether they can be handled merely by making adjustments to the analytical and rationally founded approaches. A potentially more worrying question would be whether the challenges that afflict the traditional paradigm of decision-making are always present, but only become visible in certain conditions. Is it possible that efforts to solve all problems suffer from the limitation in the decision making tradition, but some suffer more visibly than others? If so, then even the problems that apparently fit well within analytical traditions might access new possibilities, perhaps even better solutions, via a different route.

Henry Mintzberg (2005 et al; 2009) has pointed out that the traditional optimization paradigm seems challenged by any type of societal, human problem, since solutions are not ultimately a question of analysis, but of synthesis. And so, led by Churchman, one of its founding fathers, the rational, optimizing decision-making frame was beginning to fracture.

This section has shown how a powerful, almost all-encompassing movement in management thinking developed across the latter half of the 20th century and continues now into the 21st century. Looking back across this time span, it seems as if the scholars and practitioners have continuously refined, adjusted and adapted their fundamental anchoring in a rational, analytically based paradigm of management, administration and decision-making. They have also reflexively seen and depicted management in a problem solving frame. It is as if they have carefully climbed a very high mountain, and at its apex have identified an increasing number of nuances, constraints, boundaries and issues to take account for – all the while maintaining that it is still the same mountain.[18]

However, a chorus of increasingly loud voices has over the past few decades contended that public problems have evolved in character and that it does matter to designing what kind of

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[18] I have respectfully borrowed the metaphor of "two mountains" from the authors Colander & Kupers use this metaphor of "twin peaks" to discuss the challenges of policy making and problem solving under conditions of complexity (Colander & Kupers 2014)

problem space the manager is facing. Some also argue that there may not be a "best" solution waiting to be found by rigorous analysis, but that some very different ways and models of decision-making might be needed. Essentially, they are suggesting that we may need to start climbing entirely different mountains. In the following I explore what this entails.

2.4   **The public sector and its problems[19]**

The rise to the top of the "mountain" of organized, efficient, structured, rationalized, systematized and knowledge-based decision-making has not necessarily been as successful as some of its proponents had hoped. Ronald Reagan stated in 1981 that "In this present crisis, government is not the solution to our problem; government is the problem."[20] The past generation or so has seen a range of calls that lament the enduring crises of public organizations. Current global developments, notably the exit of the United Kingdom from the European Union and the rise of a populist president in the United States, certainly underline the pressure on governments to meet and manage citizen's expectations.

2.4.1   Calling for reinvention

In what was possibly the defining work on public governance for that decade, and also a seminal work in articulating the needed reform principles, Osborne and Gaebler (1992:1) called for a "reinvention of government", stating rather cataclysmically that in the United States:

> *Our public schools are the worst in the developed world. Our health care system is out of control. Our courts and prisons are so overcrowded that convicted felons walk free. And many of our proudest cities are virtually bankrupt.*

Contemporary debates about public schools, on health care reform, crime and city budgets sound eerily similar. In a recent comment on Osborne and Gaebler's vision of "reinvention", and his own government's efforts at implementing it, former President Bill Clinton said that,

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[19] This section builds in part in Bason (2014)

[20] Inaugural address, January 20, 1981 (Reagan 1981)

I think we really did a good job with that reinventing-government effort when we started, but it was alien territory when we started (…) constantly re-examining whether you were actually achieving your purposes (The Atlantic 2014).

The European Commission, the executive body of the European Union, likewise highlights enduring challenges but also new forms of problems, stating that: "The evolution of society requires public administrations to tackle many new challenges, including those around demographic change, employment, mobility, security, environment and many others." (2013a:1). Perhaps the shift over the last few decades has been the recognition that, for better or for worse, there is no single domain in our societies where governments are not expected to play some role. Even when it comes to stimulating innovation in industry and business, the role of government is from some sides seen as essential (Mazzucato 2014).

Much of this ostensibly has to do with the changing nature of the problems public organizations are facing; however, much may also have to do with the principles from which we have derived our current models of governance, organization, management and decision-making, and the degree to which they are amenable to our challenges. In fact, has it not always been so that public institutions have found themselves challenged by the need to address "public problems"?

Where the facts are most obscure, where precedents are lacking, where novelty and confusion pervade everything, the public in all its unfitness is compelled to make its most important decisions. The hardest problems are those, which institutions cannot handle. These are public problems (Lippmann 1925:121)

The inability of institutions, expressed in the quote above by American journalist and writer Walter Lippmann in his 1925 work *The Phantom Public,* to "handle" public problems, has not become less pressing with time. One very prevalent argument put forward by observers of public policy and administration – including the academic community – is that the nature of the problems the public sector faces is changing while, at the same time, public management grows more and more out of touch with them (Downs & Larkey 1986; Attwood et. al. 2003; Carlsson 2004; Kelman 2005; Seddon 2008; Eggers & Singh 2009; Mulgan 2009; Parsons 2010; Bourgon 2011; Greve 2013; Hassan 2014; Colander & Kupers 2014; Doz & Koskonen 2014; Ansell & Torfing 2014). If that is really the case, this clearly goes against Simon's contention that "To the

best of our current knowledge, the underlying processes used to solve ill-defined problems are not different from those used to solve well-defined problems." (1997:128). The governance question becomes whether the Weberian model implicitly assumed that the modern organization faced a certain problem type, a certain societal reality, which was more stable and predictable than current problems and realities. Did Weber's model rightly (for its time) address problems such as predictability, accountability, efficiency and scale, but fail to sufficiently (for our time) address the problem of creating better public outcomes for complex social and behavioral challenges? It is not my intention here to concede that optimization models of management were necessarily ever well suited even to problems that were "only" difficult or complicated. It seems however that the Weberian conception of public administration helped create an environment, a governance context, where an analytically driven "optimization approach" to decision-making became the ideal model of management.

Jocelyne Bourgon, a former top-ranking civil servant turned author and teacher, acknowledges in *A New Synthesis of Public Administration: Serving in the 21st Century* that in some cases public managers will be able to rely on tried and tested past approaches and tools. However, in most cases "(…) they will need to chart a new course as they face new circumstances and unique challenges." (2012:19). According to Bourgon, and many of her contemporaries, these "new circumstances" partly have to do with the volume and scope of the issues and challenges that governments are expected to deal with – in short, with the characteristic of twenty-first century problems.

The volume and scope of government has become all-encompassing. Bruno Latour (2007:133) points out that no domain of human life is today beyond the boundaries of government responsibility and attention: "Every day we discover to our great dismay *more* elements to take into account and to throw into the melting pot of public life, not *less*". In fact, whether it is the very climate we live in, the air we breathe, governments have in recent years been called to action.

The Anthropocene is upon us. The human-induced consequences of environmental manipulation, industrial production, urbanization and mobility have become increasingly prevalent, not only in our physical and natural world but also in our social fabric. A European Commission vision paper notes that citizens today are more than ever aware of their rights, have

better access to information via information technology, and hence expect governments to do more (2013a). So, whereas "everything" is designed, "everything" is also the public's problem. The wider issue, however, is whether the nature of the problems faced by public decision-makers have remained stable, and (to reference Simon) whether it matters to governance and decision-making what kind of problem we are facing?

2.4.2 Wicked problems and complexity

Some scholars point out that the problem space, or context, within which public organizations operate severely constrain and challenge effective government action. Carlsson (2004:36), in his contribution on the policy perspective of managing as designing, asks:

> *How can you make sensible policy or strategy in a nondeterministic, evolutionary, highly complex world, that is, a world where the most desirable outcomes are unknown but there may be many possible acceptable outcomes, where change is characterized by both path dependence and unpredictability, and where there are many diverse components, interaction, and feedback among components and multiple dimensions to each problem? This is the design problem with respect to public policy.*

Carlsson argues that "sensible" policy (or public management, or strategy or governance), might not be the same as "rational" policy, as we have discussed it here. But then what might it be? Framing the challenge of how to govern effectively as *a design problem* suggests that there might be a contribution of design, to addressing it. In the following I will expand on this question of the character of public problems.

Contextually, as Carlsson highlights above, there is a growing recognition that the social systems which governments seek to influence are "complex and adaptive, and continuously evolving over time" (Colander & Kupers 2014:5). This implies that at least a significant set of the problems faced by public managers calls for different kinds of policy and public service responses. One fundamental way of distinguishing between problem types is between:

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- *Tame problems, or well-defined, technical and engineering problems.* These problems can be understood and addressed through an appreciation and careful, systematic assessment of their constituent parts. Although they may be extremely "difficult" or "complicated" (Bourgon 2011:20-21) or "hard" (Martin 2009:95), they can be effectively addressed through rigorous analysis. It is as a point of departure relevant for decision-makers to draw extensively on knowledge of existing evidence and "best practice" (Snowden & Boone 2007).

- *Wicked, or complex, problems,* which are ill-defined and can only be addressed by way of systematic experimentation. These types of problems, or contexts, were first articulated in some detail by Horst Rittel and Melvin Webber (1973). They famously argued that a certain kind of problems, or planning dilemmas, are better understood through examining the interrelations and dependencies between the constituent parts, and by "probing" in order to generate dynamics, which then reveal underlying and hidden relationships. Many public policy problems fall into this category, since, as paraphrased by Wayne Parsons (2010:17), the design of public policies is "a very different matter from that of designing for a moon landing".

This proposed distinction between problem types is key. As discussed in the previous section, scholars and practitioners ranging from Weber to McNamara, Dantzig and Simon did not seem to believe that problems could differ in their nature, at least not enough to fit badly with an analytical approach. However, if it can be argued that some types of problems are fundamentally different than others, might it also be that the way of addressing (if not ultimately solving) them would also need to differ fundamentally?

Let me first consider the notion of "complex problems" before returning to "wicked problems". The last decade has seen a significant rise in interest in understanding complexity – the theory and dynamics of highly interconnected systems. Part of the reason is quite possibly, as discussed above, that our 21st century world is in fact getting "complexer and complexer" (Colander & Kupers 2014:47). Goldsmith & Eggers, in their work in networked governance, underline that "increasingly complex societies force public officials to develop new models of governance" (2004:7). Steinberg (2014) likewise points out that the complexity at hand is caught between

human behavior, cultural traits, ideals, values, physical principles, and perceived facts. The task, says Steinberg, is to find the right simplifiers for issues spanning many domains. From a policy practitioner's standpoint, this raises several questions, where one of the most pressing ones may concern the issue of diagnosis: How does one come to know what kind of problem space is in play – ranging from "tame" to "wicked" or perhaps "super wicked"? Given the problem dynamics, the policy environment, and the tools available, what kinds of process and potential solutions should we look for?

The claim made by most observers seems partly to be that policy makers and public managers have underestimated (or simply not understood) the extent to which the problem space they find themselves in is fundamentally characterized by wicked and complex problems; issues such as education, health and social policy are all characterized by a very large set of actors acting simultaneously; extremely high volumes of users and thus interactions, and by unpredictable dynamics. Partly the argument is that the kinds of megatrends discussed in chapter 2, including rapid changes to life styles, health, globalization, demography, mobility, deregulation, technology, etc. all introduce new sources of dynamics and unexpected relationships. The social entrepreneur and activist Zaid Hassan, for instance, argues, that "…our current challenges are profoundly different than those of the past. Our familiar modern responses no longer work because they're based on a fundamental misunderstanding of what we are facing" (2014:17). Similarly, Wayne Parsons (2010:27) suggests that:

> *We face problems for which causal relationships are so complex that we cannot know when one problem ends and another begins, or whether the problems themselves have been caused by previous or existing policies. We confront a world in which "what works?" is a simplistic and nonsensical question. "What works?" like probability, is a poor guide to action in a world in which "problems" are not continuous over time and space.*

Unfortunately, for all the recognition of the novelty brought forward by technology, globalization and other mega-trends, the sense that public problems are being ill-addressed is far from new. Donald Schön, in his 1983 treatise on reflective practice, asserts that "Professionally designed solutions to public problems have had unanticipated consequences, sometimes worse than the problems they were designed to solve" (1983:4). An important point here is the phrase

professionally designed, which points to the classical role of policy experts deriving "solutions" and proposing decisions on the basis of rigorous data and analysis. Schön could very well have been thinking of the decision-making and analytical models proposed by gentlemen such as McNamara, Dantzig and Simon here.

2.4.3   Characterizing "wicked"

A key question in this thesis, then, is what might be useful approaches to innovation under the conditions in which public managers operate? For the purpose of understanding the context in which contemporary public governance and management is being challenged, and to understand the quest for new approaches and perhaps even vocabularies, it seems to make sense to dive a little deeper into our understanding of the wickedness of problems and the complex context in which public managers govern. Originally, Rittel and Webber (1973) put forward ten criteria to characterize wicked problems, the first being that they have no clear or final definition, and so can be continuously redefined. The original list contains some overlap and repetition; for the sake of clarity, Martin (2009) suggests that wicked problems can be identified by four dimensions. They are presented here with additional substance added from other sources:

- *Causal relationships are unclear and dynamic.* Root causes of the problem are difficult, if not impossible, to identify; they are ambiguous and illusive. Part of the reason for the confusion around causality is also that many public problems are ultimately *behavioral*. During the last decade, scholars ranging from Nobel laureate Daniel Kahnemann's work on how people make decisions, *Thinking Fast and Slow* (2010), to Dan Ariely's *Predictably Irrational* (2010), and Thaler & Sunstein's runaway success *Nudge* (2008) and Sunsteins more recent *Simpler* (2013), have pointed out that human behavior is not as easily understood as we might like to think, and cannot be predicted with much accuracy. Following the ostensible failings of traditional economics in the wake of the global financial crisis, fields such as behavioral economics and psychology have gained prominence. Another part of the confusion around causality is more political. In a public sector context, the root causes, and thus the very definition of the nature of the problem, can be highly prone to ideological contention: Is immigration a problem or a resource for a society? Is climate change a major problem or just a manageable consequence of the quest for growth?

- *The problem does not fit into a known category*; in fact there are no "classes" of wicked problems. Snowden & Boone (2007) have argued that this implies that available "good" or "best" practices cannot be applied effectively as a course of problem solving. This poses particular and important limitations to the public management notion of "evidence-based policy" which implies that policy decisions should be based on solid knowledge of "what works".

- *Attempts at problem solving changes the problem*. Devising potential approaches to the problem tend to change how it is understood; and implemented solutions are consequential in the sense that they create a new situation for the next trial; so, all solutions are "one shots". This is not least the case in the highly exposed domain of public policy, where as soon as stakeholders learn of potential ideas, plans, laws or initiatives they start acting strategically and thus influence the policy landscape even before any action has been undertaken. This prompts the need for more iterative, non-linear and possibly more inclusive approaches – what Halse et. al. 2010 call *generative* – ways of exploring and addressing the problem.

- *No stopping rule.* Further, wicked problems do not have any firm basis for judging whether they are "solved" or not; as Rowe (1987:41) formulates it, they have no "stopping rule". Solutions cannot be judged as true or false, but merely as "better or worse" (Ritchey 2011:92). Whenever a solution is proposed, it can always be improved upon. Due to the indeterminacy of the problem definition, there will always be alternative problem definitions possible, and thus entirely new solution spaces can be envisaged. In fact, one can question whether wicked problems can ever truly be "solved". In a public sector context this issue is hardened by the many stakeholders often engaged in a particular policy field, which can have wildly divergent notions of what is "good" or "bad" – based not on empirical or "objective" data, but based on ideology, power calculations or institutional interests.

At times of rapid change and increased turbulence, Rittel & Webbers notion of "wicked problems" may even be too limited a notion; Stanford University's Banny Banerjee (2014:71) characterizes some contemporary public challenges as "super-wicked" in that they:

> *(…) Have most notably the additional attributes of massive scale, urgency and complex interactions between many subsystems that are themselves wicked problems. A "Grand Challenge" such as ensuring global water security certainly transcends our current disciplinary limitations but the real difficulty lies in the possibility that the nature of these challenges are emblematic of deeply entrenched flaws in our institutional structures, our underlying theories, definitions of success and our inability to act.*

Andrea Siodmok (2014) similarly proposes that the public sector is facing more ill-defined problems than it used to. She argues that such "mega-challenges" require a more holistic, qualitative, contextual and experience-based approach to policy.

2.4.4   The problems with wicked problems

The implications of these insights for the issue of innovation and change in the public sector are potentially significant. Let me briefly discuss two perspectives.

First, as Parsons (2010) underlines, recognizing that many of the challenges facing public organizations are akin to complex, wicked problems, run counter to the notion that accumulating and applying rigorous analysis and evidence of "what works" is the key to public service reform. The movement around evaluation research and evidence-based policy making, which has been strongly associated with the rise of the New Public Management governance paradigm (Hood 1991; Osborne & Gaebler 1992; Rist 1993; Pollitt 2003), is challenged. The same are, one might argue, the big data and analytics movements. David Snowden, in the now-famous Harvard Business Review article, asserts a similar point when it comes to decision-making under conditions of complexity and emergence (Snowden & Boone 2007). He asserts that the character of the problem space defines what are the most appropriate approaches to decision-making. Again, here he is in opposition to Simon (1997) who does not believe that appropriate decision-making process differs between problem types. In his so-called *Cynefin framework*,

Snowden suggests that under conditions of relative simple or even "complicated" problems, the application of "best" or "good" practice is relevant. As Bourgon contends, in such situations "governments know what actions are possible, and have relatively good knowledge about their most likely impacts" (2012:20). Public managers can relatively comfortably stick with their usual ways of doing things. But under conditions of a high level of complexity, managers cannot pull existing solutions off the shelf. Here, the problem is characterized by multiple actors and a high degree of interdependence. As Bourgon (2012) underlines, here, power is highly dispersed, and the problem space manifests a high degree of unpredictability and emergent characteristics. Instead, say Snowden & Boone (2007), decision-makers must "probe" their way to relevant insights about what would constitute effective action. In other words, managers need to act to the best of their ability, even if tentatively, then "sense" or register the changes and results coming from their actions, and then rapidly adapt their efforts accordingly. One could call this approach an ability to embrace uncertainty and ambiguity (Michlewski 2015). This understanding of management under conditions of complexity is in many ways at odds with the analytical, data-driven and rational approaches to management that we have inherited, and which arguably to this day are prevalent in public organizations, and indeed in many business organizations: "It's hardly surprising, then, that embracing uncertainty and ambiguity goes against their very foundations." (Michlewski 2015:53). All this is not to say that the possibly changing character of problems is the only argument for adopting a different approach to management and governance of public institutions. Perhaps, to again invoke the image of the mountain, the shifting nature of the challenges public bodies face simply accelerates the recognition that we may have climbed the wrong peak.

Second, what if the tendency to frame public policy in terms of "problems" is in itself problematic? By suggesting that the business of government is to deal with "problems" – whether they are wicked or not – casts the public manager into a particular role. As Christiansen (2013) and Junginger (2014a) argues, the *problem frame* renders governments in a reactive position, one of analyzing problems and trying to deduce "solutions", rather than one of appreciating *situations* that might give rise to creative new visions. Henry Mintzberg has made a similar argument when it comes to business strategy: By emphasizing how organizations must address problems through their strategy, there has been so much emphasis on analysis that people have forgotten that analysis is not synthesis (Mintzberg et al 2005). So, whereas there is a powerful argument for a new type of governing because of the changing nature of the

problems faced by government, there is also a narrative suggesting that governments might need to become more future-oriented than problem-oriented. As politically driven organizations, this should not in itself be a foreign notion. Public organizations are regularly called to provide advice and input to policy, rather than only to execute policies originating from somewhere else. If we assume that there is a demand for such policy and service innovation, public organizations will be challenged to not only be reactive, but proactive in anticipating and shaping emerging trends. Or, as I will discuss below, less focused on minimizing risk, less concerned with optimization and decision-making procedures, more focused on the ability to actually produce the outcomes society longs for. One might even call it *a shift from a decision-making stance to a future-making stance*, as a way of being effective, relevant and legitimate in a 21st century context. Essentially, it is a quest for a new governance paradigm.

2.5 **Conclusion: Challenging the decision-making paradigm**

This chapter has explored the rise of public administration and management, and has discussed the relationship between bureaucratic administration, or management, and decision-making. In particular, I explored the powerful role, which the notion of an analytical, rational, "optimizing" approach to decision-making, and ultimately to systems of governance, has played throughout the latter half of the twentieth century. Additionally, I have examined the role, which the nature of contemporary problems might play in terms of challenging our understanding of the role of management, and of the manager, in public sector organizations.

A key theme raised in this chapter is the question of how managers might engage differently with the problems they face. What approaches, tools and ways of managing, or leading, would be useful? From a management perspective, if optimizing decisions, or "decision-making", is no longer the most useful frame, what would it mean to engage in "creation of decisions", or "future-making"? And beyond this, what kind of governance model could arise from such a different approach to managing change?

The wider implications for the future of public management and governance will be further discussed in the next chapter.

3. Public governance futures: The quest for a new paradigm

Contrary to all expectations for its progressive obsolescence, never was the rediscovery of the State more important than today.

Bruno Latour, *Seeing as a State* (2007:2)

We have now looked at the roots and emergence of public administration and management. We have explored the rising tension between the tools and approaches managers have inherited on the one hand, and the nature of the types of challenges they are facing on the other hand. In this chapter I shift more to a public governance perspective in order to first consider the significance of the themes of innovation, experimentation and "reinvention" in government. These themes can largely be viewed as a critique against the traditional, or bureaucratic mode of management, and as signifiers of a search for something else: A different management approach, and hereby possibly a different approach to governing. Building on the previous chapter, I chart the ensuing discussion on the next governance model for the public sector. The purpose here is not to establish a full history or synthesis of the public governance literature or debate, but rather to complete the picture of the "second wave" of concern to this thesis, bringing the evolution of public governance up to the present date. As such, my aim is to allow for a consideration of the relationship between emerging design practice and emerging governance.

I start with the last few decades' growth of the new public management and present its key tenets briefly. I then explore, in some detail, the rise of new ideas about more "networked" and collaborative public management, and map the key strands of thought that currently are being considered. I look at the innovations beginning to take place within public management, and discuss whether – as some now claim – public management theory and practice might be undergoing transformations that (roughly) follow a trajectory that mirrors the evolution of the design profession, which I described in chapter 1. To do this, I examine where some public sector organizations are currently heading, or thinking of heading. What are the principles and patterns within the chorus of voices arguing for new approaches to public management and governance? What might characterize such a new paradigm of public governance: what, if

anything, is truly new? Is it reasonable to view the fundamental challenge – as some have begun to argue – as a rediscovery of the state? If so, what role(s) would new governance model(s) cast public managers into? Across these sections I draw on selected key texts that help pinpoint some key developments and dimensions of the governance landscape.

Finally, I discuss the extent to which some degree of convergence is, after all, taking place between design and public management. Are some of the recent developments and emerging ideas and practices in the two fields similar? What does that tell us about the potential of design to possibly contribute to an emerging future public governance model? What are the questions we must ask of such a model that is shaped by design approaches? What are the particular dimensions where design might play an influential role?

3.1   Diagnosing the limits of the current paradigm

Nearly a generation ago, James Q. Wilson (1989:31) pointed out that most government managers in mid-level to high positions spend a disproportionately large amount of their time dealing with, and navigating, their external environment:

> *High-level government executives are pre-occupied with maintaining their agencies in a complex, conflict-ridden, and unpredictable political environment, and middle-level government managers are immersed in the effort to cope with the myriad constraints that this environment has imposed on their agencies.*

As I've discussed, public managers find themselves "thrown" into circumstances that they must continuously deal with, as effectively and correctly as possible, and which are constantly changing. In his contribution to Boland & Collopy's *Managing as Designing,* Karl Weick asserts that the role of design, as managing, becomes not to introduce something novel but essentially to re-design, re-interpret, what is "already there" (Weick 2004:76). In short, managers are too busy and constrained to take a step back and more fundamentally reconsider "why are we doing this?" (ibid. 2004:76).

So what is it that is "already there" as a consequence of the past decades of mountain-climbing with departure in our bureaucratic, decision-making legacy? What are the key tensions between the past mode of governing and the present context?

3.1.1   A new governance context?

It is widely acknowledged that there is a range of significant barriers, or constraints, to innovation and change in government at numerous levels: The political context (which means that objectives are usually politically given and prone to significant change outside of the public manager's control); the lack of regular market competition and multiple value types, making it difficult to measure and assess success or failure of government initiatives (Wilson 1989); limited ability to make and shape long-term strategy (Mulgan 2009; Doz & Koskonen 2014); hierarchical and bureaucratic organizational structures; limited and often inefficient leveraging of new information technology; and (too) homogenous a composition of managers and staff, just to name a few (Osborne and Brown 2005; van Wart 2008; Bason 2010; Doz & Koskonen 2014).

In a recent analysis of the future of the state, Yves Doz, a strategy professor and Mikko Koskonen, a Finnish senior government official, point out that the complexity of the policy environment has developed dramatically at the same time – especially since the 2008 global financial crisis – that the availability of resources has declined. Government organizations find themselves under conditions of technological, environmental, social and political turbulence while their access to funding and resources is severely constrained. Part of the austerity has perhaps to some extent been self-imposed. None the less, Doz & Koskonen (2014:6-8) argue that three major challenges put the current model of public governance under strain:

First, *strategic atrophy:* The authors suggest that flowing from periods of more stable conditions, positive feedback over a long period of time has tended to reinforce established assumptions, perceptions, behaviors, and values, leading to a self-satisfied and coherent world view that inhibits political and government leaders from formulating new visions. Managers instead are inclined to re-confirm the opinions they hold and discount anything that challenges them. Collective learning is inhibited, restricting the range of alternatives considered to the ones already in practice. One might say, linking to the previous chapter's discussion of our

management legacy, that government organizations in a sense have become trapped in their expertise-driven, analytical, problem solving mode.

Second, *the imprisonment of resources*: Doz & Koskonen argue that the mobility of resources for alternative uses across the public sector system (or beyond) has become increasingly restricted. This means that resources can only be reallocated with great difficulty. They point to six key factors impeding government action, including siloed budgetary planning, highly specialized service delivery systems, lack of infrastructure and processes for collaboration and flexibility, limited mobility among public servants, lack of competency to shift public organizations in new directions, and unclear roles and division of labor between elected politicians and public officials. In their analysis, as one would have it, the system is crumbling under its own built-in constraints and governance principles.

Third, *diverging commitments:* Finally, in Doz & Koskonens view, the right to error in good faith is absent. In effect, "government officials may not diverge from their official mandates and commitments, or if so, settle for very modest action, often unable to bring together key stakeholders to collaborate in the pursuit of common interests" (2014:8). The authors stress that this is the exact opposite of what they should do to address the complex and inter-related problems facing contemporary organizations.

In summarizing these challenges, Doz and Koskonen argue that "many policies need to incorporate a far wider array of contingencies and interrelated factors in their search for solutions – decision-makers need to dig deeper in their search for solutions, seek input from farther afield, and execute as a "single, unified government" rather than from their traditional bureaucratic silos." (2014:6).

3.1.2 Needed: Managing to design transitions?

This insight that in dynamic environments organizations need to be more agile and adaptive is by no means new (Thompson 1967). However, the argument above, which is echoed by a wide range of Doz and Koskonen's contemporaries, is that public organizations have been to slow in adapting internally, while the external environment is changing faster and faster. As Ansell & Torfing (2014) argue, this kind of collaborative approach to public sector innovation calls not for less management, but for a *different kind* of management and governance.

Central planning cultures and political aversion to experimentation tends, all other things being equal, to work against modalities of innovation that are focused on fundamentally rethinking solutions and systems (Doz & Koskonen 2014; Banerjee 2014). Current government systems have, drawing on their bureaucratic legacy, largely been built to ensure efficiency, predictability, objectivity and stability – and mass delivery – not adaptation, flexibility, dynamism, and more individualized approaches. However, the issue of identifying different and more effective models of governance may not be a question of abandoning existing models and institutions without having anything to place instead. In Marco Steinbergs perspective (2014:99), the challenge is that,

> *(…) to manage a shift towards new competencies, cultures, incentives, and resource allocation models, cannot happen at the expense of the current delivery needs and long terms stability. As such the core issue is to design coherent transitions whereby current obligations can be fulfilled while simultaneously building necessary future ones.*

What Steinberg proposes here, in line with Agranoff (2014), is that the introduction of different or new approaches within a government context never happens on a blank canvas; and that "coherent" transition strategies and processes are needed. Managers are, to use Boland & Collopy's point, "thrown" into situations that are not of their own making; they must take account of context, of what is already there, in order to enable sustainable change (Boland & Collopy 2004). A potentially problematic part of our current public management legacy, then, is that we may not fully possess the strategies, tools, and processes to allow us to make coherent transitions. As Bourgon (2008:390) points out, in spite of the emergence of new articulations of what governance is or could be "Public sector organizations are not yet aligned in theory and in practice with the new global context or with the problems they have for their mission to solve". The question this thesis addresses is less the issue of what that theory and practice ultimately might look like, even though there are some emerging patterns that I will explore later. The question, rather, is *what practices may contribute to the journey of public managers and their organizations towards such new theory and practice* – and especially, what role design might play in the transition process.

3.1.3   Models of public governance

The need for better alignment between public organizations, their objectives and their changing context has certainly not gone unnoticed among public management practitioners and scholars. So, what are the innovations taking place within public administration, how is the existing legacy being challenged, and to what extent might the changes occurring even be somehow aligned with the innovations taking place within the design profession?

In the following section, I will discuss this last point in more detail as I turn to a consideration of which new directions for public governance have been, and are being, suggested on the back of this criticism: How might alternative governance models seek to offset or ameliorate some of the main drawbacks of the bureaucratic or traditional governance model? These matters have been discussed in the public management literature intensely for the last two decades. My purpose here is to highlight some of the key themes from this vast literature.

One of the most-quoted contributions to the public management literature of the past decade or two is Benington and Hartley's (2001) distinction between Weberian bureaucracy or "traditional" public administration, the "new" public management, and "networked governance".

Figure 6: Competing paradigms: Changing ideological conceptions of governance and public management

	Traditional public administration	New Public Management	Networked governance
Context	Stable	Competitive	Continuously changing
Population	Homogeneous	Atomized	Diverse
Needs/problems	Straightforward, defined by professionals	Wants, expressed through the market	Complex, volatile and prone to risk
Strategy	State and producer centered	Market and customer centered	Shaped by civil society
Governance through actors	Hierarchies Public servants	Markets Purchasers and providers Clients and contractors	Networks and partnerships Civic leadership
Key concepts	Public goods	Public choice	Public value

Source: Benington and Hartley (2001)

These three ideal types of public governance have framed much of the subsequent discussions on innovations in management and governance (Goldman & Eggers 2004; Hartley 2005; Pollitt & Bouckaert 2011). They are, however, in many ways artificial distinctions since one would be hard pressed to find any contemporary Western public sector organization, which did not display some form of hybrid, or mix, of them all. We have seen, in a previous chapter, the characteristics of bureaucracy, which emerged in the early 20th century. Before exploring the current search for the next paradigm, which Benington & Hartley called networked governance, but which I will generally characterize as emerging public governance, I will briefly discuss the key tenets of the New Public Management.

3.2   **The new public management: A call for reinvention**

The new public management, which emerged in the 1980s and 1990s, offered a compelling set of principles that set off what has arguably been a world-wide public sector reform movement that has continued to this day (Hood 1991; Osborne and Gaebler 1992; Pollitt 2003; Alford 2009; Ansell & Torfing 2014; Hood & Dixon 2015). The British academic Christopher Hood first coined the term in his seminal article *A public management for all seasons* (Hood 1991). However, the probably most central work that sparked this movement was Osborne and Gaebler's *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*, published in 1992. It is worth noting that the "burning platform", or hopes for change formulated by Osborne and Gaebler, were strikingly similar to the arguments made today by proponents of the emerging management paradigms. For instance, consider this quote (Osborne & Gaebler 1992:15):

> *Today's environment demands institutions that are extremely flexible and adaptable. It demands institutions that deliver high-quality goods and services, squeezing ever more bang out of every buck. It demands institutions that are responsive to their customers, offering choices of non-standardized services; that lead by persuasion and incentives rather than commands; that give their employees a sense of meaning and control, even ownership. It demands institutions that empower citizens rather than simply serving them.*

In *Reinventing Government,* Osborne and Gaebler introduced ten principles for New Public Management that they felt described some of the most innovative and forward-thinking public organizations of their contemporary society. In other words, they offered not so much ideas about what should be done to "reinvent" the state; they showed what was already happening. Among the principles, there was a strong emphasis on learning from the private sector and benefiting from the introduction of market mechanisms and principles to public service provision. The promotion of competition between service providers and the reframing of citizens as customers, who should be given a range of choices, were each devoted significant treatment in the book. In essence, the market mechanism, according to Osborne and Gaebler (1992:19-20), should replace bureaucratic mechanisms. They even suggest that public organizations should get into the business of "earning money" rather than only spending it. Additionally, public organizations should measure their performance not on the basis of their expenditures (inputs) or activities, but on the basis of the results and outcomes they generate.

Since the reform movement was initiated by Osborne & Gaebler, numerous other scholars have observed, catalogued, commented and proposed how the new public management worked, or did not work, at accomplishing its stated objectives (Alford 2009; Pollitt & Bouckaert 2011; Christensen & Lægreid 2013). John Alford (2009) suggests that the initial success of Osborne & Gaebler's work was in part that it posited an enthusiastic reform agenda with a wide range of alternative tools, which governments could turn to in order to become more efficient (productive) and effective (outcome-oriented). In total, *Reinventing Government* suggested 36 different alternative approaches to public service delivery (Osborne & Gaebler 1991). However, as governments from the US to the UK to New Zealand and Australia, and following suit in varying degrees, the Nordics and other northern European countries, embarked upon this new path, the contracting-out and market-oriented principles came to dominate. And these market-oriented tenets of the new public management have been extensively criticized in the context of the current debate on the emerging governance paradigm. Christopher Hood's and Ruth Dixon's evaluation of 30 years of new public management reforms in the UK provides one of the most comprehensive critiques (Hood & Dixon 2015). They draw on vast amounts of data to ultimately question whether British government, over the three decades long period, has become any better off through the reform efforts. The book has resonated widely outside the UK borders, including in Denmark.

Disappointment with what the new public management has become has led to new governance thinking, which includes some of the design based approaches that are the focus of this thesis. Although it is not widely recognized, Osborne and Gaebler did posit some of the principles that are now being discussed, and promoted as ways of dealing with the shortcomings of the new public management. Issues such as citizen and community involvement were there, but were largely drowned out by the managerial and market emphasis that evolved in practice. Osborne & Gaebler argued, for example, for more mission-driven goals, prevention, and decentralization of authority. Their highlighting of the need for government organizations to engage a wider span of sectors (public, private, civic) to address problems and create lasting impact resonates with today's discussions on co-production and collective impact.

3.3   **Rediscovering the state: In search of an emerging governance paradigm**

Different ways of framing the emerging paradigm, which could replace or supplement bureaucracy and the new public management, abound, and go beyond the title provided originally by Bennington and Hartley. Alternative proposals include "Governing by network" (Goldsmith & Eggers 2004); "co-production" (Alford 2009); "collaborative governance" (Paquet 2009); "a new synthesis" (Bourgon 2011); "collaborative innovation" (Ansell & Torfing 2014); and "strategic agility" (Doz & Koskonen 2014). As Peters (2010:145) asserts:

> *If bureaucracy has declined as a paradigm for the public sector, however, it has not been replaced with any single model that can provide descriptive and prescriptive certainty. Neither scholars attempting to capture the reality of contemporary public administration, nor politicians and managers attempting to make the system work on a day-to-day basis, have any simple model of what the contemporary reality is.*

Rather than a simple, or single, model for the next, emerging governance approach, a number of different models are currently in play. Christensen (2012) suggests that the organizational forms of public management have become increasingly complex and multifunctional. In a paper titled *Ideas in Public Management Reform for the 2010s,* Carsten Greve (2013) describes three self-styled conceptual alternatives from the literature on public management. "Self-styled" refer to the fact that they all explicitly describe themselves as alternatives to the new public

management. It is useful, for the purpose of this thesis, to expand a bit on these conceptual alternatives as they largely make up the playing field onto which new approaches linked to design processes would be inserted.

3.3.1   *Variations over an emerging governance model*

The emerging governance model is not a blank space, it is already full of ideas, suggestions, frameworks and approaches – some based on empirical practice, others perhaps still more theoretically informed. The interesting issue will be how design approaches might interact with it. Greve (2013) proposes the following alternatives:

Digital-Era Governance, which has mainly been formulated by Patrick Dunleavy (Dunleavy et al. 2006a). Key components in this governance thinking is obviously the opportunities raised by digital (e-government) services, including issues of transparency, social media and shared service centers. Dunleavy et al. describe digital-era governance as being composed of three elements (Dunleavy et al. 2006a: Table 2): First, the roll back of agencies, joined-up governance, re- governmentalization, reinstating central processes, radically squeezing production costs, re-engineering back office functions, procurement concentration and specialization and network simplification. Second, a needs-based holism including client-based or need-based reorganization, one-stop provision, interactive and ask-once information seeking, data warehousing, end-to-end service re-engineering and agile government processes. And third, "digitization" processes including electronic service delivery, new forms of automated processes, radical disintermediation, active channel streaming, facilitating isocratic administration and co-production, moving toward open-book government. It might be noted that many of these suggestions resonate with Doz & Koskonens analysis.

Public Value Management, which has been suggested by Benington and Moore (2011). Here the key themes include strategy-making, performance governance, and innovation and strategic human resource management. This strand of governance thinking builds in part on Mark Moore's earlier and influential work on public value (Moore 1995). In terms of strategy-making for public value creation, according to Greve, Benington & Moore places public managers in "a strategic triangle" between a legitimizing and authorizing environment, an organizing environment, and a results oriented environment. Greve (pp. 55-56) suggests (referencing

Alford & O'Flynn) that the public value management framework has something different to offer than new public management. Whereas new public management is essentially competitive government, public value management is *post-competitive*; it focuses more on relationships, sees collective preferences as expressed, sees how multiple objectives are pursued, including service outputs, satisfaction, outcomes, trust and legitimacy, and it recognizes multiple accountability systems. Whereas the preferred system of service delivery under the new public management paradigm is (or has become to mean) the private sector, or tightly defined arms-length public agencies, public value management's delivery system "is a menu of alternatives selected pragmatically." New public value management also expands on the notion of "performance governance" as an integrated, institutional framework that includes use of data for managing not only performance but also transparency. Finally, according to Greve (2013), the agenda of public sector innovation is rather explicitly accommodated in public value management.

Collaborative Governance, or New Public Governance. Scholars such as O'Leary and Bingham (2009), Osborne (2010a, 2010b), Donahue and Zeckhauser (2011) and Ansell & Torfing (2014) formulate this paradigm. Some of the central concepts are networks and collaboration, public-private partnerships and new ways of engaging active citizens. Greve (2013:58) points out that new public governance can be viewed as an overarching theory of institutionalized relationships within society, including relationships between public organizations and the for- and not-for profit sectors. New public governance hereby focuses attention on partnerships, networks, joined-up services, and new ways to work together. The numerous ways that citizens can become active and enter into co-producing relationships are key (Alford 2009; Newman and Clarke 2009). In this paradigm, the strategic orchestration of public-private partnerships, allowing sharing of risk or leveraging of resources, is also a key theme. Finally, when it comes to citizen engagement, new public governance suggests that efforts can be stepped up and become more systematic. The rise of public sector innovation and design labs, which I will discuss briefly towards the end of this thesis, may in part be seen as an example of this (Bason 2014). However, it is worth noting that the collaborative governance paradigm, upon closer scrutiny, is not so much expression of a radically different approach to an emerging governance model but draws rather extensively on the networked public governance and management tradition we saw already with Benington & Hartley (2001) and subsequent work such as Goldman & Eggers (2004). As I will explore further in the thesis' chapters 10 and 11, it is

possible that design approaches might provide additional dynamism and even direction to this "collaborative turn" in emerging governance.

3.3.2 Emergent public governance: Replacement or overlay?

A more general point concerning these different paradigms, starting at least with New Public Management, but perhaps including "traditional" bureaucratic public administration, is that they appear to include a broader set of ideas than are realized in practice. What is at issue may not so much be what a governance paradigm includes (or at least not *only* what it includes), as what gets chosen by public managers and their organizations "a la carte" from the paradigm to apply in practice. Put another way, the interpretation and concrete implementation of a governance approach – in a given context – is probably a strong determinant of its success. What is intended in a framework is not always what is realized; a framework gets credited or discredited based on what it becomes in practice, rather than on its own merits. The efficacy of an emerging paradigm could therefore also be judged by the likelihood that it lends itself well to implementation.

Carsten Greve's accounting of the state of the art certainly indicates that the search for the next, emerging governance paradigm is still very much on-going. While they differ in focus, some patterns seem to stand out across the three different alternatives described above. In a summary of these "post-new public management" reform strands, Tom Christensen (2012) argues that governance elements and networks are supplementing hierarchy and market as coordination mechanisms. Organizational forms such as partnerships and collegial bodies spanning organizational boundaries are being used more intensively. Networks have been introduced in most Western democracies as a way to increase the capacity of the public sector to deliver services (Klijn & Skelcher 2007). Christensen further suggests that there is a state-centric approach to governance in which public-public networks are a main component (Peters and Pierre 2003). Here civil servants have networking and boundary-spanning competences allowing them to act as go-betweens and brokers across organizational boundaries both vertically and horizontally. Additionally, public-public networks bring civil servants from different policy areas together to trump hierarchy (Hood and Lodge 2006), i.e. they become facilitators, negotiators and diplomats rather than exercising only hierarchical authority, which may be

especially important in tackling "wicked issues" that transcend traditional sectors and policy areas.

What then of the models we inherited from the "traditional" public bureaucracy, and, in part, from the new public management? Agranoff (2014) suggests that bureaucracy will not necessarily succumb to a push of collaborative structures and networks; rather, it is likely that we will see complexes of "overlays" on hierarchical structure (2014: 41). Waldorff et. al. (2014:72) likewise draw on historical institutionalism to suggest that change in the public sector is essentially an incremental process which produces a "layering" of different institutions. In a given contemporary public organization, all three of Benington and Hartley's ideal-types of governance models will typically co-exist in some dynamic mix. As does du Gay (2000), Waldorff and colleagues find that bureaucracy is in many ways still a "compelling" approach in current public management – and its "shadow" can still be found within many public innovation processes (Waldorff et. al. 2014:85). The legacies of "traditional" (bureaucratic) or "new" public management thus very much continue to form the backdrop and context against which the cohort of public managers studied in this thesis find themselves, and against which they work to find new "overlays" or even to "dismantle" their current systems. For example, they grapple with the inadequacies of market-based "competitive models" (involving outsourcing to private providers) that have become prevalent in employment and health services; or, they struggle to come to terms with a much more complex and nuanced understanding of "user needs" that the organization is trying to meet and address. The enduring strategic issue is one of adaptation and agility in the face of a changing environment. A key question, then, is whether the contribution of design approaches, and the possible emergence of a variety of new forms of governance, as suggested by Carsten Greve, merely "overlay" existing ones? Are these merely incremental change processes? This is what Waldorff et. al. (2014) would suggest, that the introduction of these new means "ultimately adds to the complexity of public sector governance" (2014:72). Or, alternatively, is there potential here for design to enable more radical "breaks" or even to allow "dismantling" of the governance models that constrain us inappropriately?

3.3.3 Designing as discovery?

The avenue seems open for an exploration of what design approaches could accomplish, when it comes to implications for the future of emerging public governance. The critical implication that

I will state for now is that it seems public managers may need to *discover* for themselves what is the contemporary reality they need to relate to, and govern in, and then make their own judgments as to the best approach.

That being said, the distinction between different governance paradigms allow us to characterize different structures, processes, and organizing principles we may find in our public institutions; and it also allows us to ask what a more "modern", or perhaps "postmodern" or "reenchanted", emerging governance model might actually look like. The last decade or so has certainly seen the public management debate not only in academic but also in practitioners' circles begin to shift towards an emerging paradigm. From Goldsmith & Eggers' volume on "Governing through networks" (2004) to Bruno Latour's dry observation that it is time to lay New Public Management's implicit attack on the state behind us:

> *It is amazing that such a dispute could have passed for so long as a serious intellectual endeavor, so obvious is it for us now, that there is no alternative to the State – on condition of* rediscovering *its realistic cognitive equipment* (2007:3, original emphasis).

It is exactly this question of "rediscovering the state", perhaps even more so than "reinventing it" which this thesis explores. The question becomes how to accommodate the need for a broader and perhaps different vocabulary and, dare one say it, concrete practices for transitioning and for navigating the process towards some different model of governance?

In fact, it seems striking that for all of the observations that public management is changing in context and content, there are surprisingly few suggestions in the literature about *how* to manage the process towards the new situation. Many offer up general characteristics of the new models, but no one really seems to offer anything like a roadmap or navigational principles. As Paquet (2009:1) sums it up, "The lack of a fully suitable theory of governance and a suitable theory of the strategic state does not mean that we cannot work with what we have". It is almost funny (but not quite) the kinds of process solutions some governance scholars suggest that managers try out in terms of facilitating change. Wayne Parsons (2010) entertains the idea of the "postmodern fool", as a "court jester" (2010:104) to inject some creativity and "re-enchantment" into public services. As Parsons argues, the jester is an outsider on the inside, and as such by

way of his cunning wit he can question meanings and "open up spaces between the words". The notion of "designers as jesters" is also discussed by Michlewski (2015:104), suggesting that a role as the "archetype jesters of the corporate world gives designers permission to be more playful". Michlewski links the notion, more seriously, to the role of playfulness as critical in encouraging unexpected experimentation and exploration. In other words, the design profession might contribute with something beyond jesting, which one might call systematic play, or systematic creativity. These considerations resonate with some of the literature on "artful making", creativity and entrepreneurial activity (Austin & Devin 2003), which tend to point out that arts methods, though they are different from the methods of management, are still methods, and reliable (the opening night of a play or concert can rarely be postponed… the tickets have already been sold).

Perhaps it is, then, ultimately the rediscovery of the state, or more precisely, *the ability of the state to transition to better generate desirable outcomes*, which public managers should be concerned with. It is in this sense their process of rediscovery, by way of design, that concerns this thesis.

3.4   **The convergence of design and public management?**

I opened this thesis by suggesting that the worlds, and in particular cultures, of public management and design were akin to two waves crashing against each other – as if these two different domains of knowledge and professional practice would not be able to fruitfully co-exist. In the last two chapters I have explored the context, foundations, and the emerging nature of public administration, management, and governance in the context of the kinds of problems facing contemporary societies. I have, using selected literature, mapped the landscape of the current debate on emerging public governance.

I believe this account demonstrates that perhaps the most powerful crash is not necessarily between public governance and design *per se*, but between the "scientific", bureaucratic and decision-making foundations of public management on the one hand, and the societal context in which we now live on the other hand. Is it rather a clash between a globalized, fast-paced 21st century world infused with technology being governed by institutions designed at the dawn of the 20th century? Is it the widening gap between the nature of our rapidly changing world and

the foundational "blueprint" of government that is the real challenge? Is the problem – to paraphrase Colander & Kupers (2014) – that using ever-more refined tools we have climbed to the top of the mountain of bureaucratic management, only to sight from the top of the pinnacle a very different mountain off in the distance? Is the issue, as we are beginning to explore a different kind of emerging governance paradigm, that it is an entirely different mountain that must be climbed? And this particular mountain, does it have more in common with the collaborative design approaches to which the pendulum is swinging today? What I mean to say is: As to the *emerging* forms of governance and design, might there be some signs of convergence? Building on this chapter and the previous one, what kind of agendas emerge in the intersection between design and public management? Design practice seems to be moving closer to public organizations, and public organizations are, perhaps, opening up to design. Whereas public management may need to begin a journey up an entire new mountain, based on something different than bureaucratic governance and rational decision-making, design may have to ascend a similarly different mountain characterized by new roles of designers as stewards, co-creators and social innovators.

Figure 7: Convergence of public management and design

	Emerging public management	Emerging design
Opening up	Recognizing the need to deal more proactively with emergence, turbulence, complexity, austerity, increased reflection on the limitations of current governance models	Embracing new social and policy contexts; adopting other disciplines such as anthropology into design practice; building experience base in public service design
Focus shift	Shift from focusing on political and systems level to (also) engaging and differentiating user level experience, wider stakeholders, and focusing on outcomes and public value	Shift from supporting industrial mass production to increased individualization, tailoring of designed services and products to (co-create) value
Transforming discipline	Search for new tools to achieve change and innovation; discovering that new structures, processes and skills may be needed	Offering new tools for stakeholder engagement and collaboration; changing role of designers in relation to organizations and users
Implications	More systematic innovation in governance and focus on networks and interactions/relations with citizens	Move to strategically position design to support innovation processes in public organizations

The figure above summarizes some of the key shifts happening within public management and design, as discussed here and in the previous chapter, and proposes how they relate.

First, we have seen that public management is opening up: Management practice and theory is becoming increasingly receptive to the messiness, complexity and unpredictability of the policy environment. As Peters (2010) argues, ambiguity may not be a bad thing. There may be advantages, in fact, since "the latitude for action by the individual is enhanced" (2010:156) in the presence of ambiguity. Recognizing the widening gap between the policy levers and tools currently available to managers, especially when it comes to "innovation" in times of turbulence and austerity, public organizations and their managers are becoming receptive to new ways of doing things, even if they do not know exactly what they are searching for (Goldsmith & Eggers 2004; Bourgon 2011; Ansell & Torfing 2014). As Peters (2010) suggests, they may also be granted, or be increasingly able to grab, the agency needed to engage in that search. As discussed above, the missing link between the current governance paradigms and an emerging one seems to be the approaches, methodologies and ways of thinking that can drive the *process* and transition towards a different future state. This opening up happens as the design discipline is also opening to contributing in the policy and social sectors – taking a "social turn" in terms of context and interest. As we saw in the previous chapter, illustrated by Dreyfuss work on "scientific" human factors, the design field has also, at some point, been occupied with finding more analytical, objective ways of problem solving.

Second, public management may already be becoming more balanced, in search of a "new synthesis" that accommodates more complex and individualized user (citizen, business) needs and adopts structures, processes and technologies to support this shift (Goldsmith & Eggers 2004; Bourgon 2011). Focusing on outcomes for citizens, or public value (Moore 1995; Cole & Parston 2006; Benington & Moore 2011) has become increasingly the "new black" in many public organizations. Similarly, we saw a shift in designs role in industrial society, in part driven by digitisation, to facilitate much more tailor-made and individually oriented "co-creation of value". The professional design community itself would certainly argue, as Angela Meyer has (2011:188), that "design is fundamentally about value creation". This does not entail, of course, that all is good just by focusing on "value", or outcomes, understood as the results flowing from public interventions, as both Moore and Cole & Parston would argue. As we saw in the analysis of Weber's principles of bureaucratic organization, there are other aspects of public

organizations that are at stake, which may be at odds with a strong emphasis on outcomes. What happens, for instance, with principles of equality, or for that matter with efficiency?

Third, as public organizations and their managers are on the search for new process tools, design is transforming: Design is taking new forms and is beginning, as a practice and profession, to lend itself to new applications, contexts and roles, also in the domain of co-design within public service and policy design (Meyer 2011; Sanders 2014; Ansell & Torfing 2014). The "social and political turn" in design is happening in sync with a "collaboration turn", towards increased co-design with stakeholders and users. So, designers, as professionals, are finding themselves increasingly as role of process designers, facilitators, stewards and orchestrators. Meanwhile, public managers find themselves cast into increasingly complex circumstances, in which they are expected to find effective courses of action. In these circumstances, managers are searching for the tools, approaches and perhaps even paradigms that can help them achieve their stated goals and manage transitions.

Fourth, whereas the term "innovation" has helped open up and perhaps legitimise the search for "new public futures" (Christiansen 2014), managers need to somehow give form, substance and direction to this search. To some extent, this type of search for methodologies and tools to support a paradigm shift has happened before. With the evaluation and performance management movement in the 1990s and 2000s, public managers increasingly accessed new tools that could increase transparency, accountability and organizational learning, under the overall guise of the New Public Management. Later, with the lean management "toolbox" that became popular in the 2000s in the public sector, managers gained access to efficiency- and error-reducing methodologies (essentially process innovation tools) that were suited to certain contexts and problems. Both of these broad domains of management techniques seem to have fit quite well with the dominant New Public Management paradigm, and with Weber's bureaucratic principles of rationality, efficiency and predictability.

But what kinds of approaches and methodologies are set to accompany, or perhaps help realize, an emerging public governance paradigm? Just as the arc of design practice has come round to a more individual and tailored understanding of consumption, interaction, and use, so has Benington and Hartley's concept of networked governance – and the other forms of "new" approaches discussed in contemporary academic circles – become associated with increased

"citizen-centricity" and differentiation, as one-size-fits-all approaches begin to give way to more customized and flexible modes of service production (Goldsmith & Eggers 2004; Alford 2009; Greve 2013).

3.5 **Conclusion: Unleashing design in the public sector**

Without taking the comparison too far, the questions raised in this chapter concern whether design might offer approaches that would help public managers transition towards the more "innovative" and "citizen-centric" public sector that is envisioned in emerging forms of governance. Additionally, if we posit that some degree of convergence might be taking place between public governance, management, and design, a key question then becomes what design approaches entail when they are "unleashed" within the emerging public sector context? This question should, of course, seem familiar, as it restates, or summarizes, the key questions that I am concerned with in this thesis: How do design approaches in practice matter to managers, to staff and organizations, and might we through the design work and the ensuing results, or organizational changes, identify patterns that signify different emerging characteristics of a future governance model, or models?

In the following chapter I present and discuss the theoretical and methodological considerations underlying my empirical research.

4. Research design and methodological approach

Questions are the core ingredient in all knowledge development.

Mats Alvesson & Jörgen Sandberg, *Constructing research questions* (2013:10)

This chapter presents my research design and methodological approach. The first section presents my reflections about how my research question and sub questions point me in certain methodological directions and guide my methodological choices.

I then, secondly, reflect on my personal stance in conducting the research; my own closeness to the subject of the study conveys both advantages and challenges for my "engaged scholarship," and I strive to be thoughtful and transparent about these. In the third section, I turn to discussing grounded theory as a methodological point of departure, and discuss the origins, ontology, and epistemology of the approach.

Fourth, I describe my sampling strategy, including criteria and process for identifying respondents and cases. Fifth, I discuss the selection and mix of methods used for primary and secondary data collection.

Sixth, I describe my data gathering protocol and provide an overview of the empirical material used for the research and how it was processed, handled and analyzed. Finally, and seventh, I provide some concluding remarks about the thesis's audience.

4.1 Point of departure: Research questions

Research is ultimately driven by questions. Bouchard (1976), and also Edmondson and McManus (2007:1157) state that good research depends, not on choosing the right method, but rather on asking the right question and picking the most powerful method for answering it. Alvesson and Sandberg (2013: 4) argue that good research, and in particular good theory, must not only be "interesting", it must also "challenge an audience's taken-for-granted assumptions in

some significant way". One might say that research questions frame an intriguing "mystery" to be solved, which the researcher then goes ahead and tries to solve (Paquet 2009; Alvesson and Kärremann 2011). This thesis addresses the following key research question and sub-questions:

What happens when managers engage with design to achieve change in public sector organizations?

1. *Characterizing design practice:* Within public sector organizations, what does the application of design approaches entail? Why do public managers look to and commission design, and what tools, techniques, processes and methods are brought into play?

2. *Design as change catalyst:* How do design approaches, if at all, influence how public managers engage with their problems and opportunities for innovation? To what extent do design approaches help public managers achieve the changes they are striving for, and why?

3. *Emerging forms of public governance:* What form and shape do the outputs resulting from design approaches take? What are the links between design approaches and the emergence of new types of public solutions and governance models?

In the following I elaborate on each of the research sub-questions.

4.1.1 Characterizing design practice

This first sub-question is inherently descriptive; it is what can be characterized as a *first-order* research question (Alvesson & Sandberg, 2013): It suggests tracking, or mapping, the kinds of tools, methods and processes that are brought into play when a public manager and his or her organization engages with "design". In other words, what "goes on" when design is used within public sector organizations? What lies behind the words and the fog of innovation and design language? Importantly, however, this is not just a matter of looking at what is done when design methods are applied. It also involves mapping the reasons why public managers look to design in the first place. What are their underlying aspirations? What are they hoping to achieve, and what are then the methods they unleash, often helped by professionally trained design teams, to help them achieve it?

4.1.2 Design as change catalyst

The second question is explanatory, a third-order, research question (Alvesson & Sandberg, 2013). With it, I seek not only to understand *what* happens, but also *why* it happens: If design approaches influence the relationships between public managers and the world in which they operate, why does this happen? What is the role of the manager's engagement with design, and what happens with the organization and staff throughout the process? In part, this question will also be addressed as a *second-order*, or comparative, question as formulated by Alvesson & Sandberg, 2013): In the experience of managers, to what extent are design approaches viewed as more useful, or effective, in bringing about particular desired outcomes than other management technologies that they have experienced? Note that my research design provides no way to directly compare design approaches with other management technologies, so any answers I offer to questions of a comparative nature will be drawn from the impressions of study respondents as derived from their past experiences.

4.1.3   Emerging forms of public governance

The third research question is also explanatory, or third-order. It raises the issue of whether design approaches lead to, or are associated with, particular types of outputs or results, and thus whether they are indicative of particular (facets of) emerging forms of public governance. To the extent that new or different principles of public governance arise through the processes studied, can we see particular patterns that can be ascribed to the contribution of collaborative forms of design?

Finally, let us briefly return to the overarching research question – *What happens when managers engage with design to achieve change in public sector organizations?* This question is partly explorative, since it ultimately seeks to understand the "mystery" of how public managers seek to use design approaches to achieve change. However, there is also a *fourth-order*, or normative, dimension to the question, since it "aims to produce knowledge about how something should be done" (Alvesson & Sandberg 2013: 15). Might there, at the end of the day, be learnings about how public managers, under certain conditions, *should* approach innovation and change? The thesis thus also seeks to add, if tentatively, to the repository of management technologies available to public managers.

A number of subsequent and (also) highly relevant questions could flow from these research questions. For instance: What conditions – especially conditions particular to the government context – influence or constrain how the approaches are used? Under what particular conditions are they most effective? What are the implications for the skills and competencies of public managers? Should design be considered a core innovation discipline, or capability, in government? These are all extremely relevant questions; however, even though they will be touched upon to some extent, they are beyond the core focus of the thesis.

I am interested in the potential of design to enable public managers to drive innovation in government. This thesis seeks, therefore, to assess *the significance of the use of design approaches by public managers as part of their efforts to achieve desired change.* My key interest is in addressing issues such as "what happens", and "what does it mean?" This study is therefore very different from one that sets about to test falsifiable hypotheses derived from an established theory via a deductive research strategy. My aim, rather, is to develop a conceptual framework that illuminates the relationships (following my research sub-questions) between 1) design approaches, 2) management behavior and 3) emerging public governance. As should be clear by now, this thesis is explorative in nature; I do, however, aspire to synthesize my findings into tentative new frameworks that might be subject to refinement in future research. My intentions have certain implications for my choice of methodology, which I elaborate on below. First, however, I reflect upon my stance in conducting this research while also playing an active role in the field I am studying.

4.2   Expanding the research approach: Engaged scholarship

My overall approach to the thesis builds on Andrew van der Ven's notion of *engaged scholarship* as "a participatory form of research for obtaining different perspectives of key stakeholders (researchers, users, clients, sponsors, and practitioners) in studying complex problems" (2007:9). It has been natural for me to turn to this participatory approach since I have helped initiate, or otherwise been involved in, some of the cases that I am researching. My dual objectives of contributing to both practice and an emerging theory of design for public sector innovation also make such "double hurdle" research (Pettigrew 2001; 2008) very natural. Double hurdle research typically aims for both academic and practical impact, by engaging closely with practitioners and field members (Nielsen 2014).

My position first (January 2007 to October 2014) as Director of MindLab, and later (November 2014 to present) as CEO of the Danish Design Center, has given me privileged and unique access to fields and actors that would otherwise have been extremely difficult to obtain. My positions made me aware of cases, and gave me opportunities and resources to get up close to them. For instance, personal interviews on-site in Australia, the United States, Finland and the UK were made possible by my participation in related professional activities, such as delivering conference keynotes and seminar presentations. My closeness to the field has allowed me opportunities to experiment with design methodologies in new contexts, and to observe and analyze the processes as they unfolded.

However, such a stance in relation to my subjects of study comes with challenges, also. As a researcher, because of my stance, I must engage in on-going self-reflection to ensure that I take my personal biases, world-views, and assumptions into account during data collection, interpretation and analysis (Suddaby 2006:640). I must acknowledge that I was, in some cases, an "obtrusive" observer; in the roles that I played other than researcher, I influenced, at times, the objects and processes I was observing. As Nielsen (2014:14) points out, the challenge becomes "how obtrusive data gathering carried out from an insider position can be optimized when the researcher is not only visiting for data collection purposes, but is part of the organizational field".

First and foremost, the nature of my stance calls for a very high degree of transparency in terms of what I have been doing, where and how, so the reader can judge the character of my engagement. My position within the field has allowed me to move between observing others doing the work, having direct interaction with research respondents, and communicating how I, in my professional capacity, reflect on the potential utility and challenges of using design approaches in the public sector (as well as in business more generally). The ways in which I have engaged with what I am studying falls into four broad categories: 1) Explicitly academic activities (e.g., observation, research interviews); 2) Engagement with wider communities of stakeholders in the field (e.g., by participating in professional meetings); 3) Engagements in the

context of MindLab and the Danish Design Center (e.g., sometimes conducting, or overseeing the conduct of, interventions); and 4) Engagement related to products (papers, chapters, books) I produced, which flowed from the first three categories of activities. In Appendix D I provide an overview of these types of activities, which I have engaged in as a practitioner-researcher, cutting across multiple domains of work and research.

I now turn to a more thorough discussion of the dilemmas, pitfalls, and opportunities of being a highly embedded actor in the field of research, and what such a reflective approach entails.

4.2.2 A reflective approach

One obvious question of methodological relevance is how I have handled the conduct of research into processes and activities that are driven, at least to some extent, by the organization that I have led. Mats Alvesson has made the argument that such self-ethnography has several benefits. "One rationale for self-ethnography concerns its capacity to come up with novel and interesting empirical material. The insider is, potentially, better positioned than the one of an outside ethnographer to reveal "the true story", although position alone is insufficient to realize the potential." (Alvesson 2003:178). Likewise, van der Ven (2007:177) points out that in revelatory case study research requires "intimate familiarity with the phenomenon from qualitatively rich case studies" to engage in abductive reasoning, which in turn can constitute the first steps in building new theory.

But, as Alvesson has pointed out, a balance needs to be struck between closeness and distance. "The challenge of ethnography, and of most qualitative work, is to be close and avoid closure." (2003:190). Alvesson emphasizes how the ethnographer's focus shifts in getting up close to the efforts of one's own organization. While the conventional researcher (with an anthropological orientation) may ask "What in hell do *they* think they are up to?" the self-ethnographer must ask "What in hell do *we* think we are up to?" (ibid.). A consideration here, in terms of my personal engagement in the field, is to what extent interviewees might have been influenced by my role as an expert. Similar considerations are mentioned, amongst others, by Katarina Wetter-Edman in her own Ph.D. thesis on service design (Wetter-Edman 2014), as well as by Nielsen (2014). Wetter-Edman suggests that as a researcher it is important to be aware how interviewees might adapt their language and wording to reflect that they see you as an expert, as they wish to mirror

or recognize the terms they hear you espouse. As I go through the empirical analysis in the coming chapters, this is clearly an issue to remain aware of. In some cases, I have interviewed a subject about her or his own experience with a design project immediately after he or she has heard me give a talk in my role as an expert about public sector innovation and design. The possibility is certainly there, in the five cases in my sample that are associated with MindLab design work, that interviewees have had some impressions about my views before I interviewed them.

That being said, it is important to underline that these interview subjects, as evidenced by their titles and positions, are no "shrinking violets", as it were. They are not members of a vulnerable or especially impressionable population. These are confident, mature, and experienced people who have over their careers developed a strong sense of their roles and who they are; although design approaches may appear novel to them, they generally do not lack the ability to interpret experiences or express themselves using their own language or concepts. This does not imply they do not take on particular concepts or expressions from the design field as they relate to it; but it is most likely that these concepts and expressions have come to them through their interactions with designers and design methodology (rather than through much less extensive interaction with me). Moreover, in my analysis of data I have reviewed their statements and expressions in an effort to identify signs that my words (in a keynote speech, for example) might have influenced their responses, as a further check on this potential source of bias.

Additionally, a number of the cases studied, as also evidenced in Appendix A, contain material beyond my own primary data collection, including project documentation, presentations made by the public managers, externally conducted analyzes and evaluations, and so forth. This material has served as a useful resource upon which to check and reflect whether my interpretations resonate with those of others who have reflected upon or analyzed the cases.

A final issue to mention is that, although I am in a relatively unique position in terms of access to both my own environment and other relevant case settings, public managers are (like their private sector peers) notoriously busy and hard to access, not just because they are attending meetings but increasingly also because they are entirely out of the office. So, while the researcher is there, the managers being studied may not be. "Modern management occurs in a net of fragmented, multiple contexts, through multitudes of kaleidoscopic movements.

Organizing happens in many places at once, and organizers move around quickly and frequently" (Czarniawska 2004, 2007). Achieving access to interesting data might therefore need a more focused approach. Similarly, in reflecting on the growth in qualitatively oriented management research, Edmondson and McManus (2007:1155) state that: "Although the potential relevance of field research is motivating, the research journey can be messy and inefficient, fraught with logistical hurdles and unexpected events." For this reason, my primary source of data has been direct personal interviews rather than observation, as will also be discussed in the following sections.

4.3   **Methodological and theoretical considerations**

Overall, I have been concerned with ensuring a strong methodological fit across the key dimensions involved in the research. Edmondson and McManus (2007) emphasize that this requires a clear alignment between four dimensions: The research questions I am posing, the existing research available (including unanswered questions and unexplored areas), the research design (type of data to be collected, data collection tools, type of analysis, and sites for field research), and finally the academic and practical contribution of the work.

Methodologically, I take my main inspiration from the overall framework for conducting case-based qualitative research suggested by Eisenhardt (1989), and more specifically from Corbin & Strauss's (2008) notion of grounded theory building. This choice seems appropriate due to the state of existing research, the characteristics of the contexts and situations I am researching, the relative open-endedness of my research questions, and ultimately because the approach is well-suited to my goal of developing a tentative conceptual framework with departure in qualitative empirical data. As Eisenhardt highlights (1989:5), this entails avoiding "thinking about specific relationships between variables and theories as much as possible, especially at the outset of the process". I do not, therefore adopt a particular theoretical stance through which to examine the phenomenon of interest, though I have, in previous chapters, described at length previous research that places my current inquiry in a theoretical context. I expect to draw on these and other relevant theories to interpret and reflect on my findings as they emerge. This is also well in line with the point made by Edmondson and McManus (2007), that one can view theory development as a continuum from relatively "nascent" to more highly "mature" constructs and models. The present research is positioned more towards the nascent (or at best intermediate)

end of the spectrum, as it can mainly be expected to produce "tentative answers to novel questions of how and why, often merely suggesting new connections among phenomena" (Edmondson and McManus (2007:1158). My project thus becomes a matter of using the lenses that are most useful in achieving a better understanding of these questions and connections. Importantly, the "nascent" theory I am attempting to build concerns the somewhat blurry intersection of design and public management – two fields with each their substantial, and growing, theoretical foundations. It will thus be important to consider the resonances with those bodies of knowledge as I develop the synthesis of my findings. As Roy Suddaby suggests in his very precise piece on *What grounded theory is not*, the aim should be to seek a "middle ground" between "a theory-laden view of the world and an unfettered empiricism" (2006:634). It is exactly to ensure that I do not fall into the trap of the latter that I have put some effort into charting the historical developments and current debates, drawing on key literatures within design and public administration, management, and governance over the last three chapters.

4.3.1   Inquiring into an indeterminate situation

Essentially I am seeking to inquire into an indeterminate situation, to understand what characterizes the "problem" of design-induced processes of change in the public sector (Dewey 1938). The societal, technological, environmental and political context of public organizations is in flux, causing many to argue that we are in a state of transition, or turbulence (Bourgon 2011; Christiansen 2014). Public organizations and their managers are themselves in search of a new, emerging model of governance that is, on the one hand, increasingly a focus of academic discussion, but, on the other hand, difficult to observe empirically. My insider access to their efforts to innovate suggests that I might have the opportunity to contribute to new theory by paying careful attention to their activities and their interpretations of them (Suddaby 2006:634). Meanwhile, the design community and profession is being changed by emerging forms of design theory and practice, challenging identities and previous understandings of what it means to design, or to be a designer. As design in its new, more collaborative forms is being commissioned and applied by managers, often as a novel approach, in order to create innovations in public organizations, what happens? Edmondson & McManus (2007) propose that in such situations where relatively little is known about a specific topic, and the research questions are open-ended, methods that allow data collected in the field to strongly shape the researcher's developing understanding of the phenomenon are in place. Similarly, Corbin &

Strauss (2008) argue that qualitative research is uniquely positioned since it offers the methods and tools to develop concepts that can help us:

- Increase our understanding of people in their everyday lives, including their routines, habits, problems or issues, and how they handle or resolve them.
- Provide a language that can be used for discussion and debate leading to the development of shared understandings and meanings.

These purposes fit well with my intention of not only answering descriptive research questions but also of exploring how public managers seek to "handle" and try to "resolve" the pressures they are under as they attempt to employ design as an approach to innovation and a way of moving toward an emerging governance model. As I mentioned in describing the first research question, this is not only a question of charting the use of design methods, but of charting the manager's rationales for employing them in the first place – and also considering the wider consequences for public governance that may arise their efforts.

Corbin & Strauss (2008) state that common understandings can in turn be used to build a professional body of knowledge and to enhance practice. As I have discussed, the entire notion of innovation in the public sector, and especially design-led approaches to innovation, seems ripe for the development of common concepts and strengthened professional practice. Additionally, there seems to be a significant lack of research-based knowledge of how public managers engage with design approaches, and what that engagement may require from them. In line with Edmondson & McManus' (2007) argument for methodological fit, this underlines the call for a highly qualitative approach to the research.

4.3.2 Research as the exploration of mystery

Applied rigorously, grounded research can be very technical and time-intensive, as it has traditionally implied very fine-grained attention to empirical material, minutely registering and coding vast quantities of qualitative data. However, as Juliet Corbin emphasizes in her preface to Corbin & Strauss (2008), the method has been modernized and in recent iterations become more flexible and open, less overtly "positivist", and more reflective. With its origins in the works of, amongst others, the pragmatic philosophers Charles Saunders Pierce, John Dewey,

and George Herbert Mead, grounded research takes account of the (subjective) situatedness, or contingency, of social and cultural contexts. In epistemological terms, the method recognizes the important role of the perspective and experience of the researcher (Corbin & Strauss 2008:80) and the fact that multiple interpretations may very well arise from the same body of empirical material (Corbin & Strauss 2008:50). Ontologically, grounded research reflects that the world is fluid, dynamic, in flux, "tangled", characterized by simultaneous splintering and emergence, and essentially socially constructed by the humans who inhabit it. One might also say, with Hernes (2008:143) that this type of research "…means paying attention to details and unexpected forms of data that might emerge from a tangled world". As I am exploring how innovation processes take place, I also need a methodology that is open for fresh perspectives and is "attentive to issues of interpretation and process and that does not bind one too closely to long-standing assumptions" (Suddaby 2006:640).

As I set out to explore the phenomenon of design in government, at a time of great turbulence and social change, my use of grounded research is a set of procedures and tools for exploring mystery. In line with what Alvesson and Kärremann (2011) have called a "mystery as method" approach, I am using empirical material for generative and illustrative purposes (rather than for rigorous and minute codification of data), to anchor my findings, and as a "critical dialogue partner" (Alvesson and Kärremann 2011:105) in developing concepts and relations between them. This implies a focus on exploration, discovery, qualitative and idiographic research, empathy, judgment, social action and interaction, meanings, cognition, emotion, closeness to the empirical material and successive induction (Alvesson & Skjöldberg 2000; Corbin & Strauss 2008). My emphasis is on eliciting meaning from qualitative empirical data, discovery, identification of patterns, and establishing conceptual "building blocks" that can lead to nascent theory, acting as "anchor points in interpretation of findings" (Blumer 1969: 26). I see such interpretation as highly central, as "…a productive process that sets forth the multiple meanings of an event, object, experience or test" (Denzin 1998 quoted in Corbin & Strauss 2008: 49). In line with Alvesson, this is also about recognizing that "empirical material is *constructed*, not just collected; *interpreted*, not just analyzed; and *written*, not just summed up."[22]

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[22] Notes from April 7, 2014 lecture by Mats Alvesson at Lund University; Ph.D. course on Reflective and Creative Methodology.

Roy Suddaby rather eloquently underlines that the purpose of grounded theory is thus not, ultimately, to focus on the subjective experiences of individual actors; rather the task is to be "attentive to how such subjective experiences can be abstracted into theoretical statements about causal relations between actors" (2006:635). This thesis contains plenty of stories, personal narratives, but these stories are "means of eliciting information on the social situation under examination" (ibid).

As I will discuss further in subsequent sections, my positions at MindLab and the Danish Design Center most likely require enhanced reflection on my role in contributing to the construction, interpretation and writing of the material at hand.

4.4   **Strategy for identifying design processes and respondents**

Eisenhardt (1989: 537) emphasizes that in case research, the "concept of population is crucial, because population defines the set of entities from which the research sample is to be drawn". What to look for, and where, in exploring the significance of design approaches for public managers and public governance, has been a key consideration in the thesis. On the one hand, some immediate choices as to criteria and dimensions have seemed natural; on the other hand, given the explorative, opportunistic approach I am taking, other dimensions will necessarily have to emerge. In the following I seek to clarify the interplay between *a priori* considerations and the openness to new interesting sampling dimensions.

4.4.1   *Population and sampling*

My empirical research focuses on individual public managers who have had key responsibility for, or been engaged in, collaborative design approaches to create new solutions within public policies or services. Of particular interest is the potential of these actors to manipulate facets of the contexts in which they operate, and their role(s) as events and processes of design work unfold. The wider purpose is to gain insight into the emergence of more overall governance principles, by way of categorizing and testing the emerging theoretical structures, using the constant comparative method (Suddaby 2006).

Empirically I explore multiple entities where change might happen, where the mode of change is largely constructive, as a sequence of events, which emerges through "the purposeful enactment or social construction of an envisioned end state among individuals within the entity" (van de Ven 2007:203). This is particularly suited for exploring applied design approaches since, as Rowe (1987:34) points out, "the unfolding of the design process assumes a distinctly episodic structure, which we might characterize as a series of related skirmishes with various aspects of the problem at hand." It is exactly these "skirmishes" – large and small – with public problems that I seek to explore. Inspired by grounded theory, my methodological approach allows the exploration of how managers within the studied organizations "subjectively experience organizational reality" (Suddaby & Greenwood 2009:15) and thus it (also) encompasses an individual level of analysis for the interpretation of organizational processes of change. As Hernes (2008:51) underlines, "a process view applies not just to events, but also to the subject that experiences events." Importantly, this means that the notion that subjects (managers) are unchanging is abandoned. Because managers interpret and attach meaning to the design work that takes place, they themselves are shaped by their experience. It is not only elements of organization that might change, it is also managers themselves. In this study, I thus expect that "…it is perfectly possible that anything can change, including the central subjects, precisely because central subjects intervene in processes and are changed by their intervention" (Hernes 2008:51). This is not at all an uncommon or new way to research innovation in organization; March (1988) for instance has pointed out that not only organizations change due to innovation processes, but the innovations themselves change too.

I conduct theoretical sampling, understood as the collection of data from places, events and people that are expected to create opportunities to develop concepts in terms of their various properties and dimensions, uncover variations, and to identify relationships between key concepts (Eisenhardt 1989; Suddaby 2006; Corbin & Strauss 2008; Yin 2014). Importantly, theoretical sampling is different from statistical sampling in that the aim is not to generalize on the distribution of variables across an entire population, but to extend emerging theory, replicate findings, and fill theoretical categories (Eisenhardt 1989). This also implies that additional cases may be added in the course of on-going research, in order to explore and address new and potentially important themes and questions as they arise. As Yin (2014:xxii) underlines, the case study process is a "linear but iterative process." My study of multiple cases, which are found in different contexts, in which several units of analysis are explored (as illustrated by my three

research questions focusing on design approaches, management experience and governance), can also be characterized as an "embedded multiple-case design" (Yin 2014:46).

Another consequence of my methodological choice is that this study does not have a control group. Rather, the research, due to its process focus, explores how the interview subjects themselves assess and compare the use of design approaches to other ways and means of achieving desired change within their organizations. As will be shown in the course of the empirical research chapters, often the managers volunteer such comparisons and judgments based on their past experience. Again, the objective is to search for patterns and insight in how they compare their experience with design approaches to other management techniques.

4.4.2 Finding respondents

My pragmatic choice has been to choose managers for interview who have personally experienced (and often commissioned) some combination of design approaches. These approaches are usually labeled explicitly as "service design", "co-design", "co-creation" or "strategic design". Typical methods involved have been ethnographically inspired (design) research such as participant observation, shadowing, open-ended qualitative interviews; a variety of workshop or co-design processes involving public employees, managers, suppliers, and often citizens or businesses (end-users); and a varied use of visualization techniques, such as graphical service process mapping and visual prototyping (eg. storyboards, film), often facilitated by professional designers. Chapter 5 provides a more comprehensive overview of the types of design methodologies and processes employed in the empirical cases I have studied – thereby also contributing to addressing my first research question.

Using a theoretical sampling technique implies that my focus has been on deriving concepts from data during analysis, and letting the discovery of relevant concepts drive the next round of data collection (Suddaby 2006; Corbin & Strauss 2008). In other words, the research strategy has been to let the analytical process drive data collection. This fits well with the highly emergent, explorative nature of the field of study.

To identify organizations that have employed design, and thereby relevant public managers, I have used multiple sources. Firstly, I used my vantage point in MindLab, the cross-

governmental innovation unit that I used to run; MindLab offered potentially interesting empirical material through the activities undertaken by its project managers and their teams. Secondly, I engaged with the wider, global design and public sector innovation community, using what is essentially a snowballing approach to find additional cases.

The target population includes large and small organizations, national and local government, and related institutions (see figure 9). The interviews have been largely open, following a loosely structured interview guide, which seeks to elicit some basic facts (actors involved, timing, main methods used, results achieved etc.) but centers on a central the open question:

> *Please share your own story of how the design project(s) unfolded, and how this made a difference to you as a manager, if at all.*

The main interview guide is attached in Appendix B.

I have used a sampling strategy that involves innovation focus and national context/geography:

Policy vs. service innovation: My interest has been both in 1) relatively broad-reaching policy design where, at the societal (macro) level, decision-makers are attempting to conceive, plan and realize approaches to tackling societal challenges, and 2) at the other end of the policy-service spectrum, the highly specific (micro-level) design of a service process and its detailed individual interactions, including delivery mechanisms, human resources, technology etc. (for instance, patient treatment and service processes in a hospital). The benefit of the policy vs. service distinction is that it might help clarify whether and how design approaches seem to be most applicable, to overall, strategic innovation processes or to more operational service solutions, or both. The dimensions also imply that I look at both state/national government (policy design) and at regional or local government (service design). As it has turned out in the course of the research, these two domains are in many ways very interconnected and probably should be seen as top-down and bottom-up approaches to innovation and to changes in governance.

National context. For reasons that are no doubt obvious, Denmark has been the main geographical research context. However, in order to give the Ph.D. a global perspective, and to explore the role of potentially important differences between countries, political systems and

administrative cultures *within the Western cultural sphere*, I have examined design projects and their managers in public sector organizations in several countries beyond Denmark. Building on my current professional network and knowledge of state of the art of public sector innovation globally, and subsequently a comprehensive review among the relevant design communities, cased in Finland, the United Kingdom, Australia, and the USA have also been included. The rationale here has primarily been to examine possible variation across countries, to determine whether the significance or sense of design approaches is a national or "cultural" phenomenon. Another benefit of including other countries is to ensure that a sufficient diverse and mature field of types of policy and service "design projects" can in fact be found in this rapidly emerging field, going beyond my personal context in Denmark. From a practical perspective, it also makes sense that at least some of the countries coincide with the location of (some) of my co-advisers (UK and US). It should be emphasized that the choice of these largely Anglo-oriented countries (possibly with the exception of Finland), my findings should not be over-generalized to all countries, or even to the set of advanced OECD-type economies. For instance, it might be that countries within the Latin cultural sphere (such as France, or Italy), may hold other kinds of insights and lessons. The history of public administration, management and governance, which I have presented in this thesis (as well as that of design) also leans towards the Anglo-Saxon cultural, economic and political sphere. This is however not to say that there would not be relevance or applicability to certain other regions, including some government bodies in Asia (think Singapore) or Latin America (think Chile, Brazil).

4.5　　**Data collection methods**

There are a number of both methodological and logistical implications of the respondent/case selection as proposed here. Flowing from the above theoretical and methodological considerations, my research has relied on an assembly of methodologies which have been selected pragmatically "in the service of gaining access to the situated generation of some kind of explanation for unexpected interruptions" (Weick 1995:173) – interruptions being whatever interactions, events or insights that the application of design approaches trigger for public managers.

As Barbara Czarniawska has stated, "...fieldwork knows no "method"; it relies on pragmatism, luck, and moral sensibility. The knowledge of a variety of techniques, and the will to innovate

rather than follow static prescriptions of method books, remain central to the craft of fieldwork, as to all others." (2008:10). This understanding of qualitative case research as an art as much as a practice has been an inspiration for my approach. My primary qualitative research of the projects and into the experience of each of the selected public managers has been carried out utilizing a mix of contextual and retrospective interviewing, combined with secondary sources, allowing for a degree of triangulation and thus providing a stronger substantiation of constructs and emerging hypotheses (Eisenhardt 1989).

Contextual interview. This interview type takes place in the setting (context) people actually live or work in. The interview guide is quite open, addressing a broad thematic level rather than specific questions. This allows for a broader and richer dialogue with the interviewee. Finally, the researcher is not only interested in what the interviewee has to say, but also in the context and resources surrounding the person in the real-life setting. The contextual interview approach involves the collection of all relevant documents and information concerning the specific innovation process in question. It could also involve (and, in several instances, it has) walking around, seeing the physical environment, viewing artifacts used in or resulting from the design work, and so on.

Retrospective review. This interview type seeks to uncover a chronological narrative about an event or series of events, which will be of particular interest in understanding the manager's role in the innovation process. The interviewee is asked to tell the story, re-creating the dynamic of the past. The researcher probes by asking "what happened then?" or "what happened before that?". As Czarniawska (2008) has emphasized, using work-life interviews, it is critical to be careful not to interpret responses as reports of real life events, but, rather, as ways of narrating lives. The value of this form of interviewing is that it enables the researcher to discover surprising transitions or breaks in a series of events that might be hard to capture without such an open format. The interview can also uncover how events triggered subjective experiences and emotions, for instance by asking, "when that happened, how did it make you feel?"

Documents. I have collected and included various key documents and texts that help set the context, objectives and activities of the design approaches and their organizational and political contexts; however, these generally serve more as background material than as key research

evidence. One exception is documentation of results and outcomes; I draw on documentation from relevant evaluation reports and business cases directly related to the design projects.

In the following section I present an overview of the managers and cases involved in the research.

<table>
<tr><td>4.6</td><td>**Data gathering protocol**</td></tr>
</table>

As indicated above, the core research activity has been to examine in-depth a number of design processes, and how the responsible public managers have (if at all) used these processes, activities and outcomes in their efforts to drive innovation and achieve desired change in their organization. A key balance to strike in this context has been between breadth (multiple observations allowing for qualitative analysis and pattern recognition) and depth (the ability to capture the richness and social dynamics of design processes vis-a-vis the managers I wish to study).

MindLab, the public organization I headed until October 2014, served as a significant research platform. The organization continuously interacts with public managers across three major national ministries and one city government, and has an extensive national and international network in the fields of design, innovation and public sector reform.[23] My subsequent work leading the Danish Design Center has shifted my focus into using design approaches in essentially transforming a public institution – an endeavor that is still in its early phases, but that has provided additional reflection and inspiration.[24]

The interviews have essentially fallen into two tranches: Exploratory and primary data collection. The first tranche consists of very open exploratory conversations with a total of six managers, who had some experience in engaging with citizen-centered design approaches in practice, or who might appreciate their potential value, as well as challenges and pitfalls. This round of interviewing helped inform the Ph.D. proposal and underpinned the development of the main questionnaire used for subsequent interviews. The second tranche includes the primary

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[23] www.mind-lab.dk/en

[24] See for instance these reflections after "Year 1" of leading the Danish Design Center:
http://danskdesigncenter.dk/en/news/danish-design-centre-year-one-design-squared

data collection, consisting of 15 much more in-depth personal interviews focusing on concrete design processes.

4.6.1   Exploratory (preliminary) data collection

The first tranche of exploratory interviews included:

Figure 8: Breakdown of exploratory interviews

Case	Title	Organization	Country	Date
A	Deputy Director	Danish Business Agency	DK	Spring 2010
B	Head of Division	Ministry of Business & Growth	DK	Spring 2010
C	Head of Division	Board of Industrial Injuries	DK	Spring 2010
D	Head of Division	Ministry of Taxation	DK	Spring 2010
E	Deputy Director	NHS Institute for Innovation & Improvement	UK	Spring 2011
F	Co-Chair	Boston Mayors Office of New Urban Mechanics	US	Summer 2012
Total: 6				

Interviews A-D and F were conducted in-person while interview E was carried out by telephone. Each interview had a duration of approximately one hour. It can be mentioned that the reason for the relatively late interview with the co-director in Boston was due to an immediate opportunity; the interview was used to reflect on the wider context of the thesis in relation to public and civic innovation, rather than to address a concrete design process. Some of the key insights from this round of interviewing, which informed the further research, were that:

- The managers were ambitious and constantly seeking out tools and methods that would allow them to achieve concrete change within the complex settings they operated in
- Design approaches, including ethnographic methods, were apparently making an impression; some managers characterized the methods as "disruptive" and a "paradigm shift"
- They stated that gaining insights into concrete behavior by citizens and businesses was a key priority for them
- The ability to use design to make solutions concrete and tangible was highly important.

The results of this research were fed into the Ph.D. application, used to inform the research design, and also formed the main empirical basis for the first Work in Progress (WIP) seminar. Importantly, it helped raise key themes and issues and to shape the research questions.

4.6.2   Primary data collection

The primary data collection process has been a substantial undertaking, the main activity being personal interviews with public managers in five different countries. Approximately 25 hours of personal interview recordings, nearly 450 pages of transcribed interview text, and a range of secondary sources are involved. Additionally, my access to participant observation of the five MindLab-related cases involved several weeks of participation and opportunity to follow the design processes. See Appendix A for an overview of data material and sources.

The following table displays the primary (second tranche) respondents involved in the thesis. They represent a balance between service and policy design, geographical distribution and content topics (public policy domains).

To ensure transparency, the table also indicates where I personally played some form of active role in the initiation (decision on design support from MindLab), observation (e.g. workshop participation), steering (overall responsibility for and governance of project) or judgment of the project (specifically as a member of the Innovation Award jury for Local Government Denmark, the interest organization of Danish municipalities).

Figure 9: Case overview

Case	Title	Organization	Country	Design focus	Domain/theme	Author's role
1	Director General	National Board of Industrial Injuries (BII) *Project: No Red Tape: Young Injured*	DK	Policy	Labor market (industrial injuries)	Initiate, steering, observe
2	Director	City of Adelaide / The Australian Center for Social Innovation (TACSI) *Project: Family by Family*	AUS	Service	Social (family services)	None
3	Development Director	Borough of Lewisham / Homelessness Services *Project: Housing Options*	UK	Service and policy	Social (homelessness)	None
4	Senior Strategy Manager	Suffolk County Council *Project: Healthy Ambitions*	UK	Service	Health (youth engagement)	None
5	Manager	Odense Municipality / Camillagaarden institution *Project: User-driven innovation*	DK	Service	Social (mentally handicapped)	Jury, prize awarded
6	Head of Division	Danish Business Agency *Project: Branchekode*	DK	Service	Business (registering new business)	Initiate, steering, observe
7	Special Advisor	City of Helsinki Economic and Planning Center *Project: Business Permit Application*	FIN	Service and policy	Business (obtaining city permits)	None
8	Head of Division[25]	Ministry of Taxation / National Tax Agency *Project: Taxing Assemblages (Ph.D. research)*	DK	Service and policy	Administration (compliance with tax code)	Initiate, steering
9	Head Nurse	Rigshospitalet (National Hospital of Denmark) / Heart Clinic *Project: The meaningful patient experience*	DK	Service	Health (patient involvement)	Initiate, steering
10	Vice Chancellor	Stenhus Community College *Project: General Study Scheme*	DK	Service	Education (course development)	Initiate, steering
11	Director, fmr. Principal	New York City Department of Education / Olympus Academy *Project: iZone*	USA	Service and policy	Education (new learning environment)	None
12	Head of Secretariat and Visitation	Holstebro Municipalily *Project: The Good Kitchen*	DK	Service	Social ("meals on wheels")	None
13	Director of Strategic Planning	New York City Department of Housing Preservation & Development (HPD) *Project: Designing Services for Housing*	USA	Service and policy	Urban, social (citizen/resident engagement)	None
14	Center Manager	Kolding Municipality / Skansebakken institution *Project: Design of Relations*	DK	Service	Social (quality of life for handicapped)	Jury, prize awarded
15	Senior Consultant	Danish Competition and Consumer Authority *Project: Children, youth and marketing*	DK	Service and policy	Consumer (children's online behavior)	Advice on methodology
15 total						

The table shows that the cases cover a balance of both service and policy focus, and a quite wide span of policy domains, ranging from health and social services to business and the labor market. The table also shows that the author has played a somewhat proactive (initiation,

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[25] This is a different manager than interviewed in the exploratory round.

steering) role in five (1/3) of the cases. In two of the additional cases I had the role of jury member and contributed to giving an award for a highly innovative project; in both cases the award was given *before* I included the projects in the present research. The point that some of the cases have received rewards for their degree of innovativeness indicates that this might also be considered a sampling dimension. However, such external or formal recognition of the cases does not, as far as I can find in my research, necessarily mean that other cases are not equally innovative. However, as I will show in chapter 9, one can suggest the factors, which in the various cases, were the main drivers of innovation. From a theoretical sampling perspective, the implication that some of the cases studied are exceptional should not in itself be problematic, but could rather offer the advantage that certain important aspects and dynamics might be easier to identify. The purpose here will be to seek to understand to what extent the variances in these cases matter in particular ways.

Data collection within each observation has been based on *triangulation* (Eisenhardt 1989; Nachmias & Nachmias 1992; Yin 2014). This implies that in addition to the primary qualitative data collection I have included the collection of relevant quantitative data (for instance data on program performance, such as productivity figures, user satisfaction surveys or outcome data), and of other secondary data including design artifacts (workshop templates, posters, film, images) and texts (internal research, consulting reports, evaluations, policy documents, etc.). For every case listed above, a variety of such material has been available. Additionally, it should be mentioned that for the five cases carried out with assistance from MindLab, I have often had the opportunity to learn of them through first-hand participant observation, through direct reports and immediate accounts.

For each case, a physical document folder has been created, which includes the printed interview transcript, examples of material developed within the projects, and (where available) evaluation reports and other documentation pertaining to the case. This very substantial volume of raw data material can be produced upon request. However, visual examples that serve to illustrate processes or solutions from the cases are presented selectively in the text, especially in chapter 9.

This points to the fact, as I will discuss further in the last section of this chapter, that I have drawn on a range of other processes in an expansion of my research approach, through "engaged

scholarship" (van de Ven 2007), which has allowed for a range of tests and refinements of the emerging analysis. I have, thus, had the opportunity to leverage a bit of "controlled opportunism" (Eisenhardt 1989:8) to expand my repertoire of data sources to obtain insights and commentary from stakeholders, test ideas with relevant audiences, etc.

However, it is the primary, in-depth qualitative data collection that constitutes the backbone of my analysis for the purpose of addressing the research questions. The secondary data has been drawn in to validate interview statements, to identify figures, to access evaluation research on the concrete project in question, etc. Likewise, the engagement with stakeholders and the wider and rapidly emerging community around the design and public sector innovation space has been used for reflection and discussion, not as a main source of data per se.

Drawing on grounded theory as the main analytical approach has meant that the data collection from the primary interviews has been conducted iteratively. After the first half dozen interviews, a first explicit exercise of pattern recognition was carried out, leading to the identification of a number of key categories or concepts (Nachmias & Nachmias 1992; Suddaby 2006; Corbin & Strauss 2008). They were elaborated in separate memos, and helped focus and prioritize the subsequent interviews.

The exact number of managers involved has depended on the degree to which the qualitative research reaches *saturation*, and the value of adding additional observations begins to diminish significantly (Suddaby 2006; Corbin & Strauss 2008; Mason 2010).[26]

4.6.3   *Analytical process*

The qualitative interview data were analyzed through a pragmatic application of the strategies of open coding and axial coding (Corbin & Strauss 2008). Coding denotes the process of extracting

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[26] By saturation I refer to the notion that when using theoretical sampling, at some point in the process the addition of more data becomes less fruitful to the development of theory, as the iterative process of building concepts, and relations between them, becomes increasingly fine-grained. Corbin and Strauss (2008: 144-145) put it like this: "Data collection leads to analysis. Analysis leads to concepts. Concepts generate questions. Questions lead to more data collection so that the researcher might learn more about those concepts. This circular process continues until the research reaches the point of **saturation;** that is, the point in the research when all the concepts are well defined and explained" [Original emphasis].

concepts from the empirical data and subsequently developing them into distinct ideas or interpretations.

The concepts I identified through this pattern recognition have then been analyzed for their inherent characteristics (descriptions) and for their dimensions, or variation. As the theoretical sample was traversed analytically, the concepts have become richer in description as well as in variation. I have written separate methodological notes on a number of the key concepts, seeking to identify higher and lower ranking concepts, and determining their characteristics and variety (open coding) as well as their relationships (axial coding). A useful methodology in this process was to map the key concepts and their relationships physically, using several large foam boards to tack on key themes from my memos, interesting quotes, and organize this material under increasingly clear and mutually exclusive headings. Over time, this categorization also led to an emerging structure for the thesis (see photo below).

Figure 10: Pattern recognition to identify core concepts
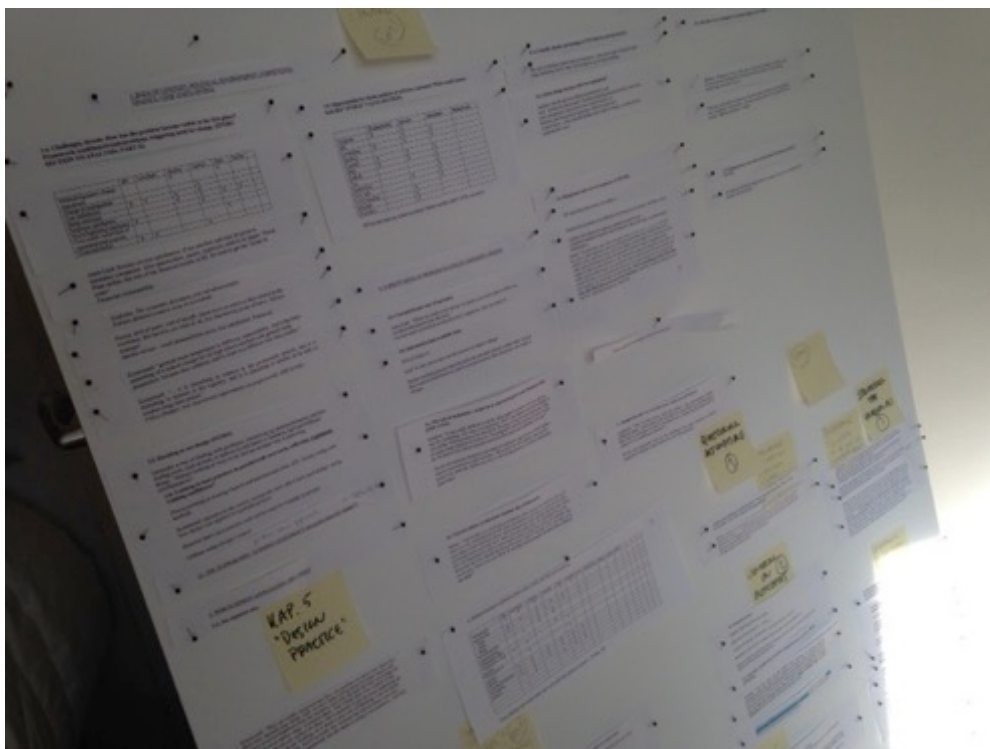
This process has thereby led to the identification of the core themes, or findings, which constitute the main chapters of the following section. In order to illustrate, by way of rich

description, some of the key characteristics and dynamics of the concepts, I have chosen to highlight selected narratives from public managers in connection to the various findings. I thus bring relatively extensive quotes and stories that reflect the managers' concrete incidents, experiences and insights. The concepts have been built via reflexive analysis of data from multiple interviews, but the examples I have chosen to highlight are chosen to be particularly illustrative. As Hernes (2008:35) acknowledges, quoting Whitehead, in conducting process research, one looks for events, or "drops of experience". Some respondents and their projects emphasize certain experiences, changes, dimensions and thus concepts over others, which means that "rich" narrative is more characteristic and to-the-point in some cases than others. Clearly there is some variety within the cases/interviews due to the variety in public sector contexts, type of problem, sector domain, and even the personality of the manager; however, the core concepts are those where there is a relatively high degree of consistency, and a robust pattern, across the interviews.

4.6.4   *Looking for the looking-glasses*

My intent in this thesis is to identify a tentative conceptual framework, a theoretical structure, a scaffolding, through which to understand the role of design processes, as engaged by public managers, in the transition processes towards an emerging public governance. This quest takes departure in empirical data, and focuses on the discovery of concepts and constructs. Eisenhardt (1989:13) emphasizes that an essential part of theory building is to compare emerging concepts, theories and hypotheses with the extant literature – including with literature that is conflicting with the research findings. Likewise, Suddaby (2006) argues that grounded theory seeks a middle ground where prior knowledge is taken seriously but where the researcher avoids using theory to test hypotheses. So what kind of literature, what type of glasses, will I look through in order to interpret the identified patterns?

As the three preceding chapters have illustrated, there is a rich range of perspectives, interpretations and propositions within the two main bodies of knowledge that are ultimately at the heart of this thesis. Together they naturally form the major prisms through which to explore the implications of the empirical research: Design and public management. In particular, it is the recent iterations, the evolving understandings, of these two fields, which are in play:

Design, which is addressed in chapter 1, and partly in chapter 3, encompasses the phenomenon of new collaborative forms of design, and the ways in which the design profession is evolving and making itself available as a contributor to public and social innovation. As the body of literature on the "new" forms of design, including service design, co-design, social design, human centered design and design for policy has grown in recent years there is a rich set of themes, concepts and relationships from which to draw.

Public administration and management, or more precisely, emerging governance models (variously labeled, as discussed in chapters 2 and 3), are concerned with emerging notions of management, leadership and innovation in connection with public problem solving, policy-making, governance and emerging forms of service provision. As will be discussed in the conclusion to this chapter below, my main audience is public managers and the academic community focusing broadly on public administration, management and governance. Ultimately the theoretical concepts through which to interpret my findings will therefore likely be found among those of emerging governance models suggested by public administration and public sector innovation scholars such as Hartley (2005), Pestoff (2006), Alford (2009) and Osborne and Brown (2013), Parsons (2011), Greve (2013), Agranoff (2014) and so forth, which I have discussed in detail in chapter 3. This is also a key body of knowledge I hope to contribute to through my research. In terms of structuring the discussion and analysis I therefore draw, as a point of departure, on the bodies of knowledge found broadly within design and within the public administration, management and governance literature. Secondarily I will rather eclectically draw on the additional theoretical perspectives in order to "enfold" additional relevant literature to provide critical reflection and perspective to the discussion (Eisenhardt 1989). What would be fruitful additional lenses through which to interpret the application of design approaches in a government context? In the course of my research, particularly two domains have captured my attention and seem relevant to draw on as my analysis unfolds, in particular in the concluding chapters of the thesis:

First, there is sensemaking. In my first Work in Progress paper I explored whether Karl Weick's notion of sensemaking (Weick 1979; 1995; 2001), would be useful, to the extent that my interest was how public managers "made sense" of their experiences with design methodology, and sensemaking claims to be well suited for exploring policy making as well as in the context of

building grounded theory (Weick 1995:172). The manager's sensemaking is of course in play when I examine what they experience and how they engage in the design process. Here, the most useful contributions by Weick seem to be his two chapters in Boland & Collopy's 2004 volume on managing as designing, where Weick explicitly seeks to couple design, as a management and governance process, with sensemaking. I will draw this in particularly in chapters 10 and 11 as I consider the resulting (emerging) governance principles flowing from the different cases.

Second, I have examined new institutional theory (Meyer & Rowan 1977; DeMaggio 1983) as a line of inquiry that could be well matched with the highly institutionalized context of the public sector. A few hints to this are included in my introductory section. This theoretical field is relevant because it lays out, with a solid base, an overall challenge which in a sense forms the canvas against which design and innovation plays out in public institutions: How can transformation be achieved in highly institutionalized settings? There are also some relevant fits with my methodological approach as it will allow the mapping of how managers within the studied organizations "subjectively experience organizational reality" (Suddaby & Greenwood 2009:15) and thus it may contribute with an individual level of analysis for the interpretation of institutional change. My object of interest, laid out in institutional terms, is the potential of these actors to manipulate particular facets of the organizational and institutional contexts in which they operate (Lawrence et. al. 2013). That being said, the larger conceptual challenge is to explore the implications for governance – which is a different unit of analysis, namely the organizational level.

Also, there is the obvious link from institutional theory to sensemaking, with Karl Weick himself pointing out that because sensemaking is concerned with the "institutionalizing of social constructions into the way things are done" that "sensemaking is the feedstock of institutionalization." (Weick 1995:36). It can be mentioned that I drew on the theoretical field when writing my Master's dissertation, using mainly a neoinstitutional framework, and thus have a familiarity with it that might prove helpful.[27] During one of my Ph.D. seminars[28] I had

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[27] My M.Sc. (political science) thesis was carried out in international relations studies and titled "EU-US Relations after the Cold War: A multiple-case study of the impact of international institutions on bilateral cooperation" (Aarhus University, 1999)
[28] Copenhagen Business School: "Change and Transformation" doctoral seminar on new institutional theory, May 5-9, 2014

the opportunity to go into the theoretical basis, and discuss its significance for my current research with some of the key academics in the field. I find that new institutional theory may therefore be relevant as a "conversation partner" in particular when it comes to the issues raised by research sub-question 3, which concerns the emergence of new organizational forms and processes within what is usually a highly institutionalized context of public sector organizations. On the one hand, the theory would as point of departure be critically positioned against notions of a high degree of agency by public managers in their pursuit of innovation. This would be a welcome opportunity for reflection and for generating perhaps unexpected insight (Eisenhardt 1989: 13). On the other hand, the relevance of engaging with this particular theoretical domain is highlighted further by the move in recent years towards capturing institutional change via notions of "institutional entrepreneurship" (Boxenbaum et. al. 2008) and "institutional work" (Lawrence & Suddaby 2006). There might in other words be some opportunities for adding to this theoretical body of knowledge, even if that is not my main objective.

4.7   **Conclusion: Final words on audience**

I opened this chapter by stating I wish to build a conceptual framework for understanding the potential contribution of design to public governance. As Alvesson & Sandberg reminds us, the question immediately becomes whether this is just "interesting" research or whether it is also "challenging"? Is there a potential for challenging current assumptions? And whose assumptions do I wish to challenge?

My primary audience for this thesis is the wider public management community – practitioners as well as academics. The core challenge addressed by the thesis is ultimately not one of innovation, or leadership or even design, but of public governance. As discussed, this community is not only finding itself under unprecedented pressure, the hunt is also on for ways in which to shift to a more pro-active or even entrepreneurial approach to tackling public problems and challenges – and this is again reflected in the strategies and language being adopted by governments, and by the growing research interest in change and innovation within government.

However, secondarily my audience is the design community. As the other "wave" crashing, and in spite of a beginning convergence, design represents a very different world – historically,

culturally, socially – than that of public administration; to many professional designers the notion of "design in the public sector" is foreign and confusing. Additionally, the small but growing international field of design research is not yet overpopulated by people who focus on the public sector. Rather, most of the global design community is still very occupied with design in and for the business sector, with social and public design more at the margins.

Part II

Leading design for public innovation

5. Design practice in government

A distinctive approach to "service design", which seeks to shape service organizations around the experiences and interactions of their users, presents a major opportunity for the next stages of public service reform: a route to get there.

Sophia Parker and Joe Heapy, *The Journey to the Interface* (2006:9)

Building on the empirical data collected specifically for this thesis, this chapter provides an analytical overview of the kinds of motives, rationales and activities associated with managers engaging in design work in the public sector. Additionally, it introduces the core research findings, or dimensions, that are elaborated in the subsequent chapters in this section of the thesis.

This chapter thus serves as a framework for Part II of the thesis. First, I briefly describe and discuss how the public managers I studied come to commission design work in the first place: What are their entry points to design skills and expertise? What motivates them? What are their expectations about how design will assist them? This contributes to answering part of research question 1: What are the rationales for employing design approaches?

Second, as an extension of this first set of findings, I provide a typology of the design approaches found across the cases studied: What are the kinds of concrete methods and activities associated with "design approaches"? This includes processes that are closely related to design approaches, such as employee engagement in change, or attempts to establish business cases or evaluations of impact. This typology addresses the other key element of my first research sub-question: What characterizes design practice in a public sector setting?

As a third move, I then shift to an overall characterization of the dimensions of design involved.

Fourth, I share an overview of my core findings concerning my second research sub-question: How does the exposure to design matter to public managers? How do they engage? This is the starting point for the subsequent and more detailed analysis in the following chapters.

All of these sections serve the purpose of giving a sense of the key dimensions identified in the study. What are the variations and patterns found as to the use of design approaches? What are the sampling dimensions? And further, what are then the resulting types of engagement, and what issues seem to emerge?

5.1   Commissioning design

This section, and the two sections that follow it, address the first research question, about the *characterization of design practice:* Within public sector organizations, what does the application of design approaches entail? Why do public managers look to and commission design, and what tools, techniques, processes and methods are brought into play?

Public managers continuously face difficult problems and dilemmas, which prompt a search for methods and approaches that might help overcome them. That is also the case for the managers included in this study. This situation fits rather well with the "wickedness" of public problems I described in chapter 2 (Rittel & Webber 1973). The types of pressure and motivations they are facing, however, vary somewhat from case to case. It is from slightly different starting points that managers come to engage with design approaches.

What seems clear is that it takes the recognition of rather substantial challenges or opportunities. It is necessary to have multiple strong reasons for engaging with design – in many ways a foreign and strange approach to draw into a public sector setting. As one manager says, "It was a very, very long learning process to procure service design because we didn't know what it was." Another comments, that, "…no one [in our municipality] knew about service design." Commissioning a largely unknown methodology for transforming the service or policy for which one is responsible is no small step to take in a system characterized by resistance to uncertainty. As one manager asks, "how to buy service design when you don't know what is in it?"

Other risks play in as well. For instance, one manager worries that the design project would be met with jealousy by the wider organization because it will cast a spotlight on her unit. Another comments, somewhat in the same vein, that she is keeping knowledge about the project "under the radar" of the top management, because if they start paying attention to it, it would put too much pressure on the staff and might put the positive, if tentative, results in jeopardy.

Across the cases I have studied, a wide variety of rationales for commissioning and engaging with design approaches can be identified. Usually it is not a single "trigger" or opportunity, but a set of interdependent conditions that in combination lead to the decision to obtain the assistance of designers. In the following I discuss the key factors, or triggers for commissioning design, which roughly fall in these categories:

- *Reacting to performance pressure:* Public organizations are under pressure to cut costs or to produce different or better outcomes without additional resources.
- *Vision-driven change:* There are organizational strategies or visions in place, or particular problems arise, which prompt the need for change.
- *Opportunity to access design skills:* Design can be commissioned with some degree of support, or there are design skills available within the organization's ecosystem, for instance in the form of access to innovation teams or centers.
- *Personal attitude of managers:* The public manager in question is personally curious and interested in exploring new ways and methods of achieving meaningful change.

The table below illustrates the distribution of these triggers across the cases:

Figure 11: Distribution of triggers of commissioning design

TRIGGERS FOR ENGAGING WITH DESIGN	Performance pressure	Vision-driven change (realizing public value)	Opportunity to access design skills	Personal attitude
Example	Announcement of annual percentage cuts in funding for hospital department.	Wish by public manager to change organization and/or to demonstrate that more public value can be created	Unexpected opportunity to access funding and/or resources to engage with design	Unusual professional background and thereby an outsider's (reflective) perspective on the organization
Case				
1 BII		X	X	X
2 FamByFam		X	X	
3 Lewisham	X	X	X	X
4 Suffolk	X	X	X	X
5 Camillagaarden	X	X	X	X
6 Branchcode		X	X	X
7 Helsinki	X	X		
8 Taxation		X	X	
9 Rigshospitalet	X	X		X
10 Stenhus	X	X		X
11 iZone		X	X	
12 Holstebro	X	X	X	X
13 Housing		X	X	
14 Skansebakken		X	X	
15 Competition		X		

Although I consider these categories one at a time it is important to emphasize that they are not mutually exclusive or even easily separated in practice; it is more often than not, in the cases I have examined, a combination of these factors, which are in play.

5.1.1   Reacting to performance pressure

First, a key theme is underperforming services and weak public outcomes, such as unsatisfactory quality of a "meals on wheels" program, the lack of ability to achieve taxation compliance amongst citizens and businesses, or recognition of overwhelming bureaucracy for businesses wishing to obtain a city permit.

One dimension of performance pressure is funding. Much has been written about demands for increased productivity of public services in the wake of the 2008 global financial crisis; as I state in my introduction, this has been a key backdrop to the consideration of new innovative

approaches to public administration. It might be slightly surprising, then, that only in about half of the cases I have studied for this thesis was the need for cost-cutting and achieving financial savings or benefits mentioned as a key reason for engaging with design approaches. For instance, in the case of the London Borough of Lewisham, the challenge was to maintain performance at more or less unchanged budgets while dealing with a massive increase in applications for homelessness services. "In 2009 it hit", says Development Director Peter Gadsdon, and adds that "the recession started in 2009, and in a lot of the private sector people could not keep up with the mortgages". This shift, then, was in fact a consequence of the financial crisis – and included a shift in the type of people and families needing assistance. Suddenly, formerly middle class and ethnically white citizens were in need of help. In spite of the drive to assist more people (a productivity concern), however, also in the case of Lewisham there was an interest in achieving better outcomes. Gadsdon: "(…) we were looking at how we could improve the experience for customers, and how we can help support them on the right pathway to housing." So, financial incentives or pressures did not, in this case, stand alone.

Another example of the role of financial pressure is the case of *Rigshospitalet*, the National hospital of Denmark. The Heart Center had for a number of years been under on-going pressure to increase operational efficiency to the point where the management team could not see any possibilities for finding further cost-reducing measures through already tested and tried means. The Head Nurse had become acquainted with design and innovation methodologies through executive education (a master of public governance program) and chose to not only write her Master's thesis on the subject, but also to simultaneously try it out in her own organization.

A third example of performance pressure is internal pressure on the management. In one case this was a clear incentive for change, even though it was also connected with financial concerns. Here it was harassment and dysfunction among staff that became part of the motivation to initiate a change program – and design approaches then happened, more or less by accident, to become the tool, with some surprising results.

The types of pressures discussed above do not however seem to be mechanically translated by managers into something on which they need to act. Rather, the pressures are often framed by the responsible public managers as opportunities for change – for increasing productivity certainly, but often also for shaping more meaningful public services or creating better public

outcomes. One could thus argue that they are motivated as much by their own ambition (or vision) as by a particular external pressure.

5.1.2 Vision-driven change and public value

A substantial number of the managers express, in various ways, a strong vision and desire to achieve better results – more public value. It is an open question whether this ambition would exist were they not at the same time facing a variety of pressures and dissatisfaction with the status quo. However, it is remarkable how uniformly the managers I have interviewed express a desire to enable their organizations to do better.

Take for instance Head of Secretariat and Visitation in Holstebro Muncipality Paula Sangill. She describes a discussion with her deputy, Anne Marie, about her ambition to transform the quality of publicly provided food service for the elderly – *meals on wheels*:

> *[...] when you say local food service, you think of something with grey boring pork roast, with brown gravy and boring potatoes. We are tired of being conjured up in a corner where people think the public services are boring and second-rate, and if you cannot get something better, you can then always take it. We will break this.*

Sangill articulates her ambition as "not being content to be second-rate", and that the municipal food service should "be seen as attractive".

Some managers describe the rationale as more exploratory, essentially laying the groundwork for future performance. Peter Gadsdon, development director in Lewisham, says, "We were always trying to find another way of achieving change and transformation". Another manager, based in Helsinki, Finland, was planning a new economic development strategy for the city, and came across an interesting design consultancy, which spoke about how design could improve public services. The manager contends that, "when I heard about service design I didn't know what it was"; she nevertheless proceeded to write in the project plan for the strategy that they will use design as an approach.

As this story about the design consultancy, which apparently made a convincing pitch to the manager, demonstrates, rationales for commissioning design approaches can also be influenced by the ambitions, or professional claims, of the disciplines of design and ethnography. For instance, reflecting on the Danish Ministry of Taxation's decision to hire an ethnologist to carry out a Ph.D. project with focus on user experience, Head of Division Niels Anker Jørgensen says: "(…) we needed to be smarter about *why* people [users] did as they did. All our new anthropologically oriented staff had some dreams and hopes about what their discipline could bring to the table."

Part of the ambition for achieving change is also that the managers are occupied with achieving tangible results as an outcome of the work with design approaches. Here Sune Knudsen, a Head of Division in the Danish Business Authority (DBA) describes his ambitions for a newly started design project addressing how newly established businesses register their statistical classification code online. By enhancing their service experience and supporting easier compliance, he hopes that ulimately: "…businesses will save a lot of money, they will be more satisfied, you will get higher efficiency of regulation, and the public sector will save money." Mr. Knudsen here describes quite a range of types of public value he is aiming for (I discuss the quest for realizing public value, and return to expand on this quote, in more detail in chapter 8).

In the Skansebakken case, Jesper Wiese similarly reflects that once he had committed to the design project, he was adamant that it was carried out, even though at times there was "an immense pressure" both from external stakeholders and from the staff. He adds, "It is also a matter of being ambitious in your field."

A final example is Anne Lind, at the time the Director General of the Board of Industrial Injuries in Denmark. Lind says of her motivation to engage with design work: "If our users do not find what we do to be valuable for them, then our efforts don't really matter." Here, it is a strong vision that she wants her agency to make a difference to the citizens it serves.

Other managers invoke the need to cut costs and save to increase productivity at a time where the public sector at large, following the global financial crisis, is under severe financial pressure. One manager sums up that although he is not happy with the idea of "a burning platform" it was still useful to make the argument towards staff that "everybody" in government had to save, and

so the same would go for their own institution. Hence, this supported and motivated the design project and the changes involved, even though its main objective was not to create particular savings. This indicates that the entire environment surrounding public service reform in the period studies, which in most countries implied some degree of austerity measures or financial limitations, could well play a catalyzing role for the design projects to be undertaken, and perhaps even for them to be successful.

The figure below summarizes the kinds of changes that are at stake for the managers in the cases. It displays the types of public value suggested by Moore (2005), National Audit Office (2006, 2009), the OECD (Daglio et. al. 2014) and myself (Bason 2007, 2009, 2010), including the desire to achieve better *service experiences* for citizens and business; higher *government productivity*; better *outcomes* (changes in concrete behavior), or enhanced *democracy* (transparency, accessibility, accountability, etc.). The indications here are based on the initial expectations and ambitions with which the managers entered the design projects; in some instances, the aims for public value shifted significantly during the course of the project.

Figure 12: Ambitions, expectations and hope for the creation of value through design

AMBITIONS FOR PUBLIC VALUE	Better service experience (How end-users experience the public service)	Higher productivity (Cost savings at similar output or increased output at same budget level).	Better outcomes (Changes in actions and behaviors by citizens)	Enhanced democracy and regulation (Improvements in accountability, legality, transparency, participation)
Example	"We do not want to be second-rate, we want to deliver the best service" (Hostebro)	"We could manage a few more rounds of savings, but then it would hurt quality. So we need inspiration" (Rigshospitalet)	"Permanent housing is the ultimate outcome that we aim for" (Lewisham)	"The last step before regulation meets the business users was simply not designed in an understandable way" (Branchekode)
Case				
1 BII	X		X	
2 FamByFam			X	
3 Lewisham	X	X	X	
4 Suffolk			X	
5 Camillagaarden	X		X	
6 Branchekode	X	X	X	X
7 Helsinki				
8 Tax	X	X	X	X
9 Rigshospitalet	X	X	X	
10 Stenhus			X	
11 iZone			X	
12 Holstebro	X			
13 Housing	X			
14 Skansebakken	X	X	X	
15 Competition			X	

A number of the managers have simply come across design support as an opportunity that they thought might help them generate a certain change. In some cases, the opportunity seemed almost coincidental. What is characteristic however is that the managers are inclined to reach out for the opportunity, in an almost entrepreneurial way.

Consider for instance the reaction of Head of Secretariat and Visitation in Holstebro Municipality Paula Sangill as she listens to a broadcast on Danish National Radio (DR), which describes how a new government program will provide design support to improve services. In the radio program she hears first the Minister of Business mention that there is funding available for service design, and then she hears a comment from the Dean of the Kolding Design School, a well-known public figure, politician and former Minister of Culture:

> *I hear her saying something about how they really liked to be seen as part of a community that not only produces chairs and coffee pots, but as an integrated part of service thinking. Then I thought, oh boy, what is this. I have always been very interested in services, wherever I am, I pay a lot of attention to what is happening around me.*

Sangill conveys the sense that she gets excited and curious at the opportunity. Very quickly hereafter she submits an application for government funding support for purchasing design consultants.

In another case the availability of external funding is also key. Here it is Christina Pawsø, a manager at Camillagaarden, an institutional work place for adult mentally handicapped. When consultants from Local Government Denmark (the national association of municipalities) tell her she can apply for funding for an "innovation program", she is immediately attracted:

> *I really put much attention to the fact that we could get a quarter of a million DKK to work with, and we could very well use that money. So it was a great motivation for me.*

Christina does not necessarily know what the program would entail or what it would demand from her, but she senses that she could put the resources to good use. This kind of opportunism is also at play at the Skansebakken institution, where Jesper Wiese, a center manager, was invited together with his co-manager to a workshop at Kolding School of Design to learn about design methodologies. By coincidence he was the one attending since his colleague was unavailable. Jesper Wiese had no prior knowledge of what it would entail, but says, "…but it has also to do with taking the chance."

To some, the legitimacy and connection with the funding body is also important; for instance, in the Lewisham case, the Chief Executive of the borough was also on the Board of the UK Design Council, and thus played a key role in bringing the *Public Services by Design* program to his organization. In the Skansebakken project, which was carried out by the Kolding School of Design, legitimacy was added by the endorsement of the Dean of the school (who, as mentioned above, was generally active in promoting design in public services), and later by the Mayor of Vejle municipality who attended the first kick-off workshop of the project. This legitimacy perhaps also contributed to provide the funding, as the School obtained some of the project resources from the national Agency for Social Services (part of the Ministry of Social Affairs) as well as from Vejle municipality.

There seems to be no doubt that the availability of funds or immediate resources for design work is an additional factor motivating public managers to take the step to engage with design. As a way to lower the transaction cost for trying something different in terms of management advisory services, such design promotion programs seem in many cases to have been important catalysts in the cases studied.

5.1.4 Reflection: Do the personal characteristics of managers matter?

In an earlier chapter, I discussed whether public managers who engage with design could be characterized as "design thinkers" or as having a particular "design attitude". While this is a dimension that will be explored further throughout the following chapters, the issue of what motivates public managers to engage with designers does move the question to the forefront: Is there something particular about these managers' backgrounds, personal motivation and even their psychological setup that might differentiate them? Is there somehow a self-selection, or

bias, involved, which implies that these managers are especially prone to wish to engage fruitfully with design approaches? If so, it would be sensible to reflect on it up front.

On analysing the interviews with managers, certain characteristics do seem to stand out. This does not tell us whether these managers are particularly "atypical" or "outliers" or, as the academic Sandford Borins has called public management innovators, "rule-breakers" and "loose cannons" (Borins 2000). But it does seem somewhat likely that they are not really at the center of the bell curve when it comes to appetite for change and development. These managers appear used to trying out new things. Consider some of the backgrounds of the managers involved in the study:

- One manager was originally trained as a TV repairperson, but put himself through business school and then applied and won a public management position
- Another got involved in sustainability issues as a UK policy maker and decided to stop driving a car herself but to run and bike to work places, then picked up half marathons; later she became head of development in a local council
- One is a trained psychiatrist who worked in a hospital context but realized that to truly help patients, municipalities needed to do a better job; so she changed position to work in the local government context, ultimately driving change towards stronger rehabilitation efforts in social care
- A development director works among mostly engineers in a city business development unit, but has a PhD in education and has worked extensively abroad; "when you have worked in Iraq you are not scared of a powerful city director".
- A center manager working with severely handicapped, who was trained first to work as a forest manager, later an educator, and who has held numerous other positions, working with a broad range of user groups, before becoming a manager in the particular institution.
- A manager with a business education decided to enter a teaching fellows program, worked as a math teacher, then joined a government innovation initiative and was asked to run a New York City transfer school.

This is not to say that there are not also a handful of managers with rather "classic" careers and

professional public sector backgrounds; one was a manager in the same position for 15 years in the same high school; another has worked at the tax agency for several decades. Whether these personal traits of public managers matter to how they engage, and lead, design is an open question. Asked directly, one manager says that coming into the organization from a different setting was significant: "I think I was able to see the challenges in a new way", and adds, "I think it is great fun. But I might have done that before and maybe I have actually done that all my life."

In her thesis on design and design management in the Australian Taxation Office, Nina Terrey (2013) suggests that it is more the contingent positions in relations to networks of human and material entities that define how public managers engage with design. Drawing on an actor-network approach, she eschews analysis of the individual; however, from my observations in the present thesis it seems to be worth-while keeping the individual characteristics or inclinations of managers open as a possible source of explanation. So-called *upper echelons theory* deals with such individual explanatory variables in relation to strategy and decision-making. This role of the public manager's personal background has for instance been studied by Esteve et. al (2012), who in a study of top executives in government suggest that the age, educational background and inclination for self-development influenced the degree to which managers engaged in inter-organizational collaboration. Especially the apparently high activity of continuing and professional development, as illustrated by the examples above, support this possibility, since as Esteve et. al. (2012:943) conclude, "Managers that get out of their offices and participate in organizational courses tend to collaborate more." Inter-organizational collaboration is not exactly the same as engagement with design or innovation, but since engagement with design approaches usually entails collaboration with external design teams, and additionally opens up for collaborations with other organizations, the issues seem likely to be related.

A final comment would be that there may well be a role of "the manager's manager" in catalyzing the opportunity for using design approaches. For instance, as the initial story about Carolyn Curtis in the Introduction illustrates, the significant space and time she was given to conduct the long and resource-intensive, exploratory process with families at risk was necessarily enabled by her top management. While this factor is interestingly not touched explicitly by very many of the respondents, it is probably a latent, underlying condition that is not unimportant. Where the managers studied are in mid-level management roles, the degree to

which they are enabled by an authorizing environment from the top to undertake new and innovative development initiatives is likely to matter.

5.2   **Towards a typology of design approaches[29]**

We have now seen some of the rationales, motives and incentives for managers who choose to commission design work. But what are the particular types of contributions of design approaches to a development process, whether it is in high-level policy making or it concerns more specific re-shaping of public services? As I discussed in chapter 2, design is a discipline and practice undergoing significant changes both in the academic and operational sense; this makes it a difficult task to pinpoint the boundaries of design methods and processes (Moggridge, 2007: 648). Meanwhile, the potential significance of design is worth exploring. Bruno Latour has pointed out that "Every change in our conception of knowledge creation instruments must have huge effects on what we can expect from the state to envision and foresee" (2007:3). The question becomes what kind of "knowledge creation instrument" is design in a public sector context, and what are its effects?

As I have also discussed in the previous methodology chapter, when looking for design approaches applied in a public sector setting, some pragmatism has been warranted. The question then is: If I have been able to identify a range of instances where design has been an entry point, what are then the concrete methods and processes – what I in this thesis characterize as *design approaches* – that have been put into play?

Across the case sample I have mapped and identified the following key approaches, or activities, which are presented briefly here but discussed extensively in the three next chapters:

Field research (text or photo). Some form of ethnographically inspired research within the empirical context of design use is carried out in nearly all the cases. This could have the form of observation studies, participant observation, open-ended interviews etc.

Field research (audio or video). A variant of the above is the recording of field data not only by "static" means such as field notes, interview transcriptions or photography, but by audio

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[29] This section builds in part on Bason (2010; 2014b)

recordings (e.g. of interviews) or video film (e.g. of interactions between professional staff and users, or of particular use situations, or even video diaries administered by users themselves).

Visualization. Across many of the processes involved in design projects, a range of visual tools and representations are used. This could be everything from graphically designed field research tools (prompt cards, photo cards, tools for self-documentation, cultural probes, etc.) to visually mapping the "user journey" across a particular service, identifying multiple actors involved in service provision and the touch points (interactions) they have with citizens.

Ideation. Invariably, there are numerous forms of brainstorming activities focused on unleashing new creative ideas, especially in the project phases or activities related to forward-looking "solutions" and avenues for further development.

Concept development. In most projects, there is a set of activities in which ideas are selected, prioritized and categorised (for instance for expected impact or relevance), and then expanded to include a range of more nuanced and detailed dimensions which put "meat on the bone" in terms of the purpose, content, activities, actors, stakeholders and resources involved in the idea.

Prototyping. This entails taking a design concept further by – again – making it visual, tangible and thereby testable. This process often draws on specialist design skills such as sketching, building physical mock-ups, creating digital wireframes to simulate websites, storyboards to simulate flows of new processes, etc.

User testing. Bringing prototypes into play, end-users and staff are in many cases engaged in trying out, discussing, testing the ideas in their raw and still unfinished form. User testing can take place in the actual context where users encounter a service, or in more simulated environments such as workshops.

Business cases and evaluation. Finally, many, although not all, of the cases studied include some form of built-in or ex post process for establishing business cases and/or evaluating the success of the effort, often drawing on economic or quantitative assessments as well as more traditional public management methods in the fields of "evidence-based policy" and evaluation research. This cannot as such be characterized as design approaches, but seems relevant to

include in the scope of study since I will draw on some of the findings from this work in my analysis.

The following table provides an overview of the types of design-related methods and practices (clustered as approaches) applied in the cases included in the empirical research. The design approaches have been ascertained through the interviews with managers, and supplemented via research of secondary sources such as project descriptions and reports, websites, news articles, evaluation reports, etc. A full overview of these source types by case are found in the case log in the Appendix A of the thesis. As with any such categorization however, some choices and simplifications have been made, in order to give coherence and overview. Some categories could ostensibly be split into more subdivisions, or new ones added. The categorization is thus a pragmatic balancing of overview versus granularity.

Figure 13: Design approaches by case

APPROACHES	Field research (txt/photo)	Field research (A/V)	Visuali-zation	Ideation	Concept develop-ment	Prototyping	User testing	Business cases, evaluation
Case								
1 BII	X	X	X	X	X	X	X	
2 FamByFam	X	X	X	X	X	X	X	X
3 Lewisham	X	X	X	X	X	X	X	X
4 Suffolk	X		X	X	X	X	X	
5 Camillagaarden	X		X	X	X	X	X	
6 Branchekode	X	X	X	X	X	X	X	X
7 Helsinki	X		X	X	X	X	X	
8 Tax	X				X			
9 Rigshospitalet	X	X	X	X	X	X		X
10 Stenhus	X		X	X	X	X		
11 iZone		X	X	X	X	X	X	
12 Holstebro	X	X	X	X	X	X	X	X
13 Housing	X		X	X	X	X	X	X
14 Skansebakken	X	X	X	X	X	X	X	X
15 Competition	X	X	X	X	X		X	

The table also indicates to what extent there was significant employee involvement during and possibly after the design engagement, and whether or not business cases or evaluation research was conducted.

This overview essentially provides a *smorgasbord* of design methodologies, including approaches, which some professional designers may not immediately identify with, because they are associated with the more recent transformations in the field (Sanders & Stappers 2008; Bason 2010; Kimbell 2010; Cooper et. al. 2011; Michlewski 2015). The following chapters will, in each of their introductory sections, provide a more detailed account of the key methodologies that are brought into play.

5.3   **Three design dimensions**

We now have a rough sense of the design approaches that have been identified in the research context of this thesis. We have seen that some might claim that design knows no boundaries and also that one can list a rather long range of methods, or approaches. But the individual approaches do not provide a particularly clear overview of what design implies in the context of public sector change processes. What is the direction provided by the design approaches, what is their significance?

In a public sector context, how might one place some kind of boundaries or frame around the application of design? One way to view the role of design methodologies is in a somewhat sequential perspective: Ranging from efforts to understand the nature of problems, to "tinkering" and exploring the world of possible responses, and to the decisions and articulations leading to the organizational adoption of one or more new solutions (Boyer et. al. 2011; Bason 2014). There are plenty, perhaps an overwhelming number, of design process models around, which suggest particular stages or elements of the design process. Many are inspired by the global design consultancy IDEO's "human-centered design" model, or by variants of the "double diamond" model developed by the UK Design Council (IDEO 2016; Nesta 2016; Design Council 2017), just as there is a growing body of literature on service design and design thinking which suggests particular models (Meroni & Sangiorgi 2011; Polaine et. al. 2013; Body & Terrey 2014; Siodmok 2014; Lövlie et. al 2016).

Below I suggest a way to structure the range of methodologies and approaches, which I have found empirically across the cases. This structure, which consists of three dimensions, is in part developed conceptually, based on the nature of design as discussed in chapter 1, and in part it is

developed to encapsulate the distinct practices found in my research.[30] As such, the structure draws and reflects on the broad categorizations of design approaches one might find in the literature, while being sensitive to whether it meaningfully summarizes the practices I have found. The three dimensions are used to organize the subsequent chapters on management engagements with design practice.

5.3.1 Exploring public problems

First, the cases display a distinctive set of approaches, which are mainly related to the dimension of *exploring public problems*. Here, design provides an array of concrete research tools, ranging from ethnographic, qualitative, user-centered research, to visualising user experience, user journeys. In the collaborative, human-centered design approaches studied in this thesis, it seems that these qualitative research tools play an important role in this dimension of the design process. The focus of the research on enabling empathy with end-users' experience with public services seems to be key here.

5.3.2 Generating alternative scenarios

Second, the emergent and more collaborative aspects of design suggest that options for decision-making are co-designed through an interplay between public managers at different levels of the governance system, interest and lobby groups, external experts and, end-users such as citizens or business representatives themselves. In the cases studied, various forms of joint ideation take place in order to suggest alternative scenarios, or directions for the design project. Graphic facilitation and the use of tangible models, prompt cards, design games and other visual tools for service and use scenarios are used as means for enabling cross-cutting dialogue. The design approaches deployed here aim at stimulating joint idea-generation, supporting mutual understanding, and contributing to collective ownership of potential new ideas and concepts.

5.3.3 Enacting new practices

Third, the cases encompass methods and approaches -- including concepts, identities, graphics, products, service templates, system maps – that appear to help give direction, form and shape to policies and services in practice. For instance, professional design skills are used to create the

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[30] A roughly similar structure was proposed in *Design for Policy* (Bason 2014), which was published during the research phase of this thesis.

tangible artifacts, or "design outputs" that people can engage with physically and emotionally. The ability to create deliberate user experiences and to make visual expressions, services and products desirable and attractive is in this sense at the heart of design practice. Beyond the most visual results are, of course, also the questions of whether design approaches help bring about wider changes in systems, e.g. in governance, which facilitate particular kids of behaviors and outcomes – something I will return to in chapters 10 and 11. One might call this *enacting new practices* (Winhall & Maschi 2014).

My research indicates that in practice, these three dimensions are not necessarily sequential at all, but are intertwined in a complex interplay which mixes different methods across time scales, and where there is an on-going conversation between design research (ethnography, field work), developing ideas and concepts for policies and services, and the articulation of those ideas in tangible and implementable ways which engage the wider organization. As Halse et. al. (2010:38) reminds us, "…it is reminiscent of a rationalistic distinction between knowing and doing to seek this closure of the existing before the imagination of new opportunities is encouraged". Instead, "knowing" and "doing" is in practice intimately intertwined in complex connections between understanding and intervention, as a form of reflection in action (Schön 1983, Halse et. al. 2010, Michlewski 2015)

The table below illustrates this mapping of design approaches across the three overall dimensions. In line with Halse's argument, it is important to underline that the individual design approaches do not necessarily fit neatly in the three overall dimensions. For instance, prototypes and testing are approaches which are not only apparently useful for generating new policy or service options for decision-makers, they are also partly vehicles for providing a better understanding of the problem at hand; and partly they are vehicles which pave the way for subsequent implementation by key stakeholders. In other words, there is a very dynamic and intimate relationship between the approaches across the somewhat artificial sequence of design dimensions. For purposes of clarity and structure however it seems useful to organize the approaches and actions accordingly.

Figure 14: Mapping design dimensions and approaches

DESIGN DIMENSIONS	Exploring the problem space		Generating alternative scenarios			Enacting new practices		
Design approaches	Field research	Visualization of current situation	Visualization of possible futures	Ideation	Concept dev.	Prototyping	User testing	Business cases, evaluation

The second research question in this thesis, which will be addressed in the following chapters, concerns how public managers engage with the types of activities related to design approaches. In other words, what is the interplay between the managers' more established approaches to problem solving, and the methods and tools associated with the three dimensions of design identified above: Exploring public problems, generating alternative scenarios, and enacting new practices? My second research question is formulated as follows:

> *Design as change catalyst:* How do design approaches, if at all, influence how public managers relate to problems and to opportunities for innovation?

One might ask whether managers themselves display a design attitude as discussed by Boland & Collopy (2004) and Michlewski (2008, 2014). However, it is too early to know whether managers really approach policy and public service problems as designers would approach a design challenge. In line with my methodological approach, I simply start out with a curiosity as to how managers engage with design, and whether there are some common patterns in that engagement across the processes I have studied.

In this study of managers, it is important to note that some management behavior, which might be termed "designerly," has perhaps not always much to do with the managers' experience of design methods. Rather, these are managers who simply are always searching for ways of enacting change. There might therefore be some selection bias in terms of which kind of managers choose to engage with design in the first place, as also discussed above.

My empirical research, which will be analyzed in-depth in the following chapters, has revealed six distinctive but closely interrelated patterns in how public managers engage with design practice. These patterns are mainly derived, bottom-up, through my encounter with the data relating to public managers' experience with design. Based on this data, I have worked to synthesise and simplify the patterns found into distinct categories that are essentially theoretical building blocks. By presenting the structure here, I recognize that I am foreshadowing the analysis to come in the next chapters. However, just as with the three design dimensions, the

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[31] This section builds in part on Bason (2014a)

purpose is to use these emergent, or synthesized themes, to organize the thesis analysis.[32] The patterns, or dimensions of design engagements, are shown in the figure below:

Figure 15: Dimensions of management engagement with design

These patterns are tentatively described as *themes* or *dimensions*, not as causalities: In other words, it is not necessarily so that a particular dimension of design approaches (say, "exploring the problem space") prompts a certain reaction by managers (say, the management engagement of "challenging assumptions"). It is also not the case that the themes present a particular linearity, although I have chosen to describe and analyze them in a flow from left to right in the figure above. However, my claim is that there seems to be a particular dialogue, or interaction, taking place between the manager as an agent within the organization, and the design approaches as they unfold in his/her immediate organizational context (Bason, 2012). The question, ultimately, becomes whether design processes trigger certain sensibilities and perhaps

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[32] It can be noted that I use a similar approach in chapter 10 when I suggest a set of princip for an emerging governance model.

strengthen latent inclinations for the manager? Do design approaches open up certain opportunities for leading change – perhaps with implications for the wider organization – which might not otherwise have been available?

My research does indicate that there are some relatively similar ways in which the sampled public managers address the challenges and opportunities they face. Although, as the earlier section on commissioning design indicated, they have different vantage points, and are situated in very different national, cultural and organizational contexts, it is striking how they use quite similar language and terms in describing their approaches to innovation and change, as they engage with design practice. I have characterized these ways as "management engagements with design", or simply "design engagements".

The connections between specific design methods, the three dimensions of design, and types of design engagements are shown in the figure below:

Figure 16: Management engagements, design dimensions, and design approaches

MANAGEMENT ENGAGEMENTS	#1 Questioning assumptions #2 Leveraging empathy		#3 Stewarding divergence #4 Navigating discomfort			#5 Making the future tangible #6 Insisting on public value		
Design dimensions	**Exploring the problem space**		**Generating alternative scenarios**			**Enacting new practices**		
Approaches	Field research	Visualization of the current situation	Visualization of possible futures	Ideation	Concept dev.	Prototyping	User testing	Business cases, evaluation

The table shows how different types of management engagements relate to the three overall dimensions of design, which I described above – and in turn how they connect back to the approaches and methodologies applied.

5.5   **Conclusion: Mapping design dimensions and engagement**

This chapter has analyzed the motivations for managers in looking to design approaches, and presented the overall structure of the analysis that makes up most of Part II of the thesis. In mapping the use of design approaches across three dimensions, it has contributed to answering

research sub-question 1.The next three chapters will explore in detail how each of these three design dimensions relate to the six management engagements. Each chapter first presents and analyzes my empirical findings and insights with regard to management engagements with design, before turning to a theoretically informed discussion of the implications

6. Exploring the problem space

The first step in any problem-solving episode is representing the problem, and to a large extent, that representation has the solution hidden inside it.

Richard Boland & Fred Collopy, *Managing as Designing* (2004:9)

This chapter takes its departure in the role of design in enabling an exploration of the problem space.[33] I analyze the propensity of the public managers studied to ask questions about the nature of the problems and opportunities they are facing. Further, I examine how they relate to, or represent, the people and other actors they wish to impact.

First, this chapter considers how managers, through various types of interplay with the design approaches, reflect about the challenges they are facing, and the types of questions they ask themselves and their staff. This I call *questioning assumptions*. Based on the data collected, I consider two central themes: How do these managers from the outset – sometimes before they choose to engage with design – think about the problem they are confronting? Further, as they begin to collaborate with designers, how does their experience with design approaches influence their thinking?

Second, I undertake a discussion of the theoretical and methodological implications of the empirical findings concerning the theme of questioning assumptions.

Third, I analyze the extent to which the managers draw actively on the design research, typically field work among end-users (citizens) or alternatively among staff at the "front-stage" interaction level, to *leverage empathy*. Again, I build the analysis from the patterns emerging from the empirical material I have collected. What is the role of design practices, including highly qualitative "empathic" data, as well as visualization tools? How do the design approaches

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[33] This chapter draws in part on Bason (2013b; 2014a).

bring citizens' experiences into play, and how do managers consciously and strategically use this knowledge to start to facilitate organizational change? In this analysis, I consider the interplay between the exploration of user interactions on the one hand, and the ensuing challenging of pre-existing assumptions across the wider organization on the other hand.

Fourth, I interpret and discuss the findings concerning management engagements by drawing on theoretical perspectives from design and governance research respectively. This leads to an analysis of the kinds of activities associated with design approaches in the public sector focusing on problem exploration.

I conclude, fifth, by briefly summing up this empirically grounded account of how design is applied, across the cases studied, as a set of distinct methodologies and tools for exploring the problems faced by public managers and their organizations.

6.1   **Engagement #1 Questioning assumptions**

Among the public managers interviewed, there seems to be a pattern that they in various ways question the assumptions on which they base their decisions. This manifests itself in a range of different ways, but part of it concerns what might be called the managers' ability to confront their understanding of the problem space. By understanding the problem space, I refer to the process of exploring the characteristics, dynamics, and boundaries of the problem at hand; and making those dimensions explicit: "Formulating the mess." (Ackoff et. al. 2006:44).[34]

It appears in the research that some managers engage with the problems in ways not directly related to the use of design methods. Rather, they seem to have an inclination to challenge their own assumptions, which also prompts them to be open and curious to what design might have to offer; they see the option of working with designers as an opportunity to create change, even if they do not know exactly what this might entail. Subsequently the design research (fieldwork, visualization) lends itself to generating new questions and thus further enhances the managers' ability to question their assumptions.

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[34] When using the term *problem space*, it should be mentioned that I do not refer more narrowly to the term used in cognitive psychology as the mental representation of a problem, but somewhat more broadly as Boland & Collopy (2004) expand the term as an important concept in design.

I will consider these two perspectives – first, the *a priori* questioning of assumptions, and second the generation of new questioning through the insights generated by design research – in the following.

6.1.1   *A priori questioning: Managers' propensity to challenge their own assumptions*

Even before the prospect of leveraging design approaches enters the picture, some public managers appear to have a pre-existing inclination to be reflective, curious and critical of what they already know (or *think* they already know) about the problem they are facing. This issue is thus related to the discussion in the previous chapter of the personal traits, or make-up, of these managers. In choosing to apply design methods in their organization, are they already displaying a particular attitude towards problem solving? Are they already inclined to be open to a process of inquiry and discovery?

To better define this notion of "questioning assumptions', I will examine a couple of ways in which the managers in my study appear to do this, even before they encounter design approaches in practice, starting with Mette Kynemund, Vice Chancellor at Stenhus Community College in Denmark:

> *[A few years ago], our schedule planner and I could see that there is something in the way students choose subjects on the General Study Preparation, which is inconsistent with the goal. So, either we have completely misinterpreted what is happening, or there is something wrong with the target.*

Mette Kynemund considers two very different perspectives on the problem space: The first is the student's concrete behavior in choosing subject combinations (such as math and history). Here, she wonders if she and her colleagues really understand what is driving the choices the students make, and how this "wrong" behavior has come about. The second perspective is the policy goal or target for the General Study Preparation course, which is set by the Danish Ministry of Education. Her curiosity starts with discovering user (i.e. student) behavior that is inconsistent with what is expected and desired. This in turn prompts her to ask new questions about what "really" is going on, and about the objective of the public provision – in this case a program which is designed to prepare upper secondary school children for advanced study. By

asking these questions, Kynemund essentially opens up the problem space for further exploration.

A similar theme arises in the case of Holstebro, the meals on wheels project, which focused on redesigning food services for ageing citizens. In a meeting, Head of Secretariat and Visitation, Poula Sangill, presented the service design project to her staff of mid-level managers. They responded by complaining about how little time was allocated for food services (nominally 10 minutes). Sangill challenges her staff by asking what kinds of service interactions could take place within that time span. The staff explains that in the time allocated, they typically must assist the citizen with using the bathroom, and simultaneously prepare the food. Insisting that they need to focus on end user experience, Sangill initiates a role-play to understand, and challenge, the detailed processes that staff members go through to serve citizens. She plays the role of a staff member, pretends to walk in the door to meet an imaginary "Ms Sorensen", and proceeds to challenge assumptions by asking whether the specific interactions could not be ever so slightly redesigned so that the citizen has a better service experience. Sangill keeps insisting that staff members revisit their assumptions about the service they are shaping: "Do we speak about how we want citizens to experience our work? (…) Are we concerned with what they say to their loved ones when they call them after the meal?" These are the rhetorical questions she poses. As she challenges her staff's assumptions about what is possible, she also challenges her own. One might say that this personal enactment of concrete practices is a display of sensitivity, and also an ambition, about the design of the service for which Ms Sangill is ultimately responsible.

Another example is Mette Rosendal Darmer, Head Nurse at the Danish National Hospital's heart clinic, who initiated a design project to create more meaningful patient experiences. In her approach to managing her own assumptions, she uses measurement: "[I also make it a priority] to measure all the time, because you are deceived by your own preconceptions of what people think works, if you do not measure." In this quote, Mette Rosendal Darmer reflects on how she can use systematic measurement of performance as a way to continuously challenge her own preconceptions.

Consider also how Anne Lind, Director General of a mid-sized state agency, the Board of Industrial Injuries (BII) in Denmark, reflects on the mission of her organization. She notes that

some years ago the agency was moved from the auspices of the Ministry of Social Affairs to the Ministry of Employment, as part of a wider change in Danish labour market policy. She notes, "Something didn't fit. Because the idea of that reform was to engage people a lot more in terms of their work potential. But in the work injury system, we just threw insurance settlements at people." In part, her subsequent interest in the design project was to explore and deal with this mismatch, as she saw it, between the intent of the reform and her agency's practices.

The examples above all address the propensity to challenge and (re)frame the problem as it is understood by the public manager: The Vice Chancellor is prepared to embrace some troubling questions about the current performance of the General Study Preparation course. The Head Nurse uses measurement to cut through her own preconceptions. The Director reflects on the mismatch, the incongruity, between the purpose of the labour market reform and how her agency works.

The key point here is that none of these examples seem to relate particularly to the commissioning and use of design approaches. They took place before these managers brought design approaches into play. However, this propensity to challenge their own assumptions may be part of the reason why the managers, when given the opportunity, looked to design.

However, something more and different appears to happen when design research is carried out. It appears that the managers' ability to challenge their own assumptions, and thus their possibilities for developing a different understanding of the problem space, is influenced in different ways by design research. I will take a closer look at this in the following.

6.1.2   The eye-opener: Challenging assumptions through design research

Let me return to Anne Lind, who was until the end of 2012 the Director General of the Board of Industrial Injuries (BII) in Denmark. As mentioned earlier in this chapter, the BII undertook a range of design research and co-design activities. One of the key insights, emerging from video films with end-users, was that the injured citizens felt confused and burdened by the virtual barrage of information letters they received concerning their case process – an average of 23 physical letters per case. In one interview, a citizen expresses that one has to be healthy to be able to manage having an industrial injury case. Anne Lind, the Director General, explains how

she had the sense that something in her organization needed to change, although she could not be precise about what it was:

> *It is an eye opener ... it is more concrete. [The design process] has made me aware that there are some things we have to look at. ... So far we have been describing a service to citizens, not giving them one.*

Anne Lind – who as we saw earlier was prepared to challenge her own assumptions – starts reflecting on what this insight could mean to her organization:

> *What has happened throughout the years is that we have had lots of user satisfaction surveys, lots of dialogue meetings with users, with our stakeholders. When we have conducted a user survey we have made a nice action plan to follow up and what then happens is that as the requests of users become more and more detailed, the system becomes more complex. What happened both in terms of the wishes the users and stakeholders was that we piled information onto users. We thought that was good, because then they could follow their case. But fortunately, we are wiser now.*

Under Anne Lind's leadership, a range of seminars and conferences were held where various insights and results from the design projects were shared internally amongst staff and externally amongst stakeholders such as local government, trade unions, insurance firms, health care organizations, etc. The purpose was to understand the significance of the user insights, and begin to leverage them to create more system-wide change. How that change could unfold is something I will explore further later in this chapter.

Figure 17: User journey mapping of an industrial injury process from a Citizen perspective
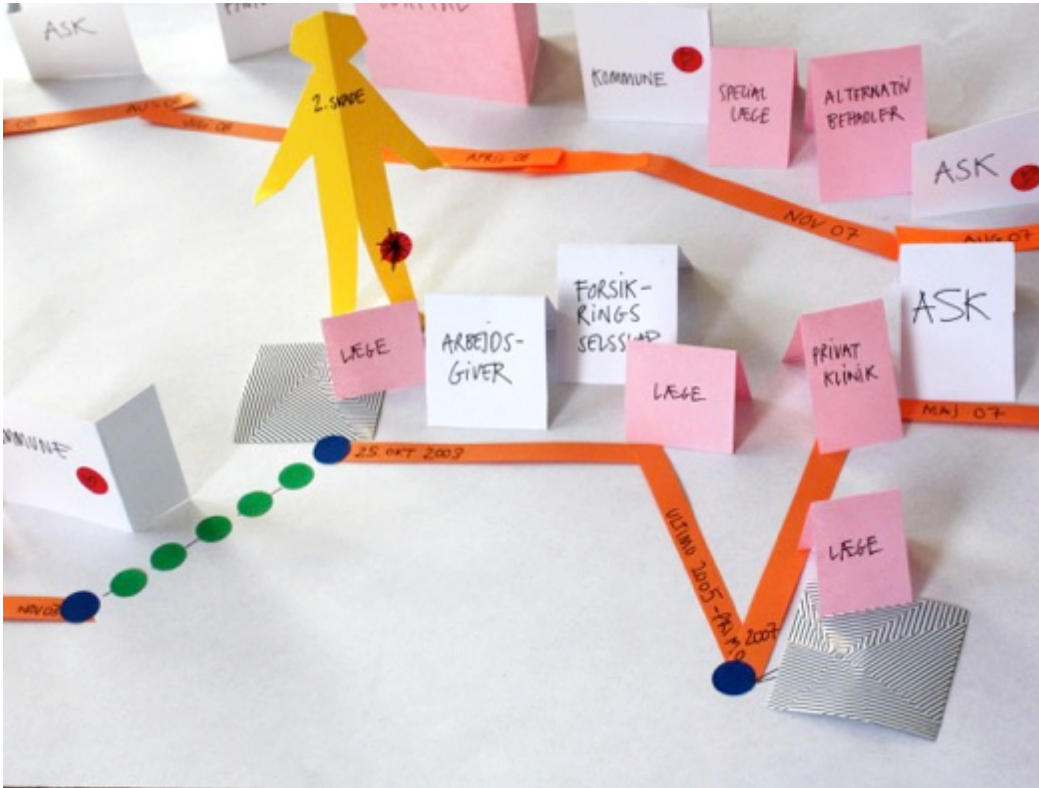
Source: MindLab

In the UK, Development Director Peter Gadsdon managed a design project in the Homelessness Services Division of Lewisham Borough in Greater London. The project was supported by funding from the Business, Industry and Skills Department (BIS) and the UK Design Council and with concrete methodologies delivered by the design consultancy ThinkPublic. Staff in Homelessness Services were trained by the designers in basic video filming, and then asked to record their colleague's interactions with citizens applying for housing. Peter Gadsdon was responsible for bringing the design team in to work with homelessness services. Reflecting on the process where staff filmed video of their interactions with homeless users, Gadsdon says:

> *… it is so powerful, you know. If you were showing it on the screen and listening to the single parent talking about their situation – and it could be violent. When you are watching that, it is quite an emotional journey. It makes it personal, does it*

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not. And so it is really good to get people's minds open to change. So, you know, using visuals is very powerful.

Gadsdon recognizes how the tools employed by the design team have a different kind of impact on staff than other typical management and change approaches.

Another case is the Family by Family program in Australia, with which I opened this thesis. Carolyn Curtis, the public manager in family services in Adelaide, conveys the process of involving end-users (at-risk families) in the design-led innovation project. As part of the process, working closely with a designer and a sociologist, Carolyn spent extended periods of time with families in their homes, at barbeques, in fast-food restaurants, interviewing them, speaking with them, observing their lives and daily practices. To her, the project "[...] helped me experience how these citizens themselves experience their lives, and has allowed me to see the barriers. I have had to suspend my professional judgment." In this case Carolyn indicates that it was the "deep dive" into citizens' (families) experience through ethnographic research, which seems to allow her to shift her professional knowledge and experience to the background, and to suspend judgment.

Mette Rosendal Darmer, the Head Nurse at Rigshospitalet, reflects on the implications of the observation and documentation of how patients experienced her ward's services: "Well, it meant that there were scratches in the paint all over our own cool picture – our self-image that we are so good".

This reflection is probably difficult to understate in terms of importance; as the self-image of the professional staff in the country's foremost heart clinic is challenged, what kinds of changes might this lead to?

Andrew Eickmann, the public manager overseeing a design project to improve New York City's Housing and Preservation Departments' service to citizens, says that compared to previous development work, "the designer focusing on the experience and perspective of the end-user, of everyday people", was significantly different. One example: as part of the project, the website used by the marketing division, called NYC Housing Connect, was evaluated from a design perspective. One of the "design fellows' carrying out the project provided a new perspective on

the concrete functioning of the portal by allowing Eickmann to watch how people used the service, screen by screen. According to Eickmann this process was "… very powerful, as it gave arguments for changes that otherwise would not have happened.".

In Helsinki, the city administration commissioned designers to develop visual mapping of the local businesses "service' journey for obtaining a city permit. As it turned out, they needed to register anywhere between 10-14 different places within the city administration in order to be granted a permit for outdoor events. Marja-Leena Vaittinen explains the impression:

> It was our responsibility and it was our processes and we believed we were customer oriented. But if you see the whole customer journey you can open your eyes and look: Ow! So many [touchpoints].... So the customer journey as a concept is a very eye opening approach in a cross sectional public service context.

It almost seems as if the insight about the painful business registration process physically hurt Vaittinen, and possibly her colleagues.

Sune Knudsen, a Head of Division in Denmark's Business Agency, led the development of a new digital registration tool for new businesses, titled "Branchekode.dk". Here he describes the significance, in terms of challenging assumptions, of one particular ethnographic interview (with a business owner) like this:

> There was this amazing, "golden' interview that really put it bluntly, that we have a problem here. This entrepreneur had to choose an industry code, which is, we must remember, a tiny little procedure that we expect to be done very quickly … but for this person, something which should not take longer than, say, 10 minutes, ended up taking the entire day. He was so unsure of which code to choose that he had taken his car and driven around to three different authorities to try to get an answer. This gap between our assumption about how long it should take to register the code, and the reality of this particular case, just made us all sit and think: Well, if we had any doubts before of what the trouble is, we don't anymore.

An important point concerning the role of representing the problem is that, as this manager points out, the design methodology appears to trigger an on-going dialogue between insight into problem space versus tentative ideas about possible new answers or solutions: "It was such a holistic design process, where you also thought of solutions while you were uncovering the problem", says Sune Knudsen. To exemplify, a key insight was that the written information provided to businesses – including online information – did not make sense to them. Here, the connection from this insight to new solutions and ultimately, the production of value, is rather straightforward as stated by Knudsen here:

> *Some of that which generates the complaints is that they simply do not understand what is on public websites. They do not understand the letters they receive. The letters come at the wrong time. So, it is not synchronized with the businesses' daily practice. And if we succeed with [this project], thus creating something that is understandable and synchronized with the day-to-day operations, the daily practice, I am pretty sure we will achieve a greater user satisfaction.*

Avenues for solutions, including "understandable the letters' and "synchronization with business' daily practices' hereby become opportunities for influencing business owners' behavior (thereby enhancing compliance outcomes and reducing error) and increasing satisfaction.

A final perspective on the issue of challenging assumptions is that in some cases, the designers do not just let the empirical, "empathic' material speak for itself. They actively interpret and communicate to the managers and staff what they make of the findings. The design team, in other words, seeks to challenge the managers' assumptions. This role is a reflection of the design attitude, to quote Michlewski (2015:104), to "…challenge and subvert the status quo". Managers, thereby, have to deal with being challenged, sometimes explicity, by the designers about implications of the research. This puts them on the spot, in a sense, as stewards of the current situation, but also as dialogue partners and explorers of a possible future state. As Jesper Wiese, the manager at Skansebakken, says, this is a difficult balance to strike:

> *...it is a balancing act between, on the one hand, to be challenged, but also to stand against it and say "Well it might be you see it that way, but we do not think it should be that way'. I think that is a challenge that we must learn to deal with.*

Engaging with design as a catalyst of challenging assumptions thereby also becomes a learning journey, and a question of difficult choices on behalf of the manager.

6.2 **Discussion: Exploring new avenues for change**

Rita Gunther McGrath has suggested that the first step in a process of innovation is to build mechanisms that cause you to re-examine your assumptions (Cliffe 2011). The research tools employed by designers – in particular ethnographically inspired field work and visualization of user journeys and touchpoints – are intended to help generate *insights* which in turn may challenge current perceptions of user needs, organizational effectiveness, which users and stakeholders should be prioritized, and so forth. What emerges from the empirical findings above seems to support this view, that the design approaches associated with problem exploration leads to various forms of insight, literally *seeing* the world in a new light. As Mette Rosendal Darmer of Rigshospitalet reflects, "It is like your bathroom tiles which are crooked and you will never get jointed, because you have stopped seeing them." Design research, in essence, casts fresh light on those crooked tiles.

In particular, the design methodologies seem to lead to new or revised understandings of citizens and how they experience their interactions with public service systems. The ensuing shifts in assumptions become ways of initiating new avenues for change, sparking emerging ideas on the side of the manager.

However, there is more than insight in play when design research unfolds. Managers do not only gain new knowledge. Rather, it seems that revisiting of assumptions and empathy with citizen experience function as *prompts* for the managers. It is almost as if there, deeply embedded within the eye-opening insights arrived at through user research, lie kernels suggestive of possible futures. Almost immediately, as the frustrations and sometimes humiliations of citizens come to the fore through narratives, stories, and visualizations, managers begin to consider what to do about it. What might be actions, interventions, services, regulations that could ameliorate

the situation? What could be different ways (perhaps *very* different ways) of governing the service provision? Perhaps the exact solution is still far off, but there is already, within these insights borne of questioning assumptions, a beginning, an early receptiveness to *what the solution should address.* An avenue, or perhaps several avenues, towards change are opened up. Some might call this the beginning of "insight-led innovation". For instance, in the Helsinki city case, Marja-Leena Vaittinen explains that as the user insights were driven home, this energized the staff to take on the challenges of beginning to redesign the service processes:

> *...If we here understand the customer situation and we really want to improve our services it's our duty to do so. There are obstacles – there are practical obstacles here in the city administration – but we can overcome them. It needs discussions and decision-making, but it's possible. You just have to try.*

Ideas about how to "try' begin to flow simultaneously as the problem is represented.

The design engagement of *questioning assumptions*, seen this way, reflects Boland & Collopy's point that "the first step in any problem solving episode is representing the problem, and to a large extent, that representation has the solution hidden within it." (2004:9). In using the term "episode,' they may implicitly be referring to Peter Rowe (1987), who likens the solving of design problems to a process unfolding in "skirmishes' or "episodes". Rowe points out that the problem, as perceived by the designer, "tends to fluctuate from being rather nebulous to being more specific and well defined" (1987:35). The key here is that through the design research, episodes happen in which new insight arises and assumptions are challenged. The problem (or opportunity) at hand becomes represented in new ways. For instance, we saw that the "golden" interview with a business owner who spent vastly more time on registering a new business than the agency had expected led to a shift in problem representation, as understood by Sune Knudsen, from "It is not an optimal process to register a new business", to "It can take vastly longer to register a new business than intended, and that is because the business owner is really worried that he will register the wrong statistical code". Kees Dorst, the Dutch design professor, has argued that the essence of designing is such *reframing* whereby both the key elements and the means of a solution are opened up and lead to significantly different ways of achieving an intended outcome (Dorst 2015).

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Polaine, Lövlie and Reason (2013:44) underline that "understanding people and their daily lives and needs provides the central insights on which many design projects are built". They suggest that insights generated in the context of design research can be found at three levels: "Low", which basically means capturing what people say about a service or about their needs; "Middle", focusing on what is visible, including data (images, sketches etc.) from observation studies; and "High", building on several iterations of field work, visualization and analysis, contributing to driving a strategic understanding of what the research findings imply for the organization and its stakeholders. In this sense, "design is emergent, the solution and the problem developing concurrently" (Michlewski 2015:36).

6.3   **Engagement #2 Leveraging empathy**

A closely related engagement with design has to do with the notion that ultimately, public services are not valuable in their own right, but only if they serve to make a positive difference for citizens and other users. Various values and perspectives are at stake here: Attitudes towards the role of government and the nature of the relationship with citizens, and the notion of "empathy" with citizens' experience. Several of the examples discussed in the previous section contain such elements, such as when Ms Curtis says she experiences how citizens experience their own lives, or when Mr Knudsen refers to a "golden" moment when his team really understood what was at stake for entrepreneurs engaging with the agency's services.

Sometimes this stance has been articulated as taking an "outside-in' perspective on the organization. Boland & Collopy write that this is concerns the fundamental question of "what are we trying to do?" (2004:7). Underlying much design research is the idea that the systematic generation of empathy with end-users will help bring about not only insight, but curiosity and a desire for change among managers and staff. In a volume written by design and innovation practitioners focusing on the intersection between design and empathy, the authors suggest that:

> *The most basic tool in any people-centered innovation process is our congenial curiosity (...) the most important tools we have are the questions we carefully and humbly articulate and ask, what we learn from the answers, and the new questions that emerge on the go.* (Wildewuur et. al., 2013: 190)

Across the cases, two processes or dimensions seem to matter in terms of the generation of empathy, which in turn can be utilised by managers to initiate change. The first, which was discussed in the previous section, is the ability of design research to be an "eye-opener" that facilitates the challenging of assumptions about the problem space. The second, which I will consider in the following, is the strategic use by managers of design research insights to set in motion processes of organizational change. In other words, the leveraging of data about citizen experiences, behaviors, and outcomes to engage staff to begin to change *their* behavior.

6.3.1 Citizen-first perspective

In order to understand how public managers work actively to leverage the empathy and eye-openers from design research to generate change, it seems important to note that the managers tend to place a higher priority on citizen's experiences, and *outcomes for citizens* than on staff satisfaction.

Christina Pawsø who was the Manager of Camillagaarden, a workplace for mentally handicapped adults in the city of Odense in Denmark, provides an example of this. She engaged with consultants from Local Government Denmark, an interest organization, and with an experienced external design team, to develop her organization and re-think the relationship between staff and employees. The following quote illustrates how she thinks about outcomes:

> *[...] my job is primarily to give the users what they want because they have nowhere else to go. [...the staff] can find other jobs, but our users cannot. They have no other options. My greatest obligation is to them. Some of my staff obviously disagree and say, well, a leader is first and foremost leader of her staff. But I think in the public sector, we have two obligations as a leader, and sometimes you must find out what you put first.*

To Ms. Pawsø, when it comes to a choice, outcomes for citizens (such as thriving by having a meaningful daily experience) are more important than satisfaction among her staff. She goes on to clarify how focusing on outcomes means that input variables, such as money and staff, lose importance relative to the quality of the experience of citizen-users:

The focus is on experiences rather than services, and I think really it has been very clear that it is the [citizens'] experience it is all about.

Consider another example from Mette Kynemund, the Vice Chancellor who sought to improve the General Study Preparatory course in her school. As part of the design project she organized a workshop with a small task force of nine teachers, who were asked to analyze the results of a survey that had been conducted among all of the school's teaching staff. As a tool in the workshop, Kynemund used a graphical template that helped structure ideas and concepts across two dimensions: Value to the organization on one axis, and ease of implementation on the other. Commenting on the dialogue unfolding at this workshop she says:

...it was very obvious that the first priority in the group's response to the survey results was about the teachers themselves. The second priority was about the concept of professionalism – which really also is about the teachers. Only the third priority was about the students. [...] and then it appeared, fortunately I would almost say, that the teacher group said, well, we really do not know what the students think about this, we can only guess. So, every time the group discussed what the students would get out of the General Study Preparatory course, I would say, well, how do we know this?

Just like Pawsø, Kynemund draws attention to the experience of the end-users (students) and to how outcomes (in this case, learning) are ultimately shaped, or carried, by them. She addresses the problem that the group of teachers simply does not know well enough what is going on from the perspective of their users. The quote here also illustrates that there is an intimate link between focusing on end-users or outcomes, and to the ability to question assumptions. "How do we know this?" is a very powerful question. Interestingly, a similar search process, driven by that very question, was instigated by Poula Sangill in the Holstebro case I discussed above. In Poula Sangill's case she challenged her staff by almost forcing an enactment to find out what was assumed, and what was known.

This engagement with design that emerges from the interviews with public managers concerns their insistence to focus on empathy with end-users and outcomes of the services and policies for which they are responsible. One might also have called it an inherent "user centeredness' or

"citizen centeredness', but this perhaps misses the point slightly. Leveraging empathy and centring on outcomes calls our attention more precisely to the intended change in the world, which the managers wish to achieve. It addresses Boland and Collopy's point that design attitude concerns the desire to leave the world a better place than we found it (Boland and Collopy 2004:9), or Herbert Simon's definition of design as an activity focused on changing an existing situation into a preferred one.

Just like their *a priori* tendency to be prepared to challenge their own assumptions, the managers seem to be also, at a rather fundamental level, *a priori* attuned to concern themselves with their organization's impact and meaning for citizens. This implies that when design research then delivers "empathic data' into their hands, they are prepared to use it actively.

6.3.2   *Strategically leveraging empathy for staff engagement*

In the following I consider the leveraging of empathy as a sort of galvanizing tool, a change tool that managers use to set in motion processes of organizational innovation. In the design project carried out at the Danish national hospital, Rigshospitalet, substantial ethnographic work was carried out, including observation studies in the ward, interviews, and the production of edited audio recordings. The recordings were shared with a team of doctors, nurses and administrative staff to facilitate a process of improving the patient experience. Head nurse Mette Rosendal Darmer reflects as follows on the patient experience as she sees it:

> *We usually lift the patient's shirt to see if the electrode is properly fixed, if it works. So, we have no such boundaries as to what we do with patients. But, of course, the patients have boundaries. And then I had a sudden insight. I have thought a lot about how the patients leave their dignity outside the door, when they enter the hospital, to the point where they go to the public lunch buffet wearing their underpants. And we must say to them, in this place we wear a gown. But it is us who foster this kind of behavior, because we ourselves overstep their personal limits all the time.*

Here, Mette Rosendal Darmer highlights how the user research puts the spotlight on something her organization needs to do differently, and how she and her staff must be the initiator of

change. Part of the design process was thus to run workshops where the patient experiences were listened to by the staff, and where they had the opportunity to start developing new ideas for solutions. Considering how the use of patient's voices helped galvanize the staff to change behavior, Mette Rosendal Darmer reflects that:

> *We have to capture people's feelings, because it is their emotions that make the staff motivated to think they must do something different.*

This consideration, which is essentially strategic, is that she recognizes the need to engage her staff emotionally in the patient experience in order to initiate change. She describes her staff's reactions when listening to some rather critical patient statements -- about an extremely high noise level at night in the ward, or rude treatment by a doctor, or dirty bathrooms -- as "puzzlement" and "a little embarrassment". She explains that by listening to the patient's stories, the staff became so disturbed, but also ambitious, that they took a range of change initiatives themselves. The patient voices challenged their view of their own professionalism. Mette Rosendal Darmer explains that her management colleague, the Head Doctor with whom she co-manages the ward, was also challenged personally and as a leader. She describes how it "hurt" him to hear patients express their dissatisfaction with the service experience. The dilemma is that while patients are happy and relieved that they are treated extremely professionally from a purely medical-technical point of view, their subjective, personal, human experience is not very good. Says Mette Rosendal Darmer:

> *...patients are happy that we are very academically proficient at what we do, but they actually expect that we master the other [experiential] aspects as well.*

But Mette Rosendal Darmer goes further than more or less passively observing how staff is disturbed by the patient voices. She consciously orchestrates settings for the purpose of challenging the staff:

> *We decided not to do what we usually do. Usually we would tell the staff that we have these challenges, and here are the actions and milestones you must undertake. But we did not at all do that. I stood up in front of all doctors and nurses and secretaries and service workers, etc., I think there were 40 people*

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present, and I told them that the project they had heard about ... we would not tell
them how we should proceed further. They were briefly told this. What we wanted
was to disturb them.

Mette Rosendal Darmer then went on to play the challenging and uncomfortable sounds
recordings from interviews with patients. Here, Mette Rosendal Darmer is extremely strategic
about how she uses this empathy-creating data. She finds that already at this stage of insight and
engagement with patient's stories, change has started to take root in the department. For
instance, she shares the story of one of the staff, in a service function, who could not let go of
the impressions from experiencing what the patients experienced:

It had certainly started a reflection with her. Because now, she tells me that when
she goes with food trolley down there or is serving food, then she hears the
patient′s voice.

Below is an illustration from field research carried out in one of the study's cases at
Rigshospitalet. The photo was taken during the week-long observation study, combined with
interviewing of approximately 20 patients.

Figure 18: Field research in practice: Photo documentation in the Rigshospitalet case

Source: MindLab

As discussed earlier, in Lewisham the manager Peter Gadsdon oversaw a project where staff learned to video record each other's interactions with "customers" in homelessness services. The result was three films, edited with support from the designers, which illustrated how citizens experienced the service process. In a public commentary on the creation of the film, Sean Miller, the project's lead design facilitator, stated that the visual was hugely enlightening to both frontline staff and management. It demonstrated in particular that clients often wrongly remember or misinterpret what they've just been told in a meeting. In a piece published by the newspaper *The Guardian*, Miller said as follows (Guardian 2012):

> *You wouldn't find this out with traditional questionnaires. It's incredibly raw and real … It's the first time they'd received a form of insight that wasn't written,*

Figure 19: Field research in practice: Video filming citizen-staff interactions in Lewisham

Source: UK Design Council

Peter Gadsdon, the Development Director who worked with Miller and the design team, reflects on the power of this approach:

In a big area of policy impact, these things are quite useful, I think, for senior decision makers because they really get to see the real situations.

What Gadsdon seems to point to here, is that it was an eye-opener for the management team across Homelessness Services to view the recordings of how their staff in practice dealt with citizens. To Gadsdon, "seeing the real situations" was important because it made otherwise abstract management conversations about concepts like "service transformation" very concrete and tangible. Through a series of workshops, managers and staff could collaboratively interpret findings from the qualitative video material, and develop ideas about how they might improve the service. However, the process went beyond the notion of new ideas, to influence the view of the service and almost immediately the staff's behavior as they interacted with citizens:

It had a profound effect on them, because it changed their view of the service they were providing. If you had asked them before they had said they were doing a good job, and they were working hard, and there were satisfied customers. I think, if you asked them afterwards they probably would be reflecting differently ... So it was opening them up for changes, because you know, if they are the ones taking ownership, they will also in a different setting talk to people.

For Gadsdon, the issue of "ownership' through the deep engagement of staff appears to be quite critical for the achievement of change.

In New York's Housing and Preservation department, Andrew Eickmann, a strategy advisor, comments that what was really significant in the process (which explored the service experience of residents in the city's public housing) was "The designer focusing on the experience and perspective of end-users, of everyday people". Having worked with a range of classic management consultants, this was methodologically a very different approach to Eickmann.

A similar shift in perspective took place at the Skansebakken institution for mentally and physically handicapped users. Centre manager Jesper Wiese explains how the insight came that the role of staff is not only to have good relations with the users, it is to foster positive and

nurturing human relations between users and people (relatives, local citizens, school students, other visitors) from *outside* the institution:

> *Well there were some key employees who at one point said, "Oh, so if <u>we</u> are not the relationships, we need to <u>facilitate</u> them?' Others said, "Yes'. I had even thought about it, but I had not been able to express it.' This is something that happens when you are together. So, I thought – damn, this is it! This is what it is about! ... And then it set off an avalanche of events, because it happened among some of the educationists who have a voice in the matter.*

Wiese here describes that the ensuing "avalanche' of events – of a series of changes within the institution to foster new relationships between users and the outside world – was carried by key people, the educational staff, who were role models for the others. He thus saw his own role in supporting and strengthening the voices of these staff members, who had the ability to bring everyone else along on the journey. In the Skansebakken project, staff was involved in mapping user journeys. The illustration here is from a workshop with staff, managed by designers from the Kolding School of Design:

Figure 20: User journey development by staff at Skansebakken

Source: Skansebakken & Design School Kolding

We have now seen a relatively wide range of empirically grounded examples and stories of how public managers engage with the distinctive set of design approaches related to the process of *exploring public problems.* Underlying this work is Latour's argument (building on John Dewey) that the type of knowledge attained and used by governments matters to the kinds of decisions that can be made:

> *(…) there is nothing more complex, nothing more susceptible of mistakes, nothing in greater need of specific and constantly refreshed inquiries than to detect what, at any point, is the public's problem* (Latour 2007: 4)

Latour proposes that it is really an on-going endeavor to "detect" the character of the problem faced by the public and thus by the state. The ways in which we come to know public problems are critically important for the ways in which we might address them. John Dewey himself suggested that no matter how one sees it, the formation of the state must necessarily be an experimental process, "the Sate must always be rediscovered" (Dewey 1927:83). However, there could be two very different ways of going about such experimentation:

> *The trial process may go on with diverse degrees of blindness and accident, and at the cost of unregulated procedures of cut and try, of fumbling and groping, without insight into what men are after or clear knowledge of a good state even when it is achieved. Or it may proceed more intelligently, because guided by knowledge of the conditions, which must be fulfilled.* (Dewey 1927: 83)

As Dewey asserts that intelligently gaining knowledge in this discovery process – which could also be called a process of inquiry – we might ask: What is it, potentially, about the design approaches that seems to influence the ways in which public managers come to know and, in various ways, establish a new understanding of public problems? Let me discuss some of the particular approaches used across the cases before turning to a broader reflection on the findings presented above.

Halse et. al. (2010: 27) suggest that design research can be characterized as "exploratory inquiry", in that it is research without a hypothesis to be tested. This type of approach offers a break with traditional modes of research as it is often applied in the public sector, such as the use of statistical data or the conduct of statistically representative quantitative surveys among users of a particular public service. Instead, Halse et. al. argue that design research understood as a process of inquiry is both more and less than the typical data collection methodologies:

> *It is less, because it does not search for testable facts. It is more, because it aims for an understanding that is profoundly concerned with purpose and intent: why, for whom and for what is this understanding directed?* (2010:27)

What Halse et.al. point out here is that as designers conduct research that is concerned with observing and documenting the present, they are simultaneously exploring that which does not yet exist. Likewise Junginger (2014a) suggests that policymaking as designing would differ from "traditional' development of policies or public services by adding 1) the ability to inquire into *situations* and 2) to explore what makes them problematic for people. In Junginger's view, "In other words, policymaking as designing begins with an inquiry, not a problem" (2014a:62)

Rowe (1987:3) describes this approach, which is typical of designers and architects, as drawing as much on "hunches", or heuristics, as on highly structured information gathering. As discussed earlier, Halse et. al. (2010) maintains that design research essentially provides a more complex connection between processes of understanding (empirical research of the present state) and intervention (proposing possible new futures). Taking this approach, the data material becomes essentially incomplete, by not offering a full "true" account through empirical research, but also not proposing final solutions. This opens up the design process to allow for other stakeholders to engage with it, and in Halse's words, it "avoids premature closure of the design space". Donald Schön, in a similar vein, describes the act of designing as "a conversation with the materials of a situation" (1983:78). As this conversation unfolds, and the designer reflects upon it, the design space is kept open and fluid.

As I will discuss in the next chapter, this avoidance of closing the problem -- or design space -- becomes a crucial element in what appears to differentiate design approaches from other

innovation and change techniques. It might even, as I will discuss in Part III, lead to particular characteristics of an emerging public governance model.

As illustrated in the previous chapter, design provides an array of highly concrete research tools ranging from ethnographic, qualitative and user-centered research methods, to probing and experimentation via rapid prototyping, to graphically visualizing large quantities of data and information. Drawing on elements of systems thinking, design research claims to help policy makers better understand the root causes of problems and their underlying interdependencies – the "architecture of problems" (Boyer et al., 2011; Mulgan, 2013). The assumption appears to be that it is possible to discover root causes and underlying causalities that have hitherto escaped the manager or decision-makers' attention. Or as Meroni & Sangiorgi (2011:37) propose: "Investigating how a service occurs and how it is perceived individually and collectively helps to evaluate the quality and the very nature of the service itself."

The kinds of design work considered here thereby also cast citizens into different roles. Bate & Robert (2007:10) propose that this type of investigation, which may also be called a process of co-designing for understanding and (re-) shaping citizens' experience of a service or policy, can be understood at the far end of a continuum. The continuum, which represents different ways of engaging with citizens, ranges from only listening to complaints, and to co-designing for better experiences:

Figure 21: Continuum of citizen's roles in shaping public services

Complaining – Giving information – Listening & responding – Consulting & advising – Experience-based co-design

Source: Bate & Robert (2007)

In the collaborative, human-centered design approaches studied in this thesis, it seems that in particular the qualitative research methodologies play an important role at this stage of the design, or co-design, process. As was shown in the previous chapter, some form of user research was conducted in all of the cases.

Returning to Latour's argument, the proposition here seems to be that "It is never the case that you first know and then act, you first act tentatively and then begin to know a bit more before attempting again" (2007:4). This approach to the exploration of problems is linked to an

appreciation of the complexity of many of the problem spaces encountered by public managers, which was discussed previously. As Bourgon (2012) suggests, attempting to understand complex phenomena by taking them apart and studying their constituent parts is pointless since emergent situations cannot be understood or addressed only through analysis. In fact, it is the complexity that calls for designers' professional contribution, since they "value originality over predictability and standardisation" (Michlewski 2015:54). Or as Schön puts it, because the process of making within a certain situation is often complex, it is not possible in advance to know what will be the outcome of the design process: "Because of this complexity, designer's moves tend, happily or unhappily, to produce consequences other than those intended" (1983:79). It is not difficult to see why design work is often equated with innovation.

What characterizes the particular methodologies involved in this dimension of design, as I have explored them through the empirical research presented here? There seems to be two broad sets of methodological approaches involved in this dimension: Field research and visualization of the current situation.

6.4.2   Field research

All of the cases studied, except one, involve some form of field research. The use of field research – using text, photo, audio or video as documentation tools – refers to ethnographically inspired research practices and methodologies. Madsbjerg & Rasmussen define ethnography as "the process of observing, documenting and analysing behavior…" (2014: 90). Ethnographic research focuses on understanding the world from the perspective of the study objects. A variation of this is to take the broader team (also non-designers) into the context of the users. Polaine et. al. (2013) call this version of the methodology a *service safari*, in which key team members get to experience and see a service or life context personally, first-hand. The process can be extremely *open*, such as "documenting a day in a person's life,' or more *focused,* such as "mapping the citizen's journey through a specific public service.' Also, it can be *challenging*, intended to test explicit hypotheses about what is perceived to be the problem. This on-going, dynamic interplay, between opening, closing, and challenging, is part of what makes ethnographic research such a good fit with the iterative process of co-designing.

The approach becomes an active learning process; a process with the purpose to change the researcher's perspective and understanding of the different contexts and create new grounds for

reflection (Hasse 2003; Halse et. al, 2010). As Polaine et. al. (2013) emphasize, however, designers who engage in such activity only rarely conduct what might be termed "proper" ethnography in its own right. For instance, many who conduct design research are not trained ethnographers, and the time horizons and resources allowed for the empirical observation, interviewing and other data gathering activities would rarely match the criteria applied by ethnographic researchers. That is certainly also the case in the present set of cases, where – with a few exceptions – the research is much more focused and conducted in short bursts of activity rather than through a prolonged, week- or month long field study. For some designers, this is really a strength since as Halse et. al. (2010) point out, the objective is to keep the design space open, not to attempt to reach conclusive insights: "Ethnographers take a disciplinary pride in the integrity of their accounts of everyday use. Often this integrity is the biggest obstacle for creating new openings for design" (2010:39). From Halse's point of view, "pure' ethnography is overly focused on the documentation aspect, and not sufficiently receptive to discovery and insights, which may lead to new solutions. Leonard & Rayport (1997) suggest that the role of the ideal design researcher may rather be characterized as "empathic design". They describe empathic design as essentially multidisciplinary since it combines the visualization expertise of designers with the sensitivity to context and culture characteristic of the anthropologist. Michlewski discusses how professionally trained designers are particularly skilled at "engaging deep empathy' and suggests that their relation to empathy is a fundamental "way of doing things by groups of people and organizations" (2015:67). Generating, and working systematically with, empathy takes more than tools and methods. It is part of designers' professional culture.

Another perspective on the role of design research in coming up close to the concrete experiences of citizens is to view the process as one of collecting "stories" (Wetter-Edman 2014). As Quesenbery and Brooks argue, in a volume on the role of storytelling in user experience design, developing and activating stories from users "…not only describe actions, but also explain them and set them into a context that help you understand why they happened" (2010:17). Bate & Robert propose that in design research:

> *The role of users (and the value and justification for being there) is to bring the knowledge of their experience to the table so that the designers can work with them to translate and build that knowledge into new and future designs.* (2006:31)

It thus becomes a key issue to capture users/citizens' experience in ways that allow for this type of translation into future designs. Understanding design research as the building of stories, Quesenbery and Brooks (2010:29) highlight four key roles of the stories: 1) to explain research and ideas; 2) to engage the imagination and spark new ideas; 3) to create a shared understanding; and 4) to persuade an audience. The issue of "persuading' is similarly emphasized by Michlewski who compares design to rhetoric, in the sense that designers are concerned with constructing an argument for a particular kind of solution (2015:35).

These roles, or contributions, of design research understood as the collection and sharing of stories (about use, about context, about actions, solutions, etc.) indicate that the research process is not only about gathering new knowledge or insight. It is a design dimension focused on triggering new ideas and possibilities, which may be turned into concrete solutions that create change.

6.4.3   *Visualization of the current situation*

The other main dimension of design research is the use of visual representation. A key contribution of graphic design skills in design research is to visualise people, groups, systems, interactions, flows and processes, helping decision-makers to see citizens and services in context and facilitating collaboration across agency and professional boundaries. Some of these visualizations were shown throughout the empirical sections above; others will be shown in later chapters. Use of visuals to drive and document research as well as to facilitate the creative process is widespread in connection with design approaches (Leonard & Rayport 1997; Michlewski 2015). In fact, the argument may be that "engaging in a constructive, often visually led, dialogue is part of what makes a designer a designer" (Michlewski 2015:78). Visualising and representing people can be done by building *personas* out of the individual data material that has been harvested, where possible combining it with quantitative data from existing databases or from surveys (Pruitt & Tamara 2006; Bason 2010). Another key visualization tool that also emphasizes citizen-centric processes, and is quite wide-spread in design research practice, is the mapping of user's *service journeys*. A service journey is a visual map, or blueprint, of service interactions with government over time, with user's actions and experiences at the centre (Parker & Heapy, 2006; Bason 2010; Meroni & Sangiorgi 2011, Polaine, Lövlie & Reason 2013). Often, such visualization can include end-user perspective (processes, flows and

behaviors on the side of citizens or businesses) or the internal user perspective, mapping the roles, interactions and handovers among staff and other stakeholders. For instance, as mentioned, when the City of Helsinki project mapped service journey for businesses wanting to register for outdoor events, the found that they were required to obtain, on average, somewhere between 10 and 14 permits from different sections and departments across the city. A majority of the cases studied include some form of visualization of processes, often emphasizing the outside-in (citizen/business) perspective. Often the designers will take such as user journey mapping process and create more clear and precise visualizations.

The use of infographics and the visualization of large quantities of data is also a key design activity, understood as "the use of abstract, non-representational pictures to display numbers" (Tufte 1983:9). Data visualization is increasingly associated with design research, and with the facilitation of design-led change processes. The notion is that in order for designers, clients, users and other stakeholder to build a shared understanding, visualization can, just like stories and narrative, be a powerful contribution:

> *At their best, graphics are instruments for reasoning about quantitative information. Often the most effective way to describe, explore, and summarise a set of numbers – even a very large set – is to look at pictures of those numbers* (Tufte 1983:9)

This statement by Tufte, perhaps the scholar most closely associated with the art and practice of visual display of quantitative information, sounds almost prophetical in light of the more recent advent of "big data" and emphasis on "mining" data for insights and patterns within it. However, these types of design practice have not been used in any major way in the cases in the present study.

A final form of visualization that is relatively prevalent across the cases studied is the creation of prototypes – sketches or models that are created for the purpose of illustration, engagement, feedback and learning. Prototypes can be considered a key design research tool, for instance through what Halse (2014) calls "evocative sketching", whereby preliminary ideas for solutions are presented to users, and their feedback and reactions are registered. The research approach thus becomes to engage actively with the field, to suggest potentialities, and to iteratively

understand the present state as well the possible actions that, in Simon's words, could lead to a preferred outcome. Halse et. al. (2010) drive this point home in saying that: "The challenge of fieldwork in design is not so much to collect data, as it is one of sensing the other's (user's, client's, stakeholder's) competence and willingness to change and innovate." As Polaine, Lövlie and Reason (2013) point out, the key to collaborative forms of design is that every dimension of the design process, including the exploration of problems, involves end-users. Prototypes are, however, more than research tools, they are also vehicles for facilitating and directing the enactment of new futures. Because designers don't necessarily distinguish between researching the present state and evoking new possible futures, prototyping can very well take place early in the process, and thus the dimension of "exploring problem space" becomes intermingled with the exploration and generation of "future scenarios".

6.4.4 *Future-oriented empathy*

It is important here to ask to what extent these forms of user-centered research and visualization methodologies are really "new" to the managers and organizations in question? As mentioned earlier, it is the case for nearly all of the studied design processes that they represent the first time these managers engaged with design methodology in practice. For instance, Jesper Wiese, the manager at Skansebakken, the home for severely physically and mentally handicapped people, was so unsure of what the design project was going to be like that he sat down and researched it in advance:

> *I thought design? Argh, what the hell is that? … I really pulled myself together in advance and tried to Google organization and service design and things like that. It was possible to Google that. Then I learned that it was okay; that design was a way of transforming things.*

Similarly, Marja-Leena Vaittinen, the manager in the City of Helsinki's business services division, reflects on the initial procurement of designers, which was mandated as part of the city's status as World Design Capital:

> *I wrote in our project plan that we shall use service design, even though we didn't know very much. So that it was a very, very long learning process to procure service design because we didn't know what it was.*

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Although the notion of design approaches – whatever label they were given in the particular context – was new, many of the managers had of course had previous experience with a range of management and research tools, either in their current organization or in previous management positions. This means that in a number of instances, the managers had a relatively good appreciation of the strengths and weaknesses of other approaches to generate organizational change. An example is Camilla Bruun Jacobsen, a Senior Consultant in the Agency for Competition and Consumer Affairs (part of Denmark's Ministry of Business). She led a policy project concerning the online behavior of children and youth. In the project, Camilla took on some of the design research roles herself. The methodology went beyond what she had previously done in terms of data collection, such as setting up quantitative surveys or conducting interviews and focus groups. For instance, she visited families to observe in practice how kids play online video games:

> *It was something new to sit and play with iPads in their homes ... it was new to me trying to create a real frame around the person...*

Here, Camilla Bruun Jacobsen seems to recognize the novelty of really engaging with the people – children using digital games and social media – that her agency, and the particular design project, was addressing.

The case studies indicate that the public managers are quite quick in embracing the insights emerging from the design research in order to reinforce their focus on citizen outcomes. Within many of the public service organizations studied, this entails shifting emphasis from managing staff to enacting change in relation to end-users. And it entails a new perspective on one's own role. In this respect, the design research process becomes almost existential for the managers. For instance, as Christina Pawsø says about shifting focus away from her social workers to the adult mentally handicapped users:

> *[...] we were really scared because this innovation basically meant that the users should determine what our work should be. I thought, well, why are we here? What is our task? If we as social workers are no longer the experts in their lives, what is then our job?*

Among Kamil Michlewskis five types of design attitude, he emphasizes *Engaging deep empathy* as the ability to "tune in" to people's needs and wants. Wildevuur et. al. define empathy as "…the capacity to recognize emotions that are being experienced by other people." (2013:207)

However, empathy is more than a recognition of what people experience today, it is also a potential resource for a future-oriented conversation in that it "is a way of building relationships between a design team and the future users of their designs" (ibid. 207). This is akin to Bate & Robert (2006) making the point that design research becomes future-oriented since it is the role of designers to translate citizen experiences into new or re-designed solutions. It seems that these public managers are doing this themselves, as they insist on being curious about how their organizations' efforts actually could influence the experiences of the citizens they serve. This may not least be the case when it comes to users not as end-users (citizens) but as public employees who are the individuals and groups who will need to change work practices and procedures as a consequence of the design work. Finally, as managers explore the problem space and engage in design work that may lead to unexpected outcomes, their approach to decision-making seems to be influenced. They do not seem occupied by, in line with traditional management thinking, to search for "optimizing" their decisions. Rather, they appear to partly request, partly be drawn into a process of inquiry that potentially opens up new spaces, not only of problems, but of new perspectives. By gaining a different view of the problem space, they potentially see a different opportunity space.

6.5   **Conclusion: Management engagement with the problem space**

This chapter has illustrated various ways in which public managers relate to how their organizations' efforts influence the experiences of the citizens they serve. The analysis of a range of empirical cases has shown that design research can stimulate their curiosity and initiate processes of organizational change. Qualitative research techniques, such as field work and open-ended interviews, audiovisual data in the form of sound clips and video footage, and visualization tools such as user journey mapping, seem to generate empathy with end-users. Drawing on such "empathic" and visual material, managers focus on engaging their staff – both as individuals and collectively – in changing work practices and procedures as a consequence of the design work.

The chapter raises the question whether design research prompts the managers to ask questions beyond their current understanding of the problem space they are facing, leading to a degree of reframing of the challenge facing their organization.

7. Generating alternative scenarios

Transforming the system means passing through zones of uncertainty.

Donald Schön, *Beyond the Stable State* (1971:12)

The previous chapter analyzed how design approaches helped make particular representations of the problem space available to public managers, and brought "empathic data" into play. Methodologies such as field research, generating emotional and empathic data, and visualization of user journeys were key in this process. The involvement of managers in this process was rooted in their inclination to challenge assumptions, and to strategically leverage empathy to direct organizational change.

The second dimension of design use in public management concerns processes of identifying which possible actions to take – sometimes with a starting point within the input generated through user research, or sometimes simply starting with an ambition, vision or aspiration to create change. The questions then becomes: Where did ideas about alternative actions come from in the cases studied, and what were the roles of design approaches in generating alternative scenarios? How do public managers relate to the process of idea-generation, including the generation of ideas that may seem foreign, challenging or even dangerous? How do the managers involve their staff, uses and other stakeholders, and how do they themselves handle the uncertainty and open-endedness associated with a more prolonged generation of alternative futures?

In this chapter, I first explore how the public managers in the cases experience processes of generating new solutions under conditions that are often complex, uncertain and open-ended. How do they lead, or *steward divergence:* Processes that are essentially concerned with broadening the available set of solutions, and thus decisions, available to them and their organization? How do they turn potentially challenging empathic material generated by design research into a positive force for generating change? How do they keep staff motivated and engaged?

Second, I reflect on how design approaches, which stimulate creativity and imagination, give managers access to the possibility of "future-making".

Third, I discuss the role of the managers in *navigating the unknown*, in particular when it concerns their own personal experience of losing control and certainty within the process. How do the managers deal with the fact that they are sometimes as confused about where the design approaches will take them as their staff is? How do they manage this personal discomfort and loss of control?

Finally, I chart, discuss and analyze the ways in which design approaches are used to explicitly facilitate the generation of new ideas, for instance through creative workshops (ideation processes) and systematic development of new concepts for solutions.

Despite the illusion of tidy process, a shift from the design dimensions of exploring problems to those of generating alternative scenarios, suggested by my organization of this material into chapter structure, there is an important caveat that we must keep in mind – indeed, that cannot really be overemphasized: In the words of Joachim Halse, "we must acknowledge that design problems and their solutions emerge in parallel" (2010: 40). Readers should keep this important point in mind, because the processes described in this chapter, though they can be distinguished conceptually, mesh rather less distinctly in practice with the processes discussed in the previous chapter, and those that will be discussed in the next.

7.1   Engagement #3 Stewarding divergence

As the design approaches of ideation and concept development are brought into play, the cases indicate that managers and employees – and in some cases users – find themselves in a territory of openness, exploration, and flux. This territory can be experienced as frustrating, not least by staff who are charged with generating changes that are prompted by design research. A design engagement that might be called "stewarding divergence" describes how managers act within these processes. What I have in mind here is the active management of the experience and expectations of the staff throughout the "creative" activities of the design projects.

Even though some managers may well embrace the open-endedness of a design process, they cannot allow it to be guided by blind faith. Somehow they must be close enough to the process to know when it should start to converge towards more certainty and ultimately, to decision-making about which solutions to take forward.

My empirical work revealed this to be, in the truest sense of the phrase, a delicate balancing act.

For some managers, generating new ideas and involving their staff in innovative processes mostly seems to have been enjoyable. Elspeth Gibson, Senior Strategy Manager for Public Health in Suffolk (UK), who engaged designers via the UK Design Council in order to address public health issues in the County, says:

> *I personally found engaging with the process really creative. An opportunity to, you know, sometimes think the ridiculous, think the unthinkable. An open space to sort of bounce ideas round. I found it immensely stimulating being with a group of people who I felt were unbelievable to the extent of speed with which they could pick up these issues that we were very close to.*

Elspeth Gibson here appears energized by the "creative" process and impressed by how the design team was able to quickly tap into the issues and agendas she and her staff are grappling with. At a personal level, she appears to be reveling in the open-endedness of the outcomes the process might lead to. For Elspeth Gibson, conducting the field work was not just about creating discomfort; there should also be something motivational about the experience. As she says about the day interviewing young people around the university campus: "Let us just learn, and bring the data back, make it fun, enjoy it."

Christina Pawsø, the manager in Camillagaarden, the institution for adult mentally disabled, likewise enjoyed, or was at least satisfied with the way the process of generating new ideas unfolded:

It was something very basic, which must be changed. ... And I certainly would like to signal that it is not the small corners, it is all being turned upside down, and everything is in play. And I think it worked really well as intended.

In the case interview, Christina Pawsø emphasizes how in the project she literally used *"the innovation* word*"* to articulate that these activities were more fundamental, more serious, than just a fun, new way of spending the time. One might say that she invoked the word "innovation" to lend legitimacy and credibility to what seems like a (too) playful process. She even highlights how she told the staff that "serious" companies like Denmark's globally leading pharmaceutical Novo Nordisk also works with "innovation".

Also, in the Holstebro municipality project "The Good Kitchen", which dealt with meals for elderly citizens, a workshop was run by the design team which involved citizens, their relatives, the staff, and the political level – the municipality's social and health committee. To the manager, Poula Sangill, it was positive and "truly breathtaking" to experience the interaction and engagement in that workshop.

7.1.2 Stewardship as engagement

For other managers, the process of dealing with openness and lack of clarity was more challenging.

As I also discussed in the previous chapter, in the case of Anne Lind, Director General of the Danish Board of Industrial Injuries, she felt she had to almost nurse her entire staff following some particularly direct video footage of citizen interviews relaying how work injury victims were not really helped by the case management – sometimes to the contrary – so that they became even more ill due to the way the authorities handled their case. To Anne Lind, leveraging design approaches to better see how her organization's services impact citizens precipitated "a shift in perspective". This shift shed light on questions raised by Lind, the Director: What is the ultimate contribution of an organization such as the BII? Is it to efficiently handle the case process to settle insurance claims and payment in accordance with legal standards, or is it to produce some kind of longer-term outcome for citizens and society? Seeing

how outcomes concretely were manifested from the point of view of citizens was a key starting point, and an emotional driver of this change.

Some of the first interviews with citizens, which were video-filmed in their own homes, were, according to Lind, of great significance, but also a source of significant discomfort. To staff, it was almost shocking to learn that although their case management was perhaps legally correct, citizens experienced it as confusing, bureaucratic, and sometimes nearly meaningless. A universal finding seemed to be that the overwhelming amount of paperwork tended to get people caught up in the work injury process to an extent they eventually began to feel that they *were* the work injury. As a result, the case management process in some instances made people more ill than they were already. "It has been good, but it has been tough", is how Anne Lind characterizes the process. At first, the staff needed a lot of attention from her, due to the emotional challenge of realizing that their work was in some cases doing more harm than good. This seemed to challenge their world-view. It also initiated significant processes of change within the agency. Ms. Lind was very aware that it was her role to facilitate that change in a positive way. Ms. Lind explains how the staff was shocked and needed her attention due to the clarity with which the citizens' experiences were presented:

> *We might have been aware that something needed to change, but not precise enough about what it was. And we had no sense that things were so bad as some of the statements we have received here.*

Anne Lind reflects that the chasm between what the design work showed, and the self-image of the organization was significant – the agency had received industry awards for the quality of its communication (in particular its clear language), and now citizens provided such negative stories. As a response, she involved her staff heavily in interpreting and presenting results and findings of the design project. She then fed the results into the organizational structure, and delegated responsibility to mid-level managers for follow-up. In this sense, even as this manager took control of dealing with uncertainty, she herself initiated a loss of control through delegation. By doing so, however, she motivated people more broadly in her organization to find meaningful ways of dealing with the challenging insights and coming up with new solutions.

Another instance of experiencing challenges with staff engagement can be found in the Skansebakken case. Here, the issue was particularly the open-endedness of the process.

Jesper Wiese, the Center Manager, reflects on the perils of managing the uncertainty of the process, and expresses some regret that he and his fellow management colleagues did not articulate slightly more precisely where they thought the design work would lead:

> *At that time, we did not communicate very much. Retrospectively it was very stupid. We started out by saying, "Now we create a design process. We will be working on relationships. And, by the way, we do not know, what it is literally." There were many who asked, "please, tell us what you expect us to do." No, not really. We will participate; we must be happy and applaud at the right moment. But in addition to that we do not really know what is expected from us. I think – it is at least some of what I have learned from it and which can be used next time: becoming a little more distinct in creating the idea of where we want to end.*

Wiese essentially suggests that in order to really steward the divergence of the design process, it is necessary to give at least some kind of picture of where the work might be headed, and what the implications could be. He also points to something else interesting, which I will follow up on in Part III of this thesis: That the learning that takes place during the managers' first encounter with design approaches can be put to good use the next time around. Perhaps some sort of "design competency" is being formed?

Figure 21: Using visuals to stimulate creativity and engage staff

Source: Skansebakken & Design School Kolding

Marja-Leena Vaittinen, the manager in Helsinki's business service division, observes that as the mapping of the user journey opened up the collaborative ideation process to a wide range of actors across the city administration, challenges arose:

> We don't know each other [across city agencies and units]. We have never worked together. It was the first time. The staff had some skeptical thoughts, but this is also important. There's a need for patience and time to adjust different experts into different mindsets and languages, because in this administration unit you speak different language or your culture is quite different than what we have here. You haven't met those people before, you don't know them. Who are you, what are you doing, what is your organization doing – we don't know. We are about forty thousand people here.

It seems that managing the opening of the opportunity space, as ideas are generated and multiple actors become involved in giving direction to the process, does not come without organizational and personal challenges. This is essentially a question of stewardship. Marco Steinberg

(2014:97) describes the concept of "stewardship" in the context of designing in public organizations as follows:

Stewardship is the art of aligning decisions with impact when many minds are involved in making a plan and many hands enacting it. As such, design stewardship is about the craft of navigating forces outside of one's control. In the case of public sector innovation these include organizational incentives, prevailing investment logic and political mood swings.

Steinberg hints that as managers engage with the process of generating potential new ideas, they must deal with a range of actors and influences, which determine which solutions are brought into play, which are considered, and which are (or should be) given momentum, shape and form as the design process unfolds. Throughout this process, managers are allowing, to the best of their efforts, for divergence, meaning the ability to let a broad range of ideas and possible solutions grow and expand. Michlewski (2015) characterizes this as the challenge of dealing with ambiguity, something that sits uncomfortably with much management practice, which strives to control all factors and facets of a process in the belief that such control contributes to the success of the project. Meanwhile, "designers believe that the chances of success increase by actually letting go" (Michlewski 2015:54).

7.2   **Discussion: Decision-making versus future-making**

Within innovation literature, it is almost a truism that in order to identify the best possible ideas, a much wider set of options have to be generated (Kelley 2005; Brown 2009). We also saw, earlier in Part I, how Herbert Simon suggested the need for a "generator" of options for decision-making. However, it is also a point made extensively by Boland & Collopy (2004) and by Michlewski (2015) that traditional managers' tendency to adopt a "decision attitude" involves the risk of closing down opportunities for invention too early, and thereby the risk of making ill-informed choices. The design dimension of generating alternative scenarios has to do with the opening up of possible futures, with acts of "future-making'.

Boland & Collopy (2004) emphasize that managers should consider, as designers do, that the ability to create great ideas under conditions of uncertainty depends on the ability to adopt a particular stance, a design attitude, which "assumes that it is difficult to design a good

alternative, but that once you have developed a truly great one, the decision about which alternative to select becomes trivial" (2004:4).

The emergence of more collaborative design approaches suggest that policy options could (maybe even should) be developed through an interplay between policy makers and managers at different levels of the governance system, interest and lobby groups, external experts and end-users such as citizens or business representatives themselves. We saw this take place for instance in the Holstebro "meals on wheels" case.

In most of the projects studied in this thesis, the emphasis is however slightly more narrowly on the relations between the organization, its staff, and citizens or businesses. As Polaine, Lövlie & Reason (2013:44) point out:

> *Service design is about designing* with *people, not* for *them … "People" does not just mean customers or users, it also means the people working to provide the service, often called frontline, front-of-house, or customer-facing staff.*

The authors underline that there are two main reasons for involving staff in the design process: Engagement and buy-in to the ideas and solutions that are developed; and the recognition that staff have unique knowledge and insight about what it will take to make a new service or process work in practice in their interactions with end users. One might also say that the involvement of staff is a recognition that innovation is a joint responsibility. As Robert D. Behn (1995) has argued, specifically concerning front-line staff roles in innovative public organizations, frontline workers will not help an organization's leadership innovate unless they also can see how the innovations might benefit them.

A key part of this interplay with users and staff is, then, the creation of ideas – ensuring a wide enough range of options are available for the manager(s) to ultimately decide upon.

There is no shortage of books and publications on processes of "creativity" for generating innovative ideas (Csikszentmihalyi 1996; Kelley 2005, Nussbaum 2012). However, the issue for the present thesis is whether there are particular "designerly" approach to engaging and stimulating people's creative abilities to develop ideas? Boland and Collopy 2004 emphasize that in speaking of design as a vehicle for problemsolving they speak about something beyond

creativity, even though creativity is "necessary for the improvement all our human endeavors" (2004:15). Rather:

> *...creativity is not sufficient for a design attitude to problem solving ... the questions really should be: Creativity in what problem space? And creativity towards what end?* (2004:15.)

One might say that the issue of "creativity" in the context of design approaches is embedded. It is embedded in the problem space – the context of in current use, of the situation of the organization, of the manager, the staff and wider stakeholders. And it is embedded in the *intent*, the overall purpose and motivation for running the project in the first place (Body & Terrey 2014).

This being said, design, as a discipline, is rather ripe with ways and means of stimulating individual and group creativity. Design might thus facilitate a wide divergence of views and ideas, enabling selection, then synthesizing them by generating alternative future scenarios. Michlewski highlights the ability of designers to act playfully, and to create playful environments and processes to stimulate individual and group creativity. According to Michlewski, "playfulness encourages unexpected experimentation and exploration" (2015:105). His study of designers' professional culture shows that by invoking the label of "creatives", designers are given more scope and permission to stage and orchestrate playful experimentation and to use unorthodox and ungrounded methods. Because they feel more comfortable than most with ambiguity and open-endedness, they feel natural and at home with processes of creation. In the cases studied in the thesis, it is certainly the case that it is the design teams, which plan and execute the various workshops, creative sessions and seminars that are intended to stimulate creativity. Perhaps diverging from Michlewski's understanding of the role of the "playful" designer, designing with his or her own team, in most of the cases I studied, designers to go great lengths to facilitate processes that involve the manager and staff in the client organization. A key part of this involvement is to bring visual tools into play.

Joachim Halse, in considering design tools for idea-generation in a design context suggests that:

> *Visualization and modeling are fundamental aspects of the professional language of designers for making physical, and making visual, proposals for future*

possibilities that may not otherwise be available for experience and critique in corporeal forms. (Halse 2014:201).

Halse (2014) points out that there are two different ways of using visualization in design work:

- *To convince:* Getting messages through to audiences by using images and scale models, for instance through beautiful renderings of artifacts to convince clients, peers, or users
- *To explore:* To support the generation of ideas, and to "try out" what potential solutions could look like, and how they would work.

Facilitation of processes using graphic visualization could thus provide the means for cross-cutting dialogue, mutual understanding, and collective ownership of ideas and solutions.

7.3   Engagement #4 Navigating the unknown

This management engagement concerns how managers lead, govern, or navigate the design process as it increasingly challenges themselves professionally as well as personally. We have seen that in governing the collaborative process, some of the managers took an active responsibility for disturbing, or challenging, their staff, for instance by initiating various forms of experimentation, or by putting them in situations beyond their usual comfort zones. Often this happened when design research called to the fore the concrete situations and experiences citizens had with the public services. I called this "leveraging empathy" to engage the organization.

Leveraging empathy, as it turns out, is a double-edged sword. As the design process leads to a divergence of ideas and options, staff look to managers for control, for reassurance, and for closure. Because of the emergent nature of the process, this is something managers often cannot provide. So, paradoxically, the public managers facilitate disruptions and allow for collaboration to unfold in an uncertain space, at least for a while. As we have seen, this involvement in divergence provides engagement and ownership, and perhaps even energy among staff, but also generates discomfort. So while they are largely responsible for the creation of discomfort, the managers must also navigate it, and ameliorate it, make it "ok" to be in a situation characterized by complexity, open-endedness and ambiguity.

Here, some of the managers become uncomfortable themselves. Often they are nearly as uncertain about where the design process will end as their staff. They have to try to deal with this personal emotional state, to manage it so to speak, in ways that do not affect the staff too adversely. While there is an outer journey happening in the organization, the managers move through an inner journey too.

7.3.1   Committing personally to the design process

Let me therefore consider how the managers reflect on their personal feelings and experience of not only stewarding but also being an integral part of the design process.

Take the perspective expressed by Poula Sangill, manager of the "Good Kitchen" project to improve municipal food service for the elderly in the city of Holstebro:

> *I tell them that if it comes to be too shaky, then they should not doubt that we [the management] will back them up. We are here in the same boat, so when it is shaky for you, then it is shaky for Anne Marie and I.*

In this quote, Poula Sangill essentially displays solidarity with her staff and underlines how important it is for her that they know that the management – herself and Head of Section Anne Marie – are on the same page. Poula Sangill goes on to explain:

> *Yes, it is to dare to show that you are uncertain, that it does not matter so much. When we were going into this project I said to them, I do not how this is going to end. It may end up in all sorts of places, we do not know. But we have taken a decision, we will not be grey and municipal.*

Sangill expresses here an intention to create a space, a frame, where it is OK for the staff to feel uncertain about where the project will end up. She shares her own uncertainty and honestly conveys that she does not know where it will end either. In explaining this, she contends that, as managers, "We are role models every day." However – and this is a key theme for many of the cases – Poula Sangill insists that change *will* happen. Because her vision is that "we will not be

grey and municipal". In doing so, she in a sense invests her personal commitment in the success of the project.

In the Lewisham case, which focused on redesigning services for homeless, Development Director Peter Gadsdon explains how the relationship with staff became somewhat contentious. In this quote, he discusses what happened as the staff was working on the insights gathered from video-filming their own interactions with homeless clients:

> *I mean if you went into that workshop and watched those things, and we did ... Even though they had captured the information on film themselves, they were looking a bit uncomfortable, because it is their service. The manager looked uncomfortable as well.*

Peter Gadsdon goes on to underline how he does not see challenging the staff in Homelessness services as an objective in itself; rather it is a tool for driving motivation and, ultimately, improvement and change.

> *So it is about not blaming, and it is about encouraging improvement. And that is the environment we try to have. [...] To create the environment for people to deliver, you know, rather than me delivering.*

Throughout the process he sees his own role as important in terms of visibly supporting the process, encouraging the shifts in behaviors, and in culture: "One of the important things is that they see the management engagement to this stuff. ... So I always made the point of being involved."

Much is at stake here. In some cases, employees are not prepared to deal with the temporality of the processes, or with the emerging shifts in underlying governance models. In a few extreme situations, this leads to people being stressed, or in other cases even made redundant. This puts personal pressure back on the manager. Consider this quote, which I have kept anonymous due to the sensitivity of the matter. A manager speaks about a key employee in the organization and her relation to the design project:

She also had stress and was sick with stress, but I actually think that what gave her stress was this transformation thing. Not necessarily what we were going to do but the unknown situation in itself.

In another case, a manager describes how she had to make a new hire redundant because the design work showed that the person's competencies were not required or needed by the users. Jesper Wiese from Skansebakken similarly reflects on the insecurity of staff.

You know, there was insecurity in the most basic way; do I lose my job, but also insecurity coming out like "what the hell are we going to do?"

A key challenge in these processes is that as the design projects unfold, and potential new ideas and avenues for change emerge, they represent breaks or disruptions from the past. Managers find themselves placed in between, having to manage the shaping of a new future without making it as if everything the staff did in the past was wrong. This is an immensely delicate balance, really one of change leadership. Consider the words of Jesper Wiese at Skansebakken: "it is a huge challenge to navigate in this, [when employees say] for instance "Well, did we do it the wrong way before?... You must find your way to navigate your way through this story without accusing people of having been wrong." He goes on to say:

Well, you emphasize, of course, that no one will be sacked. That was not the case, so there was no reason to say anything other than that nobody will be sacked. I was also very careful in saying that even though we did not know what we were doing, we would do it together. Nobody would be forcing it on us.

As the insight emerged, at Skansebakken, that the institution and its staff needed to shift towards a much more relational and empathic model for engaging with users, the navigating became more difficult. Wiese says:

We have balance between saying "Yes, maybe it is a criticism', of what we have done. We have done a lot to say culture and system and we have learned from our predecessors. But we have once in a while said, "Yes, we have actually done something that was stupid, we probably have". It is a well-known story in Vejle

that in the old days, the parents of mentally disabled children came here, dropped the child at the institution and were told that they should forget this child and go home and have a new one. We have used this story for telling the employees it is not you who are here now who did wrong. This is a heritage that we carry with us that have been a wrong path to follow. It has also been necessary to say yes, there is probably something that we should change significantly.

The managers thus clearly have a role in navigating and dealing with these types of staffing and organizational challenges. Jesper Wiese at Skansebakken explains how this was a personal journey as well:

But I must say it took me quite a lot of time before I realized [what the project was about]. Actually, it also took some time before I grasped how much energy we were supposed to put into it before it succeeded. And it took me even longer to completely capture how big it was going to be. ... [Managing the design process] is really difficult. And to draw a new future, because it is such an interaction ... It is like groping for something.

In the New York City case on housing preservation and development, Andrew Eickmann reflects on the attributes of the design methodologies: "The design process is somehow allowed to breathe, and brings more life to ideas in their pure form before they are subject to analysis". Eickmann describes how some of the ideas that were generated by the design team were "valuable, but also made people nervous". He describes how one solution proposed a digital application, a type of "Yelp" for housing quality.[35] The proposal was an open source platform for residents to review the quality of housing in their own building (star rating), and bring transparency to the issue of housing quality by way of user experience. This idea is in many ways counter to a regulatory, compliance driven approach, which would typically be employed by public agencies, including by the Agency for Housing Development and Preservation. In Eickmann's view, the service idea was exciting because it could be a powerful tool, but it would also be very challenging. As a manager he recognized the risk. Since it would "put all the power in the hands of residents, it could maybe be misused".

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[35] Yelp is a smartphone application with descriptions and user ratings of cafes, restaurants and other services.

Christina Pawsø, the manager of Camillagaarden, is also at times less than comfortable with navigating the unknown. When relaying how the innovation project she commissioned unfolded, she says, "So there was surely a period where you were a bit without identity and did not really know what to do. I could recognize it for myself at the beginning of this project, where I could easily see, well, I cannot keep doing what I used to do, but I did not really know what to do in instead. And it is frustrating to feel a bit paralyzed." Pawsø recognizes that being in a state of uncertainty is by no means comfortable for her as a manager either.

In Suffolk, where designers worked on the youth health improvement project, the project manager Gibson describes her experience that:

> *Most of the time it was about having the enthusiasm for something that you could not define, having to explain the value in something, with the value having yet to be realized. Yes, that was very tough, using some sort of incentive to motivate people to be part of something. Saying, we are going meet in the dance house today, and we might have an hour´s dance, you know, free dance, being in a nice space, a nice lunch. Make it attractive. And give people a permission just to take a bit of time away from what they are doing and say, lets us see where it leads, I cannot tell you where we are going to go with it.*

In a similar vein, Deputy Principal Mette Kynemund says:

> *The other thing is my personal perspective, because I have always ... as a leader I have known what it was we had to do. There were also some of the teachers who asked me after the 20 January [the date of the first project workshop], where is it we are going to end up with this? I answered that I don't know, because I don't know what the students are going to say. "Well, you must know it", they said. And there was actually one of the teachers who then asked me in May [after the project ended], "did you really not know how you would control us?" No, I really did not*

know. It has been a loss of control for me, and it has been a positive loss of
control.

Kynemunds reflection that to her, loss of control over the process was positive, indicates that "navigating the unknown" has been a fruitful process, whereas in much of the public management legacy we have inherited, risk and lack of control is characterized negatively.

Figure 22: Selecting ideas and developing concepts in the Stenhus community college project

Source: MindLab; Gower Publishing

It appears that the managers, as they seek to achieve direction in their navigation, draw on the underlying intent, or meaning, of the process in which they are engaging their staff. Some of them establish certain placeholders in order to sustain the process. Let me give two examples:

In the Skansebakken case, Jesper Wiese refers continuously to the central placeholder of "relationships" and the (quite early) insight that it was a redesign, or reconfiguration of the relationships between the handicapped users and the outside world that was at stake. He also

connects the issue to empathy with users. Using the placeholder during the project enabled him, for instance, to identify which people (resources) among the staff would be critical to engage and support, in order for the shift in practice to take place.

> *I can see from what we are doing now, the use of empathy is important. It is still the same things we want to do, but we will do it in a better way for some users – we want to deal with the unknown. Maybe, we do not know how, but we know what the big target is.*

At Camillagaarden, the placeholder of "user-driven innovation" becomes key as Christina Pawsø navigates the ways in which her staff questions and challenges the range of sometimes slightly crazy activities, including organizing wheel-chair races along the building's central corridor. As mentioned, she articulates how famous companies innovate in the same way; and so the activities are actually serious enough.

7.4   Discussion: Design as facilitator of divergence

We have seen how public managers across the cases engage with design approaches to steward divergence and to handle the open-endedness of the work by navigating the unkown. But what are the design approaches underlying this engagement?

In analyzing the empirical cases in this thesis, it appears that designing visual tools for exploration can further be broken down into three types of situations – each stage roughly corresponding (but not cleanly, as they tend to blur) to the three dimensions of design: Visualization for understanding the current situation (e.g. service journeys, personas, which were discussed in the previous chapter); visualization to stimulate collaboration for ideation (creativity-facilitating visuals, including idea-mapping and concept design, which will be expanded upon below); and visualization to propose possible solutions (prototypes, which are covered in the next chapter). Among the concrete methodologies applied in the cases studied, the following stand out as the most commonly used:

7.4.1   Ideation

Workshops, brainstorm processes, creative sessions and design games are very frequently part of the portfolio of activities connected with design approaches. That is also the case for the

processes that were researched for the present thesis. Idea generation, or ideation, is among the activities most closely associated with innovation and design methodologies: Developing new creative ideas, applying imagination and energy to describe possible futures. Most often, this endeavors is highly collaborative, reflecting the recognition that "No design team will possess all the relevant knowledge by itself. To accomplish innovation, a network of stakeholders must be set in motion." (Halse et. al. 2010: 27)

Even if collaborative idea generation is by no means exact science, it certainly is a discipline, and it can be done in quite systematic ways (Kelley 2005, Michlewski 2015). Karl Ulrich, professor of operations and information management at the Wharton School at the University of Pennsylvania, has conducted research that shows that "diminishing returns to scale" of more new ideas doesn't kick in until after between 150-200 ideas (Terwiesch et. al. 2009). In other words, to be sure that the quality of ideas are as high as possible, as judged by the innovation team itself, the group has to develop at least 150 distinct ideas.

In nearly all of the cases studied, some form of ideation process, usually involving staff and sometimes also users, is carried out. Often the process takes departure in material from the design research phase, such as photo, audio recordings, films, service journey mappings, and so forth. In other cases, ideation and brainstorming is stimulated by the use of visuals simply to unleash the imagination of the workshop participants.

For instance, in the Lewisham homelessness project, ideas were generated on the basis of the three films recorded by staff of their interactions with citizens. As part of the design of relations project at Skansebakken, visual "prompt cards" were deployed to facilitate creative idea generation.

What is interesting here is how the very process of bringing designers into the public organization seems to create allowance for more divergence, or creativity. Commenting on his experience working closely with designers, the strategy manager Andrew Eickmann from New York City's Department for Housing Preservation and Development recognizes the contribution of the design process in creating divergence:

> *The design process is allowed to breathe, bring more life to ideas in their pure*

form before they are subject to typical analysis.

Eickmann reflects that many of the consultants he otherwise encounters are more "Trained to think like a public agency. This makes them more conversing, but also not disruptive." Eickmann observes that because of their title and identity, designers are by default being asked to be creative, to pitch ideas, to iterate – "that is their job". A parallel job done by a consultancy like McKinsey & Co. would, by way of expectations, have more risk calculation built in, such as thinking about funding, about legal implications etc."

Michlewski (2015:104) observes that "Designers are seen as creative types, giving them more scope and cultural permission to behave and think differently". Eickmann observes that the creativity of designers is thereby "less bounded by the limitations we otherwise have in place". He acknowledges that the elements can be imitated, but professional designers also think about things differently, are hard to mimic. "It is easy to acknowledge that end user perspective has value but not easy in practice, takes someone with that mission and training and perspective to collect it, show it in a convincing way", says Eickmann. One might say that by allowing designers to focus strongly and clearly on the end-user role, with the skills to do it, the citizen perspective is suddenly placed front and center in the organization – at least for a while.

7.4.2   Concept development

Growing ideas from simple, individual words or short one-liners to mature, well-described and valuable solutions can be termed concept development. A concept is typically viewed as a coherent set of solutions, activities and benefits that are based on one particular "pitch" or fundamental idea. A concept is usually tightly connected to findings generated e.g. by design research, and to key insights (Bason 2010). Getting to concept development requires that the range of ideas generated via ideation processes is narrowed down. This selection can be done in various ways, ranging from a quite closed "elite" selection taking place within the design team, among a group of managers or even by the responsible manager him- or herself. Most often, however, in the context of the cases studied here, there is some form of collaborative, almost democratic, process, where staff (and sometimes user) are invited to examine the ideas and make judgments about which ones to develop further. This examination, and judgment process, often involves frameworks (for instance matrixes or axis upon which to assess the viability and

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cost of potential solutions) and selection mechanisms (for instance "dot voting" where workshop participants indicate their preferences for certain solutions).

For instance, in the Lewisham case, around 40 ideas emerged from the design research; a series of staff workshops narrowed the range of ideas down to 10 that could be developed further as concepts and subsequently prototyped. One concept was called a "What Next?" document intended to show citizens their place in the case management process, thus providing overview, ownership and transparency for them (Guardian 2010). In the Board of Industrial Injuries case, the user insight was processed in a range of group collaborations leading to 18 concepts, each of which were allocated a responsible "ambassador" within the organization, announced on the organization's Intranet, and put into implementation. One of the concepts, concerning the appointment of quality managers across the organization, was nicknamed "QualiTina".

An interesting aspect that is highlighted across many of the cases, and which seemed to take many managers by surprise, was the degree of precision and focus involved in the various workshops conducted in the course of the design work. Mette Rosendal Darmer at Rigshospitalet, for instance, says that the process being handled and facilitated by the design team was important: "The thing that the staff are placed in a different settings I think is important, because it is not themselves who decide."

Additionally, and perhaps also significant in terms of the dynamics of change unfolding in the projects, is that a substantial number of the managers say that they were energized by the various workshop activities. Consider Marja-Leena Vaittinen from Helsinki saying: "From my experience in those three workshops I was awfully tired when I went there but when I came out I was so full of energy", or Mette Rosendal Darmer from Rigshospitalet stating that, compared to the design workshops, a recent lean management project "didn't have the same energy". Poula Sangill, in the Holstebro case, says that the project had its highs and lows, but that the very first workshop that was carried out in the project "provided the energy that enabled us all to move on". She adds that the iterative nature of the approach, including generating ideas, testing, adjusting, revisiting the dreams and visions was powerful, "the whole circle is very good."

7.4.3   Dealing with complexity and ambiguity in the neutral zone

The managers describe in different ways how they seek to deal with what William Bridges (1980) calls the "neutral zone" in any transition process. According to Bridges, dealing constructively with transitions from one state of affairs to another, one needs to first "surrender", i.e. to give in to emptiness and stop struggling to escape it. However, as Bridges also warns, being in the transition – or as he puts it, "in the neutral zone" – does not mean that "anything goes". "This is a time for doing things you wouldn't normally do, but it is not a time to hurt yourself" (1980:128). In other words, the period of "unknowness", the "neutral zone", is not a place to tread lightly. In the neutral zone, things become unstable, including one's personal world view. Donald Schön, discussing the illusion of a "stable state" world, proposes that as people experience significant transitions or challenges in their lives – professional or personal – central elements of the self come into question: "They provoke a transformation of the system of the self, in which a new zone of stability can be attained only by passing through a zone of instability." (1971:12). This recognition is in line with the point I made earlier, that processes in organizations do not only change the organization, they also influence the subjects who may have initiated the change. The managers, as subjects, attach meaning to the process and are "shaped by the process in turn" (Hernes 2008:51).

As my research has indicated, the managers seek to balance simultaneously between proactively making their staff uncomfortable, dealing with their own personal uncertainty, and creating motivation and energy for people to keep going. Throughout this, they search for what the design insights mean and what appropriate changes must be made in the organization. As transitionary processes, design projects challenge the managers to articulate something while it still is a mystery to them. They must deal, unconsciously or consciously, with a process of making, of emergence. The wider point, which is made by Whitehead, is that "no innovation, firm or institution – is a final state; rather, everything is merely a stage forming (potentially) other processes" (Hernes 2008:50).

Another way of interpreting this style of thinking and questioning assumptions is to draw on Michlewski's design attitude, of embracing ambiguity, uncertainty and disruption. This stance reflects managers "[...] keeping an open mind while working on a practically focused solution [...]" (Michlewski 2008: 381). It is really, as Michlewski puts it, to embrace discontinuity (a break from the past) and open-endedness (not knowing where the future will lead you).

Similarly, Boland & Collopy underline that "Designers relish the lack of predetermined outcomes" (2004: 9). In Michlewski's recent refinement of his 2008 work, he conducts a survey to explore the differences between designers and non-designers in their approach to problem solving and innovation, and finds that designers to a significantly higher degree than non-designers appreciate experimentation, openness, and ambiguity (2015:53).

7.5   **Conclusion: Manage as designers?**

The engagements of *stewarding divergence* and *navigating the unknown* attract our attention to the real delicacy of managing innovation, or at least innovation processes as they are underpinned by design approaches. This chapter has drawn on the empirical material to provide nuance and substance to the concrete thoughts and actions displayed by public managers as they experienced the design dimension of generating alternative scenarios.

It may also point to a significant difference between managing change on the one hand, and leading innovation, or design, on the other hand. In managing change, the job is "just" about motivating the organization to move towards a more or less well-defined state of affairs. In leading design much of the focus is on exploring the problem space and searching for yet unknown solutions. In this sense, managers who successfully pull this off potentially "manage as designers" since, as Boland and Collopy (2004) state, designers relish the lack of predetermined outcomes.

8. Enacting new practices

Design is an exploration about people and their future ways of living.

Elizabeth Sanders, in
The Highways and Byways to Radical Innovation (2014:133)

Design is often understood by laypeople as a noun, as an end result: as the forms, visuals and expressions that we see as graphics and products, and which we call signs and things. The design approaches explored in this thesis are perhaps most in tune with this understanding when used to give form, to create the tangible artifacts that humans can engage with physically and emotionally. The ability to create deliberate user experiences and influence behavior and outcomes by making services and products desirable and attractive is in this sense at the heart of design practice. One might call this dimension of design *enacting new practices*.

However, when it comes to design in public services, including the creation of new experiences for users, citizens and businesses, the outcome is necessarily contingent on changes in organizational processes and behaviors within public sector institutions. This turns our attention, again, to the experience of the public managers, and their staff and stakeholders, as they are involved in the design work. How are they able to take the alternative scenarios they have taken part in developing, and turn them into tangible changes that can ultimately be felt and experienced by someone outside the organization?

This chapter first explores the management engagement of *making the future concrete*. I examine how managers relate to processes of transforming ideas into more specific and tangible design proposals, which might, or might not, be decided upon and implemented in the organization. This management engagement is closely linked to two design practices. The first is the practice of prototyping: processes whereby ideas and concepts that are at first abstract are developed, refined, described, given form, shape, and expression. This often involves iteratively testing and trying out how the solution might work for end-users, as well as for staff.

Second, I discuss how prototypes can be significant in the process of engagement of the organization, and of asserting what might work best in terms of achieving intended outcomes. The other design practice that I explore, which is linked with "making the future concrete," is

idealized design. Here, the approach is to establish longer-term visions for a desired state of affairs, and essentially work backwards from that vision to needed changes today. Both prototyping and idealized design processes are in play across the studied cases.

Third, I examine the degree to which public managers are occupied with the creation of public value. I discuss how this engagement of *insisting on public value* as central to the design work can itself become a driver of change. This is rather closely related to the first of the three design dimensions – exploring the problem space, which, as we saw in an earlier chapter, helped generate empathy with end-users and propel managers to adopt more of an outside-in perspective on their organization.

Fourth, as I discuss public value in this context, it seems primarily to become a matter of outcomes. The issue then is: How are managers, in engaging with design, concerned first and foremost with actual positive changes for end users?

I end the chapter with a brief conclusion on how public managers engage with design as enactment of new practices.

8.1   Engagement #5 Making the future concrete

This management engagement is associated with taking potential future scenarios and making them tangible for managers, staff and end-users – in order to facilitate a future-oriented dialogue with them. It concerns how public managers connect to making and shaping a potential future state of affairs in concrete and tangible ways. Using models and sketches, but also stories, media and enactments to envision a desired future state, are examples of "designerly" ways of working.

The cases studied in the thesis indicate that these enactments can essentially flow from either the (bottom-up) findings emerging from ethnographic work and concept development, thus informing potentially effective interventions; or from more abstract visions or strategies which are then transformed (top-down) into concrete narratives or visuals about what they would be like to experience in practice.

In the following I will therefore consider these two perspectives on how managers engage with what one might call tangible futures.

My empirical results showed managers, enabled by design, to build on their earlier design work involved in exploring problem space and generating alternative scenarios, to transform them into action. Often, this took place in a highly integrated way with design research, as also discussed in chapter 6. In other words, an on-going dialogue takes place between the exploration of the problem and the exploration of implications for new practices.

For instance, in the *Family by Family* project, prototyping of new solutions was generatively carried out alongside the fieldwork. This entailed introducing potential new solutions, such as ways for "seeking" and "sharing" families to interact, directly to citizens in the course of the month-long ethnographic field work.

At Camillagaarden, before the design project was initiated, services were organized around one-way communication that missed out on feedback loops from users, and that did not seem truly to appreciate the potential in the everyday interactions between staff and citizens. In this respect, it perpetuated a relationship that was inefficient; even dysfunctional. The key challenge faced by Christina Pawsø, who stepped in as a young new manager, was how to create a more fruitful relationship between staff and users, and, in the process, generate better outcomes. By prototyping and testing, to the point of initiating the physical enactment of new activities in the institution, Christina paved the way for more enduring changes. The following quote illustrates one of the more radical prototyping activities she engaged in with users and staff:

> *… Especially our young guys thought it was cool to try something really wild. And so we had a day which we named "giant race", where everything with wheels was used to race with. It could be up and down the corridors on scooters, or it could be around the block on our large mower. So, everything on wheels was simply put into the contest. And so we had this whole week of holiday on the Camillagården, and there is no doubt that they thought it was the coolest. We had a bus that went on tour twice around the block, where those who were on the bus and the staff*

were dressed as stewardesses and served champagne. And it took 10 minutes so the entire Camillagården could reach around in 3 hours, ha ha.

By introducing this "giant race", where the mentally disabled users were allowed to play out a fun and challenging activity, Christina Pawsø facilitated a "live" test of the ideas the users had developed, and allowed them to try it out across the institution, with full engagement from the staff as well.

In an entirely different domain, the Danish Business Authority, Head of Division Sune Knudsen, the manager leading the Branchekode project, describes the role of prototyping as follows:

> *[...] all the time designing it in concrete ways, making screen dumps or whatever it is, all the time saying, well, this abstract idea that you have, this problem that the company is in doubt, when making this choice, does it look like this, or could a solution look like this? It is about always anchoring abstract ideas into something very real physically. It has been like this all the way through the solution development, and has made it much stronger, I think.*

Here Sune Knudsen highlights how he experienced the various digital functionalities, which ultimately came to be the *branchekode* solution, were strengthened through the iterative prototyping process.

Another example is the "Good Kitchen" project in Holstebro, where a wide range of prototypes were developed, some of which were realized, some which were not. Here, the story was an image of what success would look like, according to the manager, Poula Sangill:

> *Well, success for us would be that when people sat at the coffee table out there they would tell each other, "I receive my food from* The Good Kitchen *and I am really happy.'*

So, how to create a service which citizens would be proud to receive? Concretely, prototypes were developed and ultimately implemented as new visual identity and logo for the food service, including redesign of uniforms worn by the kitchen staff. The importance of the new uniform

design (which was suggested by a star chef, which the design team brought into the project as an expert and sparring partner with the kitchen staff), was deemed by the manager, Head of Secretariat and Visitation Poula Sangill, as very significant. The new smart uniforms came to signify the change the municipal food service was undergoing, and became a source of pride. Prototypes were also developed for new and attractive packaging of the food, which would also be easy-to-open for elderly citizens with, for instance, arthritis. However, here the main constraint was that packaging producers required such large scale production (millions of units) that redesigned packaging would not be profitable if it were to serve only the municipality of Holstebro.[36]

Andrew Eickmann, in the New York City HPD project, describes his experience with the visualization and prototyping of the design work, which included design pin-up sessions, beginning with sketches, obtaining feedback from stakeholders, new iterations of development, and so forth.

> *It makes a difference, because designers bring skills in rendering an idea, e.g. through sketches, digital rendering, models etc. Having the time to really show an idea rather than just talk about it is really powerful. It gives life to things, which would otherwise be difficult to support if it were just stated in text and words. [The prototyping] gives life to things, which may otherwise not make it.*

A point worth highlighting here is this language of "giving life," which is very much in line with Kamil Michlewskis (2008; 2015) wordings on design attitude. Further it is worth noting how Andrew Eickmann underscores that prototypes facilitate decision-making, or rather, the arrival at *alternative* decisions to what may otherwise have been the case.

Jesper Wiese, the manager at the Skansebakken institution, tells the following about the designers' approach to using prototypes as they explored relationships between staff and handicapped users:

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[36] This raises the issue of why such an innovation—to redesign packaging for "meals on wheels" to be more attractive and easier to open for elderly citizens, could not be scaled across multiple municipalities, or even the country. However this discussion is beyond the scope of the present thesis.

It was questions, interviews, but also just observations. They took a lot of pictures. They also jumped the gun and started with some prototypes. Or actually there were not really prototypes, because we hadn't been involved, but they were more like tests of theories: For instance, when unpopular issues occur, will it be less unpopular if we bring some cake?

Here, prototyping, probing and testing is used by the designers as an integral part of the research process. Wiese, the manager, feels it is not "really" prototypes in his understanding of the term since it did not involve his staff in the trial, but for sure it is to the designers:

There is a lot of talk in these projects and in fact, I think, something that probably challenges many employees – how do we come from talk to action. The designers, on the other hand, taught us that we needed to act before we started talking, more or less. You act at least simultaneously, and sometimes you simply act and see where you end.

In the examples provided here, the connection between fieldwork and prototyping is rather intimate and interactive – in line with the points made earlier by Halse et. al. (2010). It is also clear that, throughout the process, multiple ways of prototyping take place, and that the approach is viewed as valuable by the managers.

8.1.2 Managers using visions to create change by design

A second and somewhat different approach is to create prototypes on the basis of strong future visions, and transforming them into tangible expressions of the desired new situation. This is what Russel Ackoff called "idealized design" (Ackoff et. al. 2006). The vision could be something very open and amenable to multiple directions for change, such as "we want more injured workers to return to labour market". Mulgan and Albury (2003) have emphasized that methods that work backwards from outcomes rather than forward from existing policies, practices and institutions tend to generate a wider range of options for decision-making (see also Bason 2010). Or the vision could be almost the same as a new solution, or governance approach, such as the case I will describe in some detail here.

In New York City, Seth Schoenfeld was Principal of Olympus Academy, a high school in Brooklyn. This school takes in students – often African Americans and other non-white groups – who have failed for a minimum of two years in other schools. The vast majority of the children's parents live below the official poverty level. As part of the city's Innovation Zone, a design-led program to drive public school reform, Schoenfeld was engaged in a workshop with a handful of other principals, facilitated by the Department of Education and a team of designers. In the workshop, Schoenfeld and his Deputy Principal were invited to create a tangible vision – a storyboard – describing their vision for the future of the school. The two managers chose to create a radical vision, pushing the boundaries of what a school is normally considered to be. Schoenfeld describes how they used the opportunity to really stretch their thinking. He remembers saying to his colleague, "Let's go further. Let's go through everything in there, what else would be radically different?" For instance, they imagined a situation where all courses and all curriculum in the school were available online for e-learning, and that each student would have his or her own, individual schedule based on their particular learning needs. At first, this was just written as a story. But the Department of Education facilitators then gave each of the school management teams a "goodie bag" with a small Flip video camera, a mini projector and other tools, which they were invited to use for creating a more concrete prototype of their vision. Upon returning to the school, Schoenfeld and his deputy involved staff and students in creating a 3-minute "day in the life" video of what a school day would look and feel like, should the vision be turned into practice. Today, many of the radical elements in the video – including an individually tailored schedule for each student and 100 percent online curriculum content – have become a reality. Subsequently the school was considered a front-runner in the City's Innovation Zone program.

Like Seth Schoenfeld, many of the other managers interviewed also seem inclined to embrace the creation of drawings, models, stories and images of the future they wish to see materialized. It can either be that they are themselves producing drawings and storyboards, or that they ask others to craft models of the future. But it is interesting that there is a tendency for the managers to engage directly in prototyping themselves.

We already in this chapter saw how different products were prototyped by the design team in the Holstebro "Good Kitchen" case. However, we also saw earlier how Poula Sangill, the manager, rehearsed and enacted the future by role-playing the interaction with elder citizens while

carrying out a conversation with her staff. Here, she essentially created a service prototype, or a service journey, to test the reactions and possibilities.

Another example of this engagement with futures is in the Stenhus gymnasium case. After Mette Kynemund, the Deputy Principal, realizes that the current scheduling for the Study Preparation program is dysfunctional, she and her scheduler literally starts drawing a visual of a possible future schedule. In the Holstebro municipality case, a "backcasting" exercise was carried out much like in the iZone project, just on the basis of storytelling.

Or consider Mette Rosendal Darmer, the Head Nurse at the Danish National Hospital, who describes making a physical prototype for a medical journal for patients to use for themselves. The idea and concept for the prototype was triggered by the ideation session in the design project, but the creating was a job taken on by Mette Rosendal Darmer herself:

> *We have made a new product, which is to be tested. This includes a field for patients' plans, where they could write down what they wanted. They could write, well here I would like to go to the movies, if I am hospitalized for a long period, or I would like to ... so it all is included. And then a back that was about the questions they would like to discuss, where they could write, so they always had a communication tool. Actually, it was not difficult. As I sat there I sat down at the computer, and it is something that I really can, I like to transform ideas into products. And we made it ready, and so we are starting to test it. I do not know how it works yet.*

Mette Rosendal Darmer, as a high ranking executive, is taking responsibility, hands-on, for shaping a product that may be used in an organization of several hundred people.

Elspeth Gibson, the manager working on youth health in Suffolk in the UK, used YouTube videos of people being active in fun ways, e.g. on a trampoline, to stimulate ideation:

> *[...it is] a prototype thing, and it was sort of like this, we can do this, and this is good fun, let us indulge ourselves ... I think that lots of potential for redesigning an existing service, but to actually take the step saying, this does not even exist,*

where could we go, if we could get a group of people together to plan something which is totally new. And it is a little bit more scary, but I do think it is quite exciting as to where it could lead.

Gibson suggests, in this quote, how she is energized even as she is also a bit scared, about the process of envisioning yet-not-existing services and solutions. In terms of decision-making one could say that she is taking part in a process of establishing a new landscape upon which decisions might be made.

What are the management implications of these processes of engaging in the creation of potential futures? In the following I will briefly discuss two interpretations; first from the viewpoint of design practice and attitude, the second from the viewpoint of "the sensemaking manager".

8.2 Discussion: Making, enacting, telling and deciding from the future

Across many of the cases, managers recognize a particular power in the physical, concrete manifestation of a solution. Because design is essentially about *creation*, whether the object is graphical, physical, procedural or systemic, this evokes Michlewski's design attitude of *Creating, bringing to life* – the managers' desire to affect change in the world, "creatively manifesting the ideas" that will later shape successful products, services or experiences (Michlewski 2008:379).

Elizabeth Sanders (2014:139) suggests that the (co-)design process of manifesting ideas can be viewed through the three lenses of making, enacting, and telling. Whereas *making* is concerned with embodying ideas into physical artifacts, *enacting* (in Sanders' terminology) is about the use of the body in environments to express ideas about future experience; and *telling* is a "verbal description of about future scenarios of use" (Sanders 2014:141).[37]

One might thus say that the ability to give physical expression to ideas is at the heart of design practice. As Michlewski (2015:112) suggests, "Creating models (of absolutely anything) is

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[37] Note that in this thesis I have used "enacting" in a broader sense in characterising design approaches which turn abstract ideas into concrete proposals, whether they are "made", "enacted" or "told".

absolutely essential in a successful design process." In his view, as mentioned earlier, such models are what enables playfulness and exploration. In the language of designers, models and other graphical and physical expressions, as part of a development process, are called prototypes. Moggridge (2004:685) defines prototypes as "A representation of a design, made before the final solution exists". Applying the process of prototyping to public sector development projects, as we have seen above, can be viewed as a practical way of exploring future solutions at an early stage, and of shaping them in ways that allow fast, small-scale testing, iteration and learning. Polaine, Lövlie and Reason (2013:139) argue that prototypes are essential in designing services, as:

> *When developing a service, you can save the organization large amounts of time and money if you design and test the experience before resources are spent on designing the processes and technology needed to eventually run the service. Therefore, it is important to create an environment where you can involve real people with trying the service as early as possible in the development process.*

Michlewski (2015:112) states that, "prototyping enables dialogue which focuses on the iterative process around a solution rather than the abstracted planning phase up front." Similarly Halse et. al. (2010:37) elaborate that the notion of incompleteness is critical here, since incompleteness as "work-in-progress … provides for a flexibility of interpretations that is crucial for continuous engagement and participation".

In the public sector, prototypes can potentially be models of "absolutely anything', be it new administrative processes, new citizen service journeys, or a visualization of the mechanisms or resulting processes of a policy initiative. What characterizes prototypes is that they are highly tangible, either as graphical illustrations or as virtual or physical models or spaces, and that they are intended to explore the experience of use (Parker & Heapy 2006, Bate & Robert 2007, Halse et. al. 2010, Polaine, Lövlie & Reason 2013; Halse 2014; Sanders 2014).

For instance, service journeys that are created not to show the current situation but to suggest a future process or experience are essentially service prototypes. They are often made visible through graphically showing steps, interactions, relations, events and experiences that make up a service. Another approach is to not illustrate the future service as a diagram, but to illustrate it as

a story. The story could simply be a text describing what happens and how it feels, using the tools of science fiction literature to create a "story from the future" (often scenario planning is associated with such stories). Or the story could be turned into a role play or an audio narrative or a film about the future – such as in the case of the iZone project discussed in this chapter. Digital services can also be prototyped. Graphical sketches or "mock-ups" of websites or apps can be drawn by hand, illustrating the layout and specific functions, such as in the Branchekode project. More advanced drafts can be drawn using graphical software. Physical models, sometimes small and sometimes in full scale can function as prototypes as well.

Prototypes do not have to look or feel anything like the solution, or design output that may ultimately result from the process. They may, while still being graphical or physical, be abstractions or symbols of dimensions of a service or even a policy, or they may provide tools that make up a design game (Kimbell 2014; Sanders 2014).

8.2.1 User testing

Either as part of design research or as a separate activity, user testing is often connected intimately to collaborative design approaches. Here, end users and/or key stakeholders are invited to experience the concepts or prototypes that have been developed, and provide their feedback (Mattelmäki 2008; Polaine et. al. 2013; Sanders 2014; Halse 2014). If it takes part during (early) field work, user testing often has a strong generative purpose (Moggridge 2004; Halse 2014), leading to a range of new ideas and directions; at a late stage in the design process, user testing might take more the form of evaluation of a proposed solution.

Design research, workshops, seminars, live testing, and prototyping are potentially all ways of engaging public sector staff in a design-led development process. From coaching employees on how to use a video camera or "flip" device, to enabling staff to test at small scale the solutions they have developed, these are all among a range of activities that foster employee involvement and, potentially, engagement. As we have seen, most of the cases studied involve rather significant and direct involvement of employees and mid-level managers in the design process.

These activities are not directly associated with design approaches, but are mentioned here as part of the portfolio of activities that were regularly carried out in connection with the cases examined for this thesis. A business case would typically involve attaching a number of assumptions to one or more design solutions (concepts) and then calculating the costs and benefits of implementing it, normally stating the financial return of investment (ROI). Some business cases were be more qualitative in nature. This meant considering from a more subjective, experiential viewpoint issues such as expected changes in errors in a service, in user experience, and so forth (Polaine et. al. 2013).

Business cases are used in some of the studied cases. For instance, in the Branchekode project, external consultants were hired to develop a business case to better understand the potential savings in time and cost for business and for the involved government agencies. The same was done in the Lewisham homelessness project, where an external consultancy was commissioned by the UK Design Council to evaluate the project. In the Family by Family and Skansebakken cases, external evaluations were carried out as well. Appendix A, an overview of data sources for the cases studied in the thesis, includes references to evaluation reports and business cases.

8.2.3   *Prototypes versus pilots*

The way in which the prototypes are developed in close collaboration with citizens and staff implies that empathy with end-users is sustained as part of the new solutions, since the process "[...] aims to embed emotional reactions into products and services" (Michlewski 2008: 384). In terms of the contribution of design approaches to generate more paradigmatic breaks from past practices, and engage staff and organizations in embracing those breaks, it seems that the tangibility of not only the process but of the resulting design proposals, and the tendency to take part in enacting them, is important. Writing about design prototypes, Moggridge (2007) quotes the Chinese philosopher Lao Tse for stating that: "What I hear, I forget; What I see, I remember; What I do, I understand". As concrete graphical devices, enactments, or stories, prototypes help the managers and their staff gain confidence that a certain design solution can actually be realized. Then, one might say, it is "just" a matter of implementation. Another way of describing the use of prototypes is that they are a way of making the *solution space* real and tangible, in

ways just like "professionally empathic" (ethnographic) methods make the problem space real and tangible to the decision-makers.

The research has shown that prototyping is experienced by managers as a relatively novel approach, perhaps because they are more used to a different way of working with proposing possible futures: pilots. As should be clear through the empirical examples, however, a prototype is a different thing than a pilot program. The way in which prototypes have been deployed across the cases the emphasis seems to have been at least as much on failing and learning, as on achieving immediate success. In contrast, pilot programs are typically more concerned with proving, or demonstrating, that the right solution has been found, and should thereby be a more direct pathway to implementation at scale. One could say that whereas prototypes are also successful when they show an organization how things should *not* be done, failed pilot programs are rarely viewed as successes. Perhaps the most central point here is that prototypes appear to have their justification at an early stage in the innovation process, where there continues to be a significant degree of uncertainty about what could be the right solution. In the cases studied, the problem space is open, and often the key problem is reframed in the course of the design work; likewise, what one might call the opportunity space is open too – which in turn triggers significant amounts of uncertainty. Here, prototypes seem to offer managers a way to navigate the uncertainty – but in most cases, they are still only roughly specified, far from implemented. Pilot programs are probably to a higher degree useful as more or less final proof (sometimes supported with randomized controlled trials, RCTs) that a given service or solution is right and can work at large scale. To complete the confusion, however, in some cases prototypes are characterized as pilots, perhaps since that language is better known in public management circles. A case in point is the evaluation of the NYC Housing and Preservation Department's design project, which is termed a "pilot".

8.3   **Engagement #6 Insisting on public value**

As I also discussed briefly in chapter 3, within public management, the notion of "value" has gained prominence over the past decade or so, not least spurred by Mark Moore's work (1995) and the work of Cole & Parston (2006). Across several of the cases, the question of value, or simply positive change, for citizens, is at the forefront. The managers seem to have an inclination, perhaps *a* priori, to insist on attempting to make a difference to the people – the

citizens – which they serve. In broader terms, many have a mindset focusing on "improvement". For instance, Peter Gadsdon, the Development Director in Lewisham, says:

> *I see my role as supporting improvement in the council. That is my main role as a manager, looking to improve things. So I am always looking for ways of doing that, and I will always provide full support and things like this. I just see this as my role, as a part of what I do.*

One of the thesis' clear cases in terms of considering public value is the Branchekode projct. Sune Knudsen is Head of Division at the Danish Business Authority (DBA). As mentioned earlier, he led an exploratory design project that aimed at making it easier to register a new business in Denmark. In describing the business case for a new solution that was co-designed with small business owners in a range of industries, Knudsen says:

> *If we succeed with this, thus creating something that is understandable and synchronized with day-to-day operations, the daily practice, I am pretty sure we will achieve greater user satisfaction. In addition, you will see that the public sector saves money because compliance would be higher. So you will get more of the most basic outcome ... And because companies will make fewer mistakes and understand it better, they will not always return with incorrect reports or a lot of questions. That means that the businesses will save a lot of money, they will be more satisfied, you will get higher efficiency of regulation, and the public sector will save money.*

Mr. Knudsens project addressed a specific government requirement: The selection of a *branch code* which is the statistical industry category to which a newly registered business will belong. However, the DBA knew that many business owners become frustrated and spend undue amounts of time figuring out which code to choose. To many of them, selecting a code is not merely a question of statistical categorization, it is making a choice about their businesses' public identity. Around a fourth of all new businesses in Denmark end up registering a code that does not accurately match what their business does; this leads to error in the government systems: Because the Food Safety Administration, the Ministry of Taxation, the Work Safety

Agency, and others, use the codes to plan and execute controls (including on-site visits) to businesses, the knock-on effects on administrative waste and error are huge.

Sune Knudsen engaged designers to use a range of ethnographic techniques to study how business owners experienced the online registration, and how various public agencies internally dealt and collaborated around the branch codes. Building on insights about user experience outside and inside the system, designers then carried out iterative prototyping of web *mock ups*, testing them with end users. The team, consisting of public servants on Mr. Knudsens own staff; a digital design agency; and the innovation unit MindLab, then created a working model for a new website to handle branch code registration, as well as a knowledge management system for administrative staff, to ensure quick knowledge-sharing across the different public agencies.

Taking a closer look at the quote by Sune Knudsen above, he expects that his design project will make the branch code registration easier and more satisfactory for business owners. Meanwhile, he is also determined to ensure better outcomes in the form of more accurate registration (compliance) with the codes, and he expects that the public administrators will save time answering questions about the codes and will have fewer errors in planning and executing controls. An externally produced business case study of the project confirmed that these types of value could be expected, to the extent that the cost of the new web-based solution would deliver a saving in time and money for both businesses and the public administration to the tune of approximately a one to twenty return on investment (ROI) over three years (MindLab 2012).

The British organization The Innovation Unit characterizes such results, where services are produced at lower cost while being better for people and driving more positive outcomes, as "radical efficiencies".[38]

Sune Knudsens comments above highlight a pattern in a number of the instances that are part of the empirical research: That the solutions flowing from design-led approaches, when implemented, hold a potential for significant improvements in public value. According to Cole & Parston (2006), "public value" is increased when public service organizations are able to improve efficiency (productivity) while at the same time improving outcomes. In my own

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[38] Gillinson, Sarah et. al: *Radical efficiency*, NESTA, 2010

earlier work (Bason 2010), I argue that in addition to productivity and outcomes, the value of innovation in the public sector should also include user (citizen) satisfaction and democratic elements such as participation, empowerment, transparency, and accountability. In fact, the engagement of citizens might in itself lead to increased value. As Pestoff (2012) points out,

Sometimes governments attempt to involve their citizens in the provision of goods and services, either for reasons of improving efficiency of public services, effectiveness of public policies, or to promote other important social goals, such as citizen engagement.

I will analyze the idea of citizens co-producing public outcomes, as a key theme in the discussions on an emerging public governance paradigm, in chapter 10. However, in the context of the present chapter I now turn the attention to how these questions of future value reorients us to the emphasis on creation, or future-making as a perspective on the management engagement with design.

Below I discuss the way in which using design approaches entails a different "punctuation" of the creation process in public management: From a highly research-driven, analytical and rational approach to a more explorative approach based on creating interventions and sensing the response. Here the guiding intent is essentially an exploration of how to create more public value.

8.4 **Discussion: Decisions from the future: The public manager as sensemaker**[39]

As public managers engage with prototypes, they are also entering the realm of decision-making, in the sense that they must choose which design proposal to take forward and possibly implement in their organization. As they do so, on what basis do they (potentially) make such decisions? As I will argue in this section, by gathering data via testing of prototypes that are essentially about the future, the decision space managers find themselves in is necessarily different than a decision space based on analysis of past performance. To relate back to chapter 2's discussion on our management legacy, and use some of that language, how are "optimal" decisions made on the basis of as-yet unrealized future scenarios?

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[39] This section builds directly on Bason (2014c)

Here, the notion of managing as future-making comes into play. To view management as a design activity challenges the paradigm of public management we have inherited from analysis-centric traditions. And it shifts us toward a future-centric paradigm essentially by reorganizing the sequence in which management activity is carried out. Managers become engaged in making decisions *on the basis of data about a potential future.* Let me explain.

Drawing directly on Herbert Simon's conceptualizations of design and vision of management decision, Dick Boland argues that design as applied to management action can be viewed as three major activities: Intelligence, design, and choice (Simon 1997; Boland 2004):

Intelligence is the activity, which calls the attention of managers to the need for intervening in order to change the current state of affairs. Boland suggests that it is "the process of sensing and predicting conditions that requires action or signal that change is required" (Boland 2004:108). This could also be characterized as analysis.

Design is the formulation of "possible courses of action that can respond to the current situation in a way that makes the possible course better able to serve desired human ends and achieve our goals." (ibid:108). In this chapter, it is particularly prototypes, as manifestations of what can be made, enacted and told, that represent potential future solutions.

Choice is the process, according to Boland (and as we also saw earlier, according to Simon) of selecting the design alternative that is most efficient and effective in reaching these goals. In examining the interplay between intelligence, design and choice (of which there are six possible sequences), Boland proposes that there are important implications in the way that managers choose order, or "punctuate" them. In particular, he highlights two such sequences as almost complete opposites: *Intelligence-design-choice* versus *design-intelligence-choice*.

Intelligence-design-choice, or "rational man" economic theory, is the punctuation proposed by Herbert Simon, and later adjusted by way of his theory of bounded rationality (which recognized that decision-makers do not have access to full information, and thereby can only act rationally within certain boundaries; Simon 1997). This is, broadly speaking, the public management model we have inherited, to the extent that this is still (in spite of the boundary constraints) an

analytical, rational, optimizing perspective on management and decision-making. In this view, rational man is intentionally goal seeking and applies intelligence and forethought in order to guide organizational action. By starting the sequence with the activity of intelligence, however, insufficient attention is drawn to the question of problem representation: Managers quickly address the establishment of alternative actions to be decided on, and move to decision-making (Simon 1997:77). To Boland, the implication is that "this way of punctuation management action leads to a finer and finer attention to problem representations that grow increasingly irrelevant to the human condition" (2004:110). He explicitly mentions public policy domains such as welfare, education and transportation as areas that are particularly prone to this challenge. He thereby places his argument squarely in the realm of this thesis.

A central question raised in this thesis is, namely, whether the systematic integration of design approaches in the practice of public management and public service creation could be somehow significant, or whether design may rather be positioned as an add-on, a more marginal contribution to the centuries-old practice of planning public interventions? This notion of different punctuations begins to move us toward insights that might help answer this question.

Consider a different "punctuation" for the managing the public policy creation process. *Design-intelligence-choice* or the "sensemaking manager", is articulated by Richard Boland as the "antidote" to the rational man model presented above. Here, design is shifted to the forefront of the sequence of management (or policy) action. Design becomes, in Boland's perspective, the shaping of things while engaging with others in the flow of action and the production of outcomes:

> *Interaction with others generates equivocal enactment that is then subject to a sensemaking process. During sensemaking, intelligence is applied to order those elements of the raw action in ways that make the situation meaningful, aesthetically pleasing, and morally acceptable. This intelligence is followed by a choice of which meanings and sensemaking structures carry forward into future enactments (Boland 2004:111).*

In this model, goals are understood retrospectively and the enactments of design become the driving force of organizing. Seeing how a number of the managers included in the cases in this

thesis seem to do exactly this, usually propelled by, or inspired by, design work, they seem to present examples of the design-intelligence-choice punctuation.

As such, this is a phenomenological appreciation of human action, and one that not only emphasizes sensemaking, but also essentially collaborative learning in an on-going endeavor to meaningfully impact the world. As Halse et. al. (2010) suggests, it entails something akin to rehearsing the future. At a more fundamental level – and very much in line with Boland's suggestion above – design approaches appear to offer the opportunity for a different interplay between defining problem space and eliciting impactful, visionary solutions.

Consider this scenario, which I will return to in Part III: As managers transform, or turn upside-down the way in which they manage, in which they design for outcomes, might the public governance model also be transformed to become more future- or even outcome-centric? As managers engage with design, they manage for outcomes *back to* activities, inputs and, ultimately, mission. One could say they lead from the future.

Leading from the future, to try out this term, implies exactly what Herbert Simon (1997) seemed (according to Buchanan) to struggle to grasp: Managing on the basis of intuition, of creativity, and of vision. It implies, to some extent, managing with the imagination as your guide.

8.5 Conclusion: Design as future-making

This chapter has discussed how design is essentially an activity of future-making which allows managers to envisage not just potential alternative futures, but to transform ideas and concepts into concrete prototypes which end-users and public staff can engage with. In many ways, this is how most people would view design: As activities of creation, making, and shaping artifacts that come to life as tangible, visible "things" in the world. This chapter has shown how, when focusing on the innovation of services and organizational processes, the role of visually and physically prototyping potential approaches together with end-users are at the heart of design practice. When it comes to collaborative design of services, the making of prototypes is thus essentially a social process of coming to agreement of viable avenues of change.

I concluded the chapter by suggesting that by engaging in action, and "trying things out" before turning to analysis, public managers who engage with design essentially flip the traditional management paradigm on its head. This reorientation of management practice might in turn have implications for emergent public governance.

This chapter concludes part II of the thesis, and the consideration of research sub-questions 1 and 2. The next part turns to the implications of the use of design dimensions and design engagement for outputs, public value and, particularly, emerging public governance.

Part III

Discovering the next governance model

9. Design outputs, change, and signs of public value

Design is fundamentally about value creation.

Angela Meyer, in
The Handbook of Design Management (2011:188)

This chapter initiates part III of this thesis. In it, I take a deeper look at the patterns that appear from my cross case analysis, with a particular focus on three questions: What triggers of change and transformation appear to have been the most significant? What do the results, or outputs, of design work in public management ultimately look like? And, to what extent are there signs across cases of creation of public value – either direct or indirect – that might be the result of the use of design approaches?

First, I summarize across the previous chapters my findings about how design contributes to change processes in the cases studied. I have argued that design work unfolded in three dimensions in the cases I studied, which I have labeled 1) *exploring the problem space*, 2) *generating alternative scenarios*, and 3) *enacting new practices*. In terms of leading to concrete changes in organizations or activities, what seem to be the dominant dimensions? What characterizes their contributions?

Second, I seek to chart the *outputs* flowing from the design processes: Are there different types of "design outputs"? In the cases I studied, what did managers ultimately create and decide to implement? What form do design outputs take? And to what extent do they go beyond singular "stand-alone solutions" to imply wider-ranging organizational, management, and strategic governance changes? To answer these questions, I map the types of outputs (graphics, products, services, governance systems) that result from the individual cases.

Third, I discuss the outcomes, or *value* of the results of the design approaches and the outputs flowing from them. This begins to address the "so what" question about the application of design approaches in public settings. Are there signs, perceived by me as researcher or by my

interview subjects or by others, of positive change flowing from the design work? Beyond changes within the organisation, such as a new view on its mission and purpose, or a different view of the relation with citizens, are there external changes realized through implemented solutions? This is an issue of the creation of public value through design approaches (Moore 1995; Cole & Parston 2006). I should note here that these questions about the value of outputs, especially relative to other non-design approaches, are perhaps the most ambitious and difficult ones that I broach in this study. Due to the limitations in the size (the number of cases) and design of my study (I have not studied cases in which change was sought by non-design methods, so cannot speak to direct comparison), my answers to these questions will be suggestive, far short of conclusive. However, the issue of value is too important for me not to address it.

Finally, and fourth, I conclude with a discussion of the potential relationship between design and public value.

9.1 Design dimensions: Drivers of change

This thesis has explored in detail how design processes unfold within a range of different organizational and policy contexts, by drawing on empirical material gathered from 15 case studies. Patterns have emerged that I have suggested can be conceptually identified with three dimensions along which managers engaged with design: The exploration of public problems the generation (ideation) of possible future scenarios; and the enactment of those futures into tangible concepts and prototypes, including in some instances the development of business cases and assessments of their potential value. In all of the cases, all the three design dimensions were in play to varying degrees.

However, the significance of the different processes varies significantly across the cases. That is, the participants in these processes did not consider all three dimensions to be equally important, and which dimension, or dimensions, seemed most important varied across cases. Perceived breakthroughs happened at different junctures across cases. Even though all cases involved some degree of design work along all three dimensions, it is relevant to ask what were the *main* dynamic and contributions of design approaches?

Figure 23: Significance of design across cases for creating change

Role of design dimension in facilitating change	Example	Exemplary cases (*indicates example)	Qualification	Role of manager to facilitate change
Exploring the problem space	Eye-opener that citizens become more sick than they already are due to case management process*	BII* Family by Family Lewisham Branchekode Helsinki Tax Rigshospitalet Skansebakken	In some instances the insights generated were surprising or novel to managers; in others they were part of an exploration of problems which managers were already to some extent aware of.	Openness to having assumptions challenged; ability to use "empathic data" to mobilize staff.
Generating alternative futures	By engaging mentally handicapped users in systematic, visual idea-generation, the institution was transformed to become citizen-centered and thriving.*	Camillagaarden* Suffolk Stenhus Housing Competition	In some cases the dominant role of ideation-led processes might be due to lack of rigorous design research; "empathic data" was simply not sufficiently available.	Patience; allowing for open-endedness; ability to "nurse" staff through uncertainty. Readiness to embrace novel ideas.
Enacting new practices	Formulating a compelling and ambitious vision for a digital, student-centric high school.*	iZone* Holstebro	In the iZone case the starting point is a politically mandated vision, taken up by the manager; in Holstebro it is very much driven by the manager herself.	Imagination and ambition of manager on behalf of organization, and possibly on behalf of self.

As shown in the table, in some cases, it was the design research, which sparked insights that led to new avenues for designing responses to the problems that were identified. In other cases, the main driver was the process of opening up the opportunity space, generating a wide range of ideas for action. And finally, in some cases it was the envisioning of radically new futures that became the main driver of change.

The table also illustrates that the majority of the cases were heavily influenced by the "empathic" user insight as a key driver of change. This does not mean this would always, or typically, be the case in design projects. There may well be bias in the selection of the projects covered in this thesis. However, there is an argument to be made, which was laid out in chapter 6, that the "empathic data" associated with insight-led processes tends to create significant momentum among staff, in terms of realizing changes to the current situation. To provide a

single example here: Andrew Eickmann of the New York HPD says that, "the spirit and ideas from the design process have life and will be implemented." As we have seen, words like "life", "energy", "engagement" and "motivation" are very prevalent in the narratives surrounding the dimension of exploring the problem space.

One might therefore distinguish between three ideal-types of roles played by design in contributing to processes of change, which can be understood as the overarching dynamic dominating a particular project:

Insight-led: Mainly driven by the "eye-opener" of empathic material from field research. This paradigm can be found in much of the literature on humanistic, ethnographic and design-anthropological approaches (Bate & Robert 2006; Bason 2010; Polaine et. al. 2013; Madsbjerg & Rasmussen 2014) but is also present in user-driven innovation (von Hippel 2005) and co-design approaches (Halse et. al. 2010).

Ideation-led: Driven mainly by an idea or concept that was developed during the design process. This perspective is associated with much of the literature on creativity, but also on open innovation and crowdsourcing (Csikszentmihalyi 1996; Chesbrough 2003; Kelley 2005; Tapscott 2006; Eggers & Singh 2009; Surowiecki 2009).

Future-led: Driven by the establishment of a clear vision of a future state, which is made concrete through the use of design approaches. This perspective on design and innovation can be found for instance with Ackoff et. al. (2006), Norman (2007) and Verganti (2009).

These ideal-types of the roles of design approaches constitute the categories within which the most significant impetus for change might arise on a given project. And, as I have noted, they may be different on different projects.

It is important to underline that these ideal-types are not mutually exclusive; as discussed extensively, the relationship between insights, ideas, and visions for a better future state are highly intermingled and really part of the reflective process of designing, and of managers engaging with design. However, based on the case analysis, it seems fair to say that certain processes take precedence, or achieve dominance over others. In the cases there is a certain

flow, there are certain punctuations, and certain exclamation marks, which accentuate the significance of particular dimensions of design.

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9.2   **Design outputs: From prototypes to implementation**

In the previous chapter, I discussed the processes surrounding the design dimension that I called "enacting future practices," which took the form of prototyping and testing solutions, as well as validating those solutions against business cases and, in some instances, evaluation. After (or sometimes together with) prototyping and validation comes decision-making: Which of the proposed design solutions shall we adopt? What are our resources and opportunities for actual implementation? The table below illustrates the kinds of designed outputs associated with the processes in each of the cases; it is based on the indications and evidence uncovered in the course of my interviews. Some projects were finished before I did my data collection; in these cases, it was relatively clear what were the outputs. In others, projects were not finished it was somewhat early to conclude what the outputs would be; in these cases, conclusions about outputs, below, are tentative. To distinguish between clear and tentative conclusions about outputs, I have indicated in **bold** the cases in which the output in question is known to have been implemented partly or fully.

It is very important to underline that when I suggest that outputs are *associated* with the design activity, it does not necessarily mean that they were directly *caused* by the design activity. As discussed also in previous chapters, as design processes unfold they are influenced by, and draw on, pre-existing ideas, concepts, and visions about what would constitute desirable solutions or changes – whether that be in graphical expression, (digital) products, service processes or systems, strategies and governance principles. The ensuing outputs are also influenced by other organizational processes and inspirations flowing into and interacting with the design process. However, in order to be marked with an "X" in the table below, the design activity must have been seen by managers as a key contributor/enabler/facilitator of the shaping, form-giving and realization of the solution.

Figure 24 Outputs of design processes

DESIGN OUTPUTS	New graphical and visual expressions	New physical or digital products or spaces	Redesigned organization, rules and/or service processes	Emerging governance systems or principles
Examples	'Communication tree" at Skansebakken; redesigned graphics (Holstebro "The good kitchen")	New patient space at Rigshospitalet; new digital interface (Branchekode)	Family by family process of connecting and facilitating seeking and sharing families; Redesigning service process for obtaining city permit (Helsinki)	Citizen-led innovation (Camillagaarden); student-centered e-learning model (iZone); shift from compliance to outcomes (BII)
Case				
1 BII	**X**	**X**	**X**	X
2 FamByFam		X	X	X
3 Lewisham	**X**		**X**	**X**
4 Suffolk			**X**	
5 Camillagaarden	**X**	**X**	**X**	**X**
6 Branchekode		**X**	**X**	**X**
7 Helsinki			**X**	
8 Tax				X
9 Rigshospitalet		**X**	**X**	**X**
10 Stenhus		X		
11 iZone		**X**	**X**	**X**
12 Holstebro	**X**	**X**	**X**	**X**
13 Housing	X	X	X	
14 Skansebakken	**X**	**X**	**X**	**X**
15 Competition		X	**X**	

Bold = known to be partly or fully implemented

The following is a gallery, a few selected snapshots from the studied cases, that illustrate design outputs in the shape of graphical expression, physical and digital products and spaces, redesigned service processes, and new systems.

Figure 25: GRAPHICAL AND VISUAL EXPRESSION: The communication tree "Georg" at Skansebakken

Source: Design School Kolding

The "communication tree" at Skansebakken was created by the design team from Kolding school of design in order to visually display interactions between visitors and citizens in the institution.

Figure 26: PHYSICAL SPACE: BEFORE/AFTER redesigning public space for patients at Rigshospitalet

Source: Rigshospitalet

Figure 27: PHYSICAL SPACE: BEFORE/AFTER redesigning public space for homelessness services in Lewisham (new physical product/space)
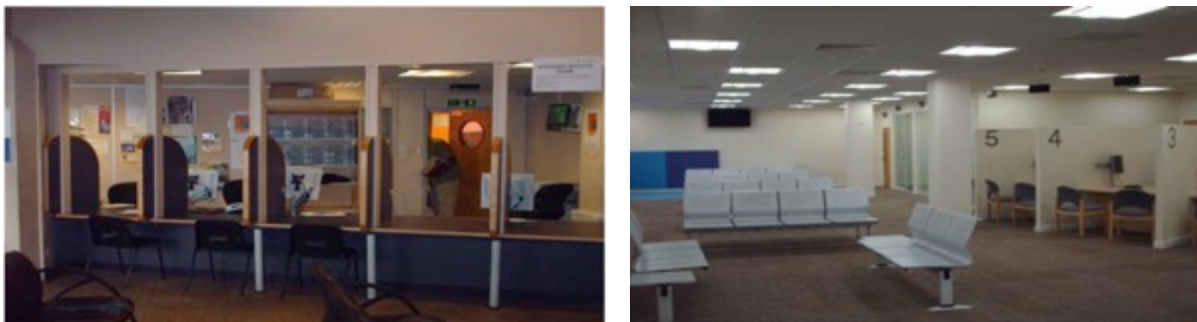
Source: Borough of Lewisham

The two sets of images show redesign of physical space at Rigshospitalet (Denmark) and Lewisham's Housing Options service (UK) respectively.

Figure 28: DIGITAL PRODUCT: New digital solution for registering a business

Source: Virk.dk

Figure 29: SERVICE PROCESS: Connecting "seeking" and "sharing" families in Adelaide

Source: The Australian Centre for Social Innovation (TACSI)

Figure 30: GOVERNANCE: Citizens empowered to design and sell their own commercial products at Camillagaarden

Source: Camillagaarden project "Støt kuglerne" ("Support the balls"), where mentally handicapped users designed, produced and sold bracelets for men (illustrated) in support of prostate cancer.

Figure 31: GRAPHIC DESIGN: Proud staff displaying new visual identity and new uniforms in the "Good Kitchen" project

The illustrations exemplify the wide range of physical and social manifestations of the design work, as the processes and methodologies led to tangible outputs and changes in behavior and experience.

9.3   **Signs of public value**

The purpose of this thesis is not to systematically evaluate and document the resulting outcomes of the design approaches and processes. As I have noted, my research design does not allow that. However, the question of public value *has* come up in the interviews (indeed, I raised it specifically, see thematic guide in Appendix), and information about public value is also included in some of the secondary material available from which my cases were developed, for instance, in externally developed "case studies" or evaluation reports. And questions about the value that has resulted from design approaches are of great interest to participants and their sponsors, which is precisely why the question comes up in source materials that I have drawn on in my study. The question is relevant, as well, to research (indeed, it was raised in discussion of the scope of this thesis at the first Work in Progress Seminar). Thus, although it would, of course, be an overstatement to claim that the material available provides robust, conclusive "evidence" of causal links between design processes, resulting "solutions," and public value, I would be remiss if I did not discuss it, while being careful to maintain an awareness of the limitations of my study. The aim of this section, then, is nothing like to "prove" that design outputs create more or different public value. My aim, rather, is to respect and honor the felt need for information about value, and to discuss what, if anything, my study can say about this question. Given all of the efforts that have gone into commissioning, managing and engaging with design work in the 15 cases studied, "so what?" is a relevant question. Are there any indications that I can discern that citizens, businesses and other users or stakeholders are better off as a result of the processes? Is the organization better capable of creating the results for which it is ostensibly accountable? Do the projects lead to cost savings for public organizations? Ultimately, questions like these matter a great deal.

Public value, and in particular policy and service outcomes, could be said to be the holy grail of public administration (Osborne & Gaebler 1992; Moore 1995; Rist & Kusek 2004; Cole & Parston 2006; Mulgan 2009; Alford 2009; Bourgon 2011). Ultimately, what is the result of the

efforts of political leaders, policy makers, public managers and their staff to enact change in the world?

According to Cole & Parston (2006) "public value" is increased when public service organizations are able improve efficiency (productivity) while at the same time improving outcomes. In my own earlier, more prescriptive work, I have argued that in addition to productivity and outcomes, the value of innovation in the public sector should also include user (citizen) satisfaction and democratic elements such as participation, empowerment, transparency, and accountability (Bason 2010). In fact, the engagement of citizens might in itself lead to increased value.

The analysis here, the result of my work in a non-prescriptive, empirical mode, will have to be more tentative and based on the documentation immediately available through my empirical research and other sources. I have chosen in my analysis to use the expression "tentative signs" when speaking of public value. By "signs" I imply qualitative (and sometimes quantitative) indications that a change has likely been caused by the design work, and that it has in some way been valuable for either end-users (citizens, businesses), for the organization, or both.

There are also leadership implications. As the public managers in question see emerging signs, or even tangible evidence, indicating increased public value being produced as a consequence of the new models they are discovering, this may function as a positive feedback loop along the arc of change they are already endeavoring on.

Let me share a few examples of what these tentative signs of public value look like.

Signs of better service experience
One of the most common types of public value that seem to result from the design work is a change in how citizens experience the particular public service in question. This might not be very surprising, since as discussed in the previous chapters, the role of user experience is central to many of the design methodologies and processes.

For instance, at *Camillagaarden*, according to the institution's own figures, user satisfaction grew and the number of users went up by nearly 30 percent (without additional staffing), to the point that the institution had a waiting list for the first time in its 40-year history.

Another example is the *Holstebro* (meals on wheels) project, which focused very clearly on improving citizen satisfaction with the local government offering. According to the municipality (Sangill 2013), the design project led to an improvement in food quality; more and new choices for citizens through a broader menu; new offerings to people with differentiated needs (e.g. older citizens who eat smaller portions); and a clearer service profile vis-à-vis citizens. As a result of involving citizens in co-designing the offering, the improvements in service and choice, the municipality belives that it has strengthened its image and attracted more satisfied users (customers) of its service.

Signs of productivity increases

In the times of austerity, such at those that have shaped the last decade of public management discourse, great emphasis has been placed on cost-cutting and increasing the productivity of public services. As shown above, objectives of concrete savings or productivity increases have not been central to all cases; however there seems to be no doubt that productivity requirements have been a very important part of the context within which many of the cases unfold.

In some instances, design methodologies are claimed to have led, directly or indirectly, to significant savings or increases in productivity. One example is the borough of Lewisham, which in official statements, according to an external evaluation, claimed to have achieved efficiency savings annually of £368,000 from a design project investment of £7,000 (Lewisham 2012; Design Council 2014).

In other cases, the available documentation has the character of business case research – indicating potential, but not demonstrating actual productivity improvements. For instance, in the *Branchekode* project, an externally produced business case study conducted by a consultancy confirmed that significant productivity gains could be expected. Based on an activity based costing method, including time and money saved by public sector staff as well as businesses, the report assessed an approximately 1:20 ratio of investment to return over three years (Advice 2012; MindLab 2012). It should be underlined, however, that the bulk of the

reduction of time spent was on behalf of the businesses; the service improvement would, in other words, matter a lot to them, and less to the tax payers indirectly funding the service.

Going back to the case of *Camillagaarden*, the institution for mentally handicapped adults, manager Christina Pawsø noted an actualized gain in productivity that flowed from changes in relationships with citizens. The institution has added 30 percent more users with a fixed number of staff, and increased satisfaction. She gives an example: on average there is one social worker to eight users at Camillagaarden, but with the right type of engagement of users, a staff of two can easily handle 30 users over several hours at a time – which is, she notes, an approximate *doubling* of productivity. Pawsø explains how this is made possible by leveraging the resources and motivation of the individual user: "If you are put into a frame where all your resources are being used instead of everything you are having trouble with, then you can also help others. And this also gives value to the individual."

In the Holstebro "The Good Kitchen" case, the municipality registered a range of changes on the side of staff, which can be translated into productivity gains (and which also influence the service experience as discussed above). Among the key changes were strengthening of employee competencies and skills, a reduction in sick leave and improvement of motivation and job satisfaction (Liedtka 2013). A rough estimate, based on the responsible managers' own data and assessment, is a productivity increase between 10-15 percent as a consequence of the project.

At Skansebakken, an evaluation shows that employees have spent more time with half the residents (ranging from 5 to 9.9 hours per week) and less time with the remaining half (ranging from -5.5 to -17.9 per week). The total amount of time spent with residents has according to the evaluation decreased with 10.5 hours per week. This implies a certain, if rather small, increase in productivity at Skansebakken, while the number of relations between citizens and the outside world have increased (as discussed below).

Signs of better outcomes
A significant number of the cases show signs of change in citizen's behavior and actions – what they do, how they act, how they relate to each other, or how they relate to their environment.

An example is the Family by Family project in Adelaide, Australia. In terms of the main goals of the program, which focused on creating more thriving families, 80 pct. of families answered that they were "better" or "heaps better" following the first coaching session. After subsequent sessions, 90 pct. responded positively that the intervention helped them achieve their goals (Community Matters 2012: 20).

In Skansebakken, where the design project focused on redesigning and ultimately increasing the amount and quality of relations between handicapped citizens and non-professionals, the centre manager Jesper Wiese says of the experience of visiting and being at the Skansebakken institution:

> *It is completely different now to come on visit. You know, fundamental things have changed. Actually, I was really excited now that we moved, if we would fall back into old habits. But everyone, including some I did not ask, have said it, "It is nice to come here'. And of course it is something to do with the physical environment also, but this is also a question of whether it is acceptable to have guests … It is those very specific things. Hanne has had a visiting friend. There is a 4th grade school class who come and sing. Now there is a big movement about creating voluntary relationships. It works. I think we have more than 35 [new relationships].*

At Skansebakken, in terms of quantitative change, an external evaluation carried out by the Municipality of Vejle and the state-run Social Service Agency showed that among six citizens studied, they collectively gained 21 new relationships beyond the institution, corresponding to increases in the number of relationships per citizen between 13 pct. and 50 pct. (Vejle Municipality & Social Service Agency 2014; Bohl 2014).[40] The evaluation report goes on to state that the tendency to form new relationships directly corresponds to the ambition that "citizens through the project would achieve new relations to family, friends, acquaintances, civil society, etc." (Vejle Municipality & Social Service Agency 2014:24). The report goes on to say that the staff at Skansebakken "to a high degree have succeeded in facilitating new relationships

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[40] The number of new relationships mentioned by the manager (35) is higher than stated in the evaluation report (21), which may be due to the fact that the interview for the thesis was carried out after completion of the report. It raises the interesting point however that it seems as if data on growth in relationships continued to be collected at the institution after end of the project, and end of the evaluation.

where they are not themselves a key player". Staff have played an active role in "setting citizens free" to gain new experiences. The value of this is underlined in the interview with manager Jesper Wiese, referring to one of the handicapped users:

> *You do not need much. If you can sit down next to Jacob and read aloud from a book, then Jakob is happy for half an hour. And it makes his day better. It is as simple as that.*

It is simple, as Jesper Wiese says, but ostensibly the result of a quite long and intensive design process, which leads to this consideration of the power of a simple interaction like reading aloud from a book to a mentally disabled citizen.

In Holstebro municipality, Poula Sangill contends that the staff have increased their focus on the entire value chain of the service offering, and have a stronger focus on the citizens who use the service, both in terms of food quality and in terms of service provision. There is increased focus on communication and interplay with citizens (Liedtka 2013).

In the Housing and Preservation Department design project in New York City, a highly comprehensive 2014 evaluation report seeks to assess the findings and results from their "pilot". Amongst other data sources, the report used a survey among more than 2,500 citizens who had interacted with the program. Respondents indicated that a range of changes implemented through the design work had positive impact, in terms of the citizen's ability to reach better, more informed decisions about their housing options and application process:

> *The evaluation team found that the pilots clearly met the proposals' stated design objectives: to encourage information accessibility and exchange, account for applicants' lived reality, and enable more informed decision-making (although findings were somewhat mixed regarding the first of those objectives). The pilots also achieved their intended short-term outcomes, to create stronger support for community groups that provide applicants with assistance and to generate greater access to information about the process* (Public & Collaborative 2014:5).

As the quote, from the executive summary of the evaluation report, illustrates, the design project has resulted in tools, which shape different service interactions, improving not just the experience but the ability to make important decisions. Another outcome, which is tightly linked to the notion of co-production of services, and which I will discuss in the next chapter, is the ability of community groups, partners to the City administration in delivery of services, to perform their role more effectively.

A final example of apparently valuable outcomes come from another New York City case, the iZone program on creating a student-centric digital high school, which embraces "asynchronous learning". The implication is that because digital learning tools can be tailored to the individual needs and learning pace of each student, the students carry through their educational process asynchronously. The former principal of Apollo Academy, the school, indicates in a follow-up interview that there were significant improvements in learning outcomes as a consequence of the design work, in combination with a wider set of reforms in New York City's public school system, which led to transformation of the school. Especially two kinds of improved outcomes are highlighted by Seth Schoenfeld, the principal: 1) Reduced absenteeism; and 2) Stronger educational progression, measured as "mastery" of subjects rather than only attainment of "credits" for passing courses.[41]

Signs of increased democratic engagement
The signs of various kinds of increases in democratic variables, such as stronger democratic engagement, are often found in terms of transparency and insight for citizens into their own cases. One example is the Board of Industrial Injuries, which digitized the case management process and made citizens' individual records available online. This was not a direct result of the design work but part of a larger process of digitizing the agencies' interaction with citizens.

One could very well also say that the HPD project in New York has strong democratic and participatory potential benefits to citizens, since the aim amongst others is to create a clear and understandable basis for understanding one's rights and possibilities for accessing public housing.

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[41] Conducted in connection with visiting scholarship in New York City at Parsons School of Design, spring 2013.

In the Camillagaarden case, participation in itself was not a stated objective in the design project; however there seems no doubt that the massive engagement of the users of the institution in creating and designing their own activities had implications for the experience of participating and "being heard".

The table below seeks to sum up where there are such tangible signs concerning the creation of value. I have indicated the signs with "O" in order to differentiate them from "X" signifying the pre-existing intent or ambition for value creation, from the perspective of the managers, which I discussed above.

Figure 32: Expectations (X) versus signs and indications (O) for the creation of value through design

AMBITIONS (X) AND SIGNS (O) FOR PUBLIC VALUE	Better service experience (How end-users experience the public service)	Higher productivity (Cost savings at similar output or increased output at same budget level).	Better outcomes (Changes in actions and behaviors by citizens, including higher compliance)	Enhanced democracy and regulation (Improvements in accountability, legality, transparency, participation)
Case				
1 BII	X O		X O	
2 FamByFam	X O	O	XO	O
3 Lewisham	X O	X O	X O	
4 Suffolk**			X	
5 Camillagaarden	X O	O	X	O
6 Branchekode	X O	X O	X O	X O
7 Helsinki**	X			X
8 Tax**		X	X	
9 Rigshospitalet	XO	XO	X	
10 Stenhus			X	
11 iZone			X	
12 Holstebro	XO	O		
13 Housing	XO		XO	XO
14 Skansebakken	X O	O	X O	
15 Competition*				

* Too early to reach any conclusions ** No data available

As the table shows, design processes seem to have led to perception of a range of the results that were expected, or hoped for, beforehand. In some instances, it appears that there is also value generated, which was not necessarily expected, or formally a part of the objectives of the design projects.

9.4   Conclusion: The design of public value?

This chapter has illustrated some of the design outputs as well as a range of tentative documentation of the kinds of public value flowing from the design work, thus contributing to answering research sub-question 3. One more time: The objective of this thesis is not to conclusively demonstrate or prove that the design approaches lead to public value; however, it seems fair to conclude that there are at least indications that various kinds of change happens in conjunction with the design work, and that some of these changes are deemed positive by the managers involved.

Further, in most cases the changes are more or less directly linked to the insights gained from various design processes, or from the ideas, concepts or prototypes that were developed. As Pestoff (2012) points out, governments can seek better ways of involving their citizens in the provision of goods and services, either for reasons of improving efficiency of public services, effectiveness of public policies, or to promote other important social goals, such as citizen empowerment, participation and democracy. At least for a subset of the cases studied in this thesis, there seems to be sufficient evidence that some of these kinds of value are being gained, in part due to the design work.

10. Creating change in governance by design

The question of who is the producer is more complex than appears at first sight.

John Alford, *Engaging Public Sector Clients* (2009:2)

The objective of this thesis is to better understand the interplay between design approaches and public governance, through the lived experience and perspectives of public managers. More specifically, I wish to contribute with new knowledge by exploring the "mystery" of the role of design in creating changes in activities, services, and systems in a government context. I also wish to inform future action – by suggesting ways that managers might engage with design to spur change in public organizations.

In terms of research design and methodology, I have emphasized that it would likely not be possible to build well-developed constructs and models in this thesis, but that I would rather combine my empirical findings with an emerging body of related research to build "nascent" or, at best, "intermediate theory," which would present "provisional explanations of phenomena, often introducing a new construct and proposing relationships between it and established constructs" (Edmondson & McManus 2007:1158).

Part II and its four chapters sought to illustrate how the change processes associated with design work unfold, and how this appears to matter to public managers. It addressed research questions 1 and 2 of the thesis.

In opening Part III with chapter 9 I gave examples of some of the outputs of the design process, and discussed tentative signs of the creation of public value. I also highlighted that some of the contributions of design did not merely concern new graphics, products or services, but rather systems. By systems, I mean the elements and interactions between them which together function to create intended outcomes. In the private sector, the principles guiding such systems would often be called business models. In a public management context, they could be called governance models (Hartley & Benington 2001; Hartley 2005; Greve 2013). Although no

generally accepted and authoritative definition of governance exists, its origins are a clear indication of its meaning: Governance is derived from the ancient Greek word *kubernáo*, which is also the origin of the word government, and which means steering of a ship or cart (Wikipedia 2016). Hufty (2011) has suggested that governance is the processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions. Question about governance models then become questions about the principles that guide such processes across dimensions like laws and regulations, financial arrangements, organizational structure, management procedures, public service operations, documentation, evaluation and accountability, and so forth.

My point of departure in this chapter is the observation that there are several alternative paradigms, ideal-types or models, from which to view and interpret public governance – the alternatives I discussed in some detail in chapter 3. My intention now is to try to understand better the role that design-led approaches play in practice from a governance perspective: Might design approaches influence managers' ability to discover new or different ways of governing that could be better suited to achieve their organizational mission (or in some cases, drive change in that mission itself), in order to produce public value? My intention is not to try to formalize a completely new governance model. That would require a rather different endeavor in scope and ambition. Rather, it is more humbly to understand whether public managers' journey of engagement with design influences governance in practice (Hartley 2005; Bourgon 2011; Agranoff 2014; Waldorff et. al. 2014), and to distil what the emerging characteristics such approaches to governance might have.[42] In this sense, I seek to provide nuance, substance and perspective to the current debate over the "next" public governance, which, as discussed, is far from finished. Another way of putting this: I am asking *which possible dimensions of an emerging governance model are brought particularly into focus through design processes?* This is an analysis of the third research question of the thesis, namely what consequences design approaches may have for public governance?

Below, this chapter briefly summarizes the findings developed across the thesis by posing the question: What appears to be the significance of design approaches for innovation in public

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[42] For communication purposes I do give these principles a name, as a model of governance.

organizations, and for the management of these processes of innovation? This "significance" is illustrated through a simple conceptual framework.

I then turn my attention to the issue of whether design approaches might contain or suggest the potential to shift governance models more broadly. Based on my empirical research, I explore what more general changes, if there are any, in the underlying governance models of public service provision are prompted through applying design approaches. In the cases studied, have design processes opened up wider considerations of the nature of public service provision that are more profound, or more fundamental, beyond the concrete design outputs of specific projects? If so, what is the nature of such wider considerations, and how have they been articulated across the cases?

Using my research findings, I identify four characteristics of such broader consideration, four ways that wider governance impacts are being articulated. Each of these four characteristics is described in terms of empirical findings, then analyzed and discussed, in order to elicit their defining properties.

Finally, I sum up in the form of a case-based overview that shows the patterns I have discussed.

10.1   **Changing governance by design: A conceptual framework**

In the previous chapter, I sought to identify the distinct kinds of designed "outputs" flowing from the different cases, and from the different design processes. However, more is at stake here than "outputs". What if the consequences of applying design approaches in public organizations reach beyond the creation of graphical expressions, or new service processes, or various types of new products (often digital)? Might the more obvious outputs of projects that involve design, the products and services that emerge, or the ways in which they emerge, exemplify principles of system design, or governance that are – to some extent at least – novel? Normann & Ramirez (2004) propose that "as offerings change … so do institutions that transact them". One might well wonder, then, if a new, or redesigned, emerging form of governance is the larger game in the quest for public sector innovation. Rather than focusing on stand-alone "solutions" individually, might we instead coax from these some ideas about fundamentally different ways of steering and organizing public organizations that could in turn yield a much broader set of

"solutions"? As Hartley (2005) has suggested, this issue of innovations in governance is rarely well addressed in public management research.

The figure below summarizes the findings of this thesis up to this point, presented within a suggested, and intentionally provocative, frame bounded by current and emerging paradigms of public governance. To the left appear the current paradigms, "traditional" and "new" public management; to the right is an emerging public governance model, which I have yet to explain. The figure also displays the different elements of the processes I have studied, organized using the design dimensions set out in earlier chapters: *Exploring the problem space*, *generating alternative scenarios* and *enacting new practices*. As I showed in chapters 6, 7 and 8, each dimension is associated with multiple engagements with design by public managers.

Figure 33: Conceptual framework for possible contribution of design to governance paradigm
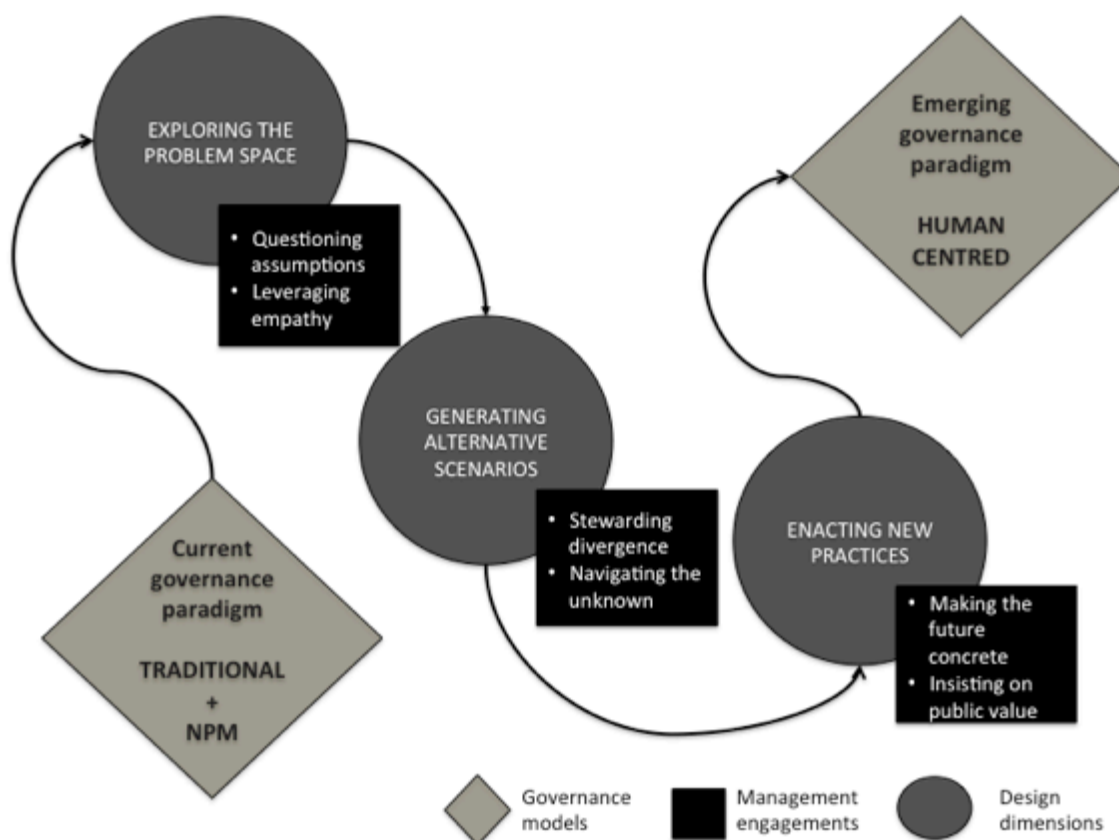
The figure illustrates the processes involved in enabling shifts in governance by design. As the legends below the figure indicate, the journey encompasses governance model(s), the

engagements of managers with design processes, and the design dimensions (which cover the various design approaches).

The figure does not show anything detailed, however, about the nature of the emerging governance paradigm itself, or about how public managers themselves understand it. Are there patterns in my empirical research, which point to a particular form of governance, or characteristics of governance, that may become enabled by design?

Based on a careful examination of the empirical material in this study, I have attempted to build a somewhat more fine-grained perspective on an emerging governance model, or perhaps, rather, on emerging governance *principles*. The sections below explain these principles. I consider each in turn, discussing my findings concerning the nature of the shifts implied by each and the contributions of design approaches to them, while drawing on relevant governance and design perspectives and extant literature in my discussion.

10.2 Relational: Reframing purpose around people

First, there is a pattern across many of the cases that the governance principles reflect a more *relational* understanding of the organization and its role in impacting users and other outside actors, to create outcomes. As Alford (2009:206) suggests, this concerns the issue of "what are we really trying to do here?" In this section (and the subsequent three) I will first consider the empirical findings that I can induct from my case research before turning to literature that can help interpret them.

10.2.1 Research findings

At the Board of Industrial Injuries (BII), the Director General Anne Lind says that, "The first thing that I see that should be changed is our mission statement." She continues:

> The perspective I want to change is where we engage the citizen more actively in our case management … What we are now exploring is whether we can influence – via innovative processes – the entire legislative framework. So that we can carry through this shift in perspective from control to trust."

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In the Borough of Lewisham, the shift was towards a new preventative service delivery model that placed the user at the center, and redesigned processes around the needs of the users starting with initial contact and continuing throughout their service journey. Underpinning this shift was a re-labeling of the Homelessness Services unit to "Housing options', signifying a shift from reactive management of the problem of homelessness to proactively attempting to create the outcome of sustainable housing for people and families. Peter Gadsdon, in Lewisham, remarks concerning the decision to rename homelessness services to *Housing Options* that it is about "…trying to change people´s behavior around homelessness, and also their expectations about what would happen to someone if they are homeless." So the emphasis is not only around what people *do* in the course of the case process, managing homelessness cases, but also how they *think* about the concept of homelessness itself.

The wider issue in the case of *Rigshospitalet* is whether the entire organization could be restructured, and processes redesigned, to become much more "patient-centric'. The Head Nurse Mette Rosendal Darmer explains:

> *And our concern is now … whether we could make the organization of the entire clinic our innovative purpose. What is needed structurally, managerially, divisionally so that we have good, flexible, fast patient processes, where the patient experience is good. That is, it is the patients journey that must be the central matter in terms of how we make our structure.*

As Mette Rosendal Darmer speaks of structure, management, divisions, processes of governance, she adds that if the ideas she has developed about reorganizing the ward were carried out, they would lead to a significantly more efficient use of resources. The changes would imply that as an organization her unit would "begin to tamper with some of our serious core matters", but that "some of it could very well be possible, because it suddenly becomes the patients' experiences that are so central." Human beings are, in this emerging vision for the hospital ward, placed as the central factor rather than professional clinical practice; at the same time, productivity still matters.[43]

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[43] Mette Rosendal Darmer subsequently estimated that the annual productivity savings at the ward following the project were in the range of 4 mill. DKK annually (Darmer et. al. 2015).

In the Family by Family case, the shift was from a legally-oriented stance, essentially viewing users (families) in a binary way in order to decide whether to remove the children or not, to a much more nuanced way, probing and exploring what it would take to help families "thrive', ultimately leading to outcomes where fewer children would have to be taken into foster care.

At Skansebakken, the shift in relations arose almost from the outset, from the very heart of the design process – the moment the design research made it clear that the institution was essentially not hospitable. The notion of "hospitality" became a key term in support the relational shift to one where staff were not considered successful if they only provided professional care to users; to be successful, they had to increase the number of non-professional (civic) relations that users had. A concrete expression of this shift was that it became more legitimate among staff to bring users along to a yearly relay race, where staffers would push users in their wheel chairs in competition with other institutions. The understanding of the importance of social activity, relationships, and fun made this more acceptable than in the past. Says manager Jesper Wiese:

> *That is where we really hit something that we could transform, right? Because at that time, there was a relationship between the educationist and the inmate ... That is what we do. And we must say that the designers came up with new ideas for thinking and talking about that relationship.*

A final example is Camillagaarden, where the relational shift was from providing handicapped users with simple manual work, to empowering users to innovate their own daily activities and create new meaning, leading to thriving and higher quality of life. In reflecting on the current relationship between government organizations and citizens, the manager Christina Pawsø says that in her experience, it is designed around top down decision-making and implementation. Citizens, and in particular "vulnerable" people such as adults with a mental disability, are often perceived, and cast, as passive recipients of public services. Says Pawsø:

> *There is [an image of] a staircase that goes up a hill with tiles, and it is very well constructed. ... And then beside the fine staircase there is a muddy path that people walk by. And it was a bit like what happened here. ... it is a really good picture of how our users actually went by a different path than the one we wanted them to walk*

on. And so, instead of trying to get them forced onto our path, we will have to follow
them. It worked well for us to have that picture.

Using the metaphor of the staircase versus the muddy path, Christina Pawsø explains how public employees and professionals have knowledge about how to operate in the system (bureaucracy, hierarchy, paperwork, procedures, "helping"), while citizens have knowledge about what motivates and engages them in their everyday life context (relationships, experiences, meaningfulness). Pawsø points out that both sides of this equation have their own knowledge – but it is a knowledge that isn't necessarily being shared or put into action. Through the use of design approaches in Camillagaarden, Christina Pawsø and her staff built a different kind of relationship with the users, which, as discussed in chapter 8, reflected a realization, and thus a fundamental relational shift, that the professionals were no more experts than the citizens. The table below summarizes the cases in instances where a reframing towards a different relationship with citizens that focuses on different outcomes is judged to have taken place:

Figure 34: Reframing the problem towards new relations

SHIFT IN RELATIONS	Original framing of problem and users	New framing of problem and users
Case	Example	Example
1 BII	How might we deliver more cost-efficient case management and enhance our legal compliance?	How might we help bring injured citizens back to the labor market?
2 FamByFam	How might we reduce the number of children removed from their families?	How might we support families in becoming thriving families?
3 Lewisham	How can we improve the efficiency of homelessness case management?	How might we provide people with a meaningful journey to new housing options?
4 Suffolk	How can we improve our population's health?	What will motivate young people to be more physically active?
5 Camillagaarden	How can we keep our mentally disabled users occupied during their time here?	How might we empower our users to become the daily innovators of this institution, enabling them to gain a higher quality of life?
6 Branchekode	How can we reduce the number of errors as new businesses register a branch code?	How do we give business owners confidence when choosing a code that also a signifier of their identity?
7 Helsinki	How might we make it less bureaucratic for businesses to obtain a city permit?	How do we as a city become perceived as a meaningful and professional service provider to business?
8 Tax	How do we increase taxpayer compliance?	How do we support a more fruitful interplay among key actors to support citizen's ability to comply in practice?
9 Rigshospitalet	How can we reduce costs in new ways?	What is the meaningful patient experience?
10 Stenhus	How do we enhance internal collaboration?	How do we create a course that is meaningful to students and which drives learning?
11 iZone	How do we increase the graduation rate from public high schools?	How might we support the public school system to transform itself to be based on more personalized learning models?
12 Holstebro	How might we create more competitive municipal food delivery for our elderly?	What makes a meal experience attractive?
13 Housing	How might we create better service experiences for tenants in public housing?	How might tenants gain more control of their own service experience, and become co-producers of it?
14 Skansebakken	How do we keep our residents safe and cared for?	How do we grow the number and quality of relations between our users, their families and non-professionals in the local community?
15 Competition	How can consumer protection be increased for children and young people who play or shop online?	How could we empower children to be aware of the financial risks of online play and shopping?

The figure illustrates how the managers in various ways consider the outcomes of the design processes not merely as the creation of particular solutions, but as shifts, or reframings, of how they view the relationship between their organization and its users. As Karl Weick (2004:77) suggests, the potential value of design is to help people "redecide what matters". That being said, there seems to be varying degrees of the shift in frame. For instance, as the empirical analysis has indicated, in cases such as Skansebakken or the Board of Industrial Injuries, the reframing seems to have been rather profound; in a case such as Competition, it seems less so.

10.2.2 Discussion: On reframing and co-production

Hilary Cottam, former partner in the social innovation consultancy Participle, argues in her influential paper *Relational welfare* (Cottam 2012:141-143), that a relational welfare approach to public governance and development is based on five key principles; the most important of these in the context of my findings above seem to be: A *focus on the root causes* of deeply embedded social problems; *a developmental approach to achieve change in people lives*; and the seeding and championing of *alternative models of service delivery*. Among the principles Cottam proposes, there are several points that are reflected in the cases studied in this thesis. In many of the cases, as I will discuss below, root causes, the underlying factors that matter to shape better outcomes for citizens and society, are addressed. As public managers take a different perspective on root causes, they start engaging alternative models, or perhaps rather they *discover* potential alternative models. Key to these models seems to be, in many of the cases, an emerging reframing of the role of the organization in achieving outcomes in its relation with end-users: citizens and businesses.

Paquet (2009:120) relates public governance to design as "a marginal practice', but in doing so hints at this potential of reframing the organizational purpose:

> *Effective governance regimes become aware of marginal practices (or alternative ways to re-tool, re-structure, and re-frame their activities according to principles heretofore not regarded as necessarily of central interest) and tend to become involved in lateral thinking: articulating the problem differently, cross-*

appropriating ways of doing things elsewhere and adjusting them to the task at hand, reframing the very notion of the business one is in along different lines.

Paquest suggests that this reframing of "the very notion of the business one is in" can be driven by inquiry based on empathy, on holistic problem-setting, and prototyping. Further he surmises that the kind of reframing would be "essentially relational, as nets of on-going relations between persons, groups and environment" (2009:121) (this also hints at a networked quality of governance will explore further in the next section). This relational quality of emergent governance principles is in many ways present in my empirical research. Much of it seems to be "insight-led", in the sense that it is closely related to the design research processes which drive discovery and generate empathy, and managers' subsequent efforts to leverage this empathy by beginning to work it into the system, culture and perspective of the staff.

In fact, part of this shift concerns a change in the very understanding of what outcomes the organization is supposed to contribute to creating, as well as how it should make that contribution; in that sense, the relational shift, at least in some cases, also concerns a reframing of the mission of the organization, as well as the activities needed to accomplish that mission. Ramirez & Normann (1994:75) define a frame as "the lens through which managers see the situation with which they are confronted". The notion of reframing the fundamental problem, mission, meaning or effort in the organization "from" something "to" something else is thus quite prevalent across the cases. This reframing is most often articulated via the proposition of a different relationship between the organization and the citizens (or "users') that it serves. Kees Dorst characterizes such reframing as *design abduction*. By this he means "both a new way of looking at the problem situation and a new way of acting within it" (Dorst 2015:53). In Kees Dorst's definition, a "frame" is a proposal through which one can apply a particular pattern of relationships (or, as Charles Eames would have put it, arrangements of elements) in order to produce a desired outcome. As I also discussed briefly in chapter 1, designers are skilled at working backward from a desired outcome (or the problem of producing that outcome) and using abductive thinking to propose a wider set of alternatives to address it. This is a contrast to Herbert Simon's insistence, discussed in chapter 2, that effective problem solving is mainly about choosing the most optimal from a given set of alternatives, and less about creatively, intuitively proposing novel solutions.

In the cases studied in this thesis, the reframing, or re-decision, of what matters to managers and their organization, is to a large extent centered around the relationship with citizens. John Alford (2009:213) suggests that "client co-production seems to sit most comfortably with a focus on outcomes". In his consideration of what it means to co-produce public services with citizens, Alford argues that this calls for a recasting of our understanding of how public value is produced. The relationship, and the interactions, between the public organizations and its users, comes into play in more complex ways:

> *To the question "What do clients want from our organization?', a prior question must be added: "What does our organization want from its clients? This in turn calls for a deeper understanding of the value the organization is seeking to create and the processes by which it produces that value* (Alford 2009:205).

Alford points out that a re-examination not only of how citizens experience and gain value from public services, but also of the means, by which organizations produce it, are key when considering the engagement of citizens in the (co) production of that value. It is a relevant point to keep in mind, given the strong focus on user experience that the design approaches entail, and given the search for new ways of achieving value that drives much of the management engagement with design.

As Botero et. al. (2012:6) state in a publication on peer-to-peer production of public services, "There are changes taking place in how the role of citizens in society is experienced – in terms of how they feel responsible for things happening – and also in what is expected from them." In the cases studied, these changes seem to be unleashed, in part, through the design methods, for instance by the leveraging of empathic data to create new insights about the nature of the relationship with citizens. It may not be surprising that the co-design of new solutions with citizens enables more co-production with citizens. The question is what co-production entails, and how (co-)design contributes to it.

From a theoretical perspective, the relational shift signifies the recognition that citizens to some extent always are "co-producers" of public value (Hartley 2005:29; Alford 2009; Bourgon 2011). Such peer-to-peer production, or co-production, is by no means a new concept. The term

was originally coined in the early 1970s; accounts vary on who was the originator of the term, but among its key proponents were Nobel laureate Elinor Ostrom. According to Pestoff (2012:16), Ostrom developed the term to describe the "relationship that could exist between the "regular producer" (such as street-level police officers, social workers or health workers) and their clients, who wanted to be transformed by the service into safer, better-educated or healthier persons." Over the last couple of decades, various more elaborate definitions of co-production have been offered.

Jocelyne Bourgon (2012) characterizes co-production as "the shared and reciprocal activities of public agencies and people to produce results of public value" (2012:26). Edgar Cahn defines co-production as a framework and set of techniques used by social service organizations to enlist active client participation in service programming (Cahn 2004). Building mainly on UK experiences, Boyle and Harris (2009:11) describe co-production as:

> *Delivering public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours. Where activities are co-produced in this way, both services and neighbourhoods become far more effective agents of change.*

Normann & Ramirez (1994), in discussing the design of interactive strategy, argue that there are three types of relationships in a system of value-creating actors, such as the system of an institution for mentally handicapped adults, or one for dealing with families at risk, or a school:

- *Pooled relationships*, in which each part of a system comes together to form a whole (as when different organizational units work towards a common purpose)
- *Sequential relationships* in which sections of an organizational system produce outputs to a sequential process (such as in traditional value chain production processes); and
- *Reciprocal relationships*, which are based on the mutual, ongoing interchange between two or more entities: The outputs of each section of an organization become inputs to the sections from which they get their own inputs. These are considered the most complex relationships and they characterize most service-producing organizations.

It seems reasonable to argue that the changes in the perception of the relationship between end users (such as mentally disabled adults) and public service organizations can be characterized as a shift toward recognizing that the relationship is (or should, or could be) a reciprocal one. Normann & Ramirez (1994:30) state that "*Co-production* is the term we use to describe the 'reciprocal' relationships between actors...", and they elaborate that this view implies that the customer (or citizen) is not only a passive orderer/buyer/user of the offering, but also participates in many other ways in consuming it, for instance, in its delivery. John Alford (2009) similarly finds that reciprocity is central to co-production, and that it prompts the organization to truly offer the client, or user, something she wants. This in turn calls for a broader conception of exchange, beyond the traditional transaction of funds or services, to something which may include a range of other human factors, such as engagement, dignity, respect, trust, and so forth (Alford 2009:38), and even social aesthetic and moral values (Normann & Ramirez 1994:63). It also implies that value can be distributed more over time, so that citizens for instance offer their resources in turn for a potential future value.

10.3   **Networked: Shift to activating wider resources**

The second characteristic of governance that seems to arise from the application of design approaches is the identification and leveraging of a wider set of resources, in a networked fashion, in order to achieve the organization's (redefined) objectives. As citizens, or human beings, and their experiences and behaviors are being repositioned as central to the organization, there is also a move towards deeper, more systematic engagement with the actors that are critical for the creation of value for them. This in turn increases the number and nature of strategic engagements that the public organization has – or is conscious of having.

10.3.1   Research findings

Let us first take a look at how some of the different cases in this thesis suggest an expanded emphasis on networks within a governance perspective.

In the case of BII, the design projects helped Anne Lind see how her organization can work systematically to re-align a range of actors such as other authorities, health care providers, and insurers, to produce more value with citizens. In the words of Anne Lind:

We have a lot of relations. We obtain information from general practitioners, specialist doctors, hospitals, work-medicine clinics, employers, trade unions, municipalities, regions, insurance companies, and sometimes the police. So in many cases it is at least 10 – and then the injured citizen – 10 to 11 different actors we obtain information from.

For instance, this could lead insurance agencies to invest actively in their customers/the citizen's rehabilitation (physical training, therapy, etc.). This allows for a much more coordinated way of helping citizens back to the labor market: a key outcome of the agency's work. The underlying movement shifts the attention of the BII from focusing on process execution (correct case management; compliance; accountability) to desired outcomes (return to labor market). By focusing on the desired outcomes, the Board has launched a dialogue with these stakeholders about how to help users make a better life based on what best suits their situation.

In the family by family case, Carolyn Curtis describes the new families project as a "resourcing model', which is radically different from how she has worked during her 10-year career as a manager. "It is bottom-up, it has end-user focus, and there is no fixed structure, criteria or categories." The key to the model is to engage "sharing families" which are "positive deviants" who display many of the same apparent characteristics in terms of social demographic as the target families, but which against the odds are doing fine. While the model was created through a design-led process, it draws on theories about multi-systemic approaches to societal problems and *positive deviance* (Pascale et. al. 2010). The ability to discover and leverage these families, voluntarily, as a resource to help at-risk families thrive is at the heart of the governance model of Family by Family.

In the branchekode.dk case, the design research uncovers the critical roles of other actors such as Statistics Denmark and the Ministry of Taxation across the case process of registering a new business. In the case, the manager Sune Knudsen becomes aware that without systematic dialogue between his own agency, the Danish Business Agency, and these other actors, it will not be possible to facilitate business registrations that are more accurate. Part of the design concept therefore becomes a "back office" platform, which will enable workers across all three agencies to systematically update their joint definitions of which kinds of businesses belong to which kind of code.

In the taxation case, the manager Niels Anker Jørgensen asserts that the ethnographic research project has provided the organization with "a new perspective on the interplay between companies, bookkeepers and accountants", leading to a reconsideration of the tax authority's means of engaging with them to support better outcomes (higher tax compliance).

As discussed extensively, the Skansebakken case is built on the principle that activating and engaging civic resources outside the boundaries of the institution will contribute to better quality of life to residents.

The contributions of design to activating wider network resources are many in the cases studied. In some instances, it is the graphical mapping of systems and networks that has been key. In others, it has been to map citizen service journeys and thereby discover hidden or non-recognized actors, such as when it turned out that the partners of injured workers were critically positioned to be an active part of rehabilitation processes. In almost all cases, there have been instances of designing workshops to engage stakeholders, to identify how they can contribute and why.

10.3.2   Discussion: On thrownness and networks in governance

As Normann & Ramirez (1994) observe, relationships in co-production are not only more complex but also more multi-directional and simultaneous. The outside-in view of user experience that is provided by various design approaches (and the visualizations used to illustrate it) tend to expose the entire network of actors, including citizens who can potentially take part in value-creation. As such, the involved partners "create value together through inventing new relationships" (ibid. 1994:43). This discovery, or rediscovery, of outside actors which may be of critical importance to effectively addressing the problems at hand, reflects Karl Weick's observation that typically,

> *Designing unfolds in a world that is already interpreted where people are already acting, where options are constrained, where control is minimal, and where things and options already matter for reasons that are taken-for-granted* (Weick 2004:76)

Karl Weick, drawing on Heideggers concept of "thrownness", argues that people (and organizations) are "already in the middle of something", meaning that designing never takes place on a blank slate. Rather, designing is almost always about redesigning in a given context, full of conditions, constraints, incongruities, and dilemmas. Design thus becomes not about pristine novelty but rather about "re-design, interruption, resumption, continuity, and re-contextualising" (Weick 2004:74). As public managers reflect and appreciate the nature of the challenges they are addressing from a human centered view point, they come to discover other actors, such as agencies and public institutions at various levels, suppliers, industrial partners and businesses, who are "already acting', in the middle of something.[44] Normann & Ramirez (1994:42-43) point out that this is a general characteristic of our contemporary world. It is becoming so interrelated "that many actors are involved in co-production without consciously realizing that they are working together. This means that many strategic opportunities are seriously undervalued, sometimes dangerously so". As managers become aware of and begin to engage other external actors in line with the relational perspective discussed above, they are prompted to new forms of behavior that can ameliorate this gap.

The challenge, as the roles and potential contributions of these actors are brought to the forefront, is that they may need to be engaged to align their ways of acting with the problem and objectives in question. In other words, through the design process it is not enough to identify actors of importance to the problem, they must be activated in the reframed context that flows from the design work.

The network perspective on governance has been elaborated from a range of sides, not least by Goldsmith & Eggers (2004:55) who argue that there is a distinct role for the "network designer" to identify possible partners, bring the relevant stakeholders to the table, analyze current operations, set expectations to the way the network will operate, assemble and enmesh its various pieces, and activate it. This design phase must, according to Goldsmith & Eggers, address issues such as policy objectives, tools used to activate the network, partners to involve,

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[44] This may also involve commercial partners and interests. Eggers & Macmillan (2013) have argued that new forms of collaboration between private firms, social innovators, philanthropies and government organizations arise in solution "ecosystems' to address societal problems.

network design, and management and governance principles. In terms of on-going governance and management, Goldsmith & Eggers (2004:159) emphasize that the roles of senior and mid-level managers include the development of relationships and strategy, understanding customer (user/citizen) needs, and manage projects and outcomes. As such the (mid-level) public manager's role shifts from enforcing rules and monitoring inputs to actively managing the network; they contend that new job functions and skills which reflect these roles need to be created and filled in public organizations who wish to take a network approach.

The leveraging of wider resources is, again, linked to the notion of co-production. Normann & Ramirez (1994) characterize this as a process of *reconfiguring*, so that actors come together to co-produce value via what they call not a value chain, but a "value constellation'. This constellation, or network, is designed so that "its partners end up performing the "right" activities for them, engendering value creation on both, or rather *all* sides. It might be noted that in public sector organizations, which are typically concerned with the production of services and not products, and which deal with highly complex problem spaces, the notion of "constellation" seems a better fit than the more mechanistic, or industrial term "chain'. Similarly, Alford (2009) suggests that in a "public value chain" the social exchanges taking place will often have more parties involved, and more elaborate forms of reciprocity.

In considering "a new synthesis" of public management, Jocelyne Bourgon (2012) highlights the ability to focus on outcomes and system-level results as a key driver of innovation. The key, in her perspective, it is the *collective* capacity for creating public results and achieve societal value. In the terminology of Normann & Ramirez, such "an effective offering" is "designed in such a way so that partners end up performing the "right" activities for them, engendering value creation on both sides, or rather *all*, sides" (1994:54). This notion was central in many of the cases, where managers, inspired by the design work, recognized that in order to engage the wider network they would have to extend a meaningful value proposition to them as well.

10.4   **Interactive: Shaping processes and behaviors**

From the enactment of tentative new practices to the creation of final graphical product and service "outputs', the design approaches applied in the cases in this study seem to embody new processes and behaviors across the organization's engagement with citizens and other actors. In

chapter 9, I showed a range of examples of outputs that result from such new processes and behaviors. It is important to highlight also that in many cases the solutions are not about stand-alone facilitated interactions. Rather they concern understanding how a range of *different* interactions (physical, virtual, distributed in time and space), are guided by the overarching relational perspective. These interactions go beyond the scope of what is typically characterized as "interaction design" (Moggridge 2014) or user experience design and are more characteristic of holistic "service design" Polaine et. al. (2013:87).

10.4.1   Research findings

At Skansebakken, the "communication tree" (with the strange name "Georg") was a device designed to facilitate concrete acts of hospitality, such as a visitor taking a book from the tree and reading it to a resident. Even though the manager, Jesper Wiese, was skeptical of this artifact, he reflects now that:

> *Maybe it actually has worked, since we now sit and talk about it, because it has been such a visible "design thing" that constantly reminded the staff that something must change here.*

As a physical intervention, the point here is seems to be that the artifact contributed to maintaining the project intent in the minds of the staff. However, digital media also drove new interactions; for instance, the creation of Facebook pages on iPads facilitated new forms of digital meetings between users and outside relations.

In the Branchekode case, it was necessary not only to create a new digital interface mediating interactions between startup businesses and the Danish Business Agency, it was also deemed necessary to build a back-end digital knowledge sharing system that could, over time, improve the accuracy and update the interactions across multiple government agencies.

In the City of Helsinki, a new digital platform for accessing city permits was developed which essentially ordered the internal interactions across the wide range of city units necessary for obtaining a permit.

For the BII to realize a shift from solely ensuring legally correct case management to *also* managing towards outcomes, different devices had to be developed, including an online graphical guide for injured citizens to better engage with their case. Part of the solution was also for the organization to underpin its shift to digital solutions with new services, such as proactively calling new clients by phone to enable them to manage their case online. In the case of BII, these new solutions were to be enabled by a new organizational unit, a Citizen Secretariat. "The idea is with the citizen secretariat is to immediately ask the client, do you have access to a computer, do you have one nearby, if you could go online then together we could try to see how your case looks right now."

However, it is not only physical or virtual artifacts, or formally redesigned service processes which can underpin new interactions. The process of insight-led change, by creating empathy with citizens, can apparently play a powerful role too. An example is an assistant at Rigshospitalet who could not help hearing patients' voices replaying in her head as she walked her cart around; to her, the relations with patients had changed because of the experience of listening to audio recordings of patient experience. The "meaningful patient experience' became a guideline for her in a very concrete sense as well as for the management (in a very strategic sense) as it started re-organising professional processes around the patient rather than the other way around.

In the Lewisham example, Peter Gadsdon, the development director, reflects on how the design process in itself has generated momentum and a culture of more continuous improvement among staff, not due to a particular "solution" but because of how staff experienced and were engaged in the process:

> *[The process] sort of gathered its own momentum, and we then set up for the service, because they had lots of ideas, and we only implemented the first in that project. But then to get more of the staff to look at new ideas, and take on some more of them, so it continues the way of thinking and gathering insight and always trying to improve. It is like a bit of a culture thing.*

One might say that the ongoing exploration, or inquiry, by staff, into how to continuously develop more fruitful interactions in support of the organization's (reframed) objective then

becomes the de facto development methodology. This seems to be very much what Cottam (2012) was hinting at in her call for a more "developmental" approach to identify alternative public service provision models. Normann & Ramirez (2004:78) contend that by viewing producer/client relationships as co-productive, and by considering the organization's role in a wider value constellation or network, is a "useful way" to enable firms to question, redefine and reconfigure interfaces.

10.4.2   Discussion: Interactions, mediation and the journey to outcomes

For relational, networked models of governance to function, it seems that they must be able, at a visceral level, to facilitate, or mediate, new forms of interactions between units of the public service system, other actors, and end-users. As much as a shift in relationship, a reframing of the problem, might have been identified at a paradigmatic or strategic level, it must be given concrete form to become actionable across the organization's activities, and beyond to engage its network of stakeholders.

We saw above that when we understand an organization's efforts from a relational perspective, it becomes clear that user engagement is not transactional, but reciprocal – or interactive. As Polaine et. al. (2013:87) underline, "All experiences of a service are a result of interactions of some kind". They suggest that interactions do not only have to do with concrete touchpoints such as objects, (digital) interfaces and interpersonal dialogue. Alford (2009) similarly argues that a key process in achieving a more co-productive mode of governance is for a public organization to identify "key points in the [value] chain to be influenced, and people associated with those points" (2009:208). This then entails determining how to influence those people and actors taking into account a broad range of motivators and facilitator that may impact experience and behavior. This necessarily needs to be a rather holistic and broad view. As Polaine et. al. (2013) reminds us, interactions, in the context of service experience, is also between previous experiences or beliefs, such as when a hospital patient's current experience, and behavior, is influenced by a traumatic healthcare event in the past.

Designing the organization's interactions, inside and outside, to take intelligently account of such factors, is no small task, contends Alford (2009), but must somehow be made into an operational strategy.

Parsons (2010) reminds us that public policy is essentially about constructing or framing what then comes to constitute "the public's problem" and thus it calls for collective action. As they act, public policy makers are involved in producing, or *discovering* the public's problems, Dewey might suggest, at the same time that they go about trying to solve it (my emphasis). Importantly, Parsons suggests that:

> *The study of public policy involves the study of the policy making process itself, but it is also about the analysis used* in *that process, or the analysis which is produced in the hope of influencing the process* (2010:13, original emphasis)

It would not be reasonable to characterize the internal processes of design approaches – covering research, ideation and prototyping dimensions – as "analysis". But what if, as we have seen, design based activities used in the process of policy-making are very different than what is normally used within public organizations? As discussed in chapter 5, nearly all the managers in this study were being exposed to design work for the first time in their careers. In terms of methodology, qualitative design research approaches were experienced as a major departure from past practices for many managers.

10.5.1   *Research findings*

For instance, at the Board of Industrial Injuries (BII), the main research method had previously been quantitative satisfaction surveys. Says Director General General Anne Lind:

> *When we made a user survey we made a nice action plan to follow up ... we then piled additional information onto the users.*

One could argue that the previous mode of understanding the world, and thus of problem solving, did not simplify the service production process, but made it even more complex for both the system and for users, without addressing the real question of how better outcomes are

created. As a consequence, there was a real risk that citizens were cast in a role as passive recipients, while the system was attempting to become ever-more efficient at a process that created dysfunctional outcomes. Ethnographic research therefore became a more prevalent way of "knowing" users in the BII.

A similar point, on the significance of understanding user experience more qualitatively, is made here by Head of Secretariat and Visitation in the "Good Kitchen" project in Holstebro municipality:

> *We could well have made a survey where we asked citizens, "what would you like for dinner?" Well, so we probably would get some ideas about what people would like for dinner. However, it is basically not that which interested us. We would rather hear about what gave citizens value in relation to a meal. How would they like it to be. And it applied both to the menus and how it should taste. And how the meal should be presented.*

In Lewisham Borough, the Development Director, inspired by the design work within homelessness services (now "housing options') chose to revise policies and procedures to embed new ways of working within the organization. In order to "cement" a cultural shift among staff as well as users the borough embedded film-making as a tool within its service transformation methodology to capture and use new insight and create buy-in and commitment for change (Gadsdon 2012).

In the taxation case, Head of Division Niels Anker Jørgensen contends that:

> *We are finding how complex the world actually is – through our efforts on planning compliance, control actions, getting feedback by user testing etc. Currently we are not in a position to write the ultimate guide on what works, and how.*

In this sense, even in such a relatively data- and technology driven agency as the National Tax Agency, there is a strong sense of humility about the ability to really "know" the world of tax

payers and compliance, and the actors who influence it. This humility seems to have been triggered in part by the ethnographic work that had been carried out.

In Helsinki the manager, Marja-Leena Vaittinen, recognizes at a fundamental level how the government staff must know the world they are dealing with:

> *So that we think that we know and understand their world but it's not true. If you don't go and talk with them and see how they are working and what facilities they have and what their problems are and how can we help them.*

As a consequence of the experience in the design project, the City of Helsinki developed a toolbox to support wider design-led work in the organization, including how to involve end-users such as businesses and citizens in the design process.[45]

At Rigshospitalet, Darmer highlights that the qualitative ways of understanding the patient were not only essential in the design project, it is also something the organization needs in the future; in fact, she already has plans where to apply it:

> *The anthropological material is an essential prerequisite. … it is something we actually think of how to do, because now we have had it between our fingers, and some of the processes we can actually facilitate ourselves. But we need someone to conduct interviews. … I could well imagine that as the next project, we mapped the electric patient's progress.[46]*

In New York City's Housing and Preservation Department, Andrew Eickmann says that, "If I were to come across another project with focus on end user I would advocate for this kind of user experience research". He continues to emphasize that if he had new more openings in his strategy team he would "seriously consider hiring a designer, since there is so much power in the rendering, the graphics and the creative methods." Eickman explains that the organization has internalized some of the methods, for instance in terms of making an effort to give real focus

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[45] Since summer 2016 Helsinki City has appointed a city-wide *Chief Design Officer* to further embed design work across the organization.

[46] Electrical patient are patients who have some type of pacemaker.

and life to the creative act that is part of developing potential solutions to a problem. There is also talk of creating a new position to solely focus on the user experience. Eickmann further suggests that some approaches to meetings could change, some things could be organized as a workshop, e.g. the careful curating of development activities, voting mechanisms, feedback sessions with staff, etc.

At Skansebakken, realizing the lack of firm "knowing", Jesper Wiese contends that this is a continuous challenge and effort. Jesper Wiese says, reflecting on the change:

> *I can see from what we are doing now, the use of empathy is important. It is still the same things we want to do, but we will do it in a better way for our users – we want to deal with the unknown. Maybe we do not know how, but we know what the bigger objective is.*

The sense of purpose and "bigger objective" described here by the manager Jesper Wiese goes hand in hand with the desire to "deal with the unknown" – to continue to try out solutions, learn from them, and attempt again.

10.5.2   *Discussion: Reflection through an epistemological shift*

As a fourth characteristic, the emerging governance model entails a reflective dimension, which may best be described as an epistemological shift. By this I imply that the design processes seem to trigger changes in how the manager, and also the wider organization, gain knowledge of the world and thus, through learning, become able to act. One might say, with Bruno Latour, that what comes into play is a continuous discovery of the state. Or, with John Dewey, public managers are prompted to continuously inquire into what is "exactly" the public's problem. This is a question of the degree to which the managers, through the exposure to the design work, are challenged beyond their "stable state', and are compelled to embrace new ways of working empirically, but thereby also strategically, with their organization. Part of this has to do with methodology for research, experimentation and discovery, part of it is more philosophical.

What to make of the reflective dimension of this mode of governance? As Alford (2009) suggests, there seems to be a major role for factors of intuition and (subjective) judgment, rather

than certainty and rationality. There seems to be an appreciation, as I also discussed in chapter 7, that "not knowing" and being outside the stable state, may paradoxically be a natural order of things, in all its disorder. Weick (2004) contends that when managers design, it matters whether they do so by a "categorically-based epistemic mode", or a "perceptional mode". What this means according to Weick is (2004:44) that:

- In a *categorically-based epistemic mode*, managers build increasingly abstract concepts about the world, in which they essentially come to know "less and less about more and more". The categorically based mode is useful for achieving coordination and control under increasing social complexity, but risks becoming over-specified and focus overly heavily on decision-making. Here we already see ways in which this mode connects back to Herbert Simon's consideration of the ways in which managers make decisions.

- In a *perceptional epistemic mode*, the way of knowing is increasingly concrete and tangible – very much like the kinds of experiences public managers are exposed to across the design processes analyzed in this thesis. Here, managers come to know, according to Weick, "more and more about less and less", in that they focus on the micro level and on discrete interactions. However, a potential for (macro, or strategic) contribution of this kind of designing arises, recognizes Weick, if we understand the focus of this activity as sense-making.

As such, public managers must come to terms with perhaps a more "loose", open-ended and essentially less structured way of governing, where they take responsibility for the achievement of outcomes for citizens and society even though they cannot necessarily control them. In this emerging epistemology, emphasis becomes on sense-making of the "why are we here" question rather than decision-making "because we are here".

10.6 **Four governance characteristics**

The analysis above shows that across the cases studies, I have identified at least four distinct patterns that appear to have wider consequences for governing the public organizations in question. The figure below sums up the main defining characteristics I have analyzed in this chapter, and indicates how the 15 cases relate to them.

Figure 35: Some possible characteristics of an emerging governance model

EMERGING GOVERNANCE CHARACTER-ISTICS	Relational: Reframing relationship with users towards outcomes	Networked: Strategically activating new or different resources beyond primary users	Interactive: Introducing new artifacts to mediate and facilitate collaborative governance processes	Reflective: Other ways of learning and of "knowing" the organization's impact in the world
Example	Reframing of relations with end-users towards the creation of outcomes (user experience, behavioral change), for instance towards empowering vulnerable families (Family by Family) or shifting to student-centric education (iZone)	Engaging wider stakeholders and resources in contributing to co-producing outcomes, for instance engaging insurance companies to support rehabilitation of injured citizens (BII) or opening up relations (Skansebakken)	Using graphical expression physically or online to facilitate new interactions and dialogues with citizens, e.g. case process map for homeless families (Lewisham) or among staff (Branchekode)	Embedding more qualitative ways of informing management processes, for instance by continuously using service design or ethnography in elder care services (Holstebro) or by observing kids playing with iPads (Competition)
Case				
1 BII	X	X	X	X
2 FamByFam	X	X	X	X
3 Lewisham	X		X	
4 Suffolk	X		X	
5 Camillagaarden	X		X	
6 Branchekode	X	X	X	
7 Helsinki	X	X	X	
8 Tax	X			X
9 Rigshospitalet	X		X	X
10 Stenhus	X			
11 iZone	X	X	X	
12 Holstebro	X		X	X
13 Housing	X	X		
14 Skansebakken	X	X	X	X
15 Competition	X	X		X

As the table attempts to illustrate, there are patterns across the cases, which indicate some possible changes in public governance. For each of these shifts there are implications for governance as well as insights about the ways in which the design approaches may contribute to their development as a facilitating factor. It is important to underline that these characteristics are tentative, loosely defined, emerging – as mentioned before, more a scaffolding on which to conduct further conceptual development.

A critical question here could be whether the four characteristics here are really mutually exclusive, or they are just slightly different ways of describing the same thing? On consideration I would maintain that they are probably distinct in the sense that it would normally be possible to have one without the other. This is also illustrated in the table above, where not every case displays every characteristic; some include all four, while others display only two or three. However, let me briefly entertain the argument.

For instance, a public organization could realize and seek to change activities based on insight, which motivate a shift in relations with a particular group of citizens or other end-users. This would not necessarily entail that it would also engage with a much wider network of stakeholders, and work strategically with them to achieve more of the outcomes that the (new) relational perspective would call for. However, it would likely be so that a networked approach would render the relational shift, and activities flowing from the shift, more effective in achieving desired outcomes. Likewise, in order to engage a wider network, an appreciation and active use of graphical and physical artifacts to facilitate new interactions would likely make it easier to engage network actors in a reciprocal way, and influence their behavior around a joint intent to achieve desired outcomes. But there are still other ways of working with networks than through artifacts, or indeed in a highly interactive manner. Finally, the characteristic "reflective" concerns how knowledge is more continuously generated and processed by the managers and organizations engaging with design, focusing on perceptional, rich, qualitative, "empathic" types of data. Again, this is way of knowing does relate to for instance the relational characteristic, but is not the same, since it concerns an on-going management of knowledge, not the creation of novel insights.

While they do seem to be distinguishable, the four characteristics appear to work well together, in a sense as mutual reinforcement. This is why these characteristics together form what might be called an emerging governance model, in that they seem to "fit" with each other. A point however is that the relational characteristic seems to be present in varying degrees as a governance "output" in all the cases; this is not surprising since I earlier showed that some form of reframing did take place in every case studied; this could indicate that "relational" may be an overarching or guiding principle, which contributes to organizing the others.

10.7   **Conclusion: Discovering principles of governance**

This chapter has ventured to explore what the empirical findings can tell us about possible principles of an emerging governance model. I showed an overall model that displayed how the use of design approaches, and the engagement of public managers with them, might lead to the emergence, or contour, of different ways of governing. Subsequently, the chapter carefully elicited empirical material from across the cases to give shape and form to the principles – four in total – underpinning an emerging governance model. I used extant literature to interpret and

discuss the findings, and ended the chapter with a summary "map" of the characteristics across all the study's cases. I then reflected upon the degree to which the individual characteristics are mutually exclusive, or to what degree they are somewhat interdependent. Here it seemed that the relational perspective might be guiding or, as it were, framing the other three; although this is more of a tentative speculation.

In the next chapter I will further critically discuss the implications of my empirical findings and analysis outlined here.

11. Towards human centered governance?

Twenty-first century challenges and the means of addressing them are more numerous and complex than ever before.

Stephen P. Goldsmith & William Eggers, *Networked Governance* (2004:7)

The wider context of applying design approaches in government, as I discussed in chapter 3, can be viewed as an emerging shift from a classic "bureaucratic" paradigm, combined in some degree with "new public management" components or overlays, towards something else, which has more recently been termed "networked" or "collaborative" governance, or "co-production" (Goldsmith & Eggers 2004; Hartley 2005; Alford 2009; Parsons 2010; Greve 2013; Ansell & Torfing 2014). As I discussed in the introduction to the thesis, this emerging paradigm, as it has been articulated by scholars and practitioners, seeks to embrace complexity, turbulence and emergence, recognizing that contemporary public organizations may face unprecedented types and scales of challenges.

This chapter explores what the empirical findings I presented in chapter 10 could mean to the future of governance, given what we already know in terms of emerging "new" governance models. To what extent can the four sets of characteristics I have identified – relational, networked, interactive and reflective – be seen as incremental additions or "overlays" to existing ways of governing, and to what extent might they be expressions of more disruptive challenges to, or extensions of, the dominant paradigms? How might such emerging principles compare and contrast with the legacy public organizations and their managers have inherited?

I first discuss the implications and nature of the emerging governance principles: Are they different in nature than the types we already know, and if so, how? Here I especially discuss how human centered governance can be viewed particularly as an approach to co-production of public services.

Second, I explore the implications of the seeming under specification, or "skeletal" nature of the characteristics I have identified, drawing on Karl Weick's discussion of this concept.

Third, what have we learned about the balance between "overlay" and "break" from past models, in terms of how an emerging human centered governance interacts with current, existing governance paradigms? Does the emerging model signify an incremental, or a more radical shift?

Fourth, I explore how potential new characteristics of a governance paradigm might relate to existing models. I discuss how they would perform in relation to the standards, which were originally proposed by Max Weber in terms of government efficiency and performance. Would a different paradigm have the risk of "throwing the baby out with the bathwater" and failing to deliver on some of the pillars of what we consider good government? Further, I examine how human centered governance might compare with Benington & Hartley's 2001 ideal-types of governance models.

Finally, before concluding, I ask to what extent it is methodologically reasonable to generalize analytically from the sample of cases I have studied to the population of (Western, OECD area) governance arrangements?

11.1   Re-humanizing public organizations?

In some ways, the characteristics I described in the previous chapter suggests a form of "reenchantment" of public governance, as a postmodern reaction to the disenchantment (*entzauberung* in Max Webers terms) of the modern organization. Parsons (2010:27) suggests that such a reenchantment requires that we recognize that the problems we face are of a "wicked" nature and do not have "solutions" that can be arrived at "purely through the exercise of reason and analysis".

Given the strong emphasis on the subjective experience of human beings – of citizens primarily but also of workers and managers within public systems – design might contribute to this reenchantment, or at least to the introduction of a different set of parameters for assessing the success of public management. First and foremost, as this thesis has illustrated, design

approaches tend to place human beings and their relations with public systems and processes more centrally in the public policy and service discourse. As Meyer (2011) argues, design's essentially humanistic agenda makes it a powerful tool for enriching organizations. This seems to entail a more subjective, empathic, behavioral, contextual, "messy" and flexible appreciation of what it means to govern public organizations.

But this is vague. Such vague concepts are not yet the basis for an emerging governance model. They do, however, suggest potential properties of a new model. These properties imply that the model might have to be of a more generally defined, and to some extent fluid nature, more so than the prescriptive and relatively fixed properties of traditional and "new" public management.

The core shift would appear to be from models largely designed around the *delivery of services to people*, toward a model that is designed to better enable, in various forms and guises, the *co-production of services with people and other actors*. Here we are mainly in the camp of Greve's collaborative governance model, although this risks being reductive (Greve 2013). One might also signify it as a shift towards a more "human centered governance', since the model takes into account "messy" subjective, emotional, relational human dimensions. What seems critical to understand then, is whether the emergent model is fundamentally different in character than the governance models most public organizations have inherited. As I mentioned in chapter 9, Alford (2009) underlines that a more human centric, co-productive mode of governance raises questions not only about what clients (users, citizens, people) expect from the public organization, but also about what the public organization expects from its clients. Likewise, as Ansell & Torfing (2014) contend, the role of service users is recast from passive consumers of public services to active citizens. This calls into question issues of public value and how it is created (Greve 2013).

A central point here seems to be that in a human centered mode of governance, *the appropriate modality of governing for public value creation varies.* In other words, the emergent model of governance can probably not be entirely prescribed, or specified, to the same level of detail as its predecessors.

Let me illustrate. In his careful and deep study of three cases of co-production of public services, Alford (2009:175) concludes that co-production is "beneficial" to the kinds of

organizations studied, but that the kind of public value generated by governance models of co-production "reveal no particular pattern of "performance"". In other words, the ways in which the new governance paradigm contributes value simply differs across the cases with no discernible pattern. Alford finds that the pattern of value is "haphazard" (2009:175) since the benefits of governance as co-production can accrue both in increased effectiveness (better outcomes) and in reduced costs (higher productivity), or both. Across cases of postal services, employment programs and tax administration (of which the two latter policy domains are addressed also in the present study), Alford finds that the (co-productive) governance model was valuable to different aspects of the organizations' work, to differing extents, in different ways.

As discussed in chapter 9, I similarly found signs of a wide spectrum of types of public value resulting from the use of design approaches that also varied to suit their contexts. This is a profound reflection of the complexity and "messiness" of the governance model itself, or as Goldsmith & Eggers have suggested, "one-size-fits-all solutions have given way to customized approaches as the complicated problems of diverse and mobile populations increasingly defy simplistic solutions" (2004:7).

The considerations above indicate that we might actually know something about the properties of an emerging governance model, in terms of the relational, networked, interactive and reflective dimensions I have found in my research. In the following I will consider how we might understand these properties, first in terms of how specified/unspecified the model is, second in terms of whether it really represents, even if tentatively, an actual break from the existing modes of governance.

11.2 **On the charm of skeletons**

In spite of my attempt to characterize an emergent governance model in the previous chapter, it somehow seems underspecified in the sense that the specific management tools needed to then provide content to its dimensions are tentative, open, even elusive. The cases illustrate that managers come to terms with a certain lack of control, of emergence even, and recognize that the way to creating better outcomes or even higher productivity relies much on providing space for users and staff to find their own, meaningful path. The sense remains that the model is more of a framework than a prescription, less of a top-down management strategy and more of a

placeholder for bottom-up processes to take place. Of course, part of this is because the empirical material consists of projects, not of all-encompassing reforms. However, it is at least interesting that there are similar patterns and characteristics across these projects, which may have implications for the conduct of management and the future potential of the role of design in the public sector.

In their consideration of the implications of complexity for policy making, Colander & Kupers (2014:276) suggest that, as a "far-reaching proposal', governments should create eco-structures that are conducive to more bottom-up policy solutions, providing people with institutional space to self-organize in new ways to solve social problems, and encourage civil debate inside and outside the policy system. They contend that this implies that policy, and governance, cannot be controlled – but it can be influenced. Taking complexity seriously as the ultimate constraint for achieving public outcomes, they argue that policy must be "…designed to play a supporting role in an evolving ecostructure – it is not designed to control the system" (2014:10). Similarly, writing a decade earlier, Goldsmith & Eggers (2004) suggest that in a networked mode of governing, the ways in which governments achieve objectives will be likely to be "unanticipated" and flexibility and adaptability, for instance to include new partners and new relationships, become important performance criteria (2004:183-184).

Karl Weick, building on the arguments discussed in the sections above, contends that good design, understood in the context of managing and governing organizations, is intentionally kept underspecified. He argues that in this search for stable and predictable "solutions" too often designers don't know when to stop – the result being command-and-control and machine based management models. However, Weick suggests that there is "charm" in the notion of underspecification, of keeping design parameters open for interpretation – for managers, for front-line staff and indeed for users. Quoting Dee Hock, Weick contends that management becomes much more in tune with what is needed to govern in our contemporary world: understanding and coordinating variability, complexity and effectiveness (ibid. 2004:47). Normann & Ramirez similarly argue that as actors carry out their activities in value constellations, "it is not possible to take given characteristics for granted: co-producers constantly reassess each other" (1994:55). The charm of an underspecified, or skeletal governance model thus implies, for the way of governing and managing, giving up on clarity. This is perhaps a paradox when we have also seen that a (new) degree of clarity can arise from

insights in human behavior, through design approaches. However, the lack of clarity I am speaking of now is different: It is not a lack of clarity of insight into what matters; it is lack of clarity in terms of a recipe to "solve" the problem or capture the opportunity at hand.

11.3 **Institutional shift: Overlay or disruption?**

We have seen in this thesis that public managers appear to engage with design approaches in ways that bring forward new ideas, concepts, solutions and, in many of the studied cases, implementable organizational change. The kinds of change efforts undertaken tend to embody some or all of the governance principles outlined in the earlier chapter. It is a wider, and more open question, however, whether these shifts in understanding and engaging in new relations with citizens are expressions of a paradigmatic, "radical" or "disruptive" shift in governance, or more of an "overlay" or "mix" with existing modes, leading to incremental change at best. To what extent do the types of changes in service provision across the cases really signify breaks away from the current dominating institutional "template" of new public management, and to what extent are they more like reconfigurations through "bricolage" (Lawrence & Suddaby 2006:229)?

I will consider these two perspectives of incrementalism on the one hand, and more radical, disruptive change on the other hand, and discuss them in the light of the research findings.

As we have seen throughout the thesis, a wide range of the scholars who have turned their attention to the "what's next" question of public governance contend that to the extent that something new might be happening, the new governance instruments – characterized by a balancing of the top-down and bottom-up perspectives, multiplicity of actors, taking complexity seriously and so forth – can be viewed as *additional* elements that are added on top of existing governance mechanisms of bureaucracy and the new public management (Bourgon 2011; Agranoff 2014; Waldorff et. al. 2014). Informed both by executive experience and careful research (Bourgon) and by the long-term view of historical institutionalism (Waldorff et. al.) the argument here is that change is incremental in nature, and that as new governance instruments arise they do not take something away, but rather add to the growing complexity, or complicatedness of the public service system itself (Christensen 2012). Waldorff et. al. (2014) argue in an assessment of multiple public sector innovation cases, that bureaucratic and NPM

modes of governance tend to cast their "shadow" over what is at surface more innovative, collaborative or "new public governance" practices. In line with these findings, institutional theory – arguably a key theoretical school in characterizing public organizations – expects that organizations only rarely change, since rationalized institutions create myths of formal structure which in turn shape organizations" (Meyer & Rowan 1977). Over time, organizations become increasingly similar in structure mainly due to adaptation to a socially constructed environment through three types of pressures: *Coercive pressures* which result from politics and power relationships; *mimetic pressures* arise as organizations, under conditions of uncertainty, take note of successful peers and adopt structures and approaches that are similar; and *normative pressures* characterize especially highly professionaliZed organizations who favor practices and structures that are considered morally "proper" (Boxenbaum & Jonsson 2008).

A variant of this incremental perspective is Karl Weick's argument, also mentioned in chapter 3, that any design efforts undertaken by managers are essentially re-designs or re-interpretations because of the "thrownness" of the situations within which public managers find themselves (Weick 2004:76). Weick asserts that any effort at organizational change must accept the richness and never-ending presence of *context* – empirical organizational, societal, behavioral factors and so forth, which imply that the word is "pre-interpreted" by the actors who occupy it. Weick contends that "thrownness suggests that design is incremental even when it aspires to be much more" (2004:77). For designers, this happens because as they relate to the client's world – briefs, specifications, needs, expectations – they adjust and tune in and thereby "typically extend rather than upend" (2004:77). Clients (in this thesis, public managers), also pull design towards incremental, rather than disruptive change, since they assimilate and "normalize" design to not just fit with their existing practices, "bending" the solutions their way so they fit with what is already coming in terms of strategies and plans. This leaves only little wiggle room for agency.

Such incremental design need not be negative; rather, for Weick, good design is exactly the kinds of design that take seriously what is already going on in the world, and offers useful extensions or amendments to it. However, it is worth underlining at this point that the cases studied by Waldorff et. al., the experience by Bourgon, and for that matter the design perspective taken by Weick, are not based on collaborative design approaches as they have been defined in the present thesis. Rather, the "innovation" projects and "designs" referred to by indeed by most other scholars who have examined cases of public sector innovation are either

very much based on traditional consulting approaches, which distinguish quite sharply between designer, client and end-user. Further, in the "managing as designing perspective" taken up by Weick, there is no empirical experience of what collaborative design approaches might entail for the managers, in terms of access to a different epistemology that can power a different level of reflection, as discussed above.

It is another apparent paradox, then, as documented in the cases in this thesis, that by taking context and external (user experience) seriously, thrownness is not just embraced; rather it is in a sense suspended for a while, or put into perspective. Managers seem able, drawing on the design approaches of exploring the problem space, to reflect with more clarity and vision on the fundamental purpose of their organization. By creating opportunities and affordances which – for a while – suspend thrownness, it can be (re)examined, reflected upon, and the organization's engagement with the world can be, in some cases certainly, be reconfigured and reframed.

Madsbjerg & Rasmussen (2014) argue that such "clarity" is achieved exactly because it allows for new meaning, and new interpretations to emerge (here we are again speaking of clarity as insight). Likewise, Weick goes so far as to assert that the potential value of design is that it "stirs up those pre-existing interpretations, throws some of them up for grabs, and encourages people to redecide what matters" (2004:77). Here, it sounds somewhat more radical and fundamental to redecide what matters. Perhaps Weick is not so sure about the incremental argument as he contends? The cases discussed above show a range of examples where this does seem to happen: Managers reframe, rethink, redecide, re-interpret their relations with users and other stakeholders, and often their fundamental mission. Somehow, the organization's purpose seems to become more clear, even if the governance approach is somehow loosened up.

A key reason might be, as mentioned above, that the types of design approaches which Weick relates to in his assessment signify the classical design approach, which was for (external) designers to provide a solution to a particular brief from a client. In the collaborative, engaging and "new" forms of social design, which are largely based on the methodologies studied in this thesis, the dynamics and relationship between "designer', "client" and "user" is often different. In fact, Weick himself contents that "in a true upending of organizational design, we find ourselves engaged, not in uncertainty absorption, but in uncertainty infusion" (2004:48). To the extent that collaborative design approaches "take in" complexity and uncertainty, and help

managers reconcile themselves with it, might they achieve a different kind of stability than the one characterized by (the illusion of) control? In the cases studied, at least, it seems to be the rule more than the exception to draw on a rich appreciation of the "preinterpreted world", to take departure in qualitative design research, to draw in human subjective experience, and to generate empathy with the perspective of users. The stories shared by many of the managers indicate that the resulting insights were rather profound, in that they gave a re-framed perspective of the problem space. The expectations and pre-interpretations embraced by the managers were thrown into question; the stable state was challenged. The new form of stability is, perhaps, instead one of continuous sensemaking with departure in a changed frame.

This is not to say that, just as Weick, institutional theorists may not also be able to come to terms with a potentially more disruptive potential by design approaches. As public managers engage with design to achieve change, the concepts of "institutional entrepreneurs" and "institutional work" can serve as means to interpret these engagements and actions (DiMaggio, 1988; Lawrence & Suddaby 2006; Meyer 2008; Suddaby & Greenwood 2009). In this perspective, the public managers studied can be understood as "(…) change agents who initiate divergent changes, that is, changes that break the institutional status quo in a field of activity and thereby possibly contribute to transforming existing institutions or creating new ones" (Battilana et. al., 2009:67).

It seems difficult to reach a firm conclusion on the nature of the emerging changes in governance that I have identified. Perhaps the most important discussion is not about whether the change towards human centered governance is "radical" or "incremental", but rather whether it somehow, to reference Kurt Lewin (1947), "unfreezes" the existing structures, making them less stable and more open, fluid, amenable to adaptive change? This may not qualify as a "disruption" or a paradigm shift as Clayton Christensen (1997) or Thomas Kuhn (2012) might have argued, but it is something different. As collaborative design approaches are brought into public organizations, public managers are empowered to redefine relationships, engage wider networks, make interactions more meaningful and gain new epistemologies. This may not just be temporarily tinkering with change but perhaps permanently managing differently. Perhaps, to draw on Colander & Kupers (2014) metaphor, it at least entails seeing another mountain. As such, they can give new (reframed) direction focusing on citizens and outcomes while at the same time, perhaps, letting go of control. Perhaps purpose and meaning are shifted to the fore,

rather than structure and rationality? Perhaps invention and experimentation will balance, or challenge, analysis and calculation? For organizations engaging in (new) networked forms of governance, this may not, as I will also discuss later, form a major break from the past. But for organizations anchored more firmly in a bureaucratic paradigm, the change could well be radical.

11.4 **On the performance of a human centered paradigm**

In chapters 2 and 3 I discussed the distinguishing characteristics of Weberian bureaucracy and the outcomes it claimed to deliver. There seems to be no doubt that the triumph of bureaucracy both in public administration and in the business world throughout the 20th century had to do with these outcomes, including efficiency, predictability, objectivity, procedural fairness and the underpinning of modern democracy. Indeed:

> *Because public administration [before the separation of politics from administration] was still infused with pre-bureaucratic forms of patronage and personally motivated favour, scientific management offered the prospect of more rational and systematic procedures and forms of conduct that would help eliminate these features. Its achievements in delivering on this promise should not be underestimated* (du Gay 2000:116).

The key question becomes to what extent the positive achievements caused by the rise of traditional public administrations might be sustained, to the extent they are still relevant to a contemporary world, while at the same time coexisting with the principles of a human centered governance? Or are these paradigms, or governance models, really at each end of a spectrum? It is ostensibly a bit daring to compare an emerging, underspecified and still vague set of governance characteristics with a well-grounded, tested and tried model such as traditional bureaucratic governance. However, the purpose here is not to "prove" or "demonstrate" which is the most compelling figure. It is more humbly to entertain the idea, to use contrasting and comparison as a way to make similarities and differences stand out more clearly; and to learn more about what an emerging model might entail. What are the pitfalls, what are the potentials, what needs to be understood better? The figure below seeks to contrast some of the defining characteristics of the two models across a set of different domains.

Figure 36: Contrasting bureaucratic vs. human centered governance

Domain	Bureaucratic governance	Human centered governance
Citizens	Formal rules Impersonal	Relational Subjective
Organization	Division of responsibility Management hierarchy	Networked Loosely coupled
Processes	Transactional Top-down	Interactive Bottom-up
Epistemology	Objective Categorical	Reflective Perceptional

The wider question one would want to ask – in the spirit of learning and trying out the comparison – is however beyond the descriptive, and rather the performative: How would a human centered governance paradigm potentially fare against what are ostensibly the performance criteria of traditional, bureaucratic governance? The answer might be that the principles underlying the two models, at least as ideal-types, are vastly different and that they have different objectives. The table below illustrates some key issues, in turn:

Figure 37: Performance factors of bureaucratic governance versus human centered governance

Performance factor	Bureaucratic governance *achieved through*	Human centered governance *achieved through*
Efficiency	Scale Standardization Specialization Defined as cost per output (*efficiency*)	Relations Networked Individualization Prevention Defined *also* as cost of outcomes (*effectiveness*)
Predictability and objectivity	Hierarchical management Recruitment practices Rule-based	Adaptability Empathy Embracing complexity
Procedural fairness	Uniformity of rules no matter the context Equality in terms of right to certain activities	Differentiation of processes to fit with differing contexts Equality in terms of right to certain outcomes
Democracy	Transparency of *basis* for making decisions	Transparency of *means* to achieve outcomes

An important – perhaps the most important – point in the table above is the issue of efficiency. In Weber's traditional bureaucracy there was no mature concept for *outcomes*, understood as the ability to influence a societal challenge or problem and turn, to quote Herbert Simon, the current situation into a preferred one. So in Weberian bureaucracy, efficiency is in a sense internally defined as productivity, or the ability to produce a particular output at a particular unit cost. The main concern across the cases studied in this thesis, and thus a key characteristic of human centered governance, seems rather to be the ability to achieve particular outcomes. This is more a matter of (externally oriented) *effectiveness*.

We are now ready to take a look at how human centered governance connects to the different conceptions of networked governance that I introduced in chapter 3, and discussed extensively. The figure below displays the range of variants I presented and discussed, and adds human centered governance, essentially as an additional perspective or variation.

Figure 38: Emerging paradigms: Variations over the next governance model

Networked Governance overall characteristics	Digital-era governance (Dunleavy)	Public value management	Collaborative governance	Human centered governance
Strategy Shaped by civil society	Driven by digital and technological opportunities and capabilities.	Strategic triangle between legitimizing, authorizing, and organizing environment.	Primary attention on public-private partnerships, networks, and joined-up services.	Shaped by relations, empathy with citizens' experience and design of service journeys.
Governance Through networks and partnerships; Civic leadership	Priority on centralization and specialization to reap benefits of digitization.	Focus on management for results and performance.	Emphasizes collaborative networks and co-production.	Maintained as public managers domain but organized by citizen's experience and role of other actors (networks and interactions).
Key concept Public value	Focused on radical productivity gains through digitization.	Point of departure for public governance.	Prioritizes the generation of outcomes.	Continuous experimentation, reflection, learning how to create better outcomes.

Source: Adapted after Bennington and Hartley (2001)

It is on purpose I have not included the three contextual factors proposed by Benington and Hartley (that the *context* of governance is continuously changing, that the *population* is increasingly diverse, and that needs and problems of society are *complex*, volatile and prone to

risk). All the governance model variants appear to recognize these conditions as the canvas against which governance is practiced. However, it is interesting to contrast the approaches suggested by the four variants across the remaining characteristics: How is strategy shaped? How is governance done? How is public value understood? In endeavoring to compare and contrast a "human centered governance" model with the other emerging models, I essentially introduce a new kind of construct and propose relationships between it and established constructs, as Edmondson & McManus (2007:1158) suggest. The table shows some interesting nuances and differences, but overall none of the models seem to fundamentally challenge the overarching proposition of the "new" public governance. When it comes to "human centered governance", as it might be expected, the relations with citizens are at the forefront, the role of networks and interactions central, and continuous reflection over the generation of desired outcomes is an important characteristic.

On balance, it seems that the governance characteristics I have labeled as human centered governance shares many similarities especially with collaborative governance, but perhaps also partly with public value management. It seems however that putting human beings – people and their experiences and behavior – at the forefront, including potentially reframing the relationship, could be a characteristic that at least in part is particular to human centered governance, even though co-production is central also to collaborative governance. This tells us that applying design approaches in the context of public organizations will likely contribute to a shift towards the emerging field of governance model, and that certain characteristics and properties will probably be accentuated. Public managers who engage with design will, in this sense, know a bit more of what to expect.

11.5　Reflection on generalizability of findings

A final note of reflection, which relates also to the previous parts of the thesis: Can these findings to any reasonable degree be generalized? We should remind ourselves that the empirical grounding across the study is 15 case examples, which have been drawn from across a number of modern economies in the Western cultural sphere. I have taken departure in grounded research methodology (Corbin & Strauss 2008), and so the data material for each of the cases is mainly qualitative, and the analysis of each case, as well as the cross-case analysis, is of an inductive nature. This is not by any means a statistically representative sample, and so it is not

possible to make statistical generalization on the basis of it. As Yin (2014) would suggest, we are in the domain of a multiple-case study, where the applied method is different: While survey research relies on statistical generalization, "case studies (as with experiments) rely on *analytical generalization*" Yin (2014:43). This means that the issue of generalization does not in itself concern wider populations or universes, but theoretical propositions. Each case can, according to Yin, be generalized from its particular instance in attempts to build broader theory; this is done through a *replication logic*, whereby the causalities and relationships indicated by one case study is sought after and studied in further cases, just like repeating an experiment (Yin 2014:53). This dynamic is roughly similar to the notion of *theoretical saturation* suggested by Corbin & Strauss (2008:263), whereby theoretical concepts are established inductively on the basis of qualitative data analysis. Given the rather large number of cases in the present thesis – what I have characterized as an "embedded multiple-case design" (Yin 2014:46) – there have been relatively many opportunities to replicate findings literally across cases. A number of the figures and displays showing the distribution of particular characteristics (for instance in the above analysis of an emergence governance model) underline this point of quite substantive replication. According to Eisenhardt (1989) this strengthens the validity of the constructs in that it helps verify that emerging relationships fit with the evidence in each case, and it increases the likelihood that the emerging theory will be "generalizable across settings" (Eisenhardt 1989:546). My systematic contrasting and discussion with the extant literature has further contributed to strengthening the findings.

In line with Eisenhardt's suggestion, it thus seems fair to expect that the application of design approaches in roughly similar public sector contexts such as the cases in this thesis should lead to roughly similar processes and, potentially, results. Certainly, however, my findings cannot as a point of departure be generalized to settings beyond the Western economic, political and social context in which the cases have been selected. Indeed, it is an open question if the dynamics would be the same for instance in Southern or Eastern European public sector contexts. New "experiments", by drawing in and studying cases from other contexts, would have to be carried out, in line with Yin (2014), thus testing and further refining the theoretical concepts found in the present study.

This chapter has discussed the empirical findings concerning an emerging set of governance principles, which may be summarized as human centered governance. The purpose has been to better understand what the implications could be for public organizations; what might a "re-humanized", but more loosely and under-specified model of governance entail? To what extent shall it be seen as a shift from current paradigms, and to what extent is it likely we will se such principles and characteristics as "overlays" to the current hybrid of traditional and new public management models we have inherited? In comparing and contrasting the emerging public governance, it seems fair to say that it at least potentially signifies a relatively marked shift from traditional bureaucratic governance. I ended the chapter with a methodological consideration on generalizability of my findings, suggesting moderately that applying design approaches in similar contexts might well be expected to yield similar processes and emerging outcomes.

In the next and final chapter I will reflect more broadly on my findings across the thesis, and discuss which new questions and implications arise, which are relevant for research as well as practice.

12. Perspectives: Process, agency, and context of change

Of the many activities of man, designing is one of the most fascinating and crucial.

C. West Churchman, *The Design of Inquiring Systems* (1971:3)

This thesis has explored the interplay between public managers who strive for innovation and change; the use of design approaches as a resource in this endeavor; and the possible implications for public governance. It has been driven by the question: *What happens when managers engage with design to achieve change in public sector organizations?*

In this chapter I sum up my findings across the thesis by proposing an overall model that illustrates the mutual interdependence of design *(process),* management *(agency)* and governance *(context)*. I describe it as a dynamic cycle of change.

I then reflect on the wider implications of the findings through these three perspectives, or lenses. With each lens, I first briefly sum up what I have found in the thesis; I then introduce discussions that consider the implications of those findings for design and management practice, and for research.

With the first lens, I discuss design process and method. I sum up the roles design approaches seem to have played across my analysis of the empirical cases. I consider what my findings might mean for the professional design community and (not least) the future education of designers in relation to public management. I suggest a range of research agendas that could be interesting to explore further. This is both a summary and an elaboration of my research sub-question 1.

The second lens returns to a key thread throughout the thesis: Management and agency. What are the roles public managers play in enacting change? How can we understand the implications of the six management engagements? Here, among other considerations, I bring the issue of

decision-making versus future-making in leadership practice to the forefront, and point to potential research themes, reflecting further on research sub-question 2.

The third lens looks into governance and organizational context. How can design approaches come to sit more comfortably, or at least fruitfully, in relation to public organizations? What are the organizational opportunities for embedding design to contribute to on-going practice of experimentation and exploration of an emerging model of governance? How might the governance context, as it emerges through use of design approaches, enable more authorizing environments for management agency? Here, I highlight the rise of 'innovation labs' as an organizational response to the pressure for innovation, and possibly a contribution to propelling the interplay between innovation, management, and governance forward. Finally, I consider whether there are more critical implications of a human centered governance paradigm that must be taken seriously be practitioners and scholars alike. This lens hereby reflects my third research-sub-question.

Taken as a whole, these three perspectives constitute the thesis's conclusion on the emergence of a potentially different approach to leading change in government, which unfolds in the space between managers' agency and design approaches.

12.1   **Cycles of change: The dynamics of design, management, and governance**

This thesis has explored how public managers engage with design approaches, and how this may lead to wider implications for governance. However: does governance have a role in *enabling* such engagement in the first place? Or, in other words, how does management, or the agency of managers, connect to the process perspective of design work, and to the governance perspective, which determines at least some of the overall contextual factors in which organizational activities take place? Given what we have now seen, how can we understand the role of discrete projects, based on design approaches, and their implications for the wider governance characteristics deployed in public organizations? How do these characteristics in turn lend themselves to more or less possibility for agency on the side of public managers?

From viewing the interplay between design and public management as two waves crashing against each other, I now suggest a view that captures a dynamic and more complex interplay between design, management, and governance.

The experiences of public managers that this thesis has uncovered indicate that design contributes to new understandings of the role of public organizations in achieving their purposes, specifically at the "project" level. However, these project-based processes seem also to lead to new understandings of how the organization might be governed.

The figure below illustrates how the interaction between the management efforts to drive design projects, the innovation processes themselves, and the implications for the governance context might be mutually reinforcing. What I seek to illustrate are the dynamics between managers' agency as they engage with innovation processes through design approaches, and the impact on, and role of, governance as the context.

Figure 39: Cycle of governance (context), management (agency) and innovation (change processes)
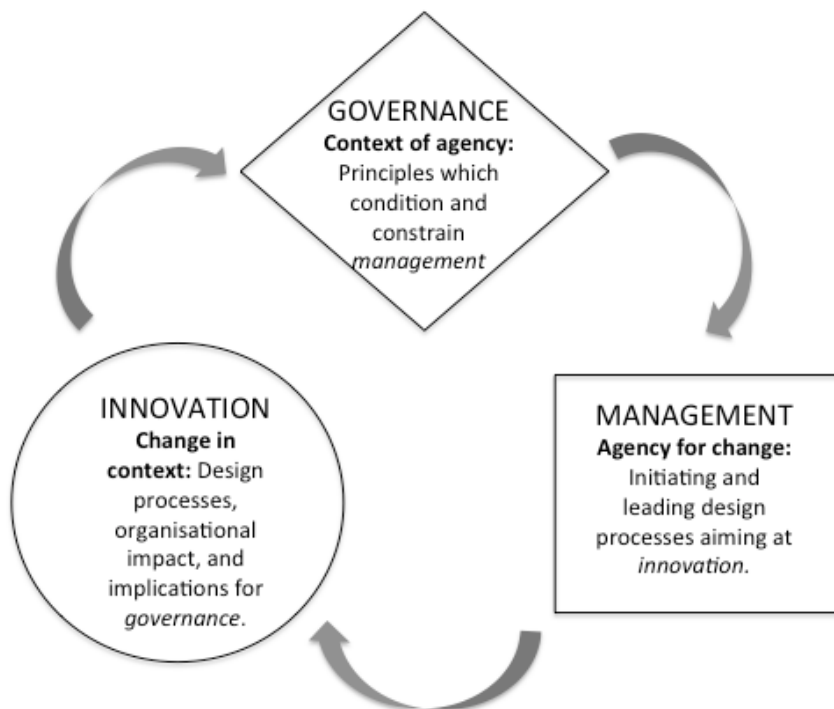
The figure illustrates how the governance context defines constraints and opportunities for the management engagement with design processes. In turn, the leveraging of design approaches and resulting changes influence the context in which agency of management is possible.

In the following, I will consider the possible implications of each these three perspectives, both in terms of research and practice.

<table>
<tr><td>12.2</td><td>**Implications for innovation: Design as a change resource**</td></tr>
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12.2	**Implications for innovation: Design as a change resource**

This thesis has taken its departure in the role of design approaches as a potential contributor to processes of innovation, change and transformation of public organizations. The nature of change flowing from the use of design approaches in government contexts, as they have been mapped, described and analyzed in the thesis, raises a number of questions and implications both for practice and for research.

12.2.1   Summary of findings

I have shown how design approaches, broadly defined, are applied in a range of public sector contexts – across five countries, across local institutions, city and national government, and across policy areas spanning from social work to education, to business services. Design practice in the public sector can be characterized in terms of activities along three dimensions:

- *Exploring the problem space*, which involves a range of ethnographically-inspired design approaches, including field work and visualization of user processes;
- *Generating alternative scenarios*, in which graphical design approaches and creativity inducing methods are used to enable collaborative ideation and concept development; and,
- *Enacting new practices,* which involves the use of prototyping and user testing to render possible solutions more tangible, and also various ways of envisioning idealized (future) situations.

These dimensions of activity were discernible in all 15 cases, though to greater or lesser degrees. In addition, the tools and ways of working systematically and collaboratively that design provides appear to resonate with a contemporary conversation that suggests that the future of public governance should be more "collaborative" and "citizen-centered".

That being said, it seems that the most emphasis, at least in the cases studied, is often placed on the first design dimension: On the systematic exploration, drawing in part on ethnographic methods, of the problem space. It is only speculation, but perhaps the more research and data-oriented, analytical process of creating insights about citizen behavior and interaction with public organizations fit well with the public management legacy that has been inherited? Although the type of data is rich, qualitative, and perhaps more "messy" than the more wide-spread use of quantitative metrics in the public sector, design research still is about generating knowledge about the existing situation; it is more oriented towards analysis, less towards action. Could there be a tendency that public sector design projects would emphasize the anthropological perspective more, and less the enactment of new futures?

12.2.2   Implications for practice and research

The findings concerning the use of design approaches as an innovation resource in public organizations point in different directions.

As for design practice, one obvious implication seems to be that designers should continue to develop and strengthen their ability to conduct in-depth user research and to facilitate processes with clients and stakeholders, to activate their "professional empathy" and help turn such eye-openers into real change. If my speculation is true that the research-oriented design dimension is a natural way for public managers to at least begin to engage with design, then this could perhaps be the entry point for design practitioners. In other words, to the extent that designers wish to generate new business opportunities for public sector clients, or find work within public organizations, they might "sell" their profession as a particular branch of citizen-centered research that can provide unique data and insights about the challenges the organization is facing.

That being said, the thesis has also shown that generating alternative scenarios through open, interactive and tangible workshop formats, visualization and rapid prototyping, and user testing of redesigned services offers something that the managers do find compelling in their quest for innovation. From a design practitioner standpoint, the challenge might then be how to show managers how design can contribute to such "future-making" – something hard to illustrate

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before the fact. Probably the use of case examples and stories can better enable designers to articulate what such approaches entail, and how managers can engage with them.

As for design education, it seems clear that there will be a need to support students in learning the theory and practice of collaborative design within a public sector setting. Design education must equip them with the ability to navigate the internal machinery of government, just as they need to understand the needs of business. Even as designers help public managers achieve an "outside-in" perspective on the consequences of their efforts, designers must also appreciate the "inside-out" experience of working within a political, hierarchical, and bureaucratic setting. Extended secondments or internships to public service organizations could be a way of helping design students really appreciate what the daily life of a public servant is like; additionally, it could make sense to equip design students with a minimum of public management theory, perhaps via electives. In spite of the trend towards convergence, one of the biggest barriers for designers to become trusted advisers of governments might still be that their world, or world-view, is too far removed from that of policy makers. For future generations of designers to be effective, that probably needs to change.

What are the implications for academic research in design? Here it seems fair to say that more empirical studies of how design approaches unfold and are of consequence in government settings are needed. Some examples could be:

Deeper studies of how design approaches, used over a longer period of time, affect a particular public organization. How are management capabilities and practices influenced (if at all), and which conditions, such as political and societal context, policy domain, and governance arrangements are critical in shaping the role that design approaches can play? To what extent do design approaches become accepted as a natural way of working in the organization?

Sector-based studies, which examine the challenges and opportunities facing a specific policy or problem field. Such studies could zoom in on, for instance, education, social work, or entrepreneurship, and examine how design approaches unfold and perhaps contribute to policy change. What are the particular dynamics of design approaches in particular policy domains? Where is there most resonance and possibly impact? Additionally, it would be interesting to learn more, cutting across policy domains, about the potential relationships between the nature

of problems (such as degree of complexity) and the efficacy of design approaches. As I have discussed in this thesis, a major argument from many of the voices advocating for new approaches to innovation and governance in the public sector is that the context has become more complex. There also seems to be some arguments that design approaches may be better aligned with a complex and emergent environment since they call for more open, experimental and collaborative approaches to innovation; however we do not really know whether design approaches are *more* suited for complex challenges than for issues that are "just" complicated. Such a rigorous assessment, on a case basis, has been beyond the scope of this thesis, but could certainly be of interest.

Broader studies, either nationally or internationally, with a more quantitative approach, to map the emergence of design approaches in the public sector.[55] Some empirical work has recently been done to map innovation practices, nationally by a body such as Denmark's Center for Public Innovation (COI) (which has established a national public sector innovation statistic); and internationally by the European Unions' *Innobarometer* survey (which maps innovation practices in Member States' public sectors), and by the OECD's Observatory for Public Sector Innovation (which has collected a vast amount of case examples). However, these mappings do not explicitly consider design approaches or capabilities; if they could come to do so, they would offer significant empirical material to take the research agenda on design in government further, enabling reflection on questions such as: What are national differences in the emergence of design approaches? What are the patterns in terms of use of design locally, regionally, nationally, across countries? Are there links between innovation activity (and perhaps impact) and the use of design approaches, from a statistically generalizable perspective?

Geographical studies, including comparative ones, which focus on the potential national and cultural aspects of design work in government. What role do national or regional design traditions and histories play? To what extent do design approaches, as they are practiced in different national contexts, carry with them certain cultural or political "baggage" that may in turn influence how they contribute to innovation and change in governance? For instance, what do the mid-Century Danish, Scandinavian and Nordic "modern" traditions in furniture design, coupled with the region's legacy, starting in the 1970s, around democratic and participatory

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[55] One interesting mapping in the design domain, which is however not quantitative, is a so-called "service design impact report" for the public sector, published by the Service Design Network (2016), an industry organization.

design in computer software (, entail for how collaborative design approaches are administered and received in the public sector today? What does the Italian design history, or Chinese culture in arts and design, imply for how design approaches are used, or not, in the public sector?

The intersection between collaborative design approaches to policy and service innovation versus design for public infrastructure, planning, architecture etc. As stated in my introduction, it has been an explicit choice in this thesis to look into the rise of collaborative design approaches to creating public services and policies, and their role in perhaps influencing public governance. However, what are the potential linkages between these emergent uses of design, and the more traditional uses of design by governments, regions and cities for large-scale planning, infrastructure and urban development projects? How do these fields co-develop and interact – if at all?

These were only some of the more obvious themes that I believe flow from the insights generated in this thesis. There should be a quite ripe research agenda for the academic design community to dive into for the years to come.

12.3 **Implications for management: Agents of change by design**

The second factor explored in this thesis is management, or rather, the role of public managers in commissioning, relating to, and using, design approaches to discover and achieve their objectives. Here, the emphasis is on the managers as potential change agents who are to varying degrees empowered by their access to design approaches – and who in turn may empower the design teams, and the design processes through their own attitudes, behaviors and actions. This complex interplay raises a number of interesting implications.

12.3.1 *Summary of findings*

I found six types of engagements with design, which can be understood as patterns of attitudes and behaviors among public managers, which were observed when design approaches were used in the organizations studied. These engagements are expressions of *what happens between managers and design processes* as the latter unfold. The six engagements I found are:

1. *Questioning assumptions*, which includes an *a priori* tendency to seek out ways of questioning one's own assumptions as a manager, as well as a design-inspired tendency that encouraged and enabled a manager to ask new questions about "what is going on" when her or his organization interacts with its users.

2. *Leveraging empathy*, which concerns the propensity of managers to seek and use "empathic data" generated from ethnographically inspired design techniques, in order to initiate processes of change in their organization.

3. *Stewarding divergence*, which refers to the ability to open, and keep open, space and time amid an organization and its routines to allow a diversity of ideas to emerge, linger, and flourish, while also maintaining for the staff an overall sense of direction and purpose.

4. *Navigating the unknown*, which concerns the ability of managers to handle constructively the insecurities and worries that design processes, with their inherent ambiguities, prompted in their own minds and in the minds of staff members.

5. *Making the future concrete*, which is tightly connected to the design practice of prototyping and testing possible solutions together with end-users, staff, and other stakeholders.

6. *Insisting on public value*, which reflects an orientation toward the outcomes of the organization's activities and a dedication to producing multiple kinds of value, such as productivity gains, but also, very importantly, value for citizens or other constituencies.

I show how these six engagements roughly correspond, in pairs of two, to the earlier identified three design dimensions. It appears that particular design approaches influence managers' engagements, and that certain management attitudes and behaviors at least in part determine how significant the use of design approaches turn out to be.

12.3.2   Implications for practice and research

What could my findings mean to the future of public management practice and research?

An interesting and overarching question is whether "designer" can be conceived of as a legitimate management role in government, public service, or public policy. It certainly seems right to say, with Herbert Simon, that the managers I have studied engage in designing because

they seek to change their current situations into preferred ones. However, does this necessarily make them 'designers'? Or, to be more precise:

- How might more managers become aware of the potential contribution of design approaches?
- Could design become a management competency of sorts, as (more) public managers come to draw on design engagement?
- Or even further, could public managers embrace a design attitude?

Let me consider these three questions, which are potentially relevant both for practice and for public management research.

First, awareness of design approaches through education and training. It seems reasonable to suggest that it would be useful to future and current public managers to be exposed to what design approaches can mean to government. Just as vocabulary and concepts such as policy analysis, benchmarking, or cost benefit analysis are often considered formally in political science and public administration education, so could design be presented as a perspective on how to address questions of policy and service innovation and organizational development. Design approaches can, in a narrow, sense be seen as a part of the public managers' (or even the public development consultant or policy advisors) management toolbox. In a broader sense, design could be viewed as a different perspective on the act of policy making, and on the role of the policy maker, drawing on the comparison I have drawn between future-making and decision-making, and foreshadowing an emerging model of human centered governance. Awareness of this could be enhanced through formal education (such as university degrees in political science and public administration, or even law and economics), or through continuing educational offerings, such as executive masters of public management and administration. Already today, many master of business administration (MBA) courses offer modules in design (or "design thinking"); given the findings in this thesis, and the emerging research and literature in the field, there seems no reason why public managers should not also have access to at least introductory theory and approaches in design. This could lead to a faster and more relevant uptake of design approaches in public organizations, where relevant, both through collaboration with design agencies and through the recruitment of in-house designers (some of whom might

make up part of an internal innovation lab, which I will discuss later in this chapter). An obvious research agenda here would be to ask what are the best or most powerful ways of delivering such education and training to public managers? How could design courses or modules be integrated in current public management educational offerings? Or, conversely, should design schools include policy and management perspectives in their educational offerings? And not least, how can we ensure that there is a strong enough research base upon which to build such education?

Second, building "design competency". A wider question is what would be required for public managers to not only to be introduced superficially to design approaches, as a component of their management "toolbox", but in addition to build more substantial skills and competency in strategically leading design processes. Or, in other words, how might we train public managers to draw on the insights created in this thesis around design engagement? Here we must consider the role of the public manager not only as commissioner of design approaches, but as someone who engages actively in future-making, shifting more profoundly away from the analytical, overly rational, and optimizing paradigm of management. This perspective – viewed perhaps as some kind of "master practitioner training", or action based training, in design engagement – could be an obvious avenue for practitioners; it also suggests some interesting avenues for research. Given the findings in this thesis, it seems that the best way for managers to build design competency would likely be through practice. So, it would be relevant to examine whether the experience of engaging with design also influences how these managers undertake work on organizational change *the next time they have the opportunity to do so?* Or put in a different way: Once they have collaborated with designers, has this changed the manager's perspective and confidence in how they can lead change in their organization? Might managers, via their experience with design, more permanently take on a different stance in their organization? To what extent does it matter whether their wider organization has also gained experience and confidence in design? As the organization scholar Tor Hernes (2008:145) says, in organizations, actors change during processes. "They act in a fluid world, which changes them in turn". Could prior experience with design enable managers to be more confident of taking particular forms of action? Hernes (2008:145) notes, "Unconsciously, decision makers know that the world is far more complex and fluid because they live in that world every day." Or, one could say that from the experience of dealing constructively with "thrownness" comes confidence. Might it then be that through the collective experience of design work, dealing with

such complexity becomes more natural, both for the manager and the staff that were involved? These are potentially exciting research problems which might be addressed via longer-term (longitudinal) studies in single organizations, perhaps involving multiple managers.

Third, "design thinking" or "design attitude" in public management. As discussed, though I uncovered six management engagements with design in the thesis, there are variations in the degree to which the manager *a priori*, or intrinsically, displays certain attitudes or behaviors. The companion question concerns the extent to which management action is prompted, or triggered by the influence of design approaches. The interplay here seems far from simple, thus it raises interesting research questions. For instance, I found how the management engagement 'questioning assumptions' is both an intrinsically driven propensity, at least with some of the public managers, as well as influenced extrinsically by the 'empathic data' generated by design research. Likewise, as design methods challenge the manager to allow for a wider and richer divergence of possible solutions, the question becomes why this happens: Is it because the manager is (intrinsically) inclined to allow for extended periods of uncertainly and is ready to steward this divergence; or is it because the processes of design-led ideation and concept development more or less forces the managers to take a certain stance? Could it be that because the manager has put his or her personal prestige into working with designers, she or he is more likely to allow for the designers to have some leeway as the process moves forward and becomes unpredictable? As I have hinted many times throughout this thesis, part of the answer seems to be that there is *something* about these managers' way of thinking which enables rather powerful uses of design work to initiate or drive change in the organizations studied. Are they simply thinking differently? If one were to ask Roger Martin (2007; 2009), long-time proponent of design thinking as an approach to innovation, he might answer that these managers in various ways display design thinking. Or, as Boland & Collopy (2004) and Michlewski (2008, 2015) have suggested, do they display some of the same traits as professional designers? Do they "manage as designing"? Or even more precisely, do they display *design attitude*? If so, there could be implications for recruitment of managers into roles that call for innovation: Should and could such recruitment and promotion look for and consider design attitude as part of the make-up of the "innovative public manager"?

Finally, the thesis has considered the relationship between engagement with design approaches, their outputs and results, and public governance. Although not an ambition of the thesis to "prove" that design approaches lead to value-creation, tentative signs were found which indicated that at least in some instances positive, measurable change such as productivity gains, enhanced user experience, and strengthened public outcomes, could be connected with the engagement with design approaches.

The main emphasis of his last part of the thesis has been the question of the role of design approaches in prompting an emerging public governance model. Here, the context of public management is in play, defined as the principles that "steer" the public organization, and which managers and staff rely on for guidance and direction.

12.4.1   *Summary of findings*

I have inferred a relationship between the use of design approaches and the characteristics of a possibly emerging public governance model. Managers who use design approaches seem inclined toward governance that, in comparison to historical public management approaches, is more:

- *Relational*, in terms of a distinctly human and often longer-term perspective on the role of the public organization and its impact on the outside world; often this implies a reframing of the kind of value the organization is supposed to bring to citizens and society;
- *Networked*, understood as a model of governance that actively considers and includes a broad variety of societal actors to achieve public outcomes, including civic actors not often considered in past governance models;
- *Interactive*, exhibiting increased awareness and more explicit use of (physical and virtual) artifacts in mediating purposeful interactions between the organization and citizens and other users and stakeholders and,
- *Reflective*, which is to say driven by a more qualitative, emphatic, subjective, and complex understanding of the organization's ability to enact change.

In a more speculative discussion (that is nevertheless consistent with my findings), I propose that this set of characteristics might collectively be termed *human centered governance*. While I do not argue that these characteristics constitute a fully-fledged governance model by themselves, they can be considered a coherent variation that could be part of emerging "new" public governance models. A human centered governance perspective would, I suggest, emphasize bottom-up and highly differentiated processes; and it would appear, relative to traditional governance models, to be more "skeletal", or even under-prescribed. It would, also, place more emphasis on future making than on the analysis of choice between already formed alternatives that has been the focus of traditional public administration thinking. This would, perhaps, be a more radical perspective, one that challenges the governance legacy that public managers have inherited from more analytical traditions.

12.4.2 Implications for practice and research

In this thesis, design has been viewed mainly from a process perspective – as a set of methodologies and activities for public managers to engage with in order to achieve some form of organizational change and, possibly, wider impact and value-creation. The emphasis has been on design as a driver of innovation in public organizations. However, as was illustrated in the introduction to this chapter, it might not only be the case that design processes, and the engagement of managers with them, lead to changes in governance; it might also be that governance sets the context for the management engagement with design. The assumption here is that governance arrangements might matter for the likelihood that innovation can happen in public organizations. As Waldorff et. al. (2014:71) suggest, "we know only little about the way innovation processes are designed and formed by existing governance approaches in the public sector". And if we accept this as true, we must also admit that we know even less about how innovation processes are formed by the emerging public governance I have described in this thesis. It is this perspective on the relationship between governance, management, and innovation which is the point of departure for my considerations below.

Designing as creating new landscapes for public policy decisions. First, if we view governance as a set of principles that help define what are the "relevant" or "right" decisions for public managers to make, then a shift towards a different governance model also implies changes in the landscape upon which decisions are made. If the frame, the context, of public managers'

ongoing decision-making becomes one that is relatively loose, open and "skeletal," and which provides only rough building blocks that we might call relational, networked, interactive and reflective, then the decision-making landscape is very different from the one that they have known. This emerging governance model reflects a world that is more ambiguous, complex, and turbulent, in which it is more within the discretion of managers, staff, and organization to discover for themselves appropriate responses, or, more proactively, appropriate policies and interventions. Think of the "two mountains" metaphor that Colander & Kupers (2014) suggest: By discovering and moving towards realizing an emerging human centered governance, public managers may find themselves on a different mountain, one that offers a different decision-making landscape. This raises interesting issues for practice as well as research: Do the human centered governance principles in turn allow for increased and "better" use of collaborative design approaches to identify new policy and service options to decide upon? Is it necessary for managers to engage in more continuous, on-going "rediscovery of the state" since there are no solid principles to draw upon as was known from bureaucratic governance or from the new public management? Or, maybe more likely, does a human centered governance paradigm sit uncomfortably and at odds with the "other mountain" which we have inherited, the public administration mountain that continues to dominate landscape? Do these two mountains clash, as some managers embrace an emerging model and others (perhaps the majority) – resting comfortably within the land that they know – insist on basing decisions on older paradigms? Academic research into emerging governance principles and arrangements, and decision-making processes, and how they "sit" with environments and other organizations building on classical public administration and/or the new public management, would be welcome.

Building experimental governance capability: The role of innovation labs. Second, if we assume that design approaches could have a role to play in continued experimentation, and in "rediscovery of the state," then what are the ways in which design practice can become a more natural part of approaches employed by public managers and public organizations? I have already considered that designers and public managers could be trained differently. However, considering the challenges of governing effectively with a "skeletal" set of principles, the question becomes how managers can have continuous *access* to design approaches as part of the organizational environment? Most of the cases in this thesis were conducted by design teams commissioned from outside the sponsoring organizations; some were carried out by bodies that were either internal design teams (such as MindLab in the Danish government) or semi-internal

bodies (such as TACSI, the Australian Centre for Social Innovation). These organizations are tied directly or indirectly to the public organizations they serve, and both employ trained designers, ethnographers, sociologists or the like. Such "innovation labs", or "design teams", can be viewed as organizational responses to a demand for innovation, and as means for bringing design processes into play. As mentioned in my introduction, so-called innovation units, or design labs, or "public innovation places", are on the rise globally (Bourgon 2011; Hassan 2014; Junginger 2014b; Bason & Schneider 2014; Nesta 2014). This phenomenon of innovation labs can be viewed as an attempt to structure and institutionalize design processes as "corporate functions" in public organizations. As such, innovation labs can possibly function as organizational vehicles for creating an authorizing environment, capability, and legitimacy, for the cycle of change I have suggested in the figure introduced in this chapter. From a practitioner's perspective, this implies that there are examples and experiences to learn from, and which can, to some extent at least, be adopted in building internal design capability. From an academic point of view, the rapid global "rise of labs" provides unique empirical research material. A range of different experiments with innovation labs as governance arrangements are taking place around the world at the same time, each of which could offer interesting insights about how to embed design approaches in public sector organizations. Some of the research questions could be: To what extent is a broader use of design for public policy and services enhanced through the top management backing which is usually associated with labs? How is such backing of design approaches sustained over time? Since the transaction costs for managers of using design approaches is usually lowered by the presence of labs (usually they do not charge regular consulting fees), one would suspect that the spread of design approaches would accelerate. But will this be the case? And, as with all such things, are the methods used by "labs" undergoing changes, for instance, towards more digital approaches, which may or may not resonate with design? As experimental sites for the use of design in government innovation, and in discovering new governance arrangements, innovation labs should offer interesting research opportunities in the coming years.

Design and public value: What are the outcomes of human centered governance? As I have shown in this thesis there seem to be concrete changes flowing from many design engagements: Tangible design outputs as well as less tangible, but in some cases certainly discernable, changes to the organizations and the ways in which they relate and interact with citizens and their surrounding environments. I found that a range of the cases I studied showed signs of

creation of public value, including productivity gains, democratic value, stronger service experience, and tentative signs of better outcomes. These findings are however tentative and not based on direct research, but rather on reports of the perceptions of managers, some self-published analyzes and reports, and (some) externally conducted evaluation reports and business case studies. Although I have sought in previous chapters to assess, contrast and compare the results and effects of an emerging human centered governance model, more should certainly be done to explore how public organizations, which embrace some of its principles, fare in practice. Over time, do they maintain an ability to co-produce better outcomes? How does productivity fare, especially since the ability to produce more outputs per input is not the main priority in this paradigm? What is it like to manage for outcomes through design-inspired governance approaches, as citizens, almost by definition, cannot expect equality of intervention (or activity), but rather equality of outcomes? This raises further questions about accountability, amongst other issues, which I will conclude by assessing here below.

Radically distributed governance: Implications for accountability? The emerging, human centered governance model that I have described may have important implications for scalability as well as accountability in public organizations. These are well worth raising, even if briefly, as they call for critical reflection on behalf of practitioners and academics alike. Roughly speaking, the governance models we have inherited – including "traditional" public administration and the new public management (NPM) – have in common that they are sufficiently prescriptive that they can, more or less, be readily audited, and managers can be checked for compliance. Because principles and procedures are based on analytical principles and rational modes of decision-making, they lend themselves to audit. Take for example a decision, under an NPM regime, of outsourcing a social service to a private provider. There are well-described legal and financial procedures involved, and a transaction of employees from the one legal entity to the other is rather clearly defined. Staff, political leaders, and the public can hold the organization accountable for the change and for its implementation. However, in an emerging human centered governance regime, the issue would rather be that there was an on-going, systematic redesign ("change") of the service, which would seek to create better outcomes for citizens, such as health or social outcomes. There are no clear indications of the means by which these changes should be achieved, and thus could be audited, other than they would draw on relational, networked, interactive, reflective principles. How to ensure against obvious corruption, and ensure fairness, to avoid local injustices where some citizens gain unfair

advantage over others? How to ensure that co-design with end-users, and co-production to achieve outcomes, is somehow balanced by universal principles – or should they be? And how to achieve (after all) scale and spread of good or best practices under a governance paradigm that is designed to be highly contextual and bottom-up? This seems to imply interesting dilemmas and challenges for practitioners, and a ripe research agenda. If the rise of labs, and the emergence of design approaches in public organizations continues at the current pace, there should be much to work on, and to study.

12.5   Conclusion: An emerging research agenda

This final chapter has summarized my findings across the thesis in the form of a dynamic model which connects governance, management and innovation processes. Each of these perspectives has formed a point of departure for a discussion of possible implications for practice and for research. If one thing seems to stand out, it is that there are many open and unanswered questions ready for the examining. On the one hand, many of those issues and questions will have to be dealt with practically, operationally, as public managers seek to balance the governance legacy they have inherited with new and emerging forms of governance, including possibly human centered governance. On the other hand, there is an urgent need for more, both deeper and broader, qualitative and quantitative, research to provide new insights in this space – and to inform and empower managers to serve the public to the very best of their ability.

I opened this thesis in company with Carolyn Curtis, the manager in the city of Adelaide who experienced collaborative design approaches for the first time. Looking back, she called her participation in the Family by Family project a "phenomenal journey". She evoked powerful words and phrases to further characterize the significance of the journey, such as "suspending professional judgment", "mindset change" and "letting go of myself as a manager and leader". She concluded that, "I am seeing how the system could be very different." As I have shared, analyzed and discussed many more such stories from public managers engaging with design approaches, Curtis' account is perhaps still among the most compelling. It suggests a potential for more radical change in terms of how organizations with a public mission can achieve their objectives, or indeed, how they might fundamentally reframe them. If this thesis has made a small contribution to our understanding of this emerging practice, and perhaps even in time could advance it, then it has served its purpose.

References

Ackoff, R. L., Magidson, J. and Addison, H. J. (2006) *Idealized design. Creating an organization's future*. Upper Saddle River: Wharton School Publishing

Agranoff, R. (2014) "Reconstructing Bureaucracy for Service: Innovation in the Governance Era", in Ansell, C. and J. Torfing (ed.) *Public Innovation through Collaboration and Design.* Abingdon: Routledge

Alford, J. (2009) *Engaging public sector clients: From service-delivery to co-production.* Hampshire: Macmillan

Allison, G. (1986) "Public and Private Administrative Leadership: Are they Fundamentally Alike in All Unimportant Respects?", in *Leadership and Organizational Culture: New Perspectives on Administrative Theory and Practice.* Chicago: University of Illinois Press

Alvesson, M. (2003) "Methodology for close up studies – struggling with closeness and closure", in *Higher Education,* 46 (1), 167-193

Alvesson, M. (2012) "Do we have something to say? From re-search to roi-search and back again", in *Organization*, 20 (1), 79-90

Alvesson, M. and D. Kärreman (2011) *Qualitative Research and Theory Development*, London: Sage

Alvesson, M. and J. Sandberg (2013) *Constructing research questions: Doing interesting research*, London: Sage

Alvesson, M. and K. Skjöldberg (2000) *Reflexive Methodology: New Vistas for Qualitative Research*, London: Sage

Amadae, S. M. (2003) *Rationalizing Capitalist Democracy: The Cold War Origins of Rational Choice Liberalism*. Chicago University Press

Ansell, C. & Torfing, J. (ed.) (2014) *Public Innovation through Collaboration and Design.* Abingdon: Routledge

Ariely, D. (2009) *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York: HarperCollins

Aristotle (350 BC) *Politics*. Translated by Lord, C., (2013) University of Chicago Press

Arnstein, S. R. (1969) "A Ladder of Citizen Participation", in *Journal of the American Planning Association*, 35 (4), 216-224

Attwood, M. (2003) *Leading change: A guide to whole systems working*. Bristol: Policy Press.

Austin, R. D. and Devin, L. (2003) *Artful Making: What Managers Need to Know About How Artists Work*. Upper Saddle River: Prentice Hall

Austin, R. D. and L. Devin (2005) "Knowledge work as a return to craft." Harvard Business School working paper. http://id.lib.harvard.edu/aleph/009885465/catalog

Austin, R. D. and L. Devin (2009) "Research Commentary: Weighing the Benefits and Costs of Flexibility in Making Software: Toward a Contingency Theory of the Determinants of Development Process Design", *in Information Systems Research*, 20 (3), 462-477

Australian Government (2011) *Australian Public Service Innovation Action Plan*, access at http://www.industry.gov.au/innovation/publicsectorinnovation/Pages/Library%20Card/APS_Innovation_Action_Plan.aspx

Banerjee, B. (2014) "Innovating Large-scale Transformations", in Bason, C. (2014) *Design for Policy*. Farnham: Gower Ashgate

Barnard, C. I. (1938 [1968]) *The Functions of the Executive*. Cambridge: Harvard University Press

Bason, C. (2007) *Velfærdsinnovation: Ledelse af innovation i den offentlige sektor [Innovating Welfare: Leading Innovation in the Public Sector]*, Copenhagen: Børsens Forlag

Bason, C., Knudsen, S. & Toft, S. (2009) *Sæt borgeren i spil: Sådan involverer du borgere og virksomheder i offentlig innovation [Put the Citizen Into Play: How to Involve Citizens and Businesses in Public Sector Innovation]*. Copenhagen: Gyldendal Public

Bason, C. (2010) *Leading public sector innovation: Co-creating for a better society*. Bristol: Policy Press.

Bason, C. (2012) "Public managers as designers: Can design-led approaches lead to new models for public service provision?" *Danish Journal of Management & Business*, 77 (4), 47-69

Bason, C. (2013a) "Design-led innovation in government", in *Stanford Social Innovation Review*, 10th Anniversary Issue, Spring 2013

Bason, C. (2013b) "Public managers as innovators: In search of design attitude", in Singapore Civil Service College's *Ethos Magazine*, Issue 12, June 2013

Bason, C. (2013c) "Discovering co-production by design", in *Public & Collaborative: Exploring the intersection of design social innovation and public policy.* New York: Parsons DESIS Lab

Bason, C. (2013d) "Engaging Citizens in Policy Innovation: Benefiting public policy from the design inputs of citizens and stakeholders as "experts'", in Lindquist, E. A., S. Vincent and J. Wanna (eds.) *Putting Citizens First: Engagement in Policy and Service Delivery for the 21st Century.* The Australia and New Zealand School of Government, Canberra: ANU Press

Bason, C. (2014a) "Design as an innovation catalyst", in Ansell & Torfing: *Collaborative innovation and design in the public sector*. Abingdon: Routledge

Bason, C. (2014b) "Introduction", in *Design for Policy.* Farnham: Gower Ashgate

Bason, C. (2014c) "The design/policy nexus", in Bason, C. (ed.) *Design for policy.* Farnham: Gower Ashgate

Bason, C. & A. Schneider (2014) "Global trends in design", in Bason, C. (2014) (ed.) *Design for policy*. Farnham: Gower Ashgate

Bate, P. and Robert, G. (2007) *Bringing User Experience to Healthcare Improvement: The Concepts, Methods and Practices of Experience-based Design*. Abingdon: Radcliffe Publishing

Battilana, J., Leca, B. & Boxenbaum, E. (2009) "How actors change institutions: Toward a theory of institutional entrepreneurship', in *The Academy of Management Annals*, 3 (1), 65-107

Behn, R. D. (1995) "Creating an innovative organization: Ten hints for involving frontline workers," *State and Local Government Review*, 27 (3), 221-234

Benington, J. and Hartley, J. (2001) "Pilots, paradigms and paradoxes: Changes in public sector governance and management in the UK", in *International Research Symposium on Public Sector Management* (Barcelona); table shown in Hartley, J. (2005) "Innovation in Governance and Public Services: Past and Present", in *Public Money & Management*, 25, January, 25-37

Benington, J. and M. Moore (2011) *Public Value: Theory and Practice.* London: Palgrave Macmillan

Blumer H. (1969) *Symbolic interactionism*. Englewood Cliffs, NJ: Prentice Hall.

Body and Terrey (2014) "Tools for Intent: Strategic Direction by Design", in Bason, C. (2014) *Design for Policy*. Farnham: Gower Ashgate

Boland, R. J. and Collopy, F. (2004) *Managing as Designing*. Stanford, CA: Stanford Business Books

Boll, K. (2011) *Taxing Assemblages: Laborious and Meticulous Achievements of Tax Compliance*, Ph.D. thesis: IT University of Denmark

Borins, S. (2000) "Loose Cannons and Rule Breakers, or Enterprising Leaders?", in *Public Administration Review,* 60 (6), 498-507

Botero, A., Paterson, A. G. & Saad-Sulonen J. (eds.) (2012) *Towards peer production in public services: Cases from Finland*. Helsinki: Aalto University

Bourgon, J. (2008) "The future of public service: A search for a new balance," Keynote Address to the 2008 IPAA National Conference, Sydney, NSW, June 2008, in *Australian Journal of Public Administration*, 67 (4), 390–404

Bourgon, J. (2011) *A New Synthesis of Public Administration: Serving in the 21st Century*. Canada: McGill-Queen's University Press

Boxenbaum, E. & Jonsson, S. (2008) "Isomorphism, Diffusion and Decoupling", in *The Sage Handbook of Organizational Institutionalism.* London: Sage

Boyer, B., Cook, J. W. & Steinberg, M. (2011) *In studio: Recipes for systemic change*. Helsinki: Sitra

Bridges, W. (1980) *Transitions: Strategies for coping with the difficult, painful, and confusing times in your life*. Cambridge: Perseus.

Brown, T. (2009) *Change by Design*: *How Design Thinking Transforms Organizations and Inspires Innovation*, New York: HarperCollins.

Buchanan, R. (1990): "Wicked Problems in Design Thinking", essay based on paper presented at *Colloque Reserches sur le Design: Incitations, Implications, Interactions*, at l'Université de Technologie de Compiègne, Compiègne, France

Cahn, E. (2004) *No more throwaway people* (2nd ed.)Washington, D. C.: Essential Books

Carlsson, B. (2004) "Public Policy as a Form of Design", in Boland & Collopy (2004) *Managing as Designing*, Stanford Business Books

Chesbrough, H. (2003) *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Boston: Harvard Business School Press

Christensen, C. (1997) *The Innovator's Dilemma: When new Technology Cause Great Companies to Fail*, Boston: Harvard Business School Press

Christensen, T. (2012) "Post-NPM and changing public governance", in *Meiji Journal of Political Science and Economics* ,Volume 1, 2012

Christiansen, J. (2014) *The Irrealities of Public Innovation*, doctoral thesis (submitted), Aarhus University

Churchman, C. W. (1967) "Wicked Problems", in *Management Science*, 4 (14), 141-142

Churchman, C. W. (1971) *The Design of Inquiring Systems: Basic Concepts of Systems and Organization*. London: Basic Books

Cliffe, S. (2011) "When your Business Model is in Trouble: An Interview With Rita Gunther McGrath", in *Harvard Business Review,* January

Colander, D. & R. Kupers (2014) *Complexity and the Art of Public Policy: Solving Society's Problems from the Bottom Up*. Princeton University Press

Cole, M. & G. Parston (2006) *Unlocking Public Value: A new model for achieving high performance in public service organizations*. Hoboken: Wiley

Community Matters (2012) *Family by Family evaluation report 2011-12*. http://www.tacsi.org.au/wp-content/uploads/2014/08/TACSI-FbyF-Evaluation-Report-2012.pdf

Cooper, R., Junginger, S. & Lockwood, T. (Eds.) (2011) *The Handbook of Design Management.* Oxford: Berg Publishers.

Cooper, R. & Junginger, S. (2011) "General introduction: Design management – A reflection," in Cooper, R., Junginger, S. & Lockwood, T. (Eds.) *The Handbook of Design Management.* Oxford: Berg Publishers.

Corbin, J. & Strauss, A. (2008) *Basics of qualitative research.* Third Edition. London: Sage.

Cottam, H. (2012) *Relational Welfare*. Retrieved 7 January 2017 from https://relationalwelfare.files.wordpress.com/2012/11/soundings48_cottam1.pdf

Csikszentmihalyi, M. (1996) *Creativity: Flow and the Psychology of Discovery and Invention*. New York: HarperCollins

Czarniawska, B. (2008) "Organizing: How to study it and how to write about it", in *Qualitative Research in Organizations and Management: An International Journal*, 3 (1), 4-20

Daglio, M., Gerson, D., & Kitchen, H. (2014) "Building Organisational Capacity for Public Sector Innovation", *Background Paper prepared for the OECD Conference "Innovating the Public Sector: from Ideas to Impact"*, Paris, 12-13 November 2014. Retrieved 7 January 2017 from http://www.oecd.org/innovating-the-public-sector/Background-report.pdf

Dahlstrom, D. O. (2013) "Thrownness" (Geworfenheit), in *The Heidegger Dictionary*, 212-215. London: A & C Black

Danish Commerce & Companies Agency et. al. (2012) *Clear, user-friendly, simple: New visions for digital government*, Retrieved January 7 2017 from http://mind-lab.dk/wp-content/uploads/2014/07/Tv_rg_ende_opsamling_UK.pdf

Darmer, M.R., Boesgaard, S. Preisler, P., Høyer, L. V., Kynemund, M. & Bason, C. (2015) "Co-creating new meaning: Towards the patient-centric hospital?" in *Danish Journal of Management and Business*, 3, 23-41

Boyle, D. & Harris, M. (2009) *The challenge of co-production: How equal partnerships between professionals and the public are crucial to improving public services*, London: NESTA

Design Council (2014) *Case Study: Lewisham Council: Service design delivers £368,000 efficiency savings*. Retrieved 7 January 2017 from http://www.designcouncil.org.uk/resources/case-study/lewisham-council

Design Council (2017) *Design Methods for Developing Services*. Retrieved 7 January 2017 from http://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%20developing%20services.pdf

Dewey, J. (1927) *The Public and its Problems.* Athens: Swallow Press

Dewey, J. (1938) *Logic: The Theory of Inquiry.* Henry Holt & Company

DiMaggio, P. J. (1988) "Interest and agency in institutional theory", in Zucker, L. (Ed.), *Institutional patterns and organizations.* Cambridge, MA: Ballinger

Donahue, J. D. & Zeckhauser, R. J. (2011) *Collaborative Governance: Private Roles for Public Goals in Turbulent Times.* Princeton University Press

Dorst, K. (2015) *Frame Innovation. Create New Thinking by Design.* Cambridge: The MIT Press

Downs, G. W. and Larkey, P.D. (1986) *The Search for Government Efficiency: From Hubris to Helplessness*. New York: Random House

Doz, Y. and Koskonen, M. (2014) *Governments for the future: Building the strategic and agile state.* Helsinki: Sitra

Dreyfuss, H. (1960) *Measure of Man: Human Factors in Design*. New York: Whitney Library of Design

Dreyfuss, H. (2012) *Designing for People.* New York: Allworth Press

Du Gay, P. (2000) *In Praise of Bureaucracy: Weber, Organizations, Ethics.* Sage Publications, London

Du Gay, P. (2011) "Without Regard to Persons': Problems of Involvement and Attachment in "Post-Bureaucratic" Public Management', in Clegg, S., Harris, M., & Höpfl, H. (eds.) *Managing Modernity Beyond Bureaucracy?* Oxford University Press

Dubois, A., & Gadde, L.-E. (2002). "Systematic combining: an abductive approach to case research", in *Journal of Business Research*, *55*(7), 553–560.

Dunleavy, P. et. al. (2006) *Digital Era Governance: IT Corporations, the State, and e-Government.* Oxford University Press

Edmondson, A. C. & McManus, S. E. (2007) "Methodological fit in management", in *American Management Review*, 32 (4), 1155-1179

Eggers, W. D. and O'Leary, J. (2009) *If we Can Put a Man on the Moon … Getting Big Things Done in Government*. Boston: Harvard Business Press

Eggers, W. D. & Singh, S. (2009) *The Public Innovators Playbook: Nurturing Bold Ideas in Government*. Cambridge: Harvard Ash Center for Democratic Governance and Innovation

Eggers, W. D. & Macmillan, P. (2013) *The Solution Revolution: How Business, Government, and Social Enterprises Are Teaming Up to Solve Society's Toughest Problems.* Boston: Harvard Business Review Press

Eisenhardt, K. M. (1989) *Building Theories from Case Study Research,* Stanford: American Management Review.

Ellis, T. (2010) *The New Pioneers: Sustainable Business Success Through Social Innovation and Social Entrepreneurship*. Chichester: Wiley

Engholm, I. & Salomon, K. L. (2017). "The Seismographic Design Concept – a disciplinary development", unpublished paper prepared for ARTIFACT Design Journal

Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press

Esteve, M., G. Boyne, S. Vicenta, T. Ysa (2012) "Organizational Collaboration in the Public Sector: Do Chief Executives Make a Difference?", in *Journal of Public Administration Research and Theory*, 23 (4), 927-952

European Commission (2012) *Design for Growth & Prosperity. Report from the European Design Leadership Board.* Brussels: European Commission

European Commission (2013a) *A vision for public services* (version 13/06/2013). Retrieved 7 January 2017 from https://ec.europa.eu/digital-single-market/en/news/vision-public-services

European Commission (2013b) *Powering European Public Sector Innovation: Towards a New Architecture*. Brussels: The European Commission

Fayol, H. (2013 [reprint of 1949]) *General and Industrial Management,* translated by Storrs, C. Pitman, London

Friedman, K. & Stolterman, E. (2014) "Series foreword", in Simonsen, J. et. al. (eds.) *Situated design methods.* Cambridge: MIT Press

Fukuyama, F. (2014) *Political Order and Political Decay*. New York: Farrar, Straus and Giroux

Gadsdon, P. (2012) *Putting partnership into practice*. Presentation. 19 March 2012

Giudice, M. and C. Ireland (2014) *Rise of the DEO: Leadership by design.* New riders.

Goldsmith, S. & W. D. Eggers (2004) *Governing by Network: The new shape of the public sector*. Washington D.C.: Brookings Press

Greve, C. (2013) "Ideas in Public Management Reform for the 2010s: Digitalization, Value Creation and Involvement", in *Public Organization Review*, 15 (1), 49-65

Halse, J. (2014) "Tools for Ideation: Evocative Visualization and Playful Modelling as Drivers of the Policy Process", in Bason, C. (2014) *Design for Policy*. Farnham: Gower Ashgate

Halse, J. et. al. (2010) *Rehearsing the future,* Copenhagen: Danish Design School Press

Hartley, J. (2005) "Innovation in governance and public services: Past and present", in *Public Money and Management*, 25 (January), 27-34

Hassan, Z. (2014) *The Social Labs Revolution: A New Approach to Solving our Most Complex Challenges*. San Francisco: Berrett-Koehler Publishers

Hasse, C. (2003) "Mødet: den antropologiske læreproces" *[The meeting: The anthropological learning process]* in Hastrup, K. (2003) (eds.) *Ind i verden: En grundbog i antropologisk metode [Into the world: An introduction to anthropological methods]*. Copenhagen: Hans Reitzel

Hatfield, H. R. (1900) "The Taylor White Process for Tool Steel", in *Journal of Political Economy,* 8 (4) September 1900

Hernes, T. (2008) *Understanding Organization as Process: Theory for a Tangled World.* Abingdon: Routledge

Heskett, J. (2002) *Toothpicks & Logos: Design in Everyday Life*, New York/Oxford: Oxford University Press.

Hobbes, T. (2011 [1651]) *Leviathan*. Pacific Publishing Studio

Hood, C. and Dixon, R. (2015) *Government that Worked Better and Cost Less? Evaluating Three Decades of Reform and Change in UK Central Government.* Oxford University Press

Hufty, M. (2011) "Governance: Exploring four Approaches and their Relevance to Research", in Wiesmann, U. and H. Hurni (eds.) *Research for Sustainable Development: Foundations, Experiences, and Perspectives*. NCCR North-South / Geographica Bernensia: 403-424

IDEO (2016): *The Field Guide to Human-Centered Design*, Retrieved 7 January 2017 from http://www.designkit.org/resources/1

iLipinar, G., Montaña, J. Iglesias, O., Kristensen, T. & Johnston, W. (2009) "Designer as Midwife: Towards a New State-of-Mind?', paper for the *3rd Annual conference of the International Association of Societies of Design Research*, Seoul, October 18-22. Retrieved 7 January 2017 from http://www.iasdr2009.or.kr/Papers/IASDR2009_Proceedings_abstract.pdf

Jenkins, J. (2008) "Creating the Right Environment for Design", in *Design Management Review*, 19: 16-22

Junginger, S. (2014a) "Towards Policymaking as Designing: Policymaking Beyond Problem solving and Decision-making", in Bason, C. (2014) *Design for Policy*. Farnham: Gower Ashgate

Junginger, S. (2014b) "Public Innovation Labs – A Byway to Public Sector Innovation?", in Christensen, P. R. and Junginger, S. *The Highways and Byways to Radical Innovation: Design Perspectives.* Kolding: University of Southern Denmark and Design School Kolding

Kahneman, D (2011) *Thinking, Fast and Slow*. New York: Farrar, Straus & Giroux

Kelley, T. (2005) *The Ten Faces of Innovation*. New York: Doubleday

Kimbell, L. (2010) "Design Practices in Design Thinking', working paper, Oxford University Säid School of Business. Retrieved 7 January 2017 from http://www.lucykimbell.com/stuff/DesignPractices_Kimbell.pdf

Kimbell, L. (2014) *The Service Innovation Handbook*. London: BIS Publishers

Klijn, E-H. and Skelcher, C. (2007) "Democracy and Governance Networks: Compatible or Not?", in *Public Administration,* 85 (3), 587-608

Kuhn, T. (2012) *The Structure of Scientific Revolution* (4th ed.). Chicago: Chicago University Press

Latour, B. (2007) "How to think like a State", Lecture on 22 November at the WRR Anniversary, Retrieved 7 January 2017 from http://www.bruno-latour.fr/sites/default/files/P-133-LA%20HAYE-QUEEN.pdf

Lawrence T. B. & Suddaby, R. (2006) "Institutions and Institutional Work", in Clegg, S. R., Hardy, C., Nord, W. R. & Lawrence, T. B. (eds.) *Sage Handbook of Organization Studies* (2nd ed.), London: Sage

Lawrence, T. B., Leca, B. & Zilber, T. B. (2013). "Institutional Work: Current Research, New Directions and Overlooked Issues.", in *Organization Studies*, 34 (8), 1023-1033

Leonard, D. and Rayport, J. F. (1997) "Spark Innovation Through Empathic Design", in *Harvard Business Review*, November-December

Lewin, K. (1947) "Frontiers in Group Dynamics: Concept, Method and Reality in Social Science; Social Equilibria , A. and Bennett, K. (2013) *Solving problems with design thinking: 10 stories of what works*. New York: Columbia Business School Publishing

Lippmann, W. (1925). *The Phantom Public,* Transaction Publishers

Madsbjerg, C. and Rasmussen, M. B. (2014) *The Moment of Clarity: Using the Human Sciences to Solve Your Toughest Business Problems*, Cambridge: Harvard Business Review Press

Manzini, E. (2011) "Introduction" in Meroni, A. and D. Sangiorgi (Eds.) *Design for services*. Farnham: Gower Ashgate

Manzini, E. (2015) *Design, When Everybody Designs: An Introduction to Design for Social Innovation*. Cambridge: The MIT Press

Manzini, E. & E. Staszowski (eds.) (2013) *Public & collaborative: Exploring the intersection of design, social innovation and public policy*. DESIS Network

March, J. (1988) *Decisions and Organizations*. Oxford: Blackwell

Steinberg, M. (2014) "Strategic Design and the Art of Public Sector Innovation", in Bason, C. (2014) *Design for Policy*. Farnham: Gower Ashgate

Martin, R. (2007) *The Opposable Mind*. Cambridge: Harvard Business Press.

Martin, R. (2009) *The Design of Business: Why Design Thinking is the Next Competitive Advantage*. Cambridge: Harvard Business Press.

Mason, M. (2010). "Sample size and saturation in PhD studies using qualitative interviews", in *Forum: Qualitative Social Research,* 11 (3), 1-13. Retrieved 7 January 2017 from http://www.qualitative-research.net/index.php/fqs/article/viewArticle/1428

Mattelmäki, T. (2008) "Probing for Co-exploring", in *Co-design*, 4 (1), 65-78

Mazzucato, M. (2014) *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. London: Anthem Press

Meroni, A. & Sangiorgi, D. (2011) *Design for services*. Farnham: Gower Ashgate

Meyer, J. & Rowan, B. (1977) "Institutionalized Organizations: Formal structure as myth and ceremony", in *American Journal of Sociology*, 83 (2), 340-36

Meyer, A. (2011) "Embedding Design Practice Within Organizations", in Cooper, R., Junginger, S. and Lockwood T. (eds.) *The Handbook of Design Management*. Oxford: Berg Publishers

Meyer, R. (2008), "New sociology of knowledge: Historical legacy and contributions to current debates in institutional research, in Greenwood, R. et. al. (eds.): *The SAGE Handbook of Organizational Institutionalism*. London: Sage

Meyer, Renate, Markus A. Höllerer, Dennis Jancsary & Theo van Leeuwen (2013). The Visual Dimension in Organizing, Organization, and Organization Research: Core Ideas, Current Developments, and Promising Avenues, in The Academy of Management Annals,7:1, 489-555

Michelsen, A. & Engholm, I. (1999) *Designmaskinen*: *Design af den moderne verden [The design machine: Design of the modern world]*. Copenhagen: Gyldendal

Michlewski, K. (2008) "Uncovering design attitude: Inside the culture of designers," in *Organization Studies,* 29 (2), 229-248

Michlewski, K. (2015) *Design Attitude*. Farnham: Gower

MindLab (2012) "New industry code website reaps rewards for companies and for business" Retrieved 7 January 2017 from http://www.mind-lab.dk/en/cases/nyt-branchekodesite-hoester-gevinster-baade-hos-myndigheder-og-virksomheder.

Mintzberg, H. (2009) *Managing*. Harlow: Pearson Education

Moggride, B. (2007) *Designing Interactions*. Boston: MIT Press

Moore, M. (1995) *Creating public value: Strategic management in government*, Cambridge: Harvard University Press

Mulgan, G. (2007) *Ready or Not? Taking Innovation in the Public Sector Seriously*, London: Nesta Provocation 03: April**.** Available at: http://www.nesta.org.uk/publications/provocations/assets/features/ready_or_not_taking_in novation_in_the_public_sector_seriously

Mulgan, G. (2009) *The Art of Public Strategy*, Oxford: Oxford University Press.

Mulgan, G. (2014) *Design in public and social innovation: What works and what could work better?*, London: Nesta

Mulgan, G. and Albury, D. (2003) *Innovation in the Public Sector*, London: Strategy Unit. Retrieved 7 January 2017 from http://www.sba.oakland.edu/faculty/mathieson/mis524/resources/readings/innovation/innovation_i n_the_public_sector.pdf

Mulgan, Geoff and David Albury (2005) "Innovation in Public Services'. Available at: http://www.idea-knowledge.gov.uk/idk/aio/1118552

Mulgan, Geoff and Nick Wilkie, Simon Tucker, Rushanara Ali, Francis Davis and Tom Liptror (2006) *Social Silicon Valleys*, London: Young Foundation.

Murray, R., Caulier-Rice, J. and Mulgan, G. (2009) *Social Venturing*, London: Nesta.

National Audit Office (NAO) (2006) *Achieving innovation in central government organizations*. London: National Audit Office

National Audit Office (NAO) (2009) *Achieving innovation in central government organizations*. London: National Audit Office

Nesta (2014) i-teams: *The teams and funds making innovation happen in governments around the world*. London: Nesta with Bloomberg Philanthropies

Nesta (2016) *Designing for Public Services*. London: Nesta. Retrieved 7 January 2017 from http://www.nesta.org.uk/sites/default/files/nesta_ideo_guide_021216.pdf

Newman, J. and J. Clarke (2009) *Publics, Politics and Power: Remaking the Public in Public Services,* London: Sage

Nielsen, R. K. (2014) *Global Mindset as Managerial Meta-competence and Organizational Capability.* Ph.D. thesis, Copenhagen: Copenhagen Business School

Norman, D. (1988) *The Design of Everyday Things*. New York: Basic Books.

Norman, D. (2007) *The Design of Future Things*, Philadelphia: Basic Books

Normann, R. and R. Ramirez (1994) *Designing interactive strategy: From value chain to value constellation*. Chichester: John Wiley & Sons.

Normann, R. and R. Ramirez (2004) *Designing interactive strategy: From value chain to value constellation*, Chichester: John Wiley & Sons

Nussbaum, Bruce (2011) "Design Thinking is a Failed Experiment. So What's Next", in *Fast Codesign*, retrieved 11 March 11th 2014 from http://www.fastcodesign.com/1663558/design-thinking-is-a-failed-experiment-so-whats-next

OECD (2005) *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data* (3rd ed.) Retrieved 7 January 2017 from www.oecd.org/sti/oslomanual

O'Leary and Bingham (2009) *The Collaborative Public Manager: New Ideas for the Twenty-First Century*. Washington, D. C. Georgetown University Press

Oliver, C. (1992) "The Antecedents of deinstitutionalization', in *Organization Studies*, 13 (4), 563-88

Osborne, D. and T. Gaebler (1992) *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*, Reading: Addison Wesley.

Osborne, S. P. (2010a) "The New Public Governance?", in *Public Management Review*, 8 (3), 377-387

Osborne, S. P. (ed.) (2010b) *The New Public Governance? Emerging perspectives on the theory and practice of public governance.* Abingdon: Routledge

Osborne, S. P. and Brown, K. (2005) *Managing Change and Innovation in Public Service Organizations*. New York: Routledge

Osborne, S. P. and Brown, L. (2013) *Handbook of Innovation in Public Services*. Cheltenham: Edward Elgar

Papanek, V. (1971) *Design for the real world*. London: Thames & Hudson

Paquet, G. (2009) *Scheming Virtuously: The road to collaborative governance*. Ottawa: Invenire

Parker, S. and J. Heapy (2006) *The Journey to the interface: How public service design can connect users to reform*. London: Demos

Parsons, W. (2010) "Modernism Redux: Po-Mo Problems and Hi-Mo Public Policy", in Fenwick, J. and J. McMillan, *Public Management in the Postmodern Era: Challenges and Prospects*. Cheltenham: Edward Elgar

Pascale, R., Sternin, J., Sternin, M. (2010) *The power of positive deviance: How unlikely innovators solve the world's toughest problems*. Cambridge: Harvard Business Press

Pestoff, V. (2012) "Innovations in Public Services: Co-Production and New Public Governance in Europe", in Botero et al: *Towards peer production in public services: Cases from Finland*. Aalto University publication series Crossover 15/2012

Peters and Pierre (2003) *Handbook of Public Administration*. London: Sage

Peters, G. B. (2010): Still the century of bureaucracy? The roles of public servants", in Fenwick, J. and Janice McMillan (eds.) *Public management in the postmodern era: Challenges and prospects*, Northampton: Edward Elgar

Peters, T. (1997) *The circle of innovation*, London: Hodder & Stoughton.

Pettigrew, A. M. (2001) "Management Research after Modernism", in *British Journal of Management*, 12 (Special Issue), 61-70

Pettigrew, A. M. (2008) "Scholarly Impact and the Co-Production Hypothesis", in *EFDM Global Focus*, 2 (2), 8-12

Piore, M. J. and Lester, R. K. (2006) *Innovation: The Missing Dimension*. Cambridge: Harvard University Press

Polaine, A., Lövlie, L. and Reason, B. (2013) *Service Design: From Insight to Implementation*. New York: Rosenfeld Media

Pollitt, C. (2003) *The Essential Public Manager*. Maidenhead: Open University Press

Pollitt, C. & Bouckaert, G. (2011) *Public Management Reform*: *A Comparative Analysis* - *New Public Management, Governance, and the Neo-Weberian State*. Oxford University Press.

Potter, N. (2002) *What is a designer: Things. Places. Messages*. London: Hyphen Press

Preston, A. (2004) "Designing the Australian Tax System", in Boland & Collopy (2004) *Managing as Designing*, Stanford, CA: Stanford University Press

Pruitt, J. & Tamara, A. (2006) *The Persona Lifecycle: Keeping People in Mind Throughout Product Design*, Morgan Kaufmann

Public & Collaborative (2014) *Evaluating New Services for Housing,* New York.

Pycroft, A. & Bartollas, C. (2014) *Applying Complexity Theory*: *Whole Systems Approaches to Criminal Justice and Social Work.* Bristol: Policy Press

Quesenbery W. and Brooks, K. (2010) *Storytelling for User Experience: Crafting Stories for Better Design,* New York: Rosenfeld Media

Radin, B. A. (2000) *Beyond Machiavelli: Policy Analysis Comes of Age*. Washington: Georgetown University Press

Raffnsøe, S. (2013) *The human turn: The makings of a contemporary relational topography*. Copenhagen: Copenhagen Business School

Ramaswamy, V. and Ozcan, K (2014) *The co-creation paradigm*. Stanford, CA: Stanford Business Books

Reagan, R. (1981) *Inaugural address*. Retrieved 3 December 2015 from http://www.reagan.utexas.edu/archives/speeches/1981/12081a.htm

Rist, R. C. & Kusek, J. Z. (2004) *Ten Steps to a Results-based Monitoring and Evaluation System*. Washington, D.C.: The World Bank

Ritchey, T. (2011) *Wicked Problems – Social Messes: Decision Support Modeling with Morphological Analysis*. Berlin: Springer

Rittel, H., and Webber, M. (1973) "Dilemmas in a General Theory of Planning" in *Policy Sciences*, 4, 155-169 Amsterdam: Elsevier Scientific Publishing. [Reprinted in N. Cross (ed.) (1984) *Developments in Design Methodology*. Chichester: J. Wiley & Sons,

Rowe, P. G. (1987) *Design thinking*. Cambridge: MIT Press.

Sanders, E. (2014) "Co-designing can Seed the Landscape for Radical Innovation and Sustainable Change", in Christensen, P. R. and S. Junginger *The Highways and Byways to Radical Innovation: Design Perspectives*

Sanders, E. and Stappers, P. J. (2008) "Co-creation and the New Landscapes of Design', in *CoDesign: International Journal of CoCreation in Design and the Arts*, 1745-3755, 4(1), 5–18

Sangill, Poula (2013) *Det gode køkken* [The good kitchen] presentation to 2013 Design Days conference

Schön, D. A. (1983) *The reflective practitioner*. Aldershot: Ashgate

Schön, D. A. (1971) *Beyond the Stable State.* Toronto: The Norton Library

Seddon, J. (2008) *Systems Thinking in the Public Sector. The Failure of the Reform Regime and a Manifesto for a Better Way*. Devon: Triarchy Press.

Service Design Network (2016) *Service Design Impact Report: Public Sector.* Access at: https://www.service-design-network.org/books-and-reports/impact-report-public-sector

Sharing Experience Europe (SEE) (2010) Evaluating Design. SEE Policy Booklet 03, www.seeproject.org

Shove, L. et. al. (2007) *The Design of Everyday Life*. Oxford: Berg Publishers

Simon, H. A. (1996) *The sciences of the artificial*. Cambridge: MIT Press

Simon, H. A. (1997) *Administrative Behavior.* New York: The Free Press

Simonsen, J. et. al. (2014) *Situated Design Methods*. Cambridge: MIT Press

Siodmok, A. (2014) "Tools for Insight: Design Research for Policymaking", in Bason, C. (2014) *Design for Policy*. Farnham: Gower Ashgate

Snowden, D. and Boone, M. (2007) A "Leader's Framework for Decision-Making" in *Harvard Business Review*, November

Sparke, P. (2004) *An Introduction to Design and Culture: 1900 to Present*. Abingdon: Routledge

Stake, R. E. (1995). *The Art of Case Study Research*, London: Sage

Suddaby, R. & Greenwood, R. (2009) "Methodological Issues in Researching Institutional Change", in Buchanan, D. & Bryman, A. (eds.) *Handbook of Organizational Research Methods*. London: Sage

Sunstein, C. (2013) *Simpler: The Future of Government*. New York: Simon & Schuster

Surowiecki, J. (2004) *The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations* Little, Brown

Tapscott, D. & Williams, A. D. (2006) *Wikinomics: How mass collaboration changes everything.* New York: Penguin

Taylor, F. W. (1967 [1911]) *The Principles of Scientific Management*. New York & London: Norton

Terwiesch, C. and Ulrich, K. T. (2009) *Innovation Tournaments: Creating and Selecting Exceptional Opportunities*, Cambridge: Harvard Business Press

Thaler, R. and Sunstein, C. (2008) *Nudge: Improving Decisions About Health, Wealth and Happiness*. New Haven: Yale University Press

The Atlantic (2014) *I never dreamed it would turn out this way.* Retrieved 8 January 2017 from http://www.theatlantic.com/magazine/archive/2014/10/i-never-dreamed-it-would-turn-out-this-way/379347/

The Economist (2013) *Back to the drawing board: Design companies are applying their skills to the voluntary and public sectors*, July 6th

The Economist (2014) *Test-tube government,* December 6th

The Guardian (2010) *Social Innovation is My Motivation,* 12 March 2010, Retrieved 7 January 2017 from http://www.theguardian.com/service-design/social-innovation

Thompson, J. D. (1967) *Organizations in Action: Social Science Bases of Administrative Theory.* Transaction Publishers

Tsoukas, H. (1989) "The Validity of Idiographic Research Explanations", in *Academy of Management Review*, 14 (4) 551-61

Tufte, E. (1983) *The visual display of information.* Cheshire: Graphics Press

Turse, N. (2013) *Kill Anything that Moves: The Real American War in Vietnam.* New York: Picador

UNIDIR, the Center for Local Strategies Research at the University of Washington, and the Saïd Business School at the University of Oxford (2010): *Strategic Design and Public Policy Conference Report*, UNIDIR

Van de Ven, A. (2007) *Engaged scholarship.* Oxford/New York: Oxford University Press

Bohl, K. (ed.) (2014) *Design af Relationer: Et samarbejde om at designe relationer til nogle af velfærdssamfundets mest handicapped* [Design of Relations: A Collaboration about Designing Relations to Some of the Welfare States most Disabled]. Design School Kolding and Vejle Municipality

Vejle Municipality & Social Service Agency (2014) *Evaluation of Design af Relationer* [Evaluation of Design of Relations]. Retrieved 7 January 2017 from http://socialstyrelsen.dk/filer/handicap/udviklingshaemning/evalueringsrapport-design-af-relationer-3.pdf

Verganti, R. (2009) *Design-driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean*, Boston: Harvard Business Press.

Von Hippel, E. (2005) *Democratizing innovation.* Cambridge: MIT Press

Von Neumann, J. and Morgenstern, O. (1994 [1944]) *Theory of Games and Economic Behavior.* Princeton, NJ: Princeton University Press

Waddington, C. H. (1973) *O. R. in World War 2: Operational Research against the U-boat*, London: Paul Elek (Scientific Books) Ltd.

Waldorff, S. B. et. al. (2014) "The Complexity of Governance: Challenges for Public Sector Innovation", in Ansell, C. and Torfing, J. (ed.) *Public Innovation through Collaboration and Design.* Abingdon: Routledge

Weber, M. (2012 [reprint 1947]) *The Theory of Social and Economic Organization.* The Free Press, New York

Weick, K. E. (1979) *The Social Psychology of Organizing.* New York: McGraw-Hill

Weick, K. E. (1995) *Sensemaking in Organizations.* Thousand Oaks: Sage

Weick, K. E. (2001) *Making Sense of the Organization.* Malden, MA: Blackwell Publishing

Weick, K. E. (2004) "Rethinking Organizational Design", in Boland, Richard J. and Fred Collopy *Managing as Designing*, Stanford, CA: Stanford University Press

Wetter-Edman, K. (2014) *Design for Service: A framework for exploring designers' contribution as interpreter of users' experience.* Ph.D. Dissertation. University of Gothenburg

Wickstrom, G. & Bendix, T. (2000) "The "Hawthorne effect" - What did the original Hawthorne studies actually show?", in *Scandinavian Journal of Environmental Health*, 26 (4), 363-367

Wildevuur, S. et. al. (2013) *Connect: Design for an Empathic Society.* Amsterdam: Waag Society and BIS Publishers

Wilson, J. Q. (1989) *Bureaucracy: What Governments Do and Why They Do It.* New York: Basic Books.

Wilson, W. (1887) "The Study of Administration", in *Political Science Quarterly,* (2) 2, 197-222

Winhall, J. and S. Maschi (2014) "Tools for Implementation", in Bason, C. (2014) *Design for Policy*. Farnham: Gower Ashgate

Wren, D. A. and Bedeian, A. G. (2009) *The Evolution of Management Thought* (6th ed.) Hoboken: John Wiley & Sons, Inc.

Yin, R. K. (2014) *Case Study Research* (5th ed.). Thousand Oaks: Sage

Appendix A: Overview of data sources by case

	Personal interview	Observation or participant observation of processes	Additional reports and documentation, including online sources	Evaluation or business case study
Case				
1 BII	X	X	X	N/A
2 FamByFam	X		X	Community Matters, Ltd. (2012) External evaluation
3 Lewisham	X		X	Design Council (2014) Assessment commissioned from a consultancy by the UK Design Council Sharing Experience Europe Programme (SEE) Case study conducted by
4 Suffolk	X		X	N/A
5 Camillagaarden	X		X	N/A
6 Branchekode	X	X	X	Business case study carried out by external consultancy commissioned by the Danish Business Authority.
7 Helsinki	X		X	N/A
8 Tax	X	X	X	
9 Rigshospitalet	X	X	X	Internal project evaluation and assessment of efficiency gains.
10 Stenhus	X	X	X	N/A
11 iZone	X		X	N/A
12 Holstebro	X		X	Internal project evaluation
13 Housing	X		X	External evaluation commissioned by NYC Housing & Preservation Department
14 Skansebakken	X		X	Evaluation commissioned by the Danish Social Services Agency and conducted by the Municipality of Vejle
15 Competition	X		X	N/A

Appendix B: Main interview guide

Leading public design

How do public managers experience design-led innovation?

Ph.D. project by Christian Bason, Copenhagen Business School

Questionnaire: Manager interviews

A. BACKGROUND

0. Introductions

About the project

Confidentiality/checking statements (if quoted)

Recording

1. Background

Professional background

Briefly about the organization

Title, role, responsibilities, time in organization

2. Innovation agenda

Current key challenges: Cultural, economic, organizational, it, strategic, media, political?

Metrics for these challenges? Data, stories, events, people, press?

What would constitute success in addressing challenge(s)? How would you in practice know you've

achieved a measure of success? What would constitute positive change? Metrics, stories...?

Lead time for successes expected to be noticeable?

Specific innovation/design project or process to tell about

B. CENTRAL STORY

Please share your own story of how the project(s) unfolded, and how that made a difference to you as a manager.

Supporting questions:

3. Character of project(s)

When? Decided by whom?

Why "design approaches'?

Which of key challenge(s) to mainly address?

Expectations to project/requirement?

Central constraints, dilemmas, limitations

What methods, approaches, tools were used?

Design brief(s) available?

Who was/is involved? External, internal, users...

4. What has been your relation to/knowledge of the project processes?

Meetings, reviews, controlling, presentations? In what key fora?

Nature of project outputs? Which are memorable/which to emphasize?

5. Experiences: What has been interesting, striking, surprising, disruptive?

Have any of the on-going processes/on-going outputs made an impression (statements, dialogues, meetings, events, actions/initiatives of your colleagues, decisions made by others, etc.).

Have any of the final, formal outputs made an impression (presentations, reports, models, solutions, etc.)? How, why, in what way?

Which challenges, barriers, frustrations, risks have you encountered – and how have they been dealt with?

What are the implications for you as a manager, for other managers, for the organization, of these outputs?

Seeing challenges/problems differently? In what way? Why?

Seeing opportunities differently? In what way? Why?

What are your expectations to change(s) flowing from the project/process?

Any changes implemented and have generated concrete changes yet? Metrics, indications, evidence?

C. END

6. Wrap-up

Anything else to add?

Documents (eg. design briefs)?

Data (eg. performance)?

Follow-up questions?

Additional data collection: Observing meetings, events? Follow for a day? Diary/cultural probe?

Appendix C: Invitation letter from Parsons the New School for Design

2 West 13th Street, New York, NY 10011
t 212.229.8970 f 212.229.5114
www.newschool.edu/parsons

School of Design Strategies
Urban Design (BS)
Design and Management (BBA)
Environmental Studies (BS)
Integrated Design (BFA)
Transdisciplinary Design (MFA)
Theories of Urban Practice (MA)
Design and Urban Ecologies (MS)
Strategic Design and Management (MS)

Christian Bason
Copenhagen Business School
Porcelænshaven 18B
2000 Frederiksberg
Denmark

January 22, 2014

Dear Mr. Bason,

Upon the recommendation of Eduardo Staszowski, I am pleased to invite you as a visiting scholar in the School of Design Strategies, Parsons The New School for Design, from April 7-11, May 19-23, and July 14-18.

I am happy to note that your appointment at The New School will be sponsored by the Danish government's innovation unit MindLab and by Copenhagen Business School, where you are currently a Director and Doctoral Fellow, respectively. In that respect, your stay at Parsons will facilitate the research you are conducting globally and in New York City on design-led approaches to innovation in public policies and services. It will also be an opportunity to collaborate with Parsons DESIS Lab on several research seminars as well as a publication for an upcoming special issue of the journal of design strategies.

The visiting student appointment offers no a priori stipend or housing, or office space. Since housing is difficult to find in New York City, we encourage you to find housing before you arrive. Our Admissions office will be happy to assist you in terms of looking for available housing options in our university dorms. And we can confirm that you are exempt from any charges relating to your research activities here.

The Office of the Dean will arrange for your identification card, which will allow you access to The New School University libraries, and to the Elmer Bobst Library of New York University. With your ID card, you will also receive an email account and access to our computer services at the Academic Computing Center. Upon arrival to the University, we suggest you first visit your sponsoring school for introductions and schedule an orientation session with the International Services Office.

If you can accept this appointment, please go to the International Student Services Office website: http://www.newschool.edu/studentservices/international/scholars/ to access instructions, forms, and a step-by-step guide. Please fill out these forms, and return all completed documents and copies of supporting paperwork to the International Student Services Office at least sixty days before you plan to apply for a visa to: International Student Services, The New School, 79 Fifth Avenue, Fifth Floor, New York, NY 10003-3034

If you have any questions about the forms, please contact the International Student Services Office or Abby Calhoun at the School of Design Strategies (calhouna@newschool.edu). You may fax your documents to 1-212-229-5592, or submit them electronically as described at the ISS website. International Student Services will send forms for you to take to the American Consulate to apply for a J-1 status on entry to the US.

My colleagues and I hope that you will be able to accept this appointment, and we look forward to working with you.

Sincerely,

Alison Mears, Dean AIA LEED AP
School of Design Strategies
Parsons The New School for Design
2 W 13th Street, 913
New York, New York 10011

Appendix D: Author activities during the research

This appendix includes a presentation of the author's key activities of relevance to the research during the period 2010-2016. The purpose is to provide maximum transparency of the roles played in practice and in academia.

My position within the field has allowed me to move between observing others doing the work, achieving access to research respondents, and to communicating how I in my professional capacity reflect on design approaches in the public sector as well as in business more generally. The ways in which I have engaged to obtain such different perspectives are multiple, falling into four broad categories: Explicitly academic activities of engagement; engagement with wider communities of stakeholders, and engagements in the context of MindLab and the Danish Design Center. Finally there are products (papers, chapters, books) flowing from these activities.

1. Academic engagements

These first types of engagements include a wide range of formal and informal activities that are tied either directly or indirectly to the PhD work, and which are linked to my role as a researcher, including:

On-site visits and conversations with co-advisors

- Meetings and dialogue with Rafael Ramirez at the Säid School of Business at Oxford University (Oxford, fall 2010, spring 2014, summer 2015, and also on-going exchanges)
- Field visit to Case Western Reserve University's Weatherhead School of Management and conversations Richard Boland and colleagues Richard Buchanan and Fred Collopy (Cleveland, winter 2011)
- Dialogues with Banny Banerjee (multiple visits to Copenhagen; collaboration on book chapter contribution, 2013-2014)
- On-going dialogues in Copenhagen and via phone and skype with main thesis advisor Rob Austin.

Conference paper presentations and feedback

- Keynote to ANZSOG academic conference (Canberra, November 2010)
- Paper presentation to International Research Society for Public Management (Rome, May 2011)
- Keynote to Copenhagen Business School Collaboratory (Copenhagen, May 2012)
- Paper presentation at DMI Research conference on design and new business models (Boston, August 2012)
- Keynote to Local Government Denmark Innovation Conference (Copenhagen, November 2013)

- Design and presentation at breakout session on public managers and design attitude at the How Public Design conference hosted by MindLab (Copenhagen, August 2013)
- Paper presentation to DMI Research conference (London, September 2014)
- Paper presentation to International Research Society for Public Management (Budapest, April 2017)

Stay abroad: Visiting scholar at Parsons the New School for Design

During the spring and summer of 2014, I was invited as a visiting scholar at the Parsons New School for Design in New York City. This built on a previous presentation at Parsons (2012) as well as a book chapter for the school's department for design strategies' DESIS Lab (2013). The scholarship program included a range of interactions and on-site work encompassing:

- Roundtable conversation based on a working paper presentation with a multidisciplinary panel of scholars; the conversation was audio recorded, transcribed, and used in the research (April 2014)
- Conference presentation of the emerging thesis topics and conversations with a mixed audience of academics and practitioners, and follow-up interview with iZone case (May 2014)
- Practitioner seminar with New York City public servants, formatted as a brief presentation of main Ph.D. findings and a two-hour recorded roundtable discussion
- Contributor to a special issue of *Journal of Design Strategies*, the in-house journal of Parsons the New School for Design (see reference below).

The invitation letter from Parsons the New School for Design is included as part of these appendices.

2. Engagements with wider communities of stakeholders

These engagement types include the participation or leadership of professional activities in the field of public sector innovation and design, usually based on a combination of my previous role as director of MindLab and my academic profile. These wider stakeholder engagements come in three categories: Contributions to formal bodies in advisory or expert roles; wider presentations, workshops and keynotes about MindLab, design-led innovation, emerging findings from my research; and finally training of executives on design and innovation.

Participation in professional bodies

- Member of the Jury of the Innovation Awards of Local Government Denmark (2007-2014)
- Member of the European Design Leadership Board, European Commission (2012)
- Chairman of the Expert Group on public sector innovation, European Commission (2013-14)
- Member of the Danish Design Council (2013-)
- Member of the Societal Challenges expert group on Innovative, Reflective and Inclusive European Societies, European Commission (2014-2016)
- Member of Selection Committee, Bloomberg Philanthropies European Mayor's Challenge (2014)
- Member of jury for Nordic Welfare Challenge, Nordic Council of Ministers (2015)
- Board Member of the Royal Academies for Architecture, Design and Conservation (2015-)

Figure 40: The members of the European Design Leadership Board

CHRISTIAN BASON
MindLab, DK

MIKLÓS BENDZSEL
Hungarian Design
Council, HU

GIOVANNI
ANTONIO COCCO
ISNART scpa – Istituto
Nazionale Ricerche
Turistiche, IT

RACHEL COOPER
Lancaster University, UK

DEBORAH DAWTON
BEDA – Bureau of
European Design
Associations, UK

OLLI-PEKKA KALLASVUO
Chairman of
the Delegation for World
Design Capital 2012, FI

ANDREJ KUPETZ
German Design
Council, DE

STEFANO MARZANO
Electrolux, SE

ISABEL ROIG
BCD – Barcelona Design
Centre, ES

KLEMENS ROSSNAGEL
Audi/Volkswagen
Konzern Design, DE

ANDREA SIODMOK
Technology Strategy
Board, UK

LIVIA TIRONE
Tirone Nunes S.A., PT

GERIN TRAUTENBERGER
Microgiants Industrial
Design GmbH, AT

ROBERTO VERGANTI
Politecnico di Milano, IT

THIERRY WASSER
Guerlain, FR

Source: European Commission

Keynotes and presentations

During the course of the Ph.D. work I annually gave 30-50 speeches and keynotes on themes related to public sector innovation and design for a diverse set of audiences nationally and internationally.

Training and workshops

- Copenhagen Business School: Master of Public Governance (Copenhagen 2011 and 2012)
- European Union: Newly appointed Directors (Brussels, 2013-2016)

- LAICS: Leadership and Innovation in Complex Systems (Copenhagen 2011-2015)
- KK LUP: Executive training for senior managers in the city of Copenhagen (Copenhagen 2012-14)
- OECD: Workshops on design, user engagement and innovation (Oslo, 2012 and Paris, 2014)
- Oxford University Saïd School of Business: Module for CCC Master's Program (Oxford 2015-2017)

3. Engagements at MindLab and the Danish Design Centre

While I was Director of MindLab, I thirdly engaged with my immediate surroundings in various ways. First, I collaborated with the (then) Secretariat of MindLab (at Director level) in formulating and proposing the Ph.D. thesis; and I gave presentations to the Managing Board (Permanent Secretary, City CEO level) of MindLab on multiple occasions. More broadly, as Director, I had the role of on-going identification, decision-making and organizing of design-led projects, overseeing and supervising our teams' work (12 employees plus interns).

At the Danish Design Centre, my role has been to lead development of the institution since November 2014, including recruitment of a larger team, establishing a new strategy, building a new operational model, etc. This work has entailed bringing design-led approaches further into the culture and practice of this institution.

Figure 41: The author at MindLab

Source: MindLab

4. Publications

I have produced and published a range of literature in the course of the research, including:

Books

Bason, C. (ed.) (2014) *Design for Policy*. Farnham: Gower Ashgate.

Bason, C. (2016) *Form Fremtiden: Designledelse som Innovationsværktøj.* [Shape the Future: Design Leadership as Innovation Tool] Copenhagen: Gyldendal Business

Bason, C. (2017) *Leading Public Design: Discovering Human-Centered Governance*. Bristol: Policy Press (UK)

Articles, book chapters and journal publications

Bason, C. (2012) "Public managers as designers: Can design-led approaches lead to new models for public service provision?", in *Danish Journal of Management & Business.* 77 (4)

Bason, C. (2013a) "Design-led innovation in government", in *Stanford Social Innovation Review*, 10th Anniversary Issue, spring 2013

Bason, C. (2013b) "In Search for Design Attitude", in *ETHOS Magazine*, Singapore Civil Service College.

Bason, Christian (2013c) "Discovering co-production by design", in Manzini, E. & E. Staszowski (eds.) *Open & Collaborative*, New York: Parsons DESIS Lab

Bason, C. (2013d) "Engaging Citizens in Policy Innovation: Benefiting public policy from the design inputs of citizens and stakeholders as "experts'", in Lindquist, E. A., S. Vincent and J. Wanna (eds.) *Putting Citizens First: Engagement in Policy and Service Delivery for the 21st Century.* The Australia and New Zealand School of Government, Canberra: ANU Press

Bason, C. (2014): "Design Attitude as Innovation Catalyst", in Ansell, C. & Torfing, J. (eds.) *Collaborative Innovation and Design in the Public Sector*. London: Routledg**e**

Bason, C. (2016) "The rise of innovation labs: Four stumbling blocks along the yellow brick road", in Staszowski, E. et. al. *Journal of Design Strategies* special issue, 8, New York: Parsons School of Design

Darmer, M.R., Boesgaard, S. Preisler, P., Høyer, L. V., Kynemund, M. & Bason, C. (2015) "Co-creating new meaning: Towards the patient-centric hospital?" in *Danish Journal of Management and Business*, 3, 23-41

I have engaged through these activities with a diverse academic field, in part reflected by my choice of three co-advisers and additional academic collaborators such as Eduardo Staszowski at the Parsons school. I have also engaged with the practitioners involved in the specific case studies, with key stakeholders (e.g. Executive Board and Advisory Board) at MindLab and now

at the Danish Design Center, and with a wider circle of professionals in government, private and third sector organizations that have experience and insight with which to contribute.

Appendix E: Glossary

Co-design

The collective creativity as it is applied across the whole span of a design process. This is somewhat narrower than *co-creation,* which essentially refers to "any act of collective creativity, i.e. creativity that is shared by two or more people. In *co-design*, diverse experts come together, such as researchers, designers or developers, and (potential) customers and users – who are also experts, that is, "experts of their own experiences".

Service design

Service design covers the design of systems, processes and intangible services that aims at delivering a service to a user. Service design is a composite of well-known design disciplines such as communication design, interaction design and digital design and ethnographic methods, which is fundamentally about the involvement of user needs and behavior.

Design attitude

Design attitude is derived from the professional culture of designers and can be seen as the expectations and orientations one brings to a design project. This entails viewing new projects as opportunities for invention, including questioning of basic assumptions and a resolve to leave the world a better place than one found it. *Design attitude* can be framed in opposition to a *decision attitude*, which portrays the manager as facing a fixed set of alternative courses of action from which a choice must be made.

Design Approaches

Systematic, creative processes, which engage people in exploring problems and opportunities, develop new ideas, and visualize, test and develop new solutions. In the public sector, the use of such methods is often framed in the context of new forms of citizen involvement and collaborative innovation.

User journey

A user journey is a series of steps and events, usually presented visually, which represent a scenario in which a user interacts over a period of time with a product, service or system. The user journey can be a mapping of existing processes and user experiences, or it can be a blueprint for a future process and desired experiences.

Field research

Any activity aimed at collecting primary (original or otherwise unavailable) data, using methods such as face-to-face interviewing, and a variety of observation methods.

Visualization

Visualization is the representation of business or scientific data, often quantitative but it could also be quantitative, as graphics or images that can aid in understanding the meaning of the data.

Co-production

Co-production refers to a governance arrangement where citizens are viewed and treated not as passive recipients of a service, but where they are engaged in a reciprocal relationship as co-producers of the service.

Persona

A persona is a representation of a user, typically based on user research (quantitative and qualitative) and incorporating factors such as statistically validated characteristics, user properties, goals, challenges, needs, and interests.

Ideation

Ideation can be seen as the explicit process of generating, developing and communicating ideas, where "idea" is understood as a basic element of thought that can be visual, concrete or abstract. A variety of creativity and brainstorming techniques are often used to drive the ideation process.

Concept development

Concept development is the process of selecting, prioritising and creating a single whole out of the ideas that have been developed by combining key elements from all the different ideas into a complete proposal for a solution. Concepts can in turn be made into testable prototypes.

Prototyping

A prototype is a tentative, draft version of a product, service or system that allows the design team to explore ideas and show the intention behind a feature or an overall concept to users before investing additional time and money in further development. A prototype can be anything from paper drawings (low-fidelity) to something that allows digital click-through of a few pieces of content to a fully functioning solution (high-fidelity).

Business case

A business case seeks to capture the business justification for initiating a task, a project or implementing a solution. The business case can be presented as a comparison between expected costs, or investments, and expected benefits, or value creation.

Design thinking

Design thinking can be viewed as "design for managers", as it proposes an iterative method for resolution of problems or realizing opportunities that draw on design methods. In some versions it incorporates two different cognitive styles: an analytical-logical mindset and an interpretative, intuitive mindset.

Bureaucracy

A system of organization distinguished by characteristics such as rigid division of labor; clear (managerial) hierarchy of authority; formal selection based on merit; career oriented and impartial employees; written, formal and inflexible rules, regulations, and procedures; impersonal relationships.

New Public Management

New Public Management is a public management reform ideology and governance model, which builds on two key ideas: First, that it is possible to insert competition and market like mechanisms, such as user choice and contracting out, into the public sector to make it more

innovative and efficient; and second, that it is possible to render the public sector more effective by introducing management measures and tools, such as performance metrics and targets, that seem to work in the private sector.

Governance

Is derived from the ancient Greek *kubernáo*, which is also the origin of the word government, meaning steering of a ship or cart (Wikipedia 2016). Hufty (2011) defines governance as the processes of interaction and decision-making among the actors involved in a collective problem that lead to the creation, reinforcement, or reproduction of social norms and institutions.

Public Administration

Public administration comes from the term *ministrare*, meaning: "to serve, and hence later, to govern'. It can be viewed as an activity serving the public, where public servants carry out policies that are set by others. Public administration is concerned with procedures for translating policies into practice, and with on-going management tasks.

Public Management

The term management is derived from the term *manus*, meaning: "to control by hand'. Public management, compared to public administration, emphasizes the role of managers and their organizing and controlling activities of achieving objectives with optimal efficiency.

Public Value

Public value emphasizes the difference between managing a public and private realm, and emphasizes that policy and management strategies must be substantively valuable to the citizens, politically legitimate, feasible and sustainable, operationally possible and practical.

Wicked Problems

Wicked problems are characterized by 1) unclear and dynamic causal relationships; 2) the problem does not fit into a known category; 3) attempts at problem solving changes the problem; 4) not having a stopping rule i.e. solutions cannot be judged as true or false, but merely as "better or worse'.

Complexity

Refers to systems with large numbers of interacting elements; where interactions are nonlinear so that minor changes can have disproportionately large consequences; which are dynamic and emergent, and where hindsight cannot lead to foresight because external conditions constantly change.

19. Thomas Lyse Hansen
Six Essays on Pricing and Weather risk in Energy Markets

20. Sabine Madsen
Emerging Methods – An Interpretive Study of ISD Methods in Practice

21. Evis Sinani
The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation

22. Bent Meier Sørensen
Making Events Work Or, How to Multiply Your Crisis

23. Pernille Schnoor
Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv

24. Sidsel Fabech
Von welchem Österreich ist hier die Rede?
Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser

25. Klavs Odgaard Christensen
Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada

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transformation af mennesket og subjektiviteten

29. Sine Nørholm Just
The Constitution of Meaning
– A Meaningful Constitution?
Legitimacy, identity, and public opinion in the debate on the future of Europe

2005
1. Claus J. Varnes
Managing product innovation through rules – The role of formal and structured methods in product development

2. Helle Hedegaard Hein
Mellem konflikt og konsensus
– Dialogudvikling på hospitalsklinikker

3. Axel Rosenø
Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development

4. Søren Buhl Pedersen
Making space
An outline of place branding

5. Camilla Funck Ellehave
Differences that Matter
An analysis of practices of gender and organizing in contemporary workplaces

6. Rigmor Madeleine Lond
Styring af kommunale forvaltninger

7. Mette Aagaard Andreassen
Supply Chain versus Supply Chain Benchmarking as a Means to Managing Supply Chains

8. Caroline Aggestam-Pontoppidan
From an idea to a standard
The UN and the global governance of accountants' competence

9. Norsk ph.d.

10. Vivienne Heng Ker-ni
An Experimental Field Study on the

*Effectiveness of Grocer Media
Advertising
Measuring Ad Recall and Recognition,
Purchase Intentions and Short-Term
Sales*

11. Allan Mortensen
*Essays on the Pricing of Corporate
Bonds and Credit Derivatives*

12. Remo Stefano Chiari
*Figure che fanno conoscere
Itinerario sull'idea del valore cognitivo
e espressivo della metafora e di altri
tropi da Aristotele e da Vico fino al
cognitivismo contemporaneo*

13. Anders McIlquham-Schmidt
*Strategic Planning and Corporate
Performance
An integrative research review and a
meta-analysis of the strategic planning
and corporate performance literature
from 1956 to 2003*

14. Jens Geersbro
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