Design and Innovation in the Public Sector: Matters of Design in Policy-Making and Policy Implementation[1]

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Abstract

As more and more governments seek new design approaches to policy-making and policy-implementation that promise to innovate and transform governments, we urgently need to understand the relationships between policy-making, policy implementation and designing. In this paper, I discuss policy-making and policy implementation as problems of design and as activities of design. I begin by pointing out traditional and emerging relationships between design and policy and by offering a design definition of policy. I roam in the field of policy-making to show that policies themselves are not yet fully acknowledged as design outcomes in contemporary policy studies. Instead, this literature treats design almost exclusively as an isolated, in-itself-closed activity, part of problem-solving that begins *after* a policy problem has been recognized as such and defined. I critically engage with this view of design and identify it as an obstacle for the kinds of innovation and transformation governments now seek to initiate and materialize. The general aim of this paper is to initiate a critical and necessary discourse for matters of design in policy-making and policy implementation.

KEYWORDS: design, policy-making, policy implementation, role of design in the public realm

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[2] http://www.federalnewsradio.com/520/3004758/OPMs-innovation-lab-spurs-new-way-of-problem-

Introduction: Public Policies as a Matter of Design

National governments around the globe are actively seeking new ways to engage in social innovation and are investing in innovation labs and innovation centers where methods and principles of design are now being explored and applied to problems of transforming and innovating the public sector. The US Personnel Department has set up an innovation lab in Washington, DC.[2] The Australian government is offering a Public Sector Innovation Toolkit (innovation.gov.au) and has dedicated resources to establish a new centre for Excellence in Public Sector Design.[3] Finland's government established SITRA to drive innovation within government.[4] In Denmark, Mindlab has gained a reputation as influential cross-ministerial innovation unit.[5] Although not as centralized, many efforts are underway in the UK government that tinker with design in social innovation, policy-making and policy-implementation.[6] Their common objective is to develop innovative social policies, which increasingly require the integration of the activities of policy-making with the activities of policy implementation. In short, the problem involves a change in design approaches, methods, practise and concepts.

In light of the above developments, the discussion of design in policy-making and policy implementation is an urgent matter for design researchers and policy makers alike. Policy implementation depends on the design of products and services. Policy-making, in its essence, constitutes a design activity. Yet neither policy-making nor policy implementation have been discussed in design terms. We know too little about the actual activities of designing that bring policies into being – of how people involved in the creation of policies go about identifying design problems and design criteria, about the methods they employ in their design process and so on. As more professional designers engage on various levels in the design of social services, a clarification of design in the contexts of policy-making and policy implementation is needed. We need to be articulate about design concepts and design methods relevant to policy-makers and public managers. We need to clarify boundaries and limits for design, designers and designing as much as any barriers that exist. Because design researchers have not been explicit about the different roles and relationships of design and policy, it seems to have gone all but unnoticed, for example, that literature on policy-making processes and policy design treats designing almost exclusively as an isolated, in-itself-closed activity which is part of a larger problem-solving effort. Yet, as I will show in this paper, this has significant implications for policy-making as designing. Before honing in on the specific issues related to design as problem-solving activity in policy-making and implementation, we need to get on overview of the landscape that makes up design

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[2] http://www.federalnewsradio.com/520/3004758/OPMs-innovation-lab-spurs-new-way-of-problem-solving | Accessed January 2013.

[3] http://innovation.govspace.gov.au/2012/01/27/a-pilot-centre-for-excellence-in-public-sector-design/ | Accessed January 2013.

[4] http://www.sitra.fi | Accessed January 2013.

[5] http://mind-lab.dk | Accessed January 2013.

[6] See for example the Social Innovation Lab Kent (SILK) http://socialinnovation.typepad.com/silk/meet-the-silk-team.html or the National Health Innovation Centre (NIC) at http://www.nic.nhs.uk | Accessed January 2013.

and policy. In particular, we need to pay attention to the kinds of relationships that exist between design and policy.

Traditional and Emerging Relationships between Policy and Design

One of the reasons we still know little about design in the public policy realm is that historically, the emphasis rested viewing design as relevant only to policy implantation matters rather than seeking to understand the making of policies and the implementing of policies as connected problems to which design thinking and methods apply. As a consequence, we find professional design present in various stages and at various levels of policy implementation as fragments or parts of a comprehensive policy design process. Four areas can be highlighted as particularly salient: The first area is the area of communication. Here, communication designers develop appropriate means to *communicate existing policies*. It is important to understand that designers have nothing to do with creating, shaping or influencing the policies in this role. The policies by then are already in existence. Professional designers are not even really part of the implementation of the policies here. Their role can be as limited as that of an announcer or as extensive as that of a mediator. This can be an important role and influence the success of a particular policy but when we seek to understand the role of design in policy-making and policy implementation, it is important to note that professional designers who communicate existing policies do not participate in their making, and only to a very limited degree in their implementations.[7]

This changes in the second area of professional design practice in the public realm, the area of policy implementation. Here, designers *implement existing policies* through appropriate products and services. Traditionally, we would find product designers and service designers active in this realm. Again, we need to be clear that a policy already exists before any professional designer gets involved. The role of design is not only one of announcing but of implementing the policy, of making it happen. This is a very important role as products and services that fail people also fail the policy. In this role, a designer can become a facilitator and enabler. More so than in the role of policy communicator, this can put designers in an ethical dilemma, for example, when a policy itself is disputed or flawed and not perceived beneficial by everyday citizens.[8] It is possible to create a good experience for a bad policy. Can designers mitigate the harshness of a policy? Should they? Independent of the answer to these questions, design gets more political the moment it engages in policy implementation. The methods of information and interaction design, which are also evident in many service design practices have recently positioned professional

[7] The justified question at this point is: Why should they? I am not arguing for professional designers to become policy designers. I am highlighting this role only to clarify the limits designers have in generating changes even if they work on high profile projects.
[8] Ron Rosenbaum demonstrates this vividly in his book *Explaining Hitler–The Search for the Origins of his Evil,* Harper, 1999. Although he does not directly refer to design, it is clear how symbols, things, actions and systems work together as enablers and facilitators.

design in a new role of *informing new and existing policies* with insights gained during the development of products & services. In this emerging relationship of design and policy, professional design practices have a role in shaping the outcome of a policy itself. Existing policies can become amended and adjusted, new policies can build on insights from the design work.[9] Finally, we are now entering a new realm of design practice in policy-making, one that is focusing on *envisioning future policies* that are based on humanizing approaches to common problems.[10] This relationship of design and policy is notable for the way it views policy-making as intrinsically linked with policy-implementation. Here, designing begins already with the identification of a policy problem and spans across the products and services necessary for policy implementation. As a result, methods of co-creation, collaboration, co-production and co-design are valuable to early stages of policy-making as well as to later stages of specific product developments. This fourth relationship of design and policy moves beyond the professional design practices we tend to be most familiar with. It is not so much about professional designers getting access to higher echelons of policy-making as it is about understanding how design concepts, practices and methods lead to policies that enhance human living. The remainder of this paper elaborates on this emerging fourth area of design practice, which is key to government efforts at transforming and innovating and can be summarized as "policy-making as designing".

Policy: A Product of Design that Frames Possibilities

Understanding policy-making as a design problem and as a design activity allows us to reflect on how policies come into being, encourages us to question some of the assumptions they are based on and enables us to envision and device new possible approaches, both for policy generation and policy implementation. But what exactly is a policy? A policy in design terms is a guideline or framework that delineates the kinds of services and products, the relationships and the manner of the interactions that are possible, encouraged or discouraged within and by a particular human system. Moreover, a policy is the result of applied design practices that employ certain design concepts and specific design methods. It is true that policies get implemented through products and services. But the design of services does not begin at the implementation stage. The design of services starts already at the policy-making stage because policies effectively establish the criteria

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[9] A good example *is Design for America*, founded by Liz Gerber at Northwestern University in Chicago. DFA teaches "human centered design to young adults and in collaboration with community partners through extra-curricular, university based and student-led design studios" to tackle "national challenges in education, health, economy and the environment." www.designforamerica.com | Accessed January 2013.

[10] The link between designing, policy-making, policy-implementation and public management is evident in the recent interest in changing individual behavior through nudging (Thaler & Sunstein 2008) and swaying (Swafman & Swafman 2008). Designing for nudging or swaying people points to another role of design in the public realm, one that seeks to entice people towards desirable and preferred behavior. In many ways, this role of design can be seen as an extension of the concept of designing for seduction, i.e., the idea that the purpose of design is to seduce people to buy certain products or to act in a certain way.

and the framework that make specific products and services possible. Policy-making and policy implementation therefore pose fundamental and connected design problems and are not disconnected design activities.

Design in Policy Making

And yet, literature on policy-making has consistently separated policy-making from policy implementation, policy-makers from frontline workers (Adobewal et al 2009). This separation precludes the possibility that design has a role in the identification, framing or, more interesting to design, in the re-framing of a problem. It limits the usefulness and relevance of design concepts, methods and activities to matters of policy implementation – denying it a central role in the early stages of policy making. The paths for a more in-depth engagement with design practices and methods in policy-making have been paved by works ranging from Herbert Simon (1969) and also by Martin Rein and Donald Schön who have continuously pointed to aspects of making in policy development. Already in 1977, they explored the issues of "problem setting in policy research" (Rein and Schön 1977). In the 1990s, they focused more specifically on the method of reframing in policy discourse (Rein and Schön 1993) and in policy practice (Rein and Schön 1994). This was in parallel to a growing interest in rhetoric beyond power in policy studies, exemplified by an exploration in narratives and storytelling (Cf: Kaplan 1993). Fischer et al (1993) have summarized these approaches in their landmark book on *The Argumentative Turn in Policy Analysis and Planning*. Because policies present frameworks, the ability to reframe policies is important in developing new and future-oriented policies. This is where Schön's concept of reflection-in-action continues to offer a bridge into designing (Schön 1983). The case for human-centred design and social innovation, too, has been made over time. John Dewey (1948) declared that the only way in which social is honorific is when it enhances human living. Kevin Lynch (1965) suggested that policies might achieve more humanizing outcomes if they were to start with imaginative explorations through which new, more suitable and sustainable policies can be discovered. In a reflection on the principles of human-centred design, Richard Buchanan (2006) explained that human-centred design is about first principles of human existence, such as human rights and human dignity.

All these scholars point to a bigger role of design, specifically human-centred design in the policy context. Yet, design is denied the ability to envision future policies when it is only slotted into the policy design process as an isolated, in-itself closed activity, a fragment or part of policy implementation. To illustrate this, I have used the policy cycle proposed by Howlett and Ramesh (2003).[11] For Howlett and Ramesh, the policy cycle begins with the identification of a policy need. This is followed by a clarification of the policy need and the formulation of a policy. In this model, design has no role until the implementation of the policy begins because for Howlett and

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[11] Some policy scholars have leveraged critiques on this model but for different reasons. The model is still widely known and popular and I have chosen it because it lends itself to an accessible illustration of my argument.

Ramesh, design is one, isolated activity of many in a larger problem-solving effort. I chose to visualize the problem for service design, as service design has an important role in policy implementation, deals with systems and runs into problems of organizational change and organizational resistance (cf: Junginger & Sangiorgi 2009, 2011). *Figure 1* shows the complete policy design cycle described by Howlett and Ramesh. I added the dotted lines to visualize how this model separates design into three realms. I call the first realm policy-making as designing because it includes all design activities beginning with policy identification and ending with policy evaluation. It therefore represents policy-making as a comprehensive design problem and activity.

Inside this all-encompassing dotted line, I have created two smaller rectangles. One of them points out the areas and activities where policies are being created. The other, shaded one, points out the realm of influence in terms of innovation and transformation of service design. The problem is not limited to service design, though. However, the service design profession can claim that it has made the deepest inroads into organizations and public institutions. For this reason, it is particularly poignant to see the limits of their efforts when it comes to generate and instil social innovations that depend on policy changes. *Figure 1* shows that for design to envision and imagine future policies, policy making itself needs to be understood as a design problem and as a design activity. In addition, the model does not acknowledge the "Fuzzy Front End" that exists before policy needs are being identified.[12] It is precisely in this early stage that imagination and vision can have a shaping role.

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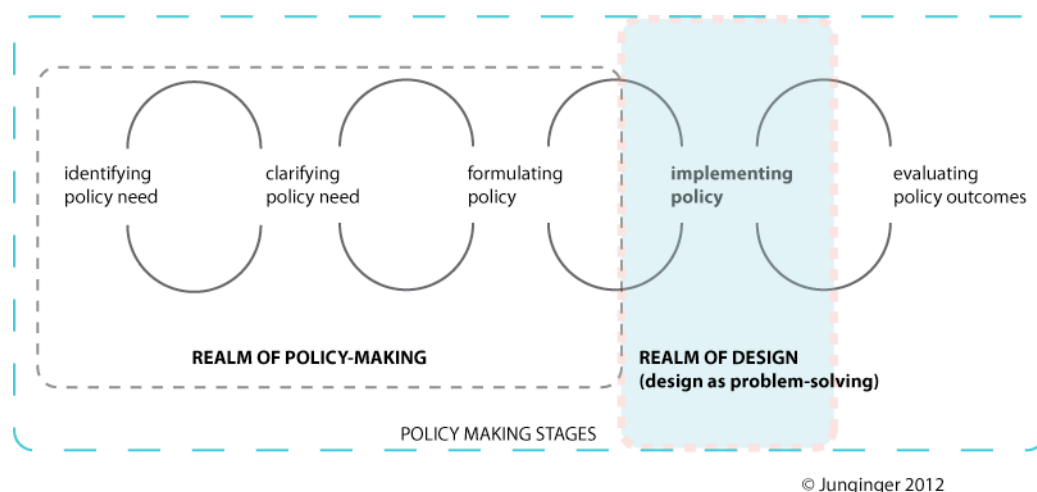
Figure 1: The policy cycle by Howlett and Ramesh 2003. The policy cycle follows a linear, relay-style development process that separates activities involved in the making from the activities involves in the implementation. Design itself is thought of as a professional service which only becomes relevant during the implementation phase. What happens or needs to happen for a policy need to be identified remains in the dark. The design of policies in this model does not allow for future-oriented envisioning. Instead, policy making is a responsive action after a problem has been identified. This limits innovation across policy-making and policy implementation.

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[12] "The Fuzzy Front End" is an established term and concept in Product Design and Product Development. It is akin to the writer's famous "white page", the blank page that stares at the writer. Strategies for the Fuzzy Front End have been put forward, amongst others, by Cagan and Vogel (2002), *Creating Breakthrough Products*, Prentice Hall.

Moving Design Beyond Problem-Solving in the Public Realm

For Howlett and Ramesh, the concepts, methods and practices of designing are not relevant to policy-making. In their view, their relevance is limited to problems of policy implementation. They view the activities that lead to policies as distinct from those activities that give shape to the products and services through which policies get implemented. The idea of design here only applies to parts of a problem-solving effort. To understand why this view is problematic for design in the public realm, we need to look into the implications of treating designing as an isolated element in problem-solving. Among the scholars who have written on this topic is Karl Ulrich. Ulrich (2007) begins with the fair point that not all problems are problems of design. Ulrich describes the way problem-solving works as follows:

> *An agent operating in the world senses a gap between the current state and some desired state. The agent then defines a problem or problems, generates alternative solutions, selects an approach, and then takes action by implementing the solution. In most cases the problem solver then assesses whether the gap has indeed been closed and, if not, the problem solving process may be repeated iteratively (Ulrich 2007, p.1).*

Ulrich carefully distinguishes between a 'problem-solving process' and a 'design process'. In his view, the problem solving process is "almost exactly" the same as the design process. However, he finds incongruencies on the concept level where, in his opinion, design focuses on "plans" and problem-solving focuses on "outcomes" and on actual practice. Ulrich argues that the creation of a design does not necessarily mean its implementation or realization. To illustrate this, we can think of a designer who has developed a concept for a public service. Developing this concept constitutes a design process for Ulrich. But unlike this concept is translated into a real service, i.e., unless this designer can convince the public agency to give her a contract, the design remains an idea or plan, incapable of solving a problem. If we translate this view into how policies are being designed and implemented, we have to separate the design of a policy ("the plan") from its implementation ("the outcomes"). This is precisely what the Howlett and Ramesh model does. It therefore follows closely Ulrich's notion that design is, though critical, only a part of problem-solving:

> *There is one conceptual difference and several practical distinctions. The conceptual difference between design and problem solving is the difference between plans and outcomes. The design process results in a plan for action, but not necessarily in a realization of that plan. One nice aspect of the way problem solving is typically taught and practiced is the relative emphasis on action, learning from that action, and improving on the initial solution as a result of that learning. Of course, many good designers are also complete problem solvers, remaining engaged in their challenges through the implementation, testing, and refinement of the artifacts they design. Because problem solving essentially includes the steps in the design process, problem solving is the more general human activity of which design is a critical element.*

Ulrich supports his view with a taxonomy of problems: Problems that need solving, he suggests, can be categorized into *design problems, selection problems, system improvement problems, tuning problems,* crises and *wicked problems* (Ulrich 2007, p.5). Each kind of problem requires a specific problem-

solving approach. A *design problem* is one that requires the creation of a new artefact in response to a gap. A *selection problem* is one in which it is possible to select from clearly articulated alternatives, i.e., by choosing from a given alternative. A *system improvement* problem is defined as the modification to existing artefacts or system(s). Further more, Ulrich identifies a *tuning problem* when given variables are used to solving a riddle or puzzle to achieve the best or optimal outcome and crises, where an urgent problem needs to be resolved with a view to short term impact. Finally, he struggles with the concept of *wicked problems*, which he understands to be as "problems where stakeholders' objectives are in fundamental conflict".

Ulrich's classifications have great relevance to our understanding of policy-making as designing. For Ulrich, design is limited to areas of creating new artefacts and new systems where no artefact and no system existed before. But this is a dilemma for design, as design never happens in a vacuum. In Ulrich's view, the integration of systems, a key challenge in policy-making and policy implementation and a design problem of the Fourth Order for another design researcher, Richard Buchanan (1998), is either reduced to a tuning problem or to a system improvement problem. Yet, system integration involves many people with often conflicting views and territorial disputes, especially when the integration means a shift in responsibilities within an organization or within a government. Thus even in Ulrich's own problem taxonomy, system integration is more akin to a wicked problem. In any case, the problem of connecting policy-making with policy implementation does not fit neatly into any of Ulrich's classifications. The reason for this is rather simple: Reducing design problems to areas that concern only the invention of "new" artefacts and "new" systems ignores the reality that designing always takes place within systems: human, social, economic, political. There is no such thing as an empty or clean slate. New artefacts emerge from and within existing systems, new systems may develop parallel to existing systems but they are still part of the larger cultural system, though the relationship may be one of opposition rather than part of the mainstream. Like there are dominant, residual and emergent cultures (Williams 1977), we can find dominant, residual and emergent systems that constantly negotiate their respective places. Problem-solving as explained by Ulrich either denies or ignores this kind of dynamic as it has to assume an "everything else being equal" (i.e., ceteris paribus) situation. Instead, a problem has to be treated in isolation to arrive at the desired outcome: selecting the right IT solution, reducing the defection rate, tuning elements of an organization.

In addition to this dilemma of design acting in and on the real world, not in a vacuum, there are other problems with approaching design solely as part of a problem-solving activity. To begin with, there is the real danger of getting lost in a round of classifying a problem before we have a chance to understand it. The urgency to assign a problem a category we are familiar with distracts us from looking into the nature of the problem at hand while we are busy seeking an appropriate category for a problem (which may or may not exist). William Clancey's (1984) treatise on *Classified Problem-Solving* and his book *Heuristic Classifications* (Clancey 1985) explore these issues more fully. It is easy to see how all this limits innovation. Innovation in a problem-solving mode can only happen within one of the categories we are ready to receive the problem into. A

necessary condition for problem-solving is the existence of a problem. For a problem to be acknowledged as such, a problem has to be identified, perceived or stated. To do this, we need to have criteria in place. These criteria can include values, norms and beliefs. In other words, people have to wait (or do wait) until the data is in that affirms a problem exists. Pro-active inquiries and explorations, driven by curiosities and hunches that can generate new insights and change our perception of problems are rendered less valuable, if not a waste of time and effort. Again we can see the implications for people's abilities to innovate. People can only act in retrospective but are limited in how they can shape and engage with a situation before it turns into a true problem. This bears ill for the generation of new, innovative and transformative policies to enhance human living in ways existing policies have not succeeded. What we need then is to move beyond design as a distinct part of problem-solving in the public realm. To do this, we need to develop and advance our theoretical understanding of design in the public realm.

Summary & Conclusion

Although designers and the field of design is rapidly engaging with social innovation (cf: DESIS), the main bulk of research into innovation and design still focuses on developing new goods for sale, new markets and new technologies. Though social innovation is a recognized area of research and study and although design is emerging as a key factor in these efforts, research into design in policy-making and policy implementation is still in its infancy. Policy-making, in its essence, constitutes a design activity, while policy implementation depends on the design of products and services. Yet neither policy-making nor policy implementation have been thoroughly discussed in design terms–not by designers, and not by policy-makers. The discussion of design in policy-making and policy implementation is an urgent matter for design researchers and policy makers alike. It concerns questions of design in the public interest (Fisher 2009).

This paper is an attempt to demonstrate the importance and timeliness of this discourse. I have discussed policy-making and policy implementation as problems of design and as activities of design. I have articulated four traditional and emerging relationships between design and policy and I have offered a design definition for policy as a product. I have roamed in the field of policy-making to support my argument that policies themselves are not yet fully acknowledged as design products in contemporary policy studies. And I have finally pointed to the limitations of viewing design merely as an isolated, in-itself-closed part of problem-solving. In doing so, I have begun to identify a few themes that warrant further research into this topic.

My general aim with this paper is to initiate a critical and necessary discourse for matters of design in policy-making and policy implementation. Design and policy go hand in hand. It is surprising then that despite the many linkages between and among design, designing, policy-making and policy implementation, we have yet to grasp the opportunities these linkages present for policy-makers and public managers. Reframing policy-making as designing opens new opportunities to approach problems in the public realm. But it also poses new challenges for

design researchers, design educators and design practitioners. Among other concerned educators, Thomas Fisher, Dean at the College of Design at the University of Minnesota-Twin Cities, has called for "design in the public interest" (Fisher 2009). I will use a quote from him to end this paper, as it nicely summarizes some of the key challenges for design in innovating and in transforming governments and policies:

> *The nature of practice and the scope of education in public-interest design raises the question of whether it can coexist within existing design fields or if it constitutes a new profession, related to but distinct from other forms of design. Public-interest design encompasses all of the other design fields, so some knowledge of design thinking, techniques, production materials, and methods seems essential. But traditional aspects of design education, such as the creation of high-cost, resource-intensive solutions to meet the needs of the world's wealthiest, would be largely irrelevant to this new field.*

Figure 1

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