The nexus between design and policy: strong, weak, and non-design spaces in policy formulation

Marzia Mortati
Department of Design, Politecnico di Milano,
Milan, Italy

The paper frames the idea of design spaces in policy formulation identifying three types (strong, weak, and non-design) and describing their characteristics on the basis of a three-folded analysis: an exploration in the design literature to understand how scholars are reporting on the connection between design and policy and identifying a debate mainly focused on policy outputs (public services) and policymakers capacities; an exploration in the policy literature to analyse design in policy formulation and depicting a focus on processes of policy development; a connection with practitioners' points of view through a small series of interviews to policy experts covering different roles. The notion of formulating better policies through establishing optimal design spaces is built upon to result in the description of three spaces where design impacts policy formulation, establishing a *meso-level* of reflection that provides a link between design and policy as theoretical reference for further empirical experimentations.

Keywords: design for policy; design and policymaking; policy design; policy formulation.

Introduction

In recent years, policymaking is increasingly discussed and practiced by designers including scholars, young graduates, and practitioners, often to experiment and share design tools and methods in policymaking practice, other times to explain and debate the specific contribution the discipline makes to this area of public concern. Despite growing interest, the majority of contributions still comes from practitioners' reports (Christiansen & Bunt, 2012; Breckon, 2015; Civil Society Exchange, 2015), and a wider need for scholarly discussion coming directly from the design literature and capable of bridging the gap with knowledge developed in policy studies exists. Only rarely has design literature looked more closely to policy studies (and policy design in

particular) to discuss of how (which values, competences, methods, and tools) design can provide to help formulate better policy: design literature is rather focused on helping policymakers understand how to deliver better outputs of policies (i.e. public services) or acquire new competences (i.e. design methods like user observation to understand public problems). Initial attempts to fill this gap from an academic perspective have been made in the upcoming approach called *design for policy* (Bason, 2014; Kimbell, 2016; Kimbell & Bayley, 2017) mainly examining the use of design in policy teams and the ways adopted in practice to build design capacities often through policy labs (McGann et al., 2018). Additionally, design scholars in other fields have also looked at ways in which design can make government tangible through artefacts, experiences, and environments (Tunstall, 2007; Rosernqvist & Mitchell, 2016). However, rare remain the attempts at intersecting design literature and policy studies to reflect critically on how design could support processes of policy formulation, on the conditions under which it can have higher impact and be institutionalised in policymaking.

This article aims at contributing to this debate by offering an overview of the links between the two areas (design and policy studies), especially providing a speculative analysis of the activities of designing that can support the process of policy formulation. First, I discuss the perspective of the design literature and the topic of designing for policy, mainly distinguishing between a focus on policy outputs (better public services) and people (design capacities for policymakers), and framing this through the need of creating a new area of studies of design in government, following Tunstall (2007) argument. Then, I look at the perspective of policy design to identify the different meanings and roles that scholars are giving to designing in policy formulation. Here, I identify a debate mainly focused on processes that inquires how

design approaches and methods could help formulate better policies through optimal design spaces. Further, both analyses are discussed in terms of how design orientations can assume different roles and provide new capacities in policymaking, making the process less linear and siloed. Finally, the analysis is complemented by a brief series of interviews to policymaking experts in Italy, to integrate academic discussion with practical insights coming from design advocates operating daily in processes of policy development.

The main result is a description of the spaces and activities through which design can impact policy formulation: starting from the description of design spaces as the procedural and operational link between policy knowledge/decisions and policy outputs, the article proposes a framework to describe how design activities can inform policy development for the better or the worse, thus distinguishing between strong, weak, and non-design spaces. Finally, limitations to the speculative analysis offered are described, mainly underling the need for further empirical studies to understand these spaces in practice and identify more detailed connections between the abstract nature of scholarly discussion and the concrete needs of policymaking practice.

Observing design in policy: the perspective of the design literature

Studies of the upcoming introduction of design in policymaking are surely an increasing trend: from dedicated tracks in academic conferences (i.e. DRS2016, Track on examining design for the public sector; ServDes 2018, Track on design in government) to special issues in scientific journals (i.e. CoDesign International Journal of CoCreation in Design and the Arts 13(3), 2017: Special issue on "Co-Design and the Public Realm"; Public administration and development 37, 2017: Special issues on "Conceptualizing effective social policy design: design spaces and capacity challenges") a new ethos seems to emerge that discusses of new political dimensions

and practical approaches through which design can engage more critically with public institutions (Huybrechts et al., 2017). This is not a new concern for design but rather one of its oldest utopias if the movements of the Seventies are referred to that aspired at improving society starting from smaller items (Branzi, 2013). Design's less commercial side has always stretched between industrial production and the greater good, although efforts have hardly moved beyond a utopian/molecular type of action. As Koskinen and Hush (2016) describe, these are two ways in which design has engaged with social ideals, expressing both a generational disconnect towards leading financial capitalism (as opposed to the industrial one where designers could find a clearer role), and the need to re-invent designers' own idea of a meaningful job. In the past, Margolin and Margolin (2002) had already argued for the need to turn design from a market-oriented discipline to something that serves 'people with low incomes or special needs due to age, health, or disability' (p.25). They stated that design should aim at building a 'good society' proposing utopias about public issues, like population growth, climate change, consumption of natural resources, inequality, loss of employment. This was both a provocation and an invitation that – despite leaving many question marks – had underlined the ambition of design to help government shift to new ways of dealing with public issues – that is devising courses of action (possible futures) by applying iterative, experimental, and action-based methods. This seems to be emerging more predominantly now, when the discipline has come into view as offering something distinctive to solve public problems and reshape government to gain citizens' trust back (Chindarkar et al., 2017). However, what exactly are the normative competences that design can offer to either government or policymaking is an open question mark that has received mixed assessments: on the one hand, supporters substantiate with practical examples and empirical studies the importance of institutionalizing design methods and

tools to enhance policymaking practice (Minstrom & Luetjens, 2016; Sinni, 2017; Junginger, 2017a); on the other hand, critics doubt the potential of design(ers) to meaningfully deal with policies, given their intrinsic drive towards creating appealing and functional outputs as opposite to the abstract nature of policy, law and governance (Rosenqvist & Mitchell, 2016). Expanding on this through the literature, two main areas of discussion can be found with both supporters and critics that inquire design's role and capacities for policymaking. A large pool of authors inquires the support design can provide to deliver more inclusive, participative, and efficient outputs of policies in terms of public services. The first two aspects (inclusiveness and participation) have been particularly developed in Participatory Design and Co-Design as disciplinary approaches 'rooted in an activist tradition aspiring to increase democratic participation of diverse societal groups in design activities related to public space, services, systems or policy' (Huybrechts et al., 2017: 145). Different notions have been developed here, including discussions on the political role of design to create and engage publics in democratic life at city level (Le Dantec & Di Salvo, 2013), and the notion of *infrastructuring* (Björgvinsson et al., 2010) as a central practice in public deliberation and a typical example of how – by constituting publics – design can foreground engagement of citizens with public authorities. Recently, scholars in this area have however shifted away from working with and for improving relationships and connections between citizens and institutions to focus on micro-level practices and local communities; an excessively narrow viewpoint has thus been reported by critics, that misses understanding the wider political implications of design: to be more effective, participatory design and co-design should be re-politicized to scale up the work done with communities into legislation changes (Huybrechts et al., 2017).

Service Design has also developed – in its more recent evolution – a growing interest in engaging with the public sector and has worked on citizen engagement and development of public services. Starting from an original focus on service interactions and user experiences mainly in the commercial sphere (Hollins and Hollins, 1991), Service Design is now also proposed as an approach to innovate the public sector, especially linking public service offerings and journeys with people's needs and culture (Parker & Heapy, 2006). The different take of Service Design in this area – even in its scientific investigation – has thus far focused on analyzing practical examples of how the public sector could become a new market for design agencies (Albury, 2005): academically, this wants to introduce a new jargon in connection to public management proposing to shift away from its rationalist approach and introduce citizen-centricity and user experiences (typical notions in Service Design) to achieve a more equal interaction between public service providers and citizens (Sangiorgi, 2015). Further, Service Design has also been identified as the disciplinary link to develop human-centered policy design processes, capable of focusing policy outputs (public services) on the real needs of people (Junginger, 2017b).

The third aspect (more efficient outputs of policies) is discussed more recently in design and intertwines with the debate about data in policymaking, the importance of evidence and their use for the development of effective policy: evidence-based policy indicates a set of methods that sustain a more rigorous process of policy development informed by systematic use of evidence (Sutcliffe & Court, 2006). This is however not a straightforward argument due to the non-neutral nature of data, that divides scholars and practitioners in those who believe that data (i.e. interests of citizens detected through digital tools) could help government become more transparent (Gray, 2016), and those who believe that the current emphasis could exceed in underlining a technocratic

approach where better information alone cannot determine positive transformation (that should rather be cultural, organisational, human, and economical) (United Nations, 2014). In this debate – still young in design studies – we more often read about operational tools used to make sense and identify patterns in large amounts of data, and to build more accountable political arguments (Venturini et al., 2015; Bounegru et al., 2016); seldom has the debate crossed disciplinary domains (politics, policy and design) to question the political implications of data design in policy design. Consequently, much remains to be investigated about the role and capacities of design to help policy formulation integrate technocratic tools and approaches (i.e. data visualization) and more transparent political priorities.

Finally, another part of the debate in design studies focuses on capacities and emphasizes the need to introduce design-based into policymakers' range of skills. This is often motivated describing the need for more experimentalism, that for many advocates can become a gateway to handling better the complexity of current public issues (Minstrom & Luetjens, 2016) and to 'muddling through' problem understanding (Hobday et al., 2012). Design tools and methods are thus described adopting a practitioner point of view (i.e. user observations, customer journeys and experiences, prototyping, visualizing) to essentially bring user-centricity in policy design and make policy more tangible to fit designers' work and language better (Bason, 2014; Kimbell & Bayley, 2017; Giordano et al., 2018; Tello et al., 2018).

The areas found in the debate developed by design scholars and described in the paragraph can further be framed by the view proposed by Elisabeth Tunstall (2007): she has argued for the need to develop 'an area of governmental inquiry in design research' (p. 3) that distinguishes between design as a term used in political science, economics, and policy, and the actual fields of design studies connected to government. Building on

Mitchell Dean's (1999) enumeration of the heterogeneous things that form the practices of government (structure, organization, staff, experts, flow and storage of information, offices, interactions, publicity, etc.) and distinguishing between a Design as strategic choices and a design as practical enactment of those choices, she argues that these types (Design/design) are 'the regimes of practice within government (…) as the formation and implementation of the thought behind the practices of government' (p. 5) capable of making government tangible to people (i.e. it can be seen, experienced, heard, etc.). This empowers citizens to guide their own 'conduct of conduct' because it makes the government open to the people's improvisational Design/designs. If we accept this view, we can find an overarching frame to the topic of design in policy discussed in the literature through the need of synthetizing and structuring a new area of studies of design in government, where the topics identified in the debate interpolate with the aim of making government and policy tangible for people through different types of Design/designs, whether in terms of policy outputs (public services) or people's capacities (design skills for policymakers).

Observing design in policy: the perspective of policy studies

A much less fragmented area of study, policy studies have acknowledged an explicit orientation to applying design since the Eighties (Schön, 1988; 1992), most often investigating the settings and characteristics for effective policy design, and describing the processes adopted by policymakers. The discipline notably argues for a pragmatic process to developing and formulating policy that connects policy means and instruments to contextual knowledge thus devising specific courses of action to enact political and public management decisions (Mintrom & Luetjens, 2017). Amidst scholarly robustness however, what exactly characterizes normative design processes and competences in the policy domain, what makes these different compared to other

processes, and what differing values design can offer to policy formulation are questions that have been asked for half a century (Chindarkar at al., 2017) still remaining under explored and unanswered.

Looking at the specifics of design in policy studies, a different scale in the discussion should first be noted, if compared to the previous analysis in design studies: if designers concentrate on policy outputs and people's capacities (the factors that make policy tangible), policy scientists inquire the more abstract nature of processes and investigate design as one of the strategic elements that may (or may not) improve the process of policy formulation. Role and capacities of design are thus investigated in terms of presence/absence and for having diverse degrees of importance in the development of solutions to public issues. Building on these disciplinary premises, Chindarkar et al. (2017) distinguish between *problem-oriented policy processes*, where means and ends are studied and connected to find the most effective way to address a policy problem, and *politically-oriented policy processes*, where the main drivers to policy formulation are dictated by either political gains or blame avoidance by policymakers. Both processes can be conducted more or less effectively and can adapt differently to contextual needs. However, policy can sometimes also be subject to more irrational processes dictated by specific circumstances rather than by careful assessment and deliberation; this situation generates a third type of process called *non-design*, which allegedly happens when policymakers are unable to properly assess circumstances and problems or base their decisions on inconsistent studies and bargaining. As many scholars argue (deLeon, 1992; Sidney, 2007; Schneider & Sidney, 2009), this distinction is quite clear conceptually, but is less apparent in practice where real processes of policy formulation have seldom been mapped out to pinpoint who enters into decisions and how these are enacted and thus transferred to policy

implementation to have effective outputs. This is another important element of debate in policy studies, that inquires the distance between policy design and implementation in terms of the different types of disconnect that may result in ineffective policy outputs. Four major explanations can be found: *top-down failure* (Pressman & Wildavsky, 1973) which focuses on the numerous steps and incongruencies that happen between policymakers and local implementers; *bottom-up explanation* (Lipsky, 1980) discussing of the excessive influence and degree of discretion of so-called street-level bureaucrats; *outside-in explanation* (Braithwaite, 1995) where failure is caused by unexpected behaviours of target groups; *flawed policy design* as the missed alignment between political and technical goals in a pragmatic process of continuous adjustment of 'preliminary problem definitions, bold but provisional change theories, innovative solutions, competing narratives and storylines, and contingent organisational and technological designs' (Ansell et al., 2017: 8). To overcome policy design and implementation disconnect, Miller and Rudnick (2010) stress the importance of what they call 'design juncture' (p.1), that is the key crossroad from problem identification to solution implementation (the same role design scholars attribute to design in policy) where decision makers can choose to either adapt existing solutions or innovate. In the authors' opinion, these have been scarcely investigated and would represent a rich point to understand the nexus between knowledge and action in policy, thus being relevant also to understand what spaces exist for design as an institutional process to enact policy knowledge and decisions into public services. Miller and Rudnick (2010) argue that these spaces are often left as secondary concerns whose parameters are bureaucratically defined in administrative documents and would therefore benefit from further studies and higher practical appreciation. Howlett (2014) also acknowledges the importance of this and talks of *design spaces* in policy, as the spaces where policy

outcomes are developed in practice by crossing political intentions and technical analysis. Interestingly, he identifies several spaces useful to study the institutional role of design in policy formulation. The remainder of this article thus attempts at describing these spaces from the perspective of design studies, intending them as the procedural link between policy knowledge/decisions and outputs. This is currently a particularly acute question in all areas treated in this article: in certain policy fields (i.e. social policy, innovation policy, economic policy), where new ways to face complex public problems as intertwined economic and social issues (i.e. rising inequality, divergence of productivity and wage, political mistrust, changing demographics, humanitarian crises, changing environmental conditions, etc.) are being sought (Yi, 2015); in policy studies, to support the argument that design can meaningfully complement the policy process; in design studies, to support the understanding of how design helps policymaking to face public challenges. Design spaces can help describe the specific role of design in policy formulation.

Observing design in policy: the perspective of experts

The review proposed in the previous paragraphs has been expanded further interviewing policymaking experts in Italy, to integrate academic discussion with practical insights coming from design advocates operating daily in processes of policy development with different perspectives. An event was held in June 2016 in Milan, entitled "Design and Policymaking" where policymakers (municipality and region), intermediaries, researchers and citizens were invited to discuss and be interviewed. The Italian context was chosen for the rare presence of experimentation: although design is a strong sector, it is not yet applied to public policy despite a growing community of service designers working for social innovation and focusing on public services. Only recently attempts to bring design into public administration have been made by creating

the Team for Digital Transformation[1], which essentially uses design to understand the best way to introduce digitalisation principles, user-centricity and service design in Italian public services at national level, as well as to introduce Italian designers and service design agencies to the public sector as a potential client. This is however only a recent evolution in the Italian landscape, as the team was created in September 2016, while the event 'Design and Policymaking' – held in June of the same year – has represented a forerunner in the evolution of national trends. Organized by the Department of Design at Politecnico di Milano as part of *project* and with the patronage of Regione Lombardia, the structure of the half-day public conversation has been extremely simple: an introduction to the topic held by researchers and a lively panel discussion, followed by individual interviews. Despite simplicity and a potential bias of interviewees toward being design advocates, interviews have covered several aspects discussed in this article about how design and policymaking can be integrated, thus providing an expert/practitioner point of view that complements the analysis at hand. Discussions have been recorded, transcribed and analysed to extract opinions about the three main areas of investigation found both in design and policy literature: role of design in policy formulation, the need for new capacities of policymakers, the nature of the process of policy design. The outlooks emerged are briefly synthetized below.

1. Role of design

An important perception emerged from interviews is about the changing role of policymakers and the extent to which there has been a shift in public administration practice from bureaucratic Fordism to a role that is more focused on citizens: in Italy,

---

[1] More information on the mission and projects of the Ministerial mandate can be found at: https://teamdigitale.governo.it/

the idea of policymaking as means to address public challenges is still not widely recognized besides few best practices, presumably because of the legislative constraints that make the task difficult also for the most proactive people. Intriguingly, because of this context design – if well explained and deployed – could be an extremely valid aid to experiment a different practice.

> 'Policymakers typically have a technical role in public institutions, even if in strict connection with politicians. Lately, this is shifting toward the request of understanding more closely the needs of citizens (or policy beneficiaries), thus requiring policymaking to start from the bottom rather than the top (political ideas). However, this is often subject to very strong constraints coming from the use of public money', policymaker.

> 'To make things happen, political endorsement and commitment is not enough, as it is not enough to have technical/administrative competences. There still is something missing in the practice of policymaking to create real transformation by turning ideas into change. This something could be design', policymaker.

In Italy and in many other countries across Europe, the need is growing for policymakers to pursue and implement transformative change. And whilst many are keen to support this position, obtaining results is not straightforward as specific and local systems of pressures, opportunities and challenges need to be understood. Also vital is an appreciation of what the policymaker's job requires to balance efficiency in the use of public resources and uncertainty in the nature of public problems, contrasting characteristics when seeking public innovation.

2. Capacities of policymakers

Pressure on resources has become the norm for many public organizations, increasing the need for policymakers to rigorously plan and monitor new initiatives, draw on more rigorous evidence of successes and failures and apply often uncertain

systems of assessment. This trend – valid in Italy as in the rest of Europe – is pressuring public administrations to experiment new methods for technical assessment to establish policy goals and put data acquisition and processing at the centre of practice; this is complemented by an emphasis on citizen engagement as a resource of public value and budgets.

> 'Scarcity of resources should be read in correlation with the new *superpowers* of citizens: the old idea that the public problem should be solved distributing public money is now confronted not only with reduced public budgets, but also with the increased ability of citizens to act on situations. Therefore, the new question is: how can policy be designed using resources that are not controlled by anyone? What does it mean to design public systems of distributed intelligence?', policymaker.

> 'Design and public policy are usually kept apart, while it is now increasingly interesting to reason on the connections between these two worlds. This is interesting for different reasons, firstly because as public issues become more complex we need to spend public money wisely; secondly, the energies of citizens play an increasingly important role, especially where public resources are diminishing. Therefore, new ways to engage new energies are needed', policymaker.

In this context, it is crucial for policymakers to provide strategic guidance: a process that embraces the new nature of public resources (data and people) is necessary, shifting from the predominant use of endogenous means (i.e. funding assigned to the most relevant political objectives), to integrate exogenous ones (i.e. the highest capacity and will of citizens to participate in the public life). These however cannot be controlled for intentions, scope, and actions, thus new capacities and frames to plan for social transformation are required.

3. Nature of policy process

Allegedly, the nature of public problems (especially social ones) is shifting toward more complexity, unpredictability and ambiguity; many proposed solutions are thus attempting at connecting new public resources (data and people) with new governance structures that can be more flexible and adaptive and follow the workings of ecosystems.

> 'Today, when making policies we should reason about ecosystems, that is non-designed systems because nature has no specific design behind. One cannot decide from the top how an ecosystem is made and how its inherent elements interact: innovation ecosystems are disordered. This is not to say that nothing can be done, however the best way to face public problems is not to control but to make oneself useful', policymaker.

> 'There is a type of innovation that is science-driven and another that is *poiesis*-intensive, that is driven by creativity and *genius loci* (the peculiarity of a context and its influence on the actions of inhabitants). These two elements are strongly characterizing innovation today while being in tension, thus changing the nature of public issues. We must face this thinking about new ways of making policies', policy intermediary.

Policy should be made thinking about open outputs and new governance systems, looking at different ways to describe the traditional democratic principles of efficiency, efficacy, and effectiveness, where government is an enabler rather than a manager and steers an interconnected system in which a diverse range of actors and institutions alternate at the lead.

Strong, weak and non-design spaces

The three perspectives offered so far in the article provide the ground to describe the characteristics of design spaces in policy formulation: I offer a speculative analysis of this building both on the notions provided in the literature and the insights emerged through experts' interviews to describe how/where design activities can inform the

process of policymaking for the better or the worse, thus distinguishing between strong, weak, and non-design spaces.

The characterisation proposed kicks-off from the perspective of policy studies offered by Chindarkar et al. (2017) who have more consistently focused the idea of design spaces in policy formulation: the authors describe them as the abstract characterization of the process through which policies are formulated in the balance between political and technical goals (Table 1). This is relevant to frame the nature and constraints of the process that policymakers follow to develop solutions to public problems. I therefore scale this framework down to ask: once the policy problem has been framed or the policy decision taken, what are the characteristics of the operational space that design has to support policymakers in developing policy outputs and outcomes? The axes of the framework proposed (Table 2) build upon the institutional recognition design has – as it is often marginalised in policy areas of minor concern or left to more junior staff (Miller & Rudnick, 2010), and the attention to the involvement of stakeholders in the process of policy formulation (to understand users' needs and develop solutions around these) – which is often recognised as one of the main skills of design for policy (Bason, 2014). Crossing these areas four types of design space emerge:

- a **strong design space**, where institutional recognition and stakeholders' involvement are both high, thus design (whether with external professionals or as set of skills/approaches of policymakers) is legitimated to support civil servants to engage with real situations and users providing insights and robust evidence for diverse options of policy outputs. In this case, design can steward the increase of accountability of a public institution, for instance by *infrastructuring* and constituting publics, proposing scenarios and prototyping

possible futures for critical reflection, but also observing user needs and translating them into feasible proposals. From a practical perspective, Bason (2014) argues that in this case various techniques can be used also linked to an array of operational tools (i.e. service templates, system maps, cartographies) all potentially supporting the practical formulation of policy in closer connection to user experiences;

- two **weak design spaces**, where the presence of design is marginal either for lack of institutional recognition or for a missing space in the daily job of policymakers to effectively engage stakeholders and understand their needs. Therefore, in these cases design is peripheral and tries to gain credibility by providing data on potential cost benefits for new service development, often not impacting at higher decisional levels, or else it works at the micro level of communities, though missing the opportunity to upscale proposals to the policy and political levels for real implementation;

- a **non-design space**, where design is essentially absent and non-recognised at both institutional and community level.

Furthermore, it should be stressed that the framework proposed is not an implicit statement that all policy problems should be addressed in a strong design space; on the contrary, many policy concerns remain effectively addressed through traditional instruments and processes. The differentiation identified – even in its simplification – highlights the conditions for which design can be more effective if introduced in policy formulation, that is to have impact it needs institutional recognition and will to engage multiple points of view for the development of better policy outputs and outcomes. Finally, the idea and characterization of design spaces in policy formulation introduces a *meso-level* in the current debate on design in/for policy that scholars have seldom

touched upon previously: if design scholars are mainly concerned with a micro-level understanding, that is the design skills and tools for policy implementation, policy design scholars focus on a macro-level analysis, that is the political and technical considerations useful to formulate policy. The *meso-level* proposed here is therefore useful to try and provide a conceptual link between these two worlds that will need to be further expanded empirically to bridge the academic outreach/divide.

Concluding remarks

This paper has discussed the connection between policy and design studies as a field of investigation that, despite reception of much attention recently, still needs to be supported through critical reflection and understanding of barriers and limitations. Especially coming from the perspective of design, it is clear how the discipline is not yet well accustomed to study and work with government and public sector and will therefore need in the future to enlarge both debate and experimentation to robustly prove effectiveness. In this field, designers are certainly supported by a growing rhetoric that sees governments concerned with experimenting new ways to rearrange their processes and relationship with citizens. In the scholarly investigation proposed in the article, this has been paralleled with the need to strengthen and enhance the process of policy formulation: new capacities and processes to maximize new public resources (data and citizen) are sought, looking to rebalance scarce public budgets, lack of trust in public institutions, and changed nature of socio-economic public problems. These combined phenomena substantiate both policy and design scholars to look for an institutional change capable of superseding old bureaucratic siloes in favour of new design orientations that can combine equity and efficiency and connect institutions and society in co-accountabilities of public assets. As these elements acquire importance, and citizens increase awareness of wanting a stake in policy formulation, these

capabilities may become the norm in government (Garcia Martinez, 2015), thus needing

to be pointed out more effectively. The framework proposed is a first step in this

direction that can hopefully support other scholars to provide further empirical evidence

on the introduction of design in policymaking, and ultimately build a new area of design

research in government.

References

Albury, D. (2005). Fostering innovation in public services. *Public Money & Management*, *25*(1), 51-56.

Ansell, C., Sørensen, E., Torfing, J. (2017). Improving policy implementation through collaborative policymaking. *Policy & Politics*, *45*(3), 1-20.

Author (2013). Book.

Bason, C. (ed) (2014). *Design for Policy*. Farnham, UK: Gower Publishing.

Björgvinsson, E., Ehn, P., Hillgren, P-A. (2010). Participatory design and 'democratizing innovation'. In: *PDC 2010: Proceedings of the 11th Participatory Design Conference*, Sydney, Australia, November 29–December 3. New York: ACM Press, pp. 41–50.

Bounegru, L., Venturini, T., Gray, J., Jacomy, M. (2016). Narrating Networks: Exploring the Affordances of Networks as Storytelling Devices in Journalism. *Digital Journalism* (2016), 1-32.

Braithwaite, V. (1995). Games of engagement: Postures within the regulatory community. *Law and Policy*, *17*(3), 225–255.

Branzi, A. (2013). Seven degrees of separation, in S. Annicchiarico & A. Branzi (eds) (2013). *The new Italian design*. Milan, Italy: Triennale di Milano, pp. 14-17.

Breckon, J. (2015). Better public services through experimental government. *Alliance for Useful Evidence*. Retrieved from http://www.nesta.org.uk/sites/default/files/better-services-through-experimental-government.pdf

Buchanan, R. (1998). Branzi's Dilemma: Design in Contemporary Culture. *Design Issues*, *1*(14), pp. 3-20.

Chindarkar, N., Howlett, M., Ramesh, M. (2017). Introduction to the special issue: 'conceptualizing effective social policy design: design spaces and capacity challenges'. *Public Administration and Development*, *37*(1), 3–14.

Christiansen, J., Bunt, L. (2012). Innovation in Policy: allowing for creativity, social complexity, and uncertainty in public governance. *Nesta*. Retrieved from https://www.nesta.org.uk/sites/default/files/innovation_in_policy.pdf

Civil Society Exchange (2015). *Whose society? The final big society audit*. Civil Exchange: London.

deLeon, P. (1992). Policy formulation: where ignorant armies clash by night. *Policy Studies Review*, *11*(3/4), 389–405.

Garcia Martinez, M. (2015). Solver engagement in knowledge sharing in crowdsourcing communities: exploring the link to creativity. *Research Policy*, *44*(8), 1419–1430.

Giordano, F., Morelli, N., De Gotzen, A., Hunziker, J. (2018). The Stakeholder map: a conversation tool for designing people-led public services. In: *ServDes2018 - Service Design Proof of Concept. Proceedings of the ServDes2018 Conference*, Milan, Italy, 18-20 June. Linköping: Linköping University Electronic Press.

Gray, J. (2016). Datafication and democracy. Recalibrating digital information systems to address broader societal interests. *Juncture*, *23*(3), 197-201.

Hobday, M., A. Boddington, Grantham, A. (2012). Policies for Design and Policies for Innovation: Contrasting Perspectives and Remaining Challenges. *Technovation*, *32*(5), 272–281.

Hollins, G. and Hollins, B. (1991). *Total Design: Managing the Design Process in the Service Sector*, Pitman, London.

Howlett, M. (2014). From the 'old' to the 'new' policy design: design thinking beyond markets and collaborative governance. *Policy Sciences*, *47*(3), 187–207.

Huybrechts, L., Benesch, H., Geib, J. (2017). Co-Design and the public realm. *CoDesign*, *13*(3), 145-147.

Junginger, S. (2017)a. Design Research and Practice for the Public Good: A Reflection. *She Ji*, *3*(4), 290-302.

Junginger, S. (2017)b. *Transforming Public Services by Design: Re-orienting Public Policies, Organizations and Services around People*, Routledge, UK.

Kimbell, L., Bailey, J. (2017). Prototyping and the new spirit of policymaking. *CoDesign*, *13*(3), 214-226.

Kimbell, L. (2016). Design in the Time of Policy Problems. In: DRS2016. Proceedings of the 2016 Design Research Society Conference, Brighton, UK, 27–30 June.

Koskinen, I., Hush, G. (2016). Utopian, molecular and sociological social design. *International Journal of Design*, *10*(1), 65-71.

Le Dantec, C. A., Di Salvo, C. (2013). Infrastructuring and the formation of publics in participatory design. *Social Studies of Science*, *43*(2), 241–264.

Lipsky, M. (1980). *Street-level Bureaucracy*. New York: Russell Sage Foundation.

Margolin, V., Margolin, S. (2002). A 'social model' of design: Issues of practice and research. *Design Issues*, *18*(4), 24-30.

McGann, M., Blomkamp, E., Lewis, JM. (2018). The rise of public sector innovation labs: experiments in design thinking for policy. *Policy Sciences*, 1-19.

Miller, D., Rudnicky, L. (2010). Working with Design Junctures at the Knowledge-to-Action Nexus. In: *Proceedings of the Convergence: Managing + Designing Conference*, Cleveland, Ohaio, USA, June 18-19.

Minstrom, M., Luetjens, J. (2016). Design Thinking in Policymaking Processes: Opportunities and Challenges. *Australian Journal of Public Administration*, *75*(3), 391-402.

Minstrom, M., Luetjens, J. (2017). Creating Public Value: Tightening Connections Between Policy Design and Public Management. *The Policy Studies Journal*, *45*(1), 170-191.

Dean, M. (1999). *Governmentality: Power and Rule in Modern Society*. Thousand Oaks, CA: Sage Publications.

Parker, S., Heapy, J. (2006). The Journey to the Interface: How Public Service Design can Connect Users to Reform, Demos, London.

Pressman, J., Wildavsky, A. (1973). *Implementation*. San Francisco, CA: University of California Press.

Rosenqvist, T., Mitchell, C. (2016). Redesigning Governance – A Call for Design Across Three Orders of Governance. In: DRS2016. Proceedings of the 2016 Design Research Society Conference, Brighton, UK, 27–30 June.

Sangiorgi, D. (2015). Designing for public sector innovation in the UK: design strategies for paradigm shifts. *Foresight*, *17*(4), 332-348.

Schneider, A., Sidney, M. (2009). What is next for policy design and social construction theory? *Policy Studies Journal*, *37*(1), 103–119.

Schön, DA. (1988). Designing: rules, types and words. *Design Studies*, *9*(3), 181–190.

Schön, DA. (1992). Designing as reflective conversation with the materials of a design situation. *Knowledge-Based Systems*, *5*(1), 3–14.

Sidney, M. (2007). Policy formulation: design and tools, in F. Fischer, G. Miller, M. Sidney (eds) (2007). *Handbook of Public Policy Analysis: Theory, Politics and Methods*. New Brunswick, NJ: CRC Taylor & Francis, pp. 79–87.

Sinni, G. (2017). Participatory Design for Public Services. Innovation in Public Administration. *The Design Journal*, *20*(sup1), s3368-s3379.

Sutcliffe, S., Court J. (2006). *A Toolkit for Progressive Policymakers in Developing Countries.* London: Overseas Development Institute.

Tello, C., Zurob, C., Pacheco, S., Negrete, S. (2018). Service Design and the co-production of public policies: the case of RedActiva. In: *ServDes2018 - Service Design Proof of Concept. Proceedings of the ServDes2018 Conference*, Milan, Italy, 18-20 June. Linköping: Linköping University Electronic Press.

Tunstall, E. (2007). In design we trust: Design, governmentality, and the tangibility of governance. *International Association of Societies of Design Research*, *1*, 1–16.

United Nations (2014). A World that counts. Mobilising the data revolution for sustainable development. *UN Secretary-General's Independent Expert Advisory Group Secretariat*. Retrieved from www.undatarevolution.org

Venturini, T., Ricci, D., Mauri, M., Kimbell, L., Meunier, A. (2015). Designing Controversies and Their Publics. *Design Issues, 31*(3), 74–87.

Yi, I. (2015). *New challenges for and new directions in social policy*. New York: United Nations Research Institute for Social Development (UNRISD).