

Design and Policy: an attempt for disambiguation of concepts through issue mapping and digital methods¹

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Abstract

Over the last ten years, design approaches have been appearing as a central issue in the public sector. At the same time, diverse actors in design but also in the policy disciplines have been producing content using the words *design* and *policy* from their own perspective. Consequently, these couple of concepts have been paired in diverse forms, creating new terms and variety of meanings.

This theoretical research aimed to identify the features of some of the terms resulting from the combination of the words *design* and *policy*. Seeking to outline the differences among them and contribute to a common basis for their use. For this purpose, the tools of digital methods and issue mapping (such as Google search engine) were used. These methods served to identify some of the terms in relation to the actors and their social significance.

As a result, five terms were identified: *design policy*, *policy by design*, *design for policy*, *policy design* and *design in policy*. The data processing and a further analysis allowed to characterize three main streams of significance. One, the inclusion of *design* in innovation policies. Two, the design of policies, and three, the use of *design* approaches in *policy*.

The issue of *design* and *policy* is still under development. Yet, it may be the proper time to clarify some popular terms and define a common language. This study is a first step to start a discussion towards that direction.

Key words: design policy, policy by design, design for policy, policy design, design in policy, issue mapping, digital methods.

Introduction

Design is an ambiguous word with a variety of definitions according to the context. Typically, it is used as a verb (to design) or as a noun (design). In these cases, it is related to the words plan and drawing (the action or the result) to decide upon the look and functioning (of something) before it is made (European Commission, 2009, p. 9; Merriam-Webster, 2019; Wikipedia, 2019). Similarly, *design* could be defined as “the conception and planning of the artificial” and refer to a methodology of *design* (Buchanan, 1992, p. 14).

On this research, the interest lays on *design* as an academic discipline or field of studies, without going further on the debate of whether design is a discipline or a science (Cross, 2001). This means, it considers *design* as a process that follows a certain methodology and stages to produce products, services and environments, among other results. Likewise, design activities are user-centred, meaning that they produce results focused on the needs, aspirations and abilities of the user. (European Commission, 2009, p. 11).

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With regard to the foregoing, *design* approach has been applied to a variety of contexts. In fact, it is becoming an issue in *policy*. On one side, the exploration of the design-based approaches in the public sector has been growing (Bason, 2014; Junginger, 2015; Kimbell, 2015), and on the other, design has been increasingly described as a process to devise policies (Peters, 2018).

Within this context, the concepts of *design* and *policy* appear together, cited by diverse actors from both disciplines in a variety of combinations. As a consequence, the pairing of *design* and *policy* has originated terms such as *policy design*, *design in policy* and *design policy* among others. These terms not only convey different meanings, but also, are used together and occasionally interchangeably. To add more complexity, even scholars are using concepts and quoting authors within disciplines.

For all these reasons, this research aims to identify the characteristics of some of the terms resulting *design* and *policy* are paired. Then, outline the differences among them and finally get closer to potential definitions. This characterisation seeks to establish a common ground for the use of the terms. Particularly, when referring about *design* as an approach to *policy* and service innovation in the public sector.

The present landscape of the issue *design* and *policy* comprises a wide range of actors coming from both disciplines. Sometimes it is notably difficult to differentiate the actors within the crossing of the disciplines.

For instance, *Design for Policy*, is considered the first publication focusing on how design has the potential to innovate in the public sector (Norman, 2015). It includes contributions from scholars, design practitioners and public managers. Moreover, Christian Bason, the editor of this book has a background on political sciences and business (Danish Design Center, 2019). Bason is currently the CEO of Danish Design Centre and he is widely recognized as an expert on the topic of public sector innovation.

Similarly, in UK the Policy Lab was established as part of the Civil Service, creating a team composed by designers, researchers and policy-makers. They bring “people-centred design approaches to policy-making” (Policy Lab, 2019). Since her period in the Lab, the designer Lucy Kimbell has been writing on applying design approaches to policy making (Kimbell, 2015; Kimbell & Bailey, 2017). Comparatively, in NZ the Auckland Co-Design Lab is part of the Auckland Council. They apply-co-design to work on complex social issues (Auckland Co-Design Lab, 2019).

In a similar line, scholars as Sabine Junginger, Michael Howlett and B. Guy Peters are studying the topic of policy-making and policy implementation. From the side of design, Junginger argues that policy formulation and implementation could be treated as problems and activities of design (Junginger, 2013, 2015). Likewise, from the perspective of policy sciences, Howlett and Peters argument on a model or a system to design policies (Howlett, 2014; Howlett & Mukherjee, 2014; Peters, 2018).

While reading these actors, it is common to find concepts as public sector innovation, but also a set of terms resulting on the combination of *design* and *policy*. To identify and clarify the terms used in this context, they were explored through issue mapping and digital methods. This means, the “study of the internet” (Rogers, 2013, p. 104) “to describe, deploy, and visualize the actors, objects, and substance of a social issue” (Rogers, Sánchez-Querubín, & Kil, 2015, p. 9). In this case, the social significance of the pairings of *design* and *policy*.

These methods provided a set of search engine results from the query of five terms identified: *design policy*, *policy by design*, *design for policy*, *policy design* and *design in policy*. Then, the data was processed by reading and categorise each of the sources. This process allowed to map the principal actors and describe the terms according to the context.

This paper starts with a description of the methodology used, which is crucial for mapping the issue through the web. Then, the section of findings describes some insights during the data processing. Followed by the results and the analysis of the map. The result comprises the analysis of the five terms derived from combining *design* and *policy*. Finally, a discussion about the research and the conclusions are presented.

Methodology

The research with the web described by R. Rogers in *Digital Methods* (Rogers, 2013, p. 111) requires to setup specific conditions. Initially, it is important to prepare a clean research browser in order to eradicate traces of web history. To facilitate this condition, it is suggested to employ a Google scraper tool. This tool returns google.com results (no country redirect version) avoiding cookies and the record of query log history. Then, the proper query needs to be formulated. For this purpose, the search engine operators should be considered, and the keywords carefully selected. Following these recommendations, the query for this research was written with quotation marks and using an asterisk (*) as a wildcard to get a variety of combinations of the words *design* and *policy*.

Accordingly, the research was developed in four stages. First, searching on Google scraper "*Design*Policy*". Second, reading each of the search engine results. Third, classifying them; and finally, visualising the data. This process, served to identify on the one hand, relevant actors; and on the other, their use and significance of the concepts.

A preliminary query of *design*policy* led to identify five terms: *design policy*, *policy by design*, *design for policy*, *policy design* and *design in policy*. Thus, the query was repeated for each of these five terms, obtaining fifty engine results per term. These results were categorised manually by type of content, actor name, type of actor and country. Some of the results were re-classified under other terms. Others, not available or considered not equivalent were deleted from the list. Hence, the resulting visualisation (see figure 1) presents for each term the number of results per actor and thereby illustrates their relevance in giving significance to the term.

In order to characterise each of the terms, only the most relevant actors were studied. That is to say, the ones with four or more results under each query. Additionally, it was developed a qualitative analysis and interpretation of the information provided.

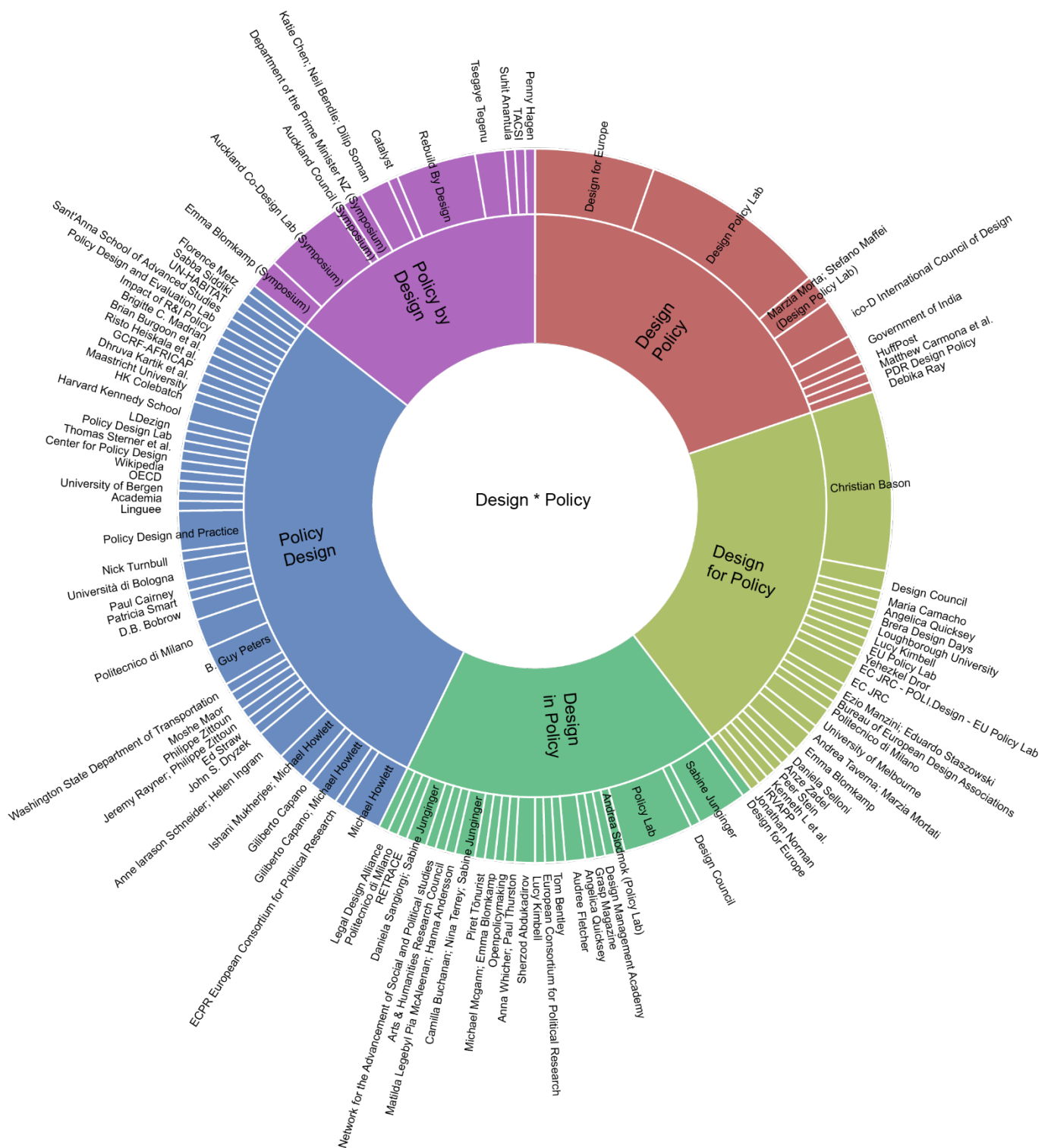


Figure 1. Data visualisation of *Design* and *Policy* issue. The visualisation presents the search engine results for terms *design policy*, *policy by design*, *design for policy*, *policy design* and *design in policy* in relation to the actors.

Findings

The process of categorising required the interpretation of the search engine results. While classifying, it was common to find the same actor listed under different terms. Reading further the sources, it was possible to recognise imprecisions of the source keywords versus the query results. Thus, the engine results were not self-sufficient to map the issue and there was a subjective input on the data processing.

Having said that, manual adjustments were done by moving some actors to the terms that evidenced a better correspondence. In some cases, one actor was mostly present under one term. Hence, the few variants were re-classified to meet the average. On the contrary, other actors were listed in a variety of terms. This required a more detailed analysis in order to classify them properly.

For instance, Design Policy Lab was indexed mainly under *design policy* and a few times under *design for policy*. This ambiguity probably comes from the way the lab describes itself. They work on “design + policy [...] policy through design and design through policy” (Design Policy Lab, 2018). But the description of the activities and experience are principally on *design policy*. So, every search engine result about this Lab was classified only under *design policy*.

On the contrary, Michael Howlett appeared listed within the results for the terms *design in policy*, *design Policy* and *Policy Design*. Reading further, it was found that Howlett works on political sciences (ResearchGate, 2019). Besides, he frequently refers to *Policy Design* connected to *policy formulation*, *policy making* and *public policies*. For these reasons, every entry of Howlett was re-classified under the term *Policy Design*.

Results

Analysing the mapping of the *Design*Policy* issue, it was possible to distinguish three main strands of significance. These are: *design policy*, *policy design*, and *design approach to policy*. Their characteristics are described as follows.

Design policy is predominantly used by Design Policy Lab and Design for Europe, with Marzia Mortati as a common actor. It refers to the creation of policies to boost *design* as an innovation strategy and a driver of socio-economic growth (Mortati & Maffei, 2018, p. 210). What is more, they (DeEP, 2013, p. 7; Design for Europe, 2017) refer to the definition of Raulik-Murphy and Cawood for the term:

“Design policy can be defined as the process by which governments translate their political vision into programmes and actions in order to develop national design resources and encourage their effective use in the country” (Raulik-Murphy & Cawood, 2009, p. 7)

Thus, the matter of this term is the political actions (policies) for design support. Here *design* refers to both industrial design and the process for problem solving which contributes to innovation and competitiveness. This term does not imply the study of the *design* as an approach to *policy*.

Policy design is used mainly by authors in the field of political sciences, planning and policy. Actors as Michael Howlett and B. Guy Peters, as well as the journal *Policy Design and Practice* are relevant for defining this term. They connect it to formulating or making public policies. According to Howlett,

“Policy design involves the effort to more or less systematically develop efficient and effective policies through the application of knowledge about policy means gained from experience, and reason, to the development and adoption of courses of action that are likely to succeed in attaining their desired goals or aims within specific policy contexts”. (Howlett, 2014, p. 281).

Furthermore, Peters introduces the idea to “think about policies in design terms” (Peters, 2018, p. 3). Moreover, he presents a model of *design* and he argues that, for any *working policy design* four components are required. Primarily, he refers to an understanding of the causation, the instruments to address the problem, and the values to evaluate the outcomes of the policy. Then, to a plan for intervention (Peters, 2018, p. 21).

In this respect, Peters suggests that policies should be designed and recognizes the importance of the process. This, in principle is very close to what is proposed from the *design* approach to *policy*, namely re-framing policymaking as designing (Junginger, 2015, p. 57). However, when Peters mentions some concepts familiar to the design discipline, he seems to refer to the traditional industrial design. That is to say, the design of products, when the object of design is not the human (and his behaviour) but the product itself. His discourse does not reflect on the user-centred feature of *design* and therefore, does not refer to the approach of *design to policy*.

Regarding the use of design-based approaches to *policy* two terms appear to be more generalised: *design for policy* and *design in policy*. A variety of actors, including people and organisations regularly use these terms in an undifferentiated manner. Despite their popularity, for the terms *design for policy*, *design in policy* and *policy by design*, the search engine results did not lead to more precise definitions.

Design for policy is predominantly represented by the homonymous book edited by Christian Bason (Bason & Schneider, 2014). According to its description, the book outlines the design approaches (usually collaborative) to address public problems and innovating in public policy (Routledge, 2019). It also collects experiences of both design practitioners and public managers. Accordingly, *design for policy* refers to *design* as a tool with a significant potential for addressing public problems. Hence, it seems to be a discourse starting from what *design* could bring to *policy* in a broader sense.

Thereupon, to describe the slight difference with *design in policy*, three factors could be considered. First, the original search engine results. Around 20% of the entries of this term were re-classified to *policy design*. Second, *design in policy* is connected to the argument that policy-making and policy implementation could be considered a design activity (Junginger, 2013), and third, the term is linked to the use of diverse innovative approaches in *policy* (Siodmok, 2017). Then, it could be said that *design in policy* tends to be more associated to *policy*, particularly to *policy design*. Arguing about how policy-making could be considered as a process of designing, and moreover, being *design one* of the new policy tools. Thus, a discourse starting from *policy* towards *design*.

Within the third strand, *policy by design* is a mixed term. The majority of the search engine results lead to the topic of collaborative design. On the one hand, to co-design and design in policy (Auckland Co-Design Lab, 2018), and on the other, to projects using “design-driven problem-solving to help communities and cities build resilience” (Rebuild By Design, 2019). The first was a symposium that introduced design to policy makers, and the second an initiative from public sector organisations to develop solutions using design. Thus, unlike the two terms described before, the search engine results seem not to be enough to outline this term further. As it involves both discourses, from *design to policy* and vice versa.

Discussion

A set of questions may arise on the validity of the research method as there is a debate on the capacity of Google to function as a research machine (Rogers, 2013, pp. 99–104). Despite these concerns, this method comprises a set of features considered valuable for this research. First, Google is one of the most popular search engines worldwide (StatCounter Global Stats, 2019). Second, it is an important source of information for society. Third, it indexes sources which would not appear in academic databases but provide social significance to the term (e.g. the book *Design for Policy*), and fourth, it provides a general overview of the issue and becomes a great starting point for the discussion, which, in effect, is part of the purposes of this research.

Conclusions

The concepts of *design* and *policy* are still evolving together with the overlapping of the disciplines of design and policy. Due to this trend, it is important to clarify the meanings of the variety of terms, and thus, be able to use them properly and communicate the right message. This study is a first step towards that direction.

This theoretical research allowed to identify three main strands of significance within the increasing exploration of *design in policy*. One, the inclusion of design in innovation policies (*design policy*). Two, the design of policies (*policy design*), and three, design approach to policy (*design for policy, design in policy, policy by design*). Additional analysis would be required to validate and create more structured definitions, especially for the third strand. For this purpose, a set of strategies would be part of a future research. Initially, a deeper literature review and a peer review discussion. Then, complementary digital explorations such as cross-country and comparative analysis of the query results.

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The issue of *design* and *policy* mapped in this study is complementary to the initial literature review developed in order to describe the theoretical framework for the dissertation of the PhD on Design.

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APPENDIX

Innovation in the public sector: an introduction to the key concepts of Design and Policy³

When talking about innovation, *design* is probably one of the first words that come to mind. Perhaps it is even common to hear about design in relation to industrial products. Instead, it might be novel to hear about design in the public sector. As strange as it may seem, over the last years the policy makers have been exploring novel tools to deal with complex public problems. Even more, scholars working on the field have been discussing about policy design. On this subject, B. Guy Peters affirms that “design is a concept that is used increasingly to describe the process of creating a policy response to a policy problem”. Additionally, the European Commission have recognised that design is a driver of innovation, especially when considering the needs of the people.

What is actually more recent is the use of the design methodologies (those similar to design products) in policy. That is to say, an approach with a structured process that aims to produce results focusing on people needs, aspirations and abilities. In the search for improving policy outcomes, the public sector is opening the space to designers. All over the world, design practitioners are starting to work together with the traditional public servers, and at the same time collaborating with citizens.

Consequently, it is becoming more frequent to find the words *design* and *policy* connected. However, to someone who is new in the subject, terms as *design policy*, *policy by design*, *design for policy*, *policy design* and *design in policy* may seem all similar, even if they are not. To shed some light on this vocabulary, the use of the internet becomes a pertinent tool. In fact, there is a research technique called *Digital Methods* which makes use of a very popular instrument: Google search engine. Even more, with a set of complementary tools, this technique allows to identify and map the actors which are part of a particular issue. Thus, the *Issue Mapping* permits to analyse the significance of a topic according to the actors.

While applying these methods it was possible to characterise the terms mentioned above. In the process it was possible to distinguish three main strands of significance. These are: one, the inclusion of design in innovation policies (*design policy*). Two, the design of policies (*policy design*), and three, the exploration of design approaches in policy (*design for policy*, *design in policy*, *policy by design*).

Hence, when talking about the use of design methods in policy, the more appropriate terms are *design for policy*, *design in policy*, *policy by design*. The first two present a widespread adoption among a variety of people and organisations. Likewise, they are usually used interchangeably, and only slight differences could be found between them.

For instance, *design for policy* refers to *design* as a tool with a significant potential for addressing public problems. So, it seems to be a discourse starting from what *design* could bring to *policy* in a broader sense. Conversely, it could be said that *design in policy* tends to be more associated to *policy*, particularly to *policy design*. Arguing about how policy-making could be considered as a process of designing, and moreover, being *design one* of the new policy tools. Hence, a discourse starting from *policy* towards *design*.

In contrast, *policy by design* is a mixed term. The relevant actors lead to the topic of collaborative design. Especially, on introducing design to policy makers and the development of solutions using design, on the initiative of the public sector. So, it is described from *design* to *policy* and vice versa.

³ Number of words in the non-technical summary: 801

Comparatively, the term *policy design* is relevant to understand the use of the word *design* in the field of political sciences, planning and policy. Primarily, it is connected to the process of formulating or making public policies. Even if scholars argue the use of a method to create policies, it is not the same as the design method.

Finally, although *design policy* combines the words of interest, it may be the term less connected to the use of design methodologies in policies. *Design policy* refers to the creation of policies to boost *design* as an innovation strategy and a driver of socio-economic growth.

In conclusion, the issue of *design* and *policy* is still evolving. To be able to follow this social conversation, it is important to be able to identify the meanings of the variety of terms. The general vocabulary presented earlier is a starting point to understand what design could bring to the public sector. Surely, governments around the world are looking for novel strategies to provide better services to the citizens, and there is a strong belief on the potential of design on this effort.