A reflection on connecting complexity theory and design for policy
Taverna, Andrea and Mortati, Marzia

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Andrea Taverna, Research Fellow, Department of Design, Politecnico di Milano
Marzia Mortati, Assistant Professor, Department of Design, Politecnico di Milano
Overview

1. Research question
2. Complex problem and complexity
3. How can policy respond effectively to these problems?
4. Applying design practice in the public sector
5. Connecting complexity theory and design for policy
How can the connection between complexity theory and design for policy impact positively policy innovation and development?
Complex problems and complexity

• Nowadays the most crucial and significant socio-technical problems for society involve a complex system of stakeholders with different interests (Don Norman, 2014).
Complex problems and complexity

• Nowadays the most crucial and significant socio-technical problems for society involve a **complex system of stakeholders** with different interests (Don Norman, 2014).

• The **digital transformation** (and in general the development of the artificial) **increased the interactions** between the elements of sociotechnical systems, **thus increasing the complexity**.
Digital transformation

What we were designed for

What we were facing

Complex problems and complexity

• Nowadays the most crucial and significant socio-technical problems for society involve a complex system of stakeholders with different interests (Don Norman, 2014).

• The digital transformation (and in general the development of the artificial) increased the interactions between the elements of sociotechnical systems, thus increasing the complexity.

• In the last century studies on complex phenomena increased defining what is called complexity theory, which is covered by different disciplines.
How can policy respond effectively to these problems?

• Jesper Christiansen (2012) states ‘In order to respond effectively to a changing context of complexity and uncertainty, governments and other public service organizations need to consider innovating the processes and practices of public policy itself.’

• To innovate socially many governments have started to explore new approaches, methods, and tools including also design (Junginger, 2013; Howlett, 2015; Kimbell, 2017; Junginger, 2018)
Renovation starting from:

• **Procedures**, that are often inappropriate and obsolete following old dynamics of the public sector compared to the scale and speed of change and technological development, frequently the traditional process followed by policymakers is linear and deterministic (Hubert, 2010);

• **Organisational structures and procedures**, that are often inadequate to support the flow of Information and collaboration (i.e. old silos structure) (Froy, F. and S. Giguère 2010);

• **Citizen engagement**, that is often not appropriately applied to the design and development of policy (Holmes 2011).
Applying design practice in the public sector

• Wicked problems and Third and fourth orders of design. (Buchanan, 1992, 2001).

• Norman et al. (2015) have described how design can play an active role in reducing political, social and cultural disruption while building more resilient solutions alongside optimizing resources.

• Bason (2017) has underlined the potential of applying design practice in public sector and administration using three dimensions:
  • Exploring the problem space
  • Generating alternative scenarios
  • Enacting new practices
Design for Policy

• «[…]Design research and design methods can support the efforts of public officials to identify new ways of working and to aid in the implementation of new thinking and doing» (Junginger, 2018).

• «What “designing for policy” seems to be questioning is how the mandate for change is created and sustained, as well as how a better relationship between policy and practice could increase the likelihood of successful state interventions and build public legitimacy. » (Mortati et al. 2018).
Connecting complexity theory and design for policy
Complex theory to support design for policy

• When design start to deal with policy it is implicit that it works with complex system. Therefore, through the lens of the complexity theory, design for policy has tools and the perspectives to understand the complexity.

• On the other hand, not connecting design for policy to the complexity theory make complex system perceived as confused and difficult to understand, therefore complexity would be perceived as a problem.
Design & complexity

• Pizzocaro (2004) notices how design in its practices embraces uncertain contexts for the ability of designers to frame problems mentioning Morin (1977) which referring to designers says “they need to have a method which enables them to design the multiplicity of viewpoints and being able to switch from one to another”.

• Referring to complexity Manzini(2015) states “the traditional boundaries between designer, provider, and user of a solution become increasingly blurred. [...] The emergence of this “enriching complexity” can be considered a value that reflects the true nature of human beings”.

• Design X (Norman et al, 2015).
Complexity and policy

• Ceruti (2007) supports the idea of a complex view in contrast with the (iper)specialization of the modern time. In order to have an understanding of complexity, it is needed a dialogue between areas of knowledge. Furthermore, he states, this dialogue becomes relevant not only in research, but for policymakers which are not equipped with the adequate paradigms and the cultural maps neither to solve complex problems nor to formulate them.

• In a time when policymakers are tasked with developing innovative solutions to increasingly complex policy problems, the need for intelligent design of policies and a better understanding of the policy formulation processes they involve has never been greater. (Howlett et al, 2015)
A shared vocabulary

• The aim of this position paper is to start building a shared vocabulary, by analysing the area of knowledge between Complexity & Design & Policy.

• The research is in an early stage in which it is under analysis what has been produced in the common areas of knowledge between:
  • *Complexity and Design*
  • *Complexity and Policy*
  • *Design and Policy*
Bibliography

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