Prototyping in public policy-making, practices and theories on experimentation in policy.

Diana Pamela Villa Alvarez
PhD candidate in Design – Politecnico di Milano
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Introduction
Introduction

Over the last ten years Design has been contributing on the public sector innovation, having an increasing role in the implementation of public services and policy (Bason, 2014; Clarke & Craft, 2019; Kimbell & Bailey, 2017; Mager, 2016).

Nowadays, the collaboration of design and the public sector is occurring in a variety of forms and the experiences are being shared. Particularly, in the last four years, the topic of prototyping in policy has been gaining attention (Kimbell & Bailey, 2017) and it has been described and exemplified for a wider audience (Appadoo, 2019; Bloomberg Cities, 2019; Holliday, 2019).

In this context, design prototyping encounters already existing practices for analysis and experimentation of policies, being policy pilots and evidence-based policy making the most relevant concepts (see Figure 2).

As this interaction of design and policy approaches is starting to be studied, there are still lessons to learn. Particularly, on how the experimentation methods in policy can complement each other in understanding how it works and what works.

In this respect, it is still unresolved how design prototyping could bring value to current policy piloting and other policy mechanisms, as well as “how small-scale prototyping could relate to large scale policies” (Kimbell & Bailey, 2017, p. 222).
Policy cycle (theory)

Figure 1. Adaptation Policy Cycle Howlett, Ramesh & Perl (2009)
Illustration of the theoretical positioning of the activities of prototyping.
Prototyping in policy cycle (hypothesis)

Figure 1. Adaptation Policy Cycle Howlett, Ramesh & Perl (2009)
Illustrative visualisation of the theoretical positioning of the activities of prototyping.
Experimenting taxonomy

evidence-based policy

policy piloting

experimenting in policy

Prototyping in policy
Figure 2. Terminology of experimentation in policy and authors mapped to elaborate the material for the workshop.
Prototype: any shared physical manifestation externalising an otherwise internal or unavailable vision of a future situation.

Prototyping is the use of prototypes to explore, evaluate or communicate in design.

Blomkvist, 2014
“Pilots are used for evaluating rigorously a policy [Randomised Controlled Trial (RCT), Experimental research] while it is still possible to adjust it and before it has been applied nationally.

Jowell, 2003)
Experiment-ing taxonomy

“

**EBPM** are used for gathering evidence to inform the development and implementation of policy

1) evidence of the *likely effectiveness* [...] 

2) evidence from *evaluations of policies* [...] to continue or how to adjust and improve policies [...] 

*Sanderson, 2002. P.4*
Prototyping positioning (hypothesis)

“How it works?”

Fleming & Rhodes 2018
- Experiential knowledge

Ettelt, Mays, Allen, 2015
- Pilot for learning
- Pilot for demonstration
- Pilot for early implementation
- Pilot for experimentation
  - Randomised Controlled Trial (RCT)

Sanderson, 2002
- Prototype

Kimbell & Baley, 2017
- Prototype

“What works?”

Evidence-based policy making

Evidence-based policy making

Experiential knowledge
The workshop
Workshop instructions

Write a case study (individual) - 10 min - & share it with the team – 20 min -

Map the cases (in teams) - 20 min -

Teams present to the group – 30 min -
Discussion and conclusions (group) - 20 min -
Case study
Piazze Aperte
Piazzre Aperte

Temporary and low cost solutions to explore possibilities of use of the public space in order to:

• Create new pedestrian zones and public spaces
• Incentivate socialization and promote cultural activities
• Connect with bike routes and bike parking areas

Source: Piazzre Aperte public call Comune di Milano
## Case study template

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
</tr>
<tr>
<td>Led by/partners:</td>
</tr>
<tr>
<td>Policy/area/topic:</td>
</tr>
<tr>
<td>Aim:</td>
</tr>
</tbody>
</table>

### Background

**What was the experiment?**

**Why? Purpose of the experimentation:**

**How it was experimented:**

### The experiment What/Why/How?

**Findings, learnings, barriers, success and failures:**

**Contact/details, further information:**
<table>
<thead>
<tr>
<th><strong>Name:</strong></th>
<th>Piazze Aperte (since 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location:</strong></td>
<td>Milan, Italy. Piazze (squares) located in the periphery.</td>
</tr>
<tr>
<td><strong>Led by/partners:</strong></td>
<td>Project developed the municipality of Milan, in partnership with Bloomberg Associates, National Association of City Transportation Official (NACTO) and Global Design Cities, integrating citizens’ proposals.</td>
</tr>
<tr>
<td><strong>Policy/area/topic:</strong></td>
<td>Use of public spaces, (Piazze) squares located in the periphery.</td>
</tr>
<tr>
<td><strong>Aim:</strong></td>
<td>Enhance the public space as a meeting place in the centre of neighbourhoods, expand pedestrian areas and promote sustainable forms of mobility a benefit of the environment and the quality of life in the city.</td>
</tr>
</tbody>
</table>

**What was the experiment?**
An exploration of possibilities of use of public squares.

**Why? Purpose of the experimentation:**
To test temporary solutions before investing time and resources in a definitive structural arrangement, helping to make choices and supporting the decision-making process towards a permanent solution.

**How it was experimented?**
1) Open call for presenting proposals 2) co-production 3) experimentation 4) Evaluation Tools/methods “Tactical Urban Planning”* followed by quantitative research (data & surveys)

**Findings, learnings, barriers, success and failures:**
Survey results: 86% of people interviewed prefer the pedestrian plaza, 72% use more of the space, and an 84% would like the redesigned space to become permanent.

**Contact/details, further information:** globaldesigningcities.org, Comune di Milano

* mode of urban planning based on interventions made in the short term and at low cost, aimed at creating new public spaces.
Mapping
Positioning maps

What type of prototypes/artefacts/ boundary objects were used?

- Single prototype (physical or digital artefact)
- Combination of prototypes (system, service, experience)
- Real version / High fidelity
- Simulated / Low fidelity
What type of prototypes/artefacts/ boundary objects were used?

**Positioning maps**

- Single prototype (physical or digital artefact)
- Combination of prototypes (system, service, experience)
- Real version / High fidelity
- Simulated / Low fidelity

**Piaffe Aperte**
- Real context space
- Low cost elements: street paint, benches, ping pong tables, vases and plants, etc.
Positioning maps

Which actors participated in the experiment?

External/ all real context actors

Micro scale (e.g. neighbourhood) → Small scale (e.g. region)

Internal / core project team
Positioning maps

Which actors participated in the experiment?

**Piazze Aperte**
- Comune di Milano
- Citizens & associations
- Partners for temporary solution

Micro scale (e.g. neighbourhood)  \(\rightarrow\)  Internal / core project team

External/ all real context actors  \(\uparrow\)  Small scale (e.g. region)
Positioning maps

What were the evaluation methods and tools?

Full solution

Qualitative Evaluation

Part of the solution

Quantitative Evaluation
Positioning maps

What were the evaluation methods and tools?

Full solution

Piazz Aperte
- evaluating the number of pedestrians and vehicles, data on accidents, reports from local partners
- carrying out surveys aimed at obtaining feedback from the public, businesses and owners.

Part of the solution
Discussion and conclusions
<table>
<thead>
<tr>
<th>Style of intervention</th>
<th>Large scale</th>
<th>Low level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Laws</td>
<td></td>
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<tr>
<td></td>
<td>Regulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Funding, taxes, tariffs and subsidies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Providing and commissioning services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Procurement, purchasing and buying powers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leading, influencing and informing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stewardship (control, organise or take care)</td>
<td></td>
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</tbody>
</table>

Source: Adaptation from Siodmok (2017), UK Policy Lab
Three levels of design

D3
Reform
Ethos, values, rules and principles

D2
Perform
Roles, relationships, experiences and platforms

D1
Form
Artefacts, details, touchpoints

Policy – The creation of meaning and purpose
Design of context

System – The design of systems and services
Designing context

Form giving – The design of details and touchpoints
Design in context

Adapted from Young, Blair and Siodmok, 2001. Beyond the Bauhaus ICSID

Source: Siodmok (2017), UK Policy Lab
Continuum of experimentation

Source: Quaggiotto, Leurs & Christiansen (2017) Nesta, States of Change
Diana Pamela Villa
@Pamelavillalv_D
dianapamela.villa@polimi.it
References


Other cases

BVG, Mercedes-Benz Vans and Via bring on-demand ridesharing to Berlin

Universal basic income and the Finnish experiment
https://bruegel.org/2019/02/universal-basic-income-and-the-finnish-experiment/
https://medium.com/basic-income/what-is-there-to-learn-from-finlands-basic-income-experiment-did-it-succeed-or-fail-54b8e5051f60

Teaching Kamu to speak_Migri’s chatbot voice experiment Finland
https://medium.com/inland/teaching-kamu-to-speak-89a45a86d60d
http://inlanddesign.fi/work/starting-up-smoothly-a-network-of-chatbots-for-foreign-entrepreneurs-coming-to-finland/

BuddySchool Finland
https://citiesofservice.org/resource/migrant-youth-helsinki/

Increasing urgent referrals for cancer treatment
https://www.bi.team/case-studies/increasing-urgent-referrals-for-cancer-treatment/