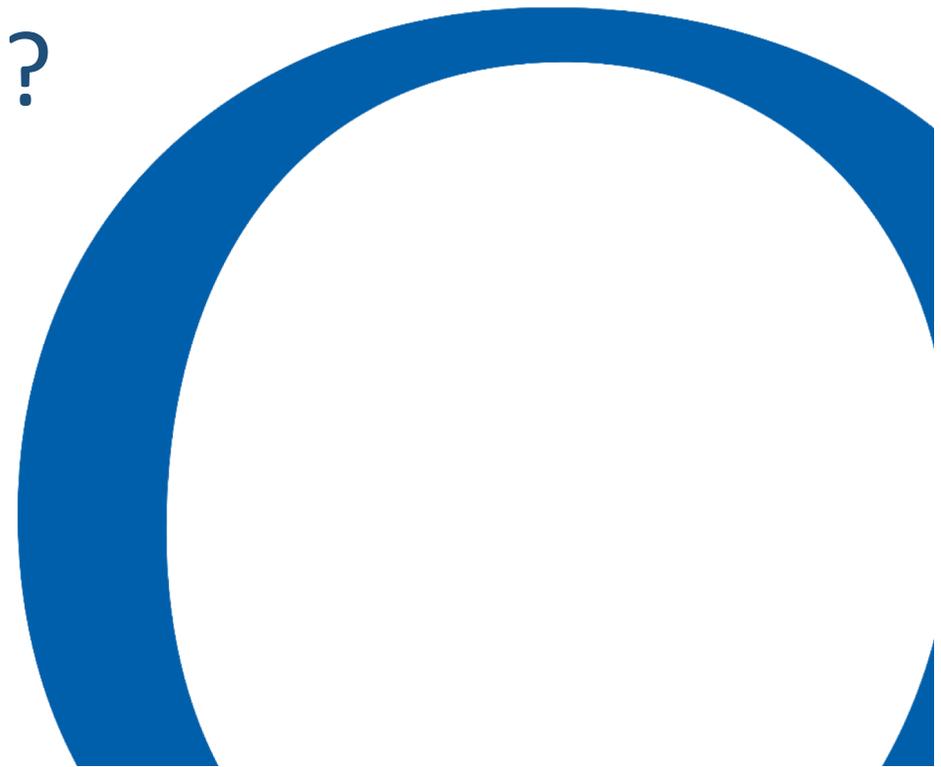


# What does place mean for transformative innovation?

Edurne Magro (with Elvira Uyarra and Kieron  
Flanagan)



## Introduction

---

- There is a rapidly growing interest in how innovation policy can be used to pursue *transformative* change. Innovation policy debates increasingly recognise **societal challenges** as drivers for innovation policy (Schot and Steinmuller, 2018; Mazzucato, 2013; 2018, Weber and Rohracher, 2012).
  - However, literature is rather silent about the role of **regions** in transformative change (Coenen et al, 2015)
- New approaches to industrial policy (e.g. Rodrik, 2004) and smart specialisation advocate more *selective* forms of policy intervention to develop new areas of comparative advantage based on unique place-specific characteristics and assets (McCann and Ortega-Argilés, 2013).
  - However they lack a normative stance in terms of the societal desirability of innovation, the directionality of change and the goal-orientation of innovation systems (Todling and Trippl, 2018; Uyarra et al, 2019).
  - Intervention based on ‘coordination failures’ that entrepreneurs face when exploring new opportunity spaces (Rodrik, 2004; Foray, 2009). More focused on *discovering* rather than *creating* opportunities (Mazzucato, 2018)?

## I) Innovation is spatially sticky

- Systemic and evolutionary approaches acknowledge a tacit dimension of innovation-related knowledge, which is embedded in people and distributed.
- To understand the growth of knowledge it is necessary to pay attention to the social characteristics of knowledge diffusion
- Thus, the growth of knowledge relies on the the availability of combinatorial capabilities
- Knowledge exchange and learning typically involve geographically and cognitively close actors.
- However, the product space (Hidalgo et. al., 2007) conditions development and growth.
- In consequence, innovation in regions is conditioned by existing knowledge capabilities and transformation is more likely to occur by combining related knowledge bases: **related variety** (Boschma &Frenken, 2011; Boschma et al., 2017)

## II) Challenges are contextual

- Most societal problems are fuzzy and ill-defined, and therefore more likely to face strong problems of contestation and legitimacy (Nelson, 1976; Hoppe, 2010).
- Not only are solutions conditioned by geography but challenges and problems are also contextual:

*“Challenges do not present themselves as the same for every region or nation, as underlying problems affect places in different ways and to different extents. Despite of labels of ‘grand’ and ‘global’, the challenges remain contextual” (Wanzenböck and Frenken, 2018)*

- Global solutions not supported by efforts at other scales are not guaranteed to solve problems of allocation of common resources (Ostrom, 2012)
- Societal challenges require fundamental societal transformations but breakthroughs are typically a result of ‘big jumps’ in combining knowledge bases: **unrelated variety**. These combinations are more likely to happen when policy facilitates not only specialisation but also cross-specialisation of distant knowledge bases (Jenssen & Frenken, 2019)

## III) Implementation is local

- Effective policies require not only adaptive policy-makers but adaptive implementers (Ansell, et al.2017; Flanagan and Uyarra, 2016)
- Implementers 'on the ground' play a key role since they “have important skills and resources and possess a practical knowledge that can help policymakers and executive managers to better understand the problem and the context of the solution” (Ansell et al., 2017)
- The institutional setting for implementation therefore conditions the impact of policies (Rodrick, 2007)
- Institutions are embedded in places

# Regional policy, challenges and transformative innovation

Depending on the nature of the problem-solution space in each place the possibilities for regional policy will differ

	Divergent views on solutions	Convergent views on solutions
Divergent views on the problem	<p><b>Hybrid strategy</b></p> <p>Promote experimentation &amp; unrelated variety through cross-specialisation strategies (societal led)</p> <p>Example: Clean growth</p>	<p><b>Solution led-strategy</b></p> <p>Promote market creation and legitimation of solution. Promote unrelated variety through cross-specialisation based on technology. Demand side policies</p> <p>Example: circular economy for manufacturing/ civil UAVs for sustainability</p>
Convergent views on the problem	<p><b>Problem-led strategy</b></p> <p>Promote discovery &amp; related variety</p> <p>Smart specialisation strategies</p> <p>Example: IT application for ageing in peripheral areas</p>	<p><b>Diffusion strategy</b></p> <p>Old industrial policies</p> <p>Diffusion of innovation</p> <p>Region as implementers</p> <p>Example: Wind energy</p>

Source: Own elaboration based on Wanzenböck et al. (2019) , Uyarra et al. (2019), Janssen & Frenken (2019)

## Role of transformative innovation policies in regional transformation

- There is a regional policy concern about regional competitive advantage and structural change
- Regions could contribute to transformative innovation policies but these will also have an effect on regional trajectories and development (as defined by Isaksen, 2015)
- Unrelated diversification strategies are more likely to lead to regional path creation and contribute to transformative innovation, but are riskier.
- Related diversification is more likely to contribute to regional path renewal and may have less impact on addressing societal challenges
- Non-directional regional policy will lead to path extension - but implementation of policies from other levels could lead to regional path creation and/or renewal through regulations and standards

## Final reflections

---

- We need a better understanding of the scope of regions and regional policy to address societal challenges, in a multi-level context (eg mission-oriented innovation policy and S3 in Europe)
- Depending on the degree of wickedness of the problem and the solution the scope for regional intervention will differ
- Importance to adapt coordination and multi-level mechanisms to the different scenarios
- Regions seeking to promote transformative innovation need to consider not just either unrelated or related diversification but a combination of both in different stages and depending on the regional institutional context.



BASQUE INSTITUTE  
OF COMPETITIVENESS  
DEUSTO FOUNDATION



@edurnemagro



edurne.magro@orquestra.deusto.es



@orquestra



Orkestra-Basque Institute of Competitiveness



Orkestra IVC

[www.orquestra.deusto.es](http://www.orquestra.deusto.es)

© Instituto Vasco de Competitividad – Fundación Deusto

A large, thick blue arc that curves from the bottom left towards the top right, framing the "Thank you!" text.

Thank you!