

# T13P06 / Innovation Districts as complex, multi-level policy spaces: the governance and implementation of a fuzzy concept

**Topic :** T13 / SCIENCE, INTERNET AND TECHNOLOGY POLICY

**Chair :** Kieron Flanagan (University of Manchester)

**Second Chair :** Elvira Uyarra (University of Manchester)

**Third Chair :** Alina Kadyrova (University of Manchester)

**Fourth Chair :** Debapriya Chakrabarti (University of Manchester)

## GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

Place-based innovation strategies are taking centre stage in urban policy and governance, and 'Innovation Districts' and similar initiatives are an increasingly popular strategic instrument for promoting the economic revitalisation of 'left-behind' places. Such initiatives represent a shift in spatiality and terminology: earlier 'science park' and 'business park' type campus developments tended to be more exurban or suburban, but the Innovation Districts (ID) concept isare typically embedded within the urban, sometimes around university campuses or conceived as means to complement inner-city redevelopment strategies.

These IDs are a new kind of policy space (Uyarra & Flanagan, 2010) where the interests and resources of science and innovation policy, business development and entrepreneurship policy, urban development policy and planning, amongst other domains of public policy, come collide together at the neighbourhood level. However IDs remain a fuzzy concept (Markusen, 1999) and there has been limited research on ID-type initiatives (Kayanan, 2022), and very few studies of the governance questions posed by them.

We can trace the origin of the planned urban ID to the Barcelona@22 initiative (see Morisson, 2020), although university 'science cities' and education precincts have a longer history. The Barcelona project was itself influenced by the long-term development of the Kendall Square area of Boston, Massachusetts, often seen as the exemplar of an urban innovation district anchored by a world class research university (see e.g. Ruder, 2022). The concept has since been popularised as an urban regeneration and innovation policy tool by the Brookings Institution (Katz and Wagner, 2014), and has gone on to influence initiatives in cities in the US, Canada, Netherlands, UK, Germany, Australia and elsewhere.

ID proponents tends to focus on high-tech entrepreneurship (in a mixed-use, 'creative class' type context) as an engine of urban revitalisation and of innovation (Kayanan, 2022), but IDs risk becoming gentrified urban enclaves that heighten social and economic inequalities (Morrison & Bevilacqua, 2019). The ID concept, even where universities are involved, may also neglect the role of students, and student creativity and entrepreneurship, which may be considerable (Breznitz et al, 2022). And at the same time other scholars have argued for a broader concept of 'urban laboratories' for societal change (see e.g. Evans and Karvonen, 2014).

We need a more nuanced understanding of how and for whom IDs are beneficial (Kadyrova et al., 2022), about the spatial and relational dimensions of these initiatives and their policy and governance implications, and about the potential for knowledge exchange and engagements between communities, government, and businesses to enhance inclusivity (Pancholi et al., 2020; Esmailpoorarabi et al., 2020).

This panel aims to unpack the ambitions and implications of Innovation Districts in transforming urban spaces and bringing about addressing broader societal changes, with a particular focus on governance, inclusion and sustainability implications. We are also particularly interested in the roles universities play as powerful actors in the governance of these initiatives, whether as land or property owners in their own right, as anchor institutions, or otherwise as boosters of the ID idea. How can IDs be the drivers of collaborative partnerships and community-led decision making within urban creative and knowledge economies? What would a successful inclusive ID look like, and how would we measure this success? Who benefits, and how?

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## CALL FOR PAPERS

This onsite panel seeks contributions on the broad theme of Innovation Districts as a policy, planning and development construct, and IDs as spaces where policies and goals from many areas of public policy and multiple levels of governance may collide. We welcome contributions on - but not limited to - the following themes:

- The multi-level, multi-actor governance of IDs
- IDs as spaces where policies collide (policy mix complexity)
- IDs as physical, relational and conceptual spaces and brands
- The roles of universities as actors in ID initiatives
- Anchor institutions and IDs
- The role of students in IDs
- Policy transfer/policy mobility of the ID concept
- Case studies on university-led Innovation Districts/IDs, including the impacts of the pandemic on ID initiatives
- Measurement and evaluation approaches for ID initiatives
- Potential of, and barriers to, ID initiatives to provide social, cultural, and economic benefits for communities
- Good practices in Innovation District ID policy to address challenges of inclusivity, sustainability and/or social responsibility.
- Wider policy implications of ID initiatives
- Relationship of IDs to contemporary concepts such as ‘urban laboratories’ and ‘living labs’ and to older concepts such as science parks.

We invite submissions for onsite or online presentations from all fields and traditions of policy studies, urban planning, innovation studies and beyond. We welcome case studies and findings which reflect on local specificities from different countries as well as broader theoretical and conceptual underpinnings drawing on global implications, and recommendations. We hope to build a cross-disciplinary network within which to continue the discussion beyond this session.

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## Session 1 INNOVATION DISTRICTS AS COMPLEX, MULTI-LEVEL POLICY SPACES: THE GOVERNANCE AND IMPLEMENTATION OF A FUZZY CONCEPT

Thursday, June 29th 10:20 to 12:20 (JOR730)

### Discussants

Elvira Uyarra (university of manchester)

Kieron Flanagan (University of Manchester)

### Changing vocabularies in university-led spaces of innovation – a systematic review

Debapriya Chakrabarti (University of Manchester)

Alina Kadyrova (University of Manchester)

Elvira Uyarra (university of manchester)

Kieron Flanagan (University of Manchester)

The role of universities in urban development have been studied over many years (Breznitz and Feldman, 2010; Smith and Bagchi-Sen, 2012), however, in contemporary times there have been renewed calls for universities, also known as the 'third mission', to take more proactive economic and civic roles in their immediate urban realms (Addie, 2017). This shift in the perceived role of the universities is particularly evident through the commissioning of the civic university commission aligning with the place-based regeneration and development policies by the UK government (Goddard and Vallance, 2012).

Closely related to this agenda, there is growing evidence of universities playing a leading role in urban experimentation spaces and strategies aimed at societal transitions. Examples include social and inclusive innovation hubs, urban living labs, urban transition labs, urban knowledge arenas and similar spaces, which are particularly common across Europe and North America (Marvin and Silver, 2016). sharing a set of place-based priorities, various approaches, primarily experimental are collaborative projects with stakeholders such as citizens, community organisations, research centres, hospitals, local and national government agencies (Davidson et al., 2023).

However, despite having shared motivation and aspirations, these two strands of research and policy literature have not been synergised and synthesised to analyse the growing role of universities as anchors in such regenerative and developmental mechanisms.

Using a systematic literature review method we analyse how university-led urban innovation hubs such as science parks, innovation districts and other socio-economic developmental mechanisms have evolved through time. Drawing on university-led urban regeneration literature, we unpack the contemporary university's responsibility towards civic engagement and societal change, considering the increasingly political and/or politicised roles urban universities play to impact wider urban development agendas.

This will be achieved through interlinked objectives:

1. To trace the evolving terminologies and approaches in policy and academic literature through time and over approximately last three decades of university-led urban regeneration models.
2. To consolidate the outcomes of the systematic mapping review to find shared synergies in urban

experimentation and innovation agenda with the potential to contribute to university-led sustainable and equitable urban transition policies.

This work discusses two emerging and related strands of academic and policy literature and possible overlaps between them. Firstly, considering the first generation of urban living labs literature as a starting point, we draw on urban experimentation as steered by universities. Secondly, this paper draws on the university-led place-based innovation strategies highlighted in policy literature as the increasingly popular strategic instrument for promoting the economic revitalisation of 'left-behind' places, highlighted in the civic universities initiative.

This paper uses a systematic review of mapping and contextualising academic and policy literature and a bibliometric analysis method to draw on publications over the last thirty years.

The research will open questions and bridge gaps between the perception of tangible impacts associated with urban experimentation projects and the values and aspirations associated with the civic universities model. We anticipate that this paper will build towards a systematic understanding of the changing role of universities in urban settings and the spatial and material implications of university-led urban development policy mechanisms over time.

## **The emergence and evolution of a volumetric innovation districts in Taipei City**

Cheng-Yi Lin

Urban innovation districts are crucial spatial-organizational forms of attracting investment, decision-making, entrepreneurship, and clustering of innovative activities. However, while vertical and volumetric urbanization stimulates high-rise live-work environments for containing emerging industries, the volumetric innovation districts become flourished and require addressing institutional challenges in order to maintain local evolutionary dynamic. Drawing on a qualitative analysis on Taipei City's Nan-Gang District, this paper explores the volumetric growth, evolution, and governance of a volumetric innovation district (VID) in the context of a 'not-so-global' city. The case, Nan-Gang District, as a former industrial district now transformed into a volumetric innovation district (VID) through attracting the clustering of knowledge-intensive industries and deploying various infrastructures. This development outcome also raises governance tensions. Drawing on volumetric urbanism and institutional work literature, this paper contributing to addressing what is the place-specific context, particularities, and challenges that are shaping the VID, and examining how the roles of central and local government and developers in maintaining or stimulating the district's growth through a multi-actor ad multi-scalar approach. Besides, the paper also discusses governance tensions and development implications of volumetric innovation districts.

## **(Virtual) Science and Technology Parks as evolving policy spaces: challenges and opportunities when embracing the Innovation District model**

Jesus Valdaliso (University of the Basque Country UPV/EHU, Spain)

Innovation districts (IDs) have thrived worldwide since the beginning of the 21st century, becoming, alongside the concept of "entrepreneurial ecosystem" another policy tool blockbuster (Brown & Mawson, 2019; Kayanan, 2022). Like science and technology parks (STPs), IDs rely too on the benefits of agglomeration economies but contrary to the STP model, they are located in urban spaces. As a result of this urban location, IDs roles, aims and governance system differ from those of STPs, particularly regarding their use as a policy tool to promote strategies of urban renewal and revitalization, their embeddedness in urban life and communities, and the incorporation of new key stakeholders such as city councils.

Although IDs seem to be conceived as an urban alternative to the SPT exurban or suburban model and, therefore, have been created, mostly as entirely new initiatives, there are some cases in which STPs have embraced themselves these new urban policy spaces and other areas of innovation (Nikina & Piqué, 2016). This paper aims to offer a reflection on the challenges and opportunities STPs are currently facing when attempting to promote and develop an innovation district within the innovation ecosystem they belong to. In particular, the paper deals with three issues: the existence of a potential conflict of interests between the goals of the former STP and those of the new ID, the change in the business model of the former STP to embrace the ID model and the implications that entails, and the governance challenges brought about by the entry of new stakeholders.

Our paper builds on the case study of the Basque Country Technology Parks Network and its role in the promotion of an ID in the city of Bilbao. The Basque Country pioneered in mid 1980s' the creation of Science and Technology Parks in Spain, a policy tool to foster regional development through the industrial

regeneration and the promotion of R+D+i. From then, the Basque STP model has undergone, in co-evolution with the science, technology and innovation policy applied by the regional government, a remarkable transformation: first becoming a science park too with the incorporation of the university, later on, adopting a multi-park and multi-campus network layout in different ex-urban or suburban spaces of the territory (Valdaliso & Catalán, 2020), and now, being one of the key agents of the innovation district that is emerging in Bilbao. STPs are living concepts in permanent evolution (Lund, 2019) or evolving policy spaces (Uyarra & Flanagan, 2010), subjected to path dependence, learning and co-evolution with other relevant agents, hence the need of adopting an historical perspective to compare the current challenges and opportunities they face with those of earlier periods. We analyze in this paper, for each phase, the mission, goals, and functions of STPs, the regional innovation policy paradigm and its influence on the typology of agents that STPs host, and the main governance issues STPs had to face, between the key stakeholders and within their management structures.

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## **Manifestations of Urban Innovation District to reality: Case of Amravati, India**

Vibhore Bakshi (School of Planning and Architecture)

The concept of "Innovation Districts," is regarded as emerging new urban paradigm; inspired from various theories of "innovative urban restructuring process". Many researchers have shared their prime understanding of Innovation district as congregation of prominent IT firms, and networked collaborate with start-ups, incubators, and accelerators (Lawrence, S., Hogan, M. Q., & Brown, E, 2019) . Many European cities have effectively implemented the process of Innovation Districts (Battaglia, A., & Tremblay, D.G. 2011). The pragmatics of Urban Innovation District focus on revival of poor downtown neighborhoods, creating employment, and reflects on the transformation of the economy from traditional industrial-based manufacturing approach toward technology-driven services (Read, D. C., & Tech, V. 2016). To embark on, the existing situation in India pertaining to the concept; the materialization of concept on ground in not evident in the formation of Indian tech based industries in Indian tech urban areas. Urban Innovation District promotes more vibrant and collaborative work culture; creation of dynamic public spaces, offers better education prospects; and foster better economic pursuits (Belussi, F., & Sedita, S. R. 2019). There is emerging need of " Rethinking the applicability of the Urban Innovation District in Indian context". The paper tries to undertake the approach of analyzing the suitability of the concept to its practice depicting Indian scenario; therefore Amravati, the capital of Andhra Pradesh, one of the Indian states, is assessed from the lens of inculcating the paradigms of Innovation Districts and its applicability. The formation of Amravati, depicts the geo political scenario; however the vision of Andhra Pradesh government reflects on the Amravati as one of those cities that will play a crucial role in knowledge dissemination. The research paper tries to assess the conceptualization of Urban Innovation District; and tries to identify the implications of the "one of the newly established green field capitals of India- Amravati". The paper elaborates on the four research stages to establish, the emerging need of deploying the concept of "Innovation District". In first research stage; there is an attempt to explore the need of ' Innovation District', through literature primarily based on Innovation ecosystem, its key actors and organizations (Kim, M., & Ben-Joseph, E. 2013). The second stage elaborates on comparative assessment of different case studies across the globe. Furthermore, emphasizes is given on innovation indices developed at a global and Indian scale. Third stage of paper embarks on; the process of identifying the need of selecting Amravati as research area and tries to contextualize from the lens of identified parameters emerged from literature. Moreover, the research reflects on analyzing the current innovation ecosystem of Amravati predominantly taking in to consideration: Infrastructure and Business environment. The fourth stage of paper depicts the attention towards policy and regulatory based interventions, majorly through spatial planning and placemaking efforts that complements the manifestation of Innovation districts to reality (Hansasooksin, S. T., & Tontisirin, N. 2021).