

MAIN SECTION

Collaboration at New Places of Production: a European View on Procedural Policy Making for Maker Spaces

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ABSTRACT

The paper sheds light on a university-led cross-innovation approach where the focus is on so-called "Makers" as a distinctive local group. We introduce the format of a policy clinic—comparable to policy innovation labs—as a method to bring different stakeholders from various local contexts under a given thematic topic temporarily together to learn how to initiate new policies for maker spaces. The key thematic interest is to focus on city challenges and approaching so-called "wicked problems." This requires wide stakeholder engagement by others not present at the event of the policy clinic. The clinic is a temporary trans-local event but is framed by wider participation involvement that starts earlier and is accompanied by a number of approaches before the Policy Clinic event takes place.

KEYWORDS

Policy Clinic; Translocal; Policy Making; Collaboration.

PEER REVIEWED https://doi.org/10.6092/issn.2612-0496/9556 ISSN 2612-0496 Copyright © 2019 Bastian Lange, Steve Harding, Tom Cahill-Jones



1. Introduction

The focus on the phenomenon of self-organized local spaces of production such as Fab Labs, maker spaces, coworking spaces, alternative worklabs, Repair Cafés and many others have raised the interest of many local administrations on how to support, to frame, and to upscale these spaces.¹ Our paper contributes to the debate on self-organized policies as well as local-regional support mechanisms by constructing a spatial view on the governance and steering modes between public and private bodies that goes beyond the geographical fix.²

While many scholars have discussed these new local spaces from the point of view of geographical and social places, the following perspective will be introduced: how are interregional communities of practice from various cities in Europe aiming at developing a procedural view on building up and supporting maker spaces in local spaces? Here, Budge argues that "existing research points to tensions and absences in relation to policy and planning for creative precincts, including makerspaces."

Our research interest as well as our theoretical starting point takes this as a key reference argument to take a closer look at the role of policy making for maker spaces in the urban context. Thereby our view on policy making is grounded on a perspective of procedural learning and knowledge. From this point of view, mixed expert, policy and maker communities co-create the social context in order to activate new economic development. As a process of co-creation, our argument is built on a spatially sensitive practice-based theory approach as well as on the role of interaction among diverse user groups from various disciplines and institutions. Our aim is to understand policy making for maker spaces from an interaction and socio-spatial perspective and from a point of view of policy making co-creation.

In this way, the role of place and scale should be brought forward to enrich the analytical benefits from an urban and economic viewpoint. In doing so, a growing number of open maker spaces have recently

^{1.} Jacki Schirmer, "Scaling up: Assessing Social Impacts at the Macro-Scale," *Environmental Impact Assessment Review* 31, no. 3 (April 1, 2011): 382–91; Kylie Budge, "Making in the City: Disjunctures between Public Discourse and Urban Policy," *Australian Geographer* 50, no. 2 (2018): 185–99; Kylie Budge, "The Ecosystem of a Makerspace: Human, Material and Place-Based Interrelationships," *Journal of Design, Business & Society* 5, no. 1 (March 1, 2019): 77–94.

^{2.} Our paper contributes to the debate on self-organized policies as well as local-regional support mechanisms by constructing a spatial view on the governance and steering modes between public and private bodies that expands policy making in geographically fixed boundaries. We emphasize situational, flexible and adaptive policy-making processes that expand policy making beyond geographically (e.g. regionally or locally) fixed boundaries. See James R. Faulconbridge, "Stretching Tacit Knowledge beyond a Local Fix? Global Spaces of Learning in Advertising Professional Service Firms," Journal of Economic Geography 6, no. 4 (August 1, 2006): 517–540; Ben Williamson, "Governing Methods: Policy Innovation Labs, Design and Data Science in the Digital Governance of Education," Journal of Educational Administration and History 47, no. 3 (2015): 251–271.

^{3.} Budge, "The Ecosystem of a Makerspace," 82. See also Budge, "Making in the City."

emerged as a research subject.⁴ Those attempts are either aiming at identifying the structuring role of these "social innovation places"⁵ or better understanding self-organized transition processes on the way to a sustainable society.⁶

Policy making in these urban and regional situations has been criticised for some time for its formalized directive top-down policy making processes. As a consequence, to increasing demands on urban and regional question of justice, social integration, economic innovation and sustainability, policy instruments need to be responsive to support spatial, innovation and skills strategies in timely and inclusive ways.

With the help of spatial-theory enriched policy concepts, a procedural and reflective process will be proposed showing how maker spaces could be placed, orchestrated, and supported. We ground our argument on a European-funded learning project, called Urban Manufacturing (2016-2021) that seeks to find practical and procedural tools and instruments for policies for improving maker spaces. We reflect on various phases of learning, of peer-reviewing, and of creative design tools to stimulate joint and shared knowledge creation among heterogeneous participants from creative disciplines as well as from public administration, academic institutions and the creative industries.

In the following two sections, new approaches to policy planning will be proposed to meet the needs of heterogeneous social, cultural and economic interests. Section three introduces several key factors driving new modes of working in local and urban contexts that are based on the construction of a temporary translocal creative space aiming at finding new steering measures for maker spaces. This will be presented in sections 4 and 5, contextualized and concluded in section 6 and 7.

^{4.} Adrian Smith, Mariano Fressoli, and Hernán Thomas, "Grassroots Innovation Movements: Challenges and Contributions," *Journal of Cleaner Production*, Special Volume: Sustainable Production, Consumption and Livelihoods: Global and Regional Research Perspectives, 63 (January 15, 2014): 114–24; James Evans and Andrew Karvonen, "Give Me a Laboratory and I Will Lower Your Carbon Footprint!'—Urban Laboratories and the Governance of Low-Carbon Futures," *International Journal of Urban and Regional Research* 38, no. 2 (2014): 413–430; Andrew Karvonen and Bas van Heur, "Urban Laboratories: Experiments in Reworking Cities," *International Journal of Urban and Regional Research* 38, no. 2 (2014): 379–92.

^{5.} Gavin Bridge et al., "Geographies of Energy Transition: Space, Place and the Low-Carbon Economy," *Energy Policy* 53 (February 1, 2013): 331–40,; Frank Nevens et al., "Urban Transition Labs: Co-Creating Transformative Action for Sustainable Cities," *Journal of Cleaner Production*, Special Issue: Advancing sustainable urban transformation, 50 (July 1, 2013): 111–22.

^{6.} Uwe Schneidewind and Karoline Augenstein. "Three Schools of Transformation Thinking: The Impact of Ideas, Institutions, and Technological Innovation on Transformation Processes," *GAIA–Ecological Perspectives for Science and Society*, 25, no. 2 (2016): 88-93.

^{7.} Patsy Healey et al., eds., Managing Cities: The New Urban Context (Chichester; New York: Wiley, 1995).

^{8.} Hubert Heinelt and Daniel Kübler, *Metropolitan Governance in the 21st Century: Capacity, Democracy and the Dynamics of Place* (London and New York: Routledge, 2004).

2. Conceptual starting points

2.1 Local knowledge creation in global competitive contexts

The first starting point is to ask how democratic, scientific and educational institutions develop new collaborative learning and transfer fields against the background of global and regional competitive situations in order to respond to changing social and entrepreneurial expectations as well as to knowledge-specific expectations. Local administrations, universities and educational institutions are faced with the challenge of, on the one hand, maintaining a plurality of disciplines and, on the other hand, meeting increasing performance expectations that are critical to decision-making at comparable European and global assessment levels. 10

Following this line of thinking, an explanation of how universities and higher education institutions on the one hand demonstrate practices and formats for the achievement of the so-called Third Mission is needed. In addition to internal entrepreneurship processes, the "open university" path opens up a broad field in which various transfer workshops and laboratories seek to play a mediating role between learning and seminars related to credit points on the one hand, and application-oriented, practical labour market experiences on the other.¹¹

On the other hand, the goal of universities is to achieve relevant transdisciplinary answers to regional economic or regional cultural challenges with small and medium enterprises (SMEs), civil society and intermediary actors in a collaborative knowledge production process. The design methods at the methodological-didactic level can be identified as collaborative co-creation formats.¹² Their concrete negotiation and workspaces are addressed here as "third places"¹³ within the policy and knowledge agenda of the so-called "third mission of universities."¹⁴

^{9.} Philip Cooke and Dafna Schwartz, Creative Regions: Technology, Culture and Knowledge Entrepreneurship (London and New York: Routledge, 2008); Ed Malecki and Gert-Jan Hospers, "Knowledge and the Competitiveness of Places," in *The Learning Region*, ed. Roel Rutten and Frans Boekema (Cheltenham: Edward Elgar Publishing, 2007), 143–159.

^{10.} Paul Vallance, "Universities, Public Research, and Evolutionary Economic Geography," *Economic Geography* 92, no. 4 (October 1, 2016): 355–377; Michael Harloe and Beth Perry, "Universities, Localities and Regional Development: The Emergence of the 'Mode 2' University?," *International Journal of Urban and Regional Research* 28, no. 1 (2004): 212–23.

^{11.} Evans and Karvonen, "Give Me a Laboratory and I Will Lower Your Carbon Footprint!"—Urban Laboratories and the Governance of Low-Carbon Futures"; V. Kostakis and M. Bauwens, Network Society and Future Scenarios for a Collaborative Economy (Palgrave Macmillan UK, 2014); Nevens et al., "Urban Transition Labs."

^{12.} Katja Fleischmann, Sabine Hielscher, and Timothy Merritt, "Making Things in Fab Labs: A Case Study on Sustainability and Co-Creation," *Digital Creativity* 27, no. 2 (April 2, 2016): 113–31.

^{13.} Eugenia Vathakou, "Citizens' Solidarity Initiatives in Greece during the Financial Crisis," in *Austerity and the Third Sector in Greece*, ed. Jennifer Clarke et al. (London and New York: Routledge, 2016); Anna Seravalli, "While Waiting for the Third Industrial Revolution: Attempts at Commoning Production," in *Making Futures: Marginal Notes on Innovation, Design, and Democracy*, ed. Pelle Ehn, Elisabeth N. Nilsson, and Richard Topgaard (Cambridge, MA: The MIT Press, 2014), 99–129.

^{14.} Edward W. Soja, Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places (Hoboken, NJ: Wiley, 1996).

2.2 A spatial view on fulfilling the "Third Mission"

For universities, the Third Mission has added a third academic mission to the two missions of teaching and research. This means, according to Roessler et al., that already today academic researchers are much more involved in areas that are not exclusively to be attributed to teaching or research and are perceived as public. According to them, the task is to link universities with civil society and companies.¹⁵

Third Mission includes, for example, cooperation projects with partners outside the higher education landscape, networks and regional working groups, e.g. with municipalities, or programmes in the field of continuing education. The term gives a name to activities, tasks and achievements that universities have been practicing for many years in addition to teaching and research. Since the late 1980s, there has been a discussion about the third mission of universities. The theoretical approaches are based on the more economic concepts of the "entrepreneurial university" and Mode-2.

In concrete terms, this means that, in addition to the traditional tasks in research and teaching, higher education institutions also carry out activities that can be of benefit to their respective regions. These can be training courses, scientific support for regional processes and knowledge transfer in a variety of forms. This activity also includes cooperative research projects with regional companies. Third Mission is thus a strategic profile-building task. In practical terms, this means, for example, initiating cooperation that achieves transfer effects between companies, students and universities.

^{15.} Isabel Roessler, Sindy Duong, and Cort-Denis Hachmeister, Welche Missionen Haben Hochschulen?: Third Mission Als Leistung Der Fachhochschulen Für Die Und Mit Der Gesellschaft (Gütersloh: Centrum für Hochschulentwicklung GmbH, 2015), accessed January 20, 2020, https://www.che.de/wp-content/uploads/upload/CHE_AP_182_Third_Mission_an_Fachhochschulen.pdf.

^{16.} Markus Bretschneider and Ekkehardt Nuissl, "Lernende Region' Aus Sicht Der Erwachsenenbildung," in *Lernende Region-—Mythos Oder Lebendige Praxis*, ed. Ulf Matthiesen and Gerhard Reutter (Bielefeld: Bertelsmann Verlag, 2003), 35–55.

^{17.} For the concept of "entrepreneurial university" see Harloe and Perry, "Universities, Localities and Regional Development"; Henry Etzkowitz and Loet Leydesdorff, "The Dynamics of Innovation: From National Systems and 'Mode 2' to a Triple Helix of University-Industry-Government Relations," Research Policy 29, no. 2 (February 1, 2000): 109–23. For the concept of Mode-2 see Gerd Bender, "mode 2— Wissenserzeugung in globalen Netzwerken?," in Stadtregion und Wissen: Analysen und Plädoyers für eine wissensbasierte Stadtpolitik, ed. Ulf Matthiesen (Wiesbaden: VS Verlag für Sozialwissenschaften, 2004), 149-157; Helga Nowotny, Peter B. Scott, and Michael T. Gibbons, Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty (Hoboken, NJ: John Wiley and Sons, 2001); Michael Gibbons, The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies (London & Thousand Oaks, CA: SAGE Publications Ltd, 1994).

As yet not a subject of much discussion, universities have started to develop internal innovation spaces¹⁸ or so-called Third Places.¹⁹ The term Third Places is an answer to what universities and colleges want to achieve in concrete terms: in addition to teaching and research on the one hand, and practice and application on the other, they organise transfer to business and society and to offer the necessary places, infrastructures and methods. Third places can be transfer workshops that bring two spheres together—such as SMEs and students—productive exchanges with new offers of interaction and solution-oriented methods.²⁰

This means that the Third Mission is geared to growing new regional potential, or that it creates new institutions in order to help focus public expectations and demands for societal change. Collaboration, as a distinct asset of knowledge competence and as the key to a successful transition design, is at the centre of this approach.

2.3 Policy making in new translocal and temporary social fields of action

The growing number of bottom-up spaces recently has challenged policy makers on how to best support these initiatives. In addition to state-led new governance models and participation opportunities, a new generation of city entrepreneurs seeks to help define their work and living environments to meet their needs and aspirations in a collaborative and common-based way.²¹ Cities have long been places engaged with their diaspora communities for bringing fresh cultural perspectives and issues of inclusivity to the fore in terms of public policy.²² As a structural consequence and due to the reverse effects of the internet, paradoxically, local and regional production is now more possible, and this is fuelled by a need for authenticity in terms of product, service, and practical making.²³ This brings local public administration to the centre of attention.

This socio-political and socio-economic re-positioning is nevertheless difficult to achieve for public administration in cities. This is mainly because asymmetrical speeds of different urban and regional developments add to the often-mentioned slowness of the response by policy makers. Although there is a recognition of the constraints of the cyclical nature of policy making which is often at odds with the needs on the ground:

^{18.} Umut Toker and Denis O. Gray, "Innovation Spaces: Workspace Planning and Innovation in U.S. University Research Centers," *Research Policy* 37, no. 2 (March 1, 2008): 309–29.

^{19.} Ramon Oldenburg and Dennis Brissett, "The Third Place," *Qualitative Sociology* 5, no. 4 (December 1, 1982): 265–84.

^{20.} Bastian Lange, "Kreative Interventionen. Innovationswerkstätten als beispielhafte Impulsgeber für Kollaboration in der Peripherie," in *Kreative Pioniere in ländlichen Räumen: Innovation & Transformation zwischen Stadt & Land*, ed. Katja Wolter, Daniel Schiller, and Corinna Hesse (Stuttgart: Steinbeis-Edition, 2018), 440–464.

^{21.} Smith, Fressoli, and Thomas, "Grassroots Innovation Movements."

^{22.} Karvonen and Heur, "Urban Laboratories."

^{23.} Richard Sennett, The Craftsman (London: Allen Lane, 2008)

For example, the development of policies in the European Structural and Investment Funds (ESIF) context is in a seven-year cycle. In addition to that, there are attempts to analyse first-hand approaches how to respond to these developments from the perspective of policy making. Based on an increased number of urban and regional successful innovative social collectives²⁴ there is an increasing curiosity in respect of speeding up collaborative decision-making by policy makers to create collective methods for site-specific common purposes. There is also a tendency for policy makers to plan in silos and for the sectors themselves to work in isolation from each other which exacerbates the problem.

The issue to be addressed is: where are new policies invented and negotiated out of the administrative "silos" and routinized habits and networks?

It is of interest how meetups are a category of temporary social events and can be understood as an expression of spatially relevant patterns of action among various geographically distributed networks and stakeholders. Short-term events aggregate resources and allow specific actions outside of the formal routines and habits. Out of such events, the creation of formal or at least temporary institutions can be coordinated and communicated afterwards.

Such approaches are often based on the concept of locally-limited and routed "creative," social and cultural capital—as e.g. design thinking methods—of mobilizing existing and new demands. In temporary notions of proximity, space is understood as a form of physical, cultural or institutional proximity between local and translocal market participants that come together for specific purposes (in this case the forming of policies for maker spaces).

Often, paradoxically, this local proximity can itself be regarded as a fixed unit. Recently, against this static perception of spatial proximity that addresses the sequences of practices and processes in a given space has been changed to the formation of dynamic, temporary and relational concepts in the organization of local/translocal networks, exchanges and institutions.²⁵

^{24.} Frank Othengrafen, Luis del Romero Renau, and Ifigeneia Kokkali, "A New Landscape of Urban Social Movements: Reflections on Urban Unrest in Southern European Cities FRANK OTHENGRAFEN, LUÍS DEL ROMERO RENAU, AND," in *Cities in Crisis*, ed. Jörg Knieling and Frank Othengrafen (London and New York: Routledge, 2015), 169–184.

^{25.} Oliver Ibert, Johanna Hautala, and Jussi S. Jauhiainen, "From Cluster to Process: New Economic Geographic Perspectives on Practices of Knowledge Creation," *Geoforum* 65 (October 1, 2015): 323–327; Oliver Ibert, "Relational Distance: Sociocultural and Time–Spatial Tensions in Innovation Practices:," *Environment and Planning* A, 2010.

3 New spaces for knowledge creation and key recent development trends – a first summary

The following aspects mark some first conceptual findings from where to start our view on new spaces and policy making for maker spaces.

3.1 New collaborative fields for policy making

Exploring these conceptual aspects together, our research approach acknowledges the changed relations between science and society observed in recent years through new forms of knowledge production and collaborative exchange. This is expressed in new collaborative concepts such as "open innovation," the "mode 2" knowledge production or "transdisciplinary research" (TD), which are particularly widespread in sustainability sciences. 28

Against the background of complex real-world problems and a large number of groups of actors with different perspectives, interests, values and knowledge, the question is to what extent a spatial view can offer relevant insights into the creation of policy means that take part across silos, sectors, and established routines in order to support maker spaces.

3.2 Maker spaces as starting points to regenerate urban areas

From a geographical view, makers in the wide field of Cultural and Creative Industries (CCI)—mainly a new type of cultural entrepreneur in combination with cultural and creative initiatives—often acted as pioneers for activating less used spaces. ²⁹ Though Cultural and Creative Industries are mainly an established field of policy making, there is a need to include the growing number of creative entrepreneurs, freelancers, self-employed agents into suitable policies. ³⁰ Their collective place-making achievements, e.g. the installation of fab labs, coworking spaces, and creative workshops ³¹ have raised the attention of policy makers in how to create conditions for economic growth for tech entrepreneurs, makers and SMEs. These "sticky places" ³² aim at attracting and retaining "talent" for the urban based-knowledge economy.

^{26.} Henry William Chesbrough, Wim Vanhaverbeke, and Joel West, *New Frontiers in Open Innovation* (Oxford: Oxford University Press, 2014).

^{27.} Gibbons, The New Production of Knowledge.

^{28.} Schneidewind and Augenstein, "Three Schools of Transformation Thinking."

^{29.} Bastian Lange, "Accessing Markets in Creative Industries—Professionalization and Social-Spatial Strategies of Culturepreneurs in Berlin," *Creative Industries Journal* 1, no. 2 (January 1, 2009): 115–35.

^{30.} Budge, "Making in the City"; Budge, "The Ecosystem of a Makerspace."

^{31.} Bastian Lange, Dominic Power, and Lech Suwala, "Geographies of Field-Configuring Events," *Zeitschrift Für Wirtschaftsgeographie* 58, no. 1 (2015): 187–201.

^{32.} Ann Markusen, "Sticky Places in Slippery Space: A Typology of Industrial Districts," *Economic Geography* 72, no. 3 (July 1, 1996): 293–313.

3.3 The search for inclusive innovation policies

From a policy making point of view, many regions aim at rolling out their innovation agenda within what is known as culture and creative industries. Software and games industries, in particular, act as catalysts for transition and growth with other sectors. For instance, the interconnection of the health segment with software and games industries is a widely known cross-sectorial case that triggers inclusive policies that stem from cross sectoral innovation practices between these branches.³³

As mentioned above, blueprint policies are hardly ever accepted on a regional and local level. The shift from Generation X to Millennials is marked by the desire for individuality and meaning in the work environment, the need for sustainability and responsible growth with the reality of competition in a global world economy. This has left regional policy makers puzzled as to how to design new places of encounters between creative people, civic society, enterprises and policy makers.

The need for changed contribution and participation derives from the paradigmatic shift of digitization. In the course of a changed nature of employment and new competencies and skills ensuring all citizens benefit from these changes, the need to overcome enclosed social and innovative silos in terms of both physical space and to allow for creative thinking and innovation is of foremost importance on the local-regional policy agenda.³⁴

3.4 Our research and methodological view on new approaches to policy making and its design in changing worlds

These indicative drivers suggest a need for new approaches to policy planning as a responsive process in order to meet the changing needs of policy makers. As a reference case, a university-led cross-innovation approach will be showcased where the focus is on so-called "makers" as a distinctive group which has the characteristics of these key factors mentioned above in section 3.1. to 3.3.

We introduce the format of a so-called policy clinic, that stems from learning organisation practice, from "learning by doing"³⁶ and aspects of "hack" practice—collaborative and intensive activity on a shared topic which is outcome-orientated. It therefore suggests a time-limited focused activity addressing a "problem" through sharing of expertise.

^{33.} Chesbrough, Vanhaverbeke, and West, New Frontiers in Open Innovation.

^{34.} Seravalli, "While Waiting for the Third Industrial Revolution."

^{35.} Chris Anderson, Makers: The New Industrial Revolution (New York: Random House, 2012).

^{36.} Chris Argyris, *Organizational Learning II: Theory, Method, and Practice* (Boston, MA: Addison-Wesley Publishing Company, 1996).

The policy clinic format is comparable to policy innovation labs,³⁷ a methodology to bring different stakeholders from various local contexts under a given thematic topic temporarily together to learn how to initiate new policies for maker spaces.

The key thematic interest is to focus on city challenges and approaching so-called "wicked problems." This requires wide stakeholder engagement by others not present at the event of the policy clinic. The clinic is a temporary event but is framed by wider participation involvement that starts earlier and is accompanied by a number of approaches before the policy clinic. We will now describe these factors and the nature of challenges that help frame the context for the policy clinics from a spatial point of view that goes beyond the understanding to develop relevant forms of knowledge in a geographically-bound entity.

4 The case of Urban M (Urban Manufacturing)

Essentially framed by an EU-policy learning approach, the Urban M project looks at makers and how cooperative working can be supported to break down silos at the city region level for establishing productive and supportive frames: this could be maker spaces or FabLabs. This became the basis for the project supported through the EU Interreg Europe Programme. The partnership led by Birmingham City University (BCU) comprises Lisbon, the Italian region of Lazio, Bratislava, Vilnius, Zagreb, Birmingham, Kranj and San Sebastian and runs from 2017 through to 2021.

The Urban M partnership seeks to address the needs of cities for collaborative maker spaces, these can be characterised as fab labs³⁸ working with policy makers at the city and regional levels. Urban M focuses on specific innovation policies and how they can be adapted to allow for collaboration at the governance, policy and project level. The partners are at different levels of development and spread geographically across Europe.

The intention of Birmingham City University (BCU), supported by a core team of external experts, was from the start to develop a framework of policy support which is responsive and informed by users taking into account design thinking principles.³⁹ Urban M can therefore be seen as addressing the new modes of living and working in urban environments at a policy level, by focusing on the establishment of fab labs and creative entrepreneurship, on the need to break down silos in the innovation eco system, as well as on the role of millennials as entrepreneurs in the new forms of work in a "maker" economy.

^{37.} Williamson, "Governing Methods."

^{38.} Fleischmann, Hielscher, and Merritt, "Making Things in Fab Labs."

^{39.} Design thinking requires a user perspective for the development and delivery of products and services

5 Methodology, empirical steps, and findings of the policy clinic approach

The policy to be tackled in the context of the Urban M programme is discussed and agreed first at the level of the local public authority. For Interreg Europe this has to be defined with clear objectives to improve support for maker spaces. For example, with the development of an innovation ecosystem in a city or region to include maker spaces, of commercial routes to market for makers to encourage business sustainability and with the development of policies to support SME's analytical approach through science (STEM) and creative thinking through the Arts.

Once the policy to be tackled is agreed, stakeholders are then convened by the public authority to meet, facilitated by the local partner as a Steering Group to act as a "critical friend" for the policy makers throughout the project. Members of the Steering Group are directly involved in seeking to implement the policy and will attend study visits and bilateral discussions throughout the Urban M project to share good practices and support the implementation of the policy changes.

The Lead Partner, in this case BCU, analyses the type of changes to be tackled and then groups the policies together to reflect partners with similar needs. These can be along the lines of "how maker spaces can support the innovation eco system," "how maker spaces can be commercialised to ensure sustainability" and "how maker spaces can support grassroots innovation."

This initial grouping of themes is then agreed at a meeting of all the partners and the Policy Clinics are then designed and planned by the lead Partner so that each partner city hosts at least one Policy Clinic and also attends a minimum of one.

This is the moment when the policy clinic demonstrates its potential as an event-based social framework. Timewise it is short, it allocates all essential stakeholders for at least 1-2 days and the European funding frame with European partner cities and potential accesses to foreign markets creates higher attention than any local innovation policy. The events triggers decision outside the everyday routines and therefore needs careful planning as well as short-time formats (that of the policy clinic) to allow change.

Within the event, policy makers are requested to collaborate with each other and with entrepreneurs, freelancers and members of SMEs, identifying strategies for policy changes. The lead partner and external experts have devised a sequential "policy clinic methodology" to firstly set out the common policy areas from the strategies of the partners. This is essentially a desk research exercise on the partners' policies to draw out key points and seek commonalities.

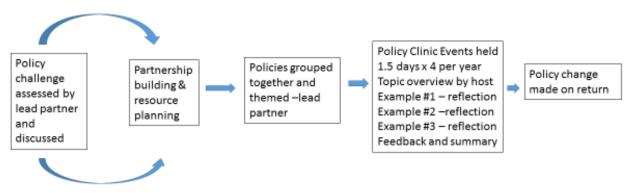


FIG. 1 Iterative policy making as a "Third place"-approach with the help of policy clinics (Urban M Project Team, Birmingham City University).

The approach starts focusing on key aspects and themes identified by the lead partner-team to reflect back to the partners. Topics have included "how can collaborative approaches help commercialisation of maker spaces?" and "the maker space and education, how best to engage with schools, the tertiary sector and universities." The topic is agreed and hosted by the partner city/region joined by on average two to three partners most closely aligned and interested in the topic. The approach is iterative in nature—it takes open discussion and mutual trust to focus on the innovation challenge with the host partner and to then communicate with the other partners the nature of the topic and the applicability for them. This can be shown diagrammatically as in Figure 1 [Fig. 1].

The Policy Clinic format is usually scheduled as a one-day-and-a-half event with expert meetings among practitioners, policy makers, and local actors. Stakeholders form a temporary collective and manifest a translocal "community of practice."

Participants then move to three or four site visits which exhibit different aspects of the challenge—such as how a maker space engages with the research base or how it coordinates activity with other innovation providers and SMEs. These site visits are project-specific and inputs are made from staff on the ground lasting around two hours. There is specific time at the end of each visit for partners to record their ideas (on a pro forma provided by the lead partner-team) and give immediate feedback. This is effective as a "reaction" to the visit enabling an immediate clear focus and supports the iterative nature of the process.

The final session on day two is structured around the participants discussing and agreeing key points for feedback following the site visits and scene setting remarks. The external experts also feedback drawing from examples from similar contexts beyond the immediate partnership and commenting on key issues and the success factors from the projects. The session concludes with a session led by a facilitator where key points are listed for the host city to consider as well as the learning points for the participating cities. Finally, on return, the lead partner-team reflects

on all the individual points and suggestions and makes a series of recommendations in a report as possibilities for the host in terms of changes to governance, policies or the introduction of new projects.

6 The distinctiveness of the Policy Clinic approach

6.1 Thematic view on effects of the policy clinic for policies for maker

The approach is inclusive and emphasises pro-active participation. The Policy Clinics have "learning by doing" and reflection by working in teams as key elements.⁴⁰ The challenges are real examples from the policy makers seeking solutions to tackle problems. The policy clinics build on the philosophy of a community of practice in the project.⁴¹

A key aspect is the focused nature of the event, a realisation that policy makers want tangible outcomes rather than broad insights where applicability is not so clear. The approach is positive in nature—building on what works and seeking to gather and understanding why this is so, following an appreciative enquiry approach.⁴²

The approach has elements of design thinking methodology. Challenges are presented and emerging solutions are then discussed as key issues to be addressed then prioritised for action. These policy actions are further developed in discussion with stakeholders after the Policy Clinic itself. Resources are allocated and ideas taken forward and tested as pilot actions to be mainstreamed. It is an iterative process and learning is a recurring factor throughout. The Policy clinics require a good degree of trust—the participants recognise the different starting points and contexts and that insights will come from a range of participants. This means that policy makers working in new contexts may be able to quickly learn from more established systems and think of new possibilities (the situation of policy makers in cities/regions new to the EU).

The sessions are timely—feedback is over a short period and this means that participants in the clinic can reflect and absorb the learning from the event in their day to day practice.

^{40.} Argyris, Organizational Learning II.

^{41.} Etienne Wenger, Communities of Practice: Learning, Meaning, and Identity (Cambridge, MA: Cambridge University Press, 1999).

^{42.} David Cooperrider and Suresh Srivastva, "Appreciative Inquiry in Organizational Life," ed. Richard W. Woodman and William A. Pasmore, vol. 1, Research in Organizational Change and Development (Greenwich, CT: JAI Press, 1986), 81–142.

6.2 Spatial view on social events as a frame for policies of maker spaces

Referring to policy making as a form of social practice and of co-creation while encountering different stakeholders, these approaches take place in specific flexible and temporary geographies. By introducing the methodology of the case clinic, the role of temporary events and temporary fields has been highlighted where different expertise come together in order to systematically find answers on how to strengthen maker spaces and the new culture of making in urban context. Whereas the literature on temporary fields and co-creation seems to be blind, our case contributes to this debate by pointing to the following aspects.

First, interaction and encounters do need systematic framing by facilitators and moderators in order to allow for focused conversation.

Second, prototyping methods that stem from design thinking are helpful in order to allow for a strict user-centred perspective in short time spans. Systematic methodologies allow for rapid development of prototypical first-hand solutions on site-specific and distinct local problems.

Third, translocal knowledge and expertise from other cities are a vital resource to support and to challenge local policies.

Fourth, policy making out of the formal democratically-legitimized field of voting and contributing to the public good, is based on mutual trust building. The observed policy clinics take this into account because, seeing, social proximity, and exchanging on rather site-specific contexts than abstract and meta-complex issues dynamizes mutual understanding and exchange.

In doing so, policy clinics reinvent participatory-based policies which in paradoxical times of shrinking acceptance of the policies and increases the need to steer public commons in urban and regional contexts.

7 Conclusions

The cities and region hosting the Policy Clinic each take away a range of specific insights on policies and processes. However, the policy benefits if this were the only outcome would not be as profound or useful.

For example, San Sebastian took away the need for *consolidation* of innovation policies to enable synergies between the maker and innovation communities. This for San Sebastian highlighted the need to develop an evidential base and to argue for a long-term approach in the next round of ESIF 2020-2027.

For the region of Lazio, the policy clinic acted as a *validation* of the policy of design thinking based on city challenges. This is already evidenced in the maker community and other innovation actors can now be supported

by focusing on this approach to better connect with the Lazio ecosystem for internationalisation and commercialisation.

In respect of the city of Lisbon, the focus was agreed on better *connectivity* within the ecosystem with targeted support for expertise for commercialisation at all levels to maximise the economic output of the maker and knowledge intensive sectors.

A logical next step for the methodology is to engage with users and citizens more directly using the same methodology and philosophy—a deeper understanding of the quadruple helix approach to planning.

8 Outlook: Further applications of the Policy Clinic approach

The approach fits well where there are common challenges across territories and cities where new ideas and approaches need to be tested. A challenge-based methodology fits well in this respect. There is a sense of a "community of practice" underpinning rationale in the Policy Clinic approach—whereby individuals can engage within a defined set of shared knowledge but can be stretched to thinking of new possibilities. The direct input of specific project experiences on the ground makes this process insightful for these policy makers.

Secondly, the Policy Clinic approach works well where there is a need for policy to be responsive to fast changing needs and for the policy process to become more visible and more porous and accountable with contributions at different levels.

Thirdly, the Policy Clinic process can be useful in validating existing aspects of successful policy and practice to enable this to be rolled out more effectively in a city or region.

Fourthly, seeing, exchanging on site-specific contexts rather than abstract and meta-complex issues dynamizes mutual understanding and exchange. Policy clinics reinvent participatory-based policies with high-level on-site focuses, in paradoxical times of shrinking acceptance of policies and increasing needs to steer public commons in urban and regional contexts.

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