Positioning Urban Labs – a New Form of Smart Governance?

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1 ABSTRACT

In the current era, in which cities are considered key arenas for coping with a number of societal challenges, there is also renewed interest in the mobilisation of experimental practices within urban planning. A growing interest in innovative intiatives emphasising co-creation, exploration, experimentation, and evaluation, such as urban living labs must also be understood in relation to the uncertatinity regarding the modern growth paradigm and its institutional arrangements: "the pragmatist heritage of urban laboratories gains renewed strength in the current era in which the belief in modernity, progress and development is in crisis" (Karvonen & van Heur, 2014, p. 387). This paper provides a sympathetic critique of the notion of urban living labs and related expeimental practices from an urban planning and governance persepective. In this light, we argue that the core principels of urban living labs (i.e. co-creation, exploration, experimentation, and evaluation) offer a useful theortical frame to understand and position different informal self-organizing initiatives in contemporary urban development. Furthermore, we assert that, considered as a planning practice (or methodology), urban living labs can be construed as a temporary mode of soft governance which include a number of merits in terms of definig new innovative pathways for urban planning beyond business as usual thinking. However, caution must be taken due to the urban living lab's inherent shortcomings in terms of demorcractic legitimacy, tendencies towards exclusiveness, and extreme temporality. In conclusion, we argue that urban living labs can be an environment for exploring new forms of smart urban governance through critical engagments with communicative planning theory and an explict focus on actor-relations.

2 INTRODUCTION

Urban living labs are offering both a methodology and an environment for social as well as technical innovations (Veeckman et al., 2013). Through public-private-people partnerships the intention is to overcome institutional lock-ins and to utilise multi-disciplinary collaboration. The idea is to mobilise individual stakeholders as experts of their experiences and enable them to advance from participants to co-creators of knowledge. In doing so, unexpected outcomes are anticipated and can even be embraced through an emphasis on process, whereby these urban laboratories are expected to provide strategies of experimentation within prescribed boundaries. In pursuing this logic, urban laboratories are anticipated to inform the manner in which actors approach the specifics of the case, increasing the likelihood that the outcome, expected or otherwise, reflects the content and approaches deployed during the activity.

Research on (urban) living labs has (so far) mainly focused on the tools, methods, processes and assessments of the generated technical and social innovations (cf. Veeckmann et al, 2013; Juujärvi & Pesso, 2013; Bergvall-Kåreborn & Ståhlbröst, 2009) instead of criticaly investigating the quality of governance of (urban) living labs and how they inform, or are engaged with, policies and politics (but see Evans & Karvonen, 2014). We are, instead, especially concerned with the how urban living labs can be understood as informal 'soft mode of temporary governance' (Boonstra & Boelens, 2011) and how to position them in the framework of various activities that try to complement formal planning practices, which themselves are often labelled as new forms of urban governance. Therefore, we want to offer a framework in which we can analyse the emergence of urban living labs as informal and temporary soft spaces of urban governance, which enables us to discuss and relate them to formal urban planning practices. In doing so, we distill a few core principels of urban living labs (i.e. co-creation, exploration, experimentation, and evaluation) and discuss their usefulness as a theortical frame for understanding these informal self-organizing initiatives in the light of contemporary urban planning theories and practices. We also consider how this could be further developed through critcial engagments with communicative planning theory and an explict focus on actor-relations.

3 URBAN LIVING LAB DYNAMICS AND PRINCIPLES

"A forum for innovation, applied to the development of new products, systems, services, and processes in an urban area; employing working methods to integrate people into the entire development process as users and co-creators to explore, examine, experiment, test and evaluate new ideas, scenarios, processes, systems, concepts and creative solutions in complex and everyday contexts." (JPI Urban Europe, 2015, p. 59, orginial emphasis)

In contrast to other living labs, urban living labs do not only add "the urban component to the conceptual design, but also a range of topics including societal, political, and technological questions" (Franz et al., 2015, p. 48). This is clearly evident in the above defintion of urban living labs provided by the Joint Programme Inntiatives (JPI) Urban Europe within their The Strategic Research and Innovation Agenda. As Franz (2014, p. 105) notes, "evidence shows that European research strategies are more recently fostering the inclusion of new paths of social innovation". Thus, the aim of urban living labs in this context is not centrally focused on technological innovation, but rather on fostering social innovations through the involvement of various stakeholders for a carefully defined project in an urban area.

In fact, the JPI Urban Europe has had an important influence on this social turn, and they emphasise that urban living labs are particularly important instruments for dealing with the multi-dimensional challenges in urban areas that "will be strategically used for testing and validating research results, involving relevant urban stakeholders; to prepare for full scale implementation of new solutions" (JPI Urban Europe, 2015, p. 53). However, this is not to say that urban living lab research activities focus solely on civic engagement and social innovation (Bergvall-Kåreborn & Ståhlbrost, 2009). Rather, the European Commission sees urban living labs as a valuable tool for sustaining engagement with end-users and innovations within the ICT sector (European Commission, 2008).

While an emphasis on openness and inclusiveness is desired, it can be challenging to engage actors that reflect the given societal spectrum (Bergvall-Kåreborn and Ståhlbrost, 2009; Franz, 2014). Going further in regards to the dovetailing foci on social and technological issues, Franz (2014) suggests that a paradigm shift from technological to social science-guided terminology might be needed to shift the perception of future living lab participants to 'citizens' rather than 'users'.

According to Juujärvi and Pesso (2013), today at least three types of urban living labs can be identified. With the first type, urban areas can serve as 'technology-assisted research environments', where users provide feedback on services or products through digital platforms or sensor-based methods. These urban living labs may aim to improve an urban environment or service, such as public transportation, waste management or housing. The co-creation of local spaces, services and/or objects, including underused or abandoned buildings, daycare services or public spaces, is a second type of lab. An urban living lab can also result in new or enhanced forms of urban planning that use new tools or processes. Here, facilitating local vision-making and planning procedures and/or greater opportunities for stakeholders to meet and learn from one another are the central objectives. In doing so, the lab can serve as a platform for stakeholders to take part in planning initiatives and decision-making processes. However, urban living labs should not be conflated with traditional planning projects, since they do not necessarily result in a plan or development project.

3.1 Co-creation

Socially-oriented living labs evolved from the notion of co-developing cities, with a view that defined spaces of the city can be sites for open experimentation. Given the emphasis on socio-spatial co-development, approaches for these labs tend include terms like 'co-creation', 'empowerment' and 'participation', and offer an inclusive, participatory and do-it-yourself setting that engages citizens and local actors in the processes of shaping the city (Franz, 2014). In an era of declining civic involvement, societal fragmentation and demands for greater institutional flexibility, urban living labs seem to be a tool to foster social, political and economic innovation, development, and cooperation in cities. Offering a new forum for interaction with a diversity of actors, or in a sense, a new mode or form of (urban) governance, urban living labs can be used to establish a defined space for experimentation where users can become "co-creators of values, ideas and innovative concepts" (Hakkarainen & Hyysalo, 2013, p. 21).

Situated in a social environment, urban living labs can be used to identify relevant urban issues and to engage a diverse group of people, often aiming for a wider cross-section of society than is typically involved

in processes of urban change. Using contextually and socially appropriate methods, urban living labs can also be used to translate research into applied uses in civic society and to enhance data collection within a defined, often local, scale (Franz, 2014). However, one needs to add critically that urban living labs offer a structure for enlarging the scope of associative as well as participative democracy, in parallel with other urban planning activities in a city that are related to formalised participative procedures of representative democracy. In other words, urban living labs are comprised of a specific club; the rules of inclusion and exclusion have to be critically questioned.

3.2 Exploration and Experimentation

Emphasising the exploratory nature of the approach can familiarise urban living lab actors with the notion that an urban development process can be undertaken without a predefined aim. This plays a number of key roles in encouraging participation, engagement, and co-creation. First, it reduces the likelihood that any single actor is able to claim jurisdiction or achieve an overt dominance over the content of an urban living lab during the process, as it is difficult to achieve this position without having a clearly defined aim or outcome. The experimental nature of urban living labs also encourages open discussions, fostering the idea that 'there are no stupid questions, only stupid answers'. This may enable actors who may otherwise not feel confident enough to express their views or challenge those of a traditionally dominant actor. Furthermore, the overtly exploratory nature of urban living labs helps to familiarise actors with uncertainty, while the notion of using urban living labs to test ideas can encourage more creative or provocative initiatives without the fear of long-term negative consequences should an idea fail to deploy as expected. As Karvonen and van Heur (2014, p. 387) note, "One of the key strategies of uncertainty reduction is the labelling of particular sites as urban laboratories." Pursuing this approach, ideas can be proposed, tested and evaluated without significant long-term commitment. Should an idea prove successful, however, it can subsequently be applied more broadly or scaled up (cf. JPI Urban Europe, 2015).

However, it is also important to note that there is considerable variation among urban living labs in the way in which the concepts of 'laboratory' and 'experiment' are employed. In some cases, urban living labs may use these notions as a way to further establish and reinforce dominant patterns of urban development. Other urban living labs might adopt more progressive and open approaches, where cooperative and communicative initiatives are undertaken to foster change, with a recognition of the transformative potentials (and inherent complexity) of contemporary urban issues (Karvonen & van Heur, 2014). Be this as it may, one needs to carefully question the way in which the notion of a laboratory can be applied, since it might imply a regulated and controlled 'environment for experimentation' instead of claiming 'openness' and 'dealing with complexity'. The discrepancy between labs can be problematic, as it risks creating a situation where the urban living lab concept becomes so broad and ubiquitous that it loses meaning.

3.3 Evaluation

The diversity of settings, scales and approaches to urban living labs can furthermore make evaluations, challenging. The flexibility to select methods and tools tailored to the aims and approaches of a particular urban living lab can increase the contextual place-based relevance of the urban living lab concept, but might limit the capacity to compare, contrast, and consolidate findings from a diversity of urban living labs. These issues could limit the potential of urban living lab development. Furthermore, with the emphasis on processes, co-creation, experimentation, and exploration, the impacts (and evaluations) of urban living labs are not straight-forward issues and are not similar to more result-oriented initatives. More specifically, impacts are seen within incremental change throughout the project rather than in a single end-product or outcome. While the issues outlined above are problematic, they do not have to be insurmountable. In seeking to distil the breadth of urban living lab approaches into a measurable and comparable concept, Karvonen and van Heur (2014, p. 381) focus on the experimental nature of the labs: "We argue that the emphasis on experimentation leads to three achievements of urban laboratories: situatedness, change-orientation and contingency." They continue by arguing that these three urban living lab aspects can serve as 'normative benchmarks' through which initiatives and practices that claim the urban living lab banner can be evaluated and critiqued. This evaluative approach shows promise; however, more research is necessary to refine and strengthen urban living lab evaluation and comparison.

4 COMMUNICATIVE PLANNING AND ACTOR-RELATIONS

The core principles of urban living labs, outlined above as co-creation, exploration, experimentation, and evaluation, offer a useful theortical frame for understanding informal self-organizing initiatives in contemporary urban development. Urban living labs as a planning practice, or methodology, include a number of merits in terms of defining innovative pathways for urban planning beyond business as usual. However, caution must be taken because of the inherent shortcomings of urban living labs construed as soft modes of governance. These shortcomings can be understood in terms of demorcractic legitimacy, tendencies towards exclusiveness, and extreme temporality, which are also key concerns in communicative planning theory (i.e. Fainstein, 2000; Forester 1989; Healey, 2003; Sager, 1994).

A key aspect of communicative planning theory is providing concerned public stakeholders with a legitimate role in the decision-making process and a general wariness of expert or elitist manipulation (Sager, 1994). Conversely, communicative planning theory has been critiqued for ignoring how to deal with the fact that open processes may produce unfair results, and for losing its critical edge once the theory is applied in reality (Fainstein, 2000). Practitioners should remain mindful of these challenges during the deployment of urban living labs.

Furthermore, much like the concept of urban living labs, communicative planning theory stresses the importance of the process in ensuring the successful outcome of projects (Fainstein, 2000; Forester 1989). That is not to say that the process is only valuable in itself or as a mere effort towards democratic inclusivity. Rather, its value is partially derived from the manner in which the process serves as a focus on relational interactions which can help to create the basis for action (Healey, 2003). In communicative planning theory, there is considerable agreement that the outcome of a project is heavily contingent on the actors who take part in the process. The actors are recognized as creative individuals and groups whose differing aims and needs will affect the trajectory of a project, ensuring a unique outcome. The outcome is also affected by a range of other actor-specific factors, including the commitment they make to the project, the intensity with which they enter the discussion and their openness to differing visions. However, planning is to a large degree shaped by leading actors and power relations, be they within or outside government, i.e. those who have the capacity and incentive to use and invest their resources into planning processes and/or their material outcomes. This encapsulates questions of the motives and rationales for engagement in urban living labs; or more fundamentally – what sorts of actors take part in such 'self-organised experiments'?

Communicative planning theory also stresses that planners are faced with the inherently political decision to foresee and partially counteract the distortion of information from powerful stakeholders. Alternatively, planners can submit to these stakeholders and take a complicit role in obscuring information from the public (Forester, 1989). In this vein, the planner is expected to navigate through the political context in which planning takes place, with the 'ideal' desire to provide all stakeholders with an equal standing on which to negotiate. This requires an "inclusionary ethic" that emphasizes the planner's moral duty to ensure that the negotiations take place on a level playing field (Healey, 2003). As Forester (1989, p. 3) argues, "Planners do not work on a neutral stage […] they work within political institutions on political issues, on problems whose most basic technical components […] may be celebrated by some, contested by others. Any account of planning must face these political realities."

These central claims within communcactive planning theory can be related to urban living labs in order to ask how they are related to the larger political context, since they work, as Boelens (2010, p. 42) puts it in his proposal for an actor-relational view of planning, "beyond the confines of government". They can be interpreted as a temporary, self-organised additional layer and mode of urban governance. So one central issue is to question how political urban living labs are, which addresses rather purely public issues within urban development (in comparision more technological labs, which are often influenced by the economic interests of the involved companies). Several questions arise related to the associative forms of democracy suggested by urban living labs. Although they deal with public concerns, to what extent can urban labs seek legitimacy or even accountability? In addition, power relations, domination, and exclusion develop in unique forms that are contextually dependent, and the results from the communicative planning process (and urban living labs as planning practices) are inherently locally specfic (Healey, 2003) In this vein, it seems valuable to consider the urban living labs in the context of other urban development settings and processes working in parallel. It is also important to question the relations between these settings and processes in terms of, e.g., discursive power, institutional decisions, or even long-term material impacts.

5 CONCLUSIONS

Through this paper, we want to initiate a critical debate and research engagement with the quality of governance in (urban) living labs and how they inform, or are engaged with, policies and politics. Urban living labs can be seen as an additional form of 'experimental' governance, since the rules of the game are often not defined in order to avoid restricting innovative and visionary thinking. However, they also bear the risk, as other forms of governance, to become arenas of unequal expectations, power games, and conflicts. For future research it is thus vital to investigate how these informal soft modes of governance relate to formal hard modes of government. However, the explorative nature of urban living labs offers, in principal, a promising method for balancing power within the context of participative urban development.

Urban living labs can be a creative environment for exploring new forms of smart urban governance, beyond simply presenting a new environment to apply established theory. By aiming to promote equal opportunities for all stakeholders, communicative planning theory seeks to ensure that those who have been traditionally ignored have the same possibilities as more powerful actors to make their voices heard in the process. This relates well with urban living labs, which aim to foster creative unsettlement by harnessing the innovative energies of a wide array of actors in shaping urban development processes. Urban living labs might thus function as an empirical environment to develop communcative planning theory and practices. Nonetheless, this needs to be explored in practice, particularly in regards to balances of power and stakeholder influence.

Another issue demanding attention involves the actors and their network relations, particularly since in urban living labs the planner is increasingly called on to serve as a connector and coordinator. In other words, it is planners who are meant to bring together all of the concerned stakeholders for a series of communicative activities as 'agents who help build the network' (Innes & Booher, 2014). Such efforts are well-suited to urban living labs. This defined role for planners, facilitator who build up partnerships, needs to be critically explored. An actor-relational approach (Boelens, 2010) can be fruitful in order to understand and identify the emerging relations and networks. An actor-relational approach can also aid in understanding alliances and confrontations between actors, along with the extent to which their acting translates into materialisation.

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