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Recasting urban governance through Leeds City Lab: Developing alternatives to neoliberal urban austerity in co-production laboratories

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Abstract

This paper reports on a research project, Leeds City Lab, that brought together partner organisations to explore the meanings and practices of co-production urban labs in the context of urban change. Our intention is to offer a response to the crisis in urban governance by bringing together growing academic and practitioner debates on co-production and urban laboratories. We do so to explore radically different institutional personae that can respond to deficits in contemporary urban governance, especially relating to participation and disenfranchisement, and ultimately unlock improved ways of designing, managing and living in cities. Our analysis identified four key findings which elaborate on the ways in which co-production labs can recast urban governance to more progressive ends: moving beyond traditional organisational identities and working practices; embracing grey spaces of new civic interfaces; foregrounding emotions and power; and a commitment to durable solutions. Ultimately, what we point towards is that urban governance can be more effectively enacted in co-production labs that bring together universities, the public, private and civil society sectors based on equality, trust and openness. These spaces have the potential to unlock a city's knowledge, resources and assets to unpack challenges and build capacity that can deliver improved city-wide solutions.

Introduction

Those involved in city governance across the world face a perfect storm of increasingly complex and interconnected challenges alongside reduced ability to respond to them. Problems persist and combine across issues of, for example, poverty, inequality, fiscal austerity, population growth, ageing, resource scarcity, environmental degradation, climate change and security threats (Peck et al., 2013; Aalbers, 2013). City leaders offer responses in a context of ossified governance institutions, short term and siloed decision making, low citizen engagement, the exclusion of diverse voices, and power imbalances between a largely ascendant free-market oriented private sector and weakened civil society and public sectors (Harvey, 2012; Soja, 2010; Leitner et al, 2007). Most acutely, in the continuing era of fiscal austerity, municipalities are engaged with the reality of simply doing less with less, often reduced to the role of commissioner (Peck, 2012).

Those delivering urban policy solutions against this backdrop come up against sub-optimal decision-making and outcomes, reduced political acceptance, public confidence, financial viability and long term sustainability. This can be non-trivial in terms of reducing prosperity and wellbeing. In spite of decades of urban interventions, a wealth of contemporary evidence still points towards increasing and persistent inequalities between the urban haves and have-nots (Mouleart et al, 2003; Turok and Mykhnenko, 2008; Wilkinson and Picket, 2010). A more comprehensive rethink is required to steer cities through difficult times and find more equitable solutions and delivery models.

The perfect storm of greater challenges and reduced capability places a renewed focus on broader opportunities for city self-organization (Lowndes and Pratchett, 2012) and opens up new opportunities for a reconfiguration of power, a shift away from compartmentalized working, towards progressive multi-sector partnerships (Hall & Lamont, 2013). Such opportunities are reinforced by a recognition that no single institution can have the capacity to navigate the complexity of the contemporary urban world. The specific argument in this

paper is that more progressive, and effective, processes and outcomes can be achieved if urban governance is steered away from an urban neoliberal model and lessons are incorporated from co-production, and from urban laboratories (hereafter 'labs'). We have purposefully chosen these phenomena for the following reasons: co-production has grown in popularity due to its ability to promote empowerment and engagement, and to respond to ongoing and significant structural exclusions of diverse voices; and urban labs have grown to accelerate novel and progressive approaches to place-based innovation and civic enterprise. The uniqueness of this paper is to bring together developing insights from co-production and urban labs and to explore the novel institutional personae that can be developed to unlock more effective and progressive ways of designing, managing and living in cities. In particular, we want to push debates on co-production and urban laboratories much further and stress they respond to an urgent need for more politicised institutional restructuring that can offer alternatives to neoliberalism in the face of urban crises. Our discussion builds on ongoing debates on soft spaces and fuzzy boundaries (Allmendinger and Haughton, 2009; Heley, 2013; Haughton et al., 2013), the role of policy intermediaries (Guy et al., 2011; Evans, 2009), emotions in policy (Collins, 2016), and place leadership (Sotarauta and Beer, 2016). It also offers insights into place based resilience and the broader need for rebalancing what is referred to as the quadruple helix of the private, public, university and civil society sectors (Carayannis and Campbell, 2010) as well as an open commons approach to governance (Dietz et al., 2003).

Specifically, this paper analyses the case of Leeds City Lab, a project that set out to explore the latent potential of co-production for reworking contemporary urban governance to more progressive ends. Leeds City Lab was a six-month research project based in the northern English city of Leeds, which brought together the authors amongst nine partner organizations. Our paper begins by outlining the broadening of the neoliberal project within urban governance. While we recognize its structural flaws, we nevertheless point to the growing institutional complexity and diversity which has allowed co-production and urban

laboratories to emerge and what these tendencies might mean for harnessing novel forms of institutional personae for more progressive urban governance ends. In this sense, urban neoliberalization also contains tendencies towards its own unravelling as it reaches the limits of its own logic (Peck et al., 2010). Our argument is based on four themes that emerged during Leeds City Lab: moving beyond traditional organizational identities and working practices; embracing grey spaces of new civic interfaces; foregrounding the role of emotions and power; and a commitment to creating durable solutions within the rich and diverse asset, resource and knowledge base of cities. We conclude with reflections on how to unlock the particular conditions under which co-production labs can flourish and shift urban governance to a more progressive and transferable basis.

Using co-production laboratories to recast urban governance in neoliberal times

It is now commonplace to point to a range of deficits in contemporary urban governance: organizational silos, centralization, performance management, democratic deficits, tokenistic levels of engagement, or sidelining emotions (Domhoff, 2002, Jones, 2015). Moreover, cities are now highly connected to extra-local networks and identities, especially transnational and private capital flows, which makes the job of place-based urban governance more complex. These features can be traced in a series of broader structural changes between state and capital over the last forty years through the emergence and consolidation of what is commonly called neoliberal urban governance (Jessop, 2002; Larner, 2003). One explanatory strand draws on the foundational work by Harvey (1989) on the uneven transition from ‘urban managerialism’ to ‘urban entrepreneurialism’ where city governance has become as much about managing its brand to attract footloose capital as about its welfare role in goods and services. This process involves stretching the formal government sphere into collaboration between dependent public, private and third sector actors.

It is now well understood that urban neo-liberalization has deepened through market-based solutions, the liberalization of capital, and the private ownership and commodification of assets and resources (Brenner and Theodore, 2002; England and Ward, 2007; Larner

2002). In particular, New Public Management (NPM) scholars have highlighted that market-based solutions extend into public sector arenas where these approaches might not previously have been seen as legitimate (Pollitt & Bouckaert, 2011; Gruening, 2001; Radnor, 2010). Neoliberalization is also a broader cultural schema that creates the frame of reference of what is possible, creating a 'taken for granted ordinariness' (Wilson, 2008). Crouch (2004) has argued that the current era is one of "post-democracy" where largely unaccountable, opaque and distant corporate power takes control over the daily lives of citizens, as well as the resource and land base of urban areas (see also Monbiot, 2000; Klein, 2000). Debate has therefore focused on whether cities are any longer run in the interests of their citizens (Power Inquiry, 2006).

What we want to draw out for our argument is that under conditions of mature urban neoliberalization and new public management regimes, a more plural state comprising inter-dependent actors, not just business, now engages in the co-creation and delivery of public services. Notwithstanding concerns over the decline of the state, the socially corrosive penetration of market forms into public services, and the erosion of broader narratives of redistribution and social equality (Cumbers, 2015), we want to explore the potential of our twin themes, co-production and urban laboratories, to further open up progressive urban governance practices, especially relating to empowerment and new institutional personae and spaces that can identify and tackle urban challenges (Radnor et al. 2014; Voorberg et al., 2015). While co-production and urban laboratories are not co-dependent, we suggest that they are complementary and foreground the urgent need for empowerment and experimentation within urban governance.

First, co-production values collaboration between humans and places the individual and their actions in interconnected social relations (see Cahn, 2004; Boyle and Harries, 2009; Boyle et al, 2010; Brandsen and Pestoff, 2012; McDougall, 2012). Co-production shares philosophical and methodological roots with practices such as participatory action research, cooperative inquiry and popular education (Kindon et al., 2007). We are particularly

interested in focusing on co-production due to its leverage on urban policy debates where it has gained traction because it is a practical methodology for addressing fragmentation and disengagement through overcoming silo working practices, making connections across institutions and generating better outcomes for users and participants. Co-production attempts to harness co-working and co-design aimed at problem solving and service design. It is also embedded in a commitment to mutual respect, equality and reduced hierarchy between knowledge forms, fluid and permeable disciplinary and professional boundaries, developing shared learning, and theories that are grounded in action, especially testing knowledge in the context where implementation will take place. By creating greater engagement and co-ownership of problems, their identification and analysis through recursive methods, the assumption is that co-production generates a wider range of more creative and durable solutions to persistent problems. It can also reduce blame culture as failure and learning can be co-owned. Given these characteristics, co-production sets itself clearly apart from tokenistic processes such as information sharing and consultation and is more closely associated with developing citizens' power through partnership (see Hart, 1997).

Co-production has gained recent popularity in our own field of higher education as part of a desire to produce what a recent UK research council report (Campbell et al., 2015) called 'knowledge that matters' where transformative insights of research are more fully deployed. Moreover, in the 2015 Association of American Geographers IJURR[i] lecture Nik Theodore called for researchers to decentre their practice methodologically through the use of co-production approaches that avoid instrumentality, and favour long-term commitments that can transform academic subjectivities. We take our definitional starting point from this these perspectives, where co-production redefines relationships between research participants from being essentially extractive or transactional to being interactive, where the boundaries between the academic and non-academic become increasingly blurred, expertise within

formal and informal institutions is valued, and where research is a collaborative, iterative process of shared learning, rather than distanced and linear enquiry.

Beyond our immediate field, co-production is widespread in various sectors in many national contexts (Joshi and Moore, 2004) especially in public and primary health care (Dunston et al., 2009). Many of these examples relate to targeted policy areas, enhancing the provision of services where citizens seek to improve their living conditions. However, it is also used in more politicised ways such as reconfiguring power relations which can lead to broader and unexpected outcomes (Joshi and Moore, 2004). For example, Mitlin's (2008) work with slum dwellers in the global south highlights that co-production can give entire communities political capital to be able to negotiate with the state. In this sense, co-production resonates with the 'right to the city' movement in which citizens demand action from the state (Harvey, 2012). Clearly, co-production can also be exposed to the same dangers of misuse by elites as a form of manipulation, control and tokenistic power sharing (Mohan and Hickey, 2004). Co-production methods face implementation challenges to address institutional, organizational and cognitive differences across participants (Polk 2015) requiring careful consideration of roles, the phasing of activity, the promotion of dialogue and a fluidity in objectives which can be problematic for those used to programmatic research practice (Enengel et al 2012).

Second, there is significant academic and practitioner interest in urban laboratories and experimentation as a basis for institutional renewal (Evans, 2011; Evans and Karvonen, 2014; Karvonen and van Heur, 2014; Dorstewitz, 2014; Gopakumar, 2014). Variously titled innovation labs, urban labs or city rooms, these sites for experimentation have grown rapidly, representing a commitment to generating knowledge in new ways via citizen engagement, co-production and partnerships, as well as recognizing the role of emotions, compassion and care. As Evans and Karvonen (2014:417) note, urban laboratories are 'bounded areas of innovation that create a venue for knowledge generation aimed at transforming urban governance'. The notion of the urban laboratory is part of a wider field that includes Mode 2

science based on context-driven inter-disciplinary problem solving within new and sometimes temporary institutional forms that can be referred to as a triple (and now quadruple) helix using approaches such as engaged research, service learning, trans-disciplinarity and applied innovation (Gibbons et al., 1994; Nowotny et al., 2001; Ramadier, 2004; Benneworth et al., 2010; Evans and Karvonen, 2011) or as niche innovations that explore prototyping as part of sociotechnical transitions (Geels, 2005; Geels, 2010; Bulkeley et al., 2011).

Rather than representing a new phenomenon, labs are extensions of the desire to create places for convergence amongst diverse social actors. Places of assembly are as ancient as the Agora of Athens and have continued across the ages in various guises. For example, Oldenburg (1999) points to what he calls the 'Great Good Place', those essential places in communities where people assemble and interact which include: cafes, coffee shops, bookstores, bars, hair salons, working men's clubs and community centres (see also Lyth et al., 2016). Urban labs, what we call below grey spaces of civic innovation, have in common a vision of cities as open-experimentation platforms for developing durable and effective solutions to grand challenges such as climate adaptation, energy scarcity, financial austerity and social unrest. This kind of context can shift the debate over possible solutions onto often unfamiliar and contested ground, what Radywyl and Biggs (2013) call disruptive innovations, that can take forms including peer-to-peer networks, horizontal work structures, decentralized neighbourhood organizing, land occupations, or indeed organizing to protect frontline public services. Learning can emerge in these disruptive spaces where compromises and new social and economic arrangements can be negotiated. These are "middle-out," meso-level spaces (Parag and Janda, 2014), that avoid the dichotomy of bottom-up or top-down.

In reality, there are a range of institutional and political manifestations of urban laboratories. First, there are technology-based labs, usually including anchor corporations committed to the promotion of a pro-business, digital and smart city agenda. Notable examples include the Corridor Manchester innovation district; MIT's Civic Data Design Lab; and the Co-Creation

Hub in Nigeria which catalyses creative social tech ventures. Second, there are a series of often more academic-facing laboratories, pursuing critical social science and acting more as observatories to study a city. For example, UCHICAGO Urban Labs use research and evidence to understand how cities can work better, while the Senseable City Laboratory at MIT aims to anticipate urban changes and study them. Third, there are civil society oriented labs embedded in a renewed interest in making, repairing and craft fabrication. Notably here, Fab Labs are a global network of small scale local workshops, enabling invention by providing access to tools for digital fabrication. Fourth, labs can focus on social impact often coalescing around a theme and driven by broader humanitarian and global agendas of transnational institutions. For example, over eighty place-based Impact Hubs coordinated through a global network describe themselves as part innovation lab, part business incubator, and part community centre including the mobile BMW Guggenheim Lab; the San Diego Civic Innovation Lab focused on urban planning and design; and the India Urban Lab that connects ten cities to look at local practical issues such as water and affordable housing.

Connecting many of these labs are international networks backed by foundations or international alliances. Europe has provided particular impetus through, for example, Mistra Urban Futures, the Urban Lab of Europe funded by the European Regional Development Fund, the GUST project funded by Urban Europe to examine the governance of sustainability transitions through urban living labs, and the 170-member European Network of Living Labs describing themselves as user-centred, open innovation ecosystems based on a co-creation approach in real life settings. Further afield, Urban Lab+ is a network of eight urban labs across the world focusing on urban inclusion; the International Federation for Housing and Planning Urban Labs which aim to address urban challenges in the global south; and the Low Carbon City Lab network aimed at reducing urban greenhouse gas emissions. Amongst this typology, Leeds City Lab represents a critical academic initiated

project which has then reached out to other sectors with a focus on multi-sector methodological enquiry.

What underpins this growing Lab phenomenon is a commitment by a variety of actors to transformations in policy and practice, a desire to see a step change in engagement, and to make use of (freely available) good quality data in the public realm. The strong international perspective also suggests urban labs are perceived as being able to create collaborative efforts which can generate productive solutions to complex and pernicious trans-border issues where national efforts have yielded insufficient results. Of particular importance here is a commitment to more integrative and joined up working rather than simply aggregating existing dysfunction, multiplying suboptimal outputs (Tett, 2015). In this sense, cities are regarded more as complex social and ecological systems, akin to open field experiments (Dorstewitz, 2014; Evans and Karvonen, 2013) where flows of people and resources constantly interact and generate different possible outcomes. Creating zones of experimentation can be productive ways to insert novel and disruptive activities and then observe, analyse and evaluate the outcomes in order to identify where improved solutions can be implemented. Indeed, Gross and Wolfgang Krohn (2005: 77) suggest a broader societal shift towards experimentation as: 'an institutionalised strategy which includes all kinds of political, cultural, or aesthetic components' and is often contentious, messy, deliberative and slow.

There are dangers here too. Consistency, durability and repetition underpin many of the conditions which allow citizens to flourish, for example through reliable transit systems or welfare services. Moreover, there is a danger that experimentation can depoliticize discourse and action if it becomes overly associated with detached technocrats attempting to orchestrate people and resources. Therefore, attention also needs to be maintained on longer traditions of redistributive politics and concerns with broader material socio-spatial inequalities (Featherstone, 2008). If urban innovators are to take an experimental approach, they need to establish who is doing experimenting, on whose behalf, with what potential

impacts, to what ends and who will control the outputs? Experiments are needed that attempt to solve perceived societal crises in ways that foreground equality, openness and social justice. Experimentation in this context is not simply a process to explore causal mechanisms. Rather, it aims to explore the possibilities of embedding a particular set of new conditions that will activate more socially just urban outcomes (Chatterton, 2016).

What do these tendencies mean for urban governance practices? First, we are interested in how co-production laboratories can open up urban governance to the diversity of the city, and through this how a broad range of city actors can find ways to work together through democratic scrutiny and action built around highly deliberative and participatory processes. Such processes require a commitment to an equality of interaction between different stakeholders both inside and outside formal political power. This may offer cities benefits in terms of improving inclusion and the perceived and actual social justice of outcomes from action in cities (Perry & Atherton, 2017). The potential is to create a step change in the nature of participation, using spaces to foster co-production interactions that are as diverse as possible, capturing the wide spectrum of views and life/community experiences that co-exist. Within these interactions, attention needs be given to acknowledging and resolving potential tensions that can emerge when sectors with very different levels of power and influence compete for limited resources. Co-production shared amongst diverse actors requires high levels of trust to assure participants that their resource needs will be taken seriously and their voices will be heard and fed into a process to identify common themes and build consensus. The idea of demosprudence highlights the role of social mobilizations in opening up space to marginalized groups and enabling them to participate to make decisions that affect their lives (Guinier and Torres, 2014). It is here that more radical or insurgent forms of citizenship play a part (Holston, 2009).

Second, those interested in identifying challenges and offering improvements for citizens face institutional problems. Serious disjunctures often arise when civil society, private-sector, university and government actors attempt to identify challenges and implement solutions on

their own. Single institutions are poorly positioned to support processes and outcomes that can yield benefits across a wide range of groups. Co-production labs can offer potential new resources here especially in terms of creating novel institutional forms through which disparate local actors can come together and synthesize a range of interests in a way that can guide public policy choices consistent with social solidarity and environmental sustainability.

An exploration of new institutions and associated practices for urban governance needs to consider the dynamics of institutional change where new institutions are not only sets of agreements, but also 'cultural schema' through which individuals commit to projects for the greater good (Swidler, 2013). New public institutions become valued when they facilitate the collective capabilities of social networks to develop broader and collectively held imaginings. Further key questions that we attempt to address below include whether these take place within existing institutions or in 'the cracks' (Holloway, 2011), how are they initiated and, more fundamentally, who owns the problems that cities and citizens face, and who has the authority to define and articulate them?

Leeds City Lab: opening debates on urban governance through co-production labs

Our exploration of urban co-production took place against a specific context of changes occurring in Leeds. In common with many other large post-industrial cities throughout Europe, as its industrial base declined Leeds attempted to reshape itself through a largely property-led, service-economy approach against a backdrop of a centralised, paternalistic and pro-business municipal culture (Hall and Hubbard, 1998). This kind of context has not unlocked meaningful collaboration between different city sectors. Attempts to develop partnerships first focused on a Strategic Local Partnership called the Leeds Initiative during the early 2000s, and more recently a business focused successor called Leeds and Partners, a Business Improvement District for the central area, and the Leeds city region Local Enterprise Partnership. In the understandable rush to prioritise economic growth and employment in the wake of major structural upheavals related to deindustrialization, the local

authority has struggled to develop broad and inclusive cross sector working and move away from business-dominated partnerships.

However, more recent trends show signs of change. The period since the global financial crash in 2008 has seen a shift in emphasis, specifically as the city's municipal authority recognized the need for a step change in social outcomes and governance practices in the face of fiscal austerity, reduced public engagement and increasing intra-city divisions. In 2012, the local authority played a leading role in the Commission on the Future of Local Government whose report focused on 'civic enterprise' as a new leadership style bringing together local government, business and citizens to harness innovation in governance and respond to severe budget and staff cuts. Leaders for Leeds (L4L) was also established to promote inter-sectoral networking between those who considered themselves a 'leader' or change agent interested in' making a positive difference in the city. Building on this work, in 2014 the city hosted the Tour de France Grand Depart, the success of which confirmed the commitment to new ways of working that broke through traditional boundaries to engage partners and communities, and a new vision for the city based on the twin themes of 'compassionate city, strong economy'. In 2015, the city council identified a number of 'breakthrough projects' where gains could be made through more collaboration. Other sectors have provided further impetus for cross-sector working. For example, the university sector has created platforms for health, culture, data and climate change, digital entrepreneurs have created a collaborative platform Leeds Data City, and some property sector activists have focused on sustainable urban development.

The desire to connect university researchers with civic enterprise to co-produce and disseminate impact directly from the knowledge base of universities with a range of sector partners was also growing in this period. Our experience was consolidated through what we called Leeds City Lab. As a community of practitioners, we wanted to use this single case study to generate new insights against a pre-existing collective assumption; that a co-

production lab approach could help overcome deficiencies in terms of creating a more progressive and effective practices of urban governance.

Impetus for Leeds City Lab came from earlier partnership initiatives such as Leeds Academic Collaboration with the Third Sector (LeedsACTS), Leeds Love in Share it Community Interest Company, and Leeds Open Data Institute. Members of these groups joined together and successfully accessed funding as part of a linked series of six-month pilot projects in 2015, overseen by the UK's Economic and Social Research Council in association with the N8 group[ii] of universities entitled 'Realizing the potential of co-production'. The N8 pilots aimed to explore how to unlock and maximize the potential of co-production specifically by bringing together academics and the knowledge base with other civic partners to address societal challenges. The Leeds City Lab project was co-ordinated by the University of Leeds and funding was used to recruit a project co-ordinator who was hosted in one of the sector partners, and to pay for three temporary mini urban labs. Clearly, there were limits to the extent of co-production given that the university sector accounted for most of the resources and management duties.

A notable feature of the co-production experiment discussed here is the broad range of actors involved:[iii] the project involved nine core partners, and fifty-nine participants from twenty-nine separate organizations including universities, businesses (large and small), local government, and the third sector. The project grew from a core of existing experiences in terms of local engagement, located across the CITIES theme in the schools of Environment, Business and Geography at the University of Leeds and between those with experience of co-production or and established links with the business, community and public sectors. From this core, the initial nine partners were recruited through existing platforms and contacts. Intentional selection was undertaken by each core participant who was asked to engage and invite additional partners to take part in the co-production laboratories, based on existing relations of trust and likely interest from their respective sectors. Clearly, at this scale, there were many sectors not represented or under-represented. However, Leeds City

Lab was seen by the funding applicants as a pragmatic stepping stone towards an ongoing project of building a community interested in co-production across the city.

An initial mapping of thirty three known local, national and international examples of co-production and city lab-type initiatives helped to illustrate the wide range of existing practice. The project process centred on a series of mini-labs, or prototyping events, each in a different location across the city owned by a different group of stakeholders with activities based on a locally defined question (see table 1). The sites varied: one an established co-working location, another a partnership network using co-production methods for knowledge exchange, and the third a proposed co-production space connected to a major city development programme. This variation was deliberate, and important, in testing how co-production played out in different spaces and how it could introduce novel ideas for urban governance. The mini-labs did not progress through key steps to reach a defined output. Rather, by siting each experiment in a different space, participants were encouraged to reflect on prior experience, explore the meanings and potentials of co-production under the overall question that we set ourselves: 'what could a city co-production lab be for Leeds?' Overall, we were interested in motives, activities, public benefit and replication.

Table 1. Leeds City Lab co-production pilot workshop locations

[here]

At our first workshop we undertook a participatory exercise to explore what spaces for co-production meant to the partners in the context of how to respond to urban challenges in new, effective ways. Five themes emerged focusing on the importance of process; the place of uncertainty; equality and power; emotions and vulnerability; and crossing boundaries. From these ideas, we generated a local definition which set the tone for the rest of the project:

> Co-production involves establishing a process in a time and place in which people who have some common stake in a project, idea, or place are willing to cross boundaries (organizational, disciplinary, spatial, power) that might normally divide them. These kinds of boundary crossings create potential to discuss issues that matter, uncertain of what will come out of this sharing. Participants put their own ideas at risk, committed to doing so in an egalitarian way that rejects the use of power, and instead commit to communicating with compassion, intimacy, and honesty - exposing vulnerabilities which can unearth the hidden strengths in shared understandings.

The findings underpinning this paper are derived from a number of sources: recorded transcriptions of the five minilabs, one-to-one interviews with each of the lab convenors, field notes and sketches, artefacts produced during the mini-labs such as photographs, flipcharts, post-its, a visual timeline to imagine 'a day in the life of the City Lab', and an interim and final report. During the project, reports and artefacts were shared electronically with participants and displayed and discussed at subsequent events. Analysis of this material was undertaken collectively by the authors of this paper and involved hand coding and identification of theme patterns. Over several workshops, the authors identified four findings which elaborate on the ways in which co-production laboratories can progressively reinvent urban governance. These are considered in turn below.

Beyond traditional organizational identities and working practices

Our first finding relates to the significant desire to seek working practices and identities beyond traditional organizational forms. One of the key drivers for involvement amongst most participants was the shortcomings of existing partnership work, which was limited to narrow, formal dialogues. Co-production spaces offered an opportunity to escape from the rigidities of formal working spaces and personae, to soften and, indeed, break down boundaries. This potential was more strongly expressed by those from the university sector who felt they had more institutional space to experiment. Participants recognized that

boundaries between and within sectors undermine the potential for co-production. Instead, they were motivated by the opportunity to develop new modes of working outside and across existing practices, and engaging with a range of individuals and organizations that might help recognize both shared and divergent interests. One partner commented on the instinctive qualities of this process:

(i) that people across different working contexts do in fact share common concerns;

(ii) that there is a mutual desire to work together to co-produce solutions to key challenges facing Leeds;

(iii) that it is important to engage across occupational and other differences in order to fashion meaningful projects that can begin to address such challenges.

For those from community organizations, the potential for active participation and joint production of solutions illustrated frustrations with existing models of engagement led by more powerful institutions, often in pre-determined agendas. For example, the Tetley 'City Room' mini-lab offered scope for more meaningful and sustained participation by community members to:

> meet the council as humans … not as a 'public stocks' and not a sales office for decisions already made or information giving and consultation, but really about producing something.

Local authority officers noted that the world was already 'moving on', creating pressure for more authentic engagement with wider community stakeholders and other institutional networks, especially due to the tightening of resources and increased scrutiny via social media, freedom of information and open data policies. Others noted that institutional relationships were being redefined with, for example, a third sector participant commenting:

> times have changed: a while ago it was considered that the third sector, university and council working together was a non-starter, considered threatening and now it is seen as an opportunity.

Creative processes were used in our mini-labs and valued by participants as essential aspects of any future City Lab, including World Cafe and Open Space Technology-style discussions, paired active listening, and collective scenario and timeline building. One of the notable features was a desire to create an institutional memory where the input of participants is captured, compared and accumulated. Participants saw their task as: 'a process of problem solving', 'an iterative design process', and 'solution identification'. As one person commented 'you can have a moan but you must also propose a solution'. In particular, time for introductions, exploration, reflection and shared imagining of how personal lessons were valued in terms of thinking through novel institutional forms for the city. City Lab activities helped to foster chance meetings and drew together individuals with an interest in exploration. One participant noted:

> it is a perfect platform for serendipity, the chance encounter, as it attracts lots of different people from different backgrounds, similarly motivated to collaborate with new people and find new, unexpected ideas.

It reminded a busy group of people of the value of chance encounters and the importance of slowing down. This allowed the group to treat ideas, and each other, with more respect and patience than is often evident. The pace also offered opportunities for cross-fertilization of working styles, intersecting linear project planning with more cyclical and iterative knowledge creation, providing an opportunity for divergent thinking and interaction between different thinking styles (de Bono, 1999). These aspects were facilitated in part by the sense of freedom expressed as 'getting unstuck' or 'loosening up' or, as one noted, 'quirkiness and space to have those barmy conversations', which may produce future robust solutions.

Undertaking a thought experiment as a group, 'a day in the life of Leeds City Lab', helped imagine the physicality that could encompass the needs, wants and expectations of diverse

participants. A vision emerged for collective spaces that stretched across the day with multiple-uses of work, play and in-between activity, highlighting different scales, functions and rhythms that would promote interactions between those operating within different institutional schema. City Lab proposals began to challenge and combine different languages and cultures of work, proposing shared desk time, mixing work and social activities and the blurring of professional tasks. Some participants valued the opportunity to reconfigure their work life in ways that were more sociable by prioritising the importance of coffee, food, shared meals, conviviality, rest time, and integrating children as well as evening events. Throughout, there was a revalorization of collective working and an underlying critique of individualism. However, we share concerns with Chiapello and Boltanski (2007) that more sociable and collective work can further underpin and indeed accelerate capital accumulation, albeit it in more interesting forms, and obscures the tendencies towards precarity in the economy. What needs further analysis is how co-production can build social relations that enhances commonly held knowledge and relations that can address rather than reinforce broader social inequalities.

Clearly, there are still many barriers with one participant noting: ‘a challenge in co-produced projects is that it inherently requires many participants so a lot of the time can be spent sending emails, setting up events and generally helping to organize large groups of people’. University participants also voiced greater frustration as they attempted to bring their knowledge to bear on the city’s problems without broad sectoral buy-in to the nature of challenges or institutional platforms to embed commensurate solutions. Moreover, given that the implied meanings of terms such as lab, co-production and governance vary across different contexts, creating and maintaining a shared language and vision is a considerable task. We return to some of the shortcomings in our conclusion.

Grey spaces of new civic interfaces

A second key finding was an overall desire to articulate new civic interfaces where Leeds City Lab could act as a bridge between neighbourhoods/citizens and more powerful city

institutions. One participant called these kinds of new interfaces ‘meeting grounds’ for innovation, as they offer relative neutrality in terms of use. One person commented about the first mini-lab space: ‘it’s open, neutral, democratic’, while another noted ‘it is NOT the office, it is safe and neutral and not owned by anyone’ and in terms of the Tetley City Room, site of the second mini-lab, ‘it is a far cry from the formality of our committee rooms where decisions usually get made.’

There was broad appeal in the idea that Leeds City Lab might not be a single space but several, connected and ‘branded’ spaces, maintaining the core commitment to co-production. Mutually overlapping forms were discussed - a centralised hub, a dispersed neighbourhood form, nomadic spaces, a digital home accessed remotely, or outdoor temporary common spaces. City Lab, then, could be an umbrella ‘brand’ for a network of spaces that co-production partners could tap into to support neighbourhood projects. Under such conditions, there is a need to facilitate and bring together different ways of working and thinking especially across the extrovert/fast and introvert/slower spectrum. The challenge for the City Lab format is to create a platform for innovation where different timescales and paces combine to enhance the development of city-wide solutions. One particular challenge is capturing the benefits of slower, deliberative working practices within the increasing time constraints of the public sector. Secondments or time-limited innovation groups which operate on different timescales and feed into ongoing processes can help here.

Again, the idea of more 24-hour activity was widely supported to create places that run all day but come to life in the hours between normal work and home life, blurring the boundaries between work and ‘work-leisure.’ This kind of space can meet different needs throughout the day, for example, working parents, flexi-workers or nightshift/weekend workers. As mentioned earlier, there are important issues to resolve about self-exploitation and extending work-like practices into non-paid time. These civic interfaces point to novel social and spatial practices that currently operate in ‘grey’ space (Yiftachel, 2009), edge spaces which are difficult to categorise as they exist between predefined accepted norms, groups and spaces.

These new civic institutions will not be defined through traditional labels such as public or private, but may be more open common institutions (Reid and Taylor, 2010) which are only defined through their ability to define and benefit a common good, and the specific ways that citizens use them to identify challenges and propose solutions.

Importantly, such grey forms also rely on new sets of social practices as the following comment illustrates:

> I realize that whilst a 'new institution' may be needed to support a participatory re-imagining of an ecologically sound and socially just city, this will not primarily be a bricks and mortar institution. More than a building, we need to cultivate a new set of skills and a philosophy of interaction and involvement that can manifest itself within existing institutions.

There was a clear shift in thinking throughout the process from exploring the need for a space for co-production to recognizing the need for a community of advocates/practitioners who have the skills and reach to implement a methodology for change and intervention.

Emotions and power

Third, beyond discussions of organizational form, working practices and the physicality of spaces, a substantial amount of debate explored issues of emotions and power. The emotional aspects of organizations and daily working practices is an emerging, but under-researched area (Huffington et al., 2004; Bondi and Davidson, 2007), and greater understanding is needed if durable and effective civic interfaces are to emerge. Our focus on the emotional life of work took many forms. In particular, institutional reconfigurations raised problems with status and institutional anxieties about loss of power. Whereas previous studies on co-production have commented on the motivations and experiences of ‘citizen co-producers’ (Alford 2002; van Eijk & Steen 2014; Thomsen 2015), our work also focused on the experiences of professionals in co-production. More relaxed institutional boundaries can impact on certain professional personae, creating a sense of vulnerability or being

overwhelmed due to the potential uncertainties involved. Some professions require clear organizations and outcomes. Forms of co-production that are more anarchic, dis-organized and encourage (quick) failure from which to learn can be disorientating. This can create vulnerability in terms of justifying participation to professional peers and managers less committed to a co-production ethos. One of the concerns around letting go, especially among larger partner organizations, is that they have statutory responsibilities and genuine concerns about being culpable for non-delivery and failure, whereas smaller partners can walk away. A particular challenge relates to building political buy-in from elected representatives from ideas generated within more open and fluid community-initiated co-production contexts. Again, parallel innovation teams could help scope out and test new ideas.

Moreover, trust built up with particular communities is a core component of third sector power and identity. A potential fear concerned sharing this with others which might exploit and profit from that knowledge, and reinforce third sector precarity. But ultimately it was felt that ceding power on equal terms was worthwhile as it opened up routes to more durable solutions. As one participant commented: 'Giving up control over the discussion of all aspects of the issue in question, trusting the process, can pay off with this method of exchanging and transforming ideas'.

Others noted the range of emotional registers required for co-production, such as intimacy, generosity and compassion, to sustain co-operation with those holding different views and values. Our co-production activities encouraged participants to stand, move around and speak up in dynamic and rapid conversations that shifted fluidly between 1-1s, small and larger groups to pitch ideas, openly critique, re-shape and move to a loose consensus (convergent thinking) about what a Leeds City lab might be. These more collaborative activities do not suit all participants at all times and often favour extrovert thinking. Equally, co-production relies on critical engagement, albeit framed in positive ways. As one person commented 'I learned that co-production is (and should be) sometimes uncomfortable, and it

takes real strength to challenge the widely held view in a room, and to do so constructively'. This is probably the biggest challenge for university participants who stated that they felt that others perceived they had greater positions of power and knowledge.

The vulnerabilities created by co-production opens up the potential for levelling power differences. However, managing these needs to be handled carefully by facilitators through, for example, agreeing core principles, arbitration of conflict, and ultimately recognizing the inherent power of the facilitation process itself. The artefacts created during the sessions captured both divergent and more convergent thinking. This minimised the sense that outputs were being driven by a specific agenda, and they were taken forward into following events for review, discussion and re-interpretation with core and new participants. This iteration challenged thinking that was already becoming established as a new schema for City Lab. The range of voices also provided a useful counterpoint to the over-reliance on data that, as one participant noted, 'can come at the cost of not knowing what's going on in people's lives.'

But opening up dialogues on what city governance systems might be and where they take place raises the question of 'with and for whom'? Third sector partners in particular valued co-production as a way of working precisely because it suggested a re-ordering of power relations. Although new voices emerged during the project, a core challenge for the City Lab remains inclusivity. It was also recognized that there are many types of civil society organizations, and this pilot did not necessarily represent the diversity of the city. Equally, clear organizational strategies are still needed to sustain co-produced urban governance. As one person noted: 'ultimately there has to be a clear leadership and access to funding if co-production is to become effective, resilient and subsequently sustainable.' This leadership needs to be collaborative, especially in terms of resolving issues such as who owns the products of co-production. Forms of ownership and licensing held in common can be useful here (Amin and Howell, 2016).

Creating durable solutions

Finally, while this was an experimental, methodological project exploring the potential of co-production, participants examined what this meant for generating improved, tangible and lasting city-wide outcomes. However, given the small amount of resources and time, the intention of Leeds City Lab was not to undertake an actual programme of tasks, but to explore the basis of what could constitute future actions that could build more durable and progressive solutions. Co-production approaches will only flourish if those involved are able to create more durable and effective solutions compared to other approaches. But solutions are not necessarily defined just as final outcomes but also as innovations in process. It was noted by one participant that the kinds of fuzzy grey spaces for co-production mentioned above are good at handling grey problems that are themselves fuzzy and difficult to identify, and might similarly generate grey solutions that have the advantage of remaining fuzzy with open edges to permit continued adaptability.

However, the scale and complexity of governance within a large city raises challenges for co-production. As one participant commented: ‘co-production for service delivery is surely different from co-production of a place?’ Significant issues are raised here about the role of co-production within the design and implementation of outcomes at a large city level. One of the particular pernicious issues is whether co-production labs enhance trends towards short-term and project specific decision making, or indeed reinvigorate the declining trend towards holistic strategic city level planning that foreground issues of social and ecological justice. This issue was not resolved during this pilot project, but is a crucial area for further investigation.

During our mini-labs, there was a broad desire to frame participation through a commitment to make something happen in a progressive way. One university participant stressed the importance of attitude and ‘how much is possible when people want to say yes to things rather than no’. What we found was that co-production works best when it is geared towards a challenge. What encouraged and enabled participation was, as one participant commented, ‘a passion towards the city and giving time for doing activities that will change

and benefit Leeds directly.' At times this was motivated by frustration at lack of progress through conventional channels. Overall, we found this approach could be self-sustaining because participation was driven by desire, rather than obligation. Again, there are concerns here about sustainability and self-exploitation. Interestingly, a co-production approach was valued also because there is likely to be greater ownership of decisions, whatever their outcome (Guinier, 2008). This was confirmed by one of participant: 'People will find flaws in the product if they were not involved in the thinking process underpinning it'.

There was a desire to explore Leeds City Lab as a vehicle to create simple and clear pathways for collaborative working in areas that citizens can relate to such as healthcare, transport, housing or safety. Co-location of different sectors could increase accessibility, speed, transparency and accuracy, all of which underpin effective and improved delivery. A need was identified for robust feedback loops, especially in terms of how a City Lab monitors and assesses its ongoing impact and the effects it is having on identified problems. Over-reliance on metrics and impacts as a way for an organization to legitimise itself was voiced as a concern, especially given that many impacts are less tangible and hard to quantify. Moreover, this experimental lab format needs to find ways to talk about difficult and controversial issues. There is a danger that, without clear and transparent framing through deliberatively formed values, co-production could be used to reinforce bias. In this sense, the democratic and accountability basis of city lab experiments and how they are governed and accepted alongside the work of other statutory agencies need significant attention.

Conclusions. Unlocking the potential for co-producing urban governance

This paper has explored the experience of Leeds City Lab and what co-production labs offer for recasting urban governance in more progressive ways. Over the last few decades the institutional personae of municipalities have already radically shifted as they have become facilitators and regulators of dense networks of transactions and innovation processes. Similarly, civil society has become more entrepreneurial and elements of the business sector have become more civic. But amongst these ongoing changes, there is a need to further

reimagine urban governance in ways that depart from the continued prevalence of neoliberalization and austerity urbanism, and that can navigate complex and inter-connected challenges. By way of conclusion, we explore the particular conditions under which co-production labs can shift urban governance to a more productive basis, and how this can become more transferable.

First, city leaders across all sectors need to help set the tone and recognize that no single institution or sector has the capacity to diagnose and respond to urban challenges. To date, it is unclear that this is happening, and in the UK elected municipal mayors represent mixed tendencies. City lab initiatives need to find their own coherent institutional persona which distinguishes them from city mayor offices however progressive, as well as more informal peer-to-peer networks, ad hoc assemblages, social enterprises, citizen assemblies, neighbourhood forums, community development organizations and social action groups. It is likely that the most productive city labs will incorporate hybrid tendencies that emerge from the specificities of place and pull in all city sectors and a range of organizing modes, blending horizontal structures with hierarchies, circular with linear thinking, fast with slow working rhythms, as well as technocratic issues, but maintaining politicised concerns about redistribution and inequality. During Leeds City Lab, we were particularly motivated by the potential of co-production spaces to challenge individual identities and create non-aligned and collective personae where participants have permission to disagree productively and experiment. Overall, the success of co-production labs rests with collective efficacy which emerges from building political capacity from diverse social relations. Collective efficacy is usually triggered by two mutually reinforcing beliefs: that a group has the capacity to act as a group, and that such actions will succeed (Guinier, 2008: 19). Such power lies dormant until people convert the networks and ties between neighbours, colleagues or associates into a political force. Active co-production with city institutions perceived as more powerful helps foster this sense of potency for participants. This is one of the potential strengths of the City Lab model that requires more analysis.

Second, the internal economy that sustains City Lab experiments is crucial. Funding in the short-term is feasible through loans, grants and sweat equity, but to build capacity for durable solutions requires more robust business planning, as well as subsidy from, and structural links to, city partners. The danger is that as experiments grow in success they are incorporated into larger institutional frameworks, or become commissioning partners, or sub-contractors, of the austerity-hit municipality. Leeds City Lab participants were particularly keen to move beyond this pilot project and sustain a co-production lab approach to evidence the kind of concrete impacts that it could yield. At the time of writing, Leeds City Lab had secured funding to undertake a mapping project of the urban commons and how this could promote neighbourhood action. In the longer term it recognizes the need for larger independent income streams from consultancies, members or further grants and greater connections with urban lab networks.

Third, the whole experience of urban labs needs to be highly attuned to the dangers and deficits of place-based experiments. Locally-based initiatives can fall into a geographical naiveté, attempting to solve local problems without reference to broader social, historical and spatial contexts. Moreover, those using co-production labs need to ensure activities are focused on genuine empowerment rather than tokenism. Measures to counteract these deficits include making productive links to other international examples and initiatives, and ensuring equality of input between participants and sectors when conceiving and implementing processes and outcomes. External verification from independent bodies can be useful here.

Ultimately, effective co-produced urban governance rests with unlocking potential and creating coherence from a very broad range of voices and communities. Processes and spaces are needed to empower structurally disadvantaged voices, and to use a greater diversity to unpack challenges and build solutions that can improve city life. In particular, civil society needs strengthening so it can fulfil its potential in shaping a knowledge- and innovation-driven democracy, where creativity is valued and generated across the whole

social-economy (Kolehmainen et al., 2015). Adopting insights from open commons approaches to governance (Dietz et al., 2003) can help in terms of co-producing solutions and identifying and building up assets and resources that the city can use to respond to them. As with all examples of disruptive innovation, from hereon the task is to establish more prototypes so potential problems can be addressed and a more rigorous evidence base for future action can be outlined.

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Table 1. Leeds City Lab co-production pilot workshop locations

Location	Ownership of space	Focus
Open Data Institute – established city centre	Private sector social enterprise	Orientation workshop
Voluntary Action Leeds – traditional inner city neighbourhood	Third sector	How can data be used to benefit our city and help meet the challenges it faces?
The Tetley Arts Space 'City Room', developing city centre	Public sector use of social enterprise arts space	How do we want to use the space to generate ideas to future proof Leeds?
SHINE social enterprise hub – multi-ethnic inner city neighbourhood	Social Enterprise community centre	What is your experience of co-production between Higher Education and the third sector?
Centre for Innovation in Health Management, university campus	Health service delivery focused researchers	Where next?

[i] See http://www.ijurr.org/lecture/2015-aag-ijurr-lecture/ entitled ‘Subject Spaces: Towards an Ethics of Co-production’.

[ii] The N8 is a network of eight research intensive universities in the north of England.

[iii] This paper has, in itself, been a committed exercise in co-production. The five authors have very different academic and practice backgrounds spanning business, the third sector, social action groups and public policy and working at local, regional, national and international level. Through writing this we had to create a shared vocabulary. We work in different ways, and prioritise different outcomes. Therefore, to write this paper it was necessary to find a common structure in which to share experiences. The all too usual academic certainty of being right was put aside in favour of a desire to learn from each other.