GOVERNING URBAN TRANSITIONS

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Why Cities?

- Cities are vital sites for addressing environmental and energy transitions as they contribute significantly to contemporary environmental challenges and at the same time have capacities that can be harnessed to generate solutions
- Cities concentrate (interrelated) infrastructure networks and social practices which shape the provision and use of resources and their local-global environmental impact - any attempt to reduce emissions, improve resilience and address sustainability must necessarily tackle these systems and practices
- Cities provide capacities to intervene in infrastructure networks and social practices – through the direct powers of municipal governments but also through the multilevel governance arrangements of which they are part and the diverse range of actors that govern urban life
- Cities are governed not only through the explicit actions of actors and institutions, but also through norms, practices, codes, and flows that are embedded in urban systems. How traffic flows, sewerage is collected, water provided, electricity conducted, food acquired, nature protected, outdoor space enjoyed etc. is shaped both *socially* and *materially*.
- Cities enable us to see the *material* ways in which we govern environmental and energy issues and provide the potential for interventions that can radically transform what it is we take for granted.

CITIES AT THE CROSSROADS?

Part of the problem … part of the solution?

- The ‘world’s 50 largest cities, with more than 500 million people, generate about 2.6 billion tCO2e annually, more than all countries, except the United States and China.’ (World Bank 2010: 16).
- Cities account for up to 70% of energy related GHG emissions.
- Growth of energy use to 2030 is predicted to be concentrated in cities (in non-OECD countries)
- It is predicted that “material consumption by the world’s cities will grow from 40 billion tonnes in 2010 to … 90 billion tonnes by 2050” (UNEP The Weight of Cities 2018)
- “By 2050 at least 570 cities and some 800 million people will be exposed to rising seas and storm surges” (C40)

- Cities have (varied) direct and indirect powers over critical infrastructure networks that determine energy and resource use and levels of resilience.
- Concentration of population in urban centres means that cities are critical to addressing challenges arising from consumption of resources.
- Interconnected nature of urban infrastructure systems and proximity of inequalities mean that cities are critical for addressing both the *co-benefits & trade-offs* between sustainability goals
- The IPCC 1.5 Degree Special Report “identifies cities and urban areas as one of four critical global systems that can accelerate and upscale climate action” (Bazaz et al. 2018).
- Cities have democratically elected governments and potential to engage communities in addressing energy and environmental challenges.

Three Waves of Urban Response

Municipal Voluntarism

Strategic Urbanism

Sustainability Complex

Climate Problem	Urban Response	Characteristics
Emissions reduction & adaptation measures	Municipal Voluntarism	In-house measures, single policy measures and enabling voluntary action by individuals & organisations. Measures that deliver 'co-benefits' for urban priorities such as air pollution, economic savings, liveability gain more political traction. *Capacity and scope for action largely determined by multi-level governance conditions.*
Decarbonisation & Resilience	Strategic Urbanism	Embedding environmental and energy decisions in strategic planning and provision of infrastructure and services; systemic and strategic nature of the problem requires partnership with range of private and civil society actors. Rise of governing through experimentation in the context of fragmented authority and (time) limited resources, coupled with indeterminacy generated through contested idea what constitutes an improved urban future. *Capacity and scope of action largely determined by capacity to generate alignment between diverse interests and to foster experimentation towards common goals.*
Interconnected climate & sustainability challenges	Sustainability Complex	Increasingly close coupling of climate mitigation and resilience to both other urban agendas (economic development, well-being, poverty, energy access) and environmental issues (biodiversity, plastic pollution) means that action no longer seeks to address singular issues but a 'complex' of environmental and energy challenges. Growing recognition of the social and environmental justice implications of action and the need for *transformative* responses. *Capacity and scope for action largely determined by dynamics of contestation/ resistance on the one hand and ability to forge consensus/agreement on the other.*

New Dawn or False Promise?

Reckien et al. (2014) found in an assessment of 200 large and medium-scale urban areas across 11 European countries that "if the planned actions within cities are nationally representative, the 11 countries investigated would achieve a 37% reduction in GHG emissions by 2050, translating into a 27% reduction in GHG emissions for the EU as a whole" (Bertoldi et al. 2018: 72).

"Socio-technical interventions, experiments and initiatives aimed at reducing the energy and carbon intensity of human activities in cities are proliferating across the planet ... [seeking to engender] low-carbon transformations in the development and utilisation of urban infrastructural systems." (Bouzarovski and Haarstad 2018: 256)

Progress to date has yielded at best "rather modest GHG reductions which are often only a by-product of measures that were actually implemented to serve other needs" and that "cities largely operate in the shadow of hierarchy and have only limited capacities to tackle the problem of climate change independent of other levels of government" (Fuhr et al. 2018: 3).

"Examining thirteen networks … [network membership] is skewed toward Europe and North America while countries from the Global South are underrepresented; that only a minority of networks commit to quantified emission reductions and that these are not more ambitious than Parties to the UNFCCC; and finally that the monitoring provisions are fairly limited. In sum, the article shows that transnational municipal networks are not (yet) the representative, ambitious and transparent player they are thought to be." (Bansard et al. 2017)


Artwork by JonasDeRo

Three Conundrums

Does improving urban policy improve urban outcomes?

What is the value of continued growth in urban experimentation?

Can cities generate transformative change?

A MATTER OF GOVERNANCE

Governance = authoritative exercise of power

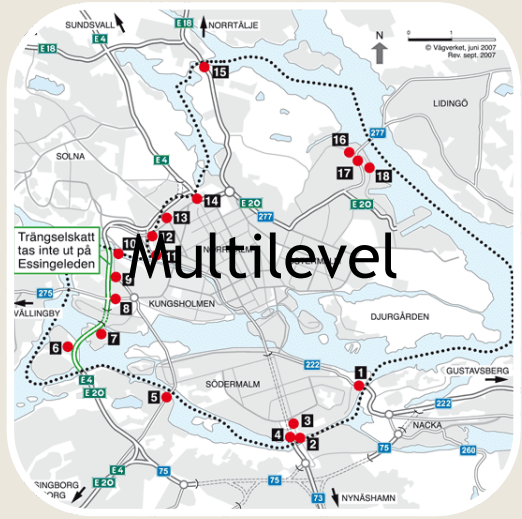
“Understanding urban climate governance in the post-Paris era requires a broader conceptualisation of governance that unpacks how a multiplicity of urban experiments are governed in the city” (Smeds & Acuto 2018: 550)

Governing … “is done through the arrangement and management of people and objects, producing the material conditions that make particular ways of being comprehensible and possible” (Gabriel 2014: 42)

Governing Transitions

Different conceptual approaches have been advanced to identify and analyse how the governing of transitions takes place in cities.

Each approach places different emphasis on core social science components – agency, power, institutions, interests, practices and socio-material structures – in terms of their role and importance in shaping governance dynamics and outcomes.



Conceptual Approach	Governance is....	Urban question...	Transitions are governed through...	Limits and challenges
Multilevel governance	A result of the capacities and resources that are mobilised across vertical levels of governance and through horizontal networks.	Multilevel conditions are critical as urban governance institutions exhibit poor 'fit' to problem/solution space and the urban arena is a dense interwoven mesh of multiple forms of vertical and horizontal governance.	Multiple modes of governing including self-governing, regulation, provision and enabling, each of which deploys different forms of authority and capacities	Limited reach of municipal governments & highly differentiated capacities to act. Horizontal governance has been more effective than vertical. Dependency on enabling powers. In a context of fragmented authority. Very limited analysis of how such capacities relate to urban consumption dynamics but unlikely to have significant influence over the majority of resources consumed in cities.
Socio-technical transitions	A result of the more or less institutionalised multi-actor networks, rules, norms and policy instruments that surround particular socio-technical systems.	Urban transitions are regarded as taking place within socio-technical systems that are spatially bounded to the urban arena and as involving primarily urban actors. Urban transitions may emerge as a result of the pressures of wider system change and innovations, or through deliberate processes of transition management.	Novel social and technical innovations give rise to and are dependent upon visions and the actor networks through which these are imagined and enabled. Strong emphasis on learning as the mechanism through which existing systems change and novelties are empowered.	Multilevel and fragmented governance conditions rarely taken explicitly into account. Focus is on questions of agency and innovation rather than structural conditions through which lock-in is maintained. There has been limited focus to date on how existing high carbon socio-technical systems can be 'undone'.

Conceptual Approach	Governance is....	Urban question...	Transitions are governed through...	Limits and challenges
Government by experiment	Governance is a socio-material process that takes place through the design and implementation of specific interventions which are in the contemporary period characterised as experimental.	Urban governance by experimentation takes place through particular urban sites but creates new relations between actors and entities that are relationally connected to the city rather than spatially delimited.	As interventions in socio-material infrastructures and practices, experimentation reconfigures institutions, actors, entities and norms, creating new flows and generating new forms of agency and power.	The boundaries around what constitutes experimentation and what does not, and the relation between experimentation and other forms of agency/power in the city are not always clear.
Transformative governance	Governance is either regarded as a process that involves the transformation of institutions and opening up of knowledge and decision-making processes *or* a matter of outright contestation of existing vested interests and the pursuit of justice to redress inequalities	Urban arenas are regarded as central to the success of any approach for transforming society both because of the concentration of the 'problem' in these areas but also because of their political possibilities either as a site for co-production or for contestation	Transitions that are transformative are either regarded as achieving *systemic* change – widespread and widescale shifts in current forms of provision and practice – or as *structural* in terms of dislodging existing interests and addressing inequalities	Although approaches to systemic and structural transformation are used interchangeably, and often both approaches bought together in relation to policy goals, they rely on fundamentally different concepts of what justice entails and what constitutes effective political processes. The invocation of the need for transformation can create more explicit resistance to change.

Key Insights

- Governing is multi-level, multi-actor and multi-faceted – it is not controlled from one (or more) centre and can not be achieved by individual actors alone
- There is divergence between approaches which emphasise *policy and planning* and those which stress the importance of *interventions* in realising governance.
- Some approaches focus on the need to increase resources, develop more evidence, integrate governance processes and standardise governance mechanisms to improve governance – these perspectives assume governance can operate 'on' urban systems from outside and achieve planned results.
- Other approaches focus on the importance of enabling innovation and experimentation in order to generate change within existing socio-material systems. Some suggest this can be achieved through social networks that govern through learning; others argue for the importance of how such interventions *reconfigure* existing interests and material flows and come to be embedded/normalised.
- The focus on transformative governance is relatively new and there are many different ideas being advanced. Some focus on the need to transform governance processes (e.g. through how knowledge is generated, how decisions are taken). Others suggest transformative governance needs to include outcomes that transform existing social and environmental conditions, either through *systemic* or *structural* change.

GENERATING NEW PERSPECTIVES

Changing Perspective

1) Understand the ‘urban’ in ***relational*** terms: “as created and changed through the various types of relationships that constitute them — socially, politically, and materially” (Grandin et al. 2018: 16). 2)

2) Power as a ***generative capacity*** - not a form of control that exists *outside* of social/material relations, but as generated through them – as immanent to those relations and inseparable from its effects

What if governance fragmentation is really the solution rather than the problem?

Orthodoxy

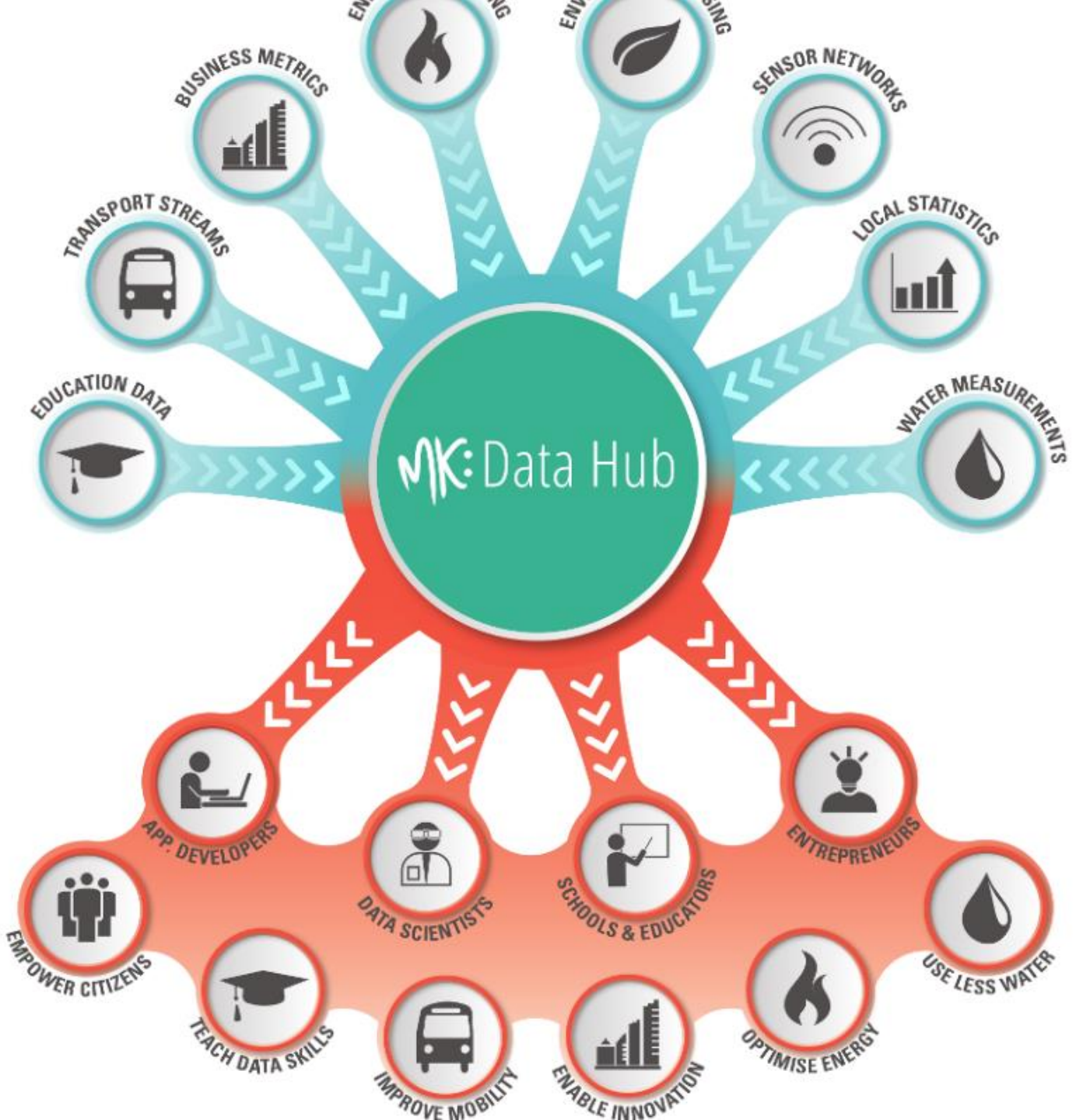
The fragmentation of authority is a problem. To address this problem we need to *integrate* and *formalise* governance. The aim is then to *concentrate* the capacity to control urban transitions (even if that involves multiple actors).

New Perspective

Authority is not fragmented but diffuse. It has always been diffuse, but we now recognise it as the matters through which we need to govern transitions come to be seen as pervasive. This provides abundant opportunities to intervene. To address this opportunity we need forms of *intermediation* that can 'come to terms' with difference and enable alignment (rather than agreement or consensus).

What if governance fragmentation is really the solution rather than the problem?

MK:Smart configured parallel experiments across multiple urban sectors such as transport, energy, and water. The agglomeration of state-sponsored experimentation schemes in Milton Keynes has provided protected space for niche practices, but are also redefining urban problems with expanded networks of actors who have invested into the but also bought different interests, goals and values. Interplays of local (e.g. MKC, OU), regional (e.g. Anglian Water), national (e.g. Satellite Applications Catapult, HEFCE) and global actors (e.g. MNCs including Samsung, Huawei, Nissan) have agglomerated at the experimental site in Milton Keynes, as MK: Smart provides a *platform* for the development of this urban living laboratory.



What if experiments can not be scaled up?

Orthodoxy

Experiments are a stepping stone towards systemic change. They are successful when they replace existing socio-technical regimes. This requires that they are either scaled out (replicated) and scaled up (adopted at higher levels of governance). Momentum for scaling can be produced from external agents or by incumbents.

New Perspective

Usually scaling is more notable for its absence than for its presence. Research suggests that learning is not only limited but often actively resisted. Experiments are usually *translated* rather than *transferred*. Experiments are successful when they can be embedded and come to be part of urban socio-material networks (that stretch over space and time). This requires the capacity to re(configure) – a capacity that relies on both social and material power.

What if experiments can not be scaled up?

The primary objective of the Low Carbon Zones Programme was to deliver “rapid carbon savings from buildings in the zones and the development of models that drive long-term carbon savings”, and in addition to contribute to the “mitigation of fuel poverty, promotion of sustainable lifestyles and lower carbon footprints and regional skills development and other positive social outcomes” (Greater London Authority, 2009b: 16). The intention of the scheme was to support a community-based approach for testing innovative measures for bringing about a 20.12% reduction in carbon emissions by 2012 (in time for the 2012 London Olympics) and to put in place mechanisms to achieve a further 60% carbon reduction by 2025.

“The Brixton LCZ intends to develop ways of engaging socially excluded communities in carbon reduction and sustainable living. Local residents who are already working to improve their communities have been engaged in the project; their contacts and skills will be used to engage further members of the community. Residents will be engaged on a house by house and street by street basis through home visits, events and workshops… These activities will be designed to be enjoyable, educational and practical and to bring residents together” (London Borough of Lambeth, 2009a: 28).

“Brixton Energy is a not-for-profit co-operative based in south London. We create cooperatively-owned renewable energy projects whose financial revenues stay within the local community.” (Brixton Solar 2019)

What if transformative change can not be achieved through improving governance processes?

Orthodoxy

Transformation requires new governance approaches. Co-production is a favoured mode through which transformative governance can take place. Better processes are thought to produce better outcomes for transitions. Such processes can generate procedural justice (inclusion) and potentially consensus which in turn can provide new visions of the goals of transitions and action to be taken.

New Perspective

Transforming infrastructures and social practices requires interventions that are capable of reconfiguring existing socio-material systems. Yet systemic change can serve to re-embed interests and fail to transform inequalities. If overt attempts for structural change meet resistance, radical incrementalism may provide a means through which to seed transformation which can be empowering.

What if transformative change can not be achieved through improving governance processes?

The Pla Buits scheme in Barcelona is a participatory intervention that gives the opportunity to public entities or non-profit associations to develop temporary uses and activities (1-3 years) on small plots of unused land. Out of the 14 selected projects in the first phase, nine are urban gardens. They ‘fit’ well to temporary use because no large infrastructure is needed. The Pla Buits urban gardens represent a form of social entrepreneurship: self-governed projects are given a space to flourish, contributing to urban green and related ecosystem services, while also offering a solution to social issues of community bonding, integration, and awareness-raising on food production and consumption

DISCUSSION

Opening Questions

- How can urban and national actors support efforts for alignment and intermediation in order to recognise multiple and fragmented forms of authority and harness them towards transitions?
- If there is limited evidence that ‘learning’ and ‘scaling’ work, but we inhabit the ‘city of permanent experiments’ how can we ensure that their potential is realised?
- If transformative governance requires structural change, is it a realistic proposition and if not can goals for social and environmental justice be achieved otherwise?

THANK YOU