

## Towards a genuinely humanizing smart urbanism

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### Abstract

This paper considers, following David Harvey (1973), how to produce a genuinely humanizing smart urbanism. It does so through utilising a future-orientated lens to sketch out the kinds of work required to reimagine, reframe and remake smart cities. I argue that, on the one hand, there is a need to produce an alternative 'future present' that shifts the anticipatory logics of smart cities to that of addressing persistent inequalities, prejudice, and discrimination, and is rooted in notions of fairness, equity, ethics and democracy. On the other hand, there is a need to disrupt the 'present future' of neoliberal smart urbanism, moving beyond minimal politics to enact sustained strategic, public-led interventions designed to create more-inclusive smart city initiatives. Both tactics require producing a deeply normative vision for smart cities that is rooted in ideas of citizenship, social justice, the public good, and the right to the city that needs to be developed in conjunction with citizens.

**Key words:** smart cities, citizenship, social justice, right to the city, future

## **Introduction**

The analysis presented in this book posits that smart cities are presently underpinned by instrumental, commonsensical, pragmatic, neoliberal conceptions of citizenship and social justice that are framed in post-political terms. Citizens – even in so-called citizen-centric visions of smart cities – are largely positioned as data points, consumers, users, players, testers or people to be corralled, nudged, disciplined and controlled (Cardullo and Kitchin 2018a). Occasionally they act as participants that provide feedback and suggestions, but rarely occupy roles of decision-makers, co-creators or leaders. Smart city policy and programmes are mostly conceived within a framework of stewardship and civic paternalism, devised by ‘experts’ and implemented on behalf of and in the best interests of citizens, or are driven by the interests of capital seeking new modes of accumulation (Shelton and Lodato, in press). In the latter case, the city is no longer the place where the market operates, but the city itself and its infrastructure and services – that were once operated by the state for the public good – become markets themselves and laboratories for social and technological experimentation. Here, any right to the smart city is the right to act as a consumer, if one has sufficient capital (financial, social, cultural) to do so. It is the right to gain the benefits of smart city technologies under the logics of neoliberal governmentality and accumulation by data-driven dispossession (Hollands, 2008; Shelton et al., 2015).

The central questions at the heart of the book have been: Is another smart city possible? Can we envisage and enact a smart city that takes seriously Lefebvre’s (1996) notion of the ‘right to the city’? Can we harness the power of smart technologies to create an emancipatory and empowering city, or what Harvey (1973: 314) terms ‘a genuinely humanizing urbanism’? Can we reframe, reimagine and remake the smart city so it really is ‘citizen-focused’, rather than predominately driven by profit and the needs of states? The chapters in the book have started to explore these questions, though they also make clear the challenges in realising such a city. Nonetheless, it is vital to map out paths to a future smart city. Indeed, as Marcuse (2012) notes, Lefebvre was clear on insisting that “it is not the right to the existing city that is demanded, but the right to a future city”; the city in the making; a city transformed with respect to its socio-spatial relations.

As I have argued elsewhere (Kitchin, 2018), the future is a critical element in discursive regime and operations of the smart city (see also Söderström et al., 2014; White, 2016; Datta and Shaban, 2016). Adams and Grove (2007) note that the future is evoked through two temporal modalities: the ‘present future’ and the ‘future present’. The ‘present

future' is the future from the standpoint of the present. It is the future to be created, which unfolds from past and present trends, the result of given and embedded structures and path dependencies, though these can be redirected (Poli, 2015). The present future positions the future as ours 'to shape and create', extrapolating forward from the present situation (Adams, 2008). Thus forecasts are made, strategies and plans are formulated, and direct action enacted to try and realise particular futures. Smart city technologies are future orientated with respect to creating plausible and preferable scenarios, dispositions, and outcomes. They seek to produce 'contingency futures', that is, being prepared for anticipated surprises, or 'optimization futures', imposing patterns and trends from the past onto the future to ensure continuity (Miller, 2007). Of particular importance in producing such futures are the practices of experimental urbanism. Here, innovators are enabled to prototype and trial new technologies in real-world settings in order to test, learn about and promote possible and desirable urban futures (Evans et al., 2015). Smart city testbeds and living labs thus work to try and produce what Adam and Grove (2008) term 'latent futures' – futures in the making that are 'on the way' (Poli, 2015). The constant and incomplete process of smart city prototyping, Halpern and Günel (2017: 2) argue, produces 'preemptive hope'; a sense that an uncertain social, economic and environmental future is being proactively tackled, yet does so by creating a transition pathway to a particular vision of a neoliberal city (Marvin and Silver, 2016). Smartness thus becomes the commonsensical means to imagine and respond to our future.

Whereas the present future extends the present into the future, the future present uses possible futures to consider and plan alternative trajectories (Adam and Grove, 2007). For example, the practice of backcasting imagines a normative future – some state that we might wish to achieve – then works back to the present to try and define the steps or pathway needed to make such a future a reality (which might require a radical break with present future strategies). The future present thus acknowledges that our present actions potentially impact on future generations and we can act morally and ethically to create a different world (Adam, 2008). In this sense, Anderson (2010) argues that a normative future is evoked in order to pre-empt, prepare for, or prevent threats from being realised, and to redirect present future paths onto a new trajectory. As White (2016) details, smart city advocates have developed a discursive rationale that seeks to colonize the future and draws extensively on potential scenarios to both rationalize technological intervention in the present and to pre-empt and plan new urban trajectories. Three crises in particular act as a motivator for imagining alternative futures: widespread changes in patterns of population, particularly rural

to urban migration, and subsequent resources pressures; global climate change and the need to produce more resilient cities; and fiscal austerity and the desire to create leaner governments and attract mobile capital (White 2016; also see Datta, 2016). By evoking alternative future imaginaries and contrasting them to a present future that fails to take a path of smart city investment, advocates seek to pre-empt and prepare the ground for smart urbanism and pre-figure the future city. However, as argued in Chapter 1 and the other chapters, the anticipatory logics of smart city are predominately framed in neoliberal terms.

Creating a more humanizing smart city then requires more than exposing, proposing and politicizing (Marcuse, 2012) the present structures, processes and injustices of smart cities: though this work is vital in providing the groundwork and justification for productive interventions and alternative paths. It necessitates shifting the thinking and practices of the present future *and* reconfiguring the future present narrative in order to reframe and remake smart cities. Both tactics require producing a deeply normative vision for smart cities that is rooted in ideas of citizenship, social justice, the public good, and the right to the city.

### **Future present of smart cities**

If we are to transform the present future of smart cities into one orientated around the mission of creating a ‘genuinely humanizing smart urbanism’ then it is productive to start with imagining an alternative future present, as this provides the context and framing for reconfiguring the present future of smart cities. Of course, in terms of imagining those alternative futures one needs to examine what is troubling about the present smart city rhetoric and implementation and its associated future vision. Chapter 1, in particular, and the other chapters document the perils and pitfalls of smart cities, so there is little need to re-rehearse these here again in detail. In short, what the previous chapters make clear is that the neoliberal smart city advances a tech-led form of entrepreneurial urbanism that is market-orientated, takes an instrumental approach to addressing urban issues that provide sticking plaster solutions rather than addressing their root causes, and reproduces rather than ameliorates disadvantage.

While the anticipatory logics of smart cities – population change, climate change, and fiscal austerity – are issues that most certainly merit action, they require holistic and structural solutions, not simply technical fixes, and these need to be accompanied by a logic of addressing systemic social and spatial divides and creating a fairer, more equitable and ethical society. This can only be achieved by: (1) tackling and limiting the worst excesses of capitalism, redistributing resources across society, creating equitable levels of access to key

resources and a generous welfare state, and; (2) reversing the trend towards neoliberal governmentality and governance to embrace the more socially democratic ideals of the public good and shared public assets, as well as ensuring institutional processes are fair, transparent and accountable. In other words, there is a need to imagine another kind of smart city, one underpinned by non-libertarian forms of citizenship and social justice; one that assures the right to the city in a Lefebvrian sense.

At a basic level, such a smart city would have a number of characteristics drawn from the ‘right to the city’ ideals (Cardullo and Kitchin 2018b). First, the smart city would be orientated towards reflecting and serving the interests of citizens, rather than these continuing to be subservient to the interests of state and market. Second, there would be a more inclusive and deliberative framing of citizen participation in the smart city beyond consumerism and tokenistic civic engagement, including more extensive public consultation, collaboration and co-production, and citizens occupying roles such as creators, members and leaders. Third, there would be a shift back from citizenship grounded primarily in market principles to a framework underpinned by a set of civil, social, political, symbolic and digital rights and entitlements. Fourth, this would be accompanied by alternative form of governmentality that respected rights and self-determination, treated people fairly and transparently, and placed checks and balances on forms of algorithmic governance and practices, such as social sorting and anticipatory nudge, discipline and punish. Fifth, key public assets such as core urban infrastructure and public services would form commons to be protected and leveraged for the common good, including re-municipalisation where they have been privatised. Sixth, the excesses of platform capitalism would be checked, labour would be fairly recompensed and be less precarious, and resources would be redistributed more equitably. Moreover, rather than producing new political concepts such as smart citizens, smart citizenship, smart justice or smart commons, where these notions are necessarily mediated in relation to and through technology, the future smart city will be orientated to citizens, citizenship, justice and the commons broadly conceived.

I appreciate that this vision is decidedly thin on specifics in terms of what each of these ambitions would look like in practice and on the tactics necessary to create such a vision. This is for two reasons. First, while there has been some thinking directed to reconceiving the smart cities along these lines (see McLaren and Agyeman, 2015; Morozov and Bria, 2018; Coletta et al., 2019), it is clear that mapping out the particularities of an alternative future present of smart cities requires much work, requiring deep reflection, and would take far more space to explicate than afforded in this chapter. Second, this work cannot

be simply undertaken by academics, city administrators and policy makers, and corporate consultants and R&D staff, but rather needs to involve ordinary people who can articulate their hopes and aspirations for future city life.

Here, employing utopia as a method (Levitas, 2013; Buscher, 2018) has some merit. Such an approach seeks to create the imaginary reconstitution of society; a speculative sociology of what is desirable and possible: in this case, an ideal future city. Levitas (2013) contends that such a method provides the means to think through ‘the connections between economic, social and political processes, our ways of life, and what is necessary for human flourishing,’ where that flourishing relates to everyone and not just a privileged few. In Levitas’ formulation, utopia as method consists of three aspects: an archaeological mode (excavating and assembling the elements of what would constitute a utopian society), an ontological mode (defining the subjects, agents and roles interpellated in such a society), and an architectural mode (the institutional design and delineation of that society). Once the utopia is envisioned, then a process of backcasting can be undertaken to think through how the whole vision, or elements of it might be realized, and the challenges of implementation. Such an exercise in utopian thinking is not a futile gesture doomed to failure, as utopian thinking is often criticized, but rather opens up the possibility for imagining and making other futures: it creates hope and new desire lines, makes it clear that the future is contingent rather than a teleological inevitability, suggests alternative pathways for exploration, and creates alternative anticipatory logics.

Inherent in this process, I believe, should be a thorough consideration of identity politics, which to date has been little addressed in the smart cities literature (though see Datta, 2015, 2018; Leszczynski and Elwood, 2015; Rose, 2017; Elwood and Leszczynski, 2018; Shwayri, 2018; Cockrayne and Richardson, 2018; Trencher and Karvonen, 2018; Jefferson, 2018a/b; Bousquet, 2018). Here, there is a recognition that if there is to be a genuinely humanized smart city, then it has to accommodate in inclusive ways diversity and difference. Reading the smart city through the lens of gender, postcolonial, queer, race, class and disability theories is a sobering experience. While smart city technologies can provide some liberatory effects, such as apps designed to improve women’s safety or facilitate disabled peoples’ wayfinding, in general much of the technology either ignores and inherently reproduces, or actively deepens, social divides, especially those that involve profiling, sorting, nudging and other forms of social control (Elwood and Leszczynski 2018; Jefferson 2018a/b). This raises the critical question: what would a smart city designed to be inclusive

and non-discriminatory for women, the LGBT community, people of colour, ethnic minorities, poor people, disabled people and older people be like? Not just in terms of the configuration and workings of the technologies, infrastructure and services but in the policy, practices and vision of the smart city?

Answering these questions requires sustained interrogation of the discursive and material manifestations of the smart city as presently conceived and deep normative thinking concerning how these might be transformed in emancipatory ways. Such speculative future making needs to be grounded in local context: there can be no one size fits all utopian future smart city, as work considering smart cities around the globe makes clear (Datta and Shaban, 2017; Karvonen et al., 2018; Coletta et al., 2019). Indeed, what the smart city means for states and low income and slum dwellers in sub-Saharan Africa (Watson, 2014), Colombia (Talvard, 2019), and India (Datta, 2015, 2018; Rangaswamy and Nair, 2012; Janu, 2017), and how future smart cities should, could and will unfold in the Global South is undoubtedly different to that of the Global North for all kinds of reasons (not least because they are starting from very different places and hold different values and customs). Which brings us to transforming the present future of smart cities.

### **Present future of smart cities**

In the absence of a well-articulated future present of smart cities a number of stakeholders and city administrations have tried to shift the present future of how smart cities are currently being formulated and implemented to one that is more inclusive and less market-orientated. This involves devising a set of tactics designed to enact more bottom-up, citizen-centric versions of the smart city. Often these are formulated in quite pragmatic, commonsensical ways, produced by civic society organisations and promoting community-led/civic tech and sharing initiatives (see McLaren and Agyeman, 2015; Schrock, 2018, this volume; D'Ignazio et al, this volume). These can be quite diverse in ethos and practice; for example, McLaren and Agyeman (2015) note four broad types of sharing initiatives, three of which take a different tack to commercial, monetized platforms (e.g., Uber and Airbnb): non-for-profit, peer-to-peer and communal platforms (e.g., Streetbank and Freecycle); commercial, social-cultural (rather than an exclusive platform-mediated) exchanges (e.g. Enspiral and Bitcoin); and communal, social-cultural exchanges, such as sharing within families and communities. Similarly, Perng (this volume) identifies a number of different forms and ethos of hackathons.

These counter-hegemonic initiatives often lack an overarching strategic vision, or a wider ideological framing, and enact politics with a small *p*. They can have a profound effect in shifting local approaches to particular smart city developments (e.g. adopting ideas of play, hacking, and community planning in how systems are conceived and deployed locally; see de Waal et al., 2018), but are usually either co-opted into the neoliberal project or limited to reshaping some aspects of a city's smart city programme, but no real change to the underlying governmentality and political economy occurs. Nonetheless, they are important in the sense that they enact what Macgilchrist and Bohmig (2012: 97) term 'minimal politics', creating 'tiny fissures' in what can otherwise appear to be the hegemonic discursive regime and material politics of smart cities. This constant refrain of tiny rips means that the smart city vision is dislocated and "ensures that democracy – understood as practices of conflict and disagreement – is enacted on a daily basis" (Macgilchrist and Bohmig, 2012: 97). In other words, while individually they might not usher in seismic shifts in the formulation of smart city, in combination with those other counter-hegemonic initiatives counter and resistive acts open up small rips through which change can be effected. It was such minimal politics that led to smart cities being re-cast as 'citizen-focused', even though such rebranding little altered their actual formulation and practices (Kitchin, 2015; Cardullo and Kitchin, 2018a/b).

Other initiatives have a more strategic, ideological vision that seeks to radically reconfigure the smart cities vision, enacted at the level of the state. In the case of Medellín in Colombia, the city has sought to enact what it terms 'social urbanism' (*urbanismo social*), promoting the idea of social inclusion in a shared public realm (McLaren and Agyeman, 2015). From the mid-1990s the Medellín city government has focused on empowering citizens, beginning in the poorest neighborhoods, through a series of initiatives relating to access to ICT, education, cultural activities, infrastructure and economic development, as well as using participatory budgeting and community planning, to create a urban commons of public services and spaces (McLaren and Agyeman, 2015). In recent years, this has extended to its smart city initiatives, seeking to enrol public and private actors to build consensus on how the city should be organized politically and economically (Talvard, 2019). While the city has a designated smart district, *Medellinnovation*, that acts as a site of urban experimentation and seeks to attract transnational investment, this area does not seek to control who lives there, but rather has the stated aim of serving existing local residents and preventing gentrification that would displace them. However, while Medellín has sought to become what city administration terms an 'inclusive and competitive smart city', Talvard (2019) details it still delivers a 'rather paternalistic and market-oriented notion of smartness' and follows a

path of development that favours the interests of commercial actors. He thus concludes that despite the emphasis on social inclusion, it appears that there has been a ‘corporate capture of the public interest masquerading as local development’. Nonetheless, the interests of capital are curtailed and there is a stronger emphasis on inclusion and commoning than in other smart cities.

The case of Barcelona, and its notion of technological sovereignty, is perhaps the clearest example of a concerted attempt to rethink the politics and principles of the smart city that challenges its underlying political economy (March and Ribera-Fumaz, 2018). Morozov and Bria (2018) set out a vision of technological sovereignty and nine political actions, designed to help cities to take control of their digital policies and public assets, reverse the damage wrought by neoliberalism, and produce a city that serves, first-and-foremost, citizens:

- Promote alternative data ownership regimes, including creating an open data commons and regulations to limit aggressive data harvesting.
- Move information services to open source, open standards, and adopt agile delivery.
- Transform procurement to make it ethical, sustainable, and innovative.
- Control digital platforms, including oversight and regulation of the sharing economy.
- Build and grow alternative digital infrastructures based on open and decentralized technologies that preserve net neutrality.
- Develop cooperative models of service provision.
- Maximize innovation with public value, including grassroots social entrepreneurship.
- Rethink welfare schemes and complementary currency systems at the local level.
- Promote digital democracy and digital sovereignty through digital participation and engagement tools and new rights.

For them, and the Barcelona city administration, these actions work to ensure cities can implement independent, effective politics and decide their own fate, and that citizens ‘have a say and participate in how the technological infrastructure around them operates and what ends it serves’ (p. 22). They argue that without technological sovereignty, ‘the fight for the right to the city loses much of its power’ (p. 23) because how the city is managed is bound up into the interests of private capital and power. They also note, that the battle for a different kind of smart city ‘cannot succeed without strong connections to the ongoing fights of urban social movements and a new generation of politicians’ (p.25) rejecting all forms of

entrepreneurial urbanism. Indeed, creating an alternative smart city needs to be part of a project to create a non-neoliberal city that has a suite of related political actions:

- Establish the city of the commons and collaborative production as global points of reference.
- End privatization and the transfer of public assets into private hands, while promoting remunicipalization of critical infrastructures and services.
- Massively reduce the cost of basic services like housing, transportation, education, and health care in order to help society's most precarious strata.
- Build data-driven economic models with real inputs (using real-time data analytics), enabling participatory democracy to model complex decisions.
- Prefer and promote collaborative organizations over both the centralized state as well as market solutions.
- Institute a universal basic income focused on targeting poverty and social exclusion.
- Build city data commons: Decree that the population's networked data generated in the context of public services cannot be owned by service operators.

(Morozov and Bria 2018, p.29-30, summarizing Mason 2016).

Clearly, creating a non-neoliberal, post-capitalist smart city is no easy task given the present embedded structures and path dependencies, but the Barcelona experiment with technological sovereignty offers both some hope and a strategy and tactics for pursuing the right to the smart city that can be used to scale-up the minimal politics being enacted elsewhere.

## **Conclusion**

Thinking through, envisioning, and enacting, the right to the smart city is far from a simple task. It is one fraught with ideological and normative questions and conundrums, and political, social and cultural work and praxes. This paper has sought to sketch out the kinds of future-orientated work required to reimagine, reframe and remake smart cities in ways that produce a genuinely humanizing smart urbanism. On the one hand, I have argued that this necessitates producing an alternative future present that shifts the anticipatory logics of smart cities to that of addressing persistent inequalities, prejudice, and discrimination, and is rooted in notions of fairness, equity, ethics and democracy. On the other hand, I contended that the work to disrupt the present future of neoliberal smart urbanism and to enact alternative more-

inclusive smart city initiatives needs to continue apace, diversify, and shift from enacting ‘minimal politics’ to more sustained strategic, ideological, public-led vision that seeks to radically reconfigure the smart city. In my view, this future present and present future work needs to become thoroughly entwined to produce a coherent vision and set of policies and initiatives for smart cities in the making. This book has sought to provide ideas, analysis and case material for continuing this work, reflecting on issues of citizenship, social justice, commoning, and the public good. The challenge to readers is to engage and reflect on the arguments made by the contributors, and to take-on Marcuse’s call to expose, propose and politicize the politics and praxes of smart cities, while complementing this with normative, future-oriented work that recasts the possibilities of the smart city. To enact the right to the smart city, we have to have a clear sense of what that right is and what kind of city is to be produced.

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