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Editorial: Social Smart Cities: Reflecting on the Implications of ICTs in Urban Space

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Much of our thinking around technology and the city is based around polarising paradigms. These tend to move between two different approaches; the technocratic and the social. On one hand the smart city agenda is underpinned by a vision of data-centred optimisation of urban systems, whilst on the other hand there is a focus on open-source, citizen driven approach based around ad-hoc practices and prototyping of counter-culture scenarios. To date, the technocratic paradigm has tended to dominate smart city projects and initiatives, which are often led by ICT companies. Many smart city concepts and projects tend to prioritise data capture that leads to top-down, technocratic governance (Kitchin, 2014), and a number of existing publications in the field focus on the technical and economic dimensions of smart systems (Paskaleva, 2011). This is despite the fact that the social issues and implications have been recognised as critical within the context of urban development (Hollands, 2008; Luque-Ayala & Marvin, 2015). Kitchin (2014) describes how the term 'smart cities' encompasses both cities which are 'increasingly composed of and monitored by pervasive and ubiquitous computing' and those 'whose economy and governance is being driven by innovation, creativity and entrepreneurship, enacted by smart people' (p. 01). This highlights the polarising nature of smart city rhetoric; the former presents a more technocratic and neo-liberal paradigm of ICT driven urban change, whilst the latter focuses on the positive societal impacts of ICTs in urban space. Consequently, Marvin, Luque-Ayala and McFarlane (2015) highlight the need for international comparative research, bringing a 'critical insight across disciplines and places' (p. 03).

The core problem with the technocratic approach in the emergence of smart cities is that they tend to operate on a neoliberal logic that prioritises market led solutions for urban development based on efficiency (Kitchin, 2014; Hollands, 2008). Brenner & Schmid (2015, p. 157) highlight how the smart city agenda functions under a neoliberal agenda, since:

> Contemporary discussions of 'smart cities' represent an important parallel strand of technoscientific urbanism, in which information technology corporations are aggressively marketing new modes of spatial monitoring, information processing and data visualization to embattled municipal and metropolitan governments around the world as a technical 'fix' for intractable governance problems (Greenfield 2013; Townsend 2013).

This approach not only reinforces a universalising view of urban development, but it also masks the social role of its citizens in its construction. According to Leontidou (2015), this has implications for the social benefits for citizens in smart city projects since 'digital technologies saturate the quotidian and the public realm, and they increasingly fall to the hands of digitally literate, highly educated (hence, intelligent), highly skilled young people' (p. 84). Even where the social impacts of smart cities are considered, discourses are usually based on the rhetoric of community participation rather than on effective participation (Hollands, 2008). To counter this, academics have tried to highlight and prioritise the role of citizen engagement in the making of the smart city. Oliveira and Campolargo (2015), for instance, call for a 'human smart city', where 'the city government supports the implementation of an ecosystem of urban innovation, which applies co-design and co-production of social and technological innovation services and processes, in order to solve real problems' (p. 2336). De Lange & de Waal (2013) also highlight the potentialities of urban technologies to 'people to become active in shaping their urban environment, to forge relationships with their city and other people, and to collaboratively address shared urban issues' (p. 493). The main challenge is how this citizen-driven approach will challenge the existing neoliberal framework in which socially driven projects of the smart are still being developed.

By directly addressing the role of the social in 'smart city', in this Special Issue we intend to make it clear that the 'smart city' as such should be understood as a socio-technical ensemble (Bijker, 1997) formed by the interrelations of individuals and groups, technology and the space they produce (Latham and Sassen, 2005).

Reflecting on the many challenges embedded in thinking a more socially engaged smart city, the 'Mediacity 5: social smart cities' conference was held in Plymouth, UK in 2014. The conference took the topic of 'social smart cities' in order to consider more fully the multiple, subtle, and interdependent spatio-temporalities which together work to constitute ICT-based urban change. The conference explored urbanity and digital media and ideas of place and space and reflected on new models, landscapes and frameworks in the social smart city. Contributions addressed different perspectives on the social through a pragmatic approach to the topic, evaluating current limitations and trends that accompany the ubiquitous presence of ICTs in urban spaces. The papers in this Special Issue have been developed directly out of the doctoral session at Mediacity 5. Within the conference programme, the doctoral session enabled PhD students to contribute to an open and supportive discussion platform on the conference topic. It brought together students from different geographical locations (from both North and South) and fields; among them Architecture, Interactive Arts, Geography, Sociology, Business Studies and Urban Studies. The contributions here presented focus on the specificities of the social smart city, by discussing case studies and methodologies that react to the problematic overgeneralisation of this emerging field.

In the first contribution 'Intelligence is Open: Smart City versus Open City', Pinheiro approaches the politico-economic role of ICTs in the urban, by exposing the conflictive nature of the smart value as public good; in contrast to market oriented strategies. The author reminds us that '*smart* technologies do not necessarily yield a positive *social product*' and underscores the role of the openness of information in the process by discussing three technological initiatives related to urban planning: Waze, Uber and OpenStreetMap. In 'Mechanisms of the Smart City: A case study of Smart City Búzios, Brazil', Batista and Fariniuk investigate the Smart city Buzios project, in Brazil to understand whether smart grids can change urban space and engage local people. The authors highlight that due to a lack of a citizen driven approach, the project was advantageous to the private energy companies

while marginally benefitting local citizens, who often could not even identify possible transformations led by the implementation of the smart grid in Buzios.

The following two contributions use a case study approach to investigate the issue of participation in ICT driven urban projects. In 'Build it and They will come: Analysis of an Online Deliberation Initiative', Lusoli and Sardo address the increasing use of ICTs for digitally-mediated citizen cooperation, by investigating the processes of design, deployment and use of a digital platform created to engage citizens in the discussion and deliberation processes of urban-related issues in a project developed by Cezena's city government in 2014. The authors highlight the need to overcome an instrumentalized approach to e-participation, and suggest that participants be not mere users, but 'agents capable to change the rules inscribed in the technological artefacts'. With a broader scope of e-participation strategies that used gamification strategies, 'Let's play Urban Planner: The use of Game Elements in Public Participation Platforms', by Thiel evaluates and compares how market and research led strategies may foster more participation in the public sphere.

In 'Delving Deeper: Considerations on Applying Empirical Research Methods to Infrastructural Urban Technology Projects', Fortin challenges the lack of interest of public institutions that deliver artistic experiences through digital infrastructures in measuring the success of their initiatives by investigating the 'Quartier des Spectacles' in Quebec and offers an ethnographic multidimensional method to evaluate urban technology.

Early career researchers working with the issues around the social smart city have to deal with an emerging, fast changing and challenging field, that is both complex and informed by many different actors. This Special Issue hopes to enrichen the field by, firstly, putting into evidence the work that is being done by early career researchers, and secondly, collecting creative and innovative work that identifies the gaps of the field and introduces new approaches. This is critical if the social is to be taken to have importance in the future of smart cities.

References

Bijker, W. E. (1997). Of bicycles, bakelites, and bulbs: Toward a theory of sociotechnical change. MIT press.

Brenner, N., & Schmid, C. (2015). Towards a new epistemology of the urban?. *City*,*19*(2-3):151-182.

de Lange, M., & De Waal, M. (2013). Owning the city: New media and citizen engagement in urban design. *First Monday*, *18*(11).

Hollands, R. G. (2008). Will the real smart city please stand up? Intelligent, progressive or entrepreneurial?. *City*, *12*(3): 303-320.

Kitchin, R. (2014). The real-time city? Big data and smart urbanism. *GeoJournal*, *79*(1):1-14.

Latham, E. R., & Sassen, S. (2005). Digital formations: Constructing an object of study. In *in R. Latham and S Sassen (Eds), Digital Formations: IT and New Architecture in the Global Realm. Princeton*.

Leontidou, L. (2015).'Smart Cities'of the debt crisis: grassrots creativity in mediterranean Europe. *Επιθεώρηση Κοινωνικών Ερευνών*, *144*(144).

Luque-Ayala, A., & Marvin, S. (2015). Developing a critical understanding of smart urbanism? *Urban Studies*, *52*(12): 2105-2116.

Marvin, S., Luque-Ayala, A., & McFarlane, C. (Eds.). (2015). Smart Urbanism: Utopian Vision Or False Dawn?. Routledge.

Oliveira, Á., & Campolargo, M. (2015, January). From smart cities to human smart cities. In *System Sciences (HICSS), 2015 48th Hawaii International Conference on* (2336-2344). IEEE.

Paskaleva, K. A. (2011). The smart city: A nexus for open innovation?. *Intelligent Buildings International*, *3*(3),153-171.