

Chapter 4

The Embedded Intelligence of Smart Cities: Urban Life, Citizenship, and Community

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ABSTRACT

This paper reviews Mitchell's thesis on the transition from the city of bits to e-topia. The review finds it wanting and suggests the problems encountered with the thesis rest with the lack of critical insight e-topia offers into the embedded intelligence of smart cities. It also suggests the difficulties, which the thesis experiences in accounting for the embedded intelligence of smart cities raise serious questions about whether the e-topia demonstrators that digitally-inclusive regeneration platforms stand on are progressive. In particular, whether the demonstrators these platforms stand on are progressive in embedding the intelligence that cities need for them to be smart in not only bridging the digital divide in urban life, but also overcoming any adverse effect, which the inequalities and degradation of such exclusion have on the sense of citizenship and community they in turn construct.

INTRODUCTION

Mitchell's (1995) book on the *City of Bits* sets out a vision of urban life literally done to bits. Mitchell's (1999) subsequent book on *e-topia* provides the counter-point to this vision of urban life and scenario whereby the city is not in bits, but a place where it all comes together. As Mitchell (2004) also goes on to state in: *Me++: the Cyborg self and the Networked City*, all this coming together is possible because "the trial separation of bits and atoms is now over" and this "post-AD 2000 dissolution of the boundaries between the virtual and physical", is what makes everything worth playing for (p.3). Worth playing for because this coming together of the virtual and physical is something that not only needs to be integrated into the networks of urban life, but citizenship which it also embeds as the intelligence required to make cities smart (ibid).

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CONCERNS WITH THE STATUS OF MITCHELL'S THESIS

While this thesis on the “coming together” of the virtual and physical and dissolution of the boundaries between cyber and meat space is compelling, it has to be recognised there are a number of concerns surrounding the status of the intelligence currently being embedded to make cities smart.¹

These concerns relate to the ability of the thesis to cope with what Mitchell refers to as: “ancient concerns” surrounding the ecology and equity of urban development and sustainability of the lean, mean and green strategy advanced to explain information society’s process of dematerialisation (what is referred to as the shedding of atoms). Here the concern rests not so much with the utopian legacy of such a vision, but the tendency the thesis has to repeat the mistakes of the past by failing to acknowledge that techno-topian solutions of this kind leave cities without the means by which to deal with the equity of such developments.

As Graham and Marvin (2001) note, these failings are significant, because they leave the thesis open to the criticism of being yet another kind of environmental determinism, which in this instance ends up splintering the experience of urban life and sense of citizenship that e-topia aims to bring together. How Mitchell counters such criticism is instructive and reveals a lot about the thesis’ ultimate objective. For while e-topia is seen to mark a break with the past, dis-embedding “insitu” practices, churning everything up and turning things around, what emerges out of this is perceived as being integrated back into an increasingly carbon-based experience of urban life and silicate-permeated sense of citizenship that serve to embed the intelligence of smart cities.

THE LANDSCAPE THIS PAPER TARGETS, AIMS TO STAKEOUT AND OCCUPY

Unfortunately, the only instruction we get from Mitchell on this reintegration appears in a statement on the materiality of the e-topia thesis found in *Me++: The Cyborg-self and the Networked City*. Here, Mitchell suggests, it is not virtual versus physical, or cyber versus meat space that is significant, but the intelligence being embedded everywhere, which is the critical factor in cities becoming smart.

Given the instruction Mitchell gives on the embedded intelligence of smart cities is not particularly insightful, the landscape this paper targets, aims to stakeout and occupy, is the middle ground between the high-level issues surrounding the Me++ of the Cyborg-self and those experiences of urban life where it all comes together. That is, where it all comes together as a sense of citizenship, which gets bottomed out as an emerging discourse on the embedded intelligence of smart cities.

The outcome of this discourse is a platform of services able to build bridges between the experience of urban life and sense of citizenship, which otherwise remains divided and in that respect, unresponsive to the public’s call for greater, more extensive and higher levels of participation. In particular, the public’s call for greater, more extensive and higher levels of participation that are scaled-up and resized into an experience of urban life, which lifts the sense of citizenship onto a new stage. Onto a new stage that has the wherewithal to reach out, extend into, consult with and include deliberations between members of communities on decisions taken in their name.

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