Securing the Neurocity

David Murakami Wood warns that cities could be transformed beyond recognition by hi-tech surveillance if protocols are not put in place.

The most highly developed cities are on the brink of an enormous and potentially fundamental transformation. Described as 'pervasive' or 'ubiquitous computing', 'ubiquitous media', or 'ambient intelligence', the 'combining of virtual and material worlds', or the emergence of an 'Internet of things', this transformation provides a basic neural infrastructure for the city in addition to the physical infrastructures of transport, sewerage, electricity and so on, with which we are familiar (Graham and Murakami Wood, 2006). Urban designer, Dana Cuff argues that these systems: 'challenge some of our fundamental ideas about the subjectivity, visibility, space, and the distinction between public and private... [and] reformulate our conception of the civic realm' (43). The Neurocity is coming.

Surveillance and the Neurocity

The UK, with more than 4.2 million CCTV cameras, has become a 'model' for the implementation of urban security by other nation states. Britain was particularly significant in implementing not just CCTV itself, but also new automated recognition technologies. Automatic number plate recording (ANPR) cameras were installed in the City of London in 1997, as part of a process which transformed the Square Mile into the most surveyed public space in the world (Coaffee, 2004). The ANPR technology was subsequently extended from February 2003 for use in the Congestion Charging scheme, which is now being extended nationwide with the ANPR system operational by 2008 (Norris, 2006).

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The relationship between surveillance, space and people continues to be transformed with the advance of multiple biometric technologies such as facial and iris recognition, based on software algorithms, some of which can be linked into the new digital CCTV (Intona and Wood, 2004). At the same time, the surveillance of individuals has gone hand in hand with the amassing of huge amounts of personal information in databases. This is a step-change from the world of the paper file: computer databases allow greater integration and automated algorithmic operations to be performed effectively in real-time, that might indicate a potential danger or profit opportunity which can be pre-empted, are becoming more common. The creation and connection of databases is not simply a commercial obsession but is also a key strategy of UK police forces with new databases of DNA samples (and new powers to fill them), digital facial images and more all linked through an expanded and more capable Police National Computer (PNC), potentially linked in real time to the hand-held 'tablet' PCs of officers on the streets.

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Secondly, conventional surveillance technologies are becoming more mobile by being combined with robotics or with remote control aviation technologies to make Unmanned Aerial Vehicles (UAVs). These have been in use by the US military for some years and situations not necessarily linked or operating with the same rationale. Whether by multiple friendly watchers, little sisters or by Big Brothers however, we are increasingly leaving our traces for others to follow, we are increasingly known in many different and unexpected ways.

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We need to be far more knowingly involved in shaping the protocols which will determine the room for manoeuvre we will have in the future Neurocity, otherwise we might wake to not just a surveillance society but to cities that will soon be more aware than we are.

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References


