Thesis abstract

The making of smart cities: Borders, security and value in New Town Kolkata and Cape Town

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The making of smart cities transforms ■ not only infrastructures and practices but also the techniques of urban government and security, and economic processes. This thesis draws on analysis conducted in two research sites: Cape Town, in South Africa and New Town Rajarhat, a satellite township on the outskirts of Kolkata, to present three key arguments. First, and as opposed to mainstream narratives that describe smart cities as seamlessly connected environments, this thesis suggests that urban digitalisation is linked to bordering processes. Whereas critical literature has comprehensively discussed the political implications and risks associated with smart city projects, such as corporatisation and technocratic governance, the specific relations between digital infrastructures and borders, within the urban space, have not yet been discussed. Secondly, this thesis argues that smart cities are inherently security projects, insofar as the deployment of a computing infrastructure of sensing initiates a pre-emptive apparatus. In security systems, such as the Emergency Policing and Incident Command (EPIC) program in Cape Town, or the Xpresso software for social media monitoring in New Town, algorithms are continuously modelling and acting upon future scenarios: from traffic

jams to wildfires, from crime hotspots to citizens' moods. My third argument is that the computing apparatus of security also serves as an infrastructure of value extraction. Recently, there has been much theorising and debate about security platforms' economic operations, but the situated modalities in which they extract value from the urban environment remain to be examined. Overall, this thesis points to the socio-spatial, governmental and economic relations that computing infrastructures are generating, or reconfiguring, in the urban environment. These relations articulate distinct processes, including the hierarchisation and control of the urban space, preemptive policies and extractive strategies. Critically analysing these processes allows the registration of the political implications of smart city projects.

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