

Atomizing the Smart City: Towards a Flexible Infrastructural Urbanism

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In cities across the developing world, a new spin on High Modernist central planning is coming into style. Fueled by the promise of big data and new technologies of urban sensing, the technocratic managerialism of modernism has found a new host in current urban discourse: the Smart Cities paradigm. Placed in the context of rapidly-urbanizing India—and more specifically, in the promises of Prime Minister Narendra Modi to build one hundred Smart Cities between and atop existing Indian urban centers—this centralized, managerial model raises many questions: What of the unplanned or unforeseen? What of the crucial role that informality plays in current Indian cities? Most fundamentally, what of the agency and ingenuity of the Indian people themselves?

In Fall 2015, a research group of sixteen architecture students from the University of British Columbia traveled to Chandigarh, India—the epitome of High Modernist urbanism, and the site of a proposed Smart City—to study and speculate on exactly these questions and challenges. The varied experiments, each focusing on one major corridor of the city, sought to recast both the notion of the Smart City and the current condition of Chandigarh, testing novel urban ideas against the backdrop of a projected 50% increase in inhabitants in a city designed to hold only half of its current population.

Situating itself against dominant discourses that prioritize control and centralization of power—on one hand, the city as utopia of technocratic technophilia; on the other, the city as untouched preservationist relic—the atomized smart city seeks to not merely accommodate but actively harness the entrepreneurial creativity of the city's occupants. Scrupulously maintaining the stated goals of the Smart City while radically intervening in its methods and architectures, the proposal overlays onto the Corbusian diagram of Chandigarh's urban structure a new network—one primed for the social and ecological challenges of the 21st century.

The project is predicated on a decentering of the notion of infrastructure, seeing it not as a means of managerial control of a populace, but rather as a flexible platform for resource provision on which new possibilities may unfold in ways both presupposed and unforeseen. Crafted as an atomized network, this overlay of infrastructure—both material and immaterial—allows a great degree of flexibility, experimentation, and appropriation, all the while strengthening a larger sense of order and reinforcing the urban diagram of the city. In effect, the project serves as an armature for localization, creating sites in which ideas and technologies from a variety of disparate sources are allowed to collide with everyday Indian life, be experimented with and experimented on, and ultimately be

adopted, altered, or rejected without undermining the viability of the urban whole. The architecture of the distributed interventions plays a mediating role, creating a system for elaboration that can suspend potential conflicts between contradictory programs.

The decentralized urbanism that results emphasizes redundancy and flexibility over rigid efficiency; experimentation and failure over a reliance on generalized solutions; and flexible systems of building and unbuilding over a desire for fixed, singular intervention—in short, a Smart City gone live.

ATOMIZING THE SMART CITY: TOWARDS A FLEXIBLE INFRASTRUCTURAL URBANISM

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In cities across the developing world, a new spin on High Modernist central planning is coming into style. Fueled by the promise of big data and new technologies of urban sensing, the technocratic managerialism of modernism has found a new host in current urban discourse: the Smart Cities paradigm. Placed in the context of rapidly-urbanizing India—and more specifically, in the promises of Prime Minister Narendra Modi to build one hundred Smart Cities between and atop existing Indian urban centers—this centralized, managerial model raises many questions: What of the unplanned or unforeseen? What of the crucial role that informality plays in Indian cities? Most fundamentally, what of the agency and ingenuity of the Indian people themselves?

This project, the result of a research studio based in Chandigarh, India—the epitome of High Modernist urbanism, and the site of a proposed Smart City—studies and speculates on precisely these questions and challenges. Situating itself against dominant discourses that prioritize control and centralization of power, the atomized smart city seeks to not merely accommodate but actively harness the entrepreneurial creativity of the city's occupants. Scrupulously maintaining the stated goals of the Smart City while radically intervening in its methods, technologies, and architectures, the proposal overlays onto the Corbusian diagram of Chandigarh's urban structure a new network—one primed for the social and ecological challenges of the 21st century.

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Conduit

These infrastructures create a mesh of mobility and resource availability



grey grid
mass transit corridors
"heavy" mobility and goods transport



green grid
distributed resource production
alternative mobilities



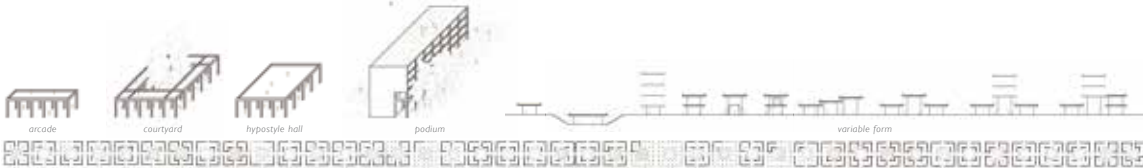
interchanges
infrastructural interconnection
centers of programmatic intensity



re-aligning the sector
shifting Corbusian urbanism into a post-carbon future
recentering around new modes of mobility

Fleet

low-cost canopy (infra)structures hook into and aggregate along the conduits, providing diverse zones for resource experimentation and informal programming



Distribution

as a multitude of experiments play out in the fleet of canopy-structures, individual structures can be added, modified, deleted or duplicated with ease

