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Smart Cities Are Little More than Technological Utopianism

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On November 23 of last year, Infrastructure Canada announced its utopian vision for the country's cities in its [Smart Cities Challenge](#). Contra the hype surrounding the challenge, smart cities are merely an evolution in how cities are planned and developed. They do not indicate progress, and much less *revolution*, despite what their proponents claim. Anthony Townsend, author of [Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia](#), described smart cities as “places where information technology is combined with infrastructure, architecture, everyday objects and our own bodies...”. This might bring to mind Minority Report-esque command centers with city workers monitoring CCTV, social media, and data streaming in from sensors across the city. And these images are spot-on. Smart cities both [real](#) and [projected](#) deliver these sorts of images and ideas to the media daily.

The second part of Townsend's definition is more telling. It's not *just* the weaving together of digital technologies and the urban landscape, but it's doing so “to address social, economic and environmental problems”.

That's where smart cities' claims to “newness” become dubious.

The industrial revolution gave North American city planners hope that science and technology hold the keys to solve all kinds of social and political problems. Planning cities took on an air of scientific authority, where cities and populations

were to be managed through proper urban design. Since that time, there isn't a social ill without a parallel movement intended to address it. The City Beautiful and Garden City movements sought to increase moral and aesthetic virtues through architectural design and lush, spacious urban parks. The post-war period leveraged the technology of the personal vehicle to sustain suburbanization isolating largely white, middle-class families from the vice many saw as inherent to center-cities. New Urbanism promotes walkable, mixed-use developments connected by public transit and context-specific housing design – primarily to decrease negative environmental impacts around driving-oriented urbanism.

The crux of the issue is that urban planners are driven by a quixotic faith in science and technology that veers from reasonable expectations of these institutions. Just like its forebears, smart cities initiatives seek technical fixes for problems that are more deeply rooted. For all their merits, smartphone apps for public participation don't address – let alone solve – the crisis of declining trust in representative democracy. Responsive traffic congestion systems might make dents in carbon emissions, but they don't touch on the reasons people drive: racial and economic segregation, lack of viable public transit, and the North American cultural imagination of grassy backyards, for starters.

Most importantly, the technological optimism captured in smart cities masks the primarily profit-driven, highly corporate, purposes the smart city serves. Behemoth multinational corporations like IBM, Alphabet's Sidewalk Labs, Siemens, and Microsoft are the key players in smart city movements. Their deepening immersion in the urban planning enterprise shifts city form and function away from publicly-accountable institutions like representative government. In other words, the technological optimism driving smart cities has severe repercussions for democracy as a whole. Far from *addressing* social and political problems, smart cities merely shift them around.

In research at University of Calgary, the Engaging Open Data Research group has found that smart cities technologies characteristically cater to technologically-savvy, entrepreneurial experts rather than laypeople. Do you know the difference between a GeoJSON and a comma-separated values file? Most people don't, even though this data downloading choice is part of "holding the city accountable" through smart cities' open data platforms. What society needs is not more boosterist claims around science and technology that hide how complex and contradictory our cities are, but instead carefully measured evaluations of what, exactly, happens in the smart city. Science and technology have certainly enriched our lives, but that does not mean that they unquestionably answer any urban trouble we face.

Any transformative potential of smart cities lies not in the technologies themselves, but in empowering communities to better represent themselves. It lies in placing people, communities, and organizations at the center of the urban development process.