Care against growth: Making the ephemeral physical in Toronto's smart city [advance version]
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Sidewalk Labs’ smart cities project in Quayside, Toronto has become a combination of lodestar and black hole. Almost no element of the project has gone unaddressed and uncritiqued, and rightfully so. From Bianca Wylie’s excoriation of the project’s privacy and governance nightmares endemic to the project, to Shannon Mattern’s reveal of the hollowness of Sidewalk’s community engagement and attempts at ‘co-design’, to Molly Sauter’s discussion of the colonial eye of the project’s renderings. These critiques are indispensable but my focus in this essay is much smaller in scope—about a meter in diameter, if memory serves.

In a universal project such as Sidewalk’s Quayside, the details betray the whole—and a simple modular paver functions as a cypher revealing a monstrous intentionality. At Sidewalk Labs’ 307 (their “experimental workspace”-slash-guinea pig cage in Toronto), a wood-construction concept version of this paver is on display, allowing visitors to get familiar with the system, called ‘Dynamic Street’. According to designer Carlo Ratti Associati and Sidewalk’s Master Innovation and Development Plan (or MIDP), these pavers are intended to be much more than a roadbed; they respond to Sidewalk’s 2017 RFP which describes Quayside as a world-significant place where “where the only vehicles are shared and self-driving, where buildings have no static use, where streets are never dug up”. Assurances of uninterrupted service are also promised to “evolve as technology changes”. Sidewalk is promising dependable infrastructure for the market, and the markets to come. The concrete paver is intended to make the city thrum in lockstep with technological advancement.

The paver was initially developed by the French Institute of Science and Technology for Transport, Development and Networks, or IFSTTAR. The concept was called, with considerably less hubris, the “Removable Urban Pavement” (RUP). According to IFSTTAR’s report, the RUP was intended to allow a street to be “opened and closed within just a few hours using very lightweight site equipment, in restoring the initial street appearance and all its functionalities”. Though Dynamic
Street hasn’t elaborated on the specifics of installation, the MIDP expects that when the paver is paired with open access utility channels in the roadbed, these “could work as a pair to increase the ease of utility work” and lessen disruption (the enemy in this case). But very quickly, Dynamic Street moves past replacability and states its ultimate goal is to “create a streetscape that responds to citizens' ever-changing needs”. This street is a platform in its own right, featuring lights, heating, and sensor suites, with further “plug and play” capabilities for parking enforcement and digital signage. For Sidewalk, the street and its pavers are a means to a greater end: a city as a blank slate of infinite amenities and infinite control, where capital, as technological progress, can play unimpeded.

Technotopia begins in the destruction of the old mundane, and the paver ushers in this world, wherein responsiveness—to bourgeois desires, to capitalist privations—is the rule. “Sidewalk Labs recognizes that this new approach to street systems would require changes to existing regulations and operations,” the MIDP admits without elaboration. These changes would be seismic shifts. The possibility of modular, local paver replacement will likely be used by Sidewalk to argue for its exemption from the City of Toronto’s typical 20- or 30-year roadbed maintenance cycles, claiming continuous reproduction to be more efficient. That said, Sidewalk’s current design will not function in this way; in videos, each individual module is shown to interconnect with others for stability.

IFSSTAR field tests using a similar design found single-paver replacement impossible with this interlocking “connection key” design, instead requiring all modules within a 120 degree dihedral to be removed for access. Maintenance equipment aside (the MIDP shows a worker guiding some machine which I can only suppose is a vacuum grabber, while installation videos show a crane being used), as currently designed, Sidewalk’s idea doesn’t even actually work.

The intention here is to recast urban maintenance as a background process, or more accurately, a logistical issue. Capital does not consider the worker “when he is not working, as a human being”, but we should not take this to mean that capital ever encounters the worker as human—just as a logistical element, a source of surplus value. When labor is made invisible the city can be presented as an ontological, autopoetic machine, adapting on its own to “the emergence of [the] new”, and is pursuing relentless “optimization”. The nature of work in smart cities, as the intensification and spatialization of logistical capital, is to desappear. “To work today is to be asked,” Fred Moten and Stefano Harney write, “…to do without thinking, to feel without emotion, to move without friction, to adapt without question, to translate without pause, to desire without purpose, to connect without interruption”. Quayside conforms perfectly to the logistical systematic, but its moving parts are
already caked with blood. Its heart is not digital, but hydraulic, obsessed with the movement of people and commodities: “an empire which, with its network of pumps, filters, vats and basins, incarnates the Principle of Fluidity…the ideal would be a factory without matter and…without workers!” Against this obliteration, labor must be rediscovered: not a constant in an algorithm or demands to return to the factory line, but as a social relationship: an expression of care.

To understand care, we can turn to the experience of unpaid domestic labor. Maria Puig de la Bellacasa describes care as “a signifier of devalued ordinary labours that are crucial for getting us through the day”. This labor is often thought of as “domestic”, such as childcare, hospice, and other “embodied practices”, as Monique Lanoix explains, and it is undertaken predominantly by women and people of color. But care can be a mode of both production and reproduction—it is the ‘personal reason’ to the question “why are you doing that?”. Care, as an unvalued and unvaluable abstract which can be present in specific acts of labor, cuts past the capitalist wage relation, prompting an understanding of work as a social practice which can and does exist apart from capital.

Considering care allows us to stop thinking about labor in capitalist terms, as mere “toil for a wage”. Returning again to de la Bellacasa, capital must be “a sociotechnical assemblage [which] can reinforce asymmetrical relations that devalue caring.” Sidewalk’s Quayside fits snugly into this asymmetrical machinery, which we can give another name: capitalist development in and of itself. This system can seem inexorable: Achille Mbembe warns that “[u]nless we reinvent the terms of what counts and in the process resignify what value stands for as well as the procedures of assigning value, of measuring value, of exchanging value, things won’t change”.

“[W]e could imagine physical infrastructures that support ecologies of care — cities and buildings that provide the appropriate physical settings and resources for street sweepers and sanitation workers, teachers and social workers, therapists and outreach agents,” Shannon Mattern writes. To imagine caring infrastructures is to imagine a world for us, far from Quayside and its rabid commoditization of urban life and activity. This imagination is a theoretical standpoint first and foremost: workers are the subject, coming first, with technological progress a firm second, in a dramatic inversion of the status quo. The theory is answered by a polical practice of design-labor, addressing labor in its role within the logistical system, that is, “the inevitable interrelations of agendas of technological change and (re)distributions of labor with associated implications for both material and symbolic reward”, as Lucy Suchman writes. By becoming conscious of our role as
caretakers of infrastructural and social relationships, the potential for interrupting capitalist
development begins to come into view. Labor reasserts itself as a teleological undertaking, and care the
method by which it is performed.xxviii

This new standpoint throws the differences between the RUP and the Dynamic Street into harsh
relief. In the RUP report, I was shocked to find that the pavers themselves were ultimately not the
essential element. After design meetings with engineers and “network operators”, the RUP team
realized that the paver itself lived and died by its substrate. The new “Structural Excavatable Cement-
Treated Material” (SECTM) developed in response with and as an element of labor ultimately was, as
the report stated, the “most innovative aspect” of the project, designed greater ease of maintenance
and installation.xix When Sidewalk and Carlo Ratti Associati adapted the RUP for Toronto, they
seemingly left out SECTM, instead favoring ‘good life’ scenarios that imagine the street as a stage
for unbridled logistics and the occasional block party, wherein residents with an “digital
reconfigurator” can “design urban scenarios of their own”xxx “in order to swiftly change the
function of the road without creating disruptions on the street”xxi The hypnagoge urbanism of
Sidewalk Labs—ephemeral, responsive only to desire, possessed of infinite growth—is not free of
the material world at all, despite their claims. The digital dream is borne up by a sea of faceless
logistical workers, bound to the city-machine. To center labor in our minds represents a weapon in
the war against the smart city—a war that we are, perhaps, already losing.
Notes

1 Wylie’s Medium page is an inexhaustible and incredibly valuable repository of information about the Sidewalk Toronto process as well as full of brilliant ruminations on the threats it poses to governance, privacy, and citizenship. See more at Bianca Wylie, “Collected Medium Posts,” Medium, accessed September 19, 2019, https://medium.com/@biancawylie.


8 Sidewalk Labs, “MIDP,” 136.

9 Aouf, “Carlo Ratti and Sidewalk Labs Collaborate to Build Reconfigurable Dynamic Street.”


13 François de Lerrard, Thierry Sadran, and Jean Maurice Balay, “Removable Urban Pavements: An Innovative, Sustainable Technology,” 24. See especially Figure 12.


16 Sidewalk Labs, “Sidewalk Labs Street Design Principles.”

17 Fred Moten and Stefano Harvey, “Fantasy in the Hold,” in The Undercommons: Fugitive Planning & Black Study (Brooklyn: Minor Compositions Press, 2016), 87.


19 Gilles Châtelet, To Live and Think Like Pigs: The Incitement of Envy and Boredom in Market Democracies (Cambridge: MIT Press, 2018), 76.


24 Panzieri, “The Capitalist Use of Machinery: Marx versus the ‘Objectivists.’”


26 This inversion is discussed more fully in Mario Tronti, “A New Type of Political Experiment: Lenin in England,” in Workers and Capital, trans. David Broder (Verso, 2019). More generally, it occupies a central theoretical obsession of operaia, particularly the editors of Quaderni Rosi.


