Google's smart city plans for Toronto's waterfront: what is at stake?
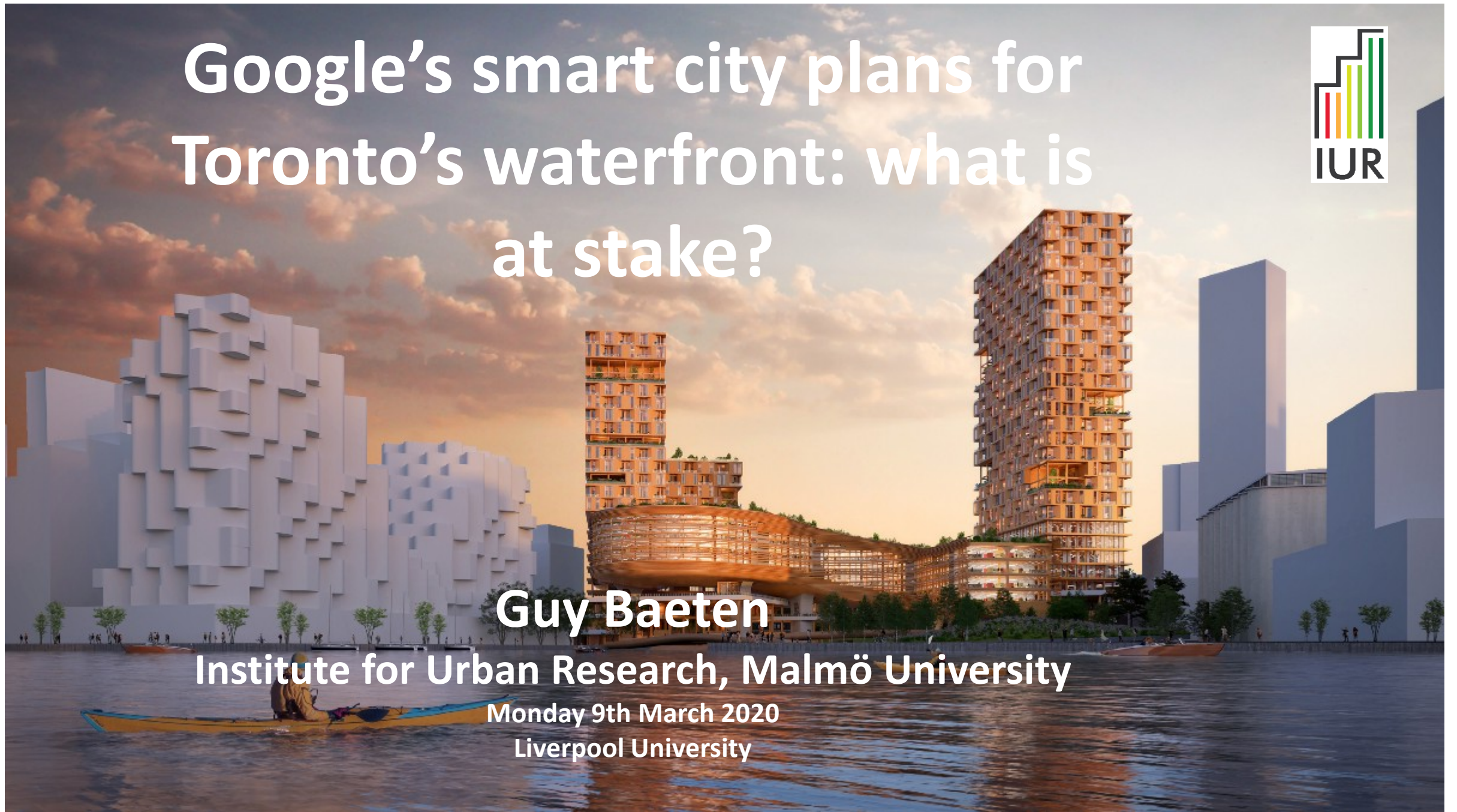
IUR

Guy Baeten

Institute for Urban Research, Malmö University

**Monday 9th March 2020**

Liverpool University

Sidewalk Labs won RfP from Waterfront Toronto, 2017

- **Urban planning + technology: urban development 'from the internet up'**
- **Neighbourhood = physical data mine alongside digital data mine**
- **Smart city model "exportable all over the world" (interview Sept 2018)**
- **Next generation planning?**
- **Next generation information conglomerates (digital + physical)?**
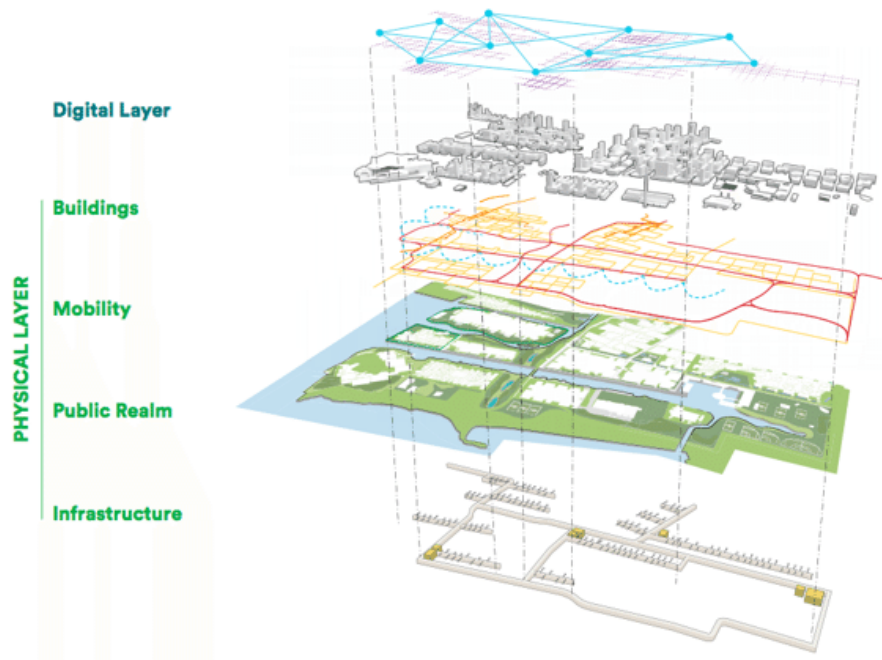
Not so much the plan or the tech but...

- **New urban ontologies, epistemologies and authorities...**
    - **City-as-data-mine**
    - **City as system of systems**
    - **Algorithmic planning based on big data**
    - **Google wants its own set of authorities**
- **... leading to fundamental reworking of the urban power landscape**
- **... and to new urban resistance movement**

New urban ontologies and epistemologies

Our mission is to use technology to change cities... to bring technology to solve big urban problems.... We expect to make a lot of money from this.

In effect, what we're doing is replicating the digital experience in physical space.... So ubiquitous connectivity; incredible computing power including artificial intelligence and machine learning; the ability to display data; sensing, including cameras and location data as well as other kinds of specialized sensors.... We fund it all... through a very novel advertising model.... We can actually then target ads to people in proximity, and then obviously over time track them through things like beacons and location services as well as their browsing activity.

Dan Doctoroff, CEO Sidewalk Labs, Yale Club, NY, 2016

Surveillance urbanism
"For-profit China",
Shoshana Zuboff

"comply or deny cities"

"We don't see ourselves as a technology company, we see ourselves as a place-making company. A large part of our team are urbanists at heart. But because of the affiliation [with Google] people are always going to assume we are just a technology company, that our objectives are somehow to scoop up all these data and sell it and monetize it, even though it is not part of the business model at all. Zero, literally" (Dan Doctoroff, CEO Sidewalk Labs, *Times Tech Talk*, 2019)

URBAN DYNAMICS

FOREWORD BY
JOHN F. COLLINS

JAY W. FORRESTER

1969

1973
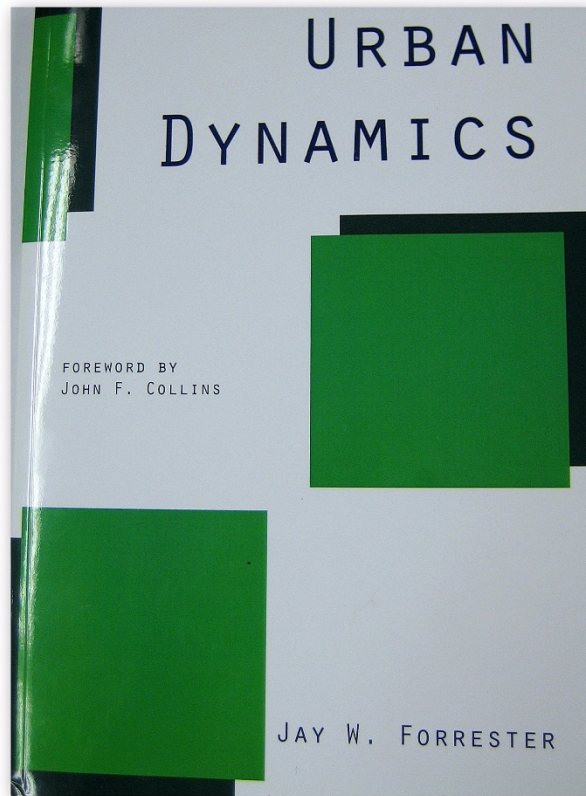
"We must qualify the forces that consider computation and artificial intelligence to be the saviour of cities but, most of all, we must bring to the attention of the new voices the history of our field" (Batty, 2014)

Optimisation models…

…are not neutral
- Functionalist
- Positivist
- Only measurable variables
- Technocratic
- Fine-tuning urban status-quo
- No space for politics, revolt, protest as trigger of change

System thinking revival under smart cities umbrella
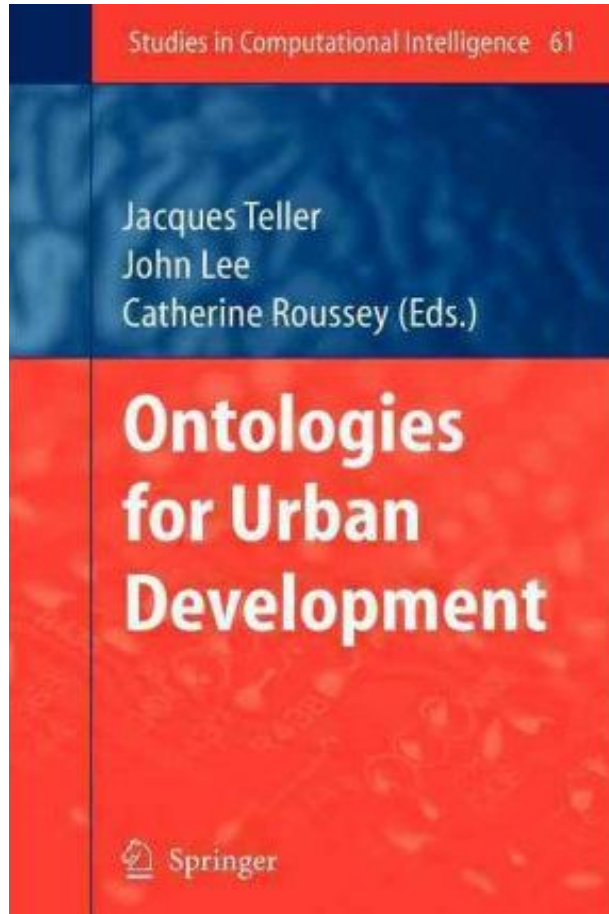
2007

Imposing systems ontology and modelling to make cities fit tech companies' products and services

Urban planning through algorithms

- **Short termism (Batty, 2014)**

- **Ever finetuning status quo**

- **Urban development by mathematicians, no need for planning or social science**

- **City as algorithmic oeuvre**

... creating a cycle of ongoing improvement driven by the feedback of residents and the energy of entrepreneurs, rather than prescribed by planners and designers.
(SL, Proposal Quayside, Appendix p.12, 2017)

"in the past prescriptive measures were necessary to protect human health, ensure safe buildings, and manage negative externalities. Today cities can achieve those same goals without the inefficiency that comes with inflexible zoning and static building codes". (SL, Vision, 2017, p.27)

Algorithms not neutral
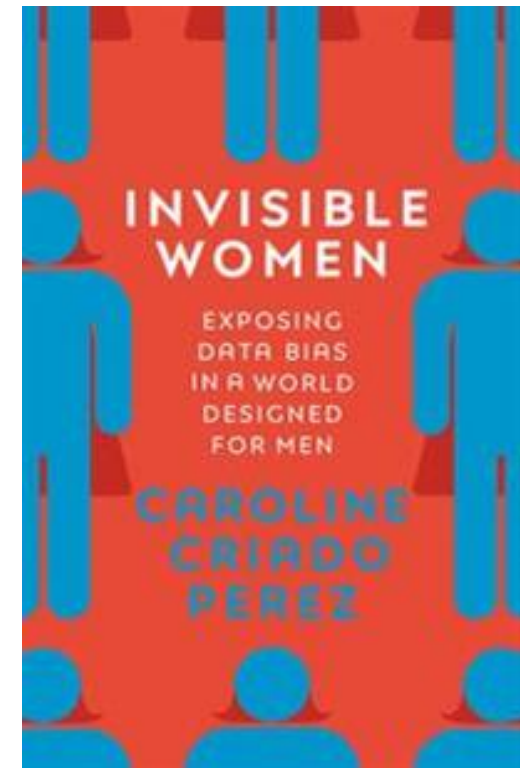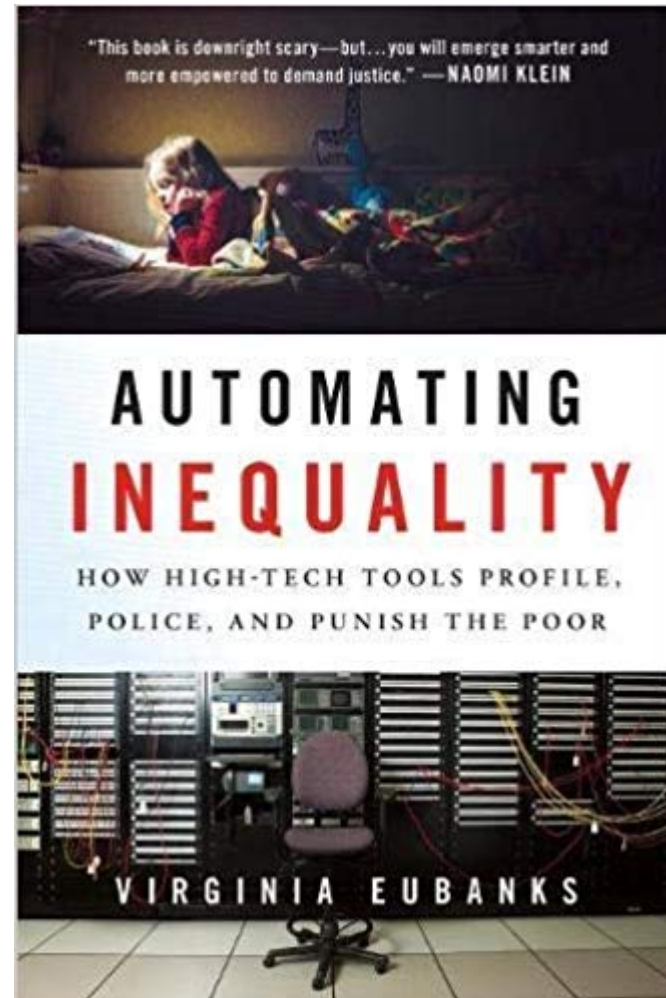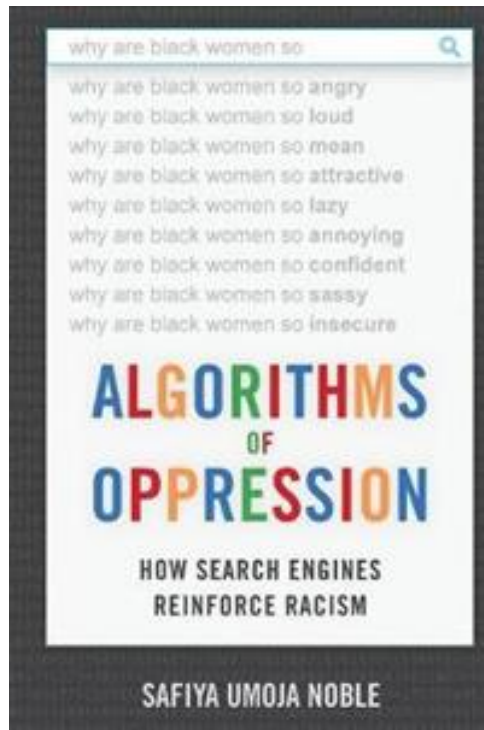
New urban power relations: global corporations enter urban development

"Google becomes the go-to partner for the Smart City, displacing all other competitors because of its focus on "human behavior" rather than infrastructure. This helps it to establish a monopoly over both the physical and digital realms, leading to the next generation of global tech conglomerates" (Nextbigfuture.com)

"... it would become the gatekeeper for those parts of the physical world that it controlled. Anyone who wanted to do business in the shiny new parts of cities that Alphabet controlled and built would end up paying up for the privilege" (The Guardian, 18/2/18)

Protest

- **July-October 2018: resignations from board and advisory panels**
    - **Saadia Muzaffar , founder TechGirls Canada**
        - "Waterfront Toronto does not ensure that both the data and the digital infrastructure in all its developments is controlled by our public institutions."
    - **Julie Di Lorenzo, real-estate developer**
        - Handing over all land to one company
    - **Ann Cavoukian, privacy expert**
        - "I imagined us creating a Smart City of Privacy, as opposed to a Smart City of Surveillance"
- **Bianca Wylie, digital activist**
    - "Shut it down and start again"

Who plans and who protests: gender dimension

BlockSidewalk organisation:
first organised resistance against smart
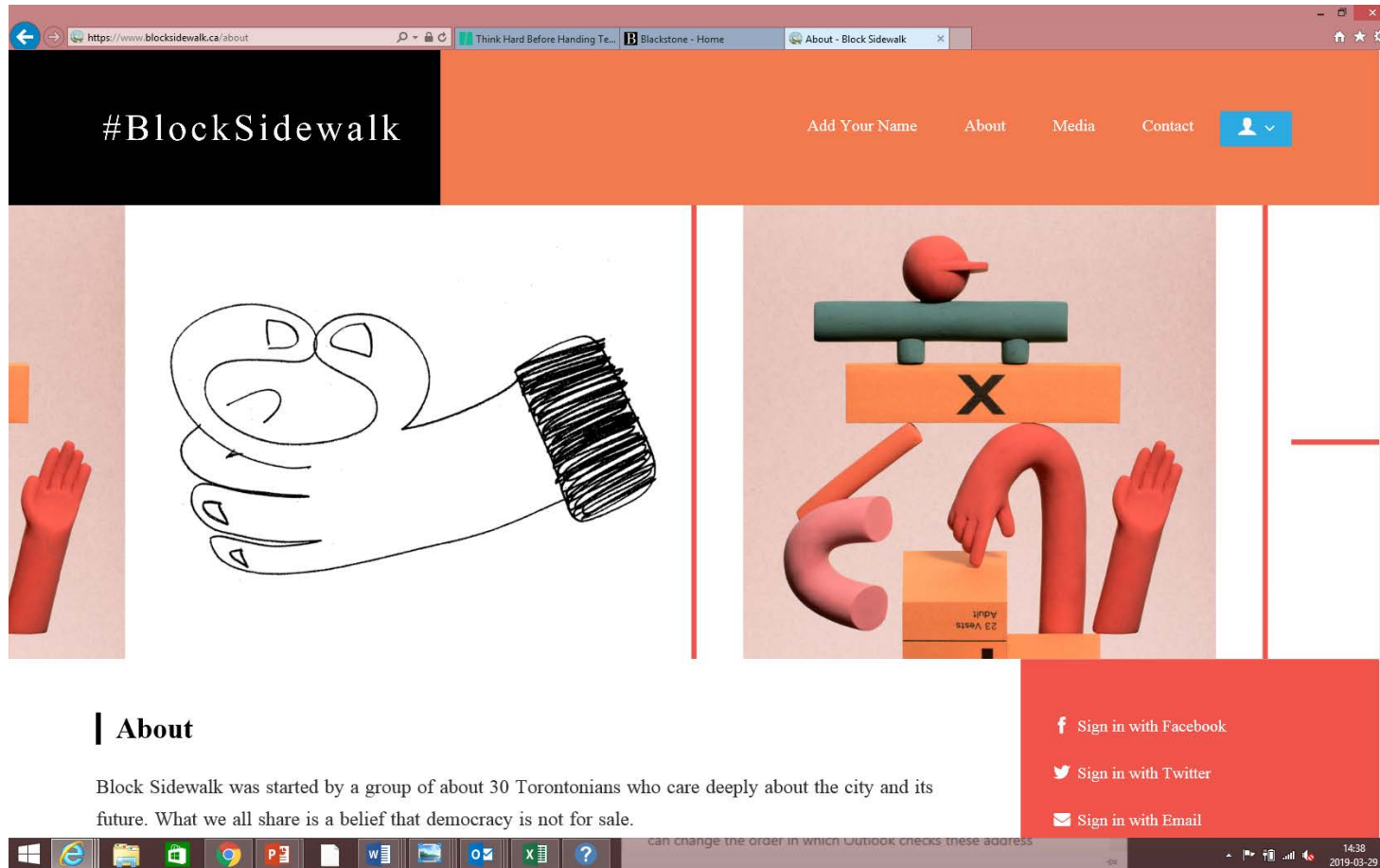
conclusion

- **Most scrutinised urban development plan without a plan**
- **If it goes ahead: game changer**
  - **New nature of tech companies**
  - **New nature of urban development**
- **New landscape of urban development actors, new power landscape, imposing (failed) ontologies and epistemologies on the city**