

Data publics in the smart city

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Universiteit Utrecht



The city today is a 'smart' media city

This talk explores the formation of urban publics in the datafied smart city.

1. smart city & data
2. urban publics
3. smart citizenship with data
4. considerations & discussion



Smart cities: optimizing the city with (realtime) data

Control rooms, dashboards, analytics, etc. Usually corporate products.



Cities doing things with data

Many cities open up datasets and develop data policies.

How can urban publics be involved, and take 'ownership' of issues through data?



ACT	
46.	Does your local government have a written process that calls for the public release of data that is relevant to stated city/department goals and objectives, fundamental services, or core mission?
41.	Does your local government have a written process for providing a means for public data requests and release of data that is responsive to residents' requests ?
42.	Does your local government make future contracting decisions based on a contractor's past performance?
43.	Does your local government apply results-driven contracting strategies for your five most important (either tying to high priority goals or representing large dollar amounts) contracts or procurements?
44.	Does your local government have an evaluation system or scorecard for key procurements, contracts, and/or grants that facilitate comparison of outcomes across contractors to determine which contractors are most effective?
45.	In the last 12 months, has your local government initiated low-cost or randomized evaluation of priority city programs or services in 5 of the city's largest departments and/or programs?
46.	In the last 12 months, has your local government allocated budget specifically designated for evaluation as a condition or sign-off for new projects?
47.	In the last 12 months, has your local government used the results from low-cost or randomized evaluations to improve city programs or processes?
48.	In the last 12 months, has your local government used rigorous data analysis and evaluation to publicly identify practices, programs and/or policies that have consistently failed to achieve their desired outcomes?
49.	In the last 12 months, has your local government shifted funds away from a practice, program or policy that, through rigorous data analysis and evaluation, has consistently failed to achieve desired outcomes toward a more effective and efficient practice, program or policy?
50.	Has your local government communicated the decision to shift funding based on practices, policies, and/or programs that, through rigorous data analysis and evaluations, are consistently failing to achieve desired outcomes to the public (e.g., residents, customers, elected official)?

Academia turns to data-driven 'science of cities'

Against 'pseudo-science' of urban planning. Systems view of cities as computational problems; quant. methods; predictive modelling, control over uncertainty.

How can connections be forged to involve urban publics as issue owners?

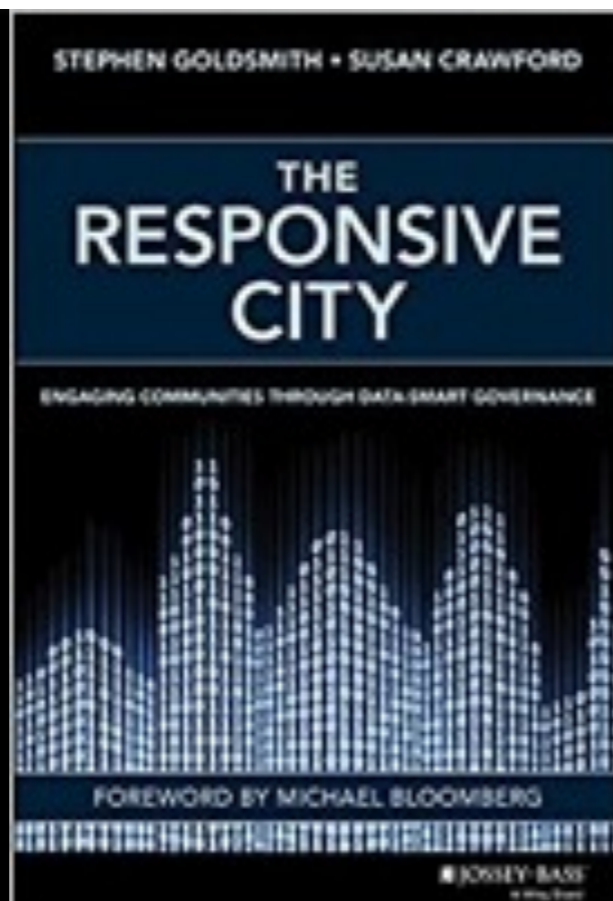


The Bartlett Centre for Advanced Spatial Analysis



NYU

Center for Urban
Science + Progress



Bigger Cities Do More with Less

New science reveals why cities become more productive and efficient as they grow

By Luis M. A. Bettencourt and Geoffrey B. West

THE NEW SCIENCE
OF CITIES

MICHAEL BATTY



THE USES
OF BIG DATA
IN CITIES

Luis M.A. Bettencourt
Santa Fe Institute, Santa Fe, New Mexico

Urban publicness

Domain spatial (public space); people (publics); communication (public info); political (public issue)

Level private - communal - public interests

Imaginaries

rational: deliberative supra-identitarian search for commonality, ignoring difference; men in coffee houses. Communication form: speaking.

emotional: experiencing and consuming co-presence and difference; affect, embodiment, personal taste; flaneurs, audiences, mobs in streets. Communication form: staging, watching.

ritual: everyday symbolic interactionism; civil inattention; public life emerges from interactions. Communication form: coded behavior.

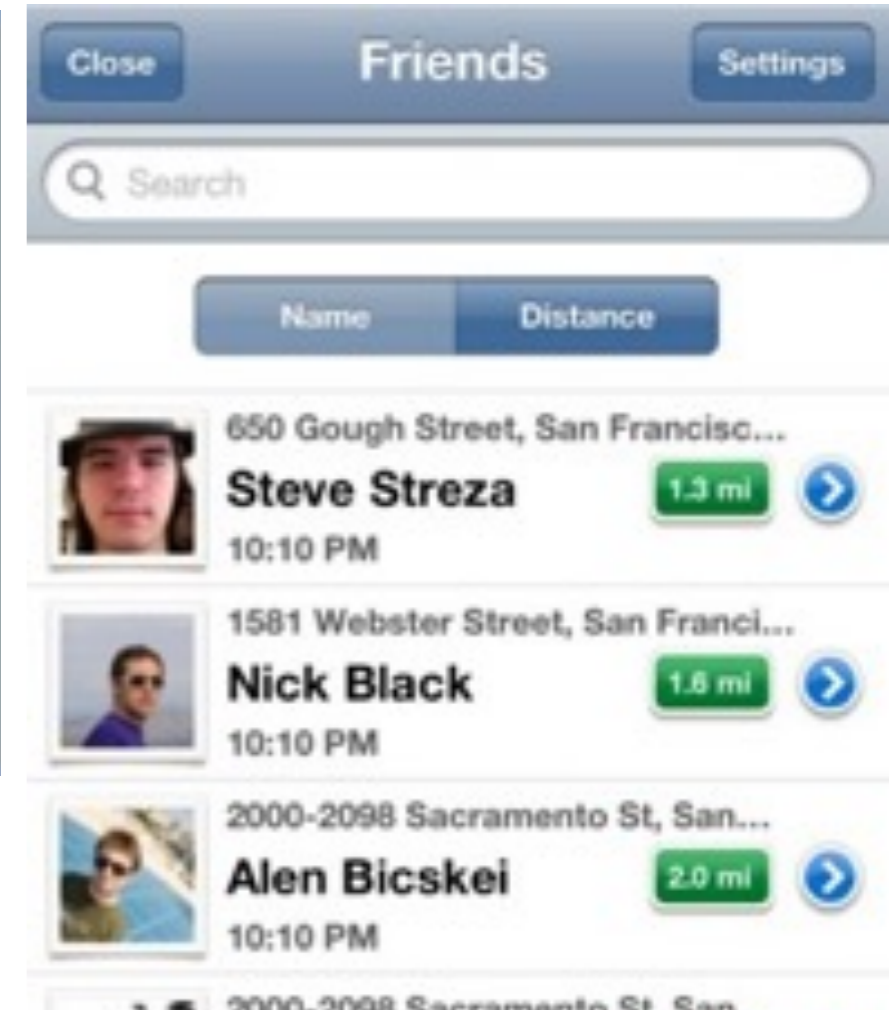
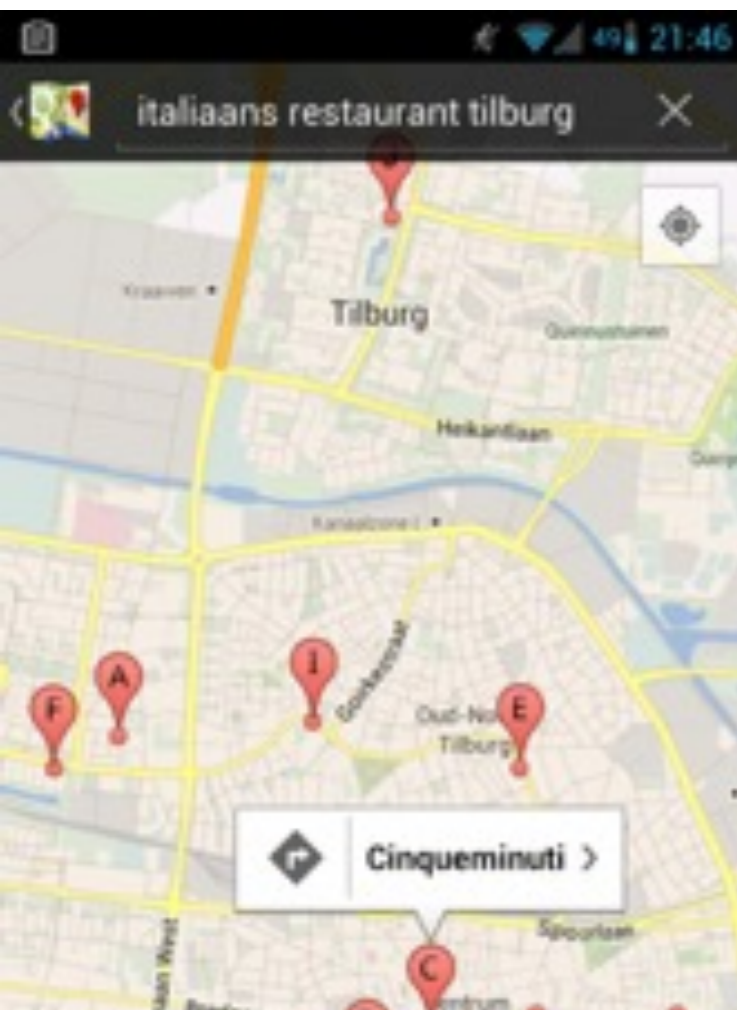


Datafied smart cities: urban publics in peril?

Smart What does 'smart' mean? Who really benefit? What agency for 'smart citizens'?

Cityness What implicit understanding of urban public culture? Compatibility with spatial, social, cultural qualities of cities? What future vision of the city? Further privatization of public realm?

Tech 'Solutionism'; Smart tech fosters logics of *consumption, control, capsularization*.



Smart citizenship with data: strengthening ownership

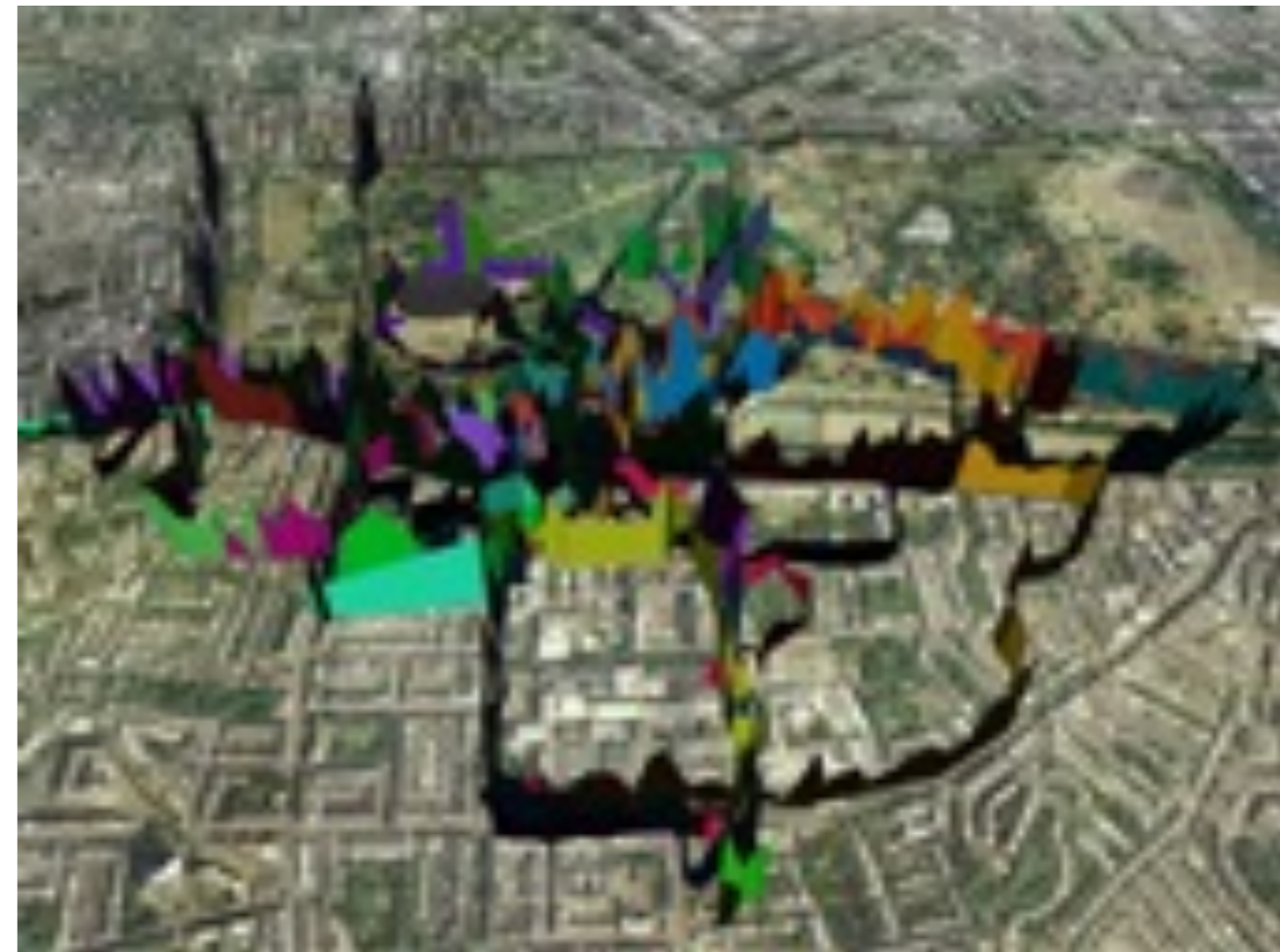
1. Networks: people self-organize as networked 'data publics'



Smart citizenship with data: strengthening ownership

2. Issue: people visualize shared 'data-driven issues'

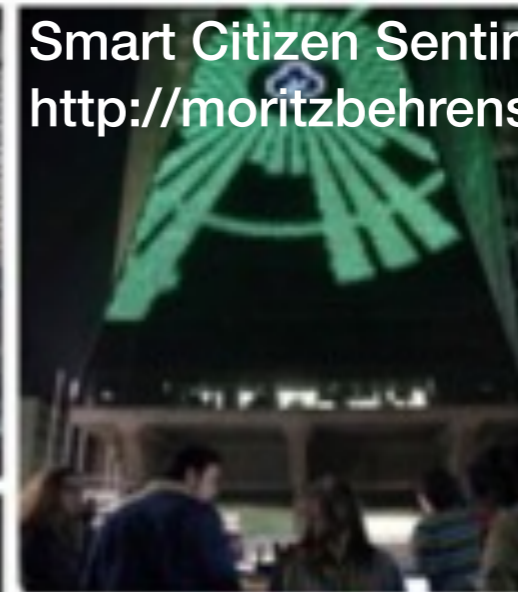
www.geluidsnet.nl



www.biomapping.net

Smart citizenship with data: strengthening ownership

3. Engagement: (self-generated) 'data-narratives' and engaging experiences



Smart citizenship with data: strengthening ownership

4. Action: data-narratives provide horizon for negotiation & collective action



Smart citizenship with data: strengthening ownership

5. Pooling resources: from opening up and connecting data, to messy ways of fostering data literacy and civic participation around hard to measure issues.

www.appsforamsterdam.nl



<http://datastudio-eindhoven.nl>



Discussion: self-description vs other-ascription

What happens to identity as either fixed or fluid?

Tension between inferred data-publics (no opting out) vs. self-defined data-publics (datafied identity politics).



Home » Blog » Facebook, Instagram, and Twitter Provided Data Access for a Surveillance Product Marketed to Target Activists of Color

Facebook, Instagram, and Twitter Provided Data Access for a Surveillance Product Marketed to Target Activists of Color

October 11, 2016

Issues: [Privacy and Government Surveillance](#), [Racial Justice](#), [Technology and Civil Liberties](#)

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By: Matt Cagle [Follow @Matt_Cagle](#)

The ACLU of California has obtained records showing that Twitter, Facebook, and Instagram provided user data access to Geofeedia, a developer of a social media monitoring product that [we have seen marketed to law enforcement as a tool to monitor activists and protesters](#).

We are pleased that after we reported our findings to the companies,



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DERAY MCKESSON | ACTIVIST AND TEACHER

BY KWAME OPAM | NOV. 29, 2016

The other thing is about data. I know there are a lot of incredible coders and people in the tech space who are trying to help us think about some big data questions. If you've heard any number about police violence at all, ever, it is all from local media reports. That means that if you get killed by a police officer in America and a newspaper does not write about it, you are not in the data set. That is wild. There are some towns that don't have newspapers. If the police kill somebody in that town, they just aren't in the data set.

I [also] think there are a lot of data questions about bail, about sentencing. Most people don't realize that the homicide rate in cities actually includes the people that the police kill. In places like Albuquerque, one in three

Discussion: agency & governance of/by platforms

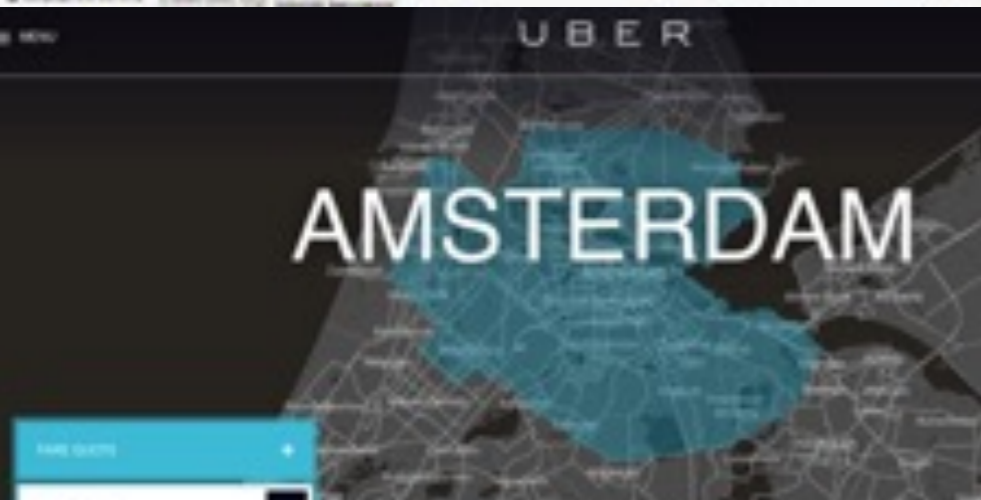
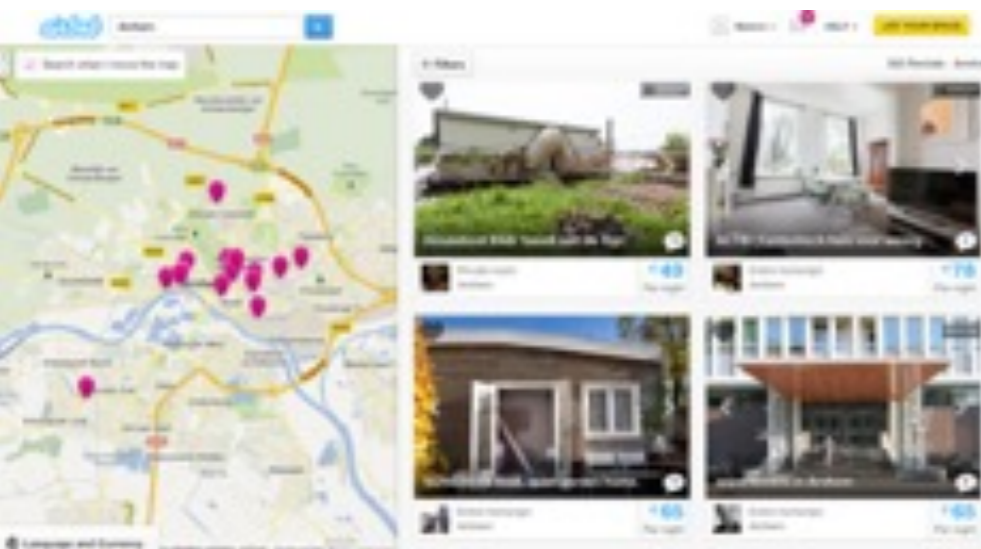
Governance: who own the data and platform?

Political economy

‘platformization’ of the city, value extraction, monetization, precarious labor

Participatory practices

commons-based value creation, peer-to-peer platform cooperativism.



TOP-DOWN
BOTTOM-UP



TUSSENMAAT



Indicators

ECONOMIC:

- cost and benefits
- flexibility and adaptivity
- risks
- duration
- amount of houses

QUALITY:

- sustainability and innovation
- materials
- diversity (amount of choices)
- height
- outdoor space

SOCIAL:

- demand- or supply driven
- involvement
- diversity (inhabitants)
- customer satisfaction
- collectivity

ORGANISATION:

- target or result oriented (outcome vs output)
- public-private cooperation
- self-organisation
- financing and financiers

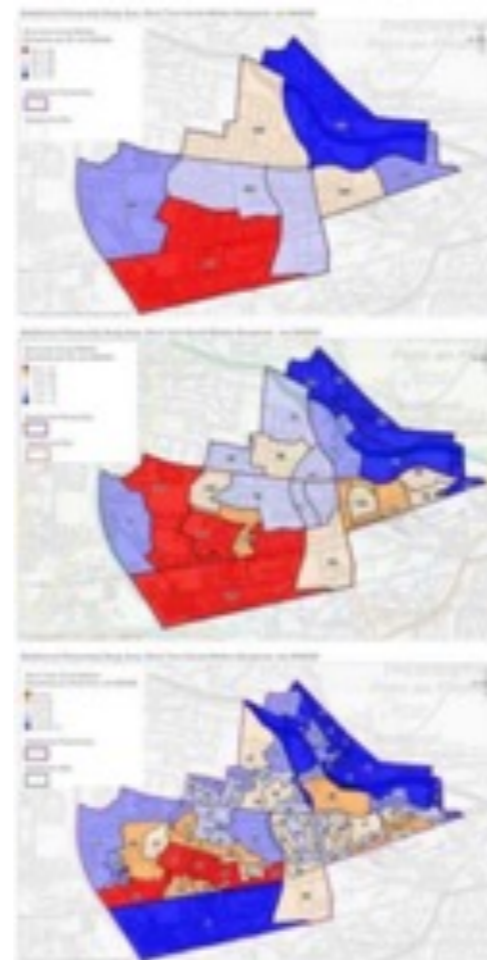
Discussion: splintering urban publics?

Publics make data, data make publics. New divides: geographical, social, cultural?

Datavis manipulation, *modifiable areal unit problem* as data-gerrymandering, shaping how we see publics.

Diversity and difference in urban public domain: from negotiating differences, to publics based on matching similarity.

Diversity as *difference* becomes *variation*: out of ordinary, deviation from standard.

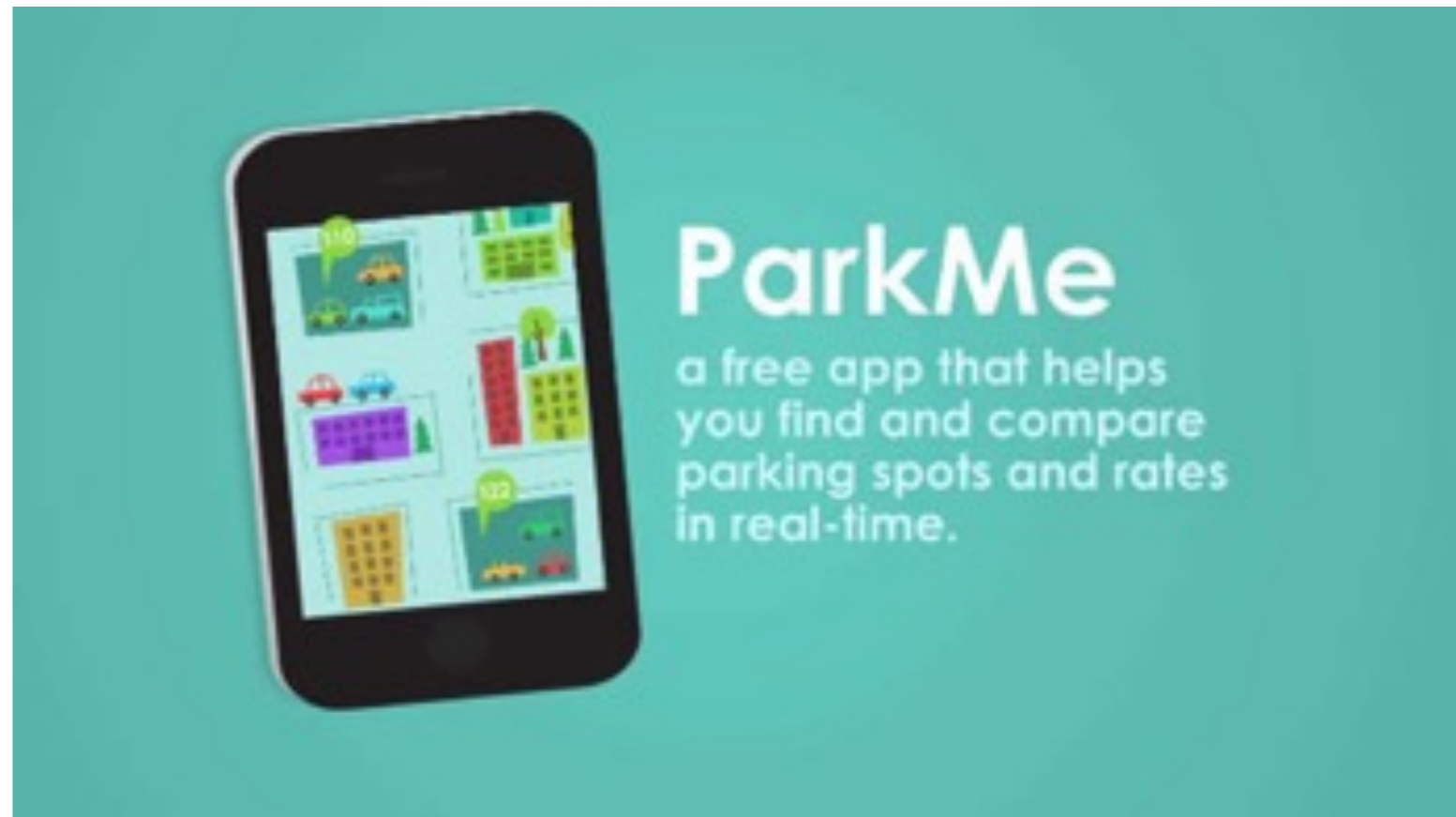


source: [Rob Kitchin](#)



Discussion: smart apps, conservative politics?

Realtime data-driven smart urban interventions: solution or distraction from public issues?
E.g. parking apps vs. future of mobility.



Discussion: reflecting on the data-driven city

Ontology

- City as cybernetic system: knowable and manageable on rational foundations?
- Or city as place of serendipity, chaos, wonder, myth and magic? Dashboard as *Wunderkammer*?

Epistemology

- Data as representation of, or as construction of reality? Implications for ontology!

Politics

- ‘Algorithmic governance’, or supporting the agency and interests of urban publics?
- Technocratic rule (‘new managerialism’), or true politics?



Figure 1.1 Knowledge pyramid (adapted from Adler 1986 and McCandless 2010)

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Thanks!

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