

Urban data work

A practitioner's perspective

Martin Dittus, 2014-02-15

@dekstop

About Me

Martin Dittus

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Research focus: Data-gathering Communities

Trustee at London Hackspace

Formerly:

Grad student at Centre for Advanced Spatial Analysis (CASA), UCL

Data team member, project manager at Last.fm

Occupy London tech team member

Organiser at EMFCamp, Hack the Barbican, others

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<http://dekstop.de>

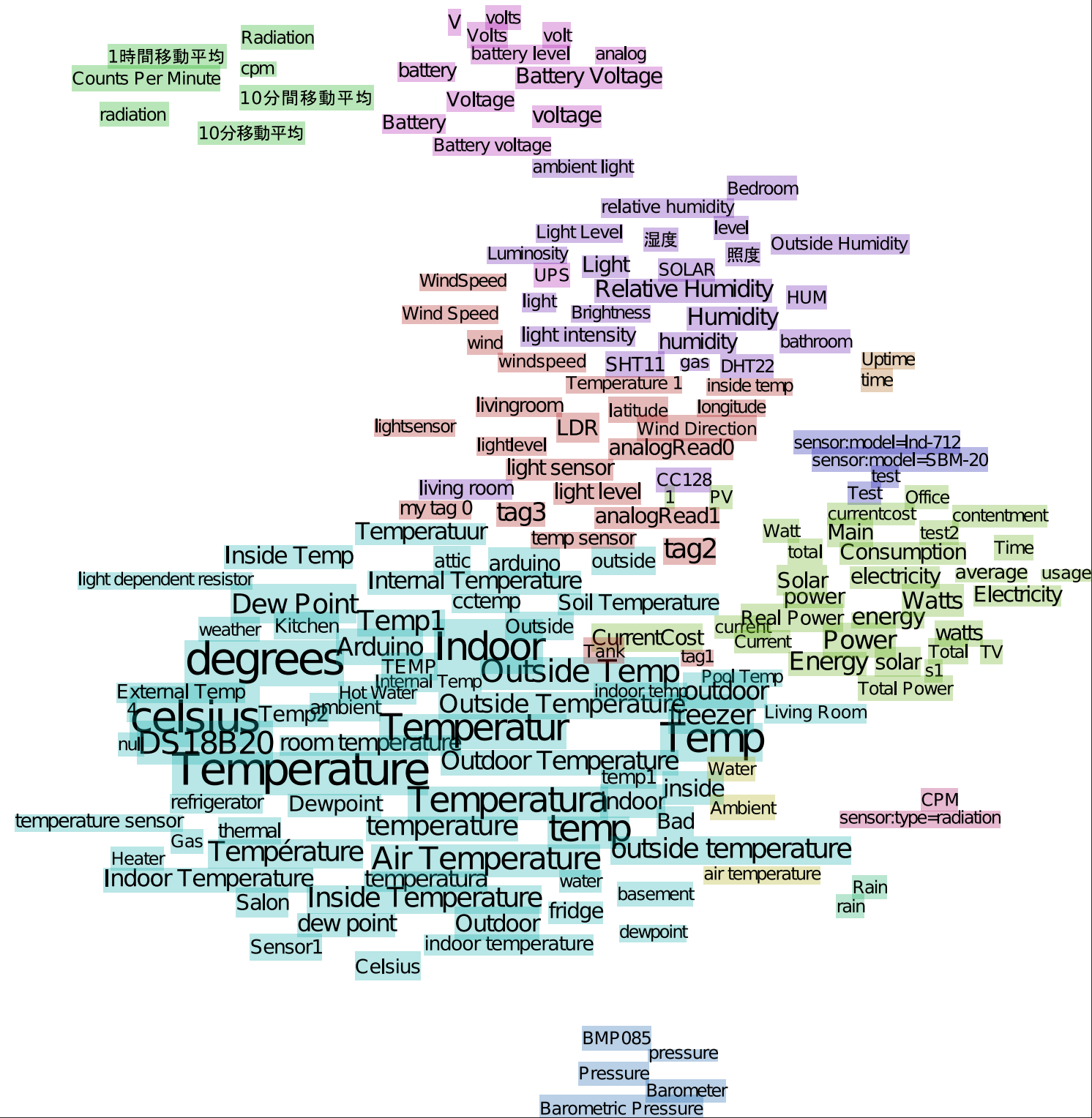
Cosm Community Sensor Data Annotations

Tag similarity network

“Similar” tags have low user correlation, high item correlation. (Clements et al. 2008)

This reveals: **many synonyms** for the same concepts.

Dittus (2012), “The Cosm Sensor Data Set”



OpenStreetMap as meeting ground for a wide range of interests

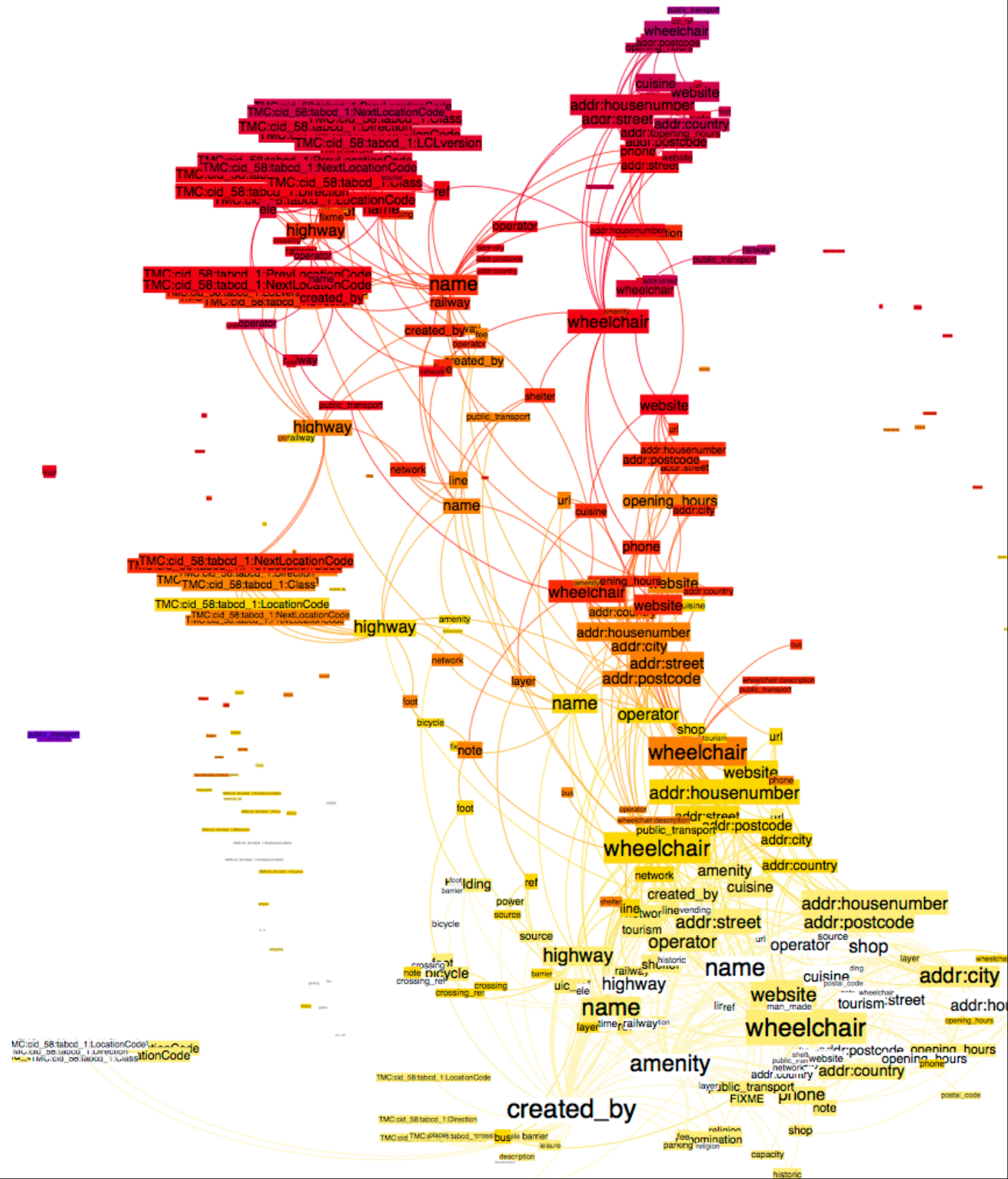


Collaboration on OpenStreetMap

No formal peer review
on OSM. How does this
affect the map?

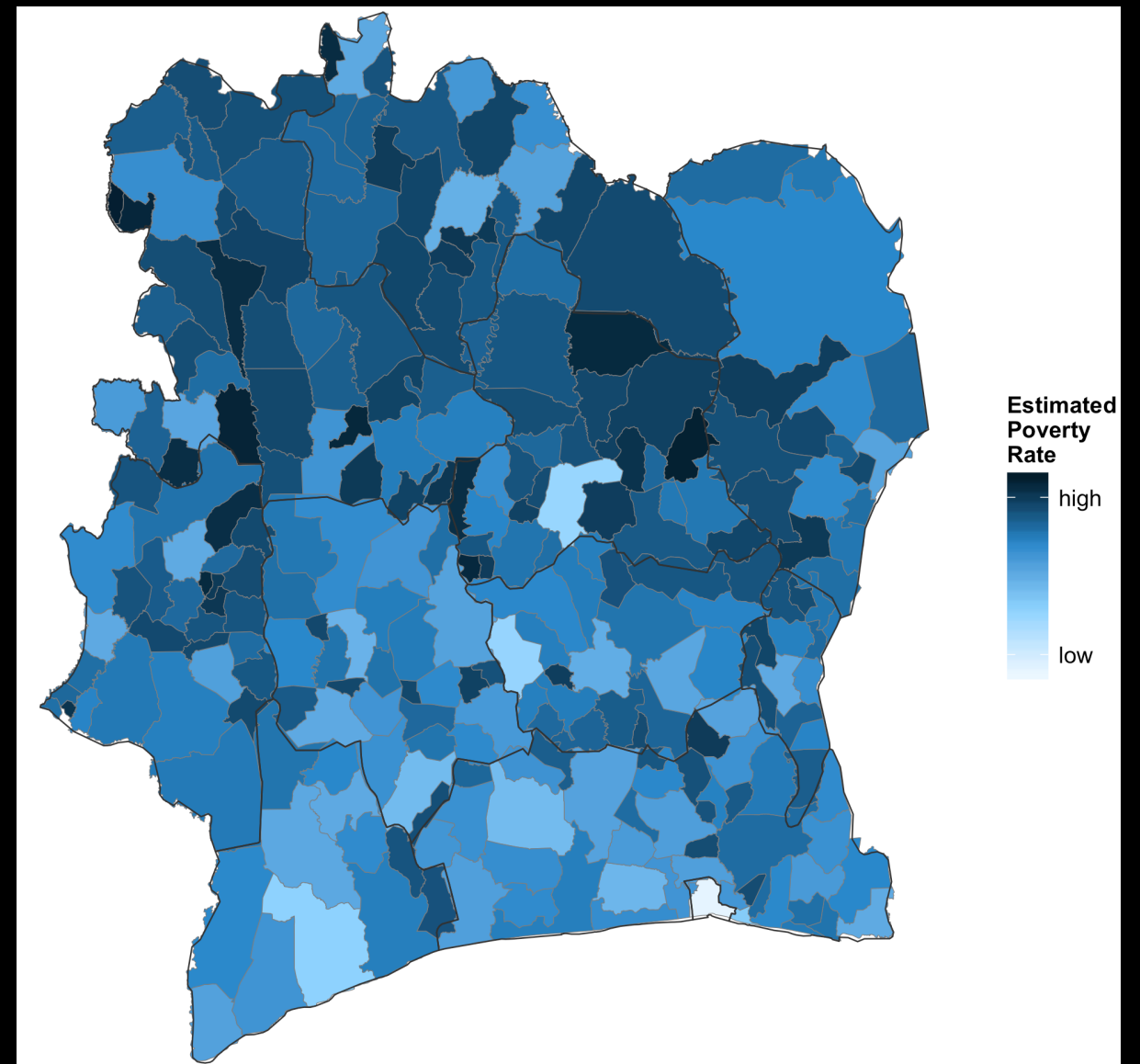
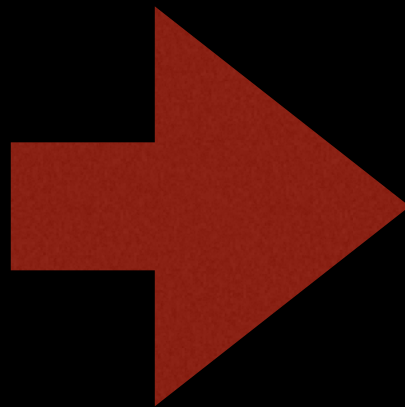
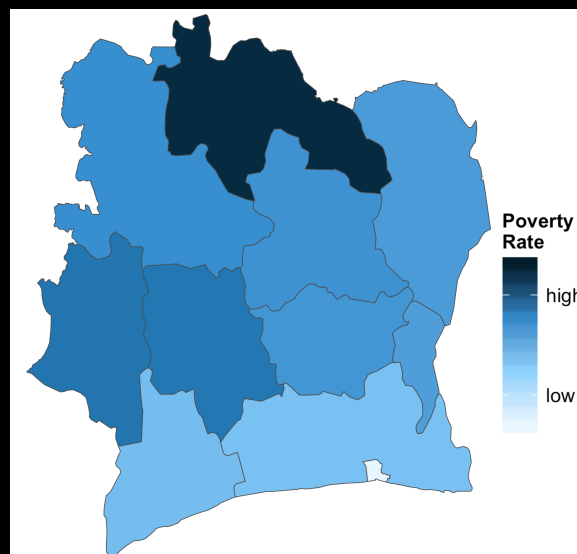
Do contributors refine map
data provided by others?

Data mining of full OSM
history, billions of edits.



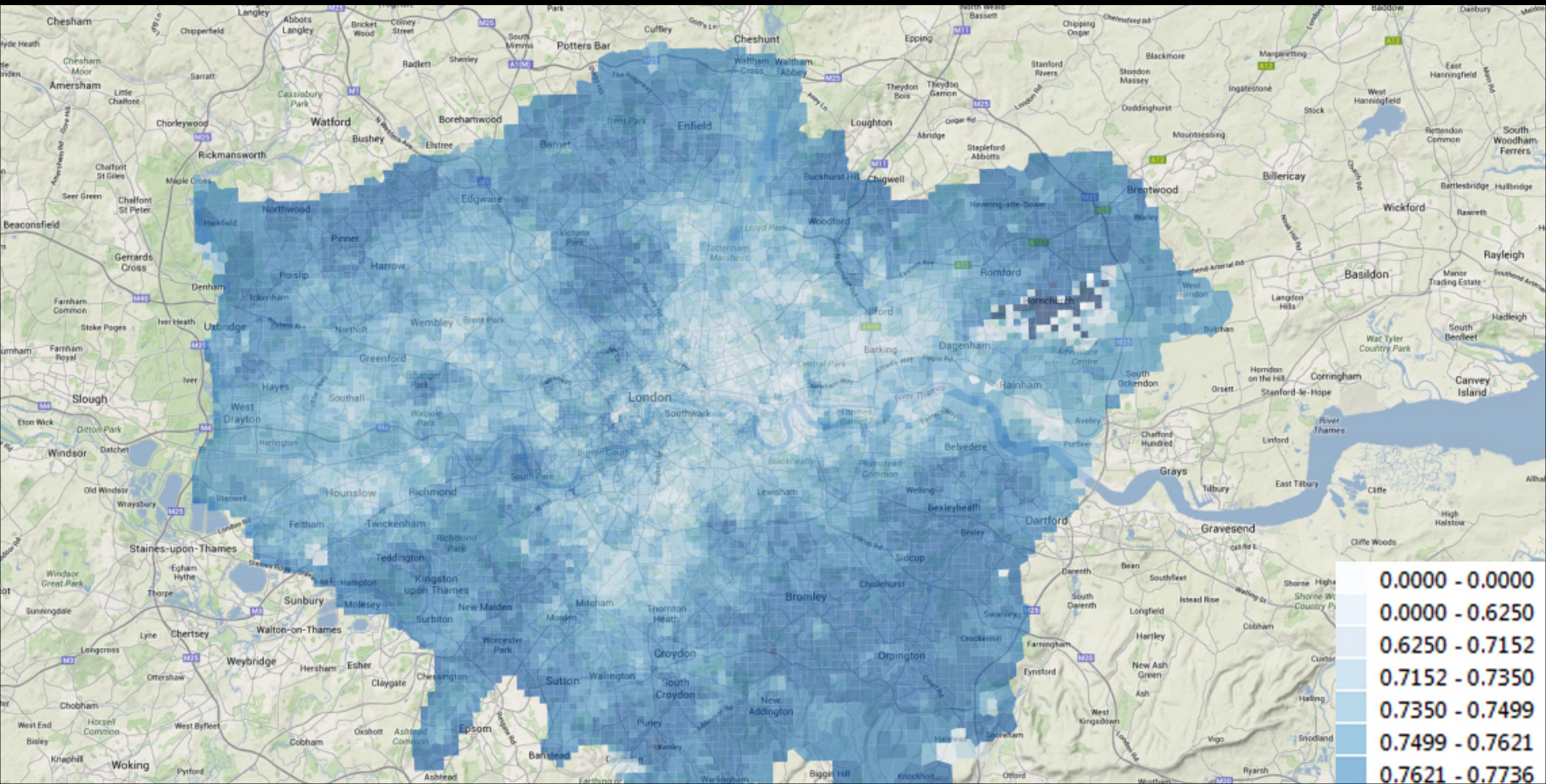
ICRI: Chris Smith-Clarke

Socio-economic indicators from mobile phone data. Can we estimate population census data on a frequent basis and at very low cost?



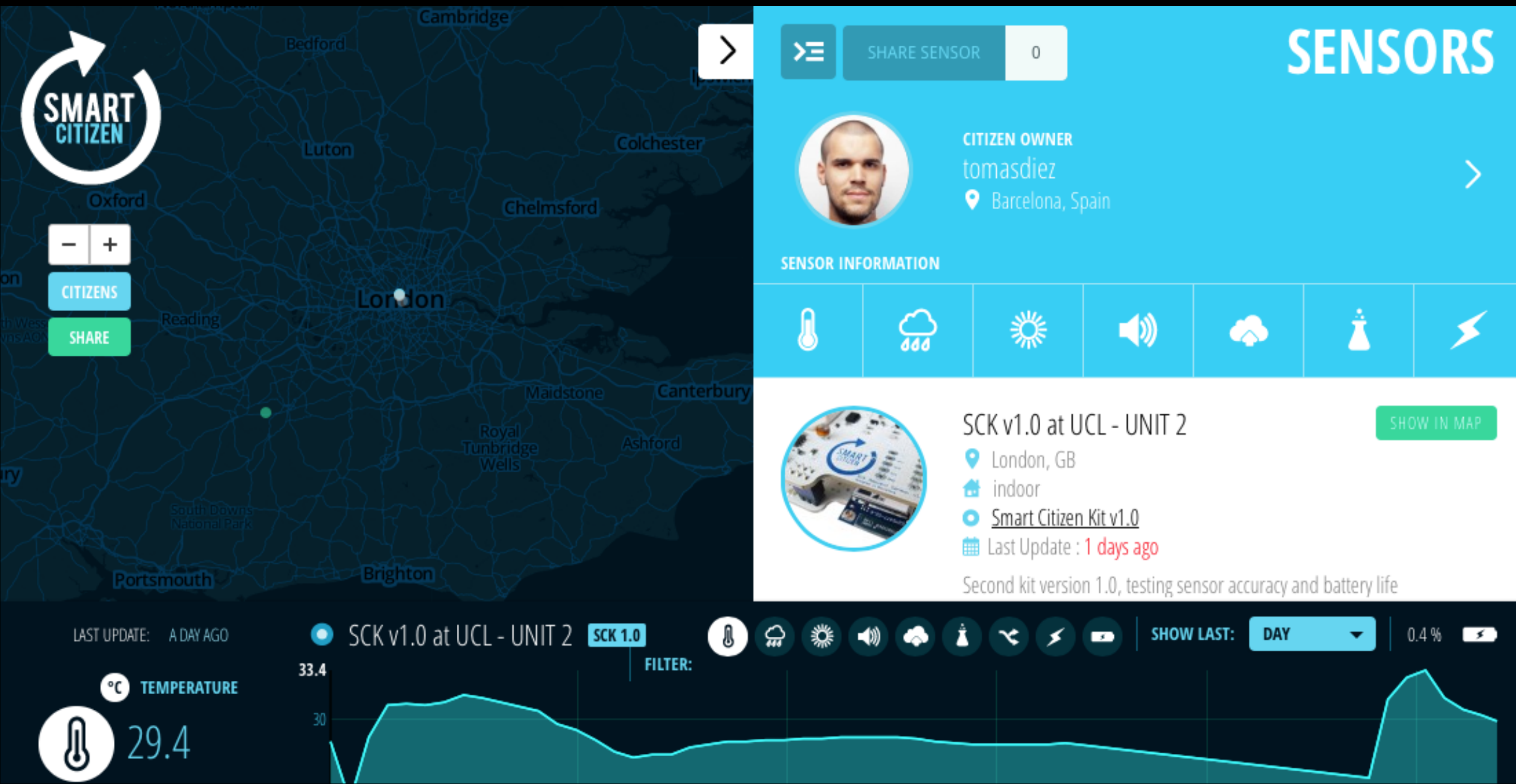
ICRI: Martin Traunmüller

Testing classic urban theories about crime.
Demographic mixture, locals vs commuters, etc.



ICRI: Tomas Diez

Smart Citizen. An community platform for environmental sensing.



ICRI: Lisa Koeman and Vaiva Kalnikaite

Visualising Mill Road in Cambridge.



This is **exciting stuff** to me.

Exploring new means of **producing knowledge**,
new means of **presenting information**.

Makes you feel like everything is suddenly different, everything is new.

However

Am also growing sceptical of a few things.

“Smart Cities”

At least three kinds of drama in one neologism.
(No need to reiterate the full debate.)

Nesta... **Nesta, UK**
@nesta_uk



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(Planners: don't enforce structure. Cities are not supposed to be perfectly well-organised.)



Adam Greenfield

@agpublic



Following

I'm just so skeptical of the idea that there ever could be a "science" of cities — of anything that matters about cities, anyway.

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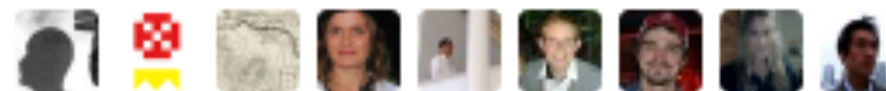
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*(Researchers: make simplifying assumptions at your peril.
Cities are complex and ever-changing.)*

*“We'll solve it with
a bit of software”*

The dominant assumption that internet technology is the missing puzzle piece. Morozov's solutionism debate.

(This is mostly aimed at the technologists in the room.)

That's simply not
going to work.*

*Unless you're really lucky.

Technology is just *one* of the parts.

I'm a technologist. I spent 20 years writing software, building infrastructure, using technology to answer hard questions.

Maybe the most important thing I learned in these 20 years: in order to do great work, **you can't limit yourself to only knowing technical things.**

To do great work, you need to **know people who are very different to yourselves.**

You need to be deeply immersed in the **mess and beauty** of other people's lives.

(Sadly, a tech education does not prepare you for this.)

It's actually very **easy** to get trapped in a mode where you're just playing with **technology**. Surprisingly easy. (Even after 20 years of working with software I still fall into that trap all the time.)

Where you're super-focused on something, really enjoying the work, getting a lot out of it yourself, learning, playing, doing cool stuff.

And then you're done, feeling pleased with yourself, and **you'll find that nobody else cares.**

You have the ability,
the **power**, to build
important systems.

So use it wisely. Don't isolate yourself.

Make a habit of being curious about people who are different from you.

Show them your work,
and then listen.

Now it's important to point out that this is a hack weekend:
nobody expects you to change the world this weekend. Don't be too hard on yourselves just yet.

This weekend is explicitly about play, and **play is very important for our kind of work.**

We need to make many new experiences all the time in order to become great at our work. We need to experiment. **Try lots of random shit and see what happens.** So play with the tech, and ignore everyone else if you just want to be focused, that's absolutely fine.

But while you're playing I'd also like you to, once in a while, ponder this little question: *why does it matter?* Is there something in there that could become important? Whose problems can I help solve with this? Who should I be talking to, who should I get advice from, to make this work really great?

Thank You.