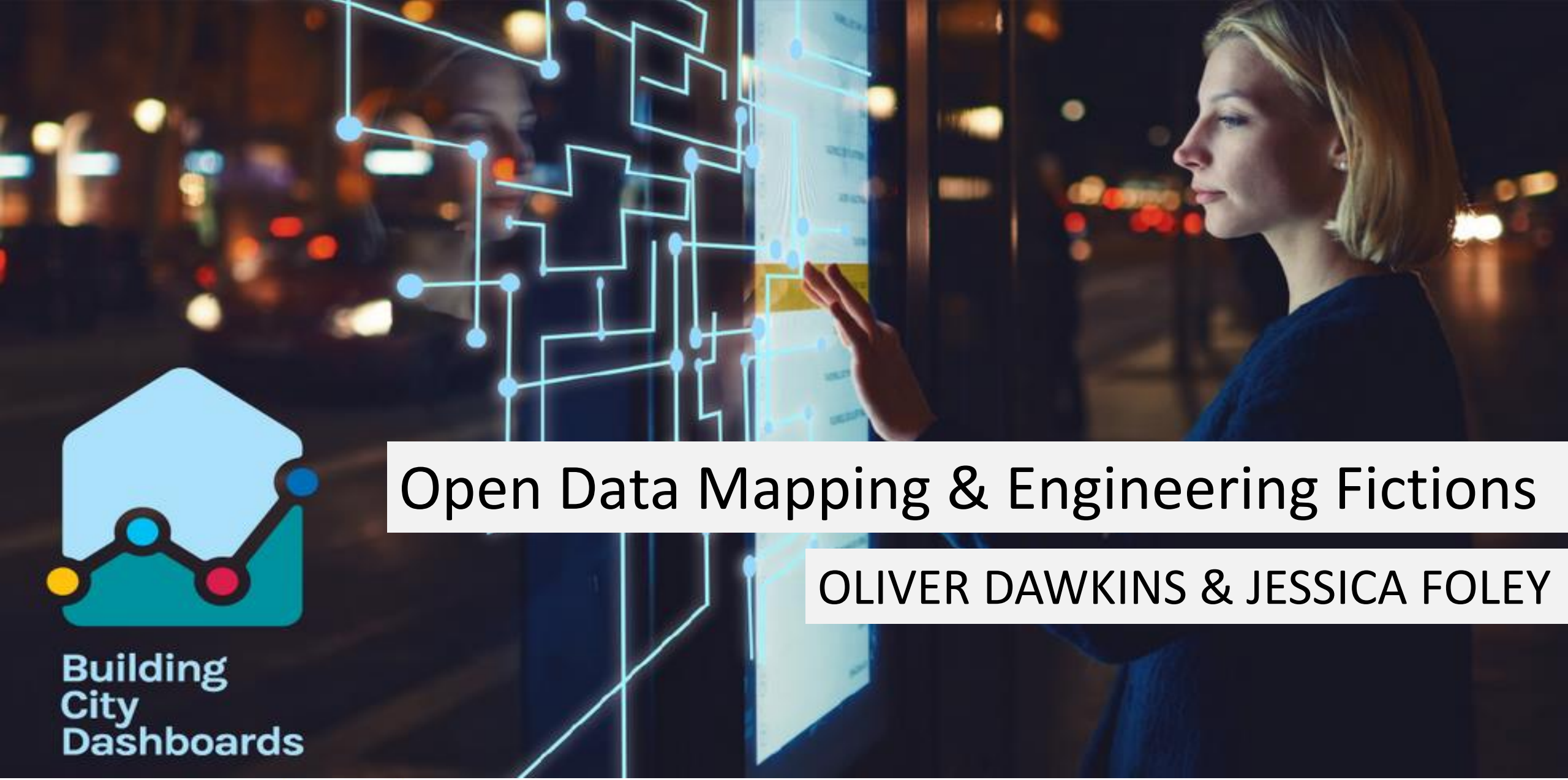

Open Data Mapping & Engineering Fictions

OLIVER DAWKINS & JESSICA FOLEY

Building City Dashboards

NCG National Centre for Geocomputation An tIonad Náisiúnta Geoiriomhaireachta

Maynooth University Social Sciences Institute

Maynooth University National University of Ireland Maynooth

Science Foundation Ireland sfi For what's next

dashboards.maynoothuniversity.ie
dashboards@mu.ie
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Building City Dashboards Project

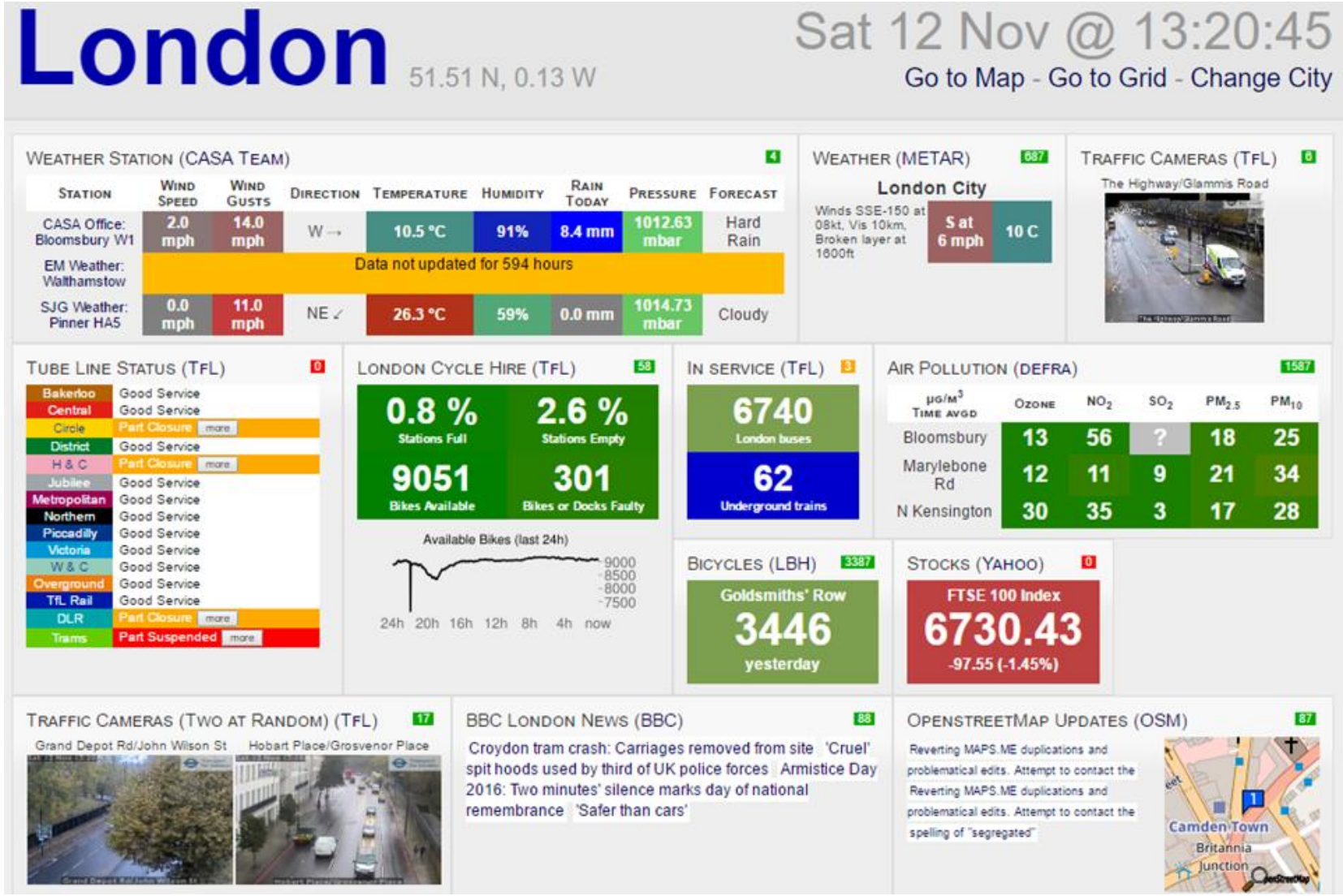
- Urban and regional data visualisation
- Interactive Maps
- Virtual and augmented reality
- Spatial modelling and analytics
- Data quality and standards
- Training and outreach

What is a city dashboard?

Just as a car dashboard provides critical information needed to operate the vehicle at a glance, indicator dashboards provide key information for running companies or cities. Information is typically communicated through gauges, traffic light colours, meters, arrows, bar charts, graphs, etc.'

Kitchin, R. et al.(2015, p11).

CASA London City Dashboard



Why do cities and regions need dashboards?

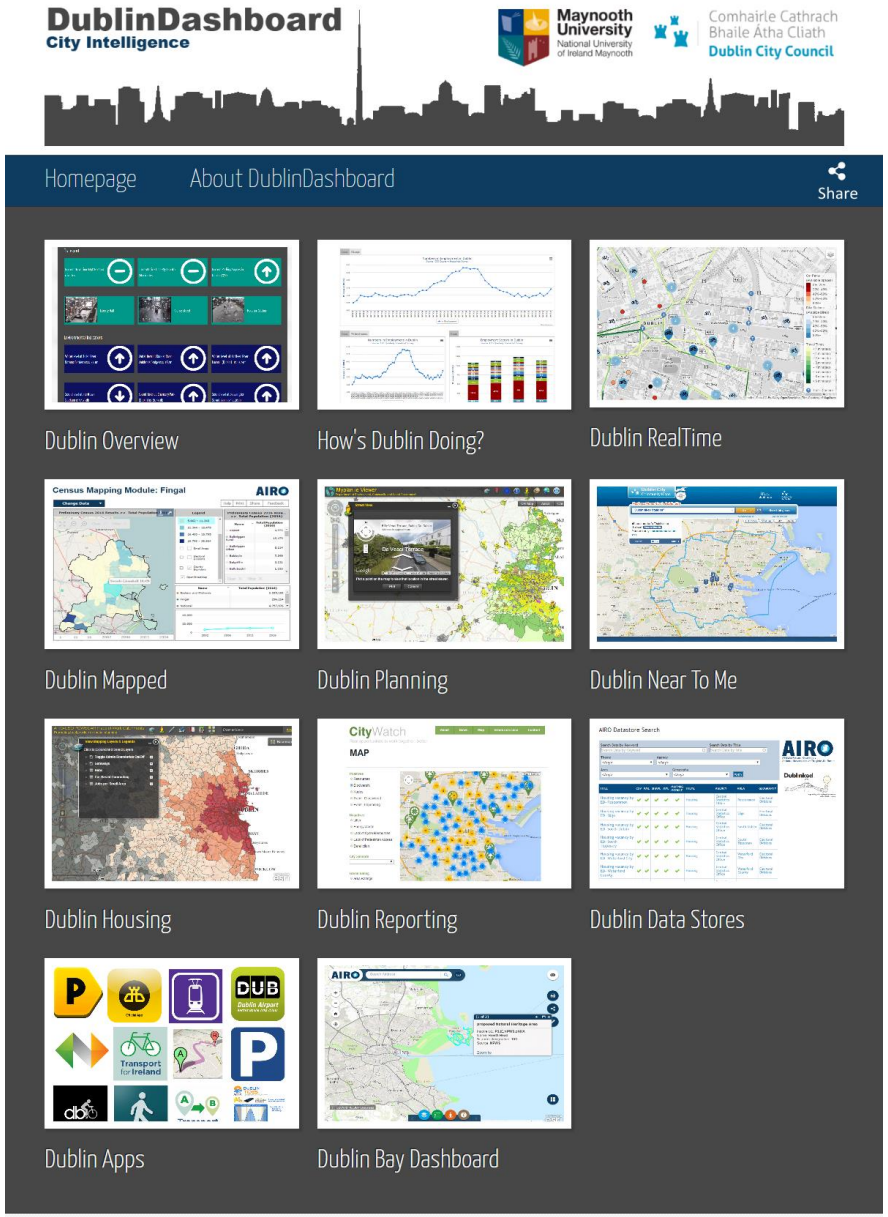
- Scale of the city increasing in terms of human population, economic output and physical size (Batty, 2009)
- New methods required to understand and manage cities
- Data produced by and about urban environments offer insights into what is happening in cities and city regions
  - Data from **sensors** e.g. noise, air quality, climate & traffic
  - Data generated by **government** and city departments e.g. housing & health
  - Data generated by **citizens**, e.g. crowd-sourced data/maps

Dublin City Dashboard

Launched in 2014

Key focus

- Enable local authorities to interact with urban data and better understand urban processes
- Provide a tool for citizen engagement

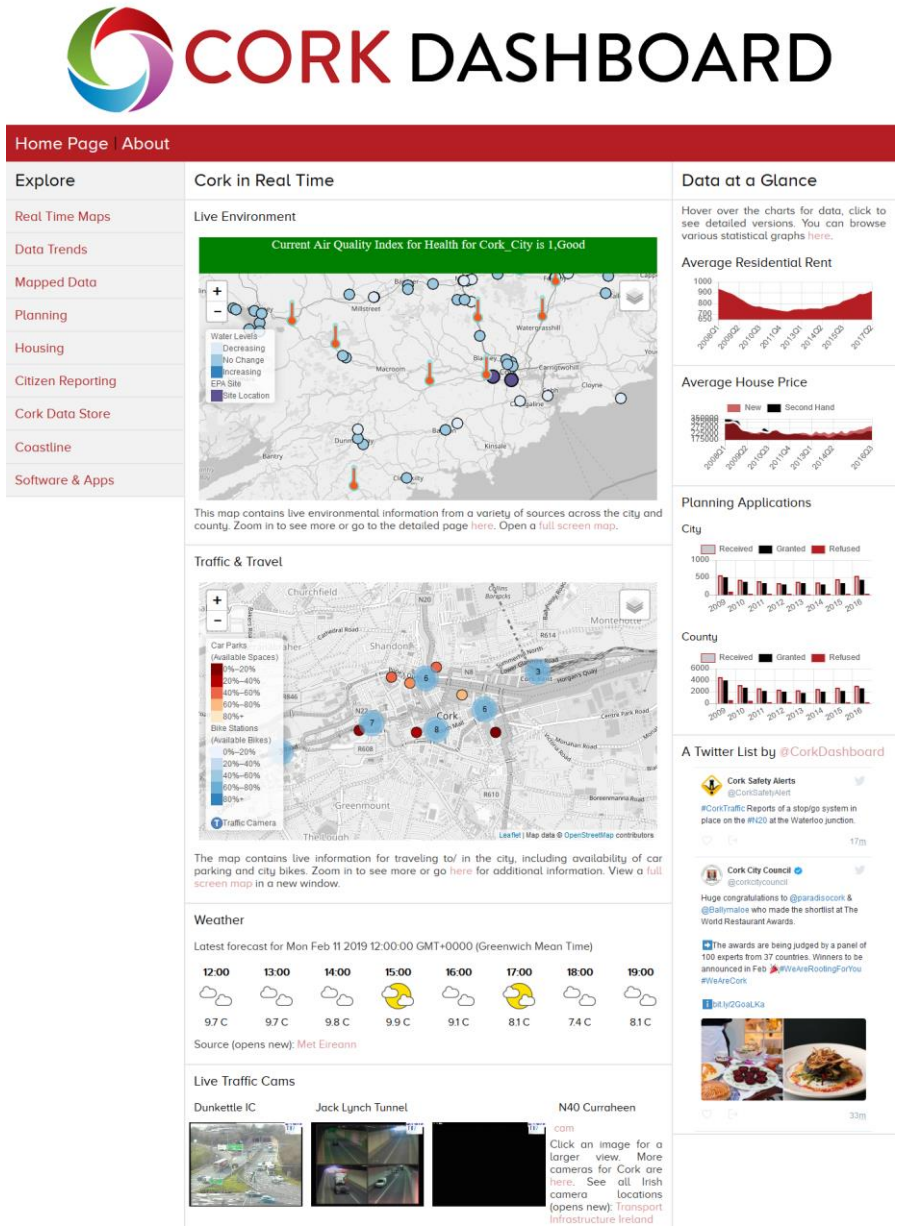


Cork City Dashboard

Launched in 2017

Key focus

- Improved design
- Better site structure and naviagtion
- Usability



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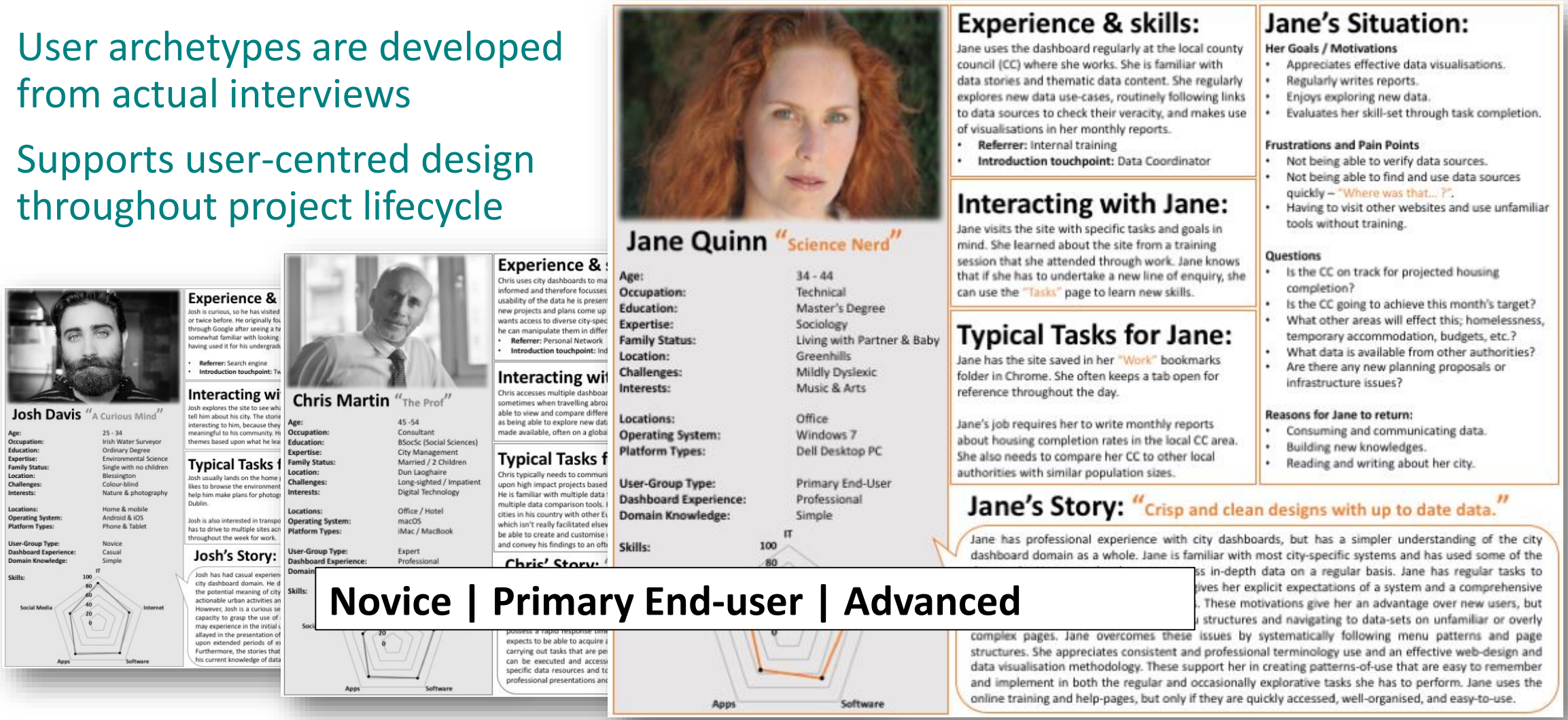
Dashboarding is more than a purely technical exercise

User archetypes are developed from actual interviews

Supports user-centred design throughout project lifecycle

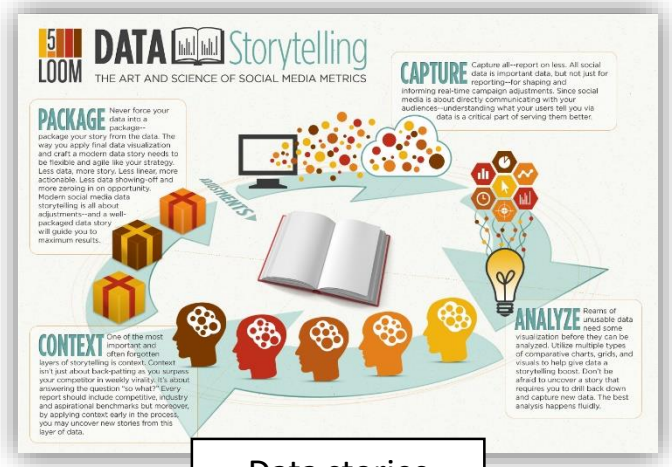


Visualizations

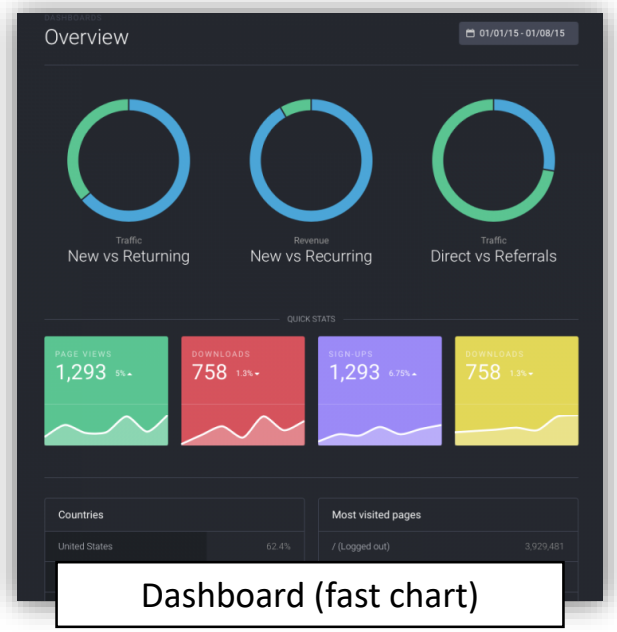
Explanative
(communication of insights)

Increasing Visualization Complexity

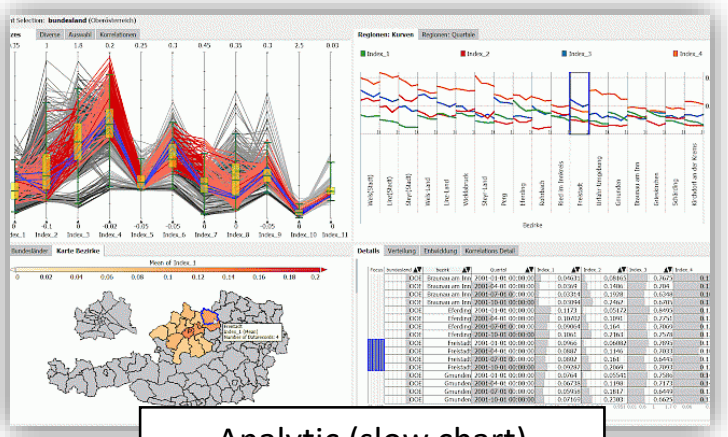
Explorative
(discovery of patterns)



Data stories



Dashboard (fast chart)



Analytic (slow chart)

Novice | Casual

End-user | Professional

Advanced | Professional

Increasing Contextual Information

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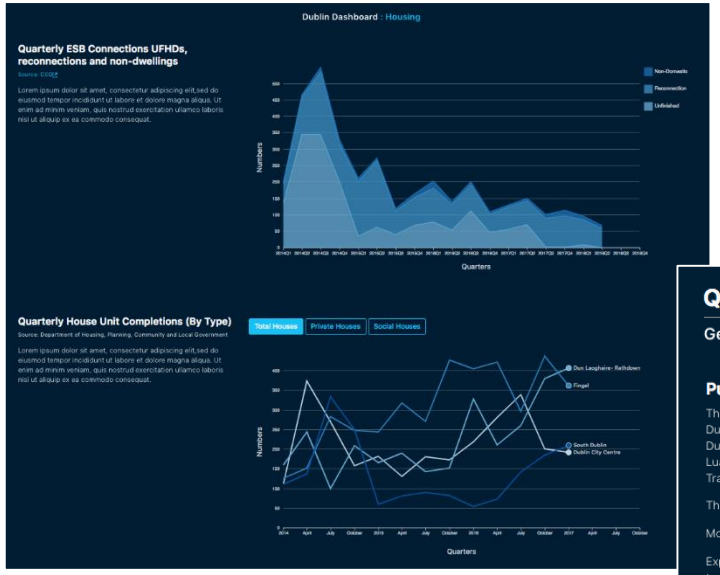
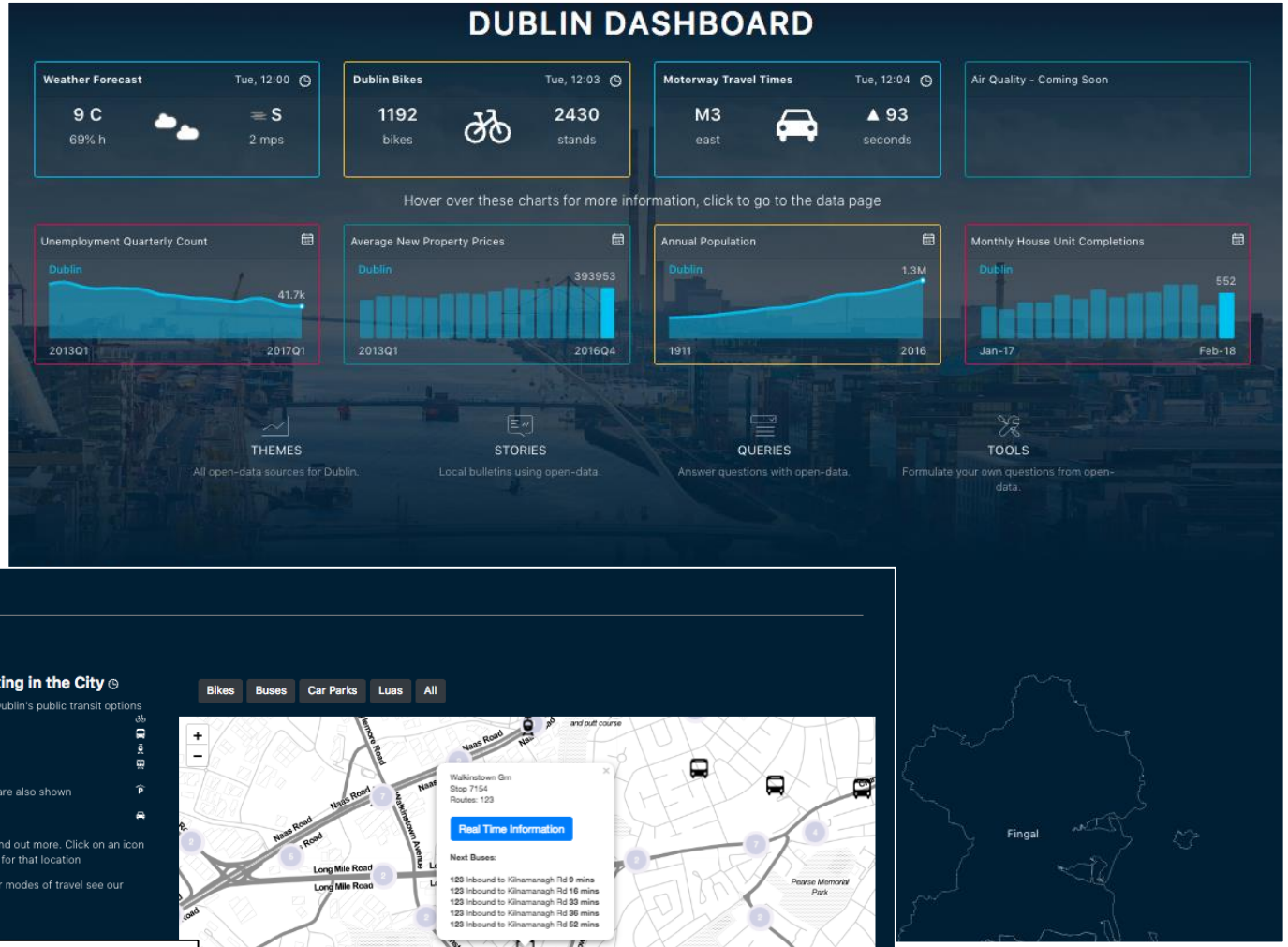
New Dashboard Designs

Informed by user research!





Stories | Themes | Queries | Tools

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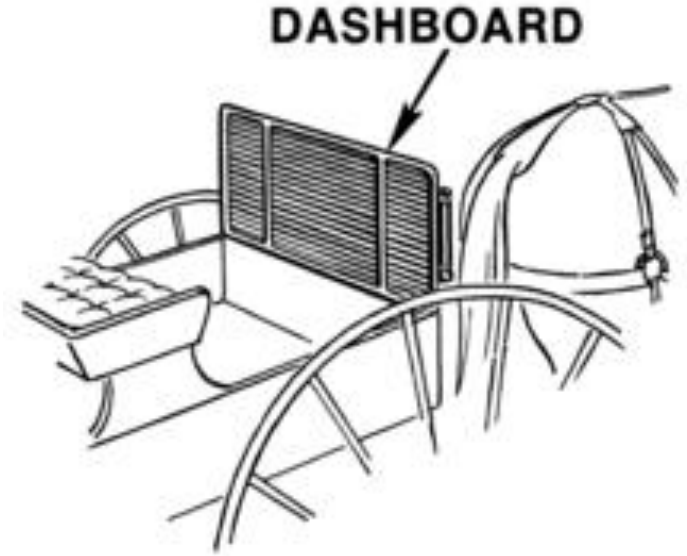
Big Data and Datafication

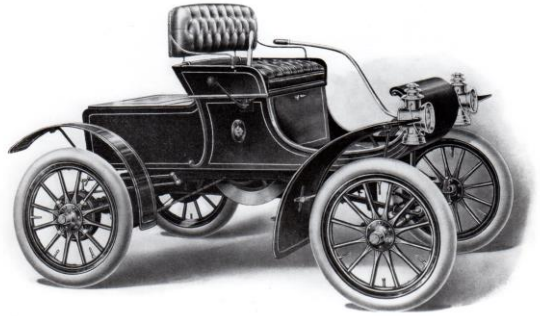
Big data is also characterized by the ability to render into data many aspects of the world that have never been quantified before; call it "datafication." For example, location has been datafied, first with the invention of longitude and latitude, and more recently with GPS satellite systems. Words are treated as data when computers mine centuries' worth of books. Even friendships and "likes" are datafied, via Facebook.

Cukier and Mayer-Schoenberger (2013, p.28)

Data Literacy – Supporting the use of city dashboards as a shared social resource

How can we help **build capacity** within local governments and the communities they serve in order to help them make more effective **shared use** of city dashboards and data-driven approaches to urban governance?





OLDSMOBILE CURVED DASH RUNABOUT
BUILT FROM 1900 THROUGH 1904

SPECIFICATIONS

CAPACITY -- Two passengers.
WHEEL BASE -- 66 inches.
TREAD -- 55 inches.
FRAME -- Angle steel.
SPRINGS -- Oldsmobile side springs.
WHEELS -- 28-inch wood artillery.
TIRES -- 3-inch detachable.
MOTOR -- 5 x 6-inch 7 H. P. horizontal.
TRANSMISSION -- All-spur gear, two speeds forward and reverse.
FINISH -- Black with red trimming.
EQUIPMENT -- Complete set of tools and pair of large brass side lamps.
RADIATOR -- Copper disk.
CARBURETOR -- Oldsmobile.
IGNITION -- Jump spark.
STEERING GEAR -- Tiller.
DIFFERENTIAL -- Bevel-gear type.
BRAKES -- Differential and rear wheel.
WATER CAPACITY -- Five gallons.
CIRCULATION -- Gear pump.
GASOLINE CAPACITY -- Five gallons.

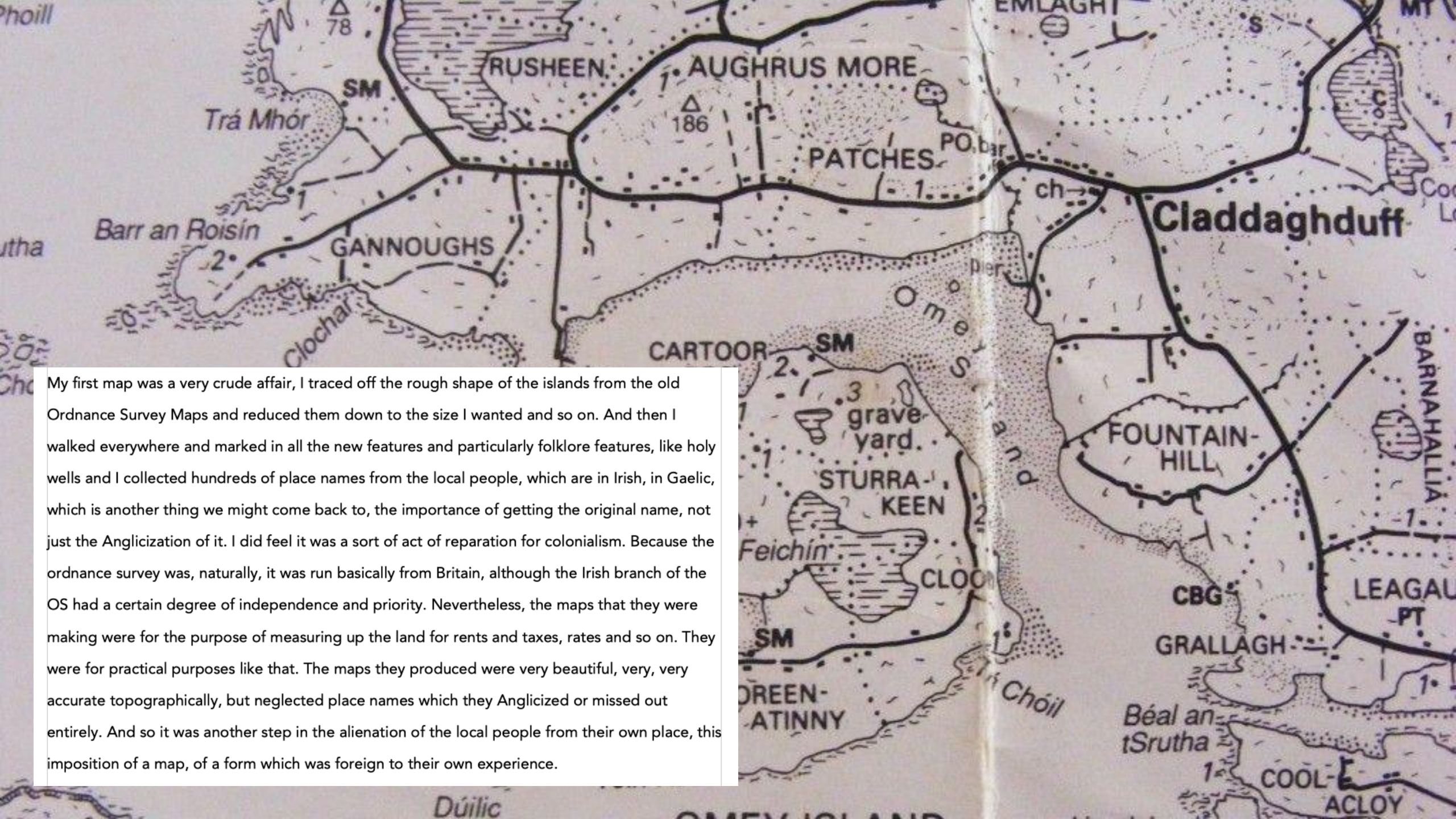
Skeuomorph

From Wikipedia, the free encyclopedia

A **skeuomorph** (/ˈskjuːəˌmɔːrf, ˈskjuːoʊ-/)[1][2] is a derivative object that retains ornamental design cues (attributes) from structures that are inherent to the original.[3] Examples include pottery embellished with imitation rivets reminiscent of similar pots made of metal[4] and a software calendar that imitates the appearance of binding on a paper desk calendar.[5]

etymological roots of the terms *data* and *capta* make the distinction between constructivist and realist approaches clear. *Capta* is "taken" actively while *data* is assumed to be a "given" able to be recorded and observed. From this distinction, a world of differences arises. Humanistic inquiry acknowledges the situated, partial, and constitutive character of knowledge production, the recognition that knowledge is constructed, *taken*, not simply given as a natural representation of pre-existing fact.

My distinction between data and capta is not a covert suggestion that the humanities and sciences are locked into intellectual opposition, or that only the humanists have the insight that intellectual disciplines create the objects of their inquiry. Any self-conscious historian of science or clinical researcher in the natural or social sciences insists the same is true for their work. Statisticians are extremely savvy about their artifices. Social scientists may divide between realist and constructivist foundations for their research, but none are naïve when it comes to the rhetorical character of statistics. The history of knowledge is the history of forms of expression of knowledge, and those forms change. What can be said, expressed, represented in any era is distinct from that of any other, with all the attendant caveats and reservations that attend to the study of the sequence of human intellectual events, keeping us from any assertion of progress while noting the facts of change and transformation. The historical, critical study of science is as full of discussions of this material as the humanities.



My first map was a very crude affair, I traced off the rough shape of the islands from the old Ordnance Survey Maps and reduced them down to the size I wanted and so on. And then I walked everywhere and marked in all the new features and particularly folklore features, like holy wells and I collected hundreds of place names from the local people, which are in Irish, in Gaelic, which is another thing we might come back to, the importance of getting the original name, not just the Anglicization of it. I did feel it was a sort of act of reparation for colonialism. Because the ordnance survey was, naturally, it was run basically from Britain, although the Irish branch of the OS had a certain degree of independence and priority. Nevertheless, the maps that they were making were for the purpose of measuring up the land for rents and taxes, rates and so on. They were for practical purposes like that. The maps they produced were very beautiful, very, very accurate topographically, but neglected place names which they Anglicized or missed out entirely. And so it was another step in the alienation of the local people from their own place, this imposition of a map, of a form which was foreign to their own experience.

Data – American Marketing Association
amaalaska.org

We Love Data by Quantcast | Dribb...
dribbble.com

CMOs Must Love Data - Inf...
infinitive.com

I love data science
slideshare.net

Love Your Data
smartimpact.co.uk

Love Data Week: The value ...
kalendarium.uu.se

SetWidth700-I-LOVE-DATA-ADMA-Blog ...
buildingengines.com

Nexxa Group Inc. – About Us
nexxagroup.com

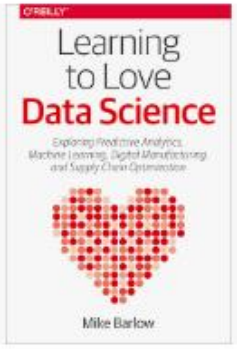
Data Week with Emory Librarie...
web.library.emory.edu

16 Reads that will make you love ...
connection.sagepub.com

Why the Best Recruiters Have Learned to ...
sourcecon.com

Keep Calm-o-Matic
keepcalm-o-matic.co.uk

PacificEast | Keep Calm a...
pacificeast.com



Learning to Love Data Sci...
shop.oreilly.com

DataFlash: Love Data Wee...
news.nnlm.gov

Love Your Data Week 2017 ...
blogs.cranfield.ac.uk

What is a Sonnet Poem?

A Sonnet is a poem of an expressive thought or idea made up of 14 lines, each being 10 syllables long. Its rhymes are arranged according to one of the schemes – Italian, where eight lines called an octave consisting of two quatrains which normally open the poem as the question are followed by six lines called a sestet that are the answer, or the more common English which is three quatrains followed by a rhyming couplet.

The Structure of a Sonnet Poem

- ab ab, cdcd, efef, gg - English
- abba abba cdecde - Italian

How Do I Love Thee? (Sonnet 43)

Elizabeth Barrett Browning, 1806 - 1861

How do I love thee? Let me count the ways.
I love thee to the depth and breadth and height
My soul can reach, when feeling out of sight
For the ends of being and ideal grace.
I love thee to the level of every day's
Most quiet need, by sun and candle-light.
I love thee freely, as men strive for right.
I love thee purely, as they turn from praise.
I love thee with the passion put to use
In my old griefs, and with my childhood's faith.
I love thee with a love I seemed to lose
With my lost saints. I love thee with the breath,
Smiles, tears, of all my life; and, if God choose,
I shall but love thee better after death.

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