Closing the divide:

Data visualisations, organisational structures and representation in humanitarian mapping

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AND MEDIA
RESEARCH
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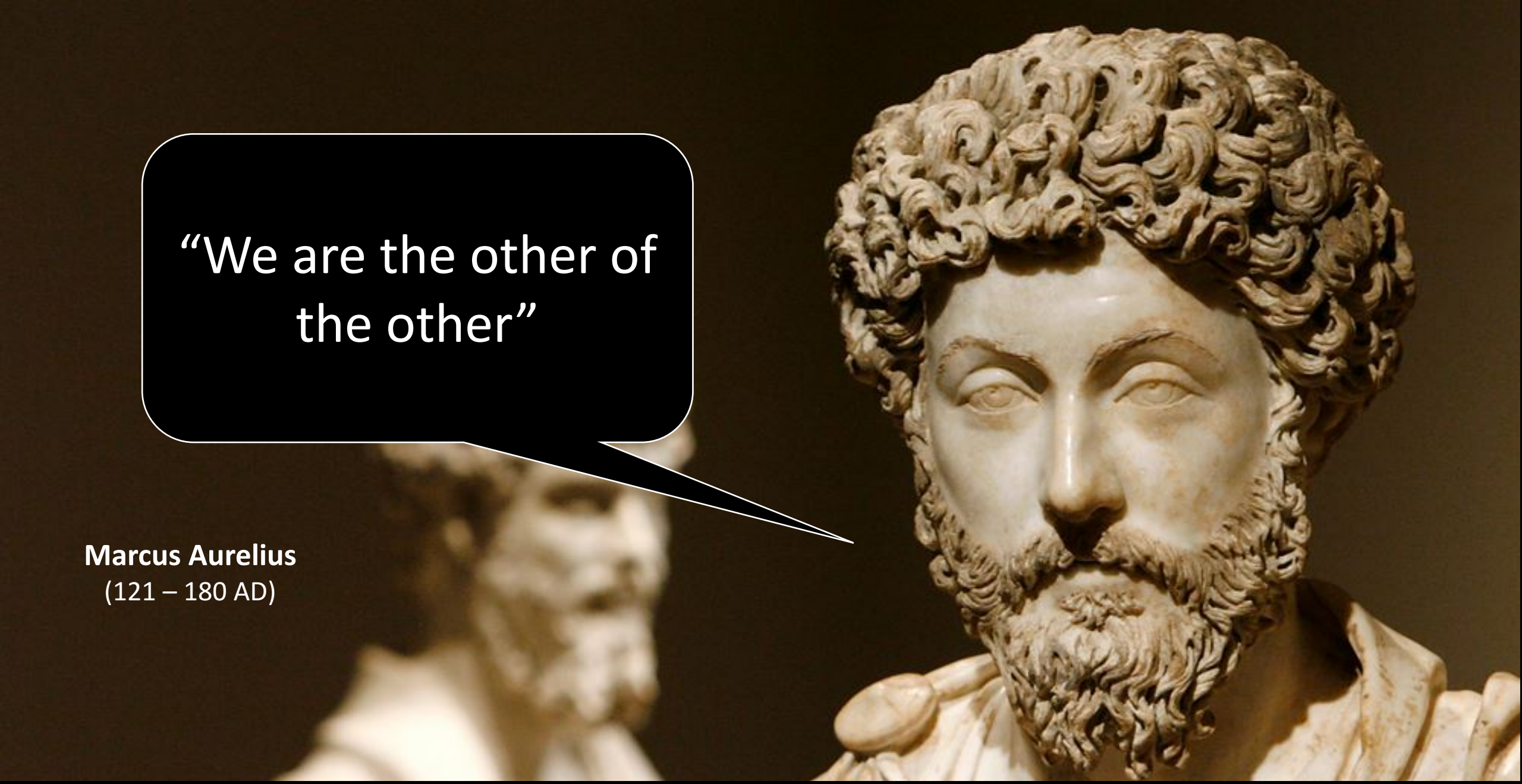
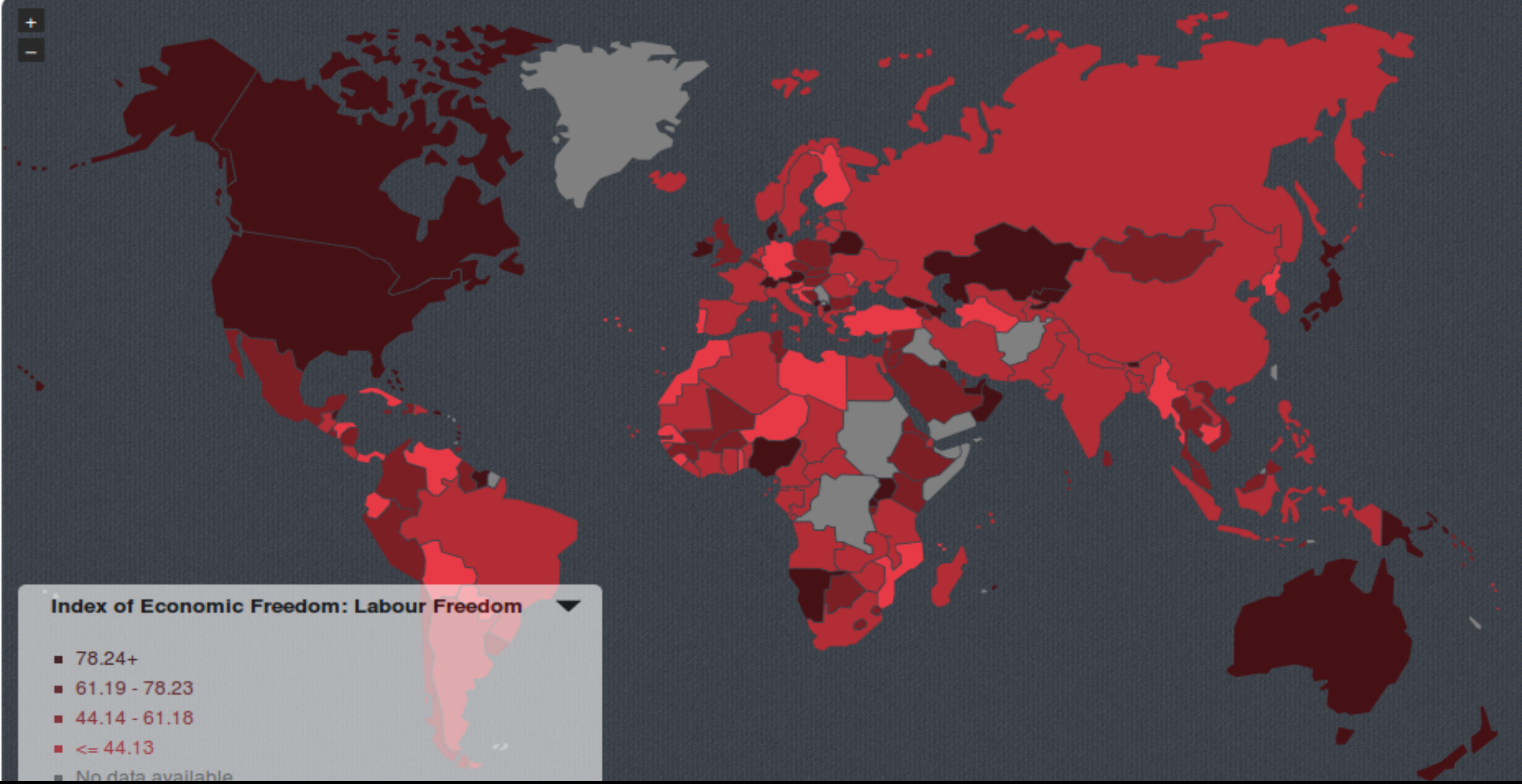
FOSS4G 2018
Dar es Salaam



Marcus Aurelius
(121 – 180 AD)


Index of Economic Freedom: Labour Freedom
78.24+
61.19 - 78.23
44.14 - 61.18
<= 44.13
No data available

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- Other
- Pesticides Problems
- Police Brutality
- Pollution
- Protest
- Trafficking
- Water Rights

1.3 billion gallons of contaminated water flows from Mount Polley

Translate to: English

Date: 04 August 2014
Location: Cariboo F, BC, Canada

Description of Event:

In the early morning of August 4, 2014, a major breach occurred in an earthen dam built to contain millions of tons of mining waste -- called "tailings" -- at the Mount Polley copper and gold mine in central British Columbia. Now, three days later, an estimated 1.3 billion gallons of contaminated tailings have spilled from the breached pond, sweeping untold volumes of waste and debris into the salmon stream and lake systems in the region and potentially threatening the Fraser River system to the west.

19/05/2014

09/02/2015

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@DougSpecht

We are not experts

telesur

We don’t want to tell stories

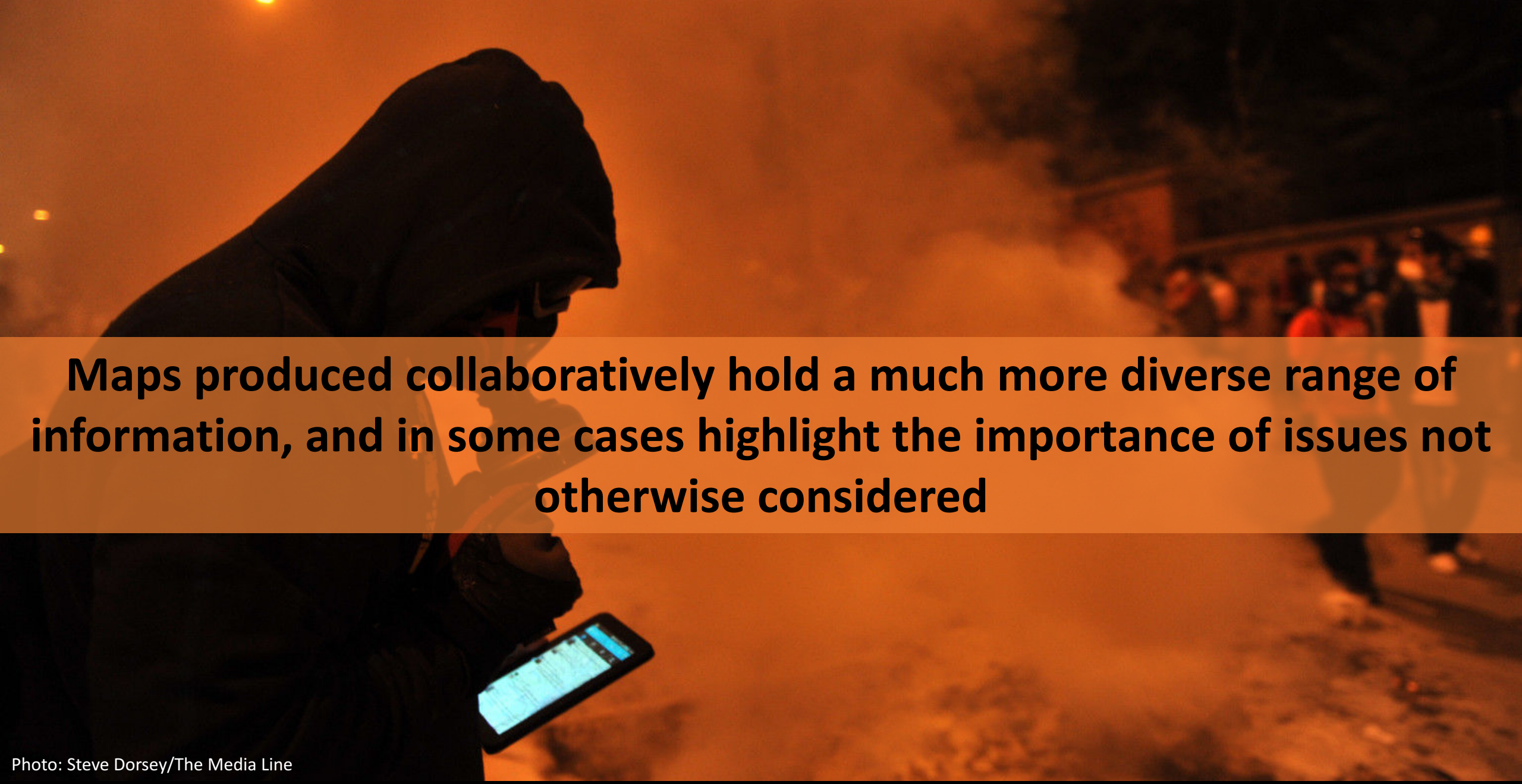
We don’t want to tell stories

We want to keep people safe to tell their stories

We are privileged by our safety

JOURNALISTS KILLED
IN LATIN AMERICA OVER THE LAST DECADE
Between 2006 and 2015, murders of journalists in Latin America increased by over 60 %, not to mention "forced disappearances."
2006
28
2007
27
2008
26
2009
33
2010
40
2011
39
2012
45
2013
30
2014
31
2015
43
TOTAL
342
telesur
Source: Cap-Felap / teleSUR

Why maps?



Maps produced collaboratively hold a much more diverse range of information, and in some cases highlight the importance of issues not otherwise considered

Photo: Steve Dorsey/The Media Line

'By simultaneously allowing the expression of a variety of knowledges… …PGIS creates a level playing field for comparing knowledge consensus and division. In so doing it allows a wider exploration of cultural and political conditions' [6]

6. Robbins, 2003: 238
Photo: aimstudents

Social media gives the impression of lateral democracy while compartmentalising knowledge in silos

Big data is like teenage sex: everyone talks about it, nobody really knows how to do it, everyone thinks everyone else is doing it, so everyone claims they are doing it...
Dan Ariely

The NSA's 1,500,000 square foot data center outside Salt Lake City will be the first facility to house a yottabyte of data
Governor Herbert

The ability to hear the signal from the noise is the key…

to unlocking the human conversation that is taking place around us.

Listening to this conversation can lead us to…

Unexpected Discoveries

A NETFLIX ORIGINAL SERIES
HOUSE of CARDS

David Armano
@armano

Just started. So far. Awesome. #houseofcards #GetGlue getglue.com/tv_shows/house...

2/16/13, 7:02 PM

House of Cards

Ruthless Congressman Francis Underwood and his ambitious wife Claire will stop at nothing to ascend the ranks of power. This wicked political drama slithers through the back halls of greed…

The Studio Executive
@studioexec1

Watching #HouseofCards. Kevin Spacey's utterly brilliant as the slimy conniving politician with the quick wit. The man has such range.

2/24/13, 12:15 PM

Beau Willimon
@BeauWillimon

Wow- According to IMDB at least, #HouseofCards "Most Popular TV Show in the World" right now. THANK YOU FANS webpronews.com/house-of-cards... @netflix

2/15/13, 3:35 PM

12 RETWEETS **10** FAVORITES

The Atlantic
@TheAtlantic

The Real History Behind the Politics of #HouseOfCards theatln.tc/Ye557b

2/22/13, 5:00 AM

The Very Real History Behind the Crazy Politics of 'House of Cards'

A few of the show's more outlandish moments are uncomfortably similar to real life.

AnikaChapin
@AnikaChapin

I've finished #HouseofCards and I don't know what to do with myself now. Maybe I'll start evilly manipulating people to fill the void.

2/24/13, 6:51 AM

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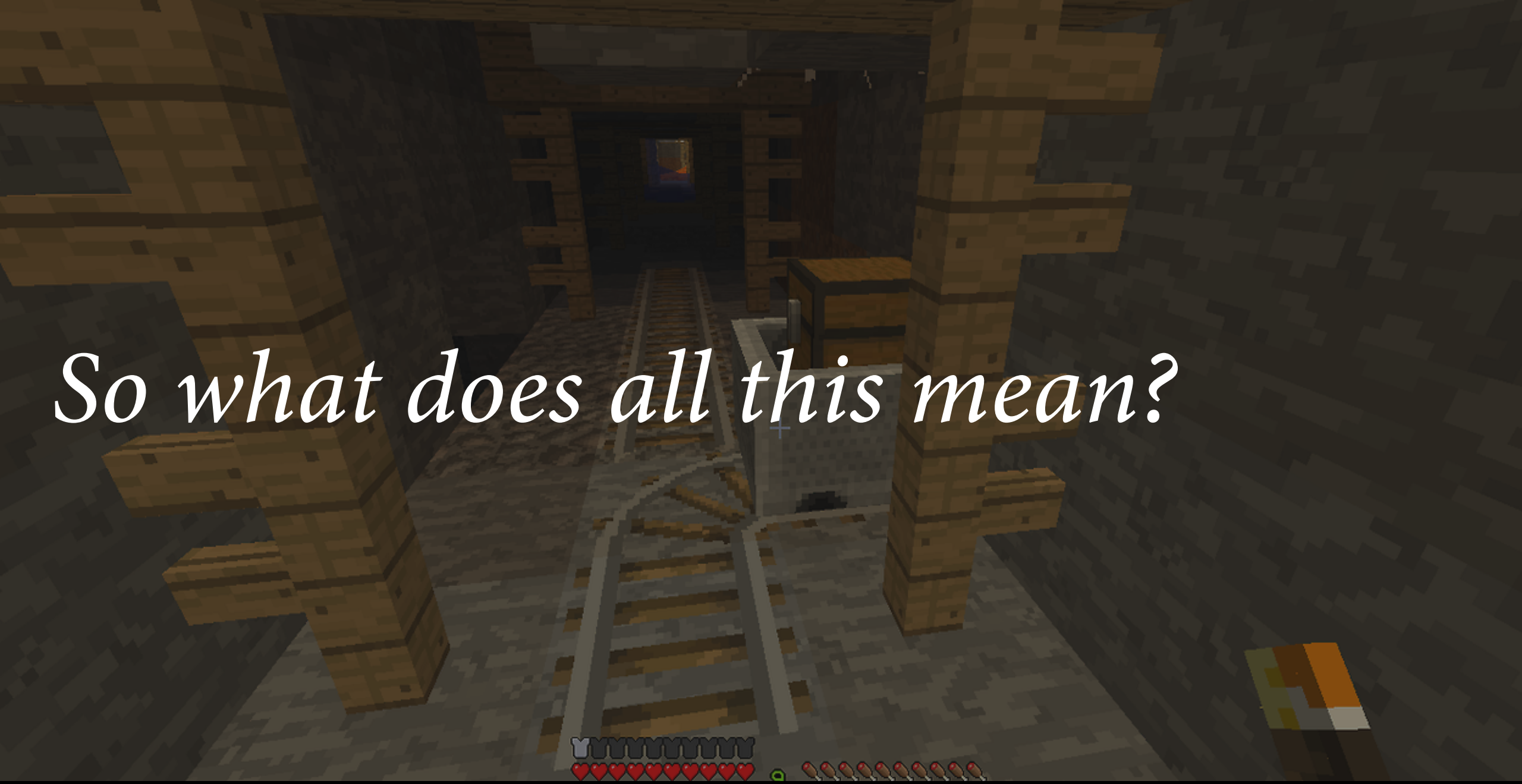
@DougSpecht

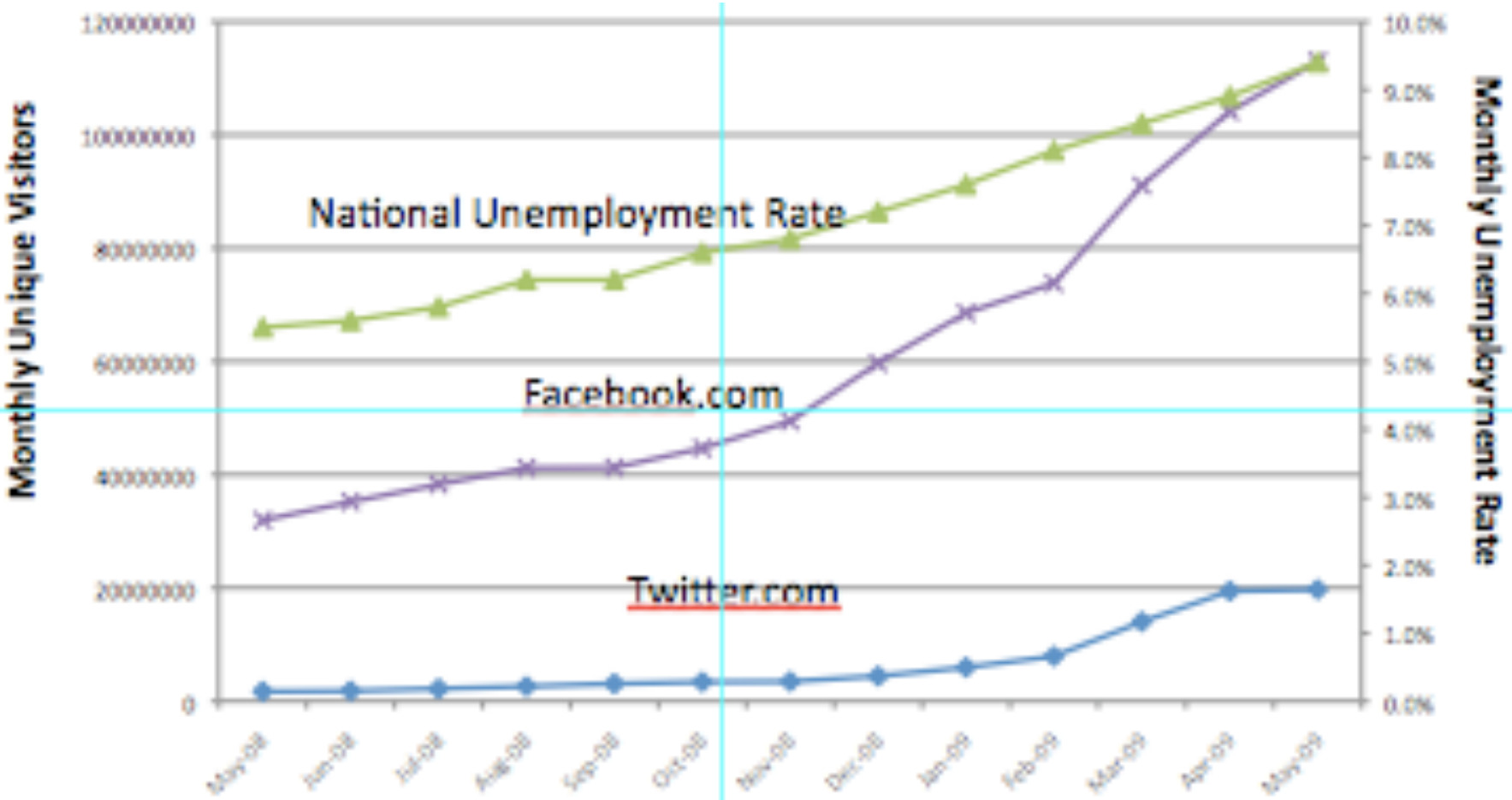

So what does all this mean?

Source: Unknown

Getty Images

Photo: AP

Unique Visitors to twitter and Facebook and Unemployment rate (USA)



Source: Unemployment Rate from Bureau of Labour Statistics. Unique visitors from Compete.com

#ICT4D

"Big data can help to revolutionize the way development work is done in the 21st Century"

Robert Kirkpatrick of UN Global Pulse

Photo: YouTube

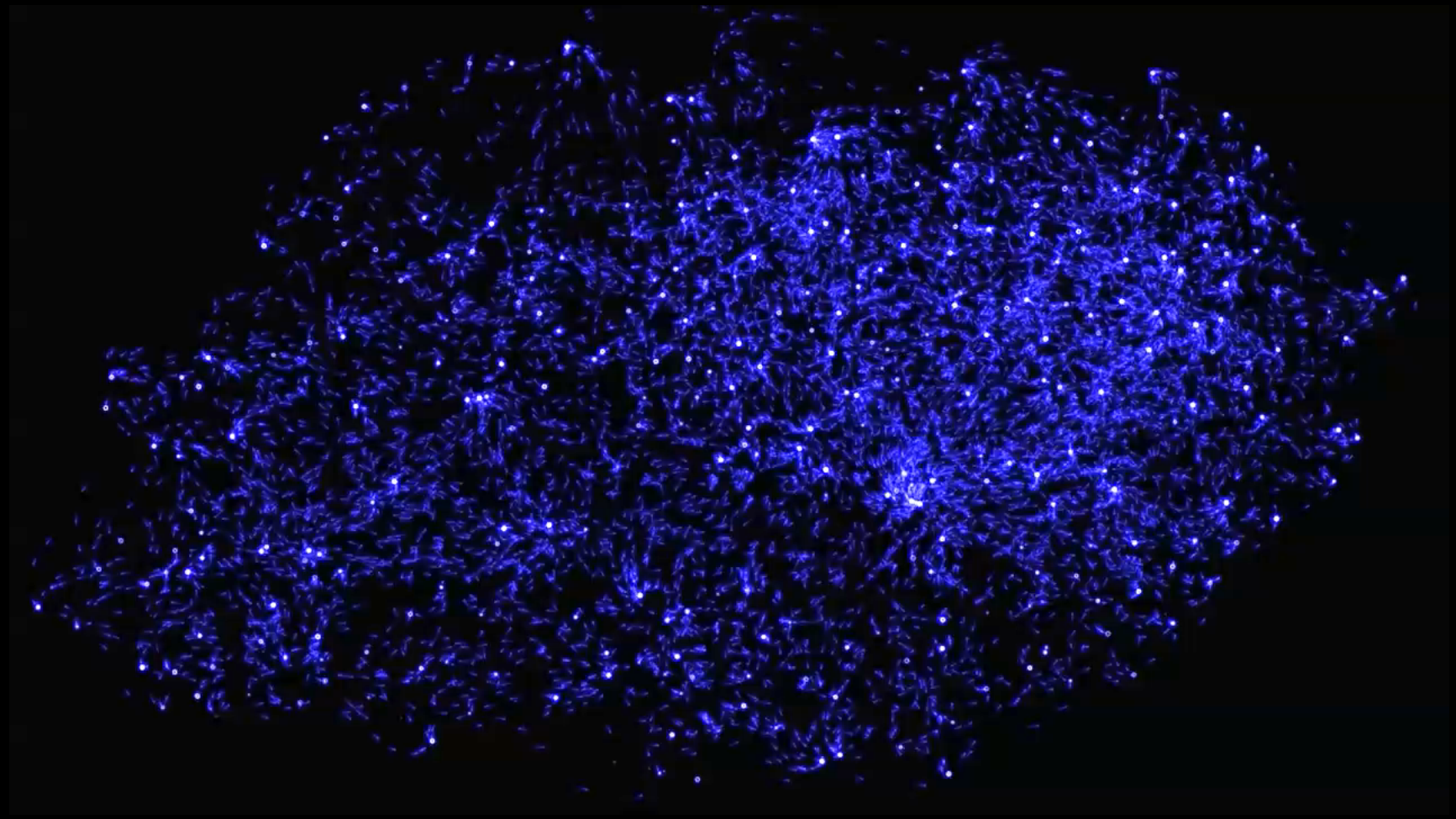
This sounds great…

Is this new?

Value for who?

Who misses out?

Who loses?



Is this new?

Image: Alexander Bertram-Powell

BROAD STREET
PUMP
MARSHALL STREET
WEST STREET
SOUTH ROW
CROSS ST
DUFOURS PLACE
BENTINCK STREET
EDWARD STREET
DUCK LANE
RICHMOND BUILDINGS
BREWERY YARD
RICHMOND MEWS
BREWERY
NEW STREET
HOPKINS STREET
COCK CT
HUSBAND ST
PETER STREET
MEARDS COURT
MEARDS STREET
LITTLE WINDMILL
GREAT PULTE
BRIDL
UP JAMES ST
SILVER STREET
WILLIAM AND MARY
WALKERS COURT
OLD CO

OMCC 1984

From: Environmental History Timeline

than in all the other districts put together; as will be seen by the following table, taken from the reports of the Registrar-General. Out of the 7466 deaths in the metropolis, 4001 have occurred on the south side of the Thames, being nearly eight to each thousand of the inhabitants.

Deaths from Cholera in London, registered from September 23d, 1848, to August 25th, 1849.

Districts of London.	Population in 1841.	Deaths from Cholera.	Deaths to each 1,000 inhabitants.
West . .	300,711	533	1·77
North . .	375,971	415	1·10
Central . .	373,605	920	2·48
East . . .	392,444	1,597	4·06
South . .	502,548	4,001	7·95
Total . .	1,948,369	7,466	3·83

That division of London called the East District in the registration reports, is supplied with water entirely by the East London Water Company. In the cholera of 1832 and 1833 the reservoirs of the company at Old Ford were entirely filled from the river Lea when the water flowed up with the rising tide from the

Thames, in the neighbourhood of Blackwall; and the river Lea itself receives some large sewers. The Company have since obtained water from near Lea Bridge, above the reach of the tide; but whether they still supply themselves in part from the river at Old Ford, where their chief works and reservoirs are still situated, and if so, to what parts of their district the water so obtained is sent, cannot be here stated, for want of exact information.

The cholera has prevailed to a considerable extent in the East districts, as will be seen by the Table, though not so much as on the south of the Thames.

The North districts have suffered very little from cholera as yet. St. Pancras and Islington, which comprise a great portion of this division, are supplied with the New River water, which is brought from Hertfordshire. Hackney is supplied by the East London Water Works; Hampstead by sources of its own; and Marylebone, which will again be alluded to, chiefly by the West Middlesex Water Works.

The whole of the Central Districts are likewise supplied from the New River, and this part of the town has suffered much less from cholera, hitherto, than the south and east divisions; although many portions of it are quite on a par with the worst parts on the south of the Thames as regards overcrowding and bad smells.

The West Districts, together with Marylebone, are supplied with Thames water by the West Middlesex,

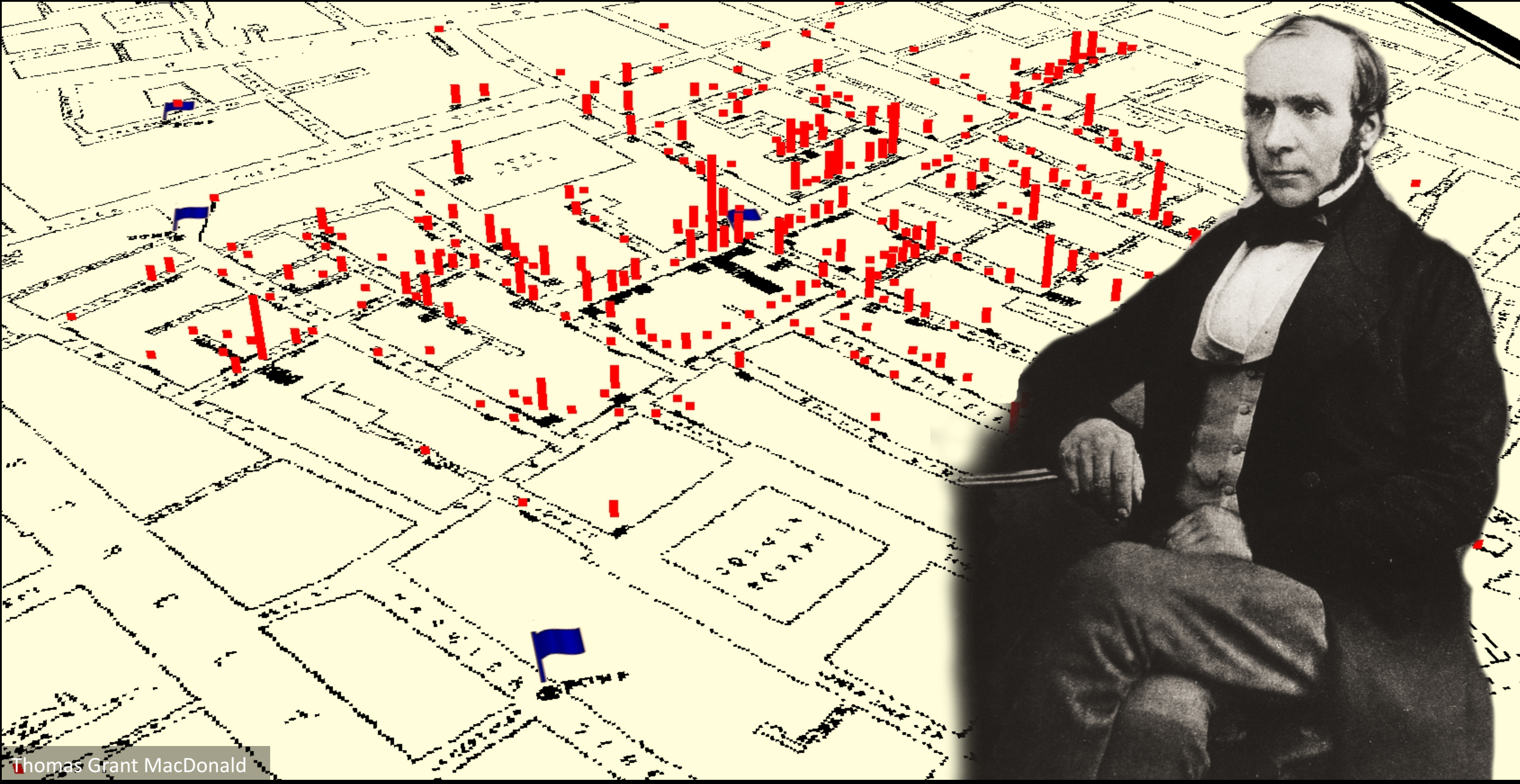
LSHTM Library & Archives
UNIVERSITY OF WESTMINSTER
@DougSpecht

Unknown Painter – Wellcome Trust
Shapter T (1849). The history of cholera in Exeter in 1832

"On examining the map given by Dr Snow, it would clearly appear that the centre of the outburst was a spot in Broad-street, close to which is the accused pump; and that cases were scattered all round this nearly in a circle, becoming less numerous as the exterior of the circle is approached. This certainly looks more like the effect of an atmospheric cause than any other

Edmund A Parkes, 1855

Photo: Wellcome Images


Thomas Grant MacDonald

By 2020, more than 70 percent of mobile phones are expected to have GPS capability, up from 20 percent in 2010.

(Hilbert, 2013)

androidauthority.com

Value for who?

Data Colonialism?

Kai Uwe Wulff, the access development director at Google

Evgeny Morozov

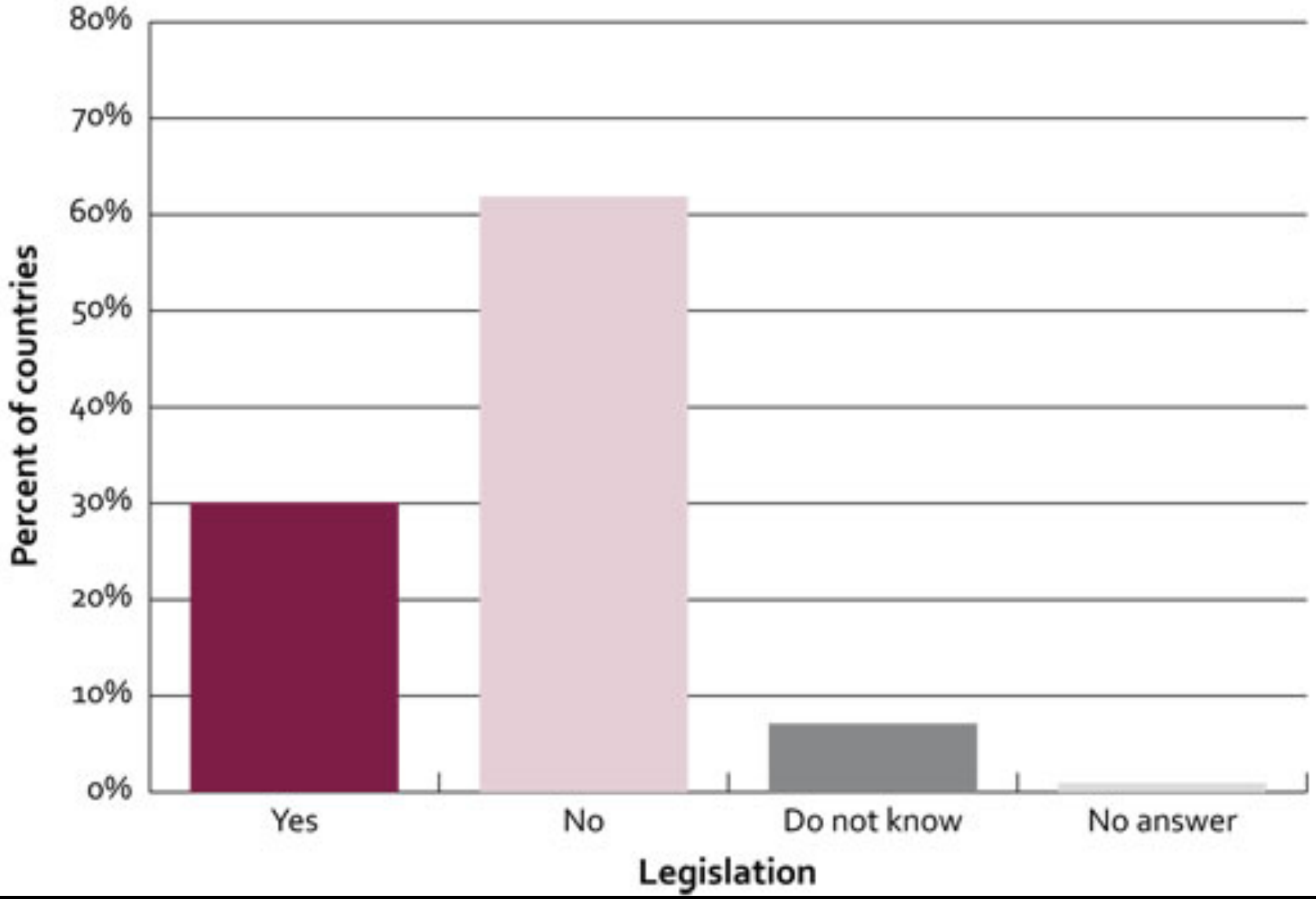
@evgenymorozov

Data colonialism? Google urges Ugandas to share more of their content online....so that Google can organize it flpbd.it/WpQxu

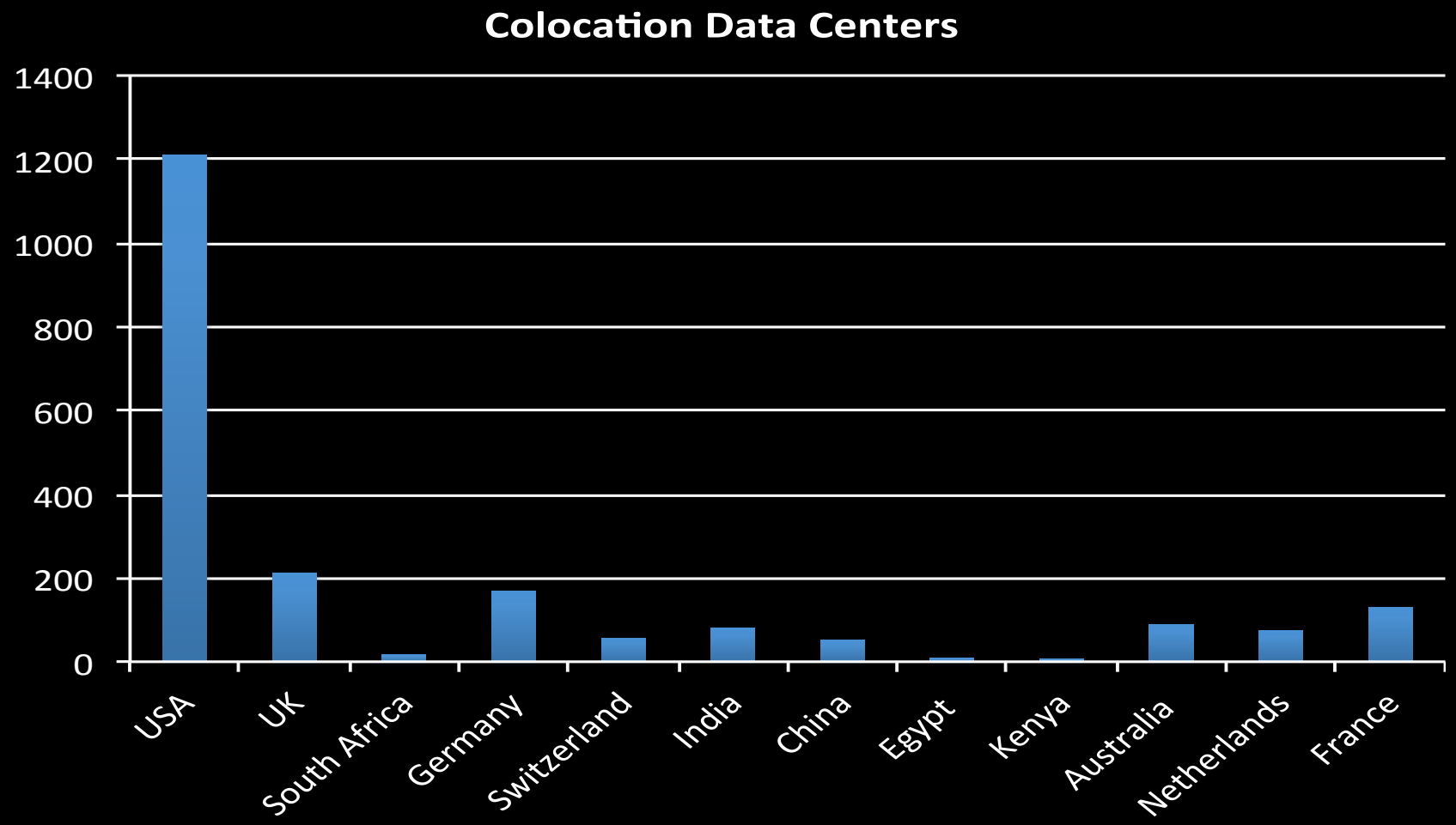
4:15am - 21 Nov 12

38 RETWEETS **11** FAVORITES

Figure 6. Established legislation to protect privacy of digitized health-related data, globally



http://www.who.int/goe/survey/2009/figures/en/index4.html



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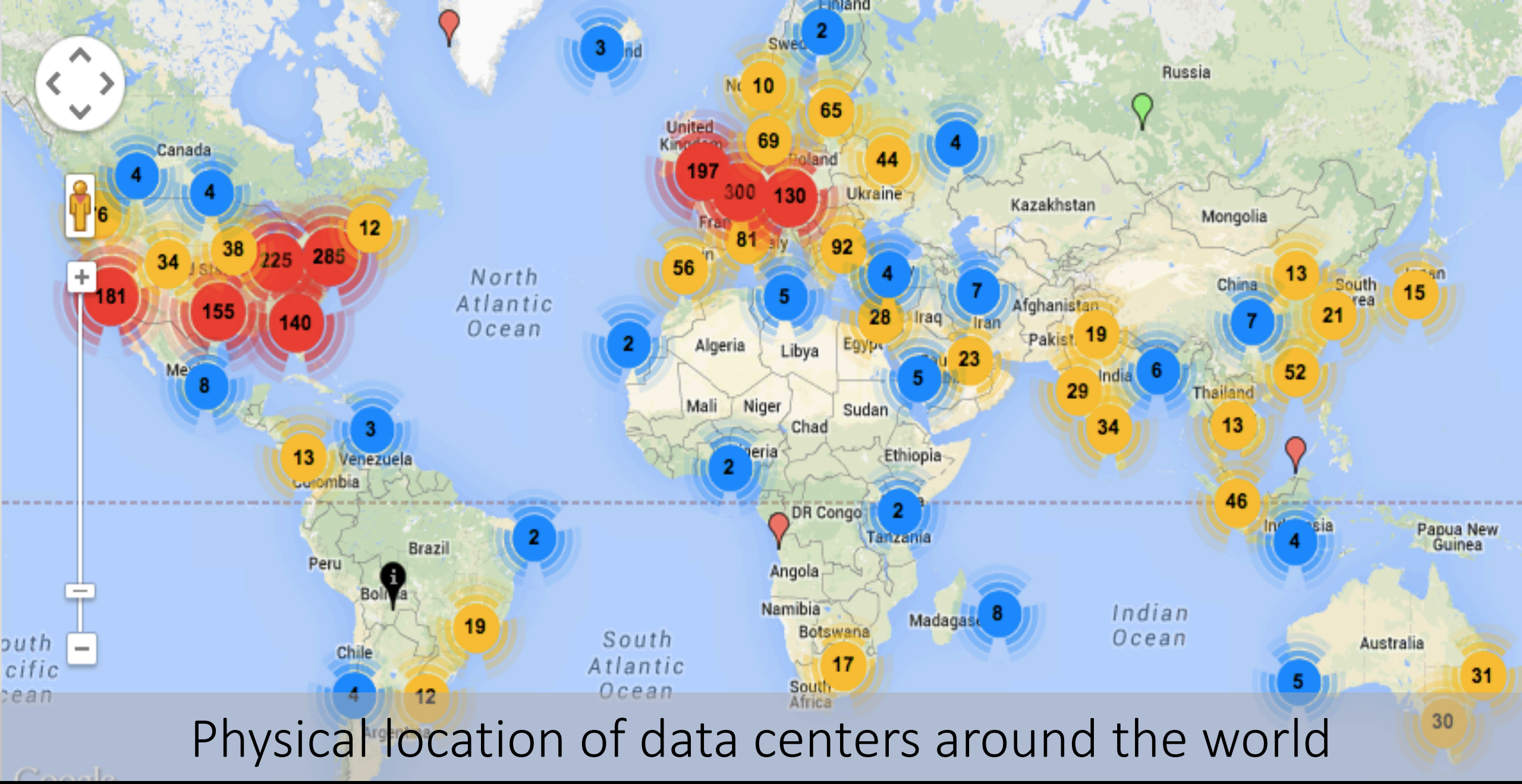


Physical location of data centers around the world

“Politicians use Big Data to get elected… not to govern” (*ANIMO*, 2014)

Digital Positivism

Where complexity is reduced to numbers and certain types of knowledge are prioritised as the expense of others. Digital positivism assumes an authority that masks subjective decisions, perspectives and ideologies. It presents an over-simplistic approach to the mediation of knowledge and a false sense of certainty, typically reproducing assumptions that support the status quo.

Who misses out?

Dark data

Dark data is the missing data.

Where certain data is not collected this is often due to the epistemic and ideological assumptions of powerful constituencies – or simply where the communication of certain data is against their interests.

AUX 2
AUX 1
TAPE
PHONO
FM
AM
THE FISHER
MODEL 500
FM 88 89 90 92 94 96 98 100 102 104 106 108 FM
AM 55 60 65 70 80 90 100 120 140 160 AM
0 10 20 30 40 50 60 70 80 90 100
TUNING
0 1 2 3 4 5
RIAA LP NAB AES TAPE FM AUX 1 AM AUX 2
SELECTOR
LOUDNESS CONTOUR
OFF MAX
VOLUME LEVEL
BASS TREBLE
TONE CONTROLS
OFF ON
AC POWER
STATION SELECTOR

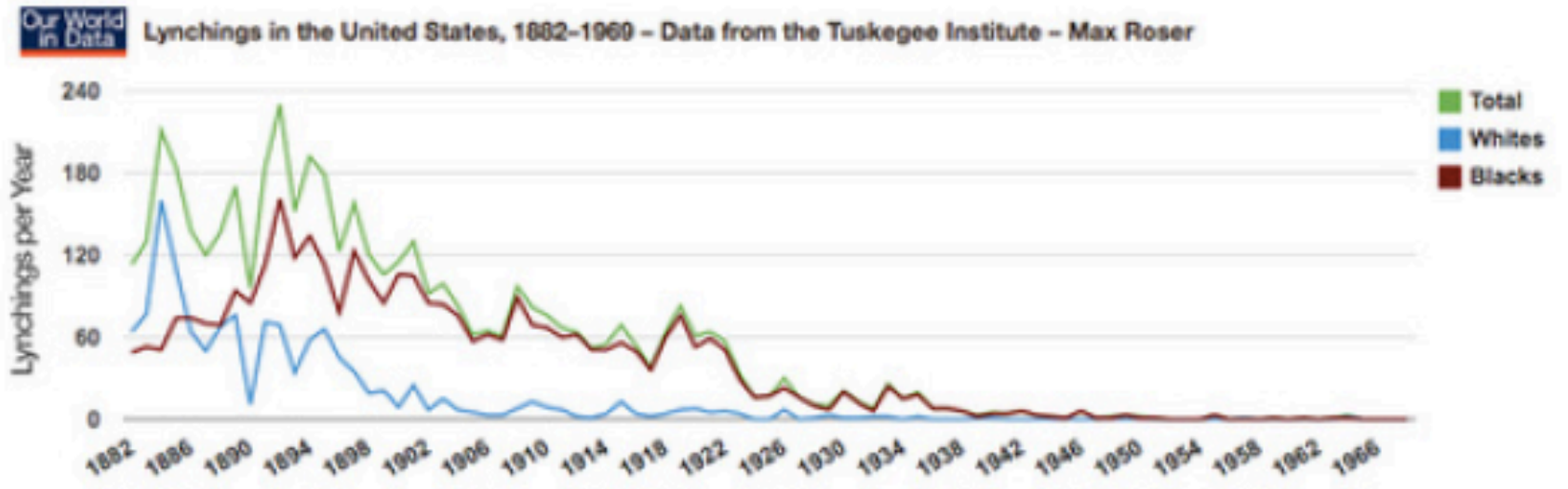
Datawash

Where data visualisation techniques conceals or obscures knowledge on issues of controversy.

Max Roser @MaxCRoser · May 10

Declining Racial Violence in the US since 1882

From: OurWorldInData.org/data/violence-…

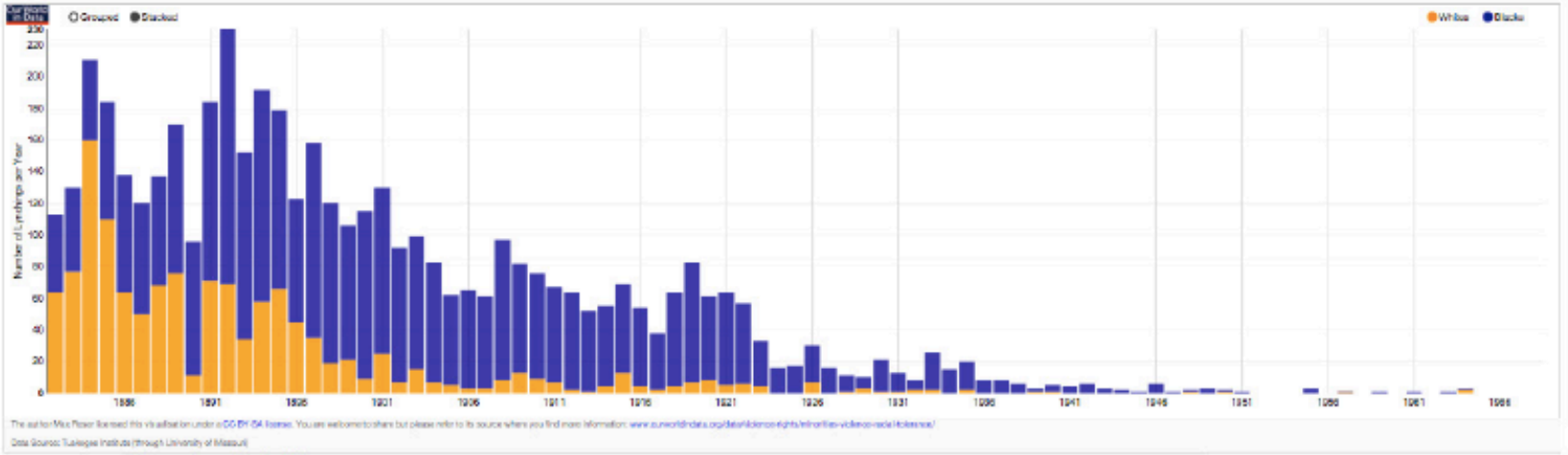


28 12

View photo

The first institution to record lynchings in the USA was the Tuskegee Institute, which is now Tuskegee University. Their data is shown here (for other statistics on lynchings see Wikipedia).

Lynchings in the United States, 1882-1969 – Max Roser[1]



The author Max Roser licensed this visualisation under a CC BY SA license. You are welcome to share but please refer to its source where you find more information: www.ourworldindata.org/data/violence-rights/minorities-violence-racial-tolerance/

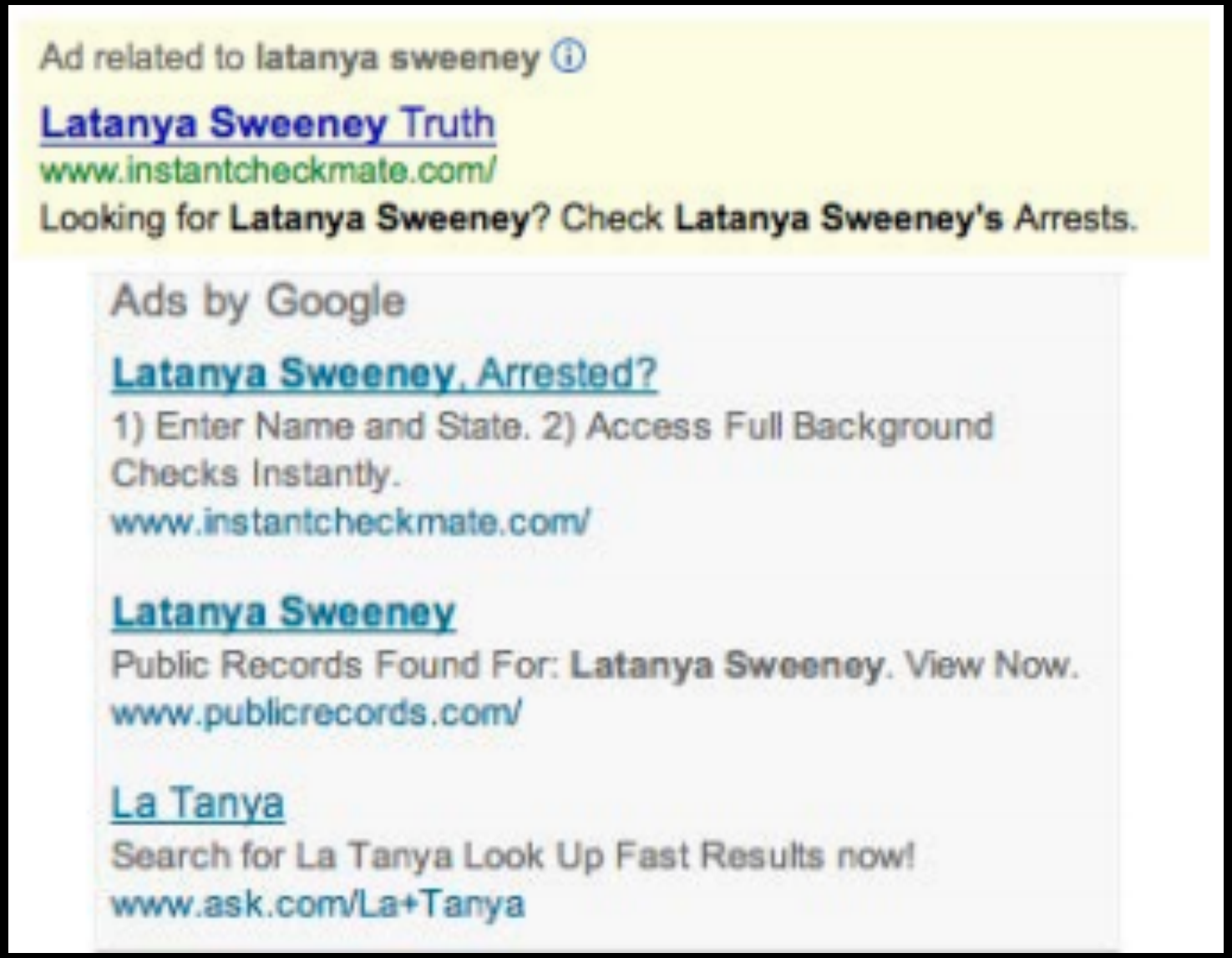
Data Source: Tuskegee Institute (through University of Missouri)

Full screen view Download Data

The data was also mapped by the Tuskegee Institute, and this US map of lynchings by states and counties in the United States from 1900 to 1931 is described by Slate Magazine here.

Algorithms

flickr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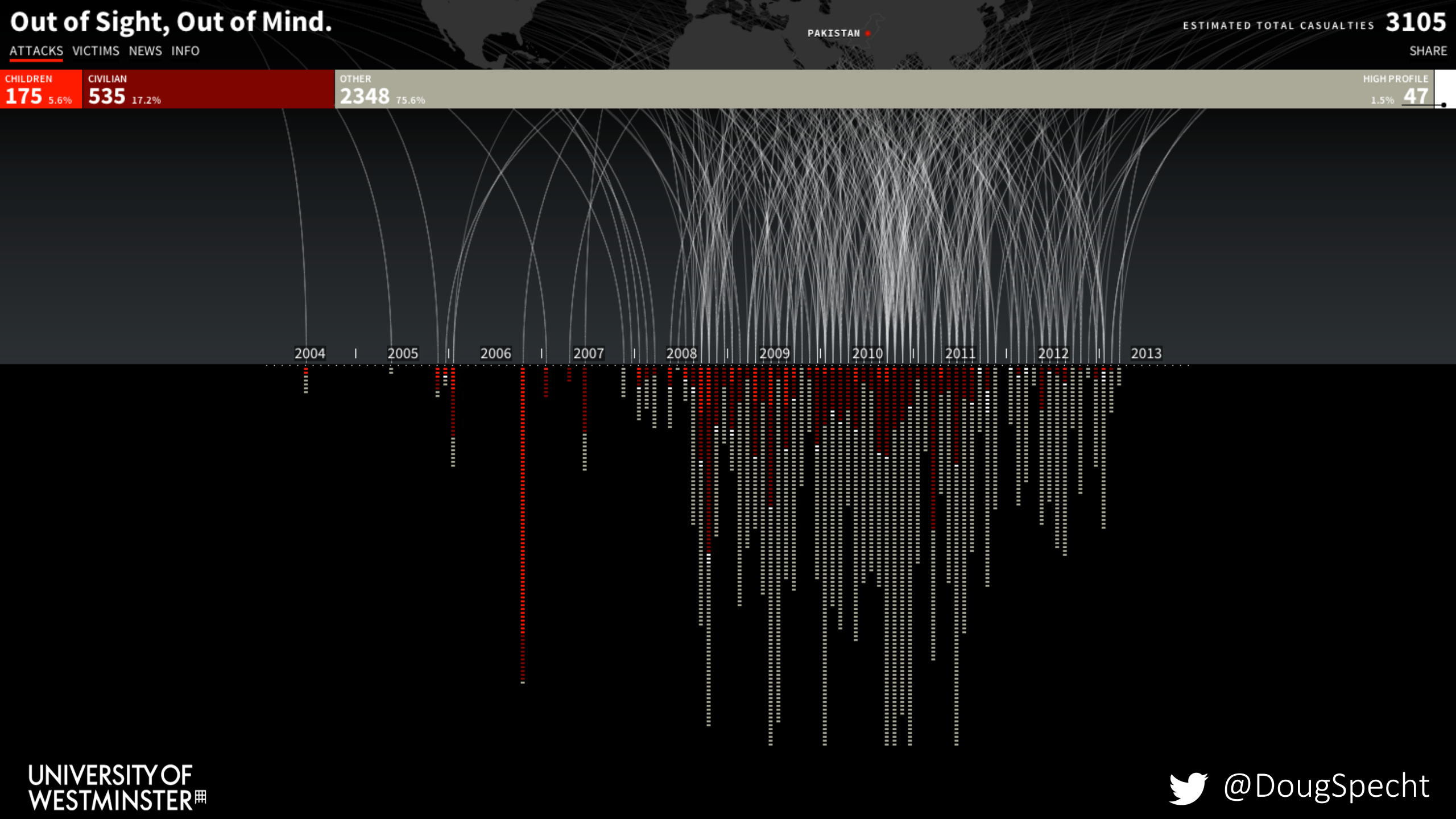
Who loses?

DAVID COLE
MAJOR GARRETT
MICHAEL HAYDEN
[@matthewkeyslive]

Michael Hayden
Former National Security Agency (NSA) and Central Intelligence Agency (CIA) Director

TADS
LiveLeak
N 3 6
FLIR



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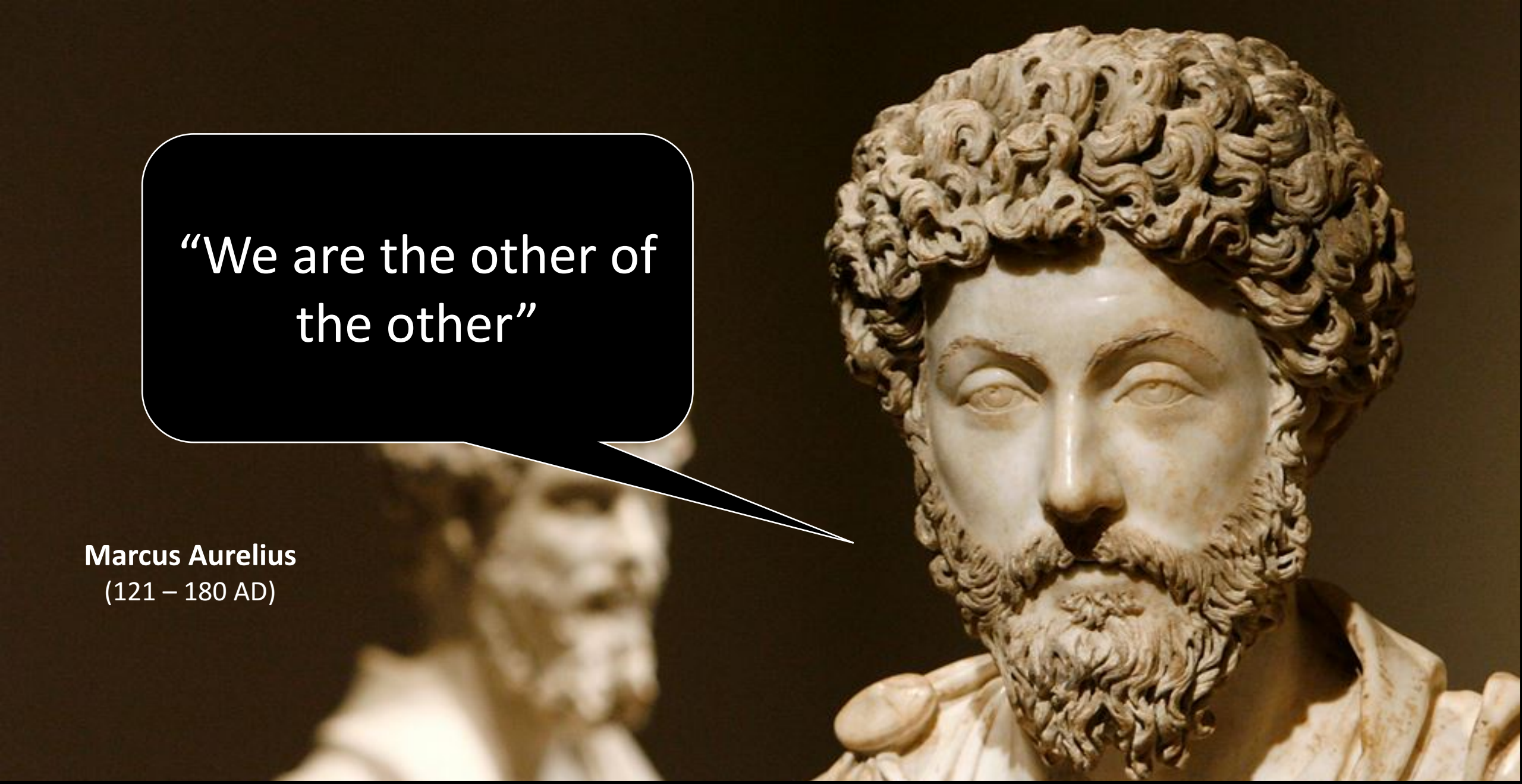

Marcus Aurelius
(121 – 180 AD)

Lessons

Is this new?

Lessons

Is this new?

NO

Integration of practices is as important as innovation

Build on the past.

Lessons

Is this new?

NO

Integration of practices is as important as innovation

Build on the past.

Value for who?

- What power have you got?
- Where did you get it from?
- In whose interests do you use it?
- To whom are you accountable?
- How do we get rid of you?

Tony Benn

Lessons

Who misses out?

Data is never complete!

Lessons

Who misses out?

Data is never complete!

Who loses?

Computers will talk to anyone

but only the rich [and powerful] teach them to speak

Faheem Qureshi

Call for Chapters

Mapping Crisis:

Participation, Datafication, and Humanitarianism in the Age of Digital Mapping.

UCL PRESS

HUMAN RIGHTS CONSORTIUM

tiny.cc/
mapping-crisis

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