

The Politics of Big Data, Migration, and Mobility

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Definitions and Motivation

Big Data refers to “things one can do at a large scale that cannot be done at a smaller one, to **extract new insights** or **create new forms of value**, in ways that change markets, organizations, the relationship between citizens and governments”

(Mayer-Schönberger & Cukier, 2013: 6)

THE END OF THEORY: THE DATA DELUGE MAKES THE SCIENTIFIC METHOD OBSOLETE



Key Messages

Data do not speak for themselves.

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Data politics are central to many pressing and urgent issues—including global migration and mobility.

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Data politics are central to many pressing and urgent issues—including global migration and mobility.

Data politics are as much social, cultural, and affective as they are technological and practical.

Roadmap

Data Politics: Subjects, Worlds, Rights

Migration and Mobility: Such a New Issue?

Collecting Data

Categorizing Data

Visualizing Data

Conclusion

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Data Politics: Worlds, Subjects, Rights

Data has “potential force that can be realized in myriad ways through its uptake and deployments”

(Ruppert, Isin, & Bigo, 2017: 2)

Data Politics: Worlds, Subjects, Rights

Data worlds: material objects, landscapes, and infrastructures associated with data and their transmission

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Data Politics: Worlds, Subjects, Rights

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Data subjects: how data collection, filtering, and usage create new kinds of individuals that relate to each other in new ways

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Data worlds: material objects, landscapes, and infrastructures associated with data and their transmission

Data subjects: how data collection, filtering, and usage create new kinds of individuals that relate to each other in new ways

Data rights: how and to what extent subjects claim and struggle over ownership of their data

Data Politics: Worlds, Subjects, Rights

Data politics arise in (at least) two forms:

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debates about the collection and use of data

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debates about the collection and use of data

how these data and their uses create new relations

Data Politics: Worlds, Subjects, Rights

Why does an appreciation of data politics matter?

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Data Politics: Worlds, Subjects, Rights

Why does an appreciation of data politics matter?

moves debate beyond simple binaries of Big Data being 'good' or 'bad'

Data Politics: Worlds, Subjects, Rights

Why does an appreciation of data politics matter?

moves debate beyond simple binaries of Big Data being 'good' or 'bad'

opens relational questions about 'effectiveness'

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Max Hirzel, *Migrant Bodies*

Shipwreck recovered by
the Italian Navy, from 18
April 2015





Diego Rivera (1947), Detail
from *'Dream of a Sunday
Afternoon in Alameda
Central Park (Sueño de una
tarde dominical en la
Alameda Central)'*

Migration and Mobility: Such a New Issue?

“...the notion that migration is a peculiarly contemporary issue actually sits at odds with global histories of trade, colonialism, transportation and vagrancy, **largely because such mobilities have not been understood as ‘migration’ in the first place.**”

(Allen et al., 2017: 218; see also Anderson, 2013)

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Collecting Data

Data volume, variety, velocity, (and veracity)

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Collecting Data

Data volume, variety, velocity, (and veracity)

Practical challenges and questions

Collecting Data

Data volume, variety, velocity, (and veracity)

Practical challenges and questions

How do you know the data actually reflect what you think they do?



John Stanmeyer wins
World Press Photo of
the Year 2013

© John Stanmeyer/VII for National
Geographic

Collecting Data

Challenges for using mobile phone data as a measure

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Collecting Data

Challenges for using mobile phone data as a measure

ethical and privacy issues (including ‘mission creep’)

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specific situations (intentional and unintentional) related to the conditions of forced migration

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Categorizing Data

Two senses of categorization

Categorizing Data

Two senses of categorization

defining subjects ('who counts as a migrant?')

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Two senses of categorization

defining subjects ('who counts as a migrant?')

predicting future behaviors via flags, maps, scores

Categorizing Data

Defining subjects: 'who counts as a migrant?'

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UN definition: anyone who has lived outside their country of origin for more than 12 months

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Defining subjects: 'who counts as a migrant?'

UN definition: anyone who has lived outside their country of origin for more than 12 months

Limitations in terms of length and geography of journeys

Categorizing Data

Defining subjects

“Developing more detailed data on categories of migration is not without hazards. Simply because we have somewhat more sophisticated data does not mean that interpretations of the analysis will be sophisticated...”

(Sumption, in Allen et al., 2018: 227)

Categorizing Data

Predicting future behaviors via flags, maps, scores

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Categorizing Data

Predicting future behaviors via flags, maps, scores

“Data derivatives...what can be imagined and inferred about who we might be—on our very proclivities and potentialities”

(Amoore, 2001: 28)

Categorizing Data

“The worry I think is we become a slave to a machine and we forget actually the data is only as good as the people who put it on there. [I]f you’ve got rubbish in you’re going to get rubbish out and actually some of the best catches we’ve had have been on what we would call ‘clean skins’. These are people who don’t come up on the computer but by talking to them and by interviewing them and by examining their baggage you can identify things that only a human being can really do.”

(Former senior management staff, UKBA; quoted in Allen and Vollmer 2018)

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Data visualization is ‘the representation and presentation of data to facilitate understanding’

(Kirk, 2016: 19)



 **Pie I have eaten**


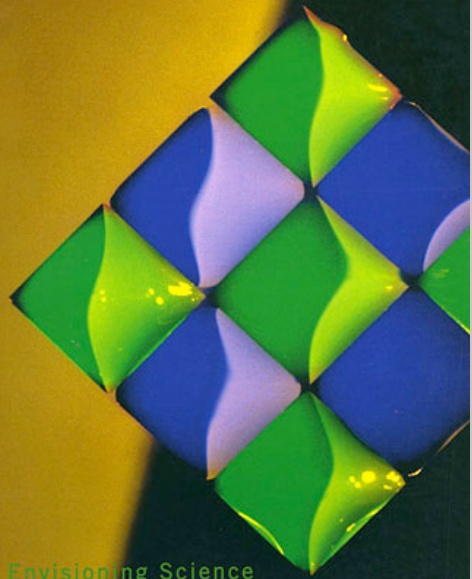
 **Pie I have not yet eaten**

Image credit:
Buzzfeed
(<https://www.buzzfeed.com/samir/worlds-most-accurate-pie-chart>)

"Open the book at random, and your eye will be dazzled."
—SCIENTIFIC AMERICAN



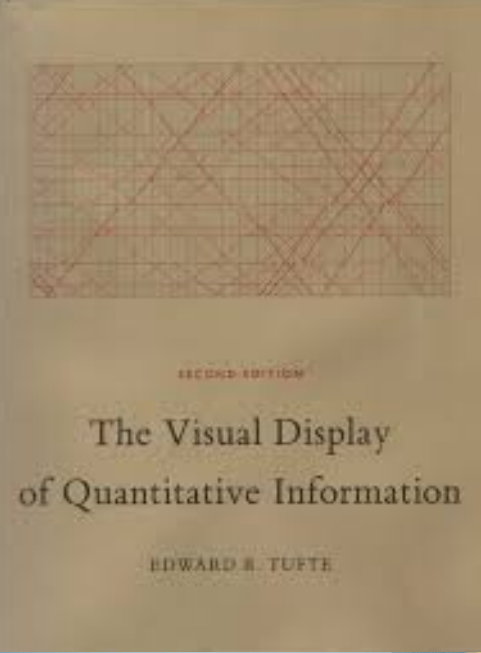
Envisioning Science

THE DESIGN AND CRAFT
OF THE SCIENCE IMAGE

Felice Frankel



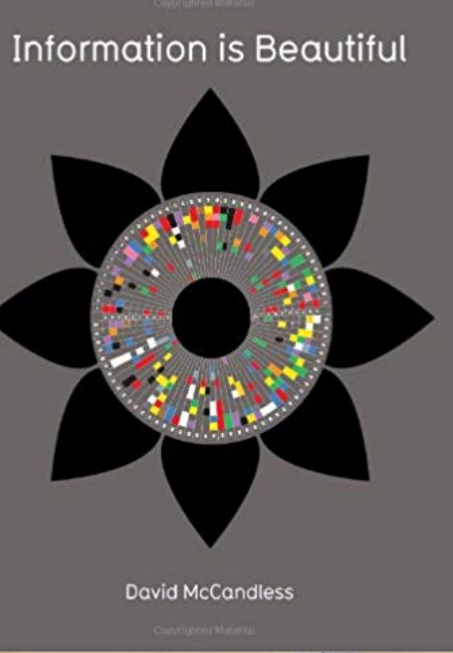
FREE POSTER
Mapping a World
Without Ice



SECOND EDITION

The Visual Display
of Quantitative Information

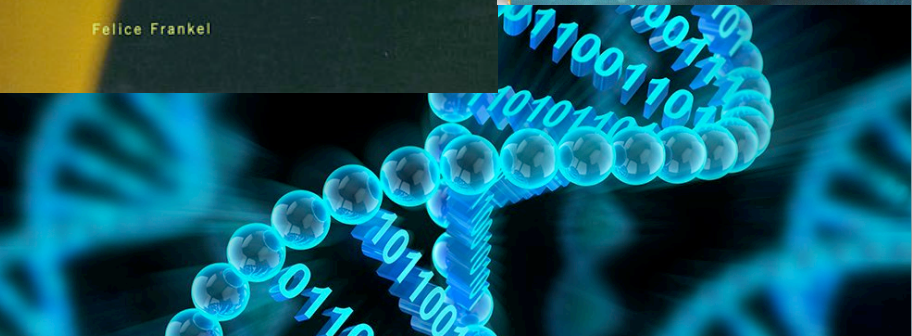
EDWARD R. TUFT



Information is Beautiful

David McCandless

Copyrighted Material

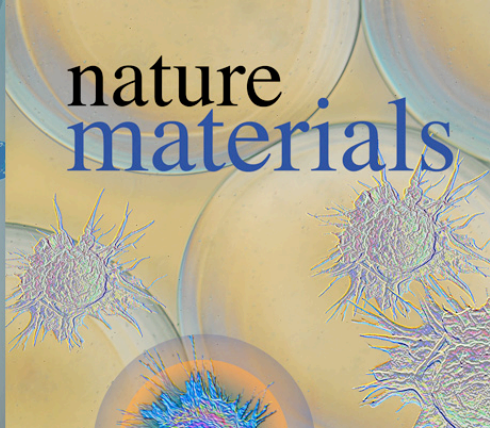


nature

THE INTERNATIONAL WEEKLY JOURNAL OF SCIENCE

FILM
PRODUCER

Remote epitaxy with graphene
turns substrate into copy
machine PAGES 301 & 340



nature
materials



Tweet your views on In Focus to @McGuinnessRoss

101m
Facebook fans

26m
Twitter followers



4m
Instagram followers



57%
of her Facebook fans are female



58%
of Shania's fans
are single

4,642
of her fans on Facebook
are called 'Shania'

A picture posted
by Rihanna of her
holding the World Cup
had more than
52,000
retweets



Sources: Fan Page List, Facebook, Twitter, Instagram

As appears in: Kennedy and Hill. 2018. 'The Feeling of Numbers: Emotions in Everyday Engagements with Data and Their Visualisation'. *Sociology* 52 (4): 830–48.

Visualizing Data

Data politics arise in two ways

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Visualizing Data

Data politics arise in two ways

representations of concepts, populations, ideas

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representations of concepts, populations, ideas

conceiving, generating, and sharing visualizations

Visualizing Data

Data 'do' ideological work through design conventions that tap into culture- and society-specific norms
(Kennedy et al., 2016)

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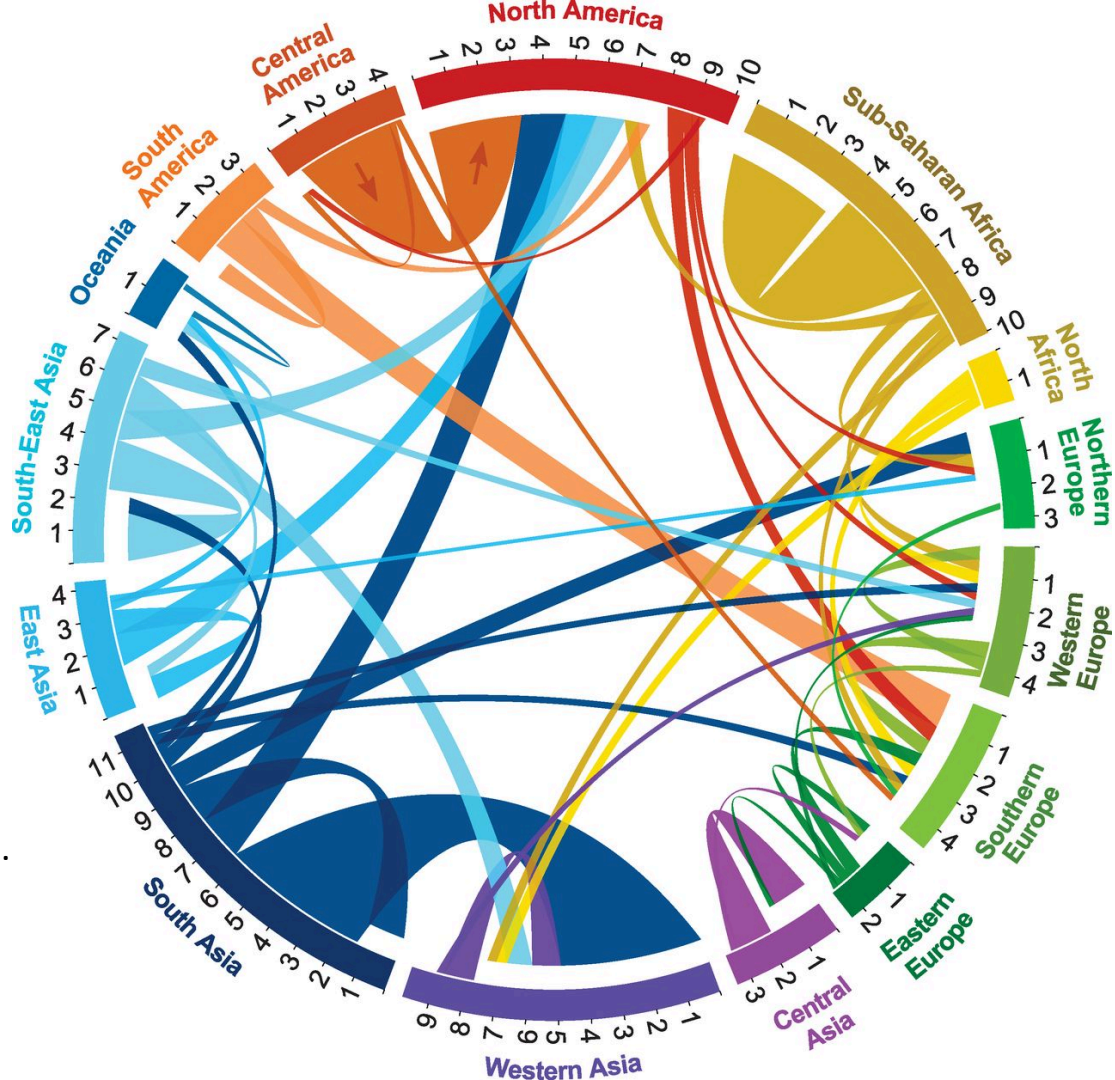
prioritize scientific objectivity over other purposes

Visualizing Data

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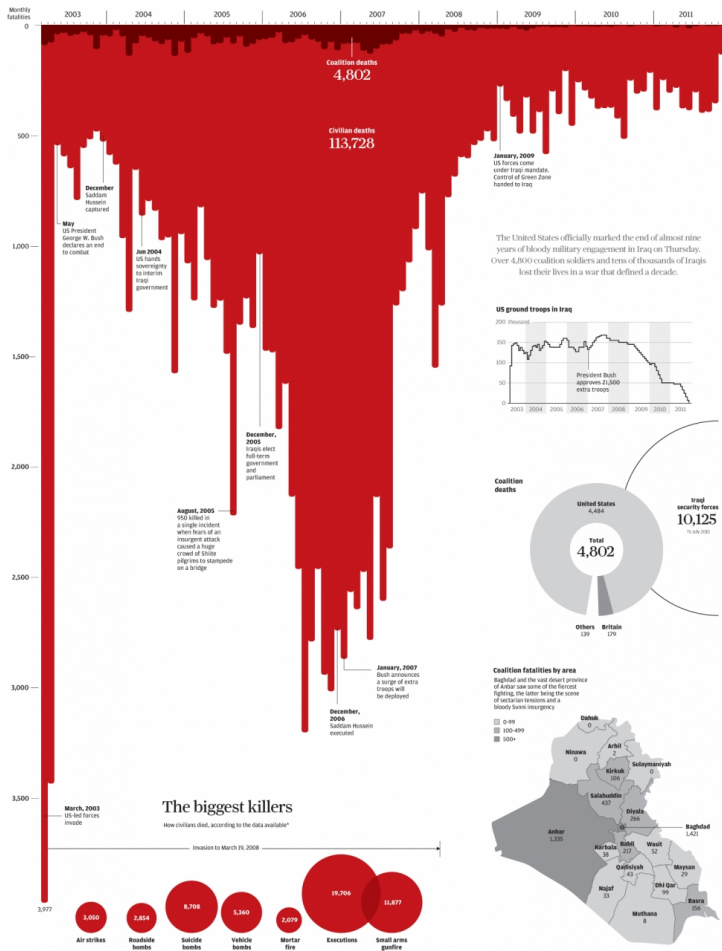
prioritize scientific objectivity over other purposes

communicate meanings (implied and explicit)

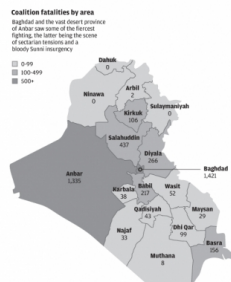
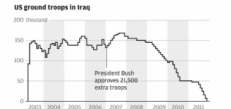


Abel and Sander (2014).
 Quantifying Global
 International Migration
 Flows. *Science*,
 343(6178): 1520-1522.

Iraq's bloody toll



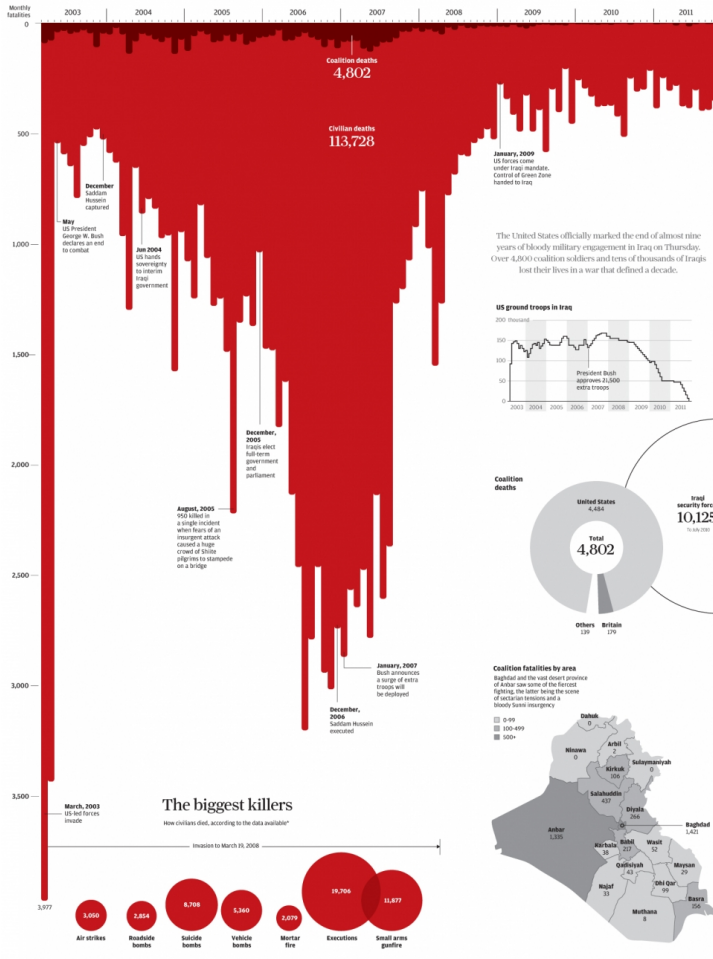
The United States officially marked the end of almost nine years of bloody military engagement in Iraq on Thursday. Over 4,800 coalition soldiers and tens of thousands of Iraqis lost their lives in a war that defined a decade.



Simon Scarr (2011), in the South China Morning Post

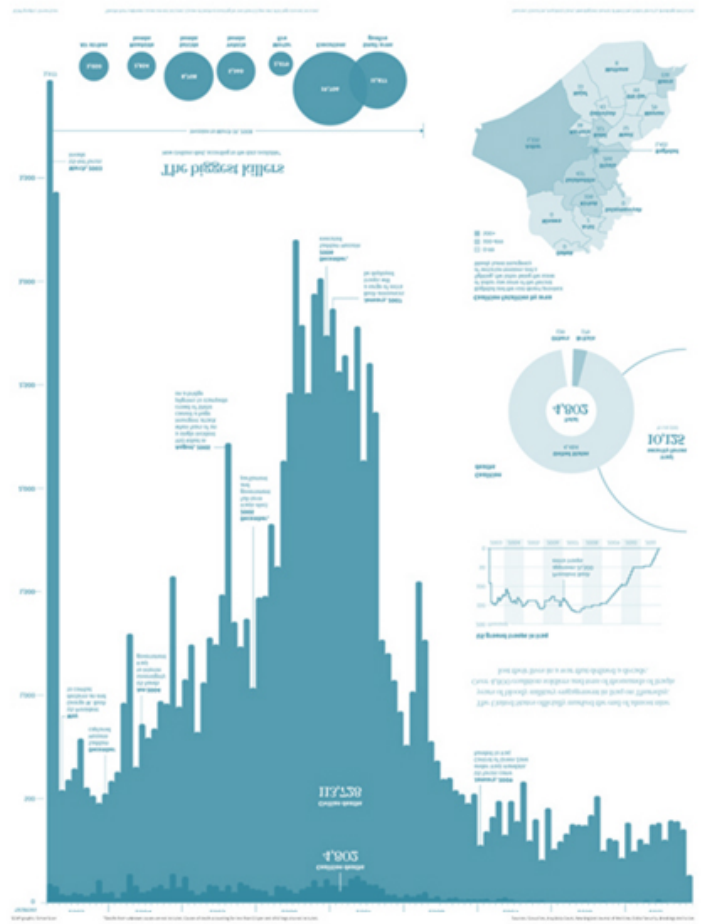
©2011 Graham. Version 1.001
*Deaths from unexploded ordnance and other indirect causes are not included. Causes of death considered to be due to US or coalition forces are included.
Sources: Coalition Forces in Iraq; British Army; Iraq's Ministry of Health; UN Human Rights; British Army; British Army

Iraq's bloody toll



Simon Scarr (2011), in the South China Morning Post

Iraq: Deaths on the Decline



Andy Cotgreave (2016), on InfoWorld

Visualizing Data

Visualizations are artifacts that are imagined, constructed, brokered, and shared

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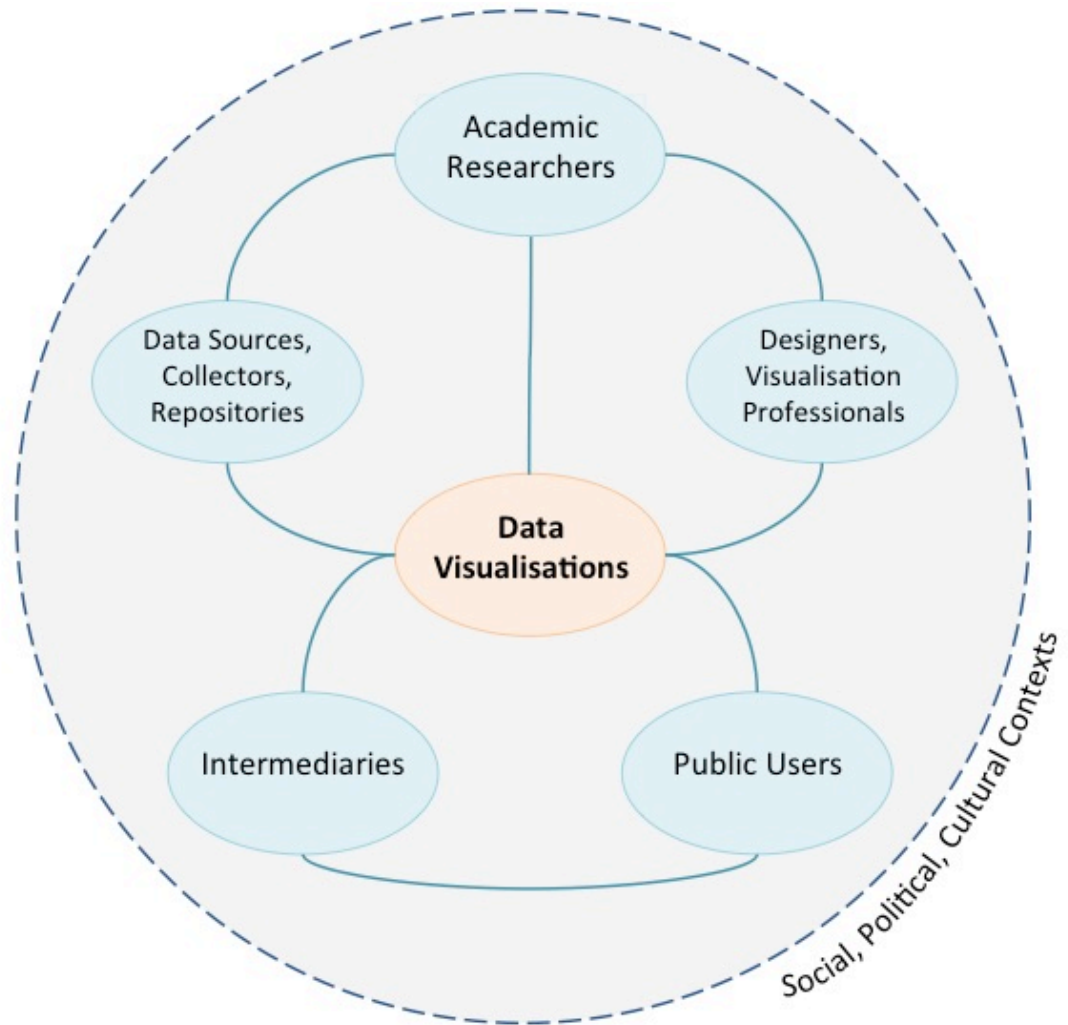
involving many hands and minds

Visualizing Data

Visualizations are artifacts that are imagined,
constructed, brokered, and shared

involving many hands and minds

with competing interests, agendas, motivations



Allen, William (2018).
Visual Brokerage:
Communicating Data and
Research Through
Visualisation. *Public
Understanding of
Science*. 27(8): 906-922

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Data politics involves ‘worlds, subjects, and rights’

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Conclusion

Data politics involves ‘worlds, subjects, and rights’

Data politics arise in the domain of migration and mobility through data collection, categorization, and visualization

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Data politics involves ‘worlds, subjects, and rights’

Data politics arise in the domain of migration and mobility through data collection, categorization, and visualization

Data politics are as much social, cultural, and affective as they are technological and practical

Conclusion

An agenda for critical data politics:

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Conclusion

An agenda for critical data politics:

how are data used,

Conclusion

An agenda for critical data politics

how are data used,

for and by whom,

Conclusion

An agenda for critical data politics:

how are data used,

for and by whom,

and under what kinds of circumstances?

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