LUND UNIVERSITY

Visualizing Big Data amounts : The Case of Google Flu Trends (GFT)

Goysdotter, Moa; Grönberg Hernandez, Jenny

2015

[Link to publication](#)

Total number of authors:
2

Visualizing Big Data: The Case of Google Flu Trends (GFT)

Goysdotter, Moa

Grönberg-Hernandez, Jenny

In 2014 Googles much-debated tool for digital prognostic of flu spread was used as an example of the problems of Big Data wrangling (Lazer 2014). With the outbreak of the pandemic ebola later that same year the debate intensified even more. GFT is currently tracking search queries concerning Dengue fever and was created with the future threat of pandemics in mind, built on the presumption that victims would search the web using specific search words when the symptoms set in. During the first year of its launch (2008), it completely missed the US swine-flu pandemic and it has continuously miscalculated data since.The debate has come to focus on the reliance on software and the relevance of so called Big Data generated prognoses and estimations (Butler 2013, Cook 2011).

In our presentation we will ask whether the common critique of research relying on Big Data can be applied to the visual levels of the data presentation as well. Does the visual presentations mirror the fallacies of big data derivation, or does it somehow disguise it in aesthetic form producing certain ”Big Data fallacy concealers”?

In the case of GFT the rather rudimentary visual translation of data does not enable any questioning of methods or representability. The user of the digital service will nowhere be able to get insight into the methods used to derive these data or how they have been made visually translatable into the different colored countries of the flu tracker map. From the specific example of GFT we will extend the discussion to embrace scientific visualizations of big data in general, and attempts to clarify the methodology in visual form. Is there an inherent need within the handling of Big Data to visualize the method behind the analysis, which is often extremely complex, and not only the data? Is this possible?

References:

Butler, "When Google got flu wrong", *Nature News*, February 2013.

Cook et al., "Assessing Google Flu Trends Performance in the United States during the 2009 Influenza Virus A (H1N1) Pandemic", *PlosOne*, August 2011.

Lazer et al., "The Parable of Google Flu: Traps in Big Data Analysis", *Science*, March 2014.

Biographical notes:

Moa Goysdotter
Senior lecturer/Researcher, Department of Cultural Sciences, Division of Art History and Visual Studies, Lund University, Lund, Sweden.
moa.goysdotter@kultur.lu.se

Goysdotter is a researcher of (visual) technology philosophy and is employed at the Bachelor program Digital Cultures, Lund University. She is also PI in the project OpenBio that researches the digitalization of the human biological body.

Jenny Grönberg-Hernandez
Patient safety Specialist at Astra Zeneca, Mölndal, Sweden
jenny@cleancutbiopharm.nu

Grönberg-Hernandez specialized in clinical study data analysis and communication. She completed her PhD in Clinical Immunology at the Medical Faculty at Lund University and currently works with global safety surveillance at AstraZeneca. She is also a member of the Open Bio research team.