

post-social methods?

issues in live social research

Noortje Marres & Esther Weltevrede

DMI Summer School 2012

```
2 import lxml.html
3 import json
4 import urllib
5
6 index = 'http://en.wikipedia.org/w/a
7
8 print 'Scraping ' + index + '...'
9 raw_json = scraperwiki.scrape(index)
10 python_json = json.loads(raw_json)
    = python_json['parse']['text']
```

Documentation

RUN

Console

Data

Sources

Chat

Starting run ...

Scraping http://en.wikipedia.org/w/api.php?act

Finished: 0.711 seconds elapsed

runfinished

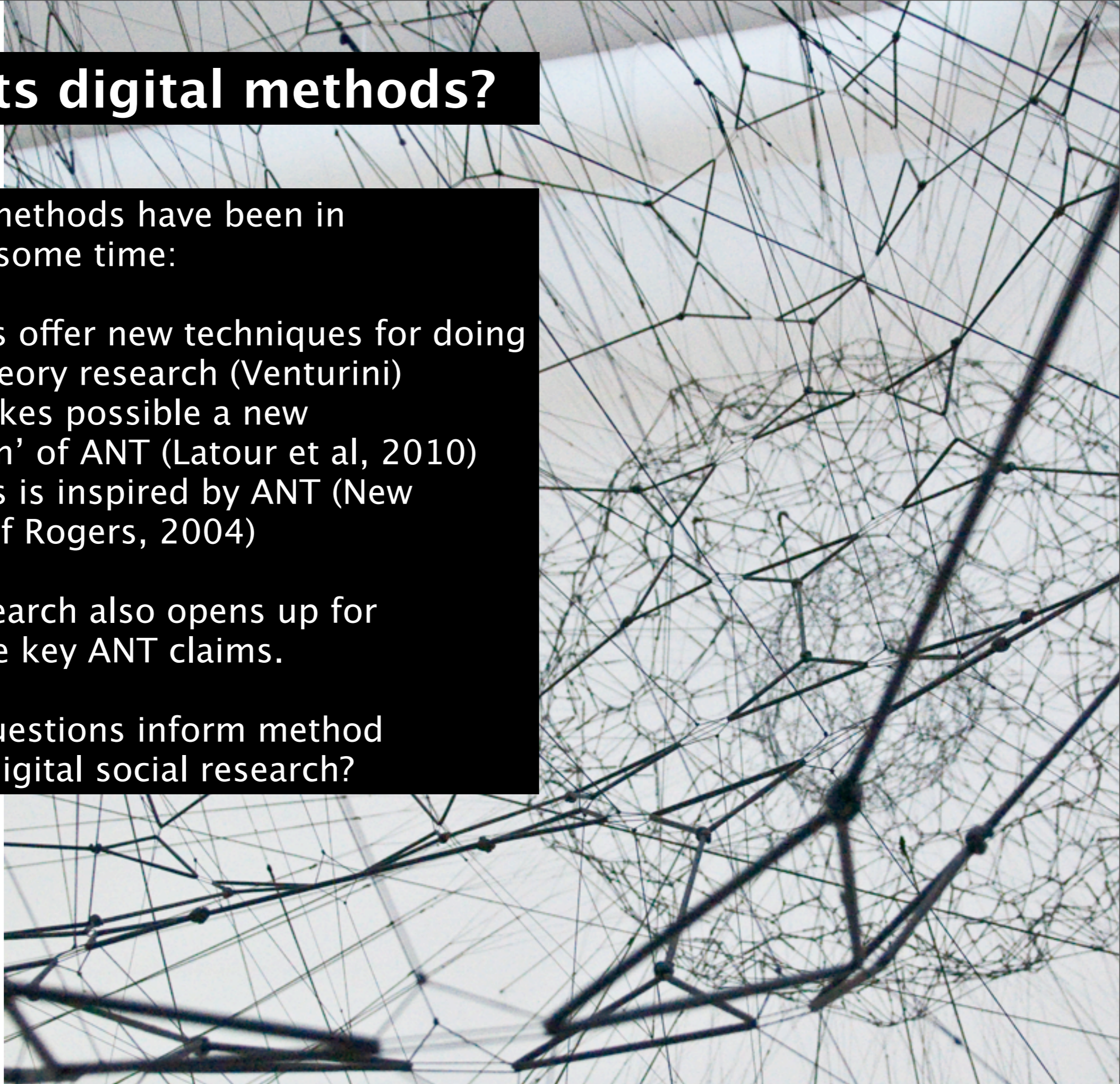
# ANT meets digital methods?

ANT and digital methods have been in conversation for some time:

- Digital methods offer new techniques for doing actor–network theory research (Venturini)
- Digitization makes possible a new operationalization' of ANT (Latour et al, 2010)
- Digital methods is inspired by ANT (New Scientist review of Rogers, 2004)

Digital social research also opens up for questioning some key ANT claims.

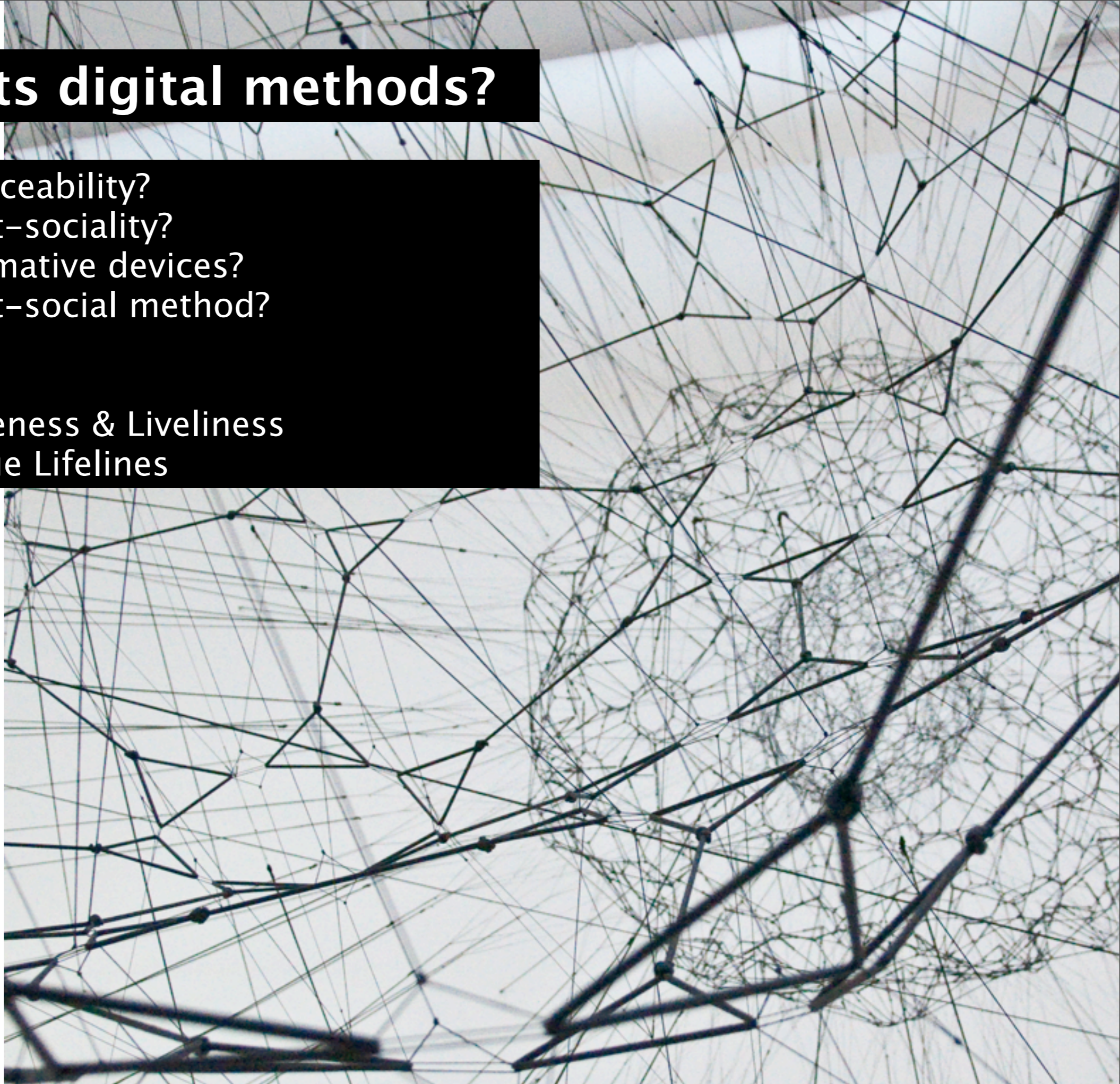
How can these questions inform method development in digital social research?



# ANT meets digital methods?

Encounter 1: Traceability?  
Encounter 2: Post-sociality?  
Encounter 3: Formative devices?  
Encounter 4: Post-social method?

Live Research  
Pilot study 1: Liveness & Liveliness  
Pilot study 2: Issue Lifelines



# Encounter 1: Traceability?

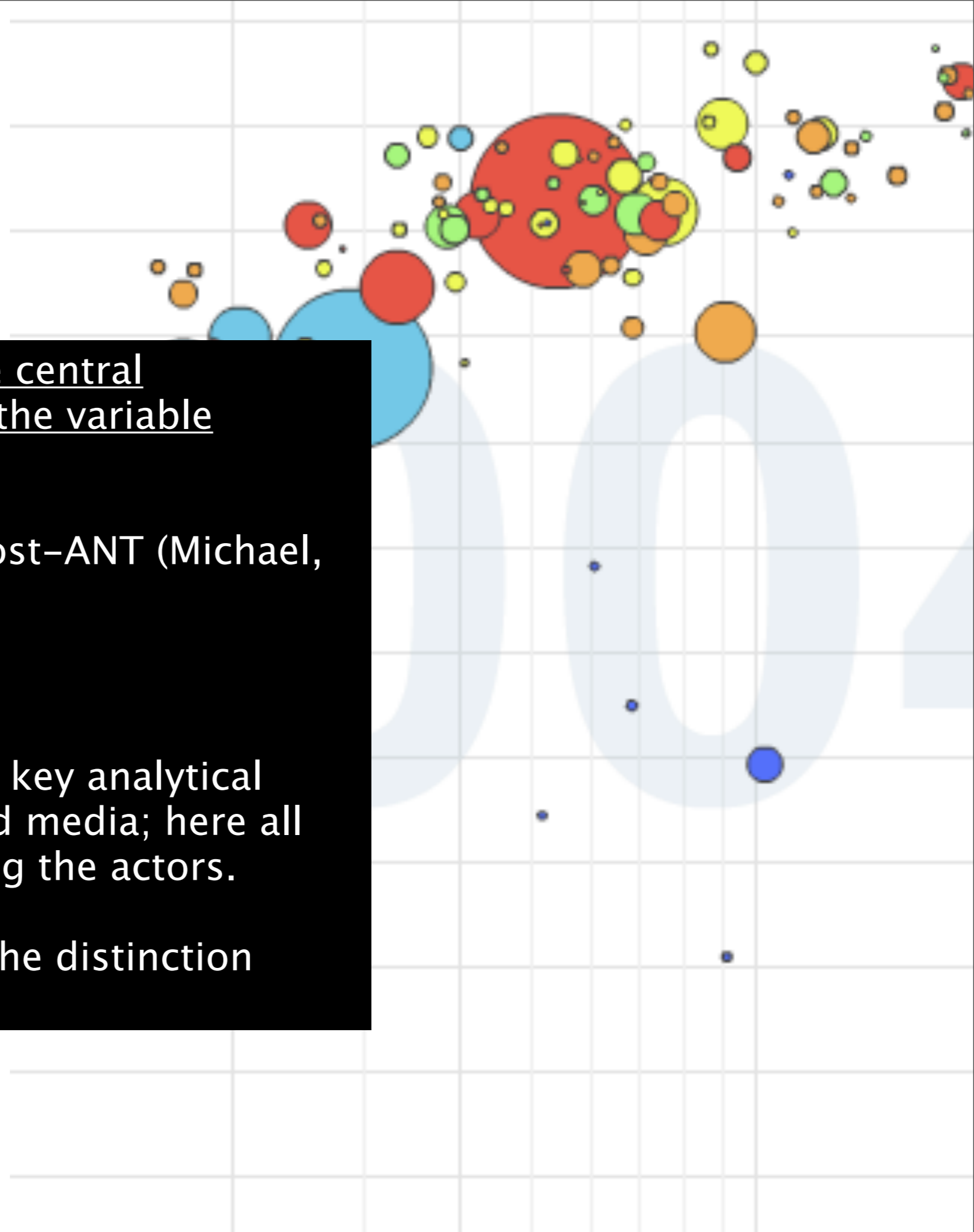
ANT proposed the 'trace' as the central sociological datum to 'replace' the variable ("follow the actors")

The critique of traceability in post-ANT (Michael, 2002)

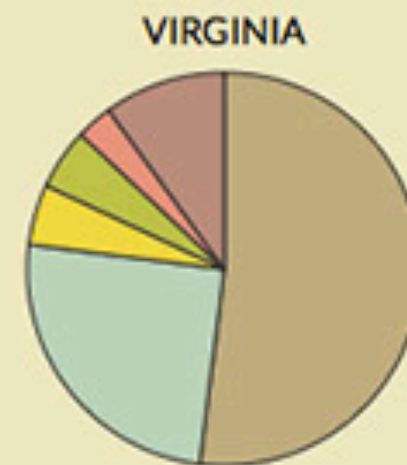
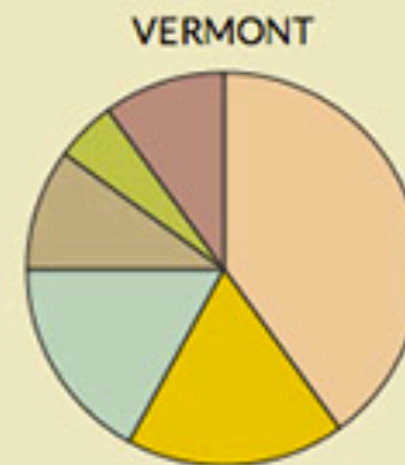
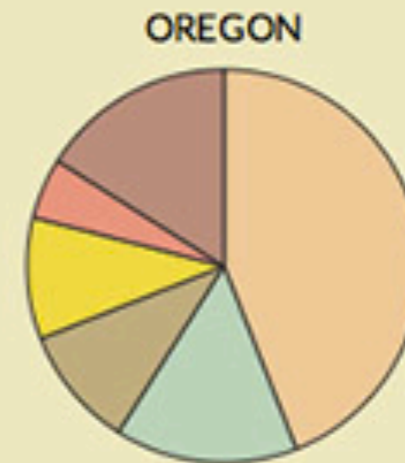
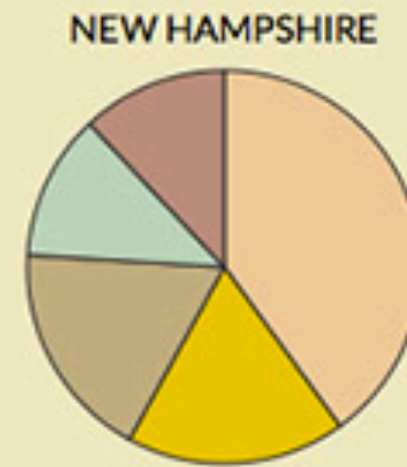
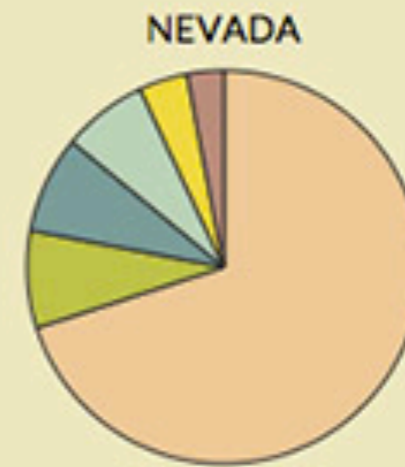
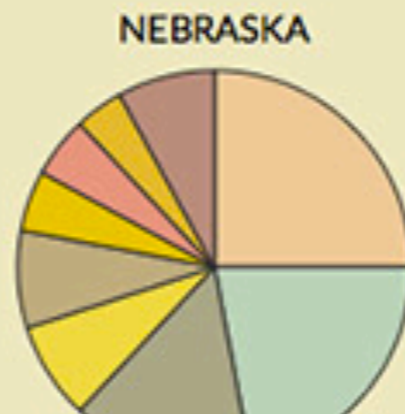
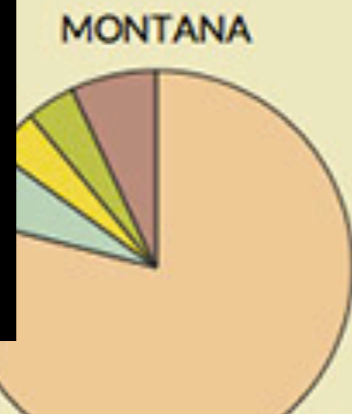
...and the revenge of the Web:

tracing and tracking among the key analytical affordances of online networked media; here all actors turned out to be following the actors.

Or do digital media reposition the distinction between trace and variable?



# Encounter 2: Post-sociality?



ANT proposed to move beyond “the social”

to trace the formation of heterogeneous assemblages (associations of humans and non-humans)

After the Web..:

1. the re-affirmation of the social as a distinctive mode of interaction, data-generation, and so on...

(Or did Facebook turn the ‘socio-technical’ into an everyday idea?)

2. the methodological and technological appeal of reduction: look only at links, tweets, mentions.. (i.e. heterogeneity in crisis?)

(Or does the link enable new ways of dealing with heterogeneous information? (Page et al 1998))

UNITARIAN

REFORMED

BAPTIST

CONGREGATIONALIST

LUTHERAN

GERMAN EVANGELICAL

ALL OTHER

CHRIST

# Encounter 3: Formative Devices?

ANT attaches special importance to formats:

The progressive re-formatting of claims: From 'scientist Y suggests that X' to 'many believe X' to 'X' (see Latour Science in Action)

Digital devices like Google similarly rely on modifiers (links, mentions) to extract knowledge from a 'panoply of elements' (Didier, 2009/2010),

After the Web:

ANT applied the metaphor of info-processing to knowledge – this doesn't quite work when knowledge becomes information processing?

Digital methods seek to **deliberately deploy** formatting effects for purposes of social research



# Live Research

What again is post-social method?

‘Tracing the formation and transformation of heterogeneous assemblies.’

This project is newly relevant in the current online context:

- the rise of the real-time web (special interest in content dynamics)
- medium-specificity: using the formats of the mediums for research (to detect heterogeneous formation)

# Liveness & Liveliness

Work in progress, post-social method development:

Instead of the most current, we are interested in the most active issues and terms

Instead of 'the most relevant result' at a given point in time (now), we are interested in issue variation over time

(from search to research)

Tracing the variable composition of the object over time:

Detecting liveliness?

ANT meets digital methods?

2 pilot studies that use co-word analysis (the co-word machine)



# Dataset

Google data 'crisis'

Co-word machine input: top 100 titles.

Duration: 1 January 2012 - 15 February 2012

Objective: show co-word variation over time

Web

Crisis

Books

More

Show search tools

ty for single homeless people. We are dedicated to ending  
g life-changing services and campaigning for ...

[What we do - Crisis Skylight London](#)

[n help · Crisis](#)

[ou can help](#)

buying a **Crisis** Kit, you will provide the items that could turn

a homeless persons life around for good. Buy a **Crisis** Kit today ...

[Volunteer · How you can help · Crisis](#)

[www.crisis.org.uk > How you can help](#)

Volunteer. We could not change so many lives without the hard work and commitment of our volunteers. Over 10000 people give their time, energy and skills to ...

[Crisis Hidden Gigs · Art and music · Crisis](#)

[www.crisis.org.uk > ... > Art and music > Crisis Hidden Gigs](#)

**Crisis** held two Hidden Gigs with Coldplay in December 2011. The events, one in Newcastle and the other in Liverpool, raised £250000 for **Crisis**. Watch this ...

[News for crisis](#)



[Central bank group: Crisis fixes still needed](#)

[Fox News](#) - 1 hour ago

Governments, banks and households struggling with too much debt are dragging down the world's economy and more needs to be done to ...

New York Ti...

[Greek crisis: An odyssey seen through ancient myth](#)

[San Francisco Chronicle](#) - 3 hours ago

[Ashraf faces hot summer of crisis](#)

[Financial Times](#) - 1 hour ago





digital  
methods  
initiative

wiki

## Course

- The Link
- The Website
- The Engine
- The Spheres
- The Webs
- Post-demographics
- Networked Content

## Digital Methods

- Summer 2012
- About
- FAQ
- Course
- Tools
- Projects by Theme
- Research Protocols
- Summer School
- Winter School
- Papers and Publications
- Blog

archive climate change  
dataset

# Co-word Lifelines

tbc

## Members

Noortje, Carolin...

## Introduction

Co- word analysis is a method of content analysis that makes textual data amendable to network analysis. Co- word analysis works by detecting word pairs or 'co-occurrences': words that occur in each others's vicinity (word distance of say 3, 4 or 5 words), and proceeds by weighing these word relations (assigning them values in terms of relative strength and quantity of connections). Combining these measures, co-word analysis in principle makes it possible to detect the emergence of new significant themes, so called 'pockets of innovation' and, more generally, changes in thematic associations over time (Callon et al, 1983; Danowski, 2009).

Co-word analysis has been included in a variety of digital research and online visualisation tools (eg [Infomous](#); [Wordij](#)). The form of analysis gained special relevance in the context of digital research and allows to address the phenomenon of 'happening content': the dynamic nature of online information ecologies as well as issues which raises the question of how to detect, valuate and display significant variation in and of data. Fresh terms may arise, new reports are released, and events occur that can shift the relations among actors and issues, and so the question arises how best to capture, analyse and render such change. In this sense, co-word analysis allows to study 'happening content': it offers a way to detect fluctuations in networked content, as an alternative, or complement, to more established 'methods of the medium', such as inlink count or the measurement of word frequency,





**Thank you.**