UNPACKING DIGITAL METHODS

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1 The misconceptions

2 The doing

3 The basis

4 The foundations
What methods do you use?

Digital methods.

Ok. I rely on more qualitative methods.
1. A QUANTITATIVE APPROACH
2. DIGITIZED OBJECTS & METHODS

The covers of every issue of Time magazine published from 1923 to summer 2009. Total number of covers: 4535 (by Jeremy Douglass and Lev Manovich, 2009)
2. DIGITIZED OBJECTS & METHODS

Images retrieved from quicktapsurvey.com & smartcashdollar.com.
3. PUSH THE BUTTON, SOFTWARE WILL DO THE REST
4. PLATFORM DATA IN THE SERVICE OF COMPUTING & STATISTICS
5. RANDOM/ARBITRARY PLATFORM DATA GATHERING AS BASIS FOR TRADITIONAL CONTENT ANALYSIS
The doing of digital methods requires particular starting points. Do I have a list of words that have became keywords or issue language?

See Rogers 2017, 2018, Akrich & Latour, 1992
Não Vai Ter Golpe
[there won’t be a coup]

Fora Dilma
[get out Dilma]

Context: few months before the impeachment of Dilma Rousseff in Brazil.
Keywords: representations of those in favour vs. those against the impeachment.
Anti-coup protests, 13 March 2016.

#todospelademocracia
[everyone for democracy]
#nãovaitergolpe
[there won't be a coup]
#globogolpista
[globo scammer]
#marchadoscorruptos
[corrupt march]
#coxinha
[chicken drumstick]

Pro-impeachment protests, 18 March 2016.

#foradilma
[get out Dilma]
#impeachmentjá
[impeachment right now]
#vemprarua
[come to the street]
#forapt
[get out Labour Party]
#tchauquerida
[goodbye darling]

“What is a program and antiprogram is relative to the chosen observer”
(Akrich & Latour 1992)
The definition of **keywords**:

→ the act of search as research
→ monitoring and following
→ to navigate through & engage with the subject of study
→ API affordances & platform mechanisms
Keywords as Hashtag Engagement, Lists of URLs, ids, account names as ISSUE LANGUAGE & MEANS OF RESEARCH
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<th>Platform</th>
<th>Query Design/Grammars</th>
<th>Data capture</th>
<th>Extraction Software</th>
<th>Output files</th>
<th>Analysis Software</th>
<th>Approach</th>
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<td>API/Scraping</td>
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<td>Excel, Gephi, Google Vision API, MemeSpector Script, Inkscape</td>
<td>Hashtag Networks, Computer vision-API based networks</td>
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Table adapted from Rieder, 2015.
Platform Grammatisation

Gerlitz & Rieder, 2018; Omena & Granado, 2020; Omena, Rabello & Mintz (forthcoming in SM+S)

combined with the praxis of software extraction, analysis & visualisation
Image tagging tool interface

This tool is an easier interface to the Clarifai API for people who either don't want to code or don't want to bother to learn how to use the API. What this API does in short is that it takes a list of images (in the form of urls) and outputs what an algorithm, also called a model, "sees" in these images.

Different models are specialized in "seeing" different things. Some models, for instance, focus on recognizing animals, whereas others can identify everyday objects.
Data sprints make the doing of & learning from digital methods complete.
Digital Methods Summer School Program

2019: "Trolls, bots and dictators" - On the current state of social media research
2018: Retraining the Machine: Addressing Algorithmic Bias
2017: Get the Picture. Digital Methods for Visual Research
2015: Post-Snowden Media Empiricism and Secondary Social Media. Data Studies Beyond Facebook and Twitter
2014: On Geolocation: Remote event analysis (Mapping conflicts, disasters, elections and other events with online and social media data)
2013: You are not the API I used to know: On the challenges of studying social media data
2012: Reality mining, and the limits of digital methods
2011: After Cyberspace: Data-rich Media
2010: Foundations for Online Research with Digital Methods
2009: Studying the Web with the Web?
2008: Govcom.org Jubilee and Workshop
2007: New Objects of Study

Every year the Digital Methods Initiative (DMI) organizes a Summer School, an intensive program where we learn and develop research techniques for studying societal conditions and cultural change with the Internet. The DMI Summer School is open to PhD candidates and other motivated scholars young and old. The Summer School normally runs for two weeks, during the last week of June and the first week of July.

During the DMI Summer School participants actively engage in empirical research projects, employing Web-specific software tools, such as scrapers and crawlers. The Summer School concludes with a final event where the research projects are presented.

The DMI Summer School is a component of the Digital Methods Initiative (DMI), directed by Richard Rogers, Chair, New Media & Digital Culture, Media Studies, University of Amsterdam, with foundational support by the Mondriaan Foundation and the Center for Creation, Content and Technology (CCCT) at the University of Amsterdam. See about DMI.
#SMARDataSprint

Digital Media Winter Institute
https://smart.inovamedialab.org/

2017
What is the data journalism debate on social media?

2018
Interpreters of Platform Data

2019
Beyond Visible Engagement
Follow and repurpose the methods-of-the-medium & platform data; evolve with them overtime.

See Rogers 2013, 2017, 2019
The methods of Internet platforms are not static, but continually updated; getting better or worse the more/how people & machines use them.
Like-Share buttons & related metadata as representations of activity-positioning-opinion
Like buttons & related metadata as representations of activity-positioning-opinion

Like  Celebrate  Love  Insightful  Curious
Hashtag Engagement

Image retrieved from https://neilpatel.com/br/blog/como-usar-hashtag/
Uniform Resource Locators (URLs) & ID attributes as means of research

https://www.youtube.com/channel/UCtxGqPJPPi8ptAzB029jpYA
https://www.youtube.com/playlist?list=PLcGiWiKtsR0-NixqFGMQ_PE5lmurVBCIH
https://www.youtube.com/watch?v=hrM3nunCuXQ&list=PLcGiWiKtsR0-NixqFGMQ_PE5lmurVBCIH&index=3&t=5s

[Image]
https://66.media.tumblr.com/5a752e0e7a855b02cfe4d905c650f19b/tumblr_p0ttavZFoA1vwo6cso6_250.jpg

[FB page]
https://www.facebook.com/913068012121624

[post]
https://www.facebook.com/331782250179584/posts/1375410369150095

[tweet]
https://twitter.com/jack/status/1189634360472829952
Link domains as paths to social enquiry
Public & Suspicious username accounts

IMAGES SHARED BY DIFFERENT BOTTED ACCOUNTS

https://wiki.digitalmethods.net/Dmi/SummerSchool/2019/Botsandtheblackmarket
Repurposing the *methods-of-the-medium*
Reimagining the grammars of web platforms
Machine learning & image-face recognition for studying institutional communication.

Repurposing Facebook Page timeline images: the case of Portuguese Universities.

(OMENA & GRANADO, 2020)
The imagery of Portuguese Universities on Facebook from 2009 to 2018.

(Omena & Granado, 2020)
Computer vision for seeing the mood of Portuguese Universities over the years: from 2010 to 2018.
The presence of the president of Portugal, Marcelo Rebelo de Sousa, is synonymous of joy and a series of pictures featured in the Facebook Pages of Portuguese Universities.
Sorrow
Machine learning & image-face recognition for studying institutional communication.

**Repurposing Facebook Page timeline images: the case of Portuguese Universities.**

(Omena & Granado, 2020)

Natively digital **objects**

Facebook timeline image URLs

Natively digital **methods**

Computer vision API-based methods

→ Placed in a given context and period of time

→ Layers of mediation inherent to software
Digital methods are online grounded approaches that look at hybrid assemblages - “entanglements of users, algorithms, data, servers, work flows, business plans, communication protocols and trackers and so forth” (Latour et. al 2012 in Marres 2017), to study both ONLINE CULTURE & THE TECHNICITY OF THE MEDIUM

See Rogers 2013, 2019; Rieder et al. 2015; Gerlitz & Rieder, 2018; Omena, Chao, Pilipets, et al. 2019
The realization of research based on digital methods requires ‘another culture of’ making research questions; designing research processes; and analysing the subject of study.

See Marres, 2018; Rogers, 2019; Omena, 2019; Rieder (forthcoming)
Query Design

or search as research the technique of building lists of keywords-URLs-ids as research questions

Visualization & Analysis

unique actors + timing perspective + context

quali-quant

Platform Infrastructure

affordances of programmability & data relational nature

Praxis

Platform data collection trials, exploratory analysis & visualization
An inter-dependent position to research processes

Platform sensitive approach, infrastructure matters

Technical & Practical knowledge can inform research questions & practices

Interpretive-quantitative logic, the trajectory matters
Data ROCKS!
Obrigada 😊