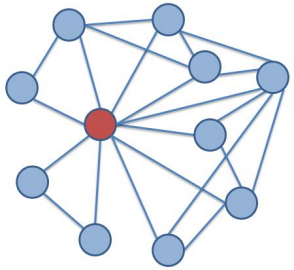

Sharing selves

Developing an ethical framework for curating social media data

Sara Mannheimer
Montana State University

Elizabeth Hull
Dryad Digital Repository

#IDCC2017 | Edinburgh | 21 February 2017


twitter
in
YouTube
digg

Emil OW Kirkegaard @KirkegaardEmil · May 8

The OKCupid paper has now been submitted. This means that the dataset is now public! Enjoy! :) openpsych.net/forum/showthre…

34 47

Ethan Jewett @esjewett · May 11

@KirkegaardEmil This data set is highly re-identifiable. Even includes usernames? Was any work at all done to anonymize it?

3 18

Emil OW Kirkegaard
@KirkegaardEmil

Follow

@esjewett No. Data is already public.

LIKES
3

11:30 AM - 11 May 2016

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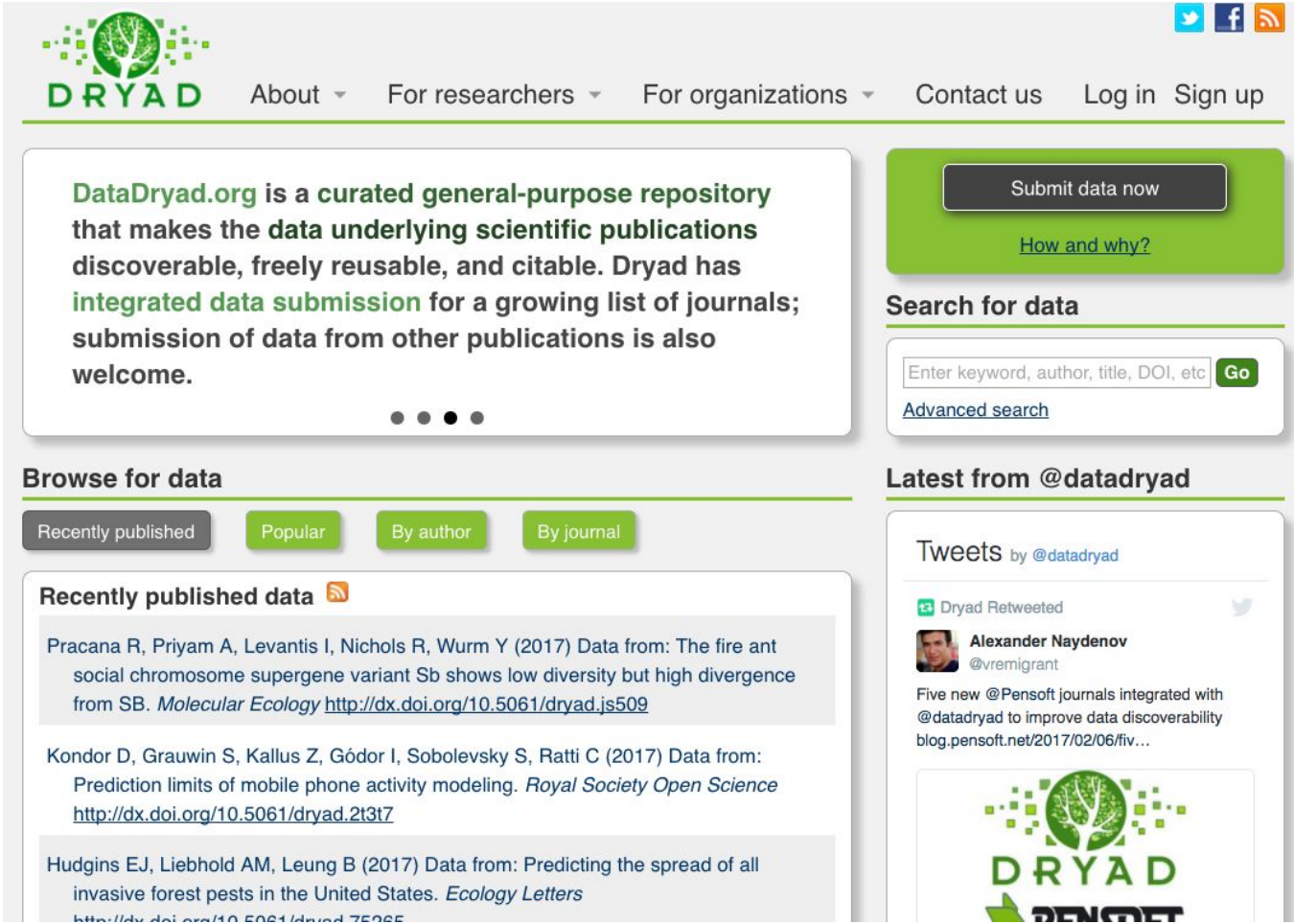
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Kondor D, Grauwin S, Kallus Z, Gódor I, Sobolevsky S, Ratti C (2017) Data from: Prediction limits of mobile phone activity modeling. Royal Society Open Science http://dx.doi.org/10.5061/dryad.2t3t7
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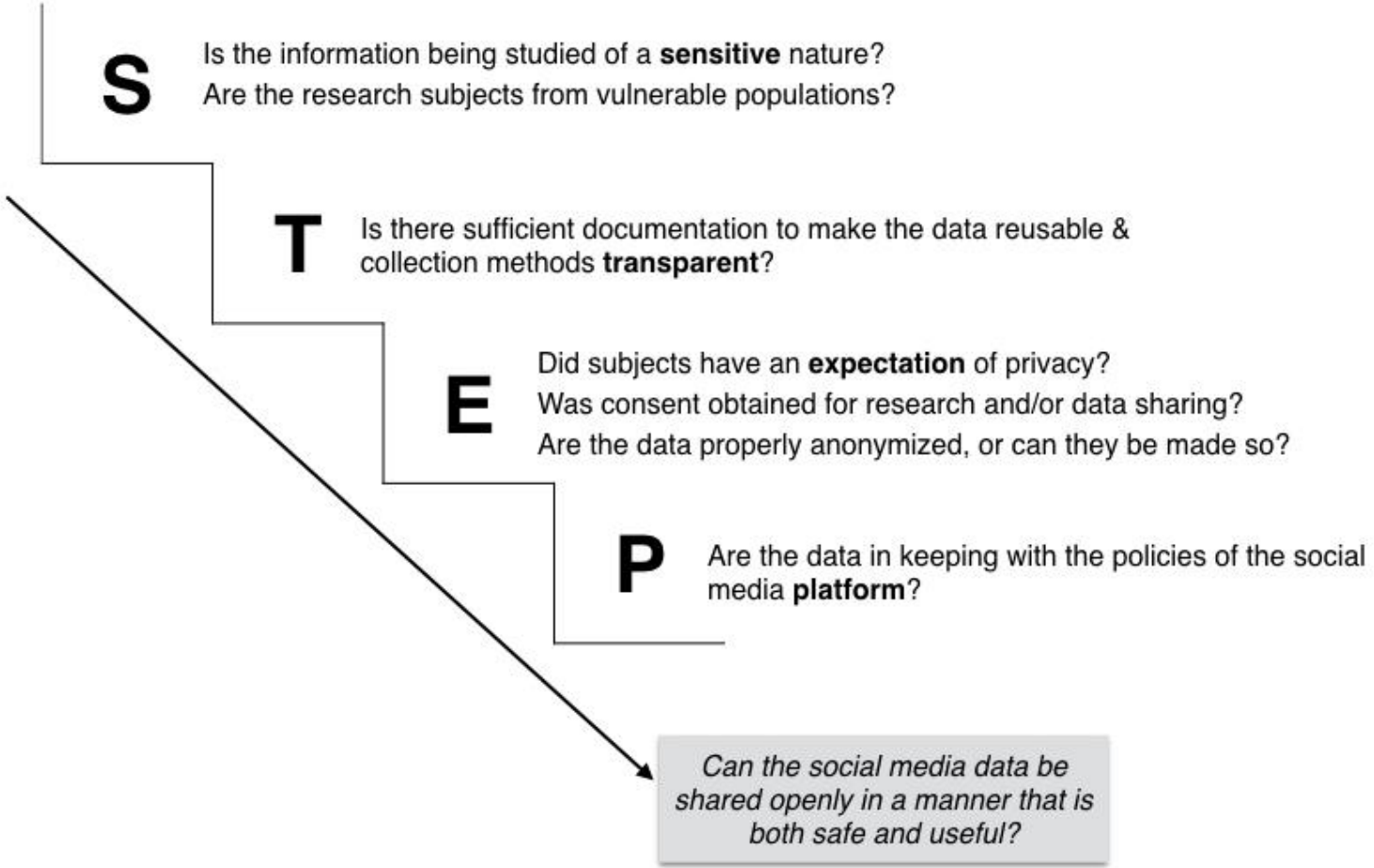
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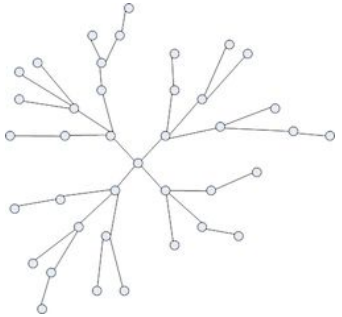
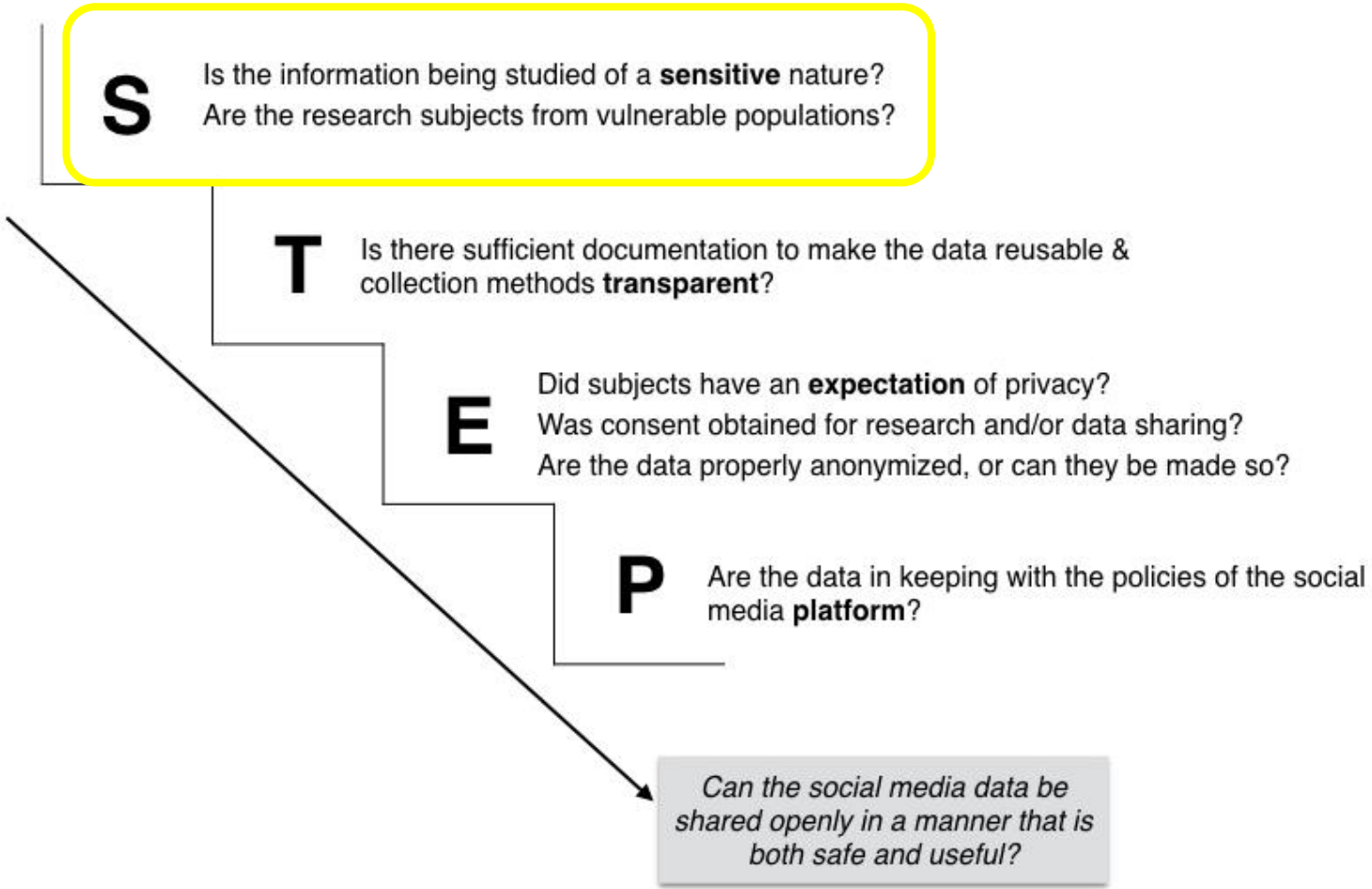
Is the information being studied of a **sensitive** nature?
Are the research subjects from vulnerable populations?
T
Is there sufficient documentation to make the data reusable & collection methods **transparent**?
E
Did subjects have an **expectation** of privacy?
Was consent obtained for research and/or data sharing?
Are the data properly anonymized, or can they be made so?
P
Are the data in keeping with the policies of the social media **platform**?
Can the social media data be shared openly in a manner that is both safe and useful?

STEP Framework guiding principles



1. **Value analysis**. When sharing social media data, researchers and data curators must measure the benefits of sharing data against the potential risks to human subjects.
2. **Responsibility**. Data curators can help educate researchers about ethical data sharing, but researchers themselves are ultimately responsible for the data they share.
3. **Continual inquiry**. Ethical practice requires ongoing dialogue and examination.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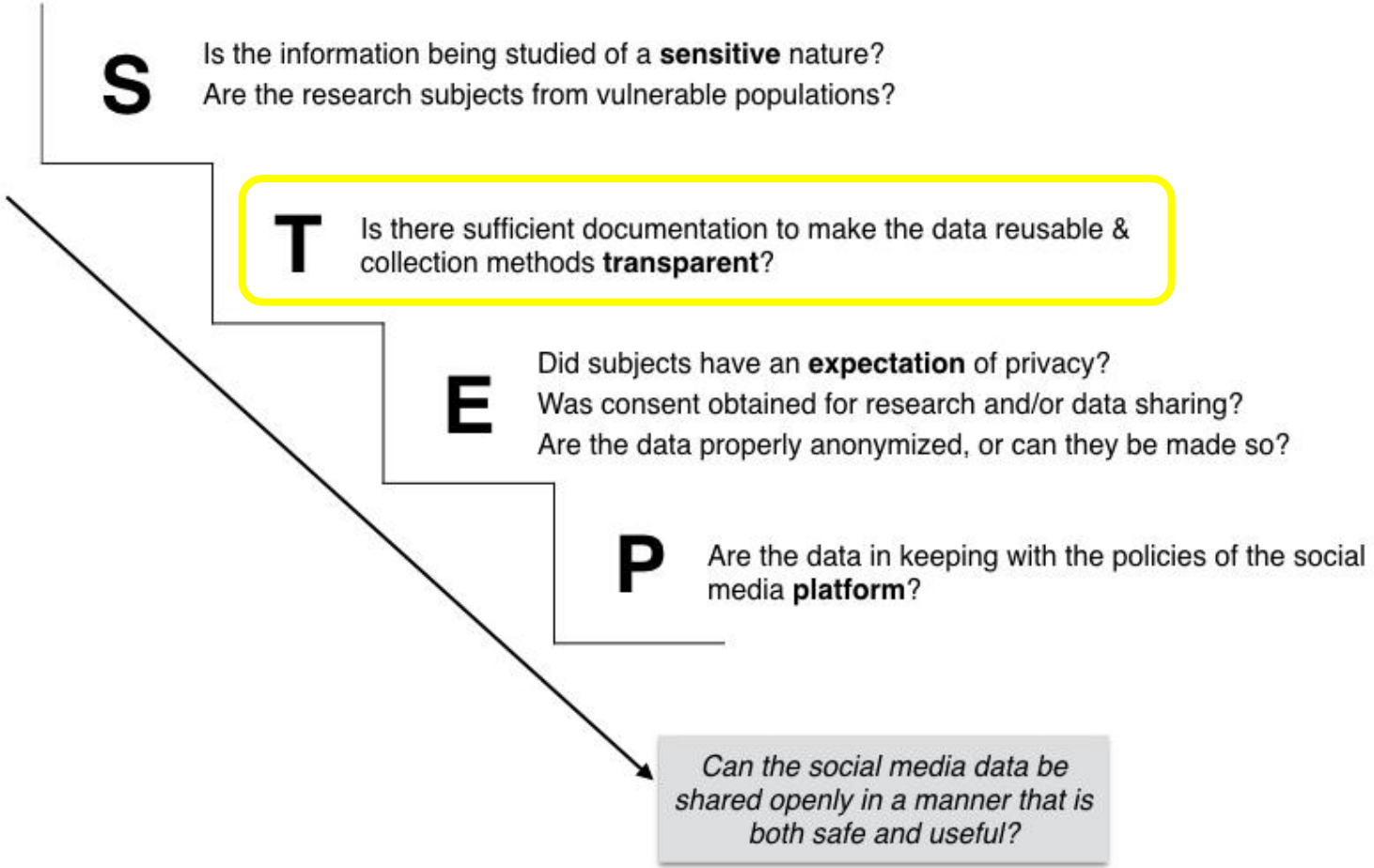
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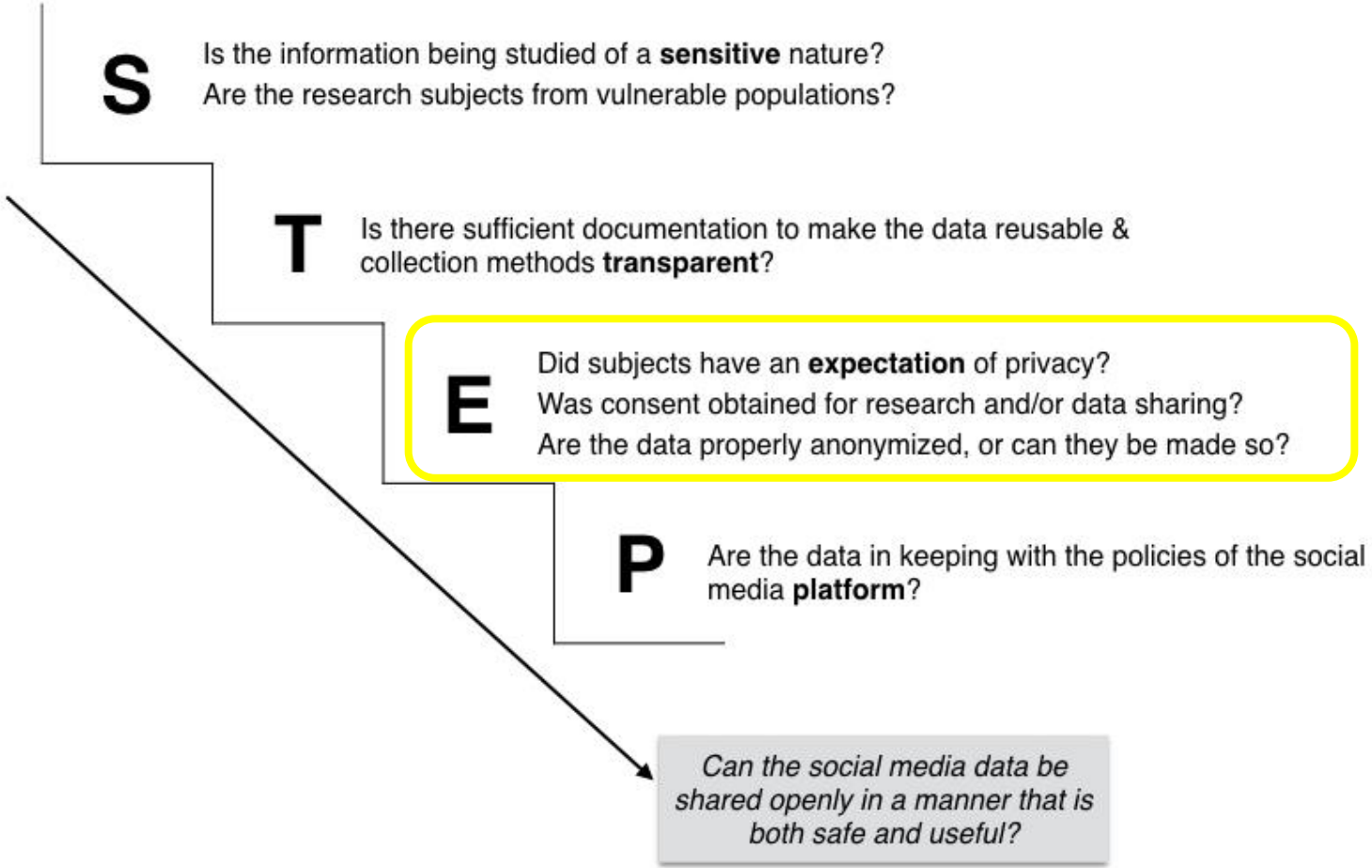
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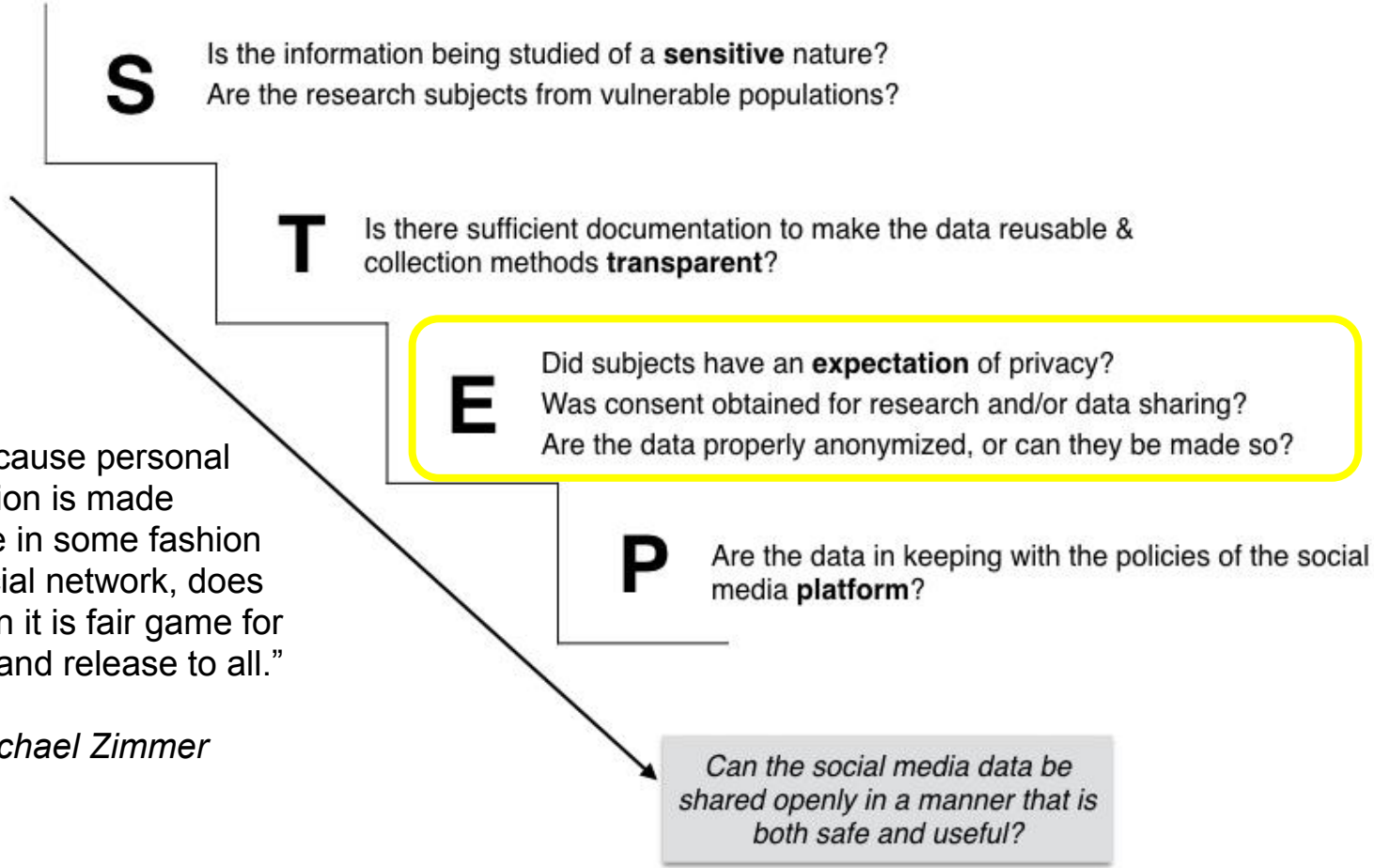
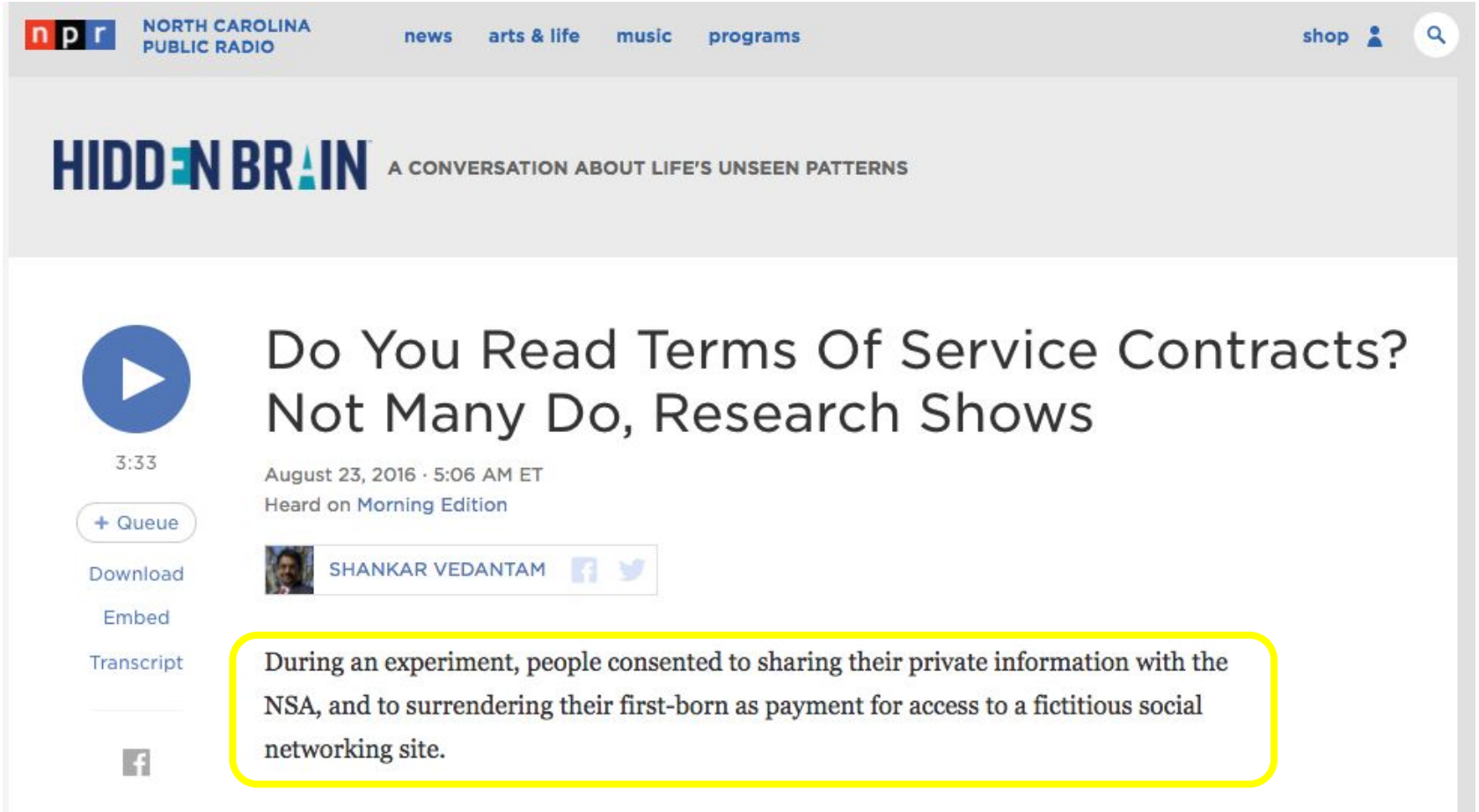


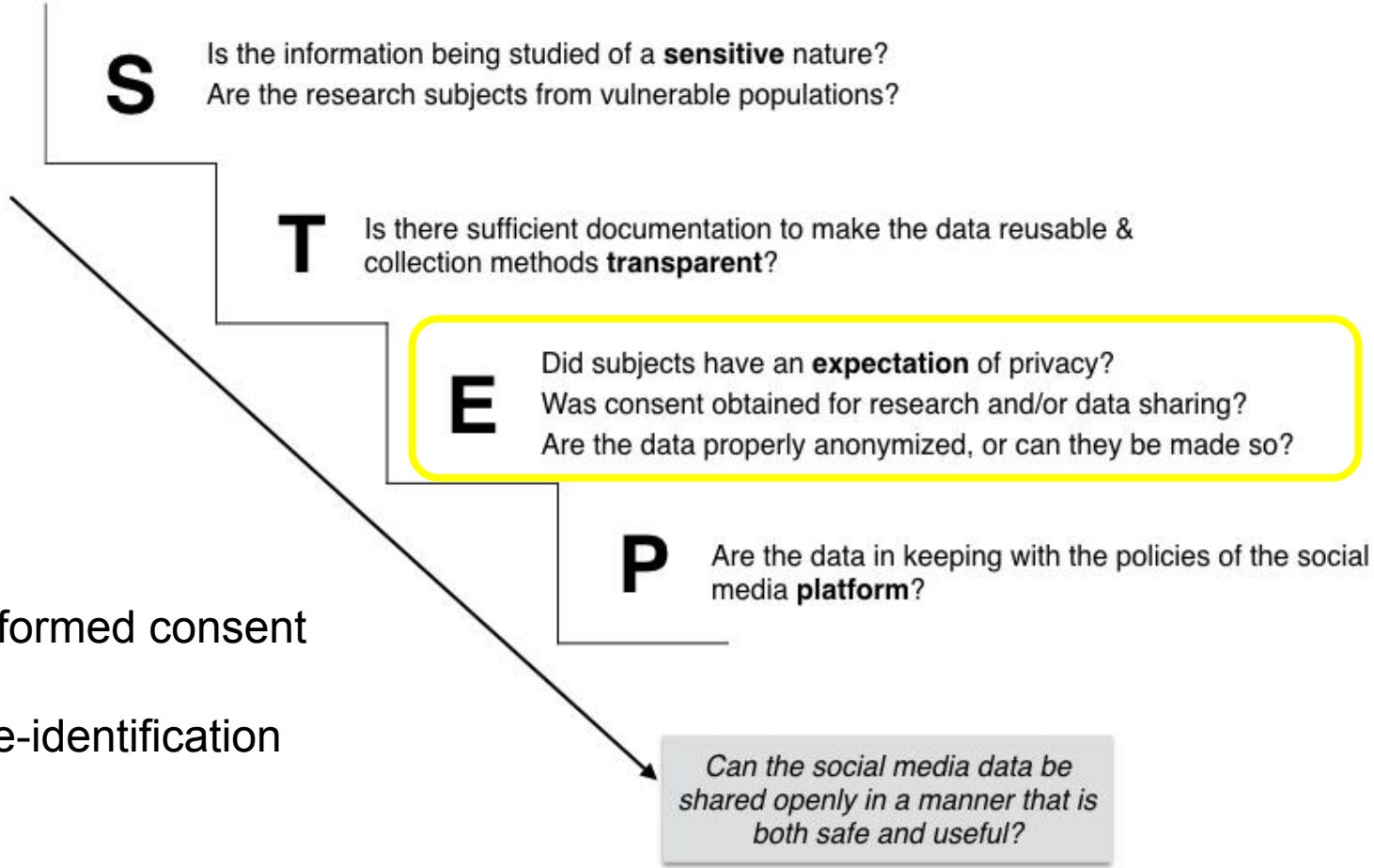
"Just because personal information is made available in some fashion on a social network, does not mean it is fair game for capture and release to all."

- *Michael Zimmer*

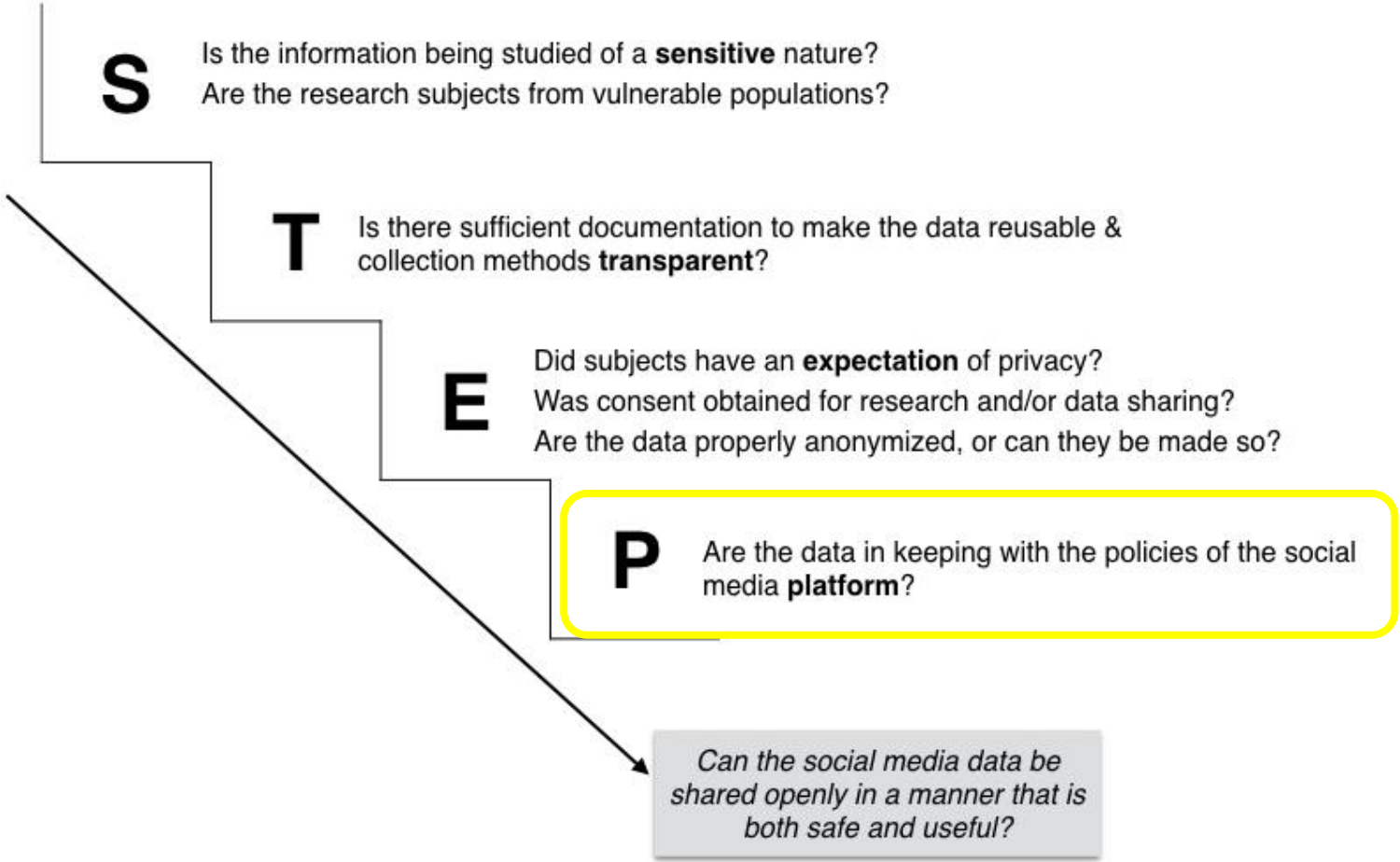
Zimmer M (2010) "But the data is already public": On the ethics of research in Facebook. http://doi.org/10.1007/s10676-010-9227-5



http://www.npr.org/2016/08/23/491024846/do-you-read-terms-of-service-contracts-not-many-do-research-shows



- Informed consent
- De-identification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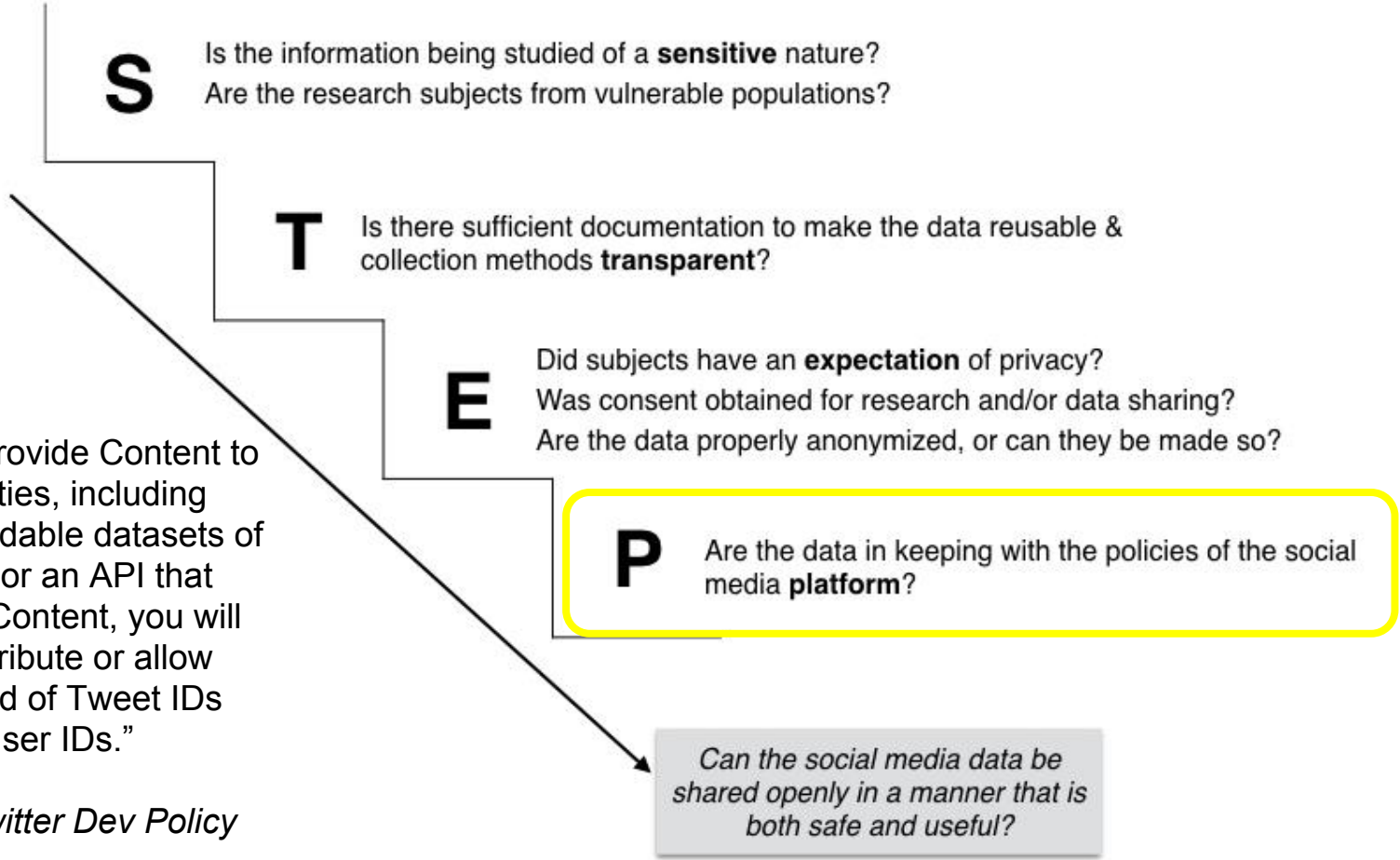
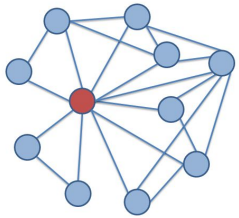


"If you provide Content to third parties, including downloadable datasets of Content or an API that returns Content, you will only distribute or allow download of Tweet IDs and/or User IDs."

- *Twitter Dev Policy*

https://dev.twitter.com/overview/terms/agreement-and-policy



Case study 1: the #occupy case

- Authors used Twitter hashtag data to study the evolution of political discussion during and after the Occupy Wall Street movement.
- The associated Dryad data package includes one .csv file containing three variables: “user,” “hashtag,” and “time.”

Gargiulo F, Bindi J, Apolloni A (2015b) The topology of a discussion: the #occupy case. PLOS ONE 10(9): e0137191. http://dx.doi.org/10.1371/journal.pone.0137191

Gargiulo F, Bindi J, Apolloni A (2015a) Data from: The topology of a discussion: the #occupy case. Dryad Digital Repository. http://dx.doi.org/10.5061/dryad.q1h04

Case study 2: in the mood

- Study of the relationship between UK Twitter users' "sentiment levels" and the network structure created by @-mentions.
- Researchers selected 18 "communities" to monitor and used these to formulate a model for "reproducing measures of emotive response."
- The data package contains several dynamic mention networks split over 6 tables; variables include an anonymised tweet ID, anonymised user IDs, and timestamps of tweets.

Charlton N, Singleton C, Greetham DV (2016b) In the mood: the dynamics of collective sentiments on Twitter. Royal Society Open Science 3(6): 160162. http://dx.doi.org/10.1098/rsos.160162

Charlton N, Singleton C, Greetham DV (2016a) Data from: In the mood: the dynamics of collective sentiments on Twitter. Dryad Digital Repository. http://dx.doi.org/10.5061/dryad.5302r

AREA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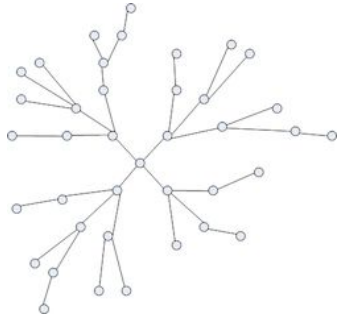
Taking STEP further



- Much like social media research, the STEP framework should evolve over time
- More case studies and testing with a variety of repositories and platforms
- Expanded application to big data research, social science data journalism

Thank you

Sara Mannheimer

Data Management Librarian
Montana State University
@saramannheimer

Elizabeth Hull

Operations Manager
Dryad Digital Repository
@datadryad