6S 2022 Sketch Groups Template
Staccato Project Design

Use this sketch -- either quickly or more comprehensively -- to draw out an ethnographic research design -- for your own project or just for practice. Do this sketch many times for different kinds of possible projects -- thinking of it as calisthenics for ethnography.

For the 6S 2022 workshop, select one of the sites|initiatives|problem-domains below to design a project for -- thinking first about different types of projects that could be done for the site|initiative|problem-domain you have selected, then about a specific project design, filling in the graphic below. Don't describe your own primary project. This is an exercise in rapid research imagining that you should spend about three hours on -- honing your capacity for "analysis as craft." The sketch can be done individually or collaboratively (the latter is more fun). Feel free to reach out to members in your group if you want to do this collaboratively. Responses can be roughly drafted and in bullet points. Fill in as much as you can in the allotted time, purposely working fast. Prioritize work on "Overview / Research Questions," "Methods and Data Resources" and "Theoretical Frames and Data Analysis." All of the sites|initiatives|problem-domains we've listed as options somehow relate to climate change. We fully understand that climate change is not a central focus for many of you (though it is context for all). We chose options within the climate change problem space so that the collection of proposals the group comes up with points to an array of STS research possibilities within any particular problem space.

TITLE

Social media, environmental activism, and sociotechnical imaginaries

RESEARCHER/S

María P. Angel

ABSTRACT, INTELLECTUAL MERIT, BROAD IMPACT

This project aims to understand the sociotechnical imaginaries built in social media around climate change. In particular, it intends to understand how climate change advocates use social media channels to communicate their message, and the impact that their behaviors and conversations on those channels may have on the construction of sociotechnical imaginaries around climate change. For this purpose, I will conduct content analysis of social media posts from the following 5 environmental groups that—according to number of likes—dominate Facebook: World Wide Fund for Nature (WWF), the Wildcat Sanctuary, Greenpeace International, Big Cat Rescue, and Sea Shepard Global. This research is expected to contribute to a better understanding of how these imaginaries align, conflict, or interact with competing imaginaries from other stakeholders involved in environmental policy decisions, as well as with other, already institutionalized, visions of desirable future. Additionally, it will fill a gap in existing literature about the interplay and interaction of social media, environmental activism, and sociotechnical imaginaries. Thus, by using the case study of environmental activism around climate change, it will address unexplored territories around the sociotechnical imaginaries that are originating and/or embedding in social media scenarios.

OVERVIEW / RESEARCH QUESTIONS

What are the sociotechnical imaginaries that environmental groups are building in social media around climate change?

BACKGROUND AND SIGNIFICANCE

Given the high stakes involved in environmental policy decisions, which are normally made under governance frameworks of multistakeholders, it is important to understand the visions of desirable futures that environmental advocates bring to the table. Thus, in terms of broad impact, exploring the sociotechnical imaginaries that are being built by environmental organizations in social media around climate change will help us understand how these imaginaries align, conflict or interact with competing imaginaries from other stakeholders, as well as with other, already institutionalized visions of desirable future. Moreover, the results of this research will contribute to foretell and anticipate the possible tensions that may arise in upcoming negotiations around climate change.

Likewise, when it comes to intellectual merit, this research will contribute to fill a gap in existing literature about the interplay and interaction of social media, environmental activism, and sociotechnical imaginaries. Currently, there is abundant literature about both social media and environmental activism, and environmental activism and sociotechnical imaginaries. However, research has so far paid little attention to the sociotechnical imaginaries that are originating and/or embedding in social media scenarios. In that sense, environmental activism around climate change seems like an adequate case study to begin filling this gap.

LITERATURE REVIEW

Through this research, I expect to build on and contribute to the following three topical literatures:

- Literature about **social media and activism**: Some of the sources that I will be reviewing include:
  - Zhuravskaya, E., Petrova, M., & Enikolopov, R. (2020). Political Effects of the Internet and Social Media. Annual Review of Economics, 12(1), 415–438. https://doi.org/10.1146/annurev-economics-081919-050239
  - Caren, N., Andrews, K. T., & Lu, T. (2020). Contemporary Social Movements in a Hybrid Media Environment. Annual Review of Sociology, 46(1), 443–465. https://doi.org/10.1146/annurev-soc-121919-054627
  - Battaglini, M., & Patacchini, E. (2019). Social Networks in Policy Making. *Annual Review of Economics*, *11*(1), 473–494. https://doi.org/10.1146/annurev-economics-080218-030419

- Pearson, E., Tindle, H., Ferguson, M., Ryan, J., & Litchfield, C. (2016). Can We Tweet, Post, and Share Our Way to a More Sustainable Society? A Review of the Current Contributions and Future Potential of #Socialmediaforsustainability. *Annual Review of Environment and Resources*, *41*(1), 363–397. https://doi.org/10.1146/annurev-environ-110615-090000
- Van de Donk, W, Loader, B.D., Nixon, P.G. & Rucht, D. (eds.). (2004). Cyberprotest: New Media, Citizens and Social Movements. London: Routledge

- Literature about **activism and sociotechnical imaginaries**: Some of the sources that I will be reviewing include:
  - Lehtiniemi, T., & Ruckenstein, M. (2019). The social imaginaries of data activism. *Big Data & Society*. https://doi.org/10.1177/2053951718821146
  - Kim, S.-H. (2015). Social Movements and Contested Sociotechnical Imaginaries in South Korea, in *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (S. Jasanoff & S.-H. Kim, Eds.; pp. 152–173). University of Chicago Press. https://doi.org/10.7208/9780226276663-007

- Literature about **environmental sociotechnical imaginaries:** Some of the sources that I will be reviewing include:
  - Christiansen, K. L., & Carton, W. (2021). What 'climate positive future'? Emerging sociotechnical imaginaries of negative emissions in Sweden. *Energy Research & Social Science*, *76*, 102086. https://doi.org/10.1016/j.erss.2021.102086
  - Beck, S., Jasanoff, S., Stirling, A., & Polzin, C. (2021). The governance of sociotechnical transformations to sustainability. *Current Opinion in Environmental Sustainability*, *49*, 143–152. https://doi.org/10.1016/j.cosust.2021.04.010
  - Levidow, L., & Raman, S. (2020). Sociotechnical imaginaries of low-carbon waste-energy futures: UK techno-market fixes displacing public accountability. *Social Studies of Science*, *50*(4), 609–641. https://doi.org/10.1177/0306312720905084
  - Flegal, J. A., Hubert, A.-M., Morrow, D. R., & Moreno-Cruz, J. B. (2019). Solar Geoengineering: Social Science, Legal, Ethical, and Economic Frameworks. *Annual Review of Environment and Resources*, *44*(1), 399–423. https://doi.org/10.1146/annurev-environ-102017-030032
  - Milkoreit, M. (2017). Imaginary politics: Climate change and making the future. Elementa: Science of the Anthropocene, 5(62), 1-18. https://doi.org/10.1525/elementa.249

- Scoones, I. (2016). The Politics of Sustainability and Development. Annual Review of Environment and Resources, 41(1), 293–319. https://doi.org/10.1146/annurev-environ-110615-090039
- Eaton, W. M., Gasteyer, S. P., & Busch, L. (2013). Bioenergy Futures: Framing Sociotechnical Imaginaries in Local Places. Rural Sociology, 69(2), 227-256. https://doi.org/10.1111/ruso.12027

METHODS AND DATA RESOURCES

I will conduct **qualitative content analysis** (Lasswell et. al. 1965) of social media posts from the following 5 environmental groups that—according to their number of likes—dominate Facebook: World Wide Fund for Nature (WWF), the Wildcat Sanctuary, Greenpeace International, Big Cat Rescue, and Sea Shepard Global. The Facebook posts of these organizations, posted on their official Facebook pages between January 2020 and January 2022, will be used as the data source, being mined for insights into the framing of desirable futures. For doing so, relying on the capabilities provided by QDA Miner and its integration with WordStat (a content analysis and text mining software) I will develop a coding frame which will be both concept driven (pre-defined) and data driven (inductive approach).

Likewise, the content analysis will be followed by **semi-structured interviews** (Weiss, 1995; Soss, 2014), with the PR & Media Officers and/or Community Managers of those organizations, to learn more about their motivations, ideas, and inspiring sources for creating and sharing those messages where social and technical elements about climate change are brought together.

THEORETICAL FRAMES & DATA ANALYSIS

Throughout my research I intend to mobilize theoretical insights about:

- Sheila Jasanoff & Sang-Hyun Kim's ideas about the sociotechnical imaginaries.
- Matthew T. Ballew, Allen M. Omoto & Patricia L. Winter's framework of Technologies for Proenvironmental Action Model (TPAM).

PLAN OF WORK

- Collect data on social media: Month 1
- Code and analyze data: Months 2-3
- Conduct semi-structured interviews: Month 4-5
- Writing the research report: Months 6-7

CHALLENGES AND ETHICAL CONSIDERATIONS

Challenges

Given that my main source of data will be social media (Fabebook), is hard to identify a geographical object of study for my research. This seems particularly problematic, taking into account that the sociotechnical imaginaries tend to be temporally situated and culturally particular.

Ethical considerations

The data that I will collect is composed of public statements of environmental organizations and of institutional positions of its employees. Therefore, it will not touch on sensitive or private information that may raise privacy concerns. In any case, in the consent form that I will provide interviewees before beginning the interview, I will let them know that they do not need to answer any questions if they do not feel comfortable about it or if they consider that doing so could potentially cause them risks of harm, discomforts, or hazards.

Additionally, the disclosure of the information collected through my proposed research methods would have very little or no risk of physical, psychological, social, economic, legal, or educational advancement harm to environmental organizations involved and/or their employees. However, I will still adopt the following data security protections to protect the audiovisual recordings and the transcripts of the semi-structured interviews: limited access, no shared passwords, strong passwords, changing passwords, report loss of data, and data disposal.

VALIDITY AND EVALUATION

PREPARATION AND WORK THUS FAR

REFERENCES

Ballew, M.T., Omoto, A.M., Winter, P.L. (2015). Using Web 2.0 and social media technologies to foster. proenvironmental action. Sustainability 7: 10620-10648.

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Eaton, W. M., Gasteyer, S. P., & Busch, L. (2013). Bioenergy Futures: Framing Sociotechnical Imaginaries in Local Places. Rural Sociology, 69(2), 227-256. https://doi.org/10.1111/ruso.12027

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Jasanoff, S. (2015a). "Future Imperfect: Science, Technology, and the Imaginations of Modernity." In Sheila Jasanoff & Sang-Hyun Kim (eds.). *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (pp.1-33). Chicago: University of Chicago Press.

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Jasanoff, S. (2004b). “Ordering knowledge, ordering society.” In Sheila Jasanoff (ed). In *States of Knowledge: The Co-Production of Science and the Social Order* (pp. 13-45). Taylor & Francis Group.

Jasanoff, S. & Kim, S. (2009). Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea. *Minerva, 47*, pp. 119–146.

Jasanoff, S. & Kim, S. (eds.) (2015). *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power.* Chicago: University of Chicago Press.

Kim, S.-H. (2015). Social Movements and Contested Sociotechnical Imaginaries in South Korea, in *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (S. Jasanoff & S.-H. Kim, Eds.; pp. 152–173). University of Chicago Press. https://doi.org/10.7208/9780226276663-007

Lehtiniemi, T., & Ruckenstein, M. (2019). The social imaginaries of data activism. *Big Data & Society*. https://doi.org/10.1177/2053951718821146

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Pearson, E., Tindle, H., Ferguson, M., Ryan, J., & Litchfield, C. (2016). Can We Tweet, Post, and Share Our Way to a More Sustainable Society? A Review of the Current Contributions and Future Potential of #Socialmediaforsustainability. *Annual Review of Environment and Resources*, *41*(1), 363–397. https://doi.org/10.1146/annurev-environ-110615-090000

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Weiss, R.S. (1994) Learning from strangers. The art and method of qualitative interview studies. The Free Press.

Zhuravskaya, E., Petrova, M., & Enikolopov, R. (2020). Political Effects of the Internet and Social Media. Annual Review of Economics, 12(1), 415–438. https://doi.org/10.1146/annurev-economics-081919-050239

DATA MANAGEMENT PLAN

The data that I will collect through social media and the semi-structured interviews will be stored in QDA Miner and its integration with WordStat. Also, and with the previous written consent of the interviewees, I will video and audio-record each semi-structured interview through Zoom, so that I can later make interview transcripts and directly refer back to specific details of the interviews during the analysis phase. If for any reason participants do not wish to be recorded, I will keep detailed notes of our conversations.

Aside from conferences participations and paper publications, I plan to make my data available to others per request.

FURTHER NOTES

POINTERS

- **Make sure to come up with a title (though this is hard and always feels -- and is -- reductive).**
- **The abstract should describe your project significance, aims, methods, expected findings/contributions (intellectual merit) and expected societal implications (broad impact). Describe each in a sentence.**
- In the Overview / Research Questions, try to articulate the scales, systems or objects that will be foregrounded in the project, and its context|location (geographic, ecologic, geopolitical, discursive, etc). Include both theoretical and empirical questions, and a description of the types of data you will generate and mobilize. End with a few statements about what the project will push *against* (methodological nationalism or essentialist constructs of identity or place, for example).
- **In the Literature Review section for a literature review, describe two to four topical literatures that you will build on and contribute to through this research. See Annual Reviews for ideas but reach for bibliodiversity.**
- **In the methods section, describe *what you will do, where and with whom* -- and the different kinds of data and insight these activities will produce. Consider, for example, how you might include multisited ethnography (Marcus 1995, a tale of implosion (Dumit 2014), tactile analytics (Patricia Alvarez Astacio 2021), drawing as analysis (Rachel Douglas-Jones 2021), or archive ethnography (Fortun et al. 2021).**

- **In the section for theoretical frames, describe the basic theoretical insights that you can mobilize in your study design, data collection, analysis, and writing. You could mobilize understanding of "the subaltern," for example, or Foucaultian ideas about discourse and subject formation. This can be a long list with very cursory descriptions. Note that this section is not usually included in a proposal submitted to funders -- but should be part of your thinking and dialogue with collaborators**

- **In building your references, reach for bibliodiversity and a transnational field of reference.**

sites|initiatives|problem-domains for 6S 2022 April 26 Workshop

- Melting Siberia
    - Troianovski, Anton and Chris Mooney (photo and video by Michael Robinson Chavez). 2019. "Radical Warming in Siberia Leaves Millions on Unstable Ground," Washington Post. October 3. https://www.washingtonpost.com/graphics/2019/national/climate-environment/climate-change-siberia/

    - Struzik, Ed. 2020. "How Thawing Permafrost Is Beginning to Transform the Arctic," Yale Environment 360. January 21. https://e360.yale.edu/features/how-melting-permafrost-is-beginning-to-transform-the-arctic

- Climate Change and Combo Disaster in the United States

- Climate Change, Labor Productivity and Politics

- USAID's Climate Links

- World Bank's Climate Change Knowledge Portal

- WHO et al Environment and Health Compendium
- WHO, UNDP, UNEP and UNICEF have partnered to create a new compendium of 500 actions aimed at reducing death and diseases driven by environmental risk factors, the first such resource to unite this expertise from across the UN system.

- Climate Change and Social Media

- World Economic Forum on Climate Governance