

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

Proper Disaster: Neglecting Petrochemical Infrastructure in the Houston Shipping Channel

RESEARCHER/S

ABSTRACT, INTELLECTUAL MERIT, BROAD IMPACT

Houston's Shipping Channel is the largest petrochemical complex in the United States, accounting for almost half of the country's petrochemical manufacturing capacity. As climate change causes increasingly severe and frequent weather disaster events, such as hurricanes, the risk of failure of the Shipping Channel's aging infrastructure (e.g. old storage tanks being submerged by storm surges and leaking into the channel) intensifies. Political leaders have described the potential disaster awaiting the Shipping Channel as a "chemical Chernobyl." In spite of this, little is being done by government regulation agencies or private companies to promote the preparation of the Shipping Channel infrastructure for increasing climate-change-related severe weather events. In fact, for many companies, it is cheaper to neglect aging infrastructure and simply pay small annual fines. This project studies the production of such a potential "proper disaster," in which negligence is the "right" course of action for profit-seeking petrochemical companies. While vital work has studied the impact of unsafe petrochemical infrastructures on nearby communities (often poor communities of color, due to environmental racism), this project adds to the picture by examining the practices and justificatory narratives of private company actors and researchers. In other words, it asks about the mechanisms and conditions of possibility by which such proper disasters can take form. A key premise is that such mechanisms and conditions of possibility are not only located in tight profit margins and corporate greed, but also buttressed by seemingly more innocuous practices such as industrial research. Thus, this project ethnographically studies the work of industrial scientists around the Shipping Channel and how their knowledge production contributes to the production of proper disasters in this context. This project, then, has the potential to contribute to strategies for just disaster mitigation or prevention that take on a wider domain of target action beyond corporate profit schemes, as it is clear that we cannot rely on companies to address the impacts of climate-change-driven disasters. The project does not aim to directly villainize scientists but potentially find openings for adjusting the ways science is carried out and promulgated to better ends, working with scientists themselves (who likely already have ideas for how to do this).

OVERVIEW / RESEARCH QUESTIONS

RQ1: Which kinds of scientific research projects do industries or companies fund and support in the Houston Shipping Channel? (Map/archive of scientific research projects)

RQ2: What day-to-day scientific practices and narratives make up such scientific research projects? (Ethnographic data of exemplar projects, textual analysis of scientific papers)
RQ3: How do such practices and narratives create the conditions of possibility for proper disaster? (Analysis linking mundane technical practices to the conditions of possibility of broader concepts and ideas)
The project will push against ideas that negligence happens only through deliberate greed, etc. It will make a case for paying attention to mundane, seemingly innocuous scientific practices and their impacts, drawing on long-standing STS scholarship to this effect and providing a specific example.

BACKGROUND AND SIGNIFICANCE
See abstract.

LITERATURE REVIEW
Negligence
Disaster
Scientific practices and narratives
Petrochemicals

METHODS AND DATA RESOURCES
Mapping the landscape of industrial research projects around the Houston Shipping Channel (online research, oral histories with scientists)
Ethnographic participant-observation with an exemplar scientific project (after building connections through the mapping above)
Textual analysis of scientific narratives in published journal articles and pre-prints (carried out simultaneously)

THEORETICAL FRAMES & DATA ANALYSIS
Disaster studies (the sociality of "natural" disasters)
The work of technicalities (scientific [STS] or otherwise, incl legal anth scholarship)
Scientific storytelling and narrativizing as social (STS, anth of science)

PLAN OF WORK
Start with mapping the landscape of industrial research projects, build connections with scientists through that, and then from there see if it's possible to spend time in a lab or with a research project. Throughout be analyzing journal articles and pre-prints. This could be a relatively small project, six months to a year, done by one person or multiple.

CHALLENGES AND ETHICAL CONSIDERATIONS
Challenges include access, but this is why it's crucial to think carefully about the researcher's relationship with scientist interlocutors. Again, it's not about villainizing them, but working with scientists' own understandings of their complicitities—ie, scientists are often not naive to their place in the order of things. They still might not understand things through the framework of critical STS or anthropology or disaster studies, so dialogue and communication between natural and social scientists is not only a method but an ultimate aim of this project. Also, this project is purposely situated among the mechanisms that maintain environmental racism, etc., rather than being a harm-centered approach.

VALIDITY AND EVALUATION
Having interlocutors validate claims made about the science, but having other STS and anthropology scholars validate the analysis as well. Ie, validity is multi-sited and this is important because critique from only one of these places won't be enough to generate the kinds of understandings that will actually be actionable upon.

PREPARATION AND WORK THUS FAR
KU has lived in Houston for six years and done a toxic tour of the Shipping Channel. KU has training in biology and biochemistry and has experience working in scientific research labs.

REFERENCES
TBD

DATA MANAGEMENT PLAN

Having the map/archive of the landscape of industrial science around the Shipping Channel be publicly available would be ideal. Would need to think more of the format and purpose/audience of this.

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](#)