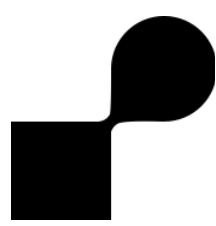


«Critical Social Media Analysis using Mixed Methods»

**Uncertain knowledge:
debates about science-related information in
the unedited public sphere of online platforms**

Dr. Simon David Hirsbrunner, Michael Tebbe
Human-Centered Computing, Institute of Computer Science
Freie Universität Berlin
Session X, 21 Jan 2021



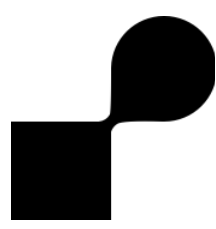
Outline

“Making of” of Hirsbrunner (2021)

Questions/Discussion regarding “Making of” of Hirsbrunner (2021)

Breakout sessions on different topics

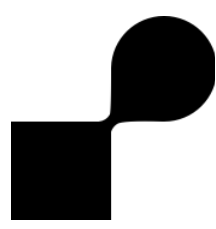
Time for group work



“making of” a paper

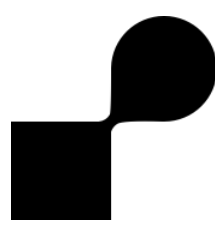
Hirsbrunner, Simon David (2021). “Negotiating the Data Deluge on YouTube: practices of knowledge: appropriation and articulated ambiguity around visual scenarios of sea-level rise futures,” *Frontiers in Communication*.

Relevant call for papers: Understanding the Role of Online Video-Sharing and Online Video-Sharing Platforms for Science and Research Communication
<https://www.frontiersin.org/research-topics/11604/new-directions-in-science-and-environmental-communication-understanding-the-role-of-online-video-sharing>



Paper introduction: premises

- YouTube as source of information on scientific issues
 - YT became important source for people who seek information about science-related issues (Medienpädagogischer Forschungsverbund Südwest 2015; Forum Wissenschaftskommunikation 2016)
 - Particularly information on climate change (Allgaier 2019)
 - New relevance due to 'infodemic' on COVID19, falsenews, conspiracy narratives



Paper introduction: premises

- Varying quality of information, some problematic sources, sometimes outdated information, difficult to assess and evaluate the credibility of information

→ Information in the “unedited public sphere” of online media / “epistemic failure” (Bimber and de Zúñiga 2020)

“In the marketplace of ideas, a bias toward truth must come from independent epistemic authorities exerting sufficiently strong influence on what circulates in the public sphere. These authorities are of course the press, whose epistemic functions are three-fold: operating a truth-biased filter on claims before they enter the broad public sphere, publicly identifying false claims that escape the filter, and providing signals about the provenance of truth claims such that interested parties can weigh evidence themselves. These constitute epistemic editing.” (Bimber and de Zúñiga 2020, 710)

Paper introduction: proposition

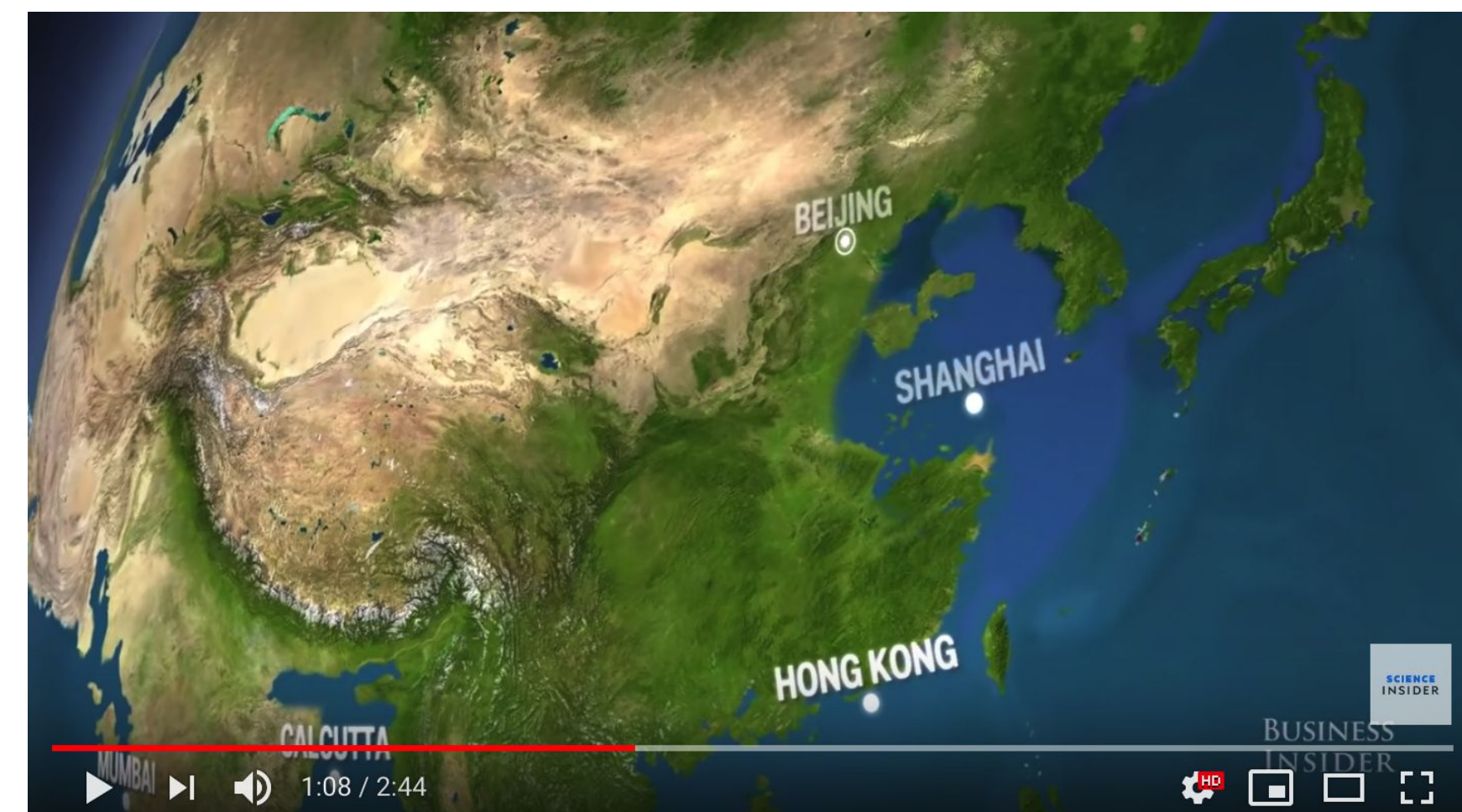
Empirical Material (animated SLR maps)

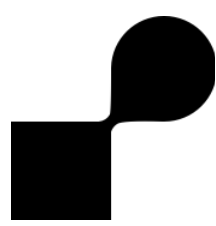
- Visualizations important for the discursive negotiation of climate change
- Sea-level rise maps as representative imaginative devices for climate change futures
- High degree of ‘uncertainty’
 - information, data, map, producers, channel, platform

Propositions (learn from comments)

- Learn from comments on Youtube how people make sense and debate this kind of information
- formalize these strategies into discursive practices (communicative routines, patterns)

In a scientific paper, assumptions and propositions should be backed by the insights of other scientists





Paper introduction: process and argument

Data exploration and selection

Identify sea-level rise maps most viewed, liked and commented

- https://tools.digitalmethods.net/netvizz/youtube/mod_videos_net.php
(search queries: 'sea-level rise,' 'SLR,' 'climate flooding' etc.

Comments extraction and coding

Extract data, develop codes, add new data (Grounded Theory)

https://tools.digitalmethods.net/netvizz/youtube/mod_video_info.php

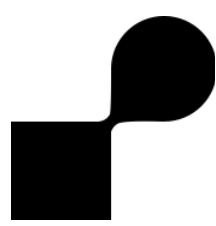
- Iterative coding by hand
- Action-oriented categories
- Define further what data means:
 - What does the data suggest? What are the limits of the explanatory power of your data?

Results: Articulated knowledge appropriation as social practice

- develop a typology of practices

Discussion: ambiguity, credibility, appropriation

- Discuss ambiguity as higher-level issue
- Make the case for ambiguity in online science communication
- Relate to other research



Group discussions

Discuss one of these topics in your breakout session:

- 1: **The relation between YouTube Video content and practices**
- 2: **Communication practices in the paper and in your own data**
- 3: **YouTube as a platform for debate**
- 4: **False narratives on YouTube**
- 5: **Effects of debate on YouTube to broader society**

Document your results in a presentation

Breakout session 1:

<https://docs.google.com/presentation/d/1ZexpcYN2-ypn9y1RSuieyBE3N05lsGOo4OXi9UkpJgg/edit?usp=sharing>

Breakout session 2:

https://docs.google.com/presentation/d/1k9rtpr2qIJdB6CsDOGhnCkq9_H4yWDZnrK1FrYjTQkg/edit?usp=sharing

Breakout session 3:

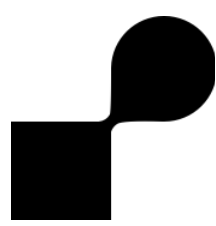
<https://docs.google.com/presentation/d/16MX064PEk8yyxZSpstlu5sqWXw6er0VBkQSeM5AgLQM/edit?usp=sharing>

Breakout session 4:

<https://docs.google.com/presentation/d/1HhDuG2EntEFQm8XZXhggq4YoQHV3pRgimoAhAKZCdAU/edit?usp=sharing>

Breakout session 5:

<https://docs.google.com/presentation/d/1jKcksr8xyAgJuWOgFy50FswzHhs0OICm5neESd61Hgl/edit?usp=sharing>



Assignments

1. Paper reading

Allgaier, Joachim. „Science and Environmental Communication on YouTube: Strategically Distorted Communications in Online Videos on Climate Change and Climate Engineering“. *Frontiers in Communication* 4 (2019). <https://doi.org/10.3389/fcomm.2019.00036>.

2. Search for three thematic academic papers informing your research project (as a group)

3. Contribute to our Zotero library

a. Create a **Zotero Online Account**

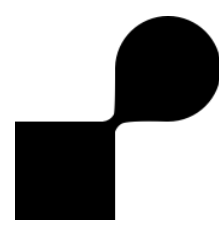
b. **Join our group:**

https://www.zotero.org/groups/2601323/seminar_critical_social_media_analysis

c. Take a **look at the literature** of the library to inform your project

d. **Upload the (bibliographic) information** on the three papers to the library

e. **Add three tags** to it that you find useful for others



What's up next session?

Conspiracy narratives on YouTube: the case of climate engineering and chemtrails on YouTube