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## COUNTERING CLIMATE CHANGE: CLIMATE SKEPTIC COMMENTS IN THE GERMAN NETWORKED PUBLIC SPHERE

Jonas Kaiser

Alexander von Humboldt Institute for Internet and Society

### Climate Change and the Internet

Even though manmade climate change is widely agreed upon in science (Anderegg, Prall, Harold, & Schneider, 2010) it is a highly polarizing issue both off- and online with climate skeptics on the one side and the mainstream on the other. This is especially visible in a country like Germany where skeptics are a small minority (Metag, Füchslin, & Schäfer, 2015) that have formed a counterpublic online (Kaiser & Puschmann, 2016). The study at hand is looking at the relationship between counterpublic and mainstream in the networked public sphere (Benkler, 2006) to find out how and where skeptics are trying to make their voices heard and how users from the mainstream react to that. The concept of counterpublics posits that within the public sphere some publics are marginalized and in opposition to the oppressing hegemonic discourse (Downey & Fenton, 2003). The climate skeptic counterpublic in this sense refers to users who are doubtful or skeptical about climate change's existence and/or climate science (Kaiser & Rhomberg, 2015). In order to shine a light at this 'clash of publics', 10,262 comments from 4 news sites and 6 climate blogs have been manually analyzed.

In this study I propose that, theoretically, an integration of counterpublics within the networked public sphere is needed to better understand the debates within comment sections. Empirically, I suggest that these debates can be best analyzed by looking at the frames involved and whether counterpublics are included or excluded in the debate (Toepfl & Piwoni, 2015). By focusing on the comment sections of news sites as well as climate activist, science and skeptic blogs this study accounts for different and yet connected publics within the networked public sphere. Online comments are an especially interesting case since they are one of the most popular forms of user-generated content and yet closely connected with the websites or blogs. Additionally, studies have shown that counterpublics can 'brigade' comment sections to make their

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messages heard (Toepfl & Piwoni, 2015) and that comments can influence the readers' perceptions of complex issues (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2013).

## **Hypotheses**

Based on these assumptions three hypotheses are tested:

H1: Climate skeptics will be overrepresented (>10%) in the comment sections of the mass media.

H2: Climate skeptics will adapt their frames to the comment section by using the less controversial climate science frames in the mainstream publics and the more denialist frames about climate change in their own counterpublic.

H3: Skeptics will be excluded from the mainstream publics by unfriendly reactions from mainstream users but will be welcome in their counterpublic.

## **Method**

In order to analyze the relationship between counterpublic and mainstream online a qualitative-quantitative content analysis of 10,262 comments from ten comment sections was conducted. The four news sites (Bild, Welt, Spiegel, Zeit) were chosen due to their active forum and journalistic stance (conservative/liberal). The six blogs (Eike, Science Skeptical, Klima der Gerechtigkeit, Klimaretter, Klimazwiebel, Klimalounge) were identified with a hyperlink network analysis of the German climate discourse (based on indegree within the skeptic, activist and scientific clusters). The comments were scraped during the three IPCC report's publications in 2013 and 2014 (352 articles in 36 days). For the frame analysis I adapted Kaiser and Rhomberg's (2015, p. 9) list of skeptic frames for online comments. Additionally, the reactions to skeptic comments were coded. Krippendorff's alpha for the coding was >0.7 and thus satisfactory.

## **Results & Outlook**

After discarding all irrelevant comments (i.e. those that did not refer to a climate issue) there were 4,425 comments left. Within these comments it is surprising *how* active skeptics are: 42.8% of all relevant comments were written by skeptics. This is far more than the general German populace with 10% (Metag et al., 2015). In fact, skeptics were overrepresented in every comment section (except for Klima der Gerechtigkeit, where only 8 relevant comments were written). Even though skeptics are less active in the mainstream blogs (between 12-18%) they are highly active in the mass media comment sections and especially so on the conservative sites Bild (75%) and Zeit (77%) which can almost considered counterpublic free-harbors within the mainstream. H1 can thus be confirmed.

For H2 I looked at the frames that were being used and whether the frame usage differed between the comment sections. This was, however, not the case for the mass

media comment sections that were very similar to the skeptic site Eike. Only on Zeit (52.8%) and Science Skeptical (56.3%) are skeptics promoting doubt on climate science more actively. This unclear picture is also true for the mainstream blogs. Indeed, the denialist message that climate change does not exist or that mankind is not to blame was promoted in every comment section and was used quite often (30% of all skeptic frames). H2 has thus to be discarded.

When looking at how users reacted to skeptics the main result is that they chose to reply and argue with them. Over 50% of all replies were replies to skeptic users. These replies were mostly either corrective (37%) and less so critical (27%). Only 22% of the comments were in agreement with them. This goes to show that even though skeptics were very much more active than mainstream users they have not conquered the comment sections but face heavy resistance. This is true for all comment sections – even the skeptic ones. This suggests that skeptics are not the only ones who try to make their voice in a somewhat hostile environment heard. The hypotheses that skeptics will be more welcome in their counterpublic than on mainstream sites thus has to be discarded.

In general, this study shows that the clash between the skeptic counterpublic and the mainstream is quite fierce with skeptics brigading the mass media comment sections and mainstream users countering the counterpublic messages on skeptic blogs. At AoIR theoretical implications and further results will be presented.

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