

Analyzing Religious Language in Social Media

Application details

Title of the project: *Live-mapping Religious Difference Online: the interplay of Digital Society, religious texts mediated online, and live-mapping*

Duration of the visit (in days): 15

Start date of the visit: 23/10/2023

End date of the visit: 06/11/2023

Network Institute member: Prof Willem Th. van Peursen (w.t.van.peursen@vu.nl)

Visitor: Dr Peter M. Phillips (p.m.phillips@durham.ac.uk)

Visitor affiliation: Honorary Research Fellow, Durham University; Director of Research/Director of the Centre for Digital Theology, Spurgeons College, London

Research problem

Social media are an important source for investigating people's convictions, opinions and social interactions. Worldwide religion is one of the main cultural factors. How can we map and analyse the interaction of social media and religion? How can we identify religious issues present across digitally mediated culture by live-mapping the differential use of religious texts in social media? The way in which we can perform such an analysis has dramatically deteriorated due to recent changes in the availability of social media data. How can we mine social media such as X in the age of restrictions? Further, how can we detect religious language?

Activities

Around these questions we organized two hackathons and a joint seminar. Unfortunately, the visiting research couldn't join us physically because of health reasons, but the Network Institute was so kind as to provide us with the means for organizing the events that we planned, which the visiting researcher attended online. We could also offer some scholarships to PhD students to attend the hackathons.

First Hackathon (Thursday 26 October 2023): Text-mining social media in the age of restrictions

Since the surge in Artificial Intelligence advancements over the past year, various social media platforms have grown increasingly cautious about safeguarding their data. To prevent mass downloading, they have either eliminated or restricted access to free or affordable APIs, marking a significant shift. This change is particularly unfortunate for the social media platform X (formerly Twitter). With X's data now out of reach, how can we still gather social media data? Could platforms like Instagram or Facebook offer viable alternatives?

Regardless, even if we manage to circumvent the current barriers to accessing X's data, we still face a range of other challenges. For instance, how can we accurately decipher posts in which the text is embedded within images rather than presented in plain-text format? How do we obtain geolocation data if it hasn't been explicitly tagged? And how do we pinpoint gaps in the data (e.g., by correlating tweets with news articles, we might discover that a particular focus in the data is tied to a specific news event rather than being representative of a broader timeframe or community)?



All these questions were addressed during the hackathon. It became clear that the academic world is still figuring out how to respond to the restrictions in the use of social media, whereas some scholars are trying to find creative solutions, others concluded that the recent developments marked the deathblow of a blossoming field of academic research (see, e.g. [RIP Australian Twittersphere](#) and [Social media data acquisition after Twitter](#)).

For an impression of the first hackathon see [this blogpost](#).

Second Hackathon (Friday 27 October 2023): Analyzing religious language in social media

How do people tweet about religion? What texts do they use? What is the knowledge base? What hashtags do they use when referring to their holy scriptures (#gospel #Bible #Quran #Qur'an)? How do you discern the religious components of a tweet? Not every use of the word "karma" presupposes a Hindu worldview, some biblical quotations have become part of the literary heritage of Western culture and may be used without conscious reference to the Christian scripture (e.g., "seek and ye will find"), mentions of God and Jesus may be used as swear words, and mentions of the name Mohammed may refer to founder of Islam or to thousands of other people who bear the same name. Existing studies on religious language often focus on its epistemological or metaphorical features, rather than concrete questions in relation to detecting religious language in large corpora.

We explored these questions using various case studies, including the highly sensitive situation in Israel and Gaza that had exploded a few weeks before our hackathon. We investigated, among others, the extent to which the debate on social media is framed religiously and to which extent it is framed politically.

For a report of the second hackathon see [this blogpost](#).



Joint seminar (Monday 6 November 2023): What has MIT to do with Jerusalem?

The visiting researcher, Peter Phillips is director of the Centre for Digital Theology, Spurgeons College, London. In this final seminar he shared his experiences in the work at this centre, addressing questions such as: what is Digital Theology? Can computing and theology ever link up or are they still in different poles of understanding?

Results

The plan that we submitted when we applied for the research visit had to be adjusted in two ways:

First, we had to change plans when it became clear that the visiting researcher could not join us physically. Yusuf Çelik (assistant professor in Islam and Digital Humanities, FRT, DAST) filled the gap and did almost all the work in the preparation of the hackathons.

Secondly, the impact of the restrictions on X data appeared to be much more severe than we envisioned when writing the application, not the least because the "academic profile" that scholars could use to obtain large amount of Twitter/X data, had been cancelled.

The following factors contributed to the success of our project:

- The first hackathon became highly topical in light of the new and ongoing social media constraints.
- We had an interesting interdisciplinary group of participants to our hackathons, which strengthened existing ties between various VU departments and created new contacts with people from other institutions.
- The interdisciplinary and multireligious backgrounds of the participants enriched our discussions about religious language.
- We made steps for long-term cooperation between the Centre for Digital Theology at Spurgeons College, London and the Faculty of Religion and Theology, Vrije Universiteit Amsterdam.