**Research Ideas for Topics of Social Science**

*Deadline for project proposal: 26th of April 2019*

1. **The formation of ISIS’ social media network**

The influence of social media as a communication channel is increasing and with it its effect on conflict actors (Zeitzoff 2017). Terrorist groups are using platforms like Facebook, Twitter and YouTube for spreading their ideology, recruitment and communicating to their network. Especially for the rise of the Islamic State (ISIS), social media played an important role (Ferrara 2017). These illegal social networks are defined as ‘convert networks’ and pose an increasing risk to society (Freeman et al. 2017). Recent research shows the relevance of analyzing convert networks to identify sentiments and trends, which can be used as an additional source of information in the fight of terrorism (Awan 2017: Ferrara 2017; Freeman et al. 2017; Mitts 2017; Zeitzoff 2017).

This paper analyses the effect of social media on the Syrian conflict. In detail, 17,411 pro-ISIS tweets at the peak of the conflict between 2015 and 2016 are studied, answering the following research questions, **how ISIS’ ideology spread between 2015 and 2016 on social media and how this reflected the development of the Syrian conflict**. This paper analyses the connection between members of the network using 3,717 pro-ISIS tweets between 2015 and 2016 that refer to another pro-ISIS twitter user. In addition, the project filters categories of tweets and uses these to map the network of pro-ISIS twitter users to analyze overlapping topics between users and identify ‘brokers’, who tweet on different topics.

The analysis follows two steps:

* First, the content of the tweets is analyzed using textual analysis to filter different categories of pro-ISIS content between 2015 and 2016 and its degree of severity. Using network analysis, the categorization of tweets helps to identify users who tweet on overlapping topics.
* Second, the network is studied over time, comparing it to key events from the Syrian conflict over two years trying to understand how social media helped in spreading ISIS ideology. The project aims to identify whether the spread of certain topics changed over time with key events during the conflict.

The dataset can be found here: <https://www.kaggle.com/fifthtribe/how-isis-uses-twitter>

ADDITIONAL IDEAS FOR ANALYSIS:

Geospatial Analysis:

* *Do tweets provide sufficient information to identify key locations of users in the social network?*

Relational Analysis:

* *Which users are the major players in the network? What content are these players posting?*
* *Is there any relationship between the names users chose?*
* *Which clergy is most influential?*

Time Analysis:

* *Are there any time peaks in the network? Are these overlapping with key events in the Syrian conflict?*
* *Can we define any contagion dynamics of ISIS propaganda?*
* *What pro-ISIS topics are most important? And are these situational or motivational?*

Sentiment Analysis:

* *Are pro-ISIS members of the network using positive or negative phrasing to motivate and recruit others?*
* *Do all pro-ISIS users agree on the ideology? Or can we identify differences?*