

Unsupervised detection of cultural boundaires and political events using Twitter data

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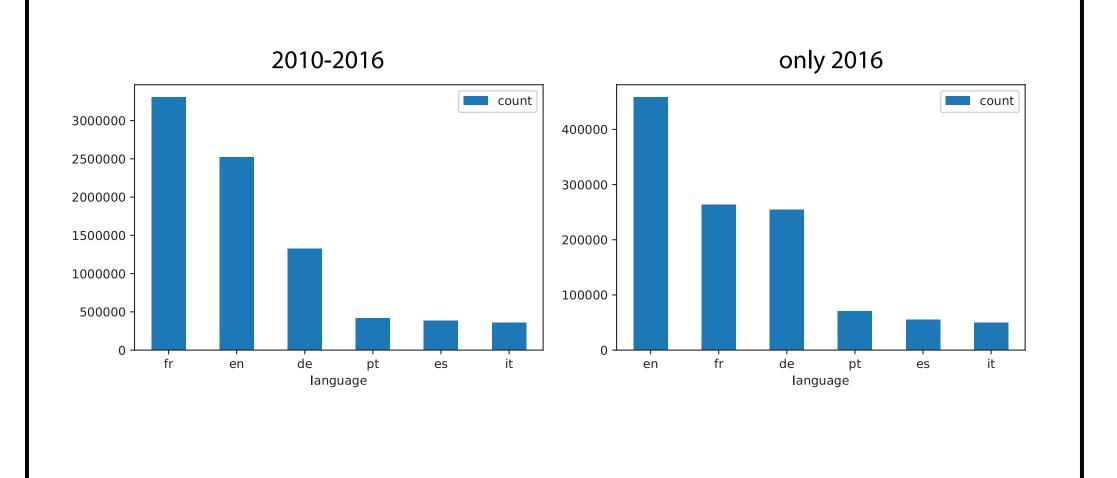
Introduction

Research questions

- 1) Does the density of the location of tweets correspond to population densities? Or are the tweets significantly more concentrated in cities?
- 2) Can we reconstruct the Ro stigraben only based on the language of tweets?
- 3) Are there any spikes in activity and do they correspond to particular events (e.g. referendums)
- 4) How involved are swiss people in politics on Twitter? Which areas are most involved?

Methods

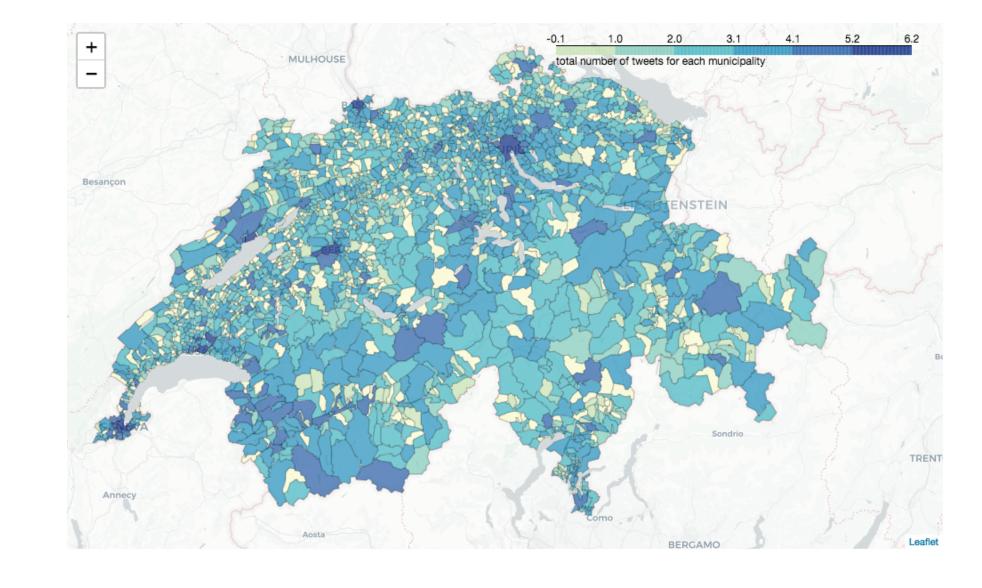
Language detection

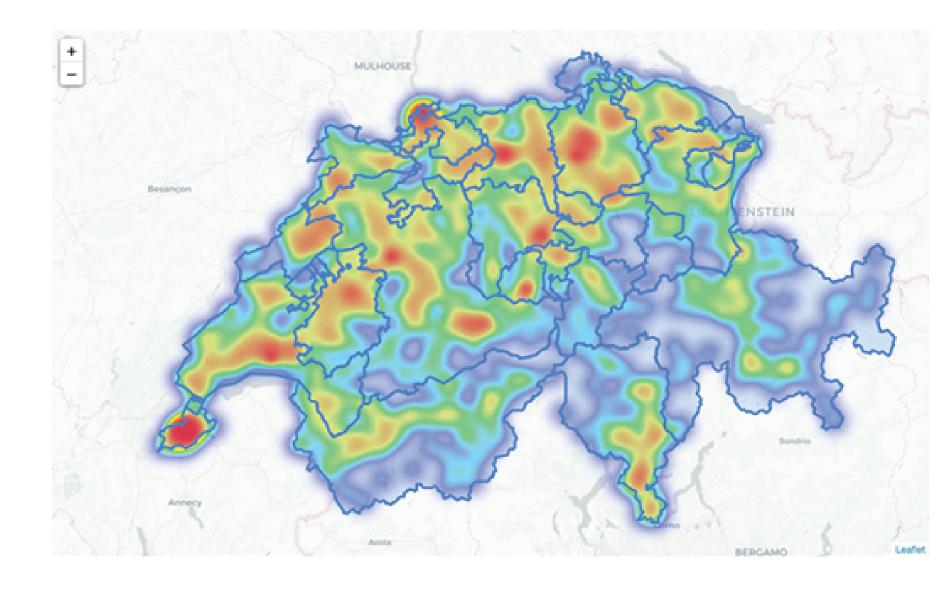


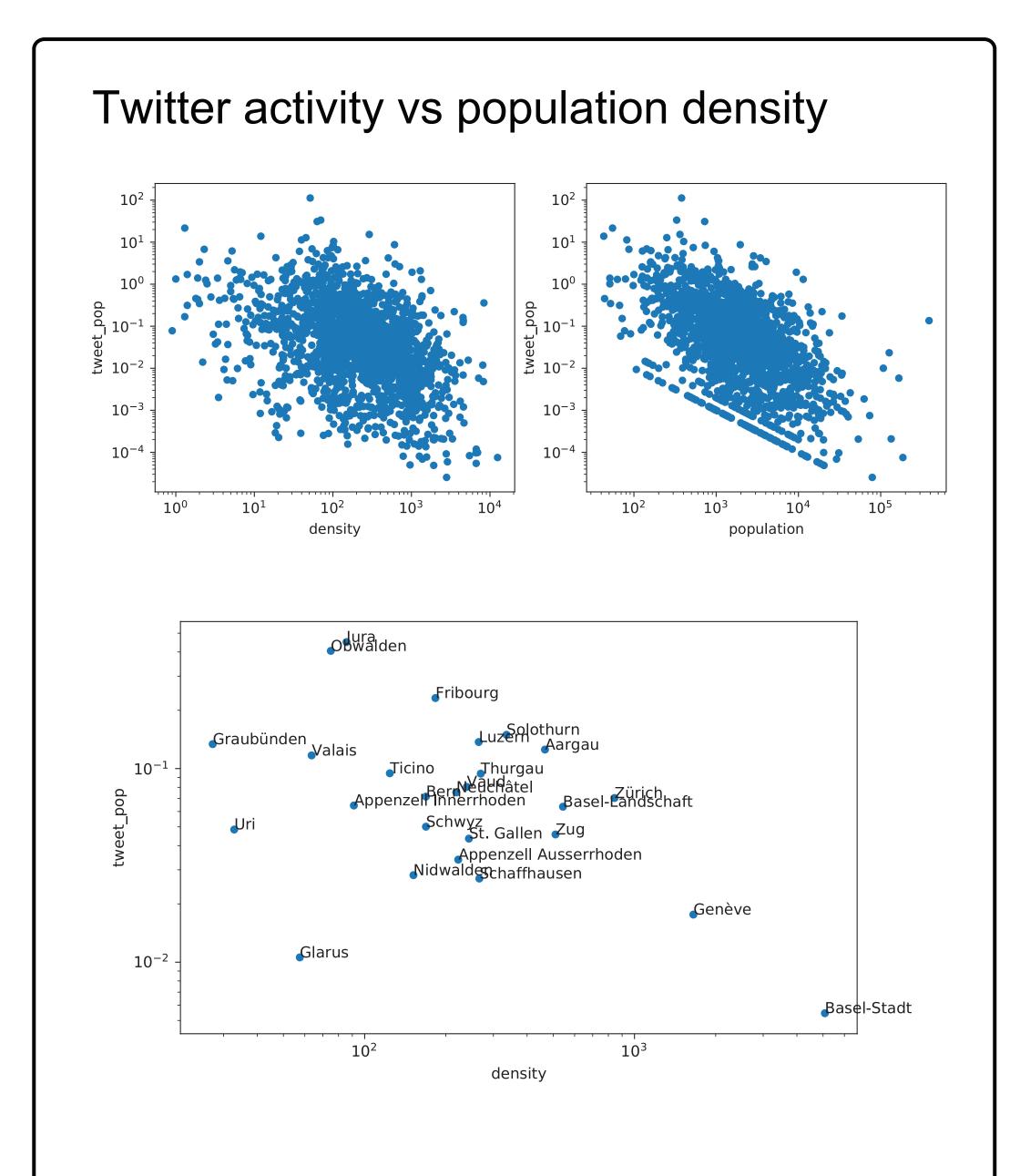
Flowchart for political content detection

Results

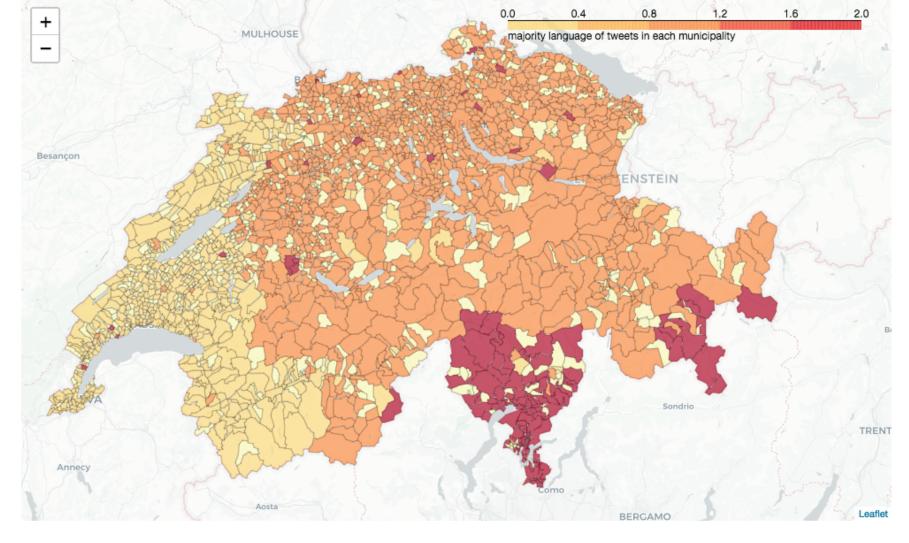
Visualization of twitter activity on map

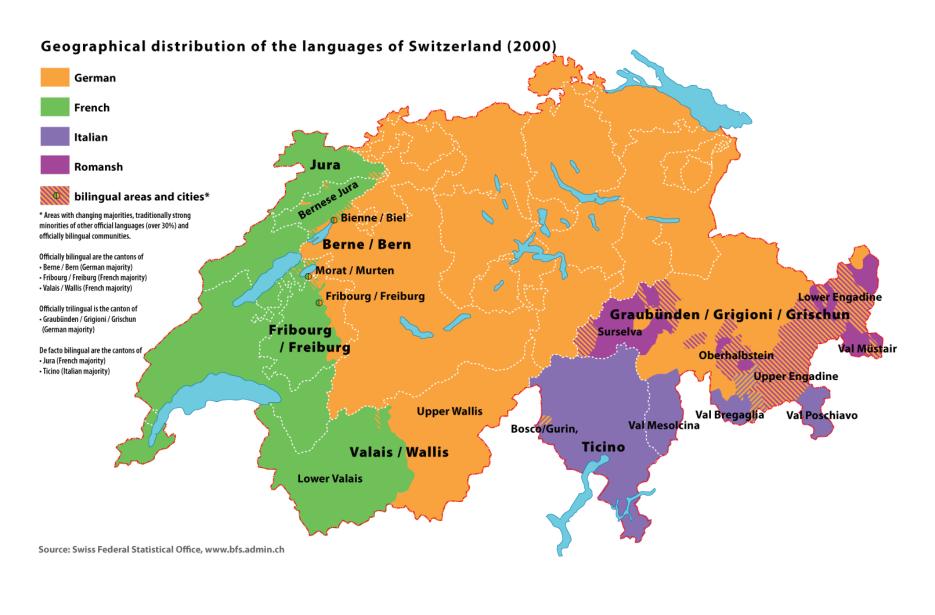




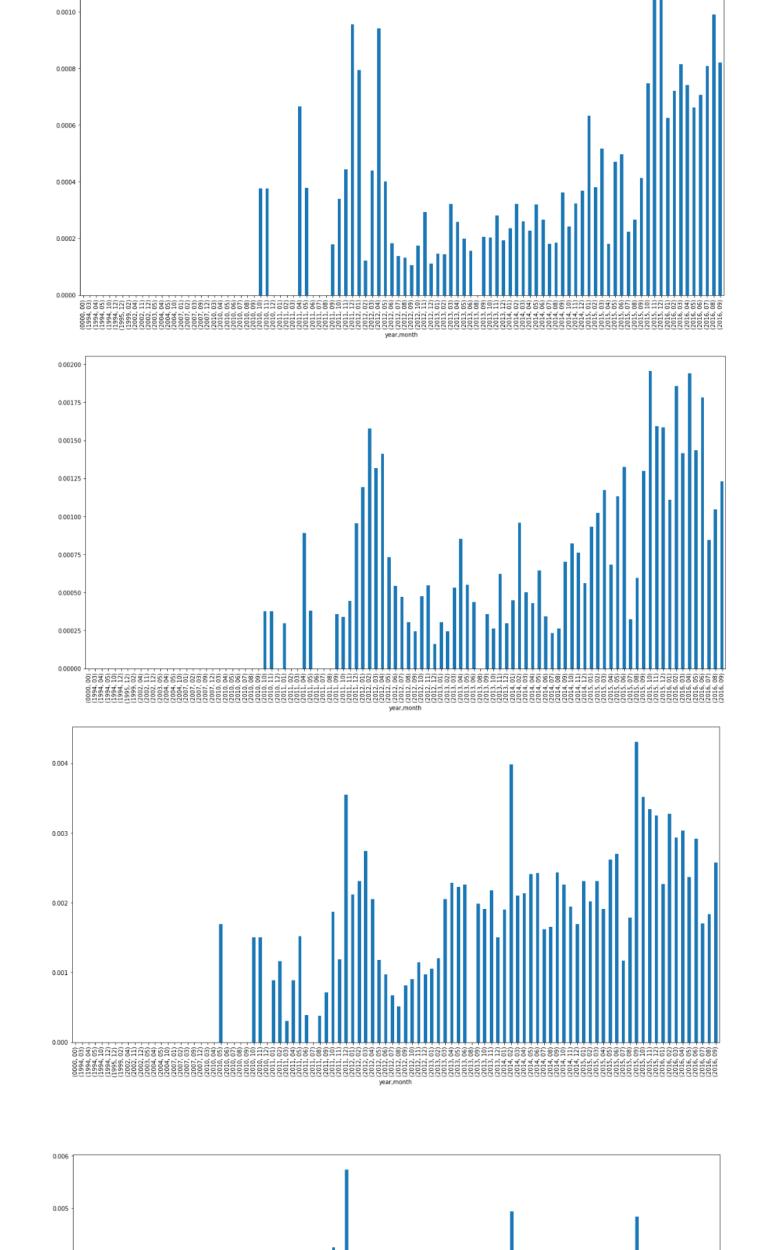


Röstigraben





Political activity



Conclusions

- 1) Negative correlation between population density and twitter activity.
- 2) We can very accurately resconstuct the Röstigraben
- 3) We can detect political content with our bootstrapping algorithm.
- 4) Our dataset was biased, the findings (especially the first) should be confirmed on other datasets

References