

1 Summary

We combine political communication and NLP to analyze the public's production and reception of frames in immigration discourse on Twitter

- We create a novel dataset of tweets labeled for multiple frame typologies
- We formulate frame detection as multilabel classification task
- Region and ideology influence framing
- Framing impacts audience responses

Joe Biden @JoeBiden · Jan 24
Immigrants have always made our country stronger. Our diversity is, and has always been, our greatest strength. Donald Trump doesn't get that — we need a president who does.

Donald J. Trump @realDonaldTrump
Democrats are the problem. They don't care about crime and want illegal immigrants, no matter how bad they may be, to pour into and infest our Country, like MS-13. They can't win on their terrible policies, so they view them as potential voters!

2 What is a Frame?

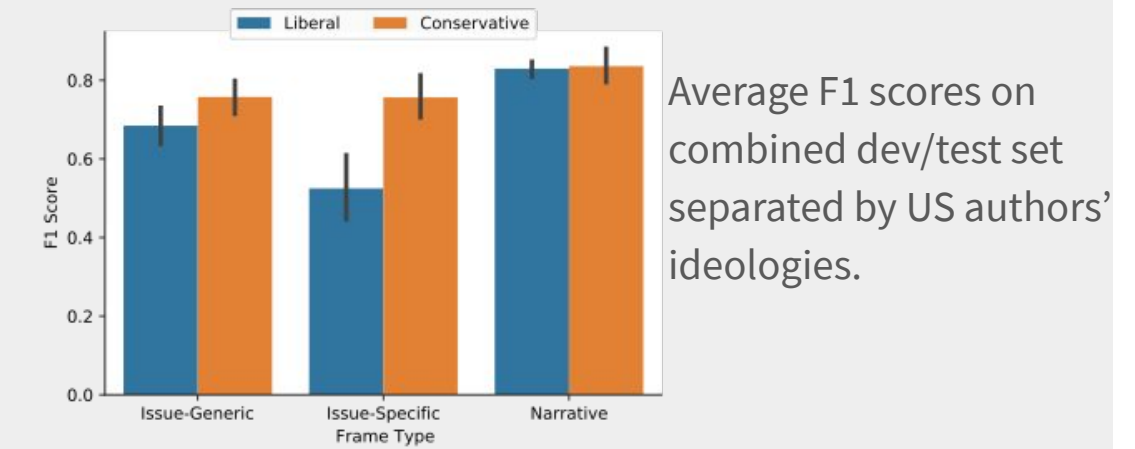
- “Selecting some aspects of a perceived reality and make them more salient in a communicating text” [Entman, 1993]
- Issue-generic Policy**
 - Crime, morality, economic, political
- Issue-generic Narrative**
 - Episodic*: focus on specific actions, examples, case studies, or events
 - Thematic*: more generic views, placing story in broader social/political context
- Immigration-specific**
 - Victims (e.g. war, discrimination)
 - Heroes (e.g. economy, cultural diversity)
 - Threats (e.g. jobs, public safety)

3 Data Collection

- 2.6M English tweets, 2018-2019
 - With immigration term, e.g. immigrant, undocumented, illegals
- 4.5K tweets annotated for all frames explicitly cued
 - 80-10-10 train, dev, test split
- Infer users' regions (US, UK or EU) & ideology with existing tools [Compton et al., 2014, Barberá 2015]

4 Frame Detection

- Multilabel classification layer for each frame type atop fine-tuned RoBERTa LM

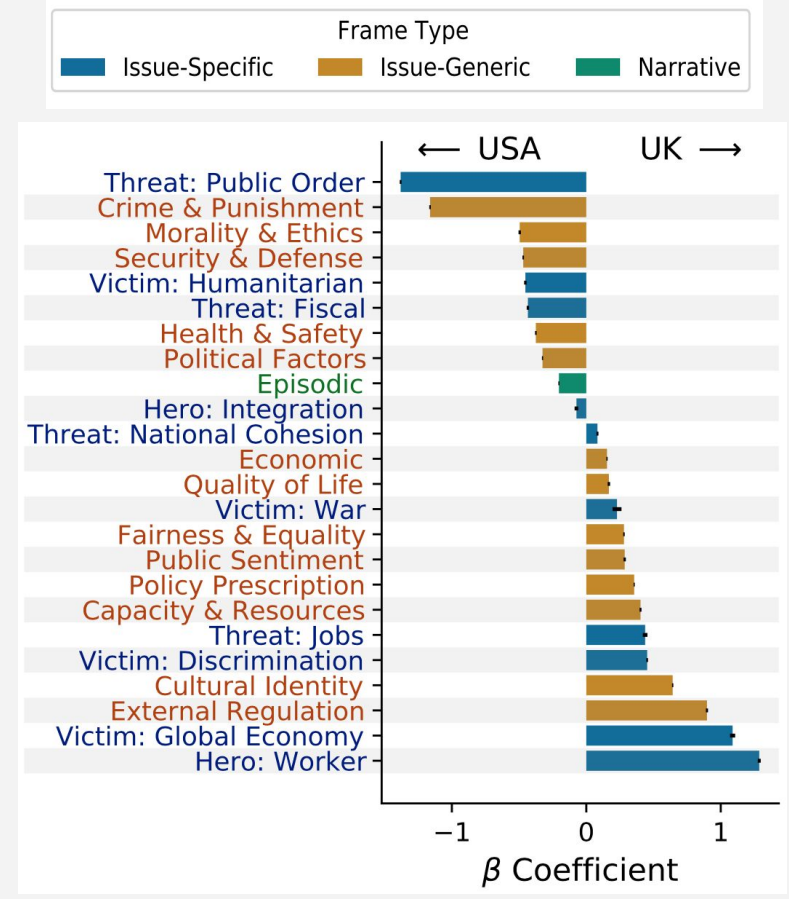


- Higher performance for conservatives suggests that they are more consistent than liberals in framing immigration

5 Analysis of Framing and its Effects

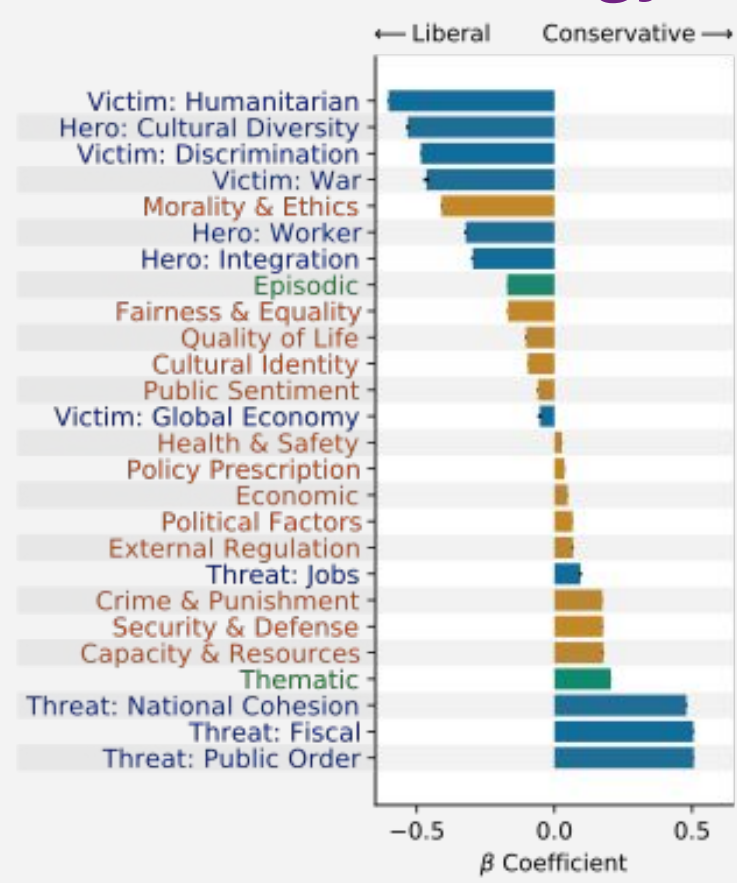


Region: USA vs UK



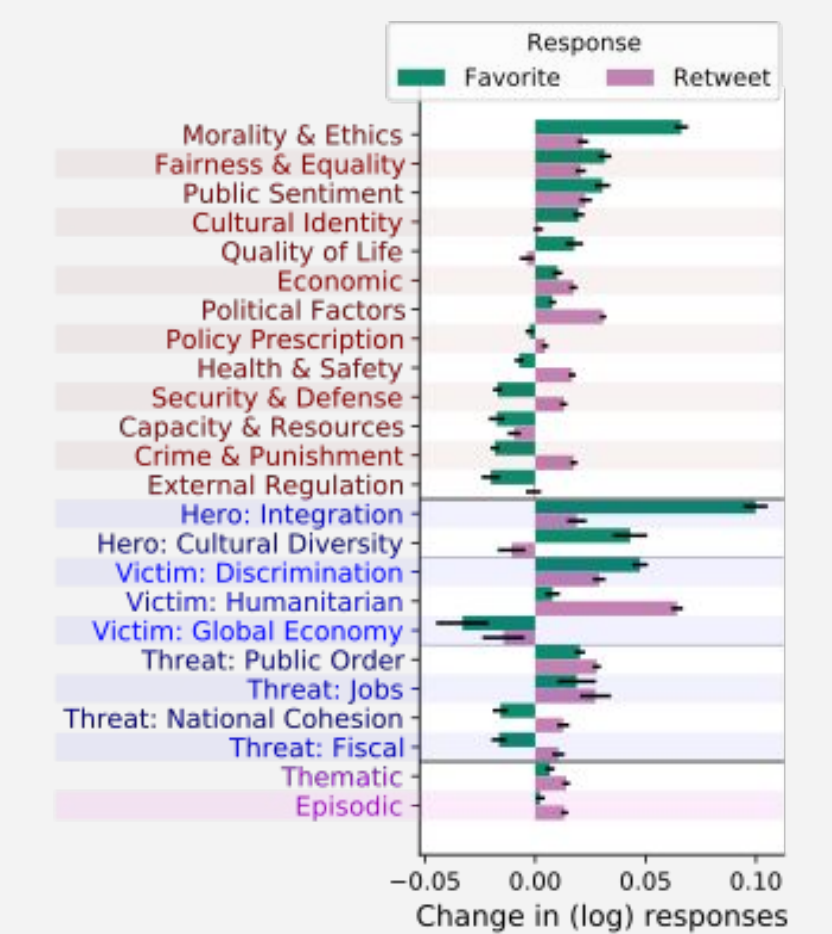
- USA**: Ideologically extreme frames (e.g. threat: public order, morality) most associated with USA
- UK**: more economy/labor, culture, global relationships

Political Ideology



- Liberals**: immigrants as heroes and victims & prefer episodic frames
- Conservatives**: immigrants as threats & prefer thematic frames
- Issue-specific frames are most ideologically extreme & reveal differences otherwise obscured

Audience Responses



- Favorites**: cultural, human interest
- Retweets**: security, safety, political
- Clear narratives are important. Both episodic and thematic frames get higher engagement