The Moral Rhetoric of Climate Change

Research Questions

What types of Moral Rhetoric are present in media coverage of climate change?

Do they depend on political ideology?

How do events affect moral rhetoric in the media?

Moral Foundations Theory


- 5 categories of moral concerns:
  Authority (command; duties; protest)
  Fairness (balanced; honesty; injustice)
  Harm (care; damage; protection)
  Loyalty (ally; group; national)
  Purity (dirty; exploitation; integrity)

- Moral Foundations Dictionary
  (Graham et al., 2009)
  A set of terms associated with each concern

Measuring Moral Rhetoric

- Based on Sagi & Dehghani (2014)
- Words as vectors in a semantic space
- Data points: Contexts of use of key terms
  - global warming
  - climate change

- Basic measure: Angle between vectors of key terms and terms from the Moral Foundations Dictionary

The Corpus

Online News Articles

- 23 online news sources
- Covers 2008-2013
- Rated for ideology
- 18,906 articles
- about 16M words
- Selected based on inclusion of climate change or global warming in article

Semantic Spaces

- Topicality: Words that occur together are likely to relate to the same topic
- Based on Infomap (Takayama et al., 1999)
- Similar to Latent Semantic Analysis (Deerwester et al., 1990)
- Semantic space is based on patterns of word co-occurrence
- Linear space generated using Singular Value Decomposition (generalized factoring)

Loadings of Moral Rhetoric by Ideology

- Progressive
- Conservative
- Authory
- Fairness
- Harm
- Loyalty
- Purity

The Effect of Climategate on Rhetoric

- progressives
- conservatives
- climate change
- Global Warming

Summary of Results

- Climate change debate rhetoric focuses on:
  - harm to the environment
  - loyalty to the national interest

- Ideology affects rhetoric
  - Conservative media shows lower levels of rhetoric
  - ... but only for climate change

- Both groups show lower levels of rhetoric for global warming

- Climategate had a minimal effect on media coverage
  - Progressive media exhibited a decrease in authority rhetoric and an increase in purity rhetoric.

References