# THE NEVER ENDING STORY

*The Cultural Evolution of Narratives*

*Part IX...*

# THE NEVER ENDING STORY

*The Cultural Evolution of Narratives*

*By*

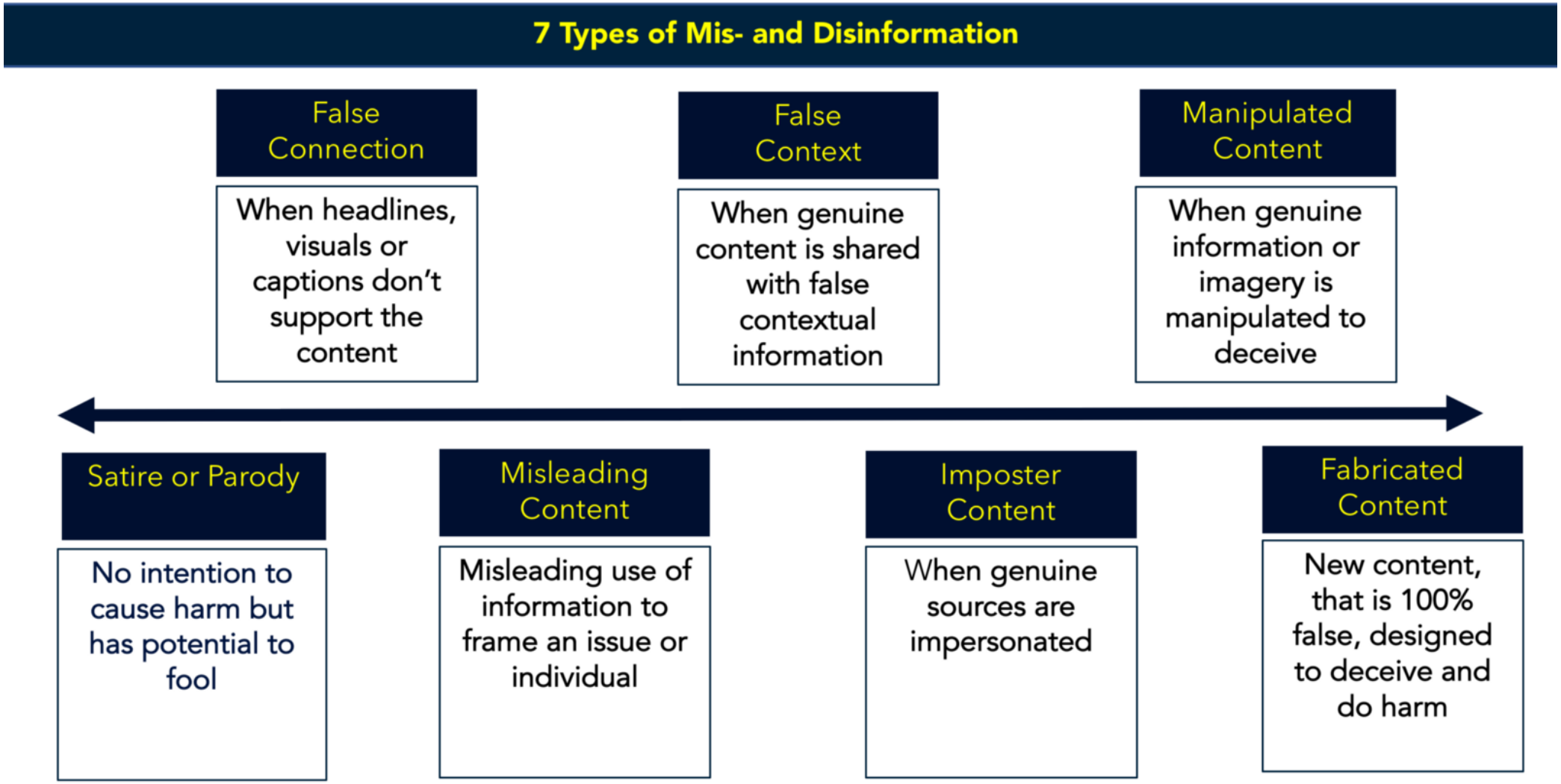
*Joe Stubbersfield*

# FAKE NEWS!

# “Fake News”

- Major contemporary issue
- Negative effect on
  - Polarisation
  - Democracy
  - Trust
- Role in key events i.e. Brexit, 2016 US election

# But what is Fake News?




(Wardle, 2017)

# But what is Fake News?

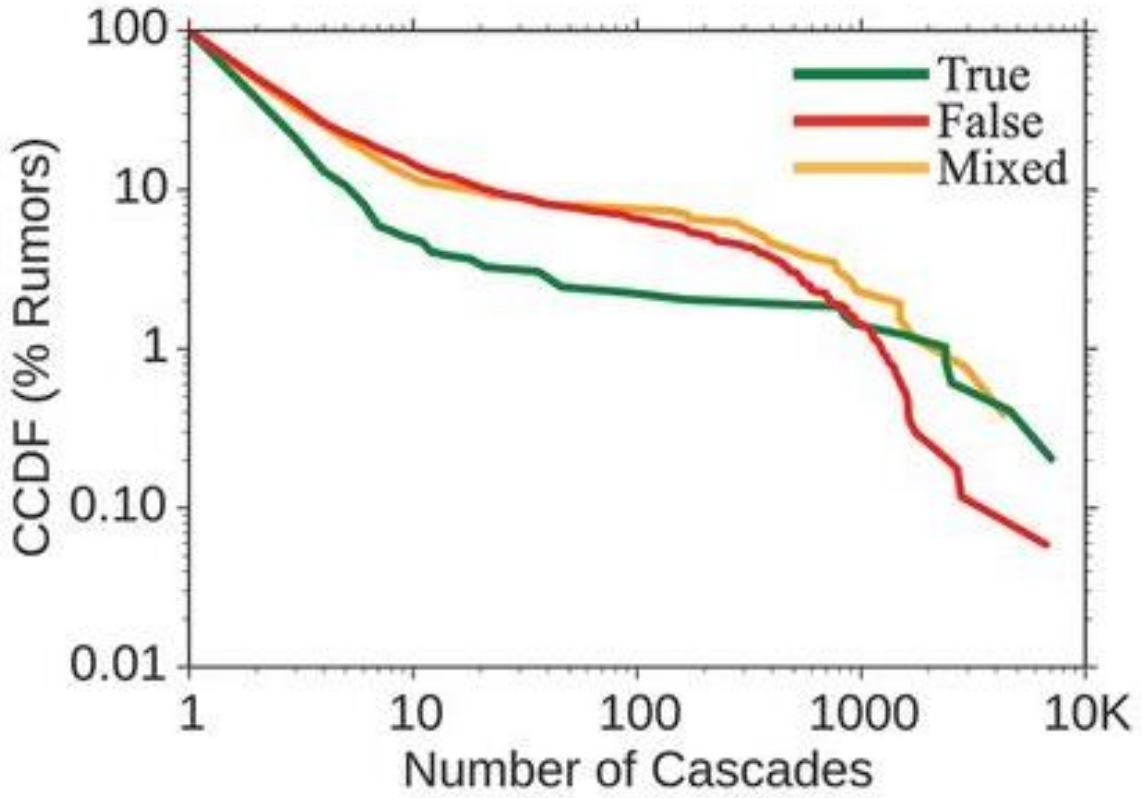
- Contemporary version of conspiracy theories, urban legends etc.
- Ultimately: more stories
- Subject to same cultural evolutionary processes as other narratives
- Apparently very successful

# Vosoughi, Roy & Aral 2017

- Diffusion of verified true and false news
- 4.5million tweets 2006 - 2017:
  ~3million users tweeting
  ~126,000 news stories
- Number of ‘cascades’:
  unbroken retweet chain with common origin

# Vosoughi, Roy & Aral 2017

- True stories 6 x as long to reach 1500 people
- 20 x as long to reach cascade depth of 10



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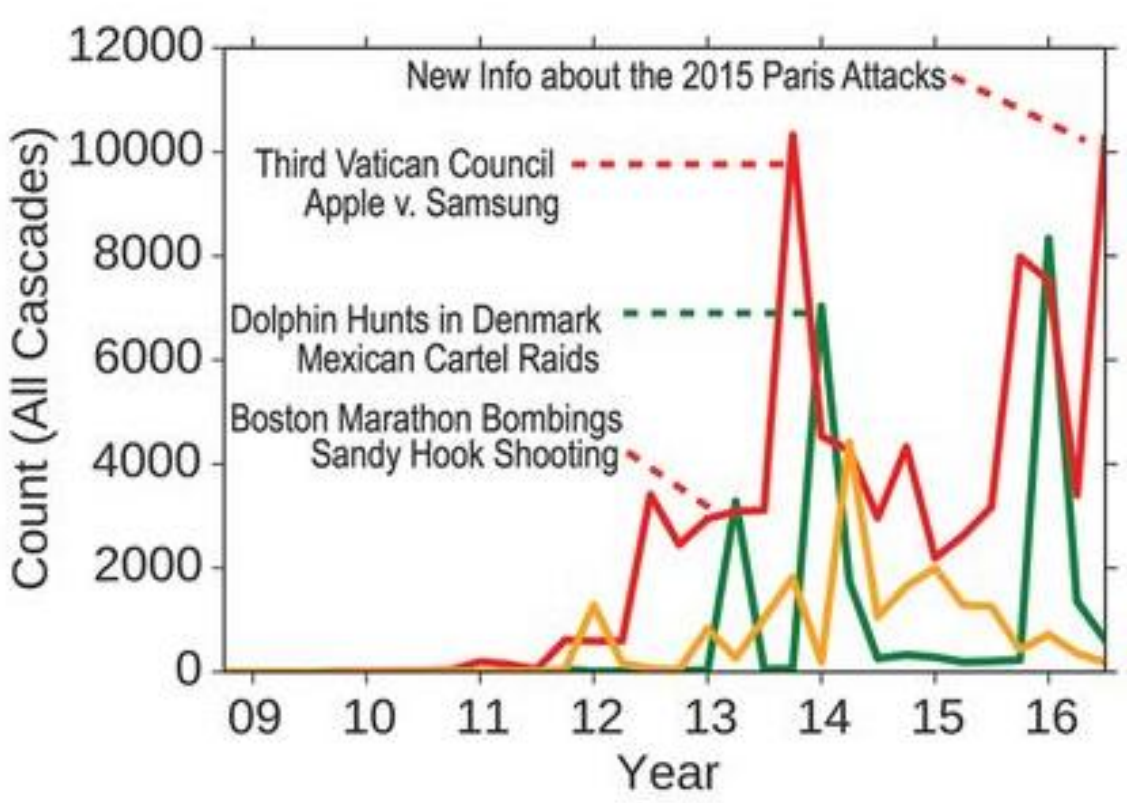


# Cultural Evolution and Fake News

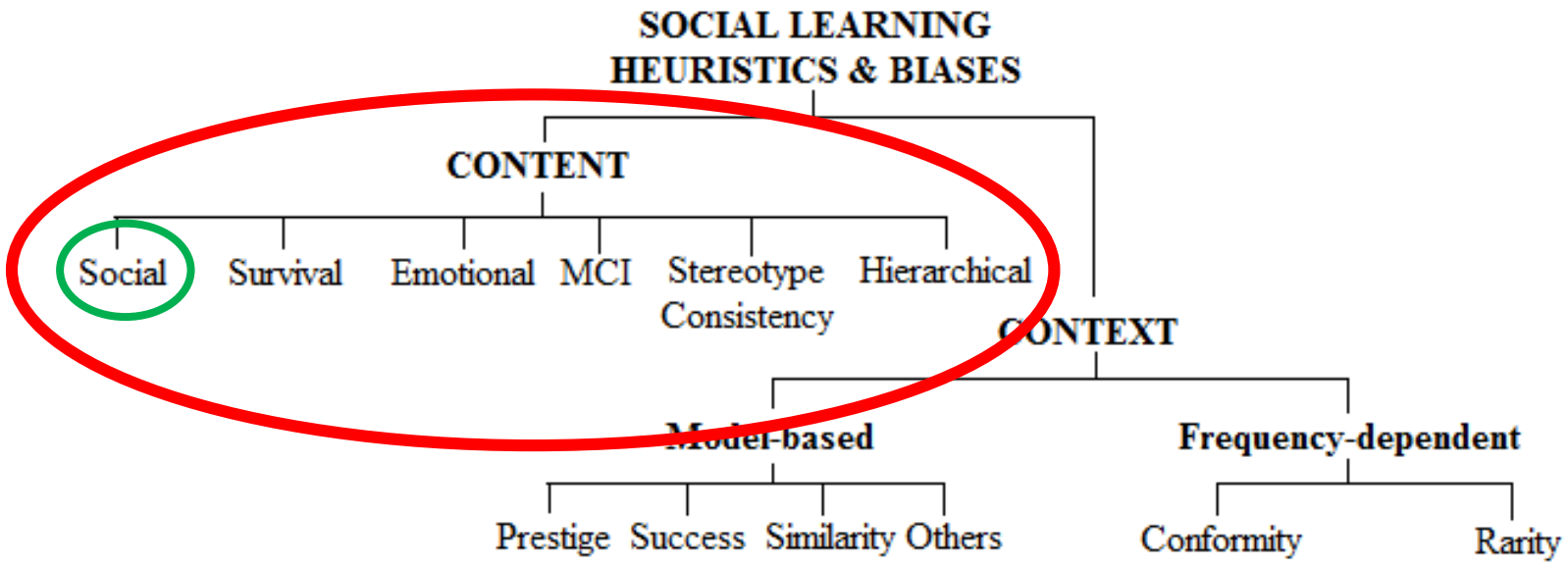
- Exploitation of biases
- Social information
- Negativity Bias
- Ingroup favouritism/outgroup negativity
- MCI etc..

# Biases and Fake News

Acerbi 2019

- Content analysis
- 260 fake news articles
- Coded for presence of bias-evoking content
- 86% contained relevant content

# Content biases and fake news



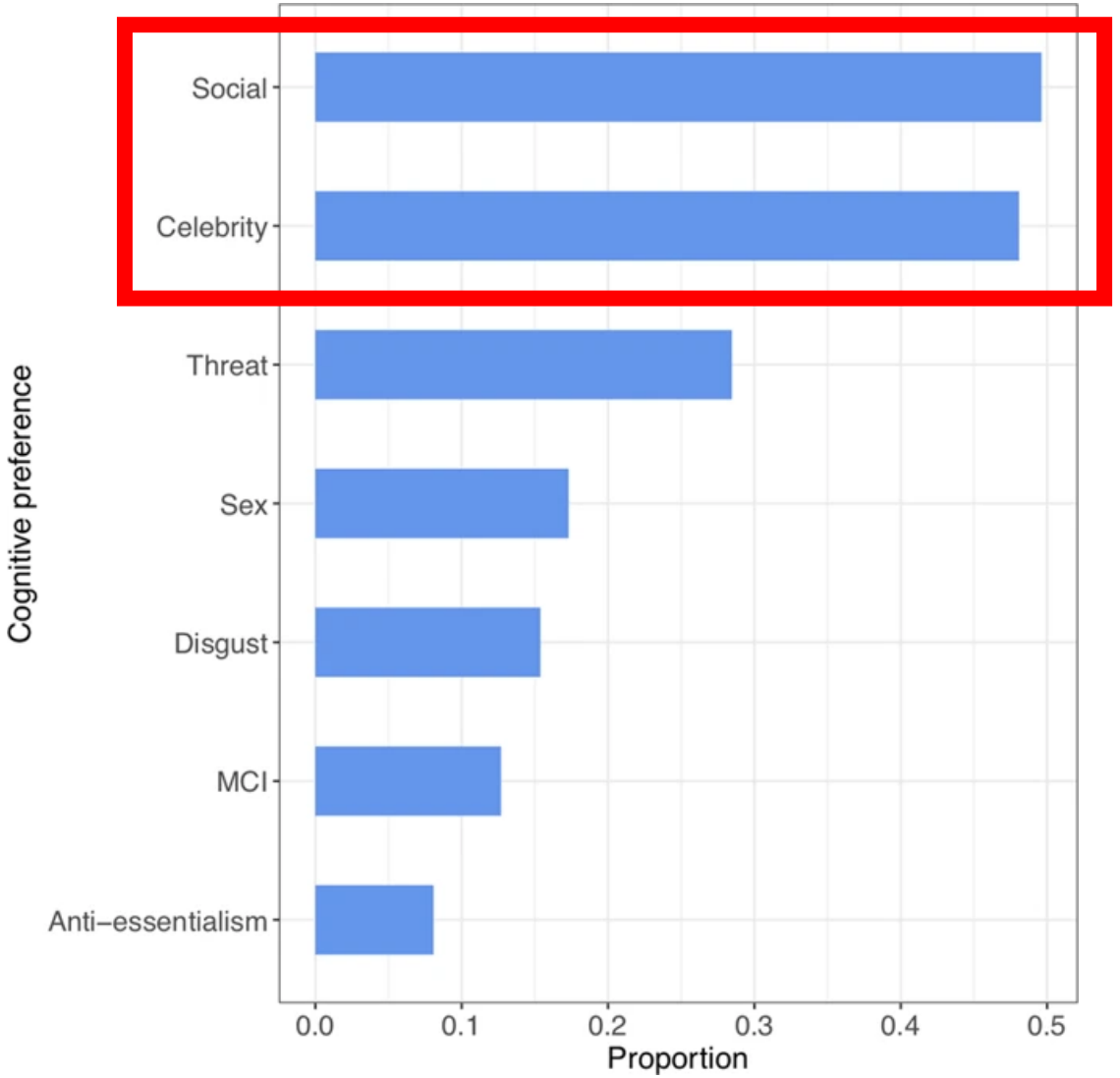
# Social Information Bias

- Social information bias
- Greater intelligence - Forming and keeping track of alliances and relationships in a large, complex social groups
- Attend to, recall and transmit social information

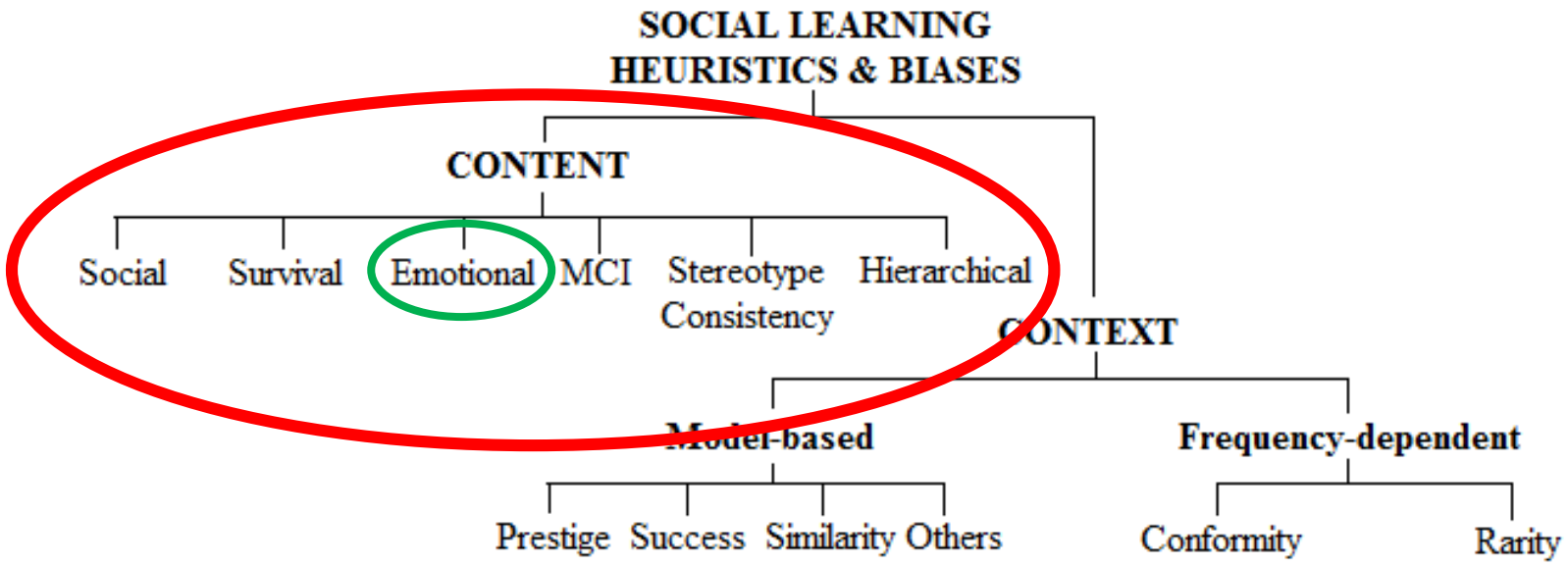
# Social Information Bias

Acerbi 2019

- Social interactions and gossip (50%)
- Celebrity content (48%)
- Most common



# Content biases and fake news



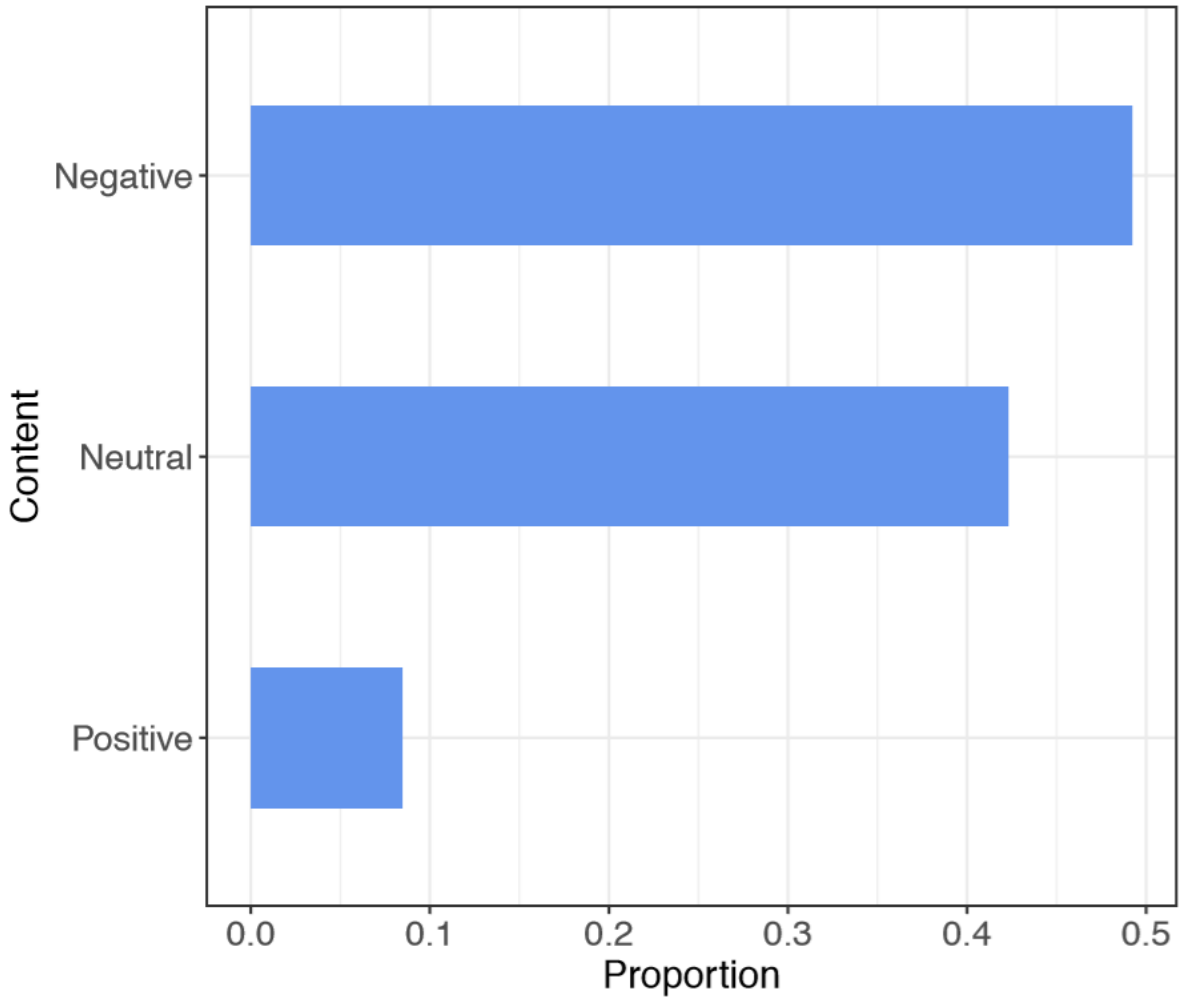
# Negativity Bias

Vosoughi, Roy & Aral 2017

- Common emotions: fear, disgust, and surprise

Acerbi 2019

- < 10% coded as positive
- Negative 5 x more numerous
- ~15% elicited disgust (largely absent from real news)



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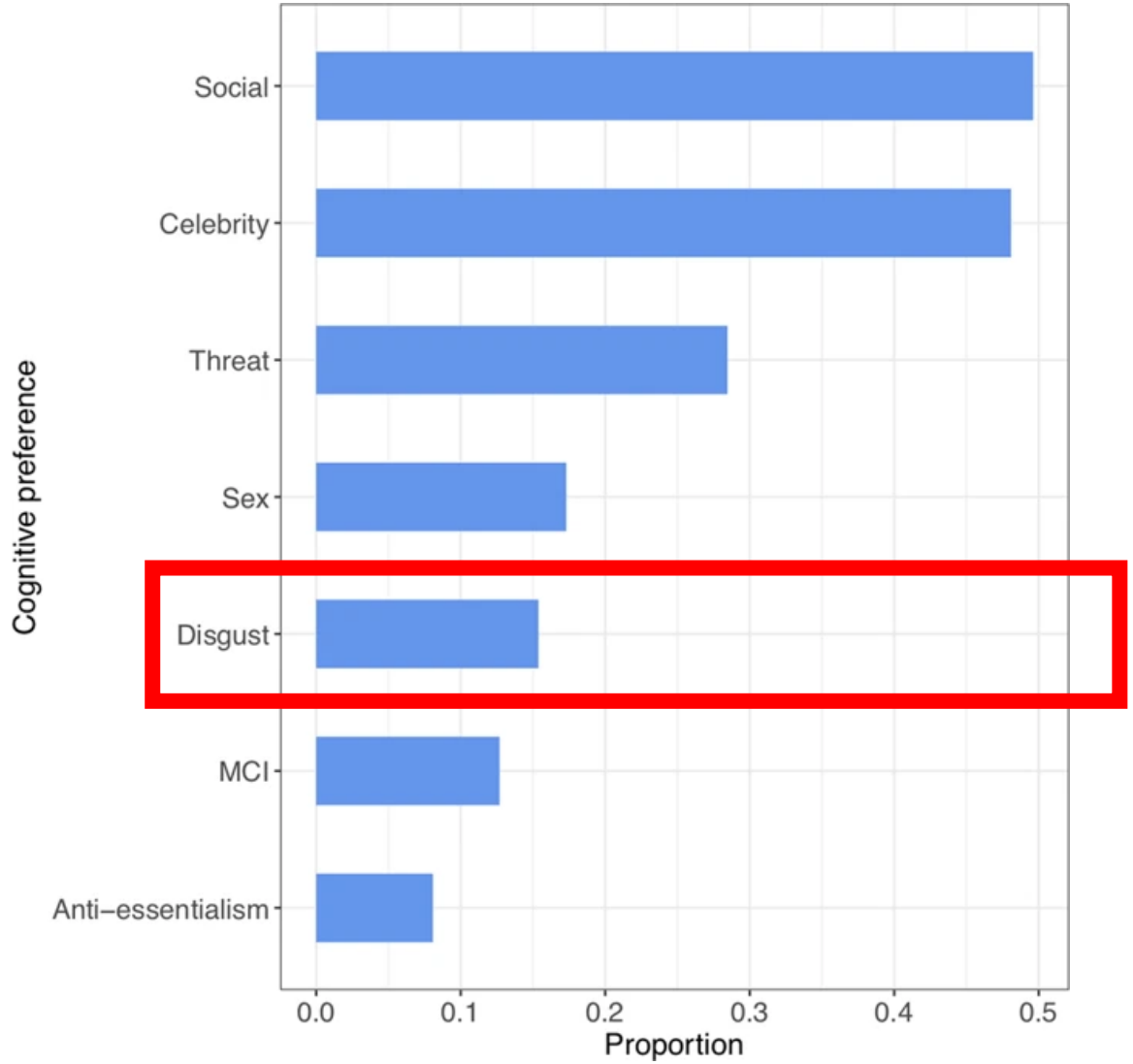
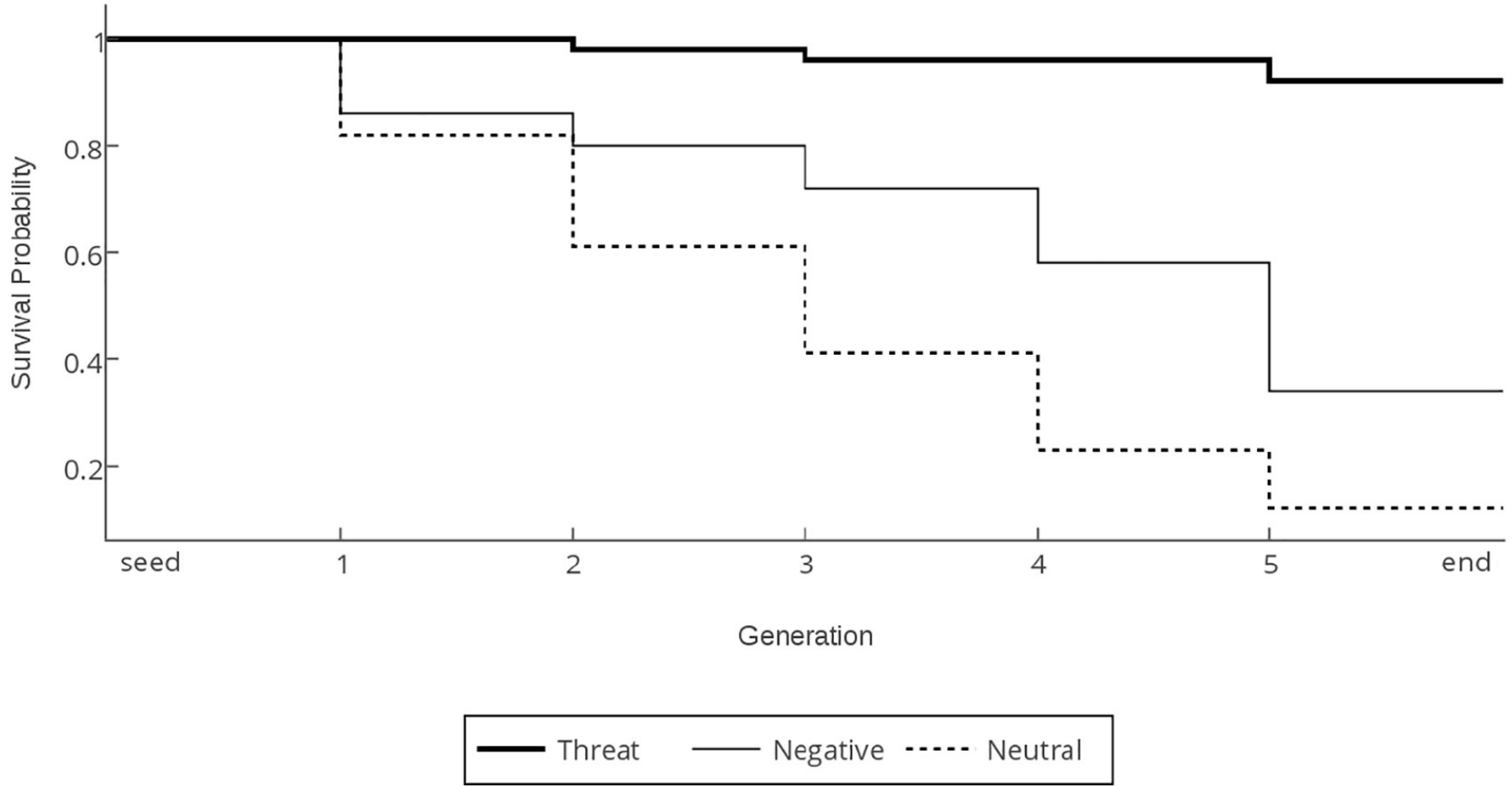


# But why might this be the case?

# Threat bias

## Blaine & Boyer 2018



# What's more believable?

"Despite their fierce appearance, German shepherds are considered loyal and intelligent pets. A recent study in the U.S. notes that other breeds of dog are responsible for 89% of dog attacks"

"Although proponents consider German shepherds loyal and intelligent pets, a recent study in the U.S. notes that this breed is responsible for 11% of dog attacks"

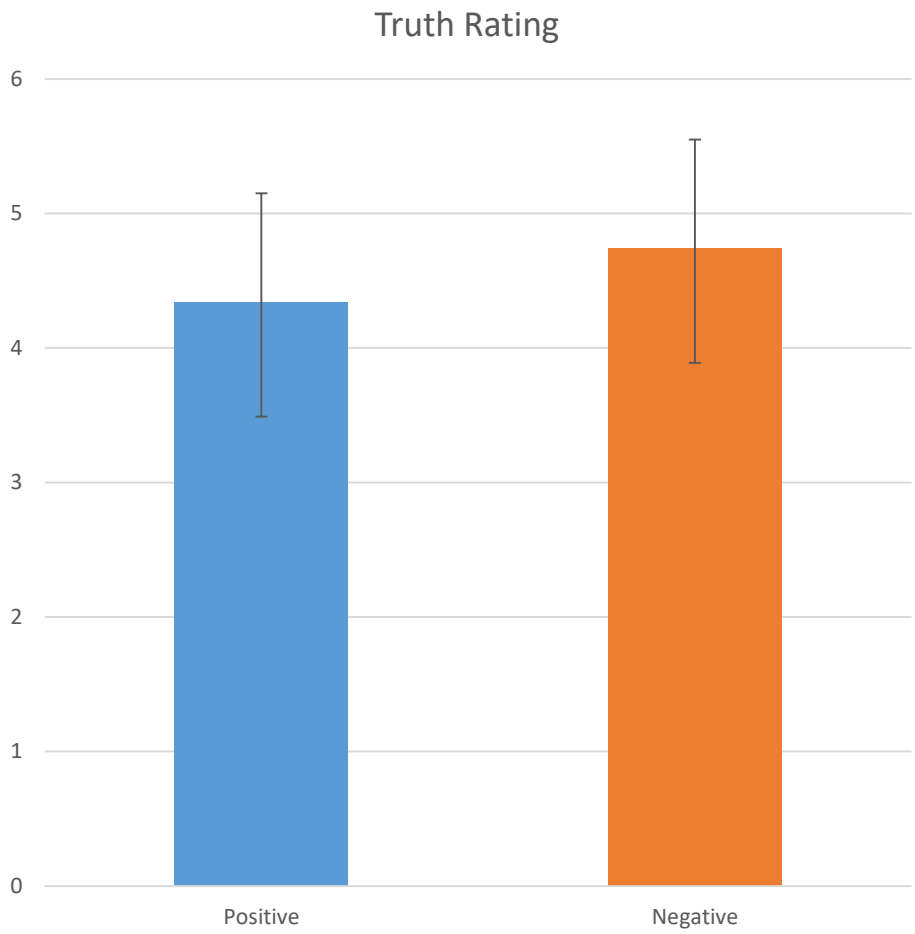
# What's more believable?

"Many people find rare ground beef patties delicious. However, 13% of ground beef patties contain bacteria that could cause illness if eaten rare"

"Many people find rare ground beef patties delicious. 87% of ground beef patties are free of bacteria that could cause illness if eaten rare."

# Negativity Credulity: Fessler et al 2014

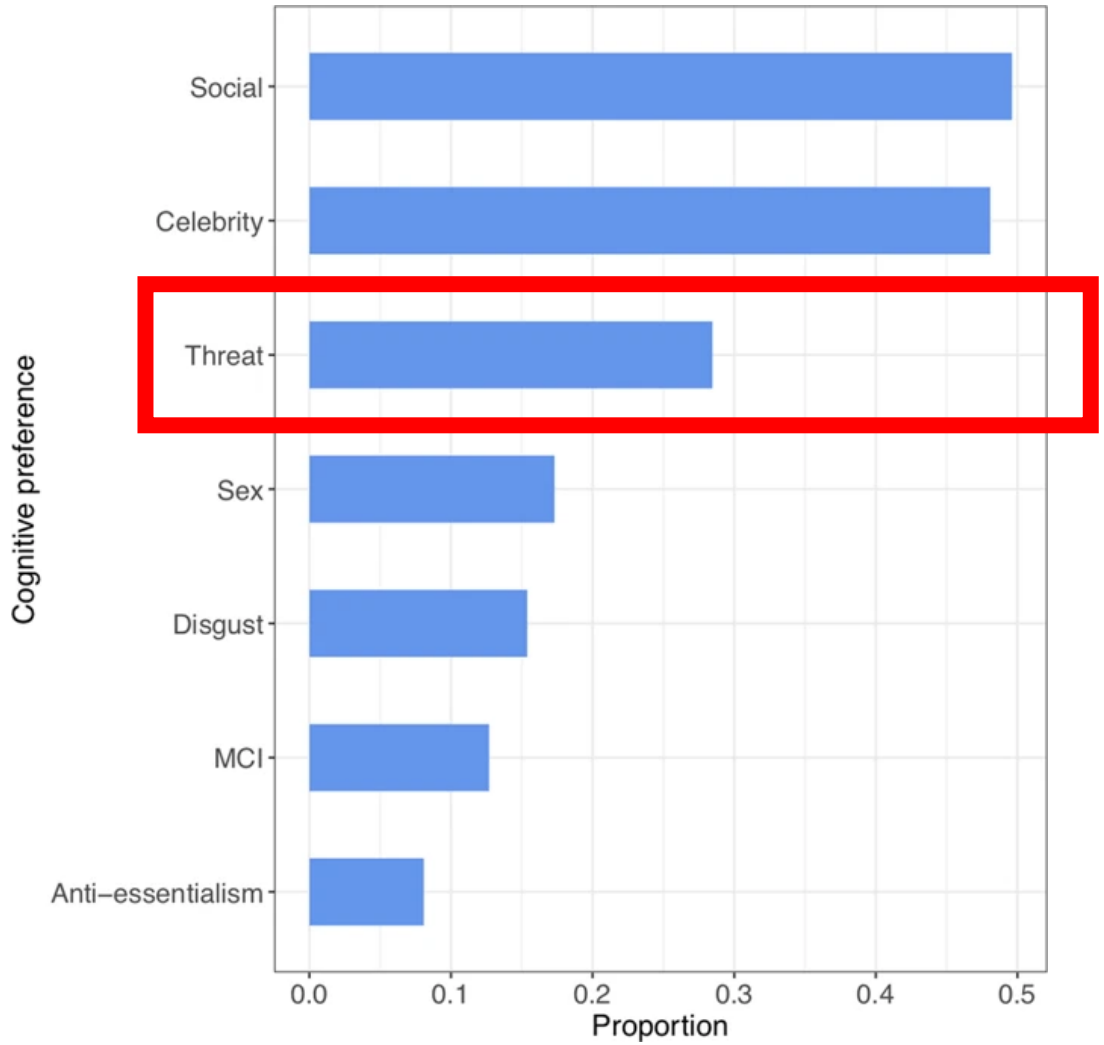
- Online survey: “Truth or Trash? How Believable is the News today?”
- Two versions with items framed positively or negatively
- Rated statements from 1 - 7
- Rated negatively framed items as more likely to be true



# Threat Bias in Fake News

Acerbi 2019

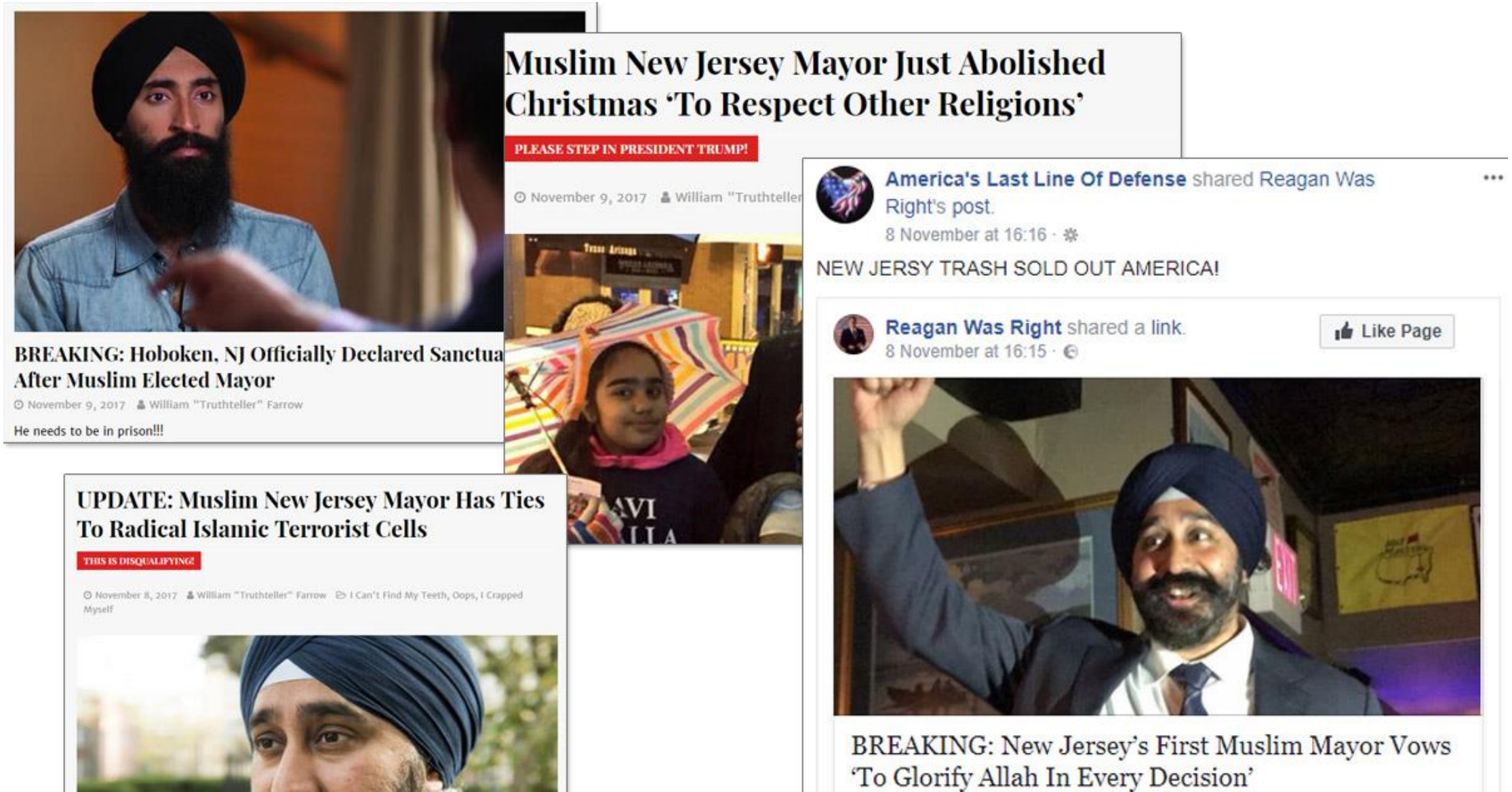
- ~30% were threat related
- Fake News about killers, bombers, sexual offenders



# Outgroup threats

- Negativity/Threat + Ingroup/Outgroup
- Powerful combination of biases

# Outgroup Negativity in Fake News



BREAKING: Hoboken, NJ Officially Declared Sanctua
After Muslim Elected Mayor

November 9, 2017 William "Truthteller" Farrow

He needs to be in prison!!!

Muslim New Jersey Mayor Just Abolished Christmas 'To Respect Other Religions'

PLEASE STEP IN PRESIDENT TRUMP!

November 9, 2017 William "Truthteller

America's Last Line Of Defense shared Reagan Was Right's post.

8 November at 16:16

NEW JERSY TRASH SOLD OUT AMERICA!

Reagan Was Right shared a link.

8 November at 16:15

Like Page

UPDATE: Muslim New Jersey Mayor Has Ties To Radical Islamic Terrorist Cells

THIS IS DISQUALIFYING!

November 8, 2017 William "Truthteller" Farrow I Can't Find My Teeth, Oops, I Crapped Myself

BREAKING: New Jersey's First Muslim Mayor Vows 'To Glorify Allah In Every Decision'

# Other biases?

- Sex and ~~romance?~~ disgust
- Sexual themes in 17% of articles (Acerbi, 2019)
- Commonly involved disgusting content

1,204,400

Babysitter transported to hospital after inserting a baby in her vagina

Angry Woman Cuts Off Man's Penis for Not Making Eye Contact During Sex

981,423

Angry Woman Cuts Off Man's Penis for Not Making Eye Contact During Sex - TRENDING

672,093

Couple hospitalized after man gets his head stuck in his wife's vagina

# Other biases?

- MCI?

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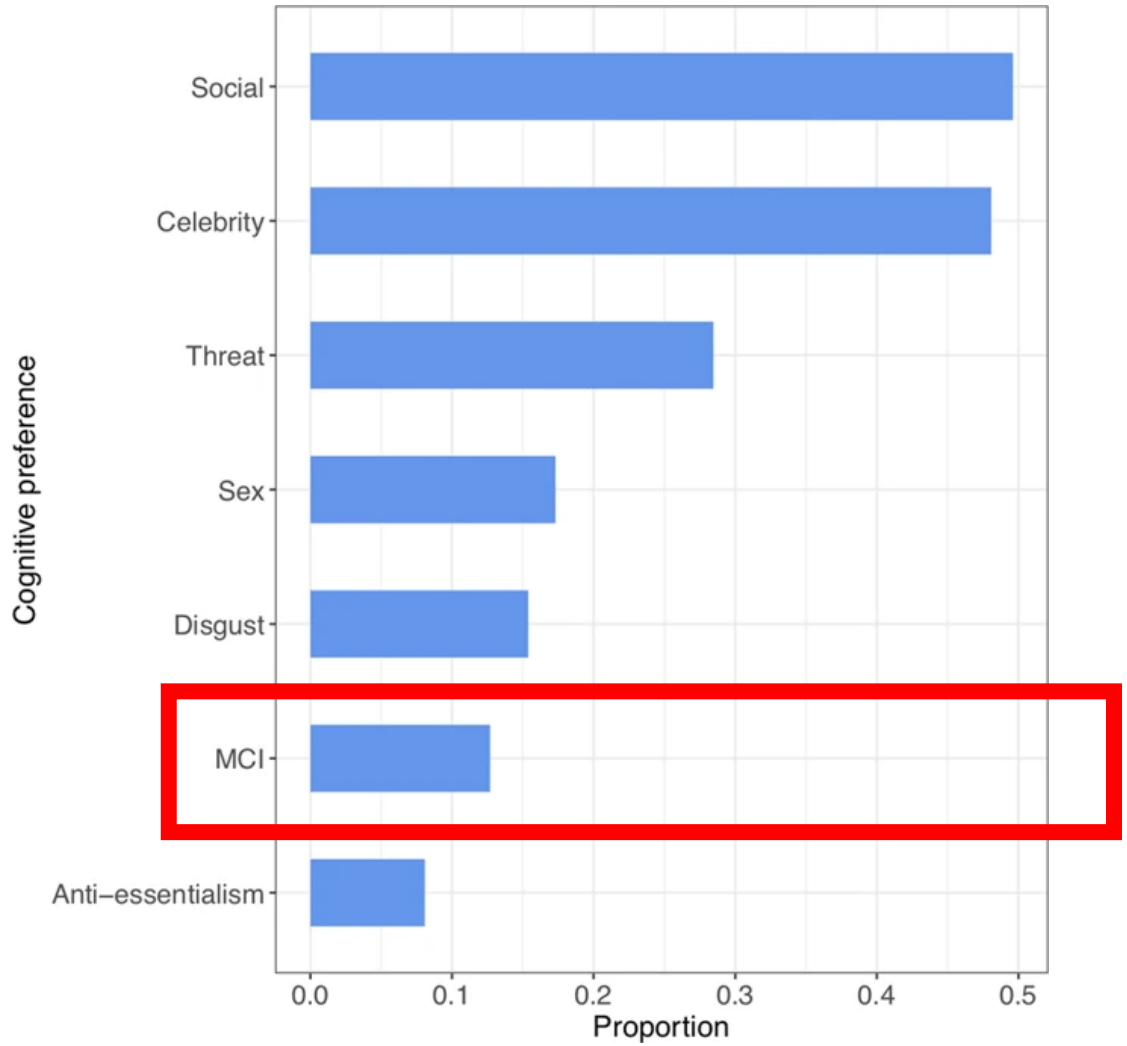
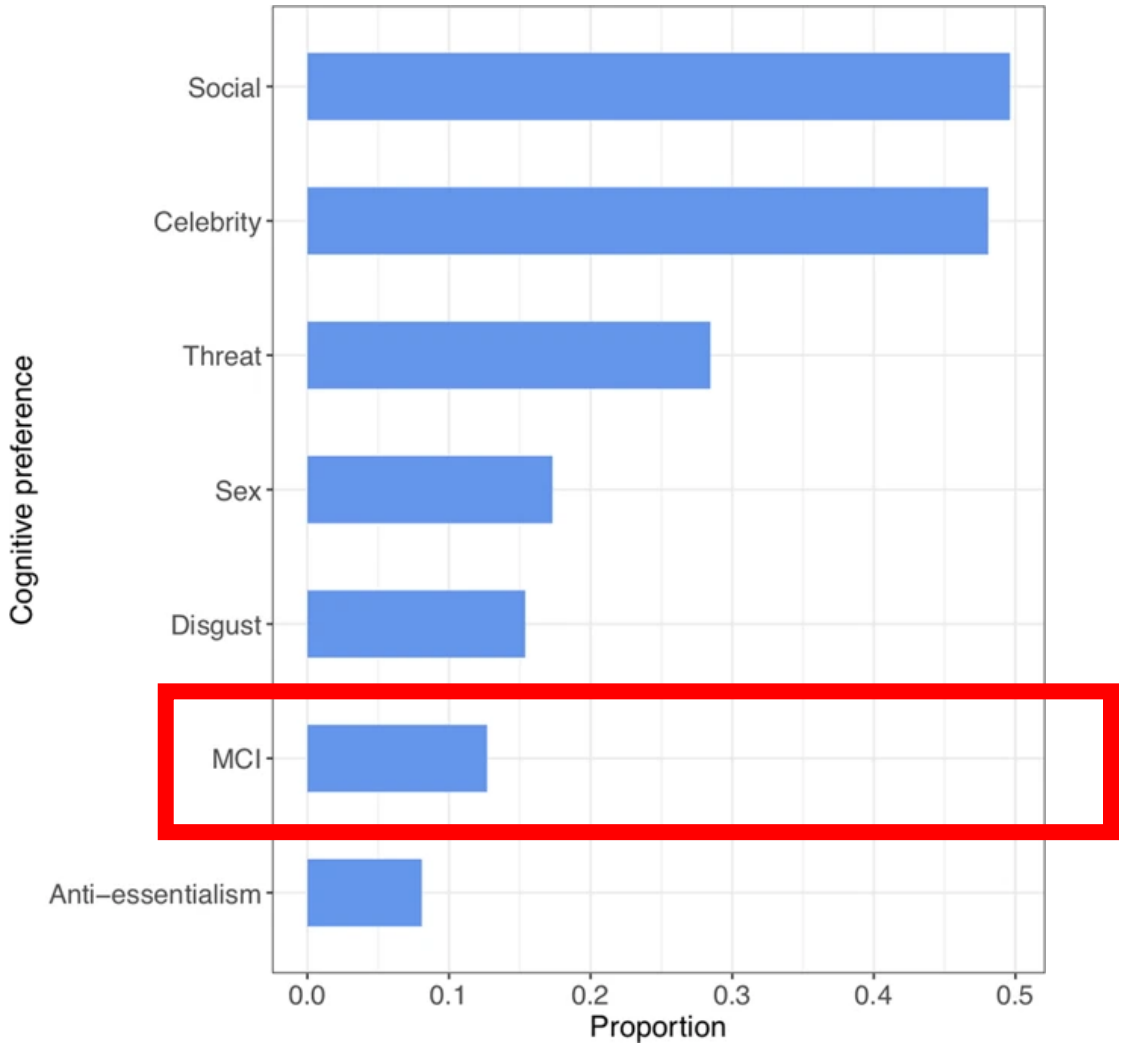
- Relatively low – 13% (Acerbi, 2019)



# Other biases?

- MCI?
- Relatively low – 13% (Acerbi, 2019)
- ‘News’ format requires higher credibility than stories?



# Conclusions

- Fake News = contemporary issue
- Appeal can be explained by cultural evolution
- Exploits cognitive biases
  - Social info
  - Negativity/threat
  - Ingroup positivity/Outgroup negativity