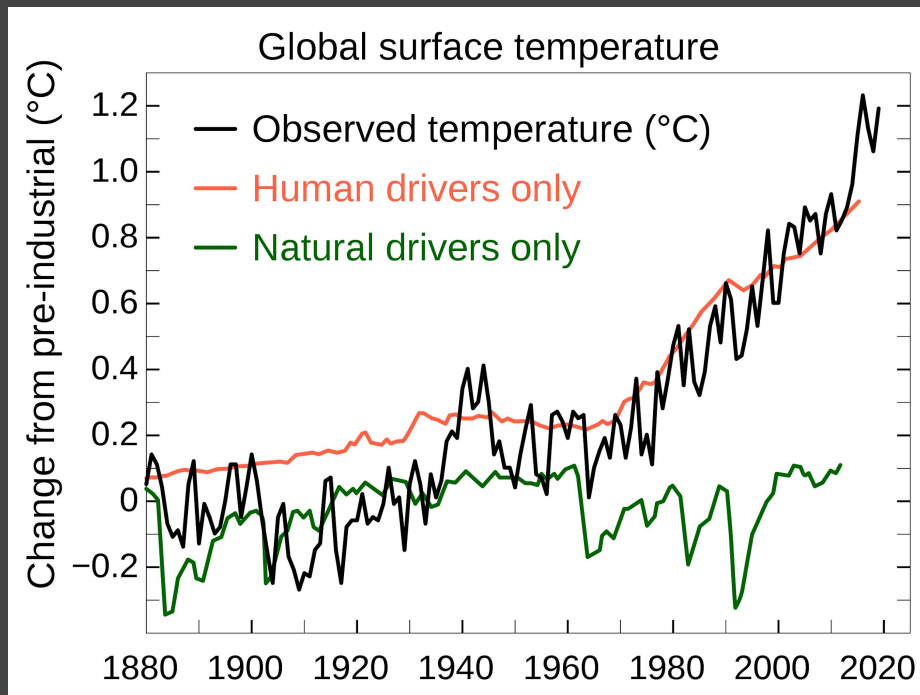


Do our climate policies secure a place within the society?



Source: NASA report (2020)

Audience: Local UN ambassadors

Motivation:

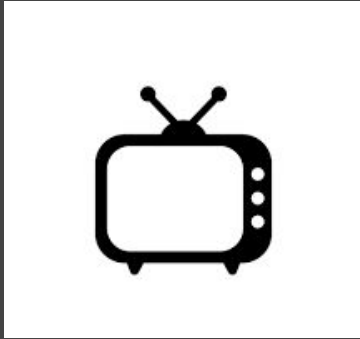
We spend enormous budgets on climate policies



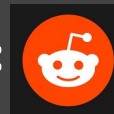
Is there something missing here?
Maybe ... how aware is the society of these facts?

Sources for assessing social awareness

TV, radio, newspaper, social media, web-based posts...



We compared:



[Globalwarming]_{6,000 subscribers}

vs.

[Conspiracytheory]_{4,000 subscribers}

Natural language processing (NLP)

Real reddit post:
Anomalous warm temperatures over
the Arctic and Siberia in May 2020



The concerned

Real reddit post:
Is the earth flat? Yesterday was the
first time that I had actually heard
the argument for The Flat Earth
Society and I can't say that I'm
totally against it.



The conspirator

Natural language processing (NLP)

Text pre-processing

Vectorizing

Training model

Real reddit post:
Anomalous warm temperatures over
the Arctic and Siberia in May 2020

Real reddit post:
Is the earth flat? Yesterday was the
first time that I had actually heard
the argument for The Flat Earth
Society and I can't say that I'm
totally against it.



The concerned



The conspirator

Text pre-processing

Initial process (only lower letters)

Remove stop words

Real reddit post:
anomalous warm temperatures
arctic siberia may

Real reddit post:
earth flat yesterday
first time actually heard
argument flat earth
society say
totally



The concerned



The conspirator

Text pre-processing

Initial process (only lower letters)

Remove stop words

Stemming

Real reddit post:

anomal warm temperatur
arctic siberia may

Real reddit post:

earth flat yesterday
first time actual heard
argument flat earth
societi say
totally



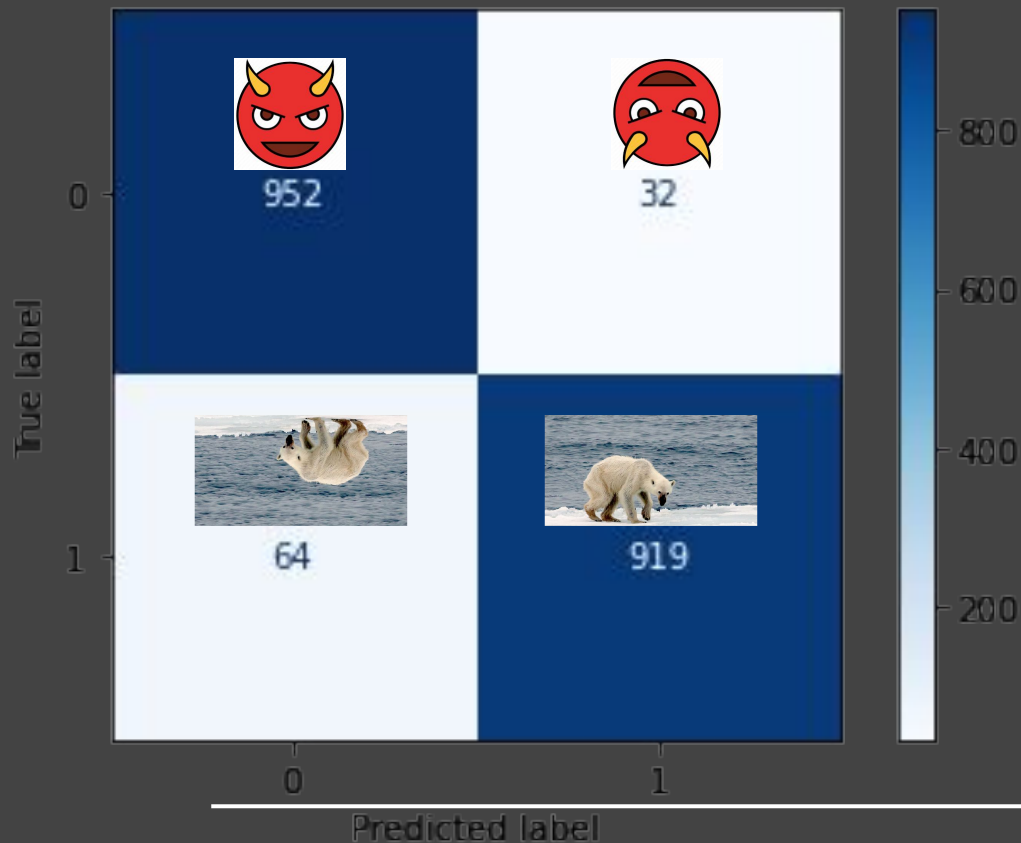
The concerned



The conspirator

Classification model development (Logistic regression)

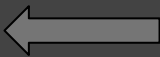
Model accuracy: 96.7 %



Word associations with target: global warming

feature_names	LR_coefficients
chang	2.701103
carbon	2.277294
scientist	2.004883
emiss	1.964167
environment	1.907267
temperatur	1.851639
futur	1.590890
ice	1.564098
hottest	1.491541
environ	1.482627

Most relevant

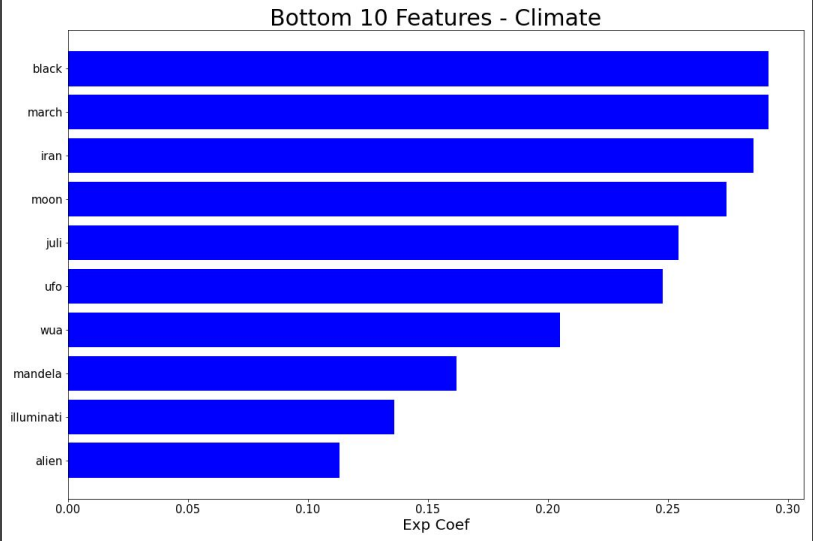
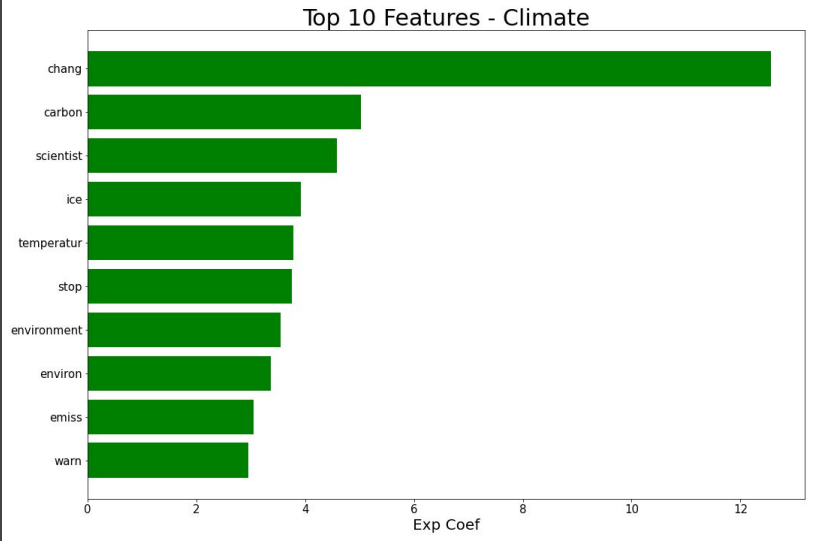


Least relevant

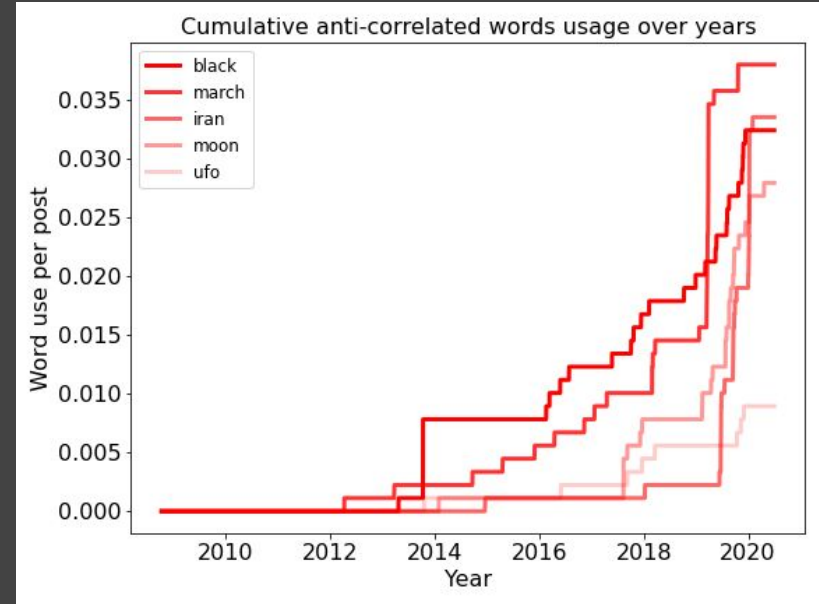
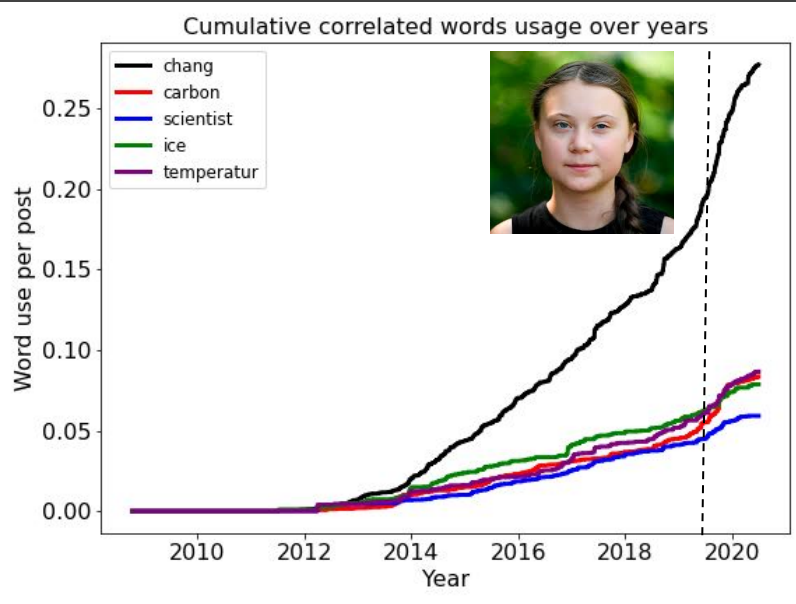


feature_names	LR_coefficients
epstein	-1.839416
control	-1.848390
dead	-1.859572
iran	-2.003617
ufo	-2.045038
moon	-2.058871
illuminati	-2.123301
assassin	-2.135199
mandela	-2.440148
alien	-2.650792

Most relevant features:



Trends in society over the past years



Next phase of the project: production-ready

We tested the model on a new test dataset: climate change.

Global warming



Climate change

Accuracy score: 0.91

We filtered the new data set, and here is what we got:

Next phase of the project: production-ready

Filtered as global warming target:

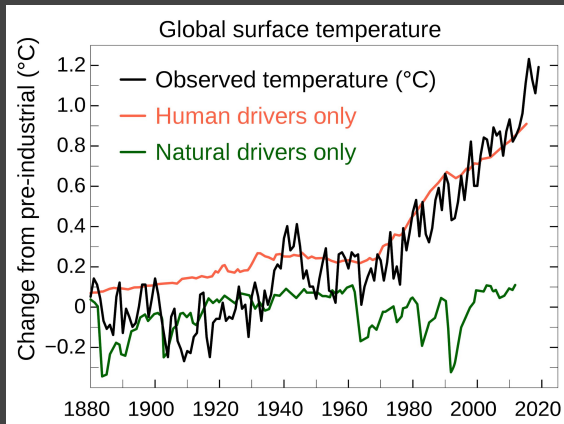
'Sea ice in the Weddell Sea has decreased by one million sq kilometers in five years'

Filtered as non-global warming target:

'Hi. I would like to know what lessons we can we take from the COVID-19 pandemic and apply to our climate actions. Specifically businesses and governments. Thanks in advance.'

Recommendations:

- The society seem to have been more aware towards global warming since 2018.
- However, we need to beware of the media that feeds conspiracy to people, as it also raised.
- The current model seems to be able to be taken to be production-ready



Source: NASA report (2020)

