

# The Persuasive Power of Words



# Problem Statement

We are constantly communicating to get our ideas across, at work and at home.

The question is, what words should we use to persuade others to agree with our viewpoints? And what words make someone appear unconvincing.

# Persuasive, Inspiring and Unconvincing?

I want to start a mobile school that visits such villages around the year, camps there for a few months & we teach both children & grown ups. Curriculum would include not only basic education but also vocational training, so people can work/earn their living & can fight poverty. Mobile schools-workshops

EVALUATE TEXT

This text is

**is not**

persuasive

**is**

inspiring

**is not**

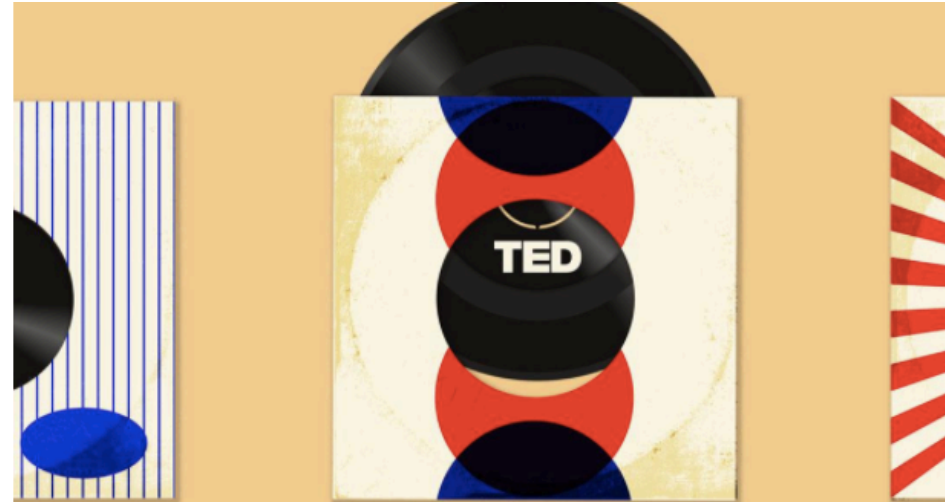
unconvincing

# Dataset

## 12 great TED Talks you've probably never seen before

We have 3,000+ TED Talks and counting — sometimes things get a little buried. Here are some gems we surfaced just for you.

[Learn more](#)



### TRENDING



The inside story of the Paris climate agreement

14:51



What it's like to have Tourette's -- and how music gives me back control

9:55



Stunning buildings made from raw, imperfect materials

12:08



What I learned from spending 31 days underwater

10:47

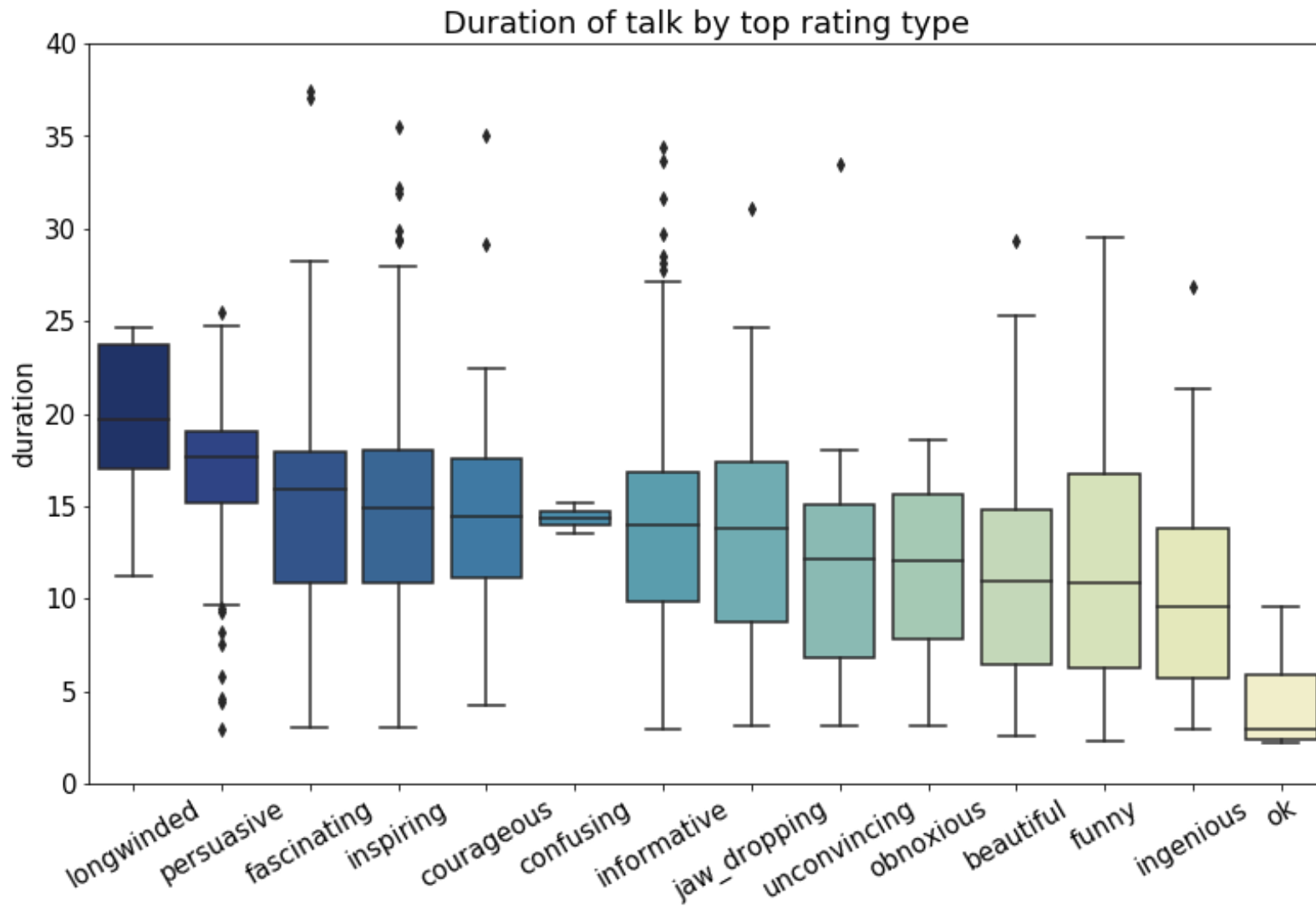


How to start a conversation about suicide

12:16



How the Panama Papers journalists broke the biggest leak in history



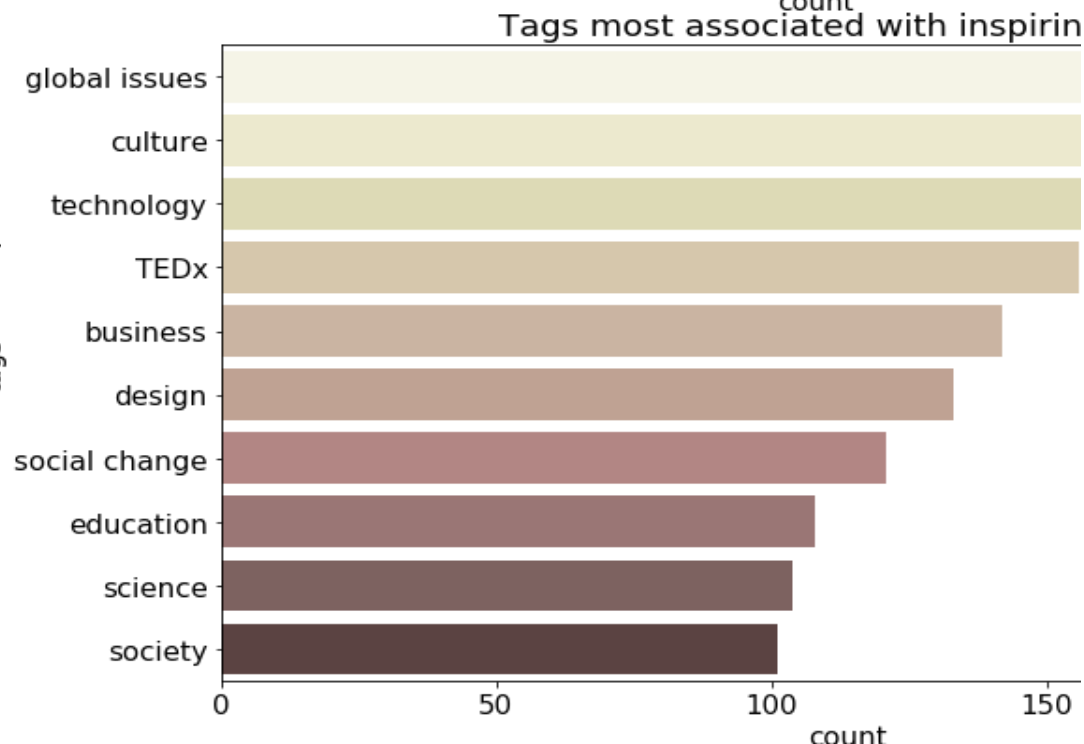
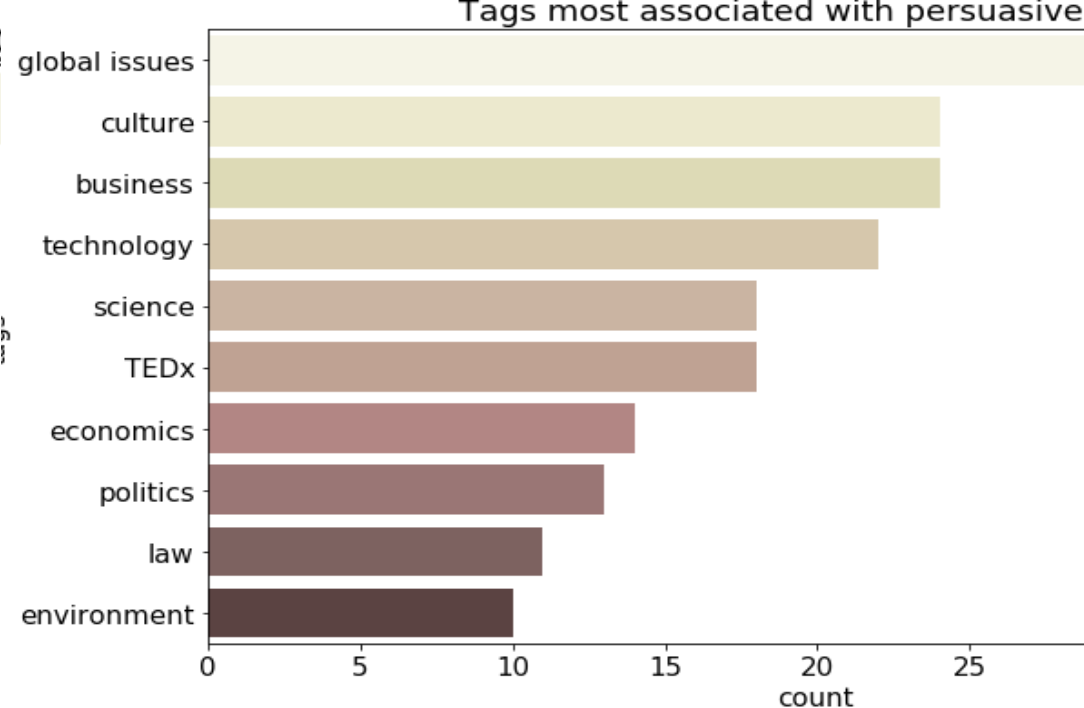
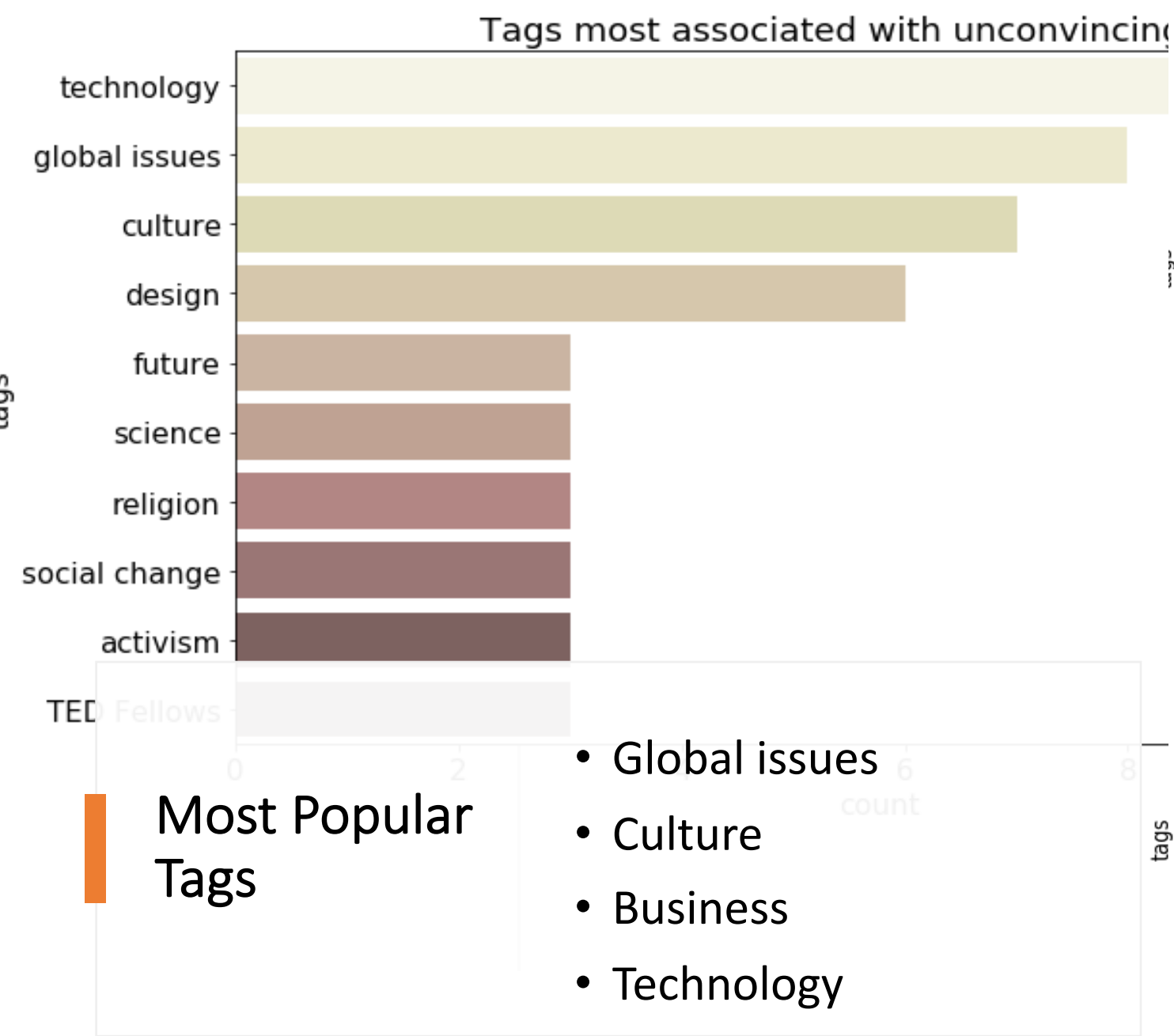
Duration of  
talks by  
rating type

## Persuasive and Inspiring Words



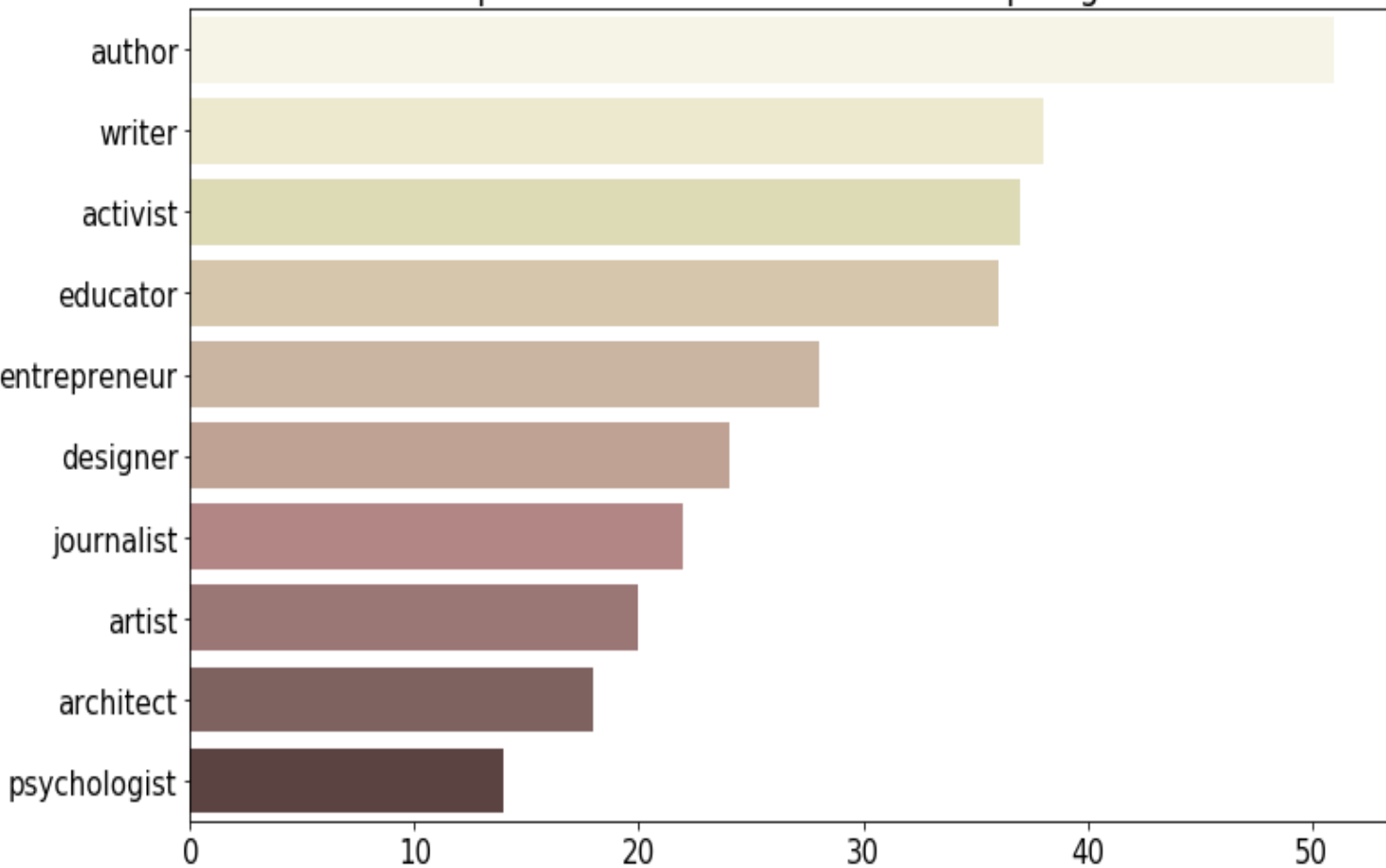
Persuasive Inspiring

# Venn Diagram – overlapping words in persuasive and inspiring talks

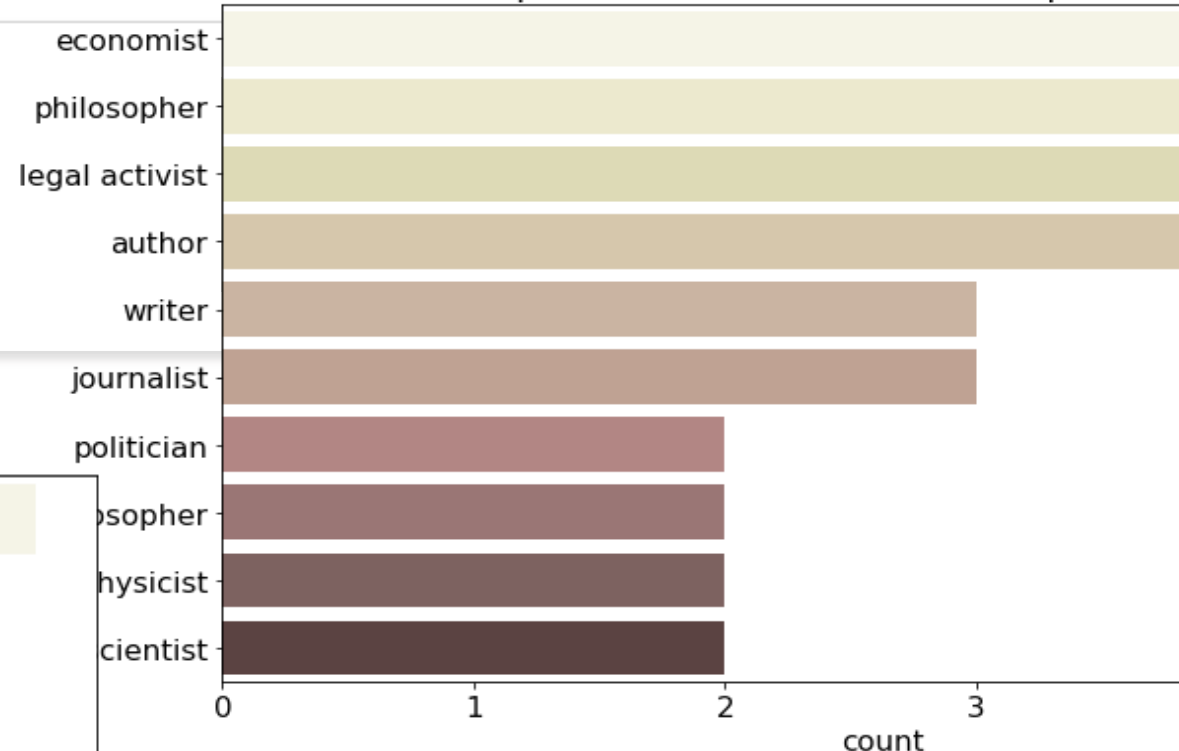


# Occupations

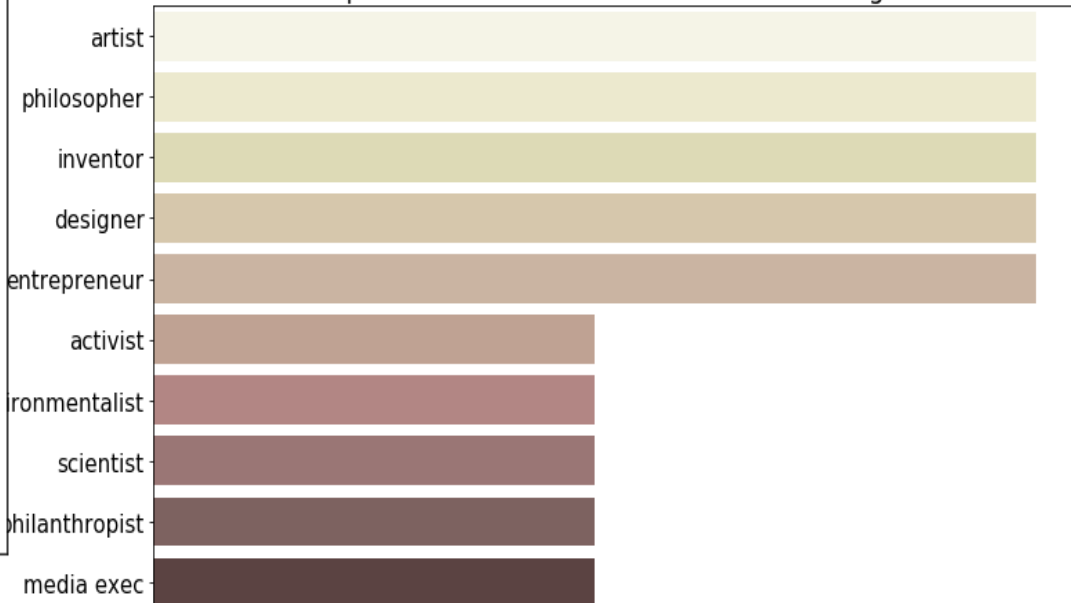
Occupations most associated with inspiring talks



Occupations most associated with persuas

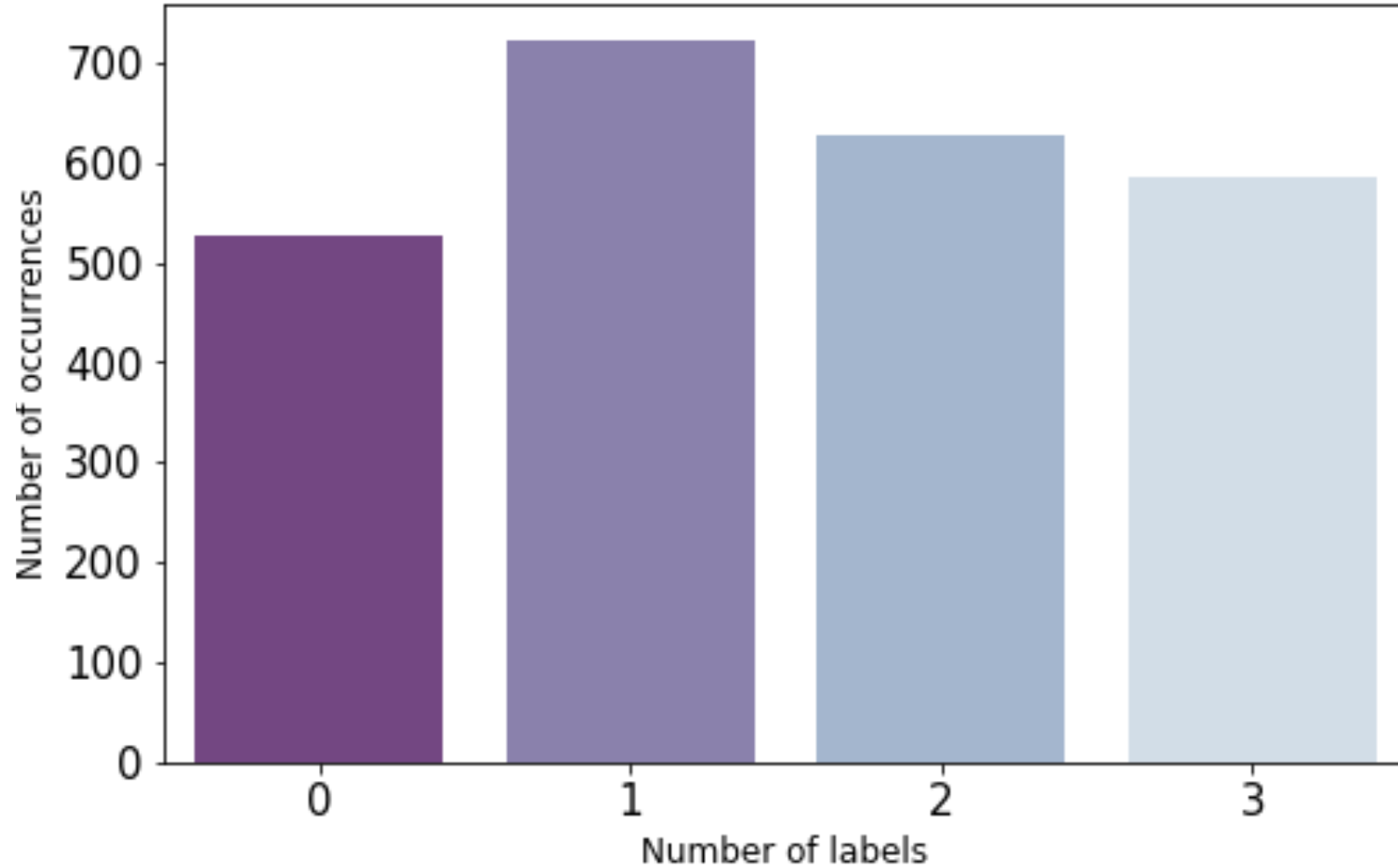


Occupations most associated with unconvincing talks





Number of labels per talk



Number of  
talks and  
number of  
labels per  
talk

# Multilabel Classification Results

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## Baseline Accuracy:

- Persuasive: 0.502
- Inspiring: 0.502
- Unconvincing: 0.511

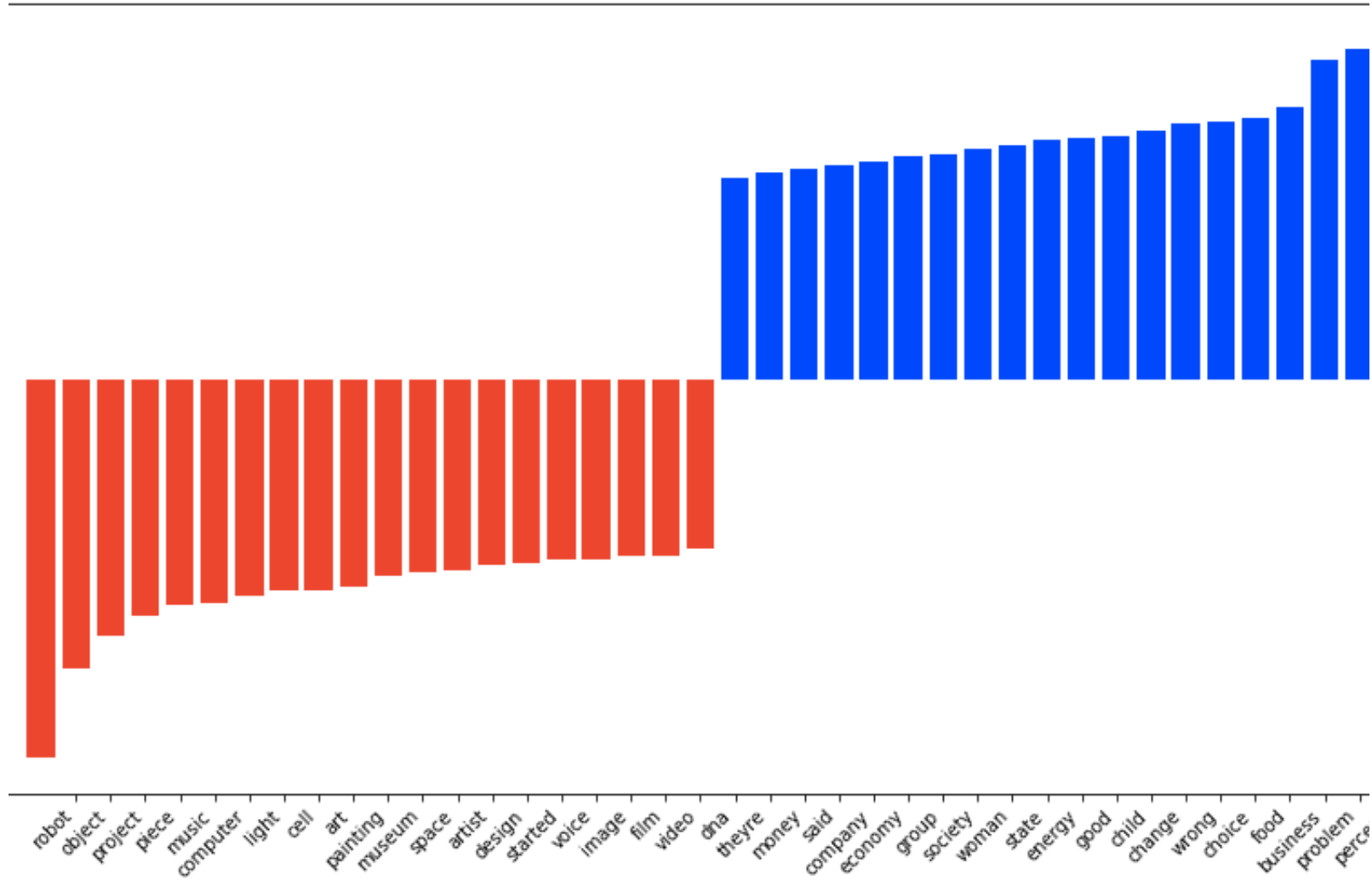
## Support Vector Machine

```
Processing persuasive_label
Train accuracy: 0.9168184578020644
Test accuracy: 0.6933497536945813
Processing inspiring_label
Train accuracy: 0.9222829386763813
Test accuracy: 0.6564039408866995
Processing unconvincing_label
Train accuracy: 0.9398907103825137
Test accuracy: 0.6896551724137931
```

## Logistic Regression

```
Processing persuasive_label
Train accuracy: 0.8384942319368549
Test accuracy: 0.6490147783251231
Processing inspiring_label
Train accuracy: 0.8324225865209471
Test accuracy: 0.5825123152709359
Processing unconvincing_label
Train accuracy: 0.8907103825136612
Test accuracy: 0.6613300492610837
```

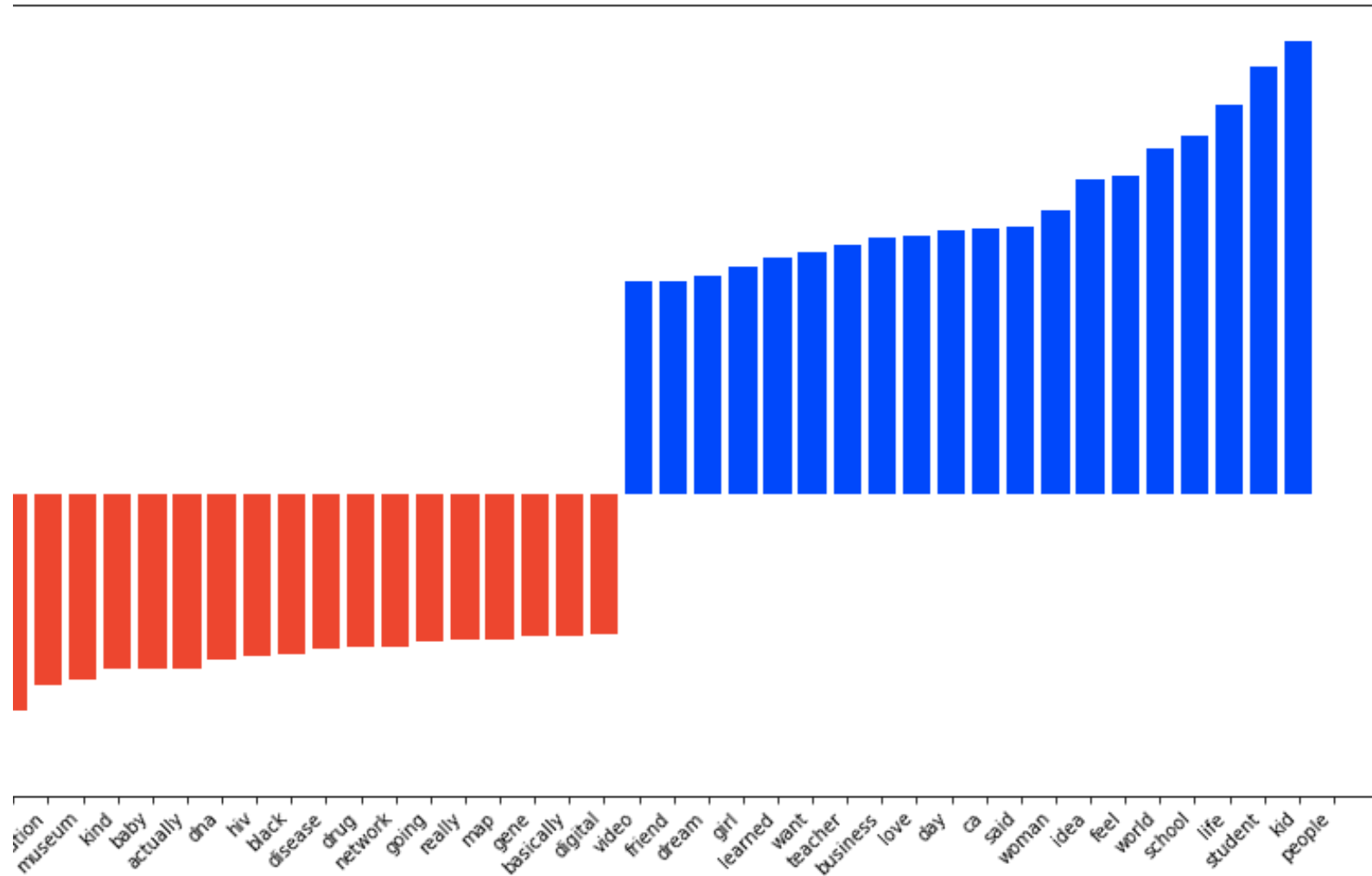
Top Coefficients of Persuasive



## Persuasive Top Coefficients

- kid
- percent
- problem
- business
- food

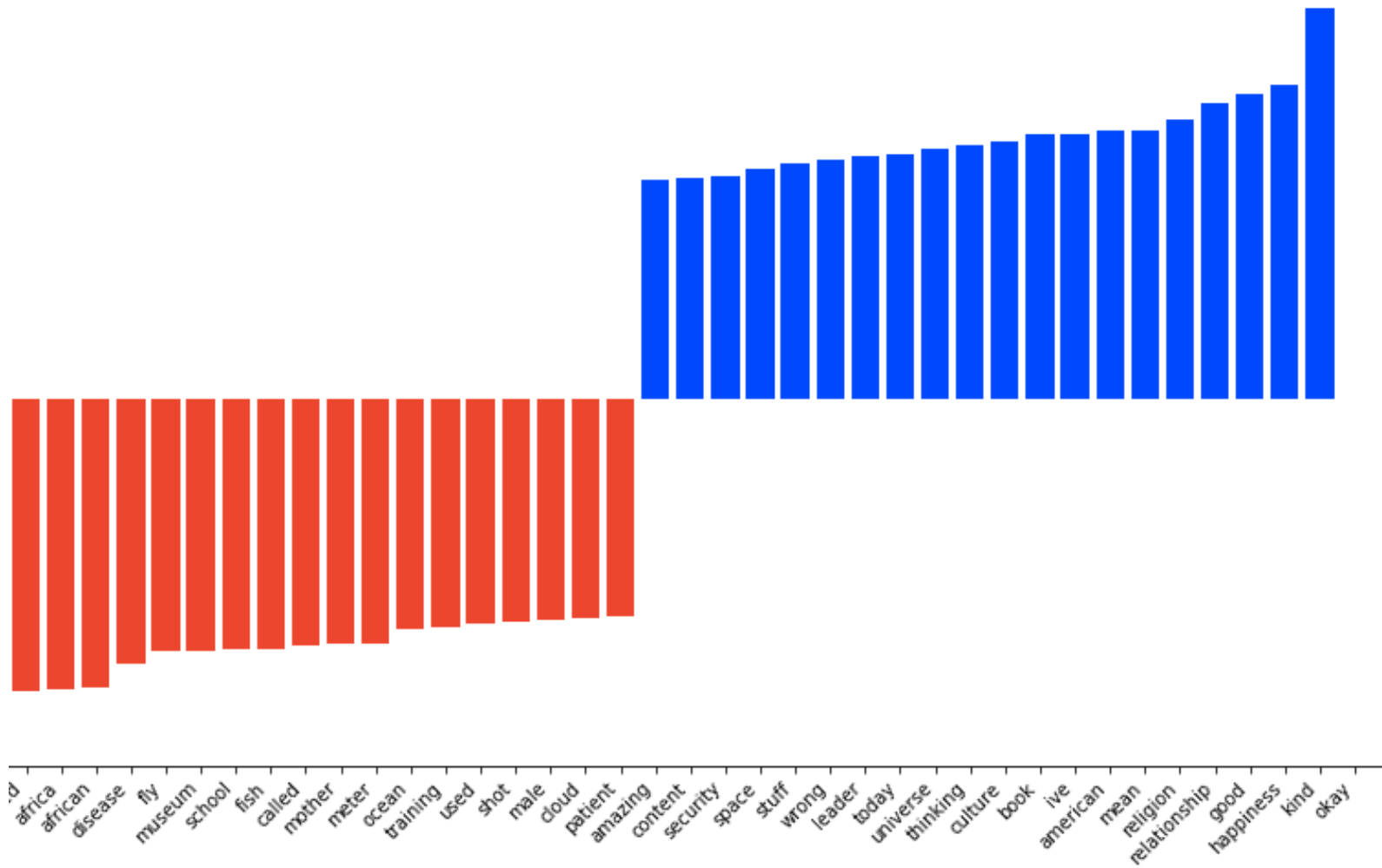
Top Coefficients of Inspiring



## Inspiring Top Coefficients

- people
- kid
- student
- life
- school

Top Coefficients of Unconvincing



## Unconvincing Top Coefficients

- okay
- kind
- happiness
- good
- relationship

# Limitations



Add more variables e.g. occupation,  
duration of talk, gender, audience  
response, body language



Use more business-related  
data

## Persuasive, Inspiring and Unconvincing?

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**[persuasively.herokuapp.com](https://persuasively.herokuapp.com)**

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