# **Detecting the Absurd**

A subreddit case study.

#### **First World Problems**

• Trivial problems from developed nations

• 261k members

#### Fifth World Problems

Surreal Problems

• 151k members

# How do we tell if a post is surreal or not?

Collect posts from both subreddits

Use a model to predict what subreddit a post comes from

### **Data**

Collection

Cleaning

Visualization

#### Collection

- Pushift Api
- ~ 10k posts with minimum score of 1000 per subreddit

# Cleaning

• Dropping posts with invalid selftext

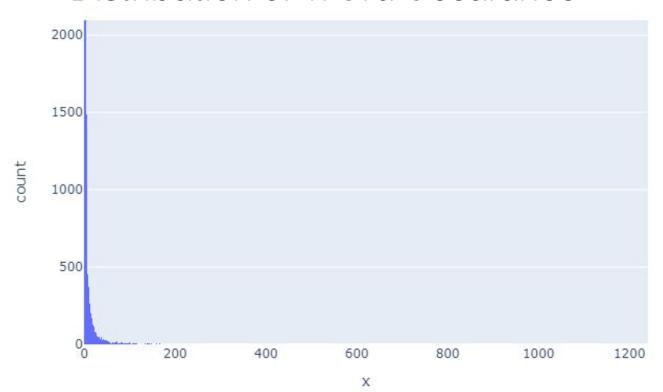
• Lemmatizing words

#### Visualization

Distribution of words (histogram)

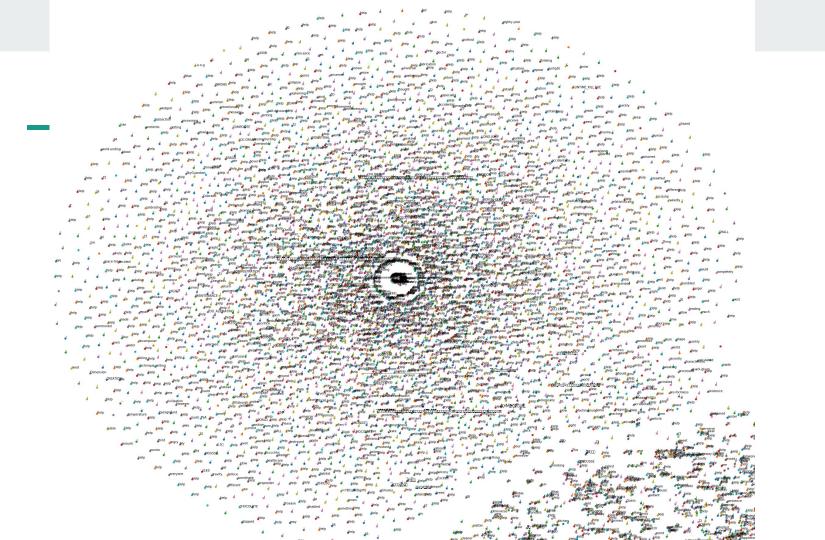
Word association map (t-distributed Stochastic Neighbor Embedding)

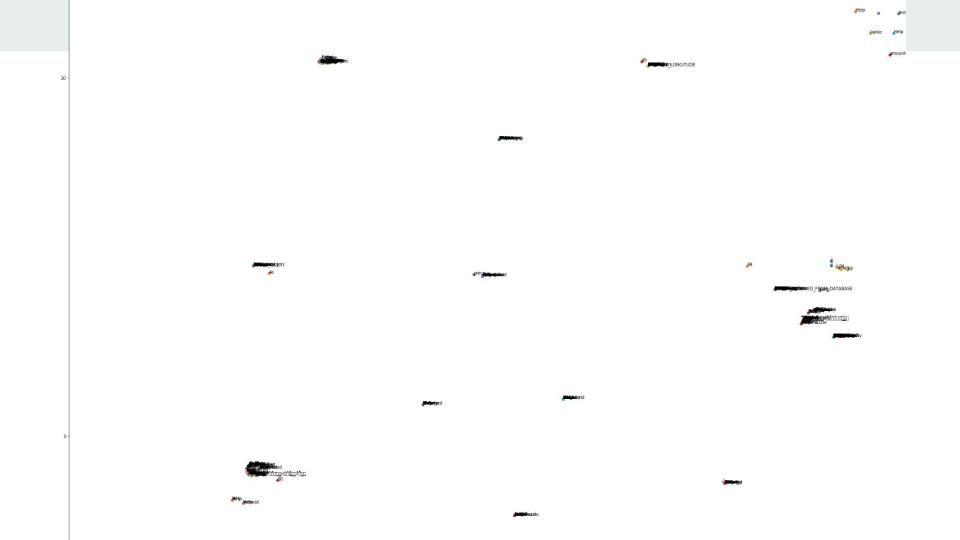
### Distribution of WOrd Occurance



## T-SNE

- Show word association
- Used to visualize high dimensional data
- Check out
   https://distill.pub/2016/misread-t
   sne/





# Modeling

Many models tried (full list in Github repo)

Grid search and train test split used to select and evaluate models

Logistic regression classifier won out with 89% accuracy

#### **Potential Uses**

• Filtering out insincere complaints in a social media site, for example.

Evaluating novel text for entertainment