Taboo implementation

BM1 Advanced NLP - Final project



Anna-Janina Goecke, Rodrigo Lopez Portillo Alcocer, Elizabeth Pankratz

February 6, 2020

Universität Potsdam

Our goal



We plan to implement two components of the gameplay:

- ightarrow Taboo card generator
 - pre-trained word2vec word embeddings
 - WordNet via NLTK
- ightarrow Taboo player
 - LSTM RNN using PyTorch

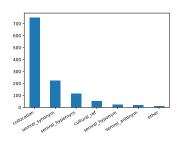
(image source)

Part 1: The card generator

- Gold standard from existing Taboo cards
 - semantic relations manually annotated
- 2. **Taboo word generation** for a given main word
 - five words selected based on probability distribution from gold standard



(image source)



Part 2: The Taboo player

- · NN to generate text (RNN with LSTM architecture)
- idea: start with e.g. "a [main word] is a" to get NN on the right track
- how to prevent TWs from appearing in output: retroactive correction (if the generated text includes a taboo word, replace with a synoynm)
- will implement using PyTorch