



Taboo implementation

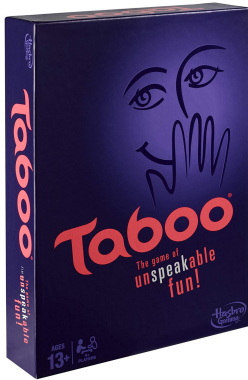
BM1 Advanced NLP – Final project

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Our goal



(image source)

We plan to implement two components of the gameplay:

→ **Taboo card generator**

- pre-trained word2vec word embeddings
- WordNet via NLTK

→ **Taboo player**

- LSTM RNN using PyTorch

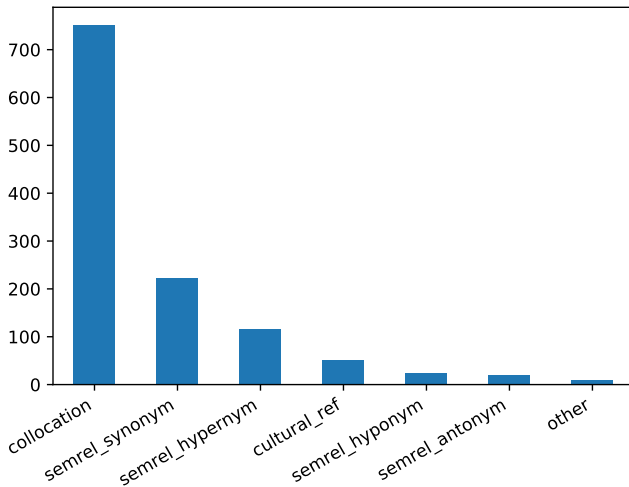
Part 1: The card generator

1. **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 1: The card generator



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 synonym)
- will implement using PyTorch