

Sophistication

Step 1 Concatenate all corpus files into one txt file in the data folder

```
bash concatenate_files.sh prompts_n_coherence/data/ --> feature_extraction/data
```

Step 2 Run the main script

```
bash sophistication.sh --> feature_extraction/results/sophistication_scores.csv
```

Lexical richness

```
bash lxr_scores.sh prompts_n_coherence/data/
```

Morphology

Step 1 Extract vocabulary of most frequent words

```
bash create_most_freq_vocs.sh : prompts_n_coherence/data/ --> scripts/freq_voc/, scripts/lemmas/
```

Step 2 Run diversity analysis

for single file

```
python3 shannon_pairwise.py -f ~/switchdrive/IMAGINE_files/datasets/wmtnews21/wmtnews_test_de_A.txt  
-l de -sys A_wmt -v freq_voc/wmtnews_test_de_A.freq_voc > test.txt
```

for multiple files in a directory if considering the top 1000 most frequent lemmas with more than 1 morphological form

```
lang = {"en", "de"}
```

```
bash shannon_1000_mostfrequent_script.sh  
~/switchdrive/IMAGINE_files/chatGPT/project_2/final_files_simple_prompt/{corpus} lang
```

if choosing all lemmas with more than one morphological form

```
lang = {"en", "de"}
```

```
bash mrph_all.sh ~/switchdrive/IMAGINE_files/chatGPT/project_2/final_files_simple_prompt/{corpus} lang
```

Extract Features with TextDescriptives

features_list.py contains several dictionaries with feature names:

- features_list is a list of TextDescriptives features
- features_custom is a list of custom-added feature names

- features_to_visualize_dict is a dictionary with feature names used by textDescriptives and throughout the project as keys and modified feature names as values
- features_raw_counts is a list of features that are measured in raw counts

Extract features and sort results by feature, language and domain

bash run_extract_features.sh :

```
# executes 3 python scripts

1. iterates through all corpora and extracts features w
TextDescriptives
includes custom formula for German Flesch Reading Ease

python3 extract_features.py --corpus $corpus

2. iterates through ../results/per_corpus/{corpus}, restructures to
../results/per_feature/{feature_to_extract}/{corpus}.csv and
../results/per_language/{language}/{feature}.csv and
../results/per_domain/news/{language}/{feature}.csv

python3 combine_results_per_lang_domain.py

3. adds morphological from ../results/morphology/{corpus}.csv and
lexical features from ../results/lexical_richness/{corpus}.csv
writes to
../results/per_feature/{feature_to_extract}/{corpus}.csv and
../results/per_language/{language}/{feature}.csv and
../results/per_domain/news/{language}/{feature}.csv

python3 transform_dataframe.py -f $feature_type
```

create data