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Dictionaries

Dictionaries

- UNL-NL Dictionary (Analysis)
 - Enumerative (word forms)
 - [foot] [2883] "100284665" (NOU,STE,WRD,5NG,M1) <eng,o,o>;
 - [feet] [2883] "100284665" (NOU,STE,WRD,PLR,M1) <eng,o,o>;
- NL-UNL Dictionary (Generation)
 - Generative (base forms)
 - [foot] [2883] "100284665" (NOU,STE,WRD,5NG,M1,FLX(PLR:="feet")) <eng,o,o>;

Building dictionaries



Dictionary Specs

- Dictionary Specs
 - Dictionary structure
 - a plain text file (.txt)
 - one entry per line
 - entries must have the following format:

```
[NLW] {ID} "UW" (ATTR , ... ) < LG , FRE , PRI > ; COMMENTS
```

[NLW]

```
[NLW] {ID} "UW" (ATTR , ... ) < LG , FRE , PRI > ; COMMENTS
```

- a multiword expression: [United States of America]
- a compound: [hot-dog]
- a simple word: [happiness]
- a simple morpheme: [happ]
- a complex structure: [[bring] [back]]
- a non-motivated linguistic entity: [g]

{ID}

```
[NLW] {ID} "UW" (ATTR , ... ) < LG , FRE , PRI > ; COMMENTS
```

- The unique identifier (primary-key) of the entry.

"UW"

[NLW] [ID] "UW" (ATTR, ...) <LG, FRE, PRI> COMMENTS

- The Universal Word of UNL. This field can be empty if a word does not need a UW.

(ATTR, ...)

[NLW] [ID] "UW" (ATTR, ...) <LG, FRE, PRI> COMMENTS

- The list of features of the NLW.
- Attributes should be separated by ",".
- It can be:
 - a list of simple features: (NOU, MCL, SNG)
 - a list of attribute-value pairs: (pos=NOU, gen=MCL, num=SNG)
 - a list of transformation rules: (plural="oo","ee")
- Replacement
 - <ATTRIBUTE>=":"<SOURCE>:"<TARGET>
 - plural:="oo":"ee"
- Left appending
 - <ATTRIBUTE>=":"<LEFT DELETION>:"<LEFT ADDITION>
 - not:="<un"
- Right appending
 - <ATTRIBUTE>=":"<RIGHT ADDITION>:"<RIGHT DELETION>
 - plural:="y">ies

<LG, FRE, PRI>

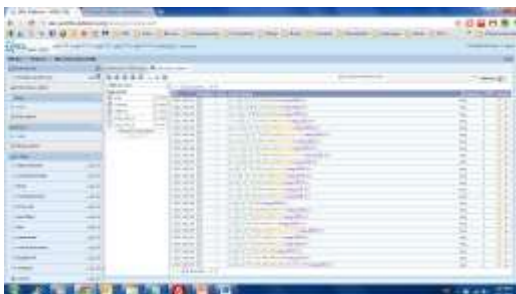
[NLW] [ID] "UW" (ATTR, ...) <LG, FRE, PRI> COMMENTS

- FLG
 - The two-character language code according to ISO 639-1.
- FRE
 - The frequency of NLW in natural texts. Used for natural language analysis (NL-UNL). It can range from 0 (less frequent) to 255 (most frequent).
- PRI
 - The priority of the NLW. Used for natural language generation (UNL-NL). It can range from 0 to 255.

Examples

```
[book]] "book" (N,NOU,SNG,M2)<eng,0,0>;
[books]] "book" (N,NOU,PLR,M2)<eng,0,0>;
[car]] "car" (N,NOU,SNG,M2)<eng,0,0>;
[cars]] "car" (N,NOU,PLR,M2)<eng,0,0>;
[dr]] "dr" (N,ABB,M0)<eng,0,0>;
[girl]] "girl" (N,NOU,SNG,M2)<eng,0,0>;
[glass]] "glass" (N,NOU,SNG,M2)<eng,0,0>;
[Bill]] "Bill" (N,PPN,SNGT,M0)<eng,0,0>;
[Edward]] "Edward" (N,PPN,SNGT,M0)<eng,0,0>;
[Geneva]] "Geneva" (N,PPN,SNGT,M0)<eng,0,0>;
[alone]] "alone" (J,ADJ,M0)<eng,0,0>;
[available]] "available" (J,ADJ,M0)<eng,0,0>;
[beautiful]] "beautiful" (J,ADJ,M0)<eng,0,0>;
[early]] "early" (A,AAV,M0)<eng,0,0>;
[never]] "never" (A,AAV,M0)<eng,0,0>;
[o'clock]] "o'clock" (A,AAV,M0)<eng,0,0>;
[arrive]] "arrive" (V,VER,TSTI,INF,M17)<eng,0,0>;
[arrives]] "arrive" (V,VER,TSTI,3PS,PRS,M17)<eng,0,0>;
[arrived]] "arrive" (V,VER,TSTI,PAS,M17)<eng,0,0>;
[arrived]] "arrive" (V,VER,TSTI,PTP,M17)<eng,0,0>;
[arriving]] "arrive" (V,VER,TSTI,GER,M17)<eng,0,0>;
```

Using dictionaries (IAN and EUGENE)



Task #2: NL-UNL Dictionary

- Goal
 - To create entries for NL-UNL Dictionary for Reference Corpus
- Methodology
 - Create the corresponding entries in the dictionary format to all the words appearing in your wordlist:
 - Do not fill in the field between {} (but don't forget to include it)
 - Use the English word as the UW, when applicable
 - Define only the basic features (use the tagset to define the features)
 - The frequency and priority should be set to 0 (zero);
 - An example dictionary (of English) may be downloaded from the Wiki
 - Upload the dictionary to IAN (UNLWEB>UNLDEV>PROJECTS>IAN>DICTIONARY EDITOR)
 - Share it with the user "martins"
- DURATION: 4 hours