Morphological Analysis for Noun, Verb and Adjective

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Problem Statement:
- Develop new methods of Morphological Analysis with the help of computer-based techniques to understand human language and obtain the correct sense of each input word.
- Take any form of a word as input and transform it into its main form that is listed in the lexicon, i.e. noun singular, verb infinitive, positive form of adjective, etc.

Morphological Analysis:

![Diagram of Morphological Analysis]

Method:

1. Take a word as input and compare it with each lexeme.
2. If a lexeme and the input word are the same then output sense/s.
3. If they are different, then check the morph field.
   - If there is a morph field for the word, then follow the Morphological Analysis Process and output the senses.
   - If there is no morph field, then ignore it.

Applications:
- An important prerequisite for syntactic analysis
- Part of speech determination
- An early module in NLP applications
- Detection of ungrammatical emails or non-natively written text based on morphological irregularities
- Identification of ambiguous words in the text
- Detection of various dialectal differences in the text
- Lemmatization