Computational Linguistics (CL3.101)

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Language Processing (contd.)

The transition between the various stages of language processing is bidirectional, to enable re-analysis.

Machine Translation

A simple architecture of a machine translation system is as follows:

- Pre-processors: font converters, identifying idioms/collocations/phrasal verbs etc.
- POS tagger
- Morphological analysis
- Chunker
- Parser

These steps constitute the Source Language Analysis phase. This order, however, is not constant across languages; for instance, in Dravidian languages, POS tagging happens after morphological analysis.

- Transfer rules
- Preposition mapping rules
- Word sense disambiguation
- Bilingual dictionary lookup

These are the Source Language-Target Language Mapping phase. It is not an exhaustive list; there are more steps.

- Morphological generator
- Sentence generator
- Font converters

These final steps make up the Target Language Generation phase.