

(1) *The coach lost a set*

Without syntax, a translator cannot decide whether *coach* is a noun or verb, *lost* is a verb or adjective, *set* a noun, verb or an adjective. This knowledge is found in grammar books of English in which the human translator should be aware of before indulging himself in translation. In MT, there is a special processing unit called ‘syntactic parser’ which applies this knowledge to the input text and produces its syntactic structure. However, syntactic analysis might not be enough in some cases:

(2) *Old men and women*

In (2), the modifier “old” could modify the noun “men”, or it could modify both nouns “men and women”. In such instances, this issue constitutes a problem to human translators, let alone MT systems. More comprehensive, such ambiguities lead to a big number of parses.

2.3.4. Semantic Analysis

Analogous to syntactic analysis, semantic analysis is considered a challenging task to MT developers. This is due to the fact that “meaning” is an abstract concept compared with the linguistic form. There are different approaches to semantic analysis. One approach is to examine the collocations of the SL and TL. Collocation is simply how words associate with other words; some items strongly collocate with each other, for example (*rancid* with *butter*, *addled* with *egg*). Other collocations have a wide range of items in which they could collocate with. *Bad* or *good* as adjectives could associate with a large number of words. The latter type is of a problematic area in MT. The second approach is to create a list of words and analyze it automatically by means of a thesaurus held with the computer system to isolate predominant themes in the text. Butler (1978) summarizes the complexity of the semantic analysis by stating that: