

The assessment is carried out on two main domains, i.e. the lexical and syntactic levels. The textual level is ruled out in the current assessment since articles rather than a full contract is fed into the system.

#### **4.5.1 Lexical Level Assessment**

##### **4.5.1.1 Polysemy and Homonymy**

One of the challenges that faces MT in general is the fact that many words in the English language are polysemous, i.e., they carry more than one meaning. It should be noted that polysemy is different from homonymy where homographs are etymologically unrelated words that happen to be represented by the same string of letters in a language. *bass the fish* is derived from Old English *barse* while *bass the voice* is derived from Italian *basso*. Conversely, Polysemes are etymologically and semantically related. *Line* in a *line of people* and a *line drawn on a piece of paper* are etymologically related and their semantic relation is obvious.

Computer applications that handle the content of natural language texts need to come to terms with polysemy as it has been considered a stumbling block in natural language processing (Ravin & Leacock, 2000). The study of polysemy in computational linguistics touches upon the problem of how to map expressions to their intended meanings automatically. The computer possesses the same resource for sense identification as human translators do, the context. Nevertheless, computers are “handicapped” because they can only interpret the context as strings of letters, words or sounds and not as meanings (ibid: 23). Bar-Hillel (1960) stresses that, although it is a trivial matter for an English speaker to assign the appropriate sense of *pen* (enclosure rather than writing device) in *the box is in the pen*, no computer can do so. We can disambiguate *pen* because our world