

Abstract

Lexical Simplification is a part of Text Simplification. Lexical Simplification performed by change complex word in a sentence with the simpler word making it easier to understand. The first step in Lexical Simplification is process to identify the complex words commonly called the Complex Word Identification (CWI). Complex word on purpose of this research is the rarely used words in the text. After identifying the complex words, the next stage is Subtitution Generation and Selection Subtitution. In this step needed Word Sense disambiguation (WSD) to reduce ambiguity in the word which replaces the complex. Ambiguity extremely affect the level of simplification in the text because it can make simplification be have a different meaning. The last stage, each word replacement results from phase Subtitution Subtitution Generation and Subtitution Selection, ranked from easy to more complex.

In this study, at the CWI stage using threshold-based methods. Simple Wikipedia corpus is much better than using Wikipedia corpus on stage CWI and Subtitution Ranking. At this stage of Subtitution Selection and Subtitution Generation, use of WSD using Lesk algorithm obtained better results compared to not using WSD. Adapted Lesk algorithm using WordNet obtained better results than the other Lesk algorithm.

Keywords: *Lexical Simplification, Lesk algorithm, Word Sense disambiguation, Complex Word Identification, Subtitution Generation, Subtitution Selection, Subtitution Ranking*