Abstract

This paper describes the design and development of a system for syntactic structure transfer of Malayalam sentences to English. A syntactic structure transfer module is required in machine translation systems using a transfer based approach. The system uses a rule based approach. It makes use of rules of morphology of both Malayalam and English and syntactic structure transfer rules between Malayalam and English sentences. The rules of morphology and sentence syntax are used by the shallow parser in the creation of the parse tree for the source language sentence. The transfer rules are used for generating target structure. The system uses a bilingual dictionary consisting of words in the source and target language along with their
lexical category. Regular expression notation is used for the representation of language syntax. The parsing algorithm is a general one and the system can be used to handle other language pairs by changing the set of rules. The results obtained are encouraging and the work can be extended to the creation of a full fledged machine translator from any Dravidian language to English since all of these languages exhibit structural homogeneity.

References

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Index Terms

Computer Science
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