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## Abstract

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The translation quality and parsing efficiency are often disappointed when Rule based Machine Translation systems deal with long sentences. Due to the complicated syntactic structure of the language, many ambiguous parse trees can be generated during the translation process, and it is not easy to select the most suitable parse tree for generating the correct translation. This paper presents an approach to parse and translate long sentences efficiently in application to Rule based Portuguese-Chinese Machine Translation. A systematic approach to break down the length of the sentences based on patterns, clauses, conjunctions, and punctuation is considered to improve the performance of the parsing analysis. On the other hand, Constraint Synchronous Grammar is used to model both source and target languages simultaneously at the parsing stage to further reduce ambiguities and the parsing efficiency.