Abstract

Anaphora Resolution is exigent task in almost all NLP applications such as text summarization, machine translation, information extraction, question-answering systems, etc. A lot of work has been done for identifying and still more need to be done for finding the factors responsible for resolving the anaphoras in all languages. An attempt has been made to resolve Hindi pronominal anaphora using syntactic as well as semantic knowledge. The occurrence of particular case markers are found, which exhibit its connectivity with the pronouns leading to the anaphora resolution approach. An algorithm is designed taking into account the roles of subject, object and its impact on anaphora resolution for identifying the noun phrase.
antecedents of first and second person singular pronouns as well as for a third person singular pronoun and a reflexive pronoun. The algorithm applies on the inputted syntactic representation generated by a Hindi shallow parser. The authors have tested it on a text corpus containing 192 pronoun occurrences. The algorithm correctly resolved the antecedent of 145 pronouns (75.5%) of these pronoun occurrences. Experiments on pronominal anaphora help in analyzing the complexity of problems under consideration and the results of the observations are presented.

References


**Index Terms**

Computer Science

Artificial Intelligence

**Keywords**

Anaphora  Pronominal Resolution  Dependency Treebank  Case Marker.