Sanskrit Compound Generator

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Abstract

Sanskrit is rich in compound formation. Pāṇini's grammar has more than 400 rules that deal with the semantic conditions governing the compound formation and the grammatical process involved in the compound formation. We have developed a compound generator for sanskrit implementing the Pāṇinian process of compound generation. The grammar is written as a combination of phrase structure grammar and regular grammar. The rules pertaining to the compound formation are primarily of two types. The rules which designate a term to the input string are termed as sañjñā sūtrās. These are implemented as a context free grammar. The sūtrās which transform the input string are termed as vidhi sūtrās. These sūtrās specify action under certain constraints. The constraints are expressed as a combination of one or more of the following: a) sequence of phonemes, b) morphological analysis of the word, c) meaning of the word, d) ontological category of the word and e) pragmatic information. So far we have implemented almost 300 sūtrās. We will demonstrate our system with various examples and discuss the issues in implementing remaining sūtrās.