Issues and Challenges Sanskrit to English Machine Translation

C K Soni & Naveen Kumar Jha – MLSU, Girish Nath Jha - JNU

Description: The massive literature in Sanskrit language contains knowledge helpful for the well being of humanity. This vast knowledge should be made accessible to the masses. If a MT system to English is created then Sanskrit connects to many Indo-European languages because MT systems from English to such languages are currently available. Translation to English is also crucial because English language is considered to be the lingua-franca of actual, scholarly and computer worlds.

Advantages of MT systems over traditional translations

- Quick
- Cost effective
- Confidential
- Consistent
- Universal
- Unbiased

Design of the Proposed Machine Translation System

User - Source language input i.e. Sanskrit

Pre-Processing of the text:
- Script checking
- Language checking
- Font checking
- Punctuation checking

Source Language Parsing Tools
- GBC & KBC
- Approaches - Rule based Statistical Hybrid

Lexical DBC: SQL server
- Lexical search
- Bi-lingual lexicon of SL & TL
- Lexical Replacing

Target language generation tools i.e.
- English

Output of comprehensible
- English sentences to the User

Divergences
- Promotional
- Demotional
- S-E Specific
- Lexical
- Categorical
- Structural

Theme

Word order implications
- Gerunds and Participles clauses

Change of Voice
- Mapping of time
- Honorefic

Morphological gaps