An algorithm to translate compound sentences from SL to TL was developed.

Step 1: Get the Input sentence

Step 2: Split the sentence into a string array S, using the delimiter space (‘ ‘)

Step 3: for int i=0 to S.Length

a) if(S[i].Contains(‘;’))

i. search word at index i+1, S[i+1] in Dictionary and read the POS of the word

ii. if(S[i+1].POS=RB) i.e. if the parts of speech of word, S[i+1] is conjunctive adverb

Split S into two arrays, S1 [0...i] and S2 [i+1...len-1]

b) if(S[i].Contains(‘,’))

i) search word at index i+1, S[i+1] in Dictionary and read the POS of the word

ii) if(S[i+1].POS=CC) i.e. if the parts of speech of word, S[i+1] is coordinate conjunction

iii) Split S into two arrays, S1 [0...i] and S2 [i+1...len-1]

c) if(S[i].Contains(‘;’))

i) split S into two arrays, S1 [0...i] and S2 [i+1...len-1]

Step 4: Chunk (S1) Chunk (S2)

Step 5: Reorder (S1) Reorder (S2)

Step 6: Translate (S1) Translate (S2)

The example below shows the translation produced for a compound sentence from source to TL using the above algorithm.

Ex: SL: Tomorrow my brother comes from town, so I won’t come to school.

TL: రేపు మా అన్న ఊరు నుండి వచ్చును, అందువలన నేను బడికి రాను.

rEpu mA anna Uru nu.mDi vaccunu, a.mduvalana nEnu baDiki rAnu

4. COMPLEX SENTENCES TRANSLATION PERSPECTIVE

Telugu is a free-word order language, but is rigid in its clause order. While the fixed word order language, English is flexible in the arrangement of the clauses. In Telugu a subordinate clause always appears at the beginning of a complex sentence [6]. The dependent clause always precedes the independent clause of the sentence, Figure 1. The verb in a subordinate sentence is frequently a relative particle with some affix attached to it.

Ex: SL: If rain falls, I do not go to school.

TL: వాన కురిసిన ఎడల, నేను బడికి వెళ్లను.

vAna kurisina eDala, nEnu baDiki veLLanu.

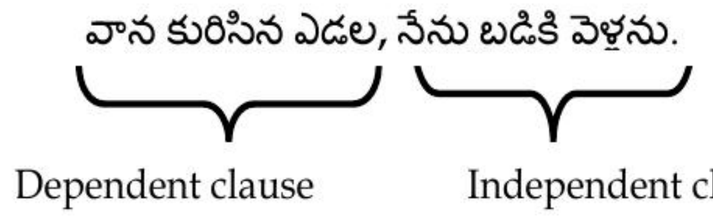

Figure 1. Type 1: Structure of complex sentence in Telugu

In Telugu the subordinate conjunction in the dependent clause always comes at the end of the subordinate clause Figure 2, Figure 3.

Ex: SL: The boy did not come, though his friend called him.

TL: మిత్రుడు పిలిచినప్పటికీ, బాలుడు రాలేదు.

mitruDu pilichinappaTiki, bAluDu rAlEdu.

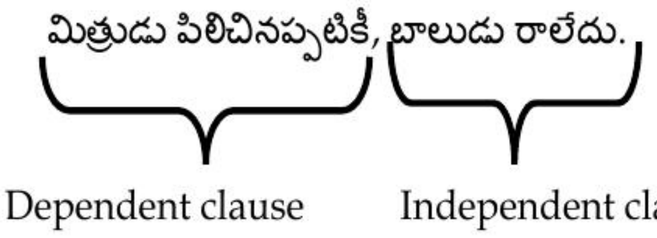

Figure. 2. Type 2: Structure of complex sentence in Telugu

Ex: SL: I will write you a letter after I have gone there.

TL: నేను అక్కడికి వెళ్ళినతరువాత, మీకు ఉత్తరము వ్రాస్తాను.

nEnu akkaDiki veLLinataruvAta, mIku uttaramu vrAstAnu.

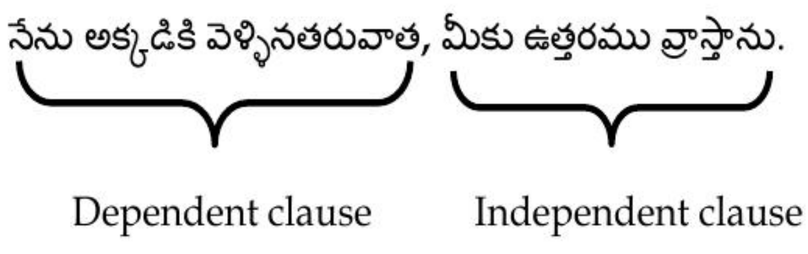

Figure. 3. Type 3: Structure of complex sentence in Telugu

5. RHETORIC RELATIONS AND CONNECTIVES

Rhetoric relations and connectives were originally formulated by [7]. Using these connectives a unified view of discourse structure, irrespective of the size of discourse segments is possible. Each discourse segment serves the realization of the overall communicative intention of the speaker. A descriptive theory of text organization based on the relationships that hold between parts of the texts is the rhetoric relation theory.

The subordinate conjunctions used to connect the dependent and independent clauses are called connectives. Connectives are always at the beginning of the dependent clause in English. They