

Assignment – 2 (Transfer Grammer Rules)

1. Download 20_Sentences.txt from Courses Portal(The file contains 20 Sentences of different types of constructions in Hindi).
2. Run Shallow Parser on those 20 Sentences(Download Link- http://lrc.iiit.ac.in/showfile.php?filename=downloads/shallow_parser.php install it on 32-bit linux system)
3. Translate the 20 Sentences in English and do chunking on English Sentences.

For Example:

Hindi Sentence: सभी बच्चे किताब पढ़ते हैं।

Shallow Parser Output:

<Sentence id="1">

1 ((NP <fs af='बच्चा,n,m,pl,3,d,0,0' head='bacce'>

1.1 सभी QF <fs af='सभी,adj,any,any,,any,,' name='saBI'>

1.2 बच्चे NN <fs af='बच्चा,n,m,pl,3,d,0,0' name='bacce'>

))

2 ((NP <fs af='किताब,n,f,sg,3,d,0,0' head='kiwAba'>

2.1 किताब NN <fs af='किताब,n,f,sg,3,d,0,0' name='kiwAba'>

))

3 ((VGF <fs af='पढ़,v,m,pl,1,,ता_है,wA' vpos='tam1_2' head='paDZawe'>

3.1 पढ़ते VM <fs af='पढ़,v,m,pl,any,,ता,wA' name='paDZawe'>

))

4 ((BLK <fs af='.,punc,,,,,' head='.'>

4.1 . SYM <fs af='.,punc,,,,,' name='.'>

))

</Sentence>

Chunks: NP NP VGF

English Translation: All children read the book.

((All children)) NP ((read)) VGF ((the book))NP

Chunks: NP VGF NP

So One rule would be : NP NP VGF -> NP VGF NP

4. Download the transfer grammer based MT system from the resources section on courses portal, run the sytem on the given 20 Sentences.

5. System will have a rule file, change that rule file with the rules you made as shown in the example in point 3, now again run the systems and compare the traslations you are getting with the translation you get in step 4.

6. Submit the report containing all the comparisons and your observations.

Deadline For this Assignment is 15th February 2014. There won't be any deadline extension for this assignment.