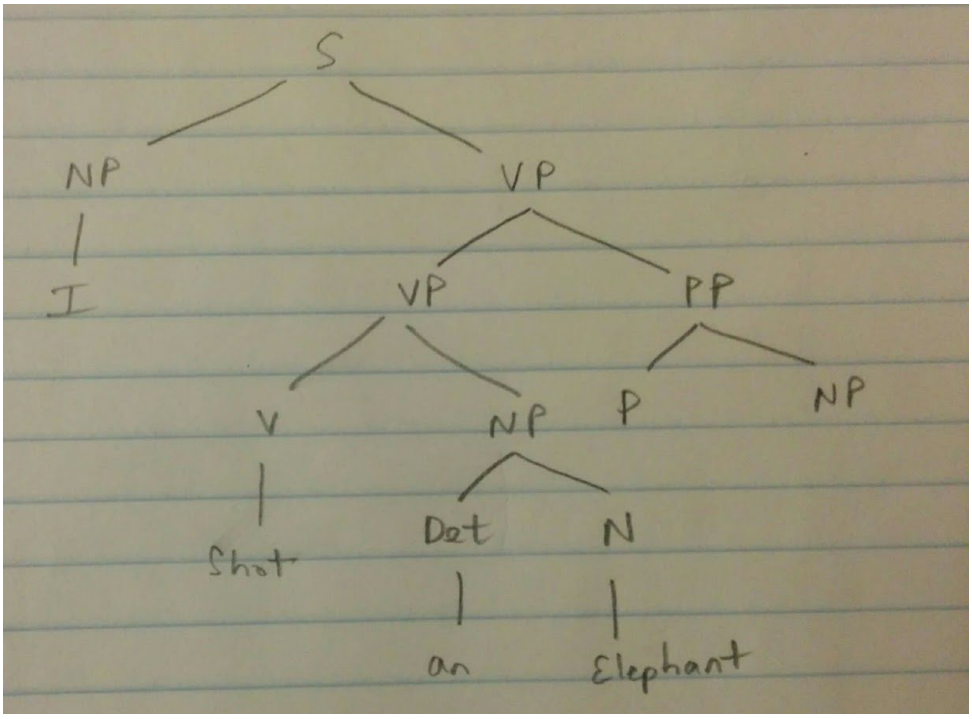
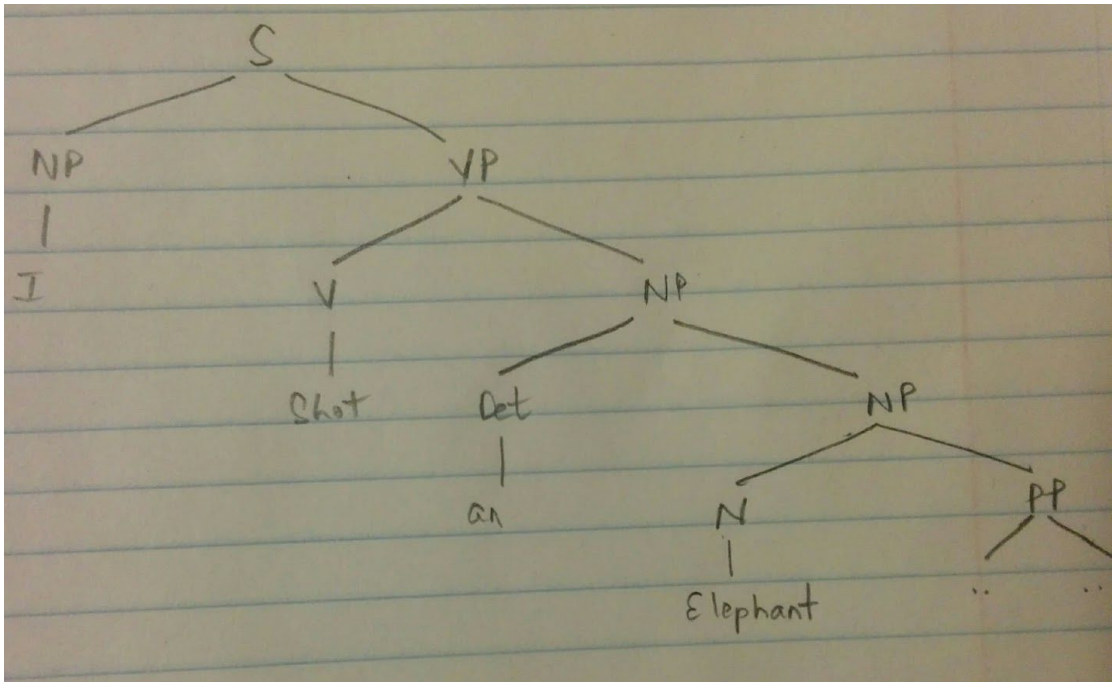
Baliganahalli Narayana Murthy, Sunil
Mar 17, 2017

Natural Language Processing

Problem set 3

1. S = "*I shot an elephant in my pajamas*"





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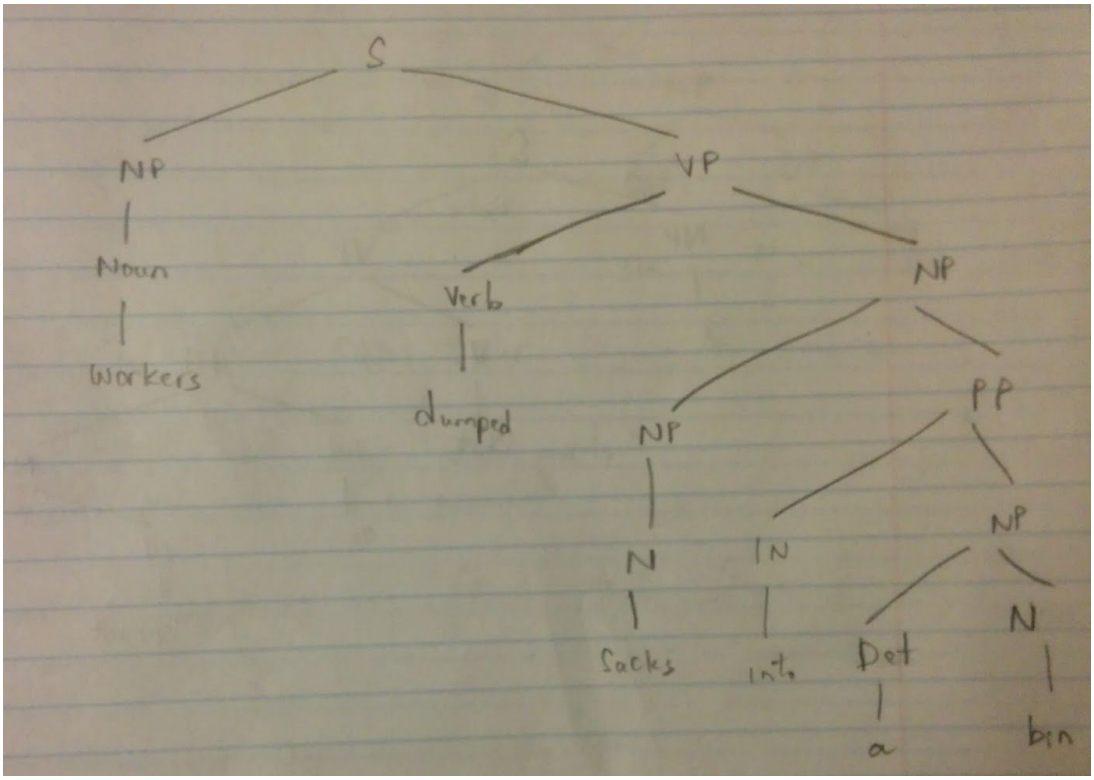
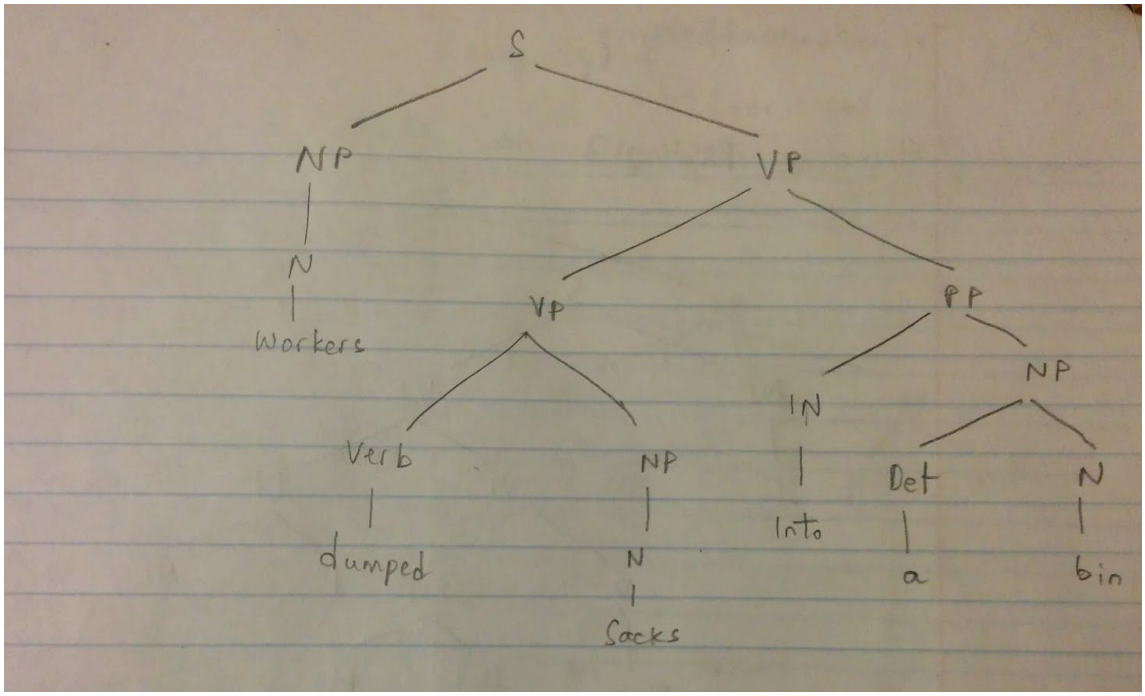
S = "*Workers dumped sacks into a bin*".



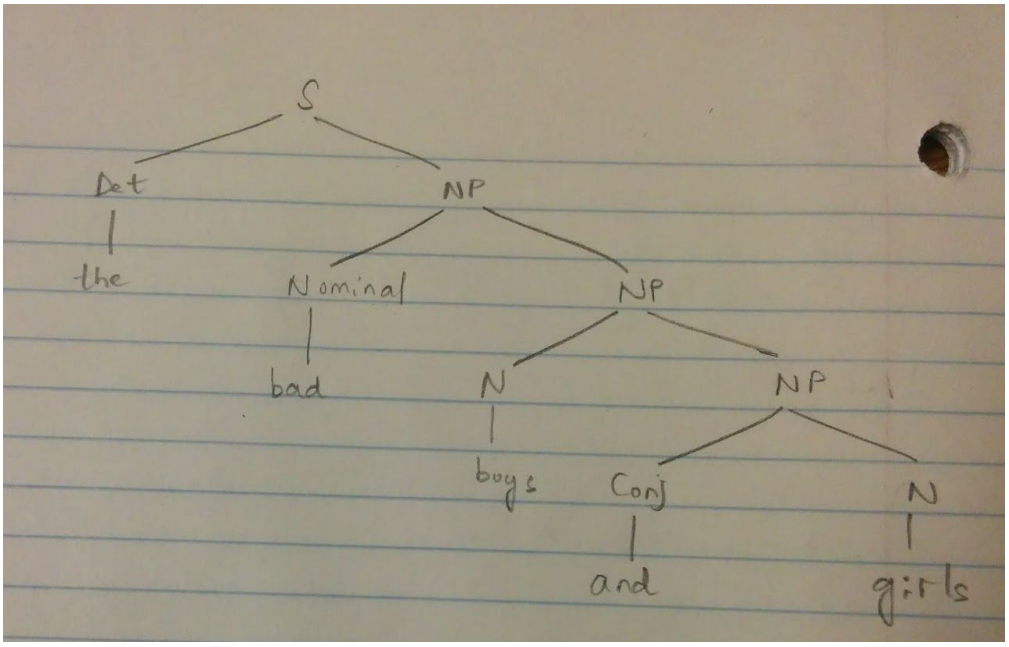


2. Coordination Ambiguity

S = "*the bad boys and girls*"

=> [the bad [boys and girls]]

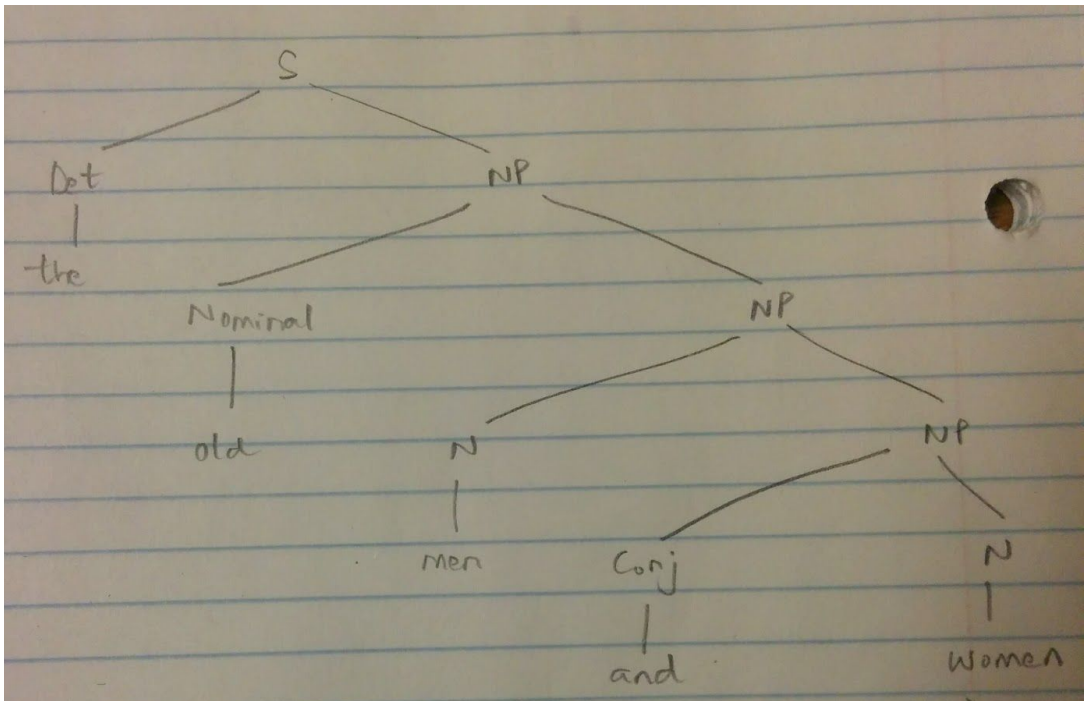
=> [the [bad boys] and [girls]]



S = "*old man and women*".

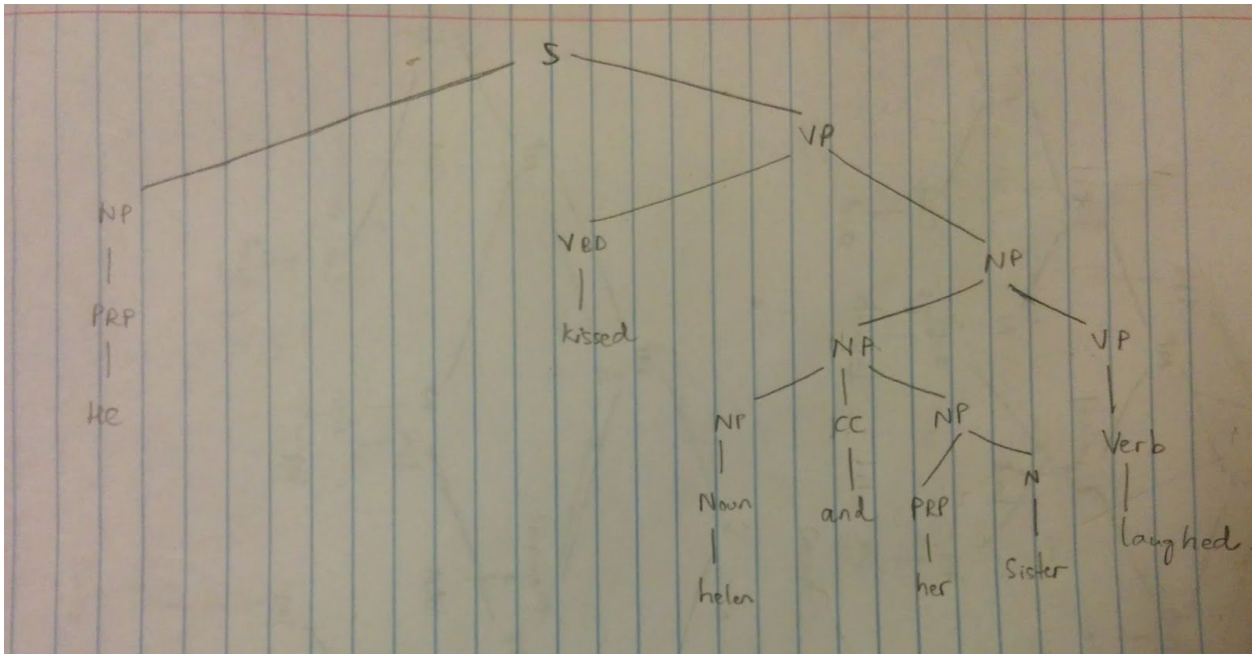
=> [old [man and women]]

=> [[old man] and [women]]



3. Local Ambiguity:

S = "*He kissed Helen and her sister laughed*".



4.

Top down approach: It's enumerates all possible parse trees before even examining the input. It spends a considerable amount of time on S trees that are not consistent with the input.

Bottom up approach: Never spends time exploring trees that won't result in a S tree. It also means that it never explores subtrees that cannot find a place in some S-rooted tree. Bottom up approach never suggests trees that are not at least locally grounded in the input.