6.3 RAT

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1. In the particular case of P(h|ph,c,pc), if we have V words in our vocabulary and C different non-terminal categories, roughly how many different probability distributions do we have to estimate for any possibility of P(h|ph,c,pc)?

2. Which of the following is true (i.e. a good assumption) about the dependencies of the labels of nodes in a parse tree?

    a) The label of a node in a parse tree is independent of the head word of the phrase over which the node spans.

    b) The label of a node is dependent on the labels of its children.

    c) The label of a node in a parse tree is independent from the labels of the node's siblings.

    d) For any node in a parse tree, its children are independent of its parent given its label.

3. What changes about the parsing algorithm with all of the modifications covered in the videos?

    a) We can use CKY, but with some modifications.

    b) Nothing except the time and space required. We can still use CKY.

    c) We need a whole new parsing algorithm.

    d) None of the above.

4. Lexicalize the following parse tree (annotate each non-terminal with the head of the phrase over which it is a constituent):