

A Couple Quick Questions on Conjunctions

(1) Eliminating a Lexical Ambiguity, Part 1

We've analyzed sentences like (a) below by postulating the lexical entry for "and" in (b).

a. Barack [smokes and dances]

b. [[and]] = [$\lambda f \in D_{\langle et \rangle} : [\lambda g \in D_{\langle et \rangle} : [\lambda x \in D_e : \underline{f(x) = T \text{ and } g(x) = T}]]]$]

However, as was discussed in class, the lexical entry above will not be enough to interpret all sentences containing "and". In order to analyze sentences like (c), where "and" conjoins together two sentences, we will need the lexical entry in (d).

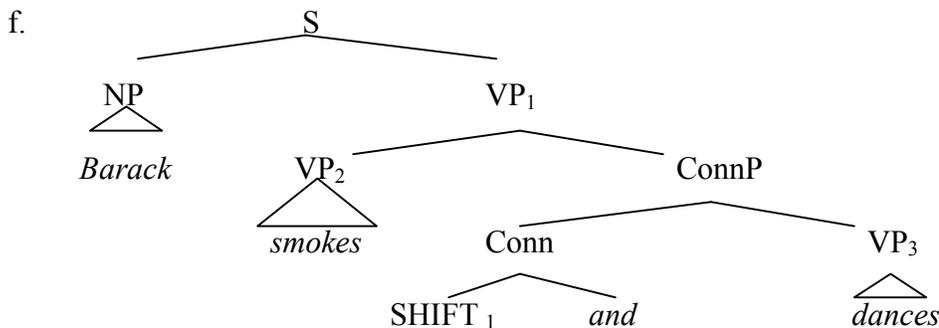
c. [[Barack smokes] and [Joe dances]]

d. [[and]] = [$\lambda p \in D_t : [\lambda q \in D_t : \underline{q = T \text{ and } p = T}]]$]

e. Question 1

Provide a proof showing that the lexical entry in (d) will provide the correct truth-conditions for sentence (c)

As mentioned in class, this kind of ambiguity may be undesirable. We would like to find some productive way of relating the two lexical entries in (b) and (d) together. Let us, then, imagine the following picture. Let's suppose that there is really only one lexical entry for "and", the one in (d), which treats "and" as of type $\langle t, \langle t, t \rangle \rangle$. Furthermore, let's suppose that in sentences like (1a), there's some phonologically null morpheme 'SHIFT₁' that is attached to "and". Thus, the structure of (1a) is really that in (1f) below:



g. Question 2

Provide a lexical entry for 'SHIFT₁' which predicts that the extension of the 'Conn' node will be equal to the function in (1b).

h. Question 3

Show via proof that the lexical entry you provided for Question 2 also allows you to compute the correct T-conditions for "Barack smokes **or** dances."

(2) **Eliminating a Lexical Ambiguity, Part 2**

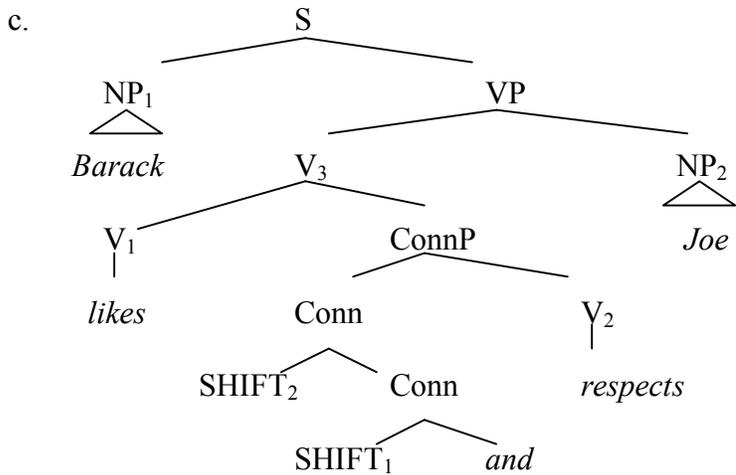
Now consider sentences like (a), below, which we will assume to have the hierarchical structure indicated.

a. [Barack [[likes and respects] Joe]]

b. **Question 1**

Briefly explain why neither the entry for “and” in (1d) nor the entry you gave for “SHIFT₁” in (1g) will allow you to interpret the sentence above.

Let us, for fun’s sake, postulate an additional, phonologically null operator in English, this one dubbed “SHIFT₂” Let us moreover suppose that the structure of (2a) is as below.



d. **Question 2**

Please provide a lexical entry for ‘SHIFT₂’ that allows the structure in (2c) to be interpreted. Please show via proof that this lexical entry will yield the correct truth-conditions for (2c).