1 An ambiguity revisited

In the first assignment of the quarter, you looked at an example very similar to (1), which has (among other readings) the two interpretations paraphrased in (1a-b).

(1) Kim saw two Tarkovsky films because Lee did.
   a. Kim saw two Tarkovsky films because Lee saw two Tarkovsky films.
   b. Kim saw two Tarkovsky films because Lee saw them.

Does our current set of assumptions (about ellipsis, quantification, variable binding, and so forth) predict this ambiguity? If so, say precisely how. If not, revise it so that it does, and show how it works. Justify all new assumptions, illustrate crucial points with derivations and trees, and be sure to show precisely how the two readings are derived, focusing in particular on how ellipsis is licensed for each of the interpretations. Does your analysis of these facts have implications for the theory of ellipsis — whether it involves a syntactic or a semantic identity condition?

2 The ‘i-within-i’ constraint

Consider the examples in (2).

(2) a. Every wife of her childhood sweetheart is unhappy.
    b. Every woman who married her childhood sweetheart is unhappy.

In both cases, it is possible to understand the pronoun her as referring to a contextually salient individual (though this is a somewhat weird interpretation if you’re not used to bigamous marriages). (2b) also has an interpretation that is paraphrased in (3).

(3) For every x such that x is a woman and x married x’s childhood sweetheart, x is unhappy.

Interestingly, (2a) does not allow this sort of interpretation, even though the meaning of wife of DP is presumably something very similar to the meaning of woman who married DP. In the syntactic literature, the impossibility of this interpretation of (2a) is sometimes claimed to be ruled out by the i-within-i constraint, which forbids the coindexation relation stated in (4).

(4) The i-within-i constraint
    *[[DP ... pro; ... ]],

This constraint rules out structures in which a pronominal expression is coindexed with the DP that contains it. The problem is that under normal assumptions about coindexing (i.e., not the assumptions we have made in this class!), the i-within-i
constraint as stated rules out both of the examples in (2) on the interpretations we are interested in, since they would have the representations in (5).

(5) a. \( [\text{DP} \text{ every wife of her}_1 \text{ childhood sweetheart}]_1 \) is unhappy.
   b. \( [\text{DP} \text{ every woman who married her}_1 \text{ childhood sweetheart}]_1 \) is unhappy.

However, our semantic system — and in particular, our assumptions about how pronouns get interpreted as bound variables — actually makes the correct predictions about the (im)possible interpretations of the sentences in (2). Your task in this part of the assignment is to show how. Specifically, you should show that our system provides a way of getting from (2b) to the truth conditions in (3), but it does not provide a way of getting from (2a) to comparable truth conditions. In particular, you should show that in the latter case, the only possible interpretation is one in which the pronoun \textit{her} is free: it cannot end up interpreted as a variable bound by the quantifier. (As noted above, (2b) also has an interpretation in which the pronoun is free, so you should show how this is derived too.)

To facilitate your work and avoid irrelevant complications, make the following assumptions:

1. The relational noun \textit{wife} has the denotation: \([\lambda x \in D_e. [\lambda y \in D_e. y \text{ is the wife of } x]]\)

2. The \textit{of} in the NP in (2a) is a dummy element that has no interpretation.

3. For any DP of the form \([\text{DP} \text{ genitive-pro}_i \text{ NP}]\), \([\text{DP}]^g = \text{the } x \text{ such that } x \text{ is } g(i)'s \text{ NP}; \text{i.e., } [\text{DP} \text{ her}_i \text{ childhood sweetheart}]^g = \text{the } x \text{ such that } x \text{ is } g(i)'s \text{ childhood sweetheart.} \text{ (In other words, you don’t need to worry about the compositional semantics of the possessive construction; just worry about how the pronoun is assigned the right value.)}

As usual, you should make all assumptions explicit, and illustrate crucial points with derivations and trees. Crucial to this assignment are our assumptions about how relative clauses are interpreted, so be sure to pay attention to this!