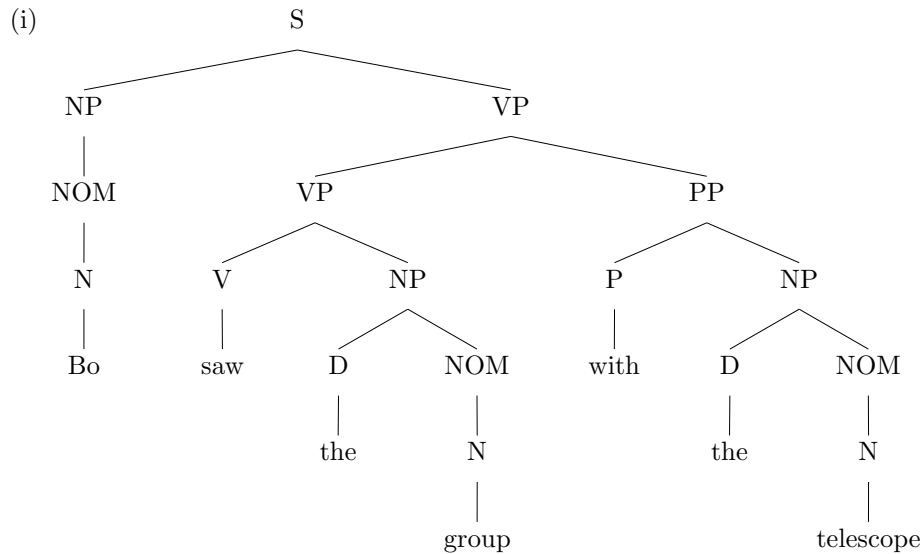
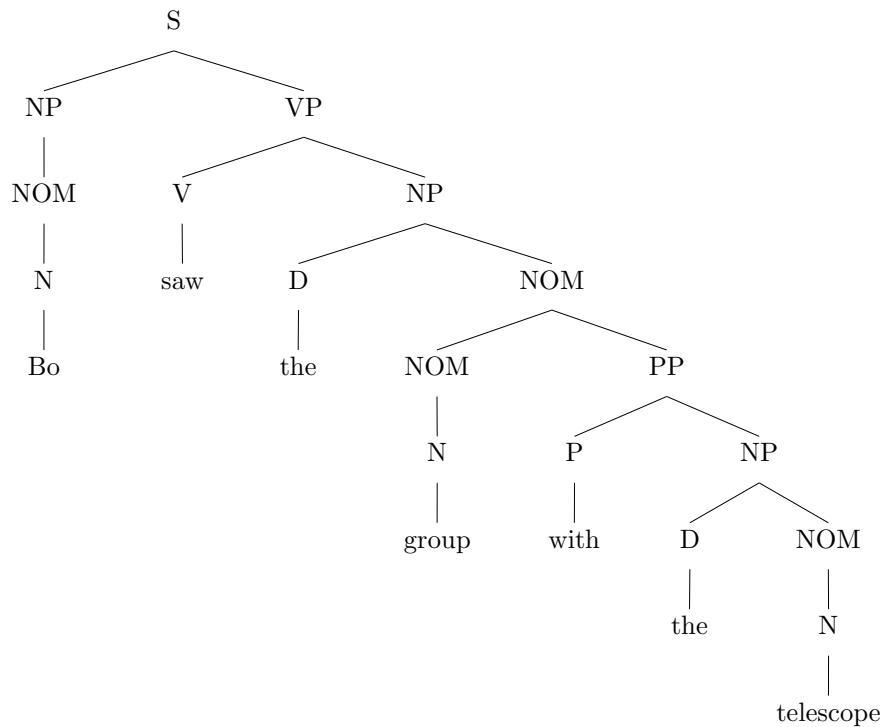


Chapter 2, Problem 2: Structural Ambiguity

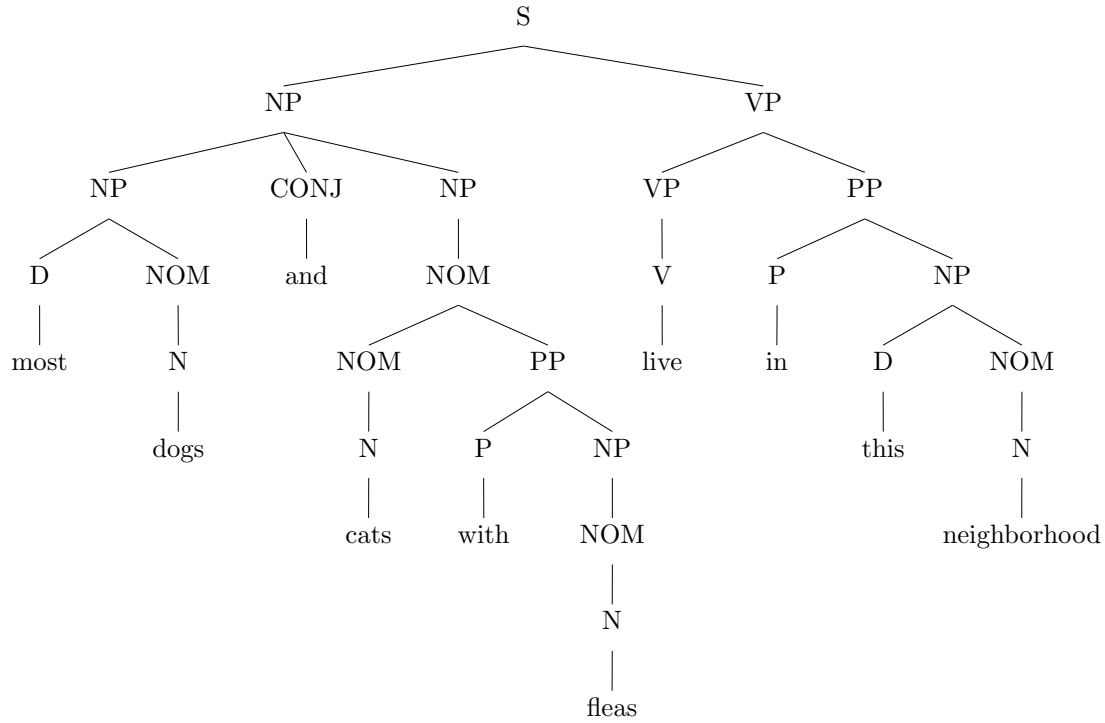


This structure corresponds to the interpretation in which Bo uses the telescope as an instrument (that is, Bo sees the group THROUGH the telescope).

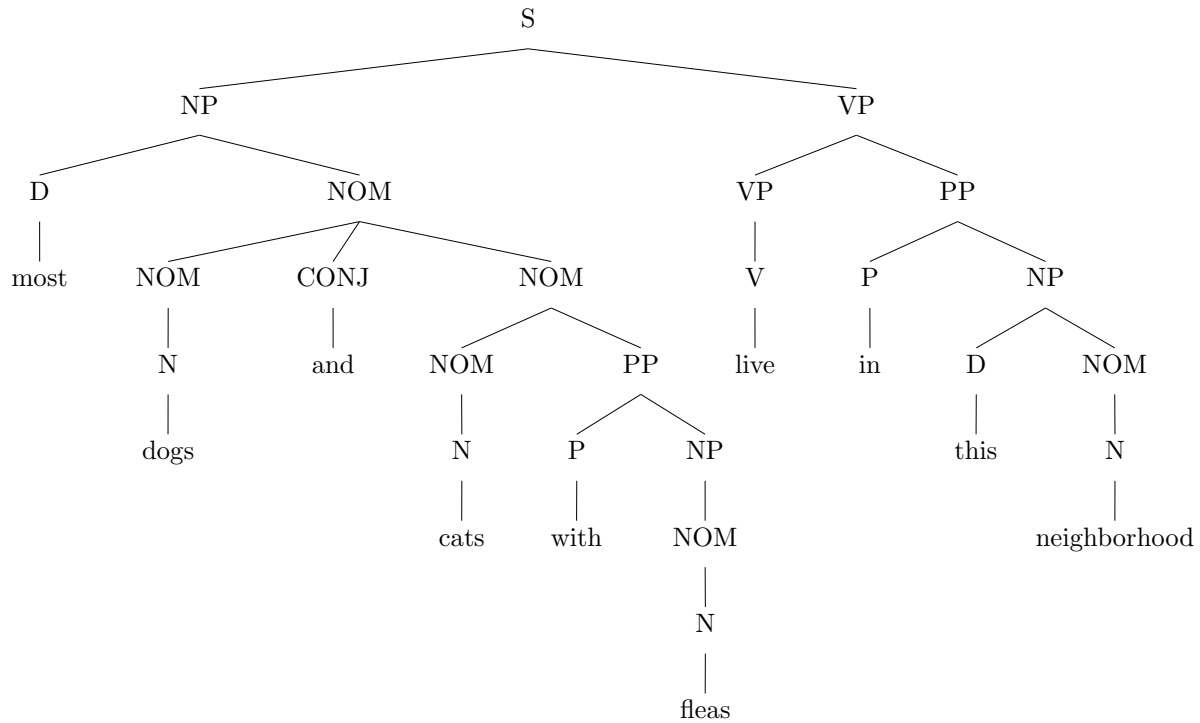


This structure corresponds to the interpretation in which the group is accompanied by or in the possession of the telescope (that is, Bo saw the group that was with the telescope).

- (ii) Our current grammar actually provides four distinct trees for this sentence, but two of them have the same interpretations:

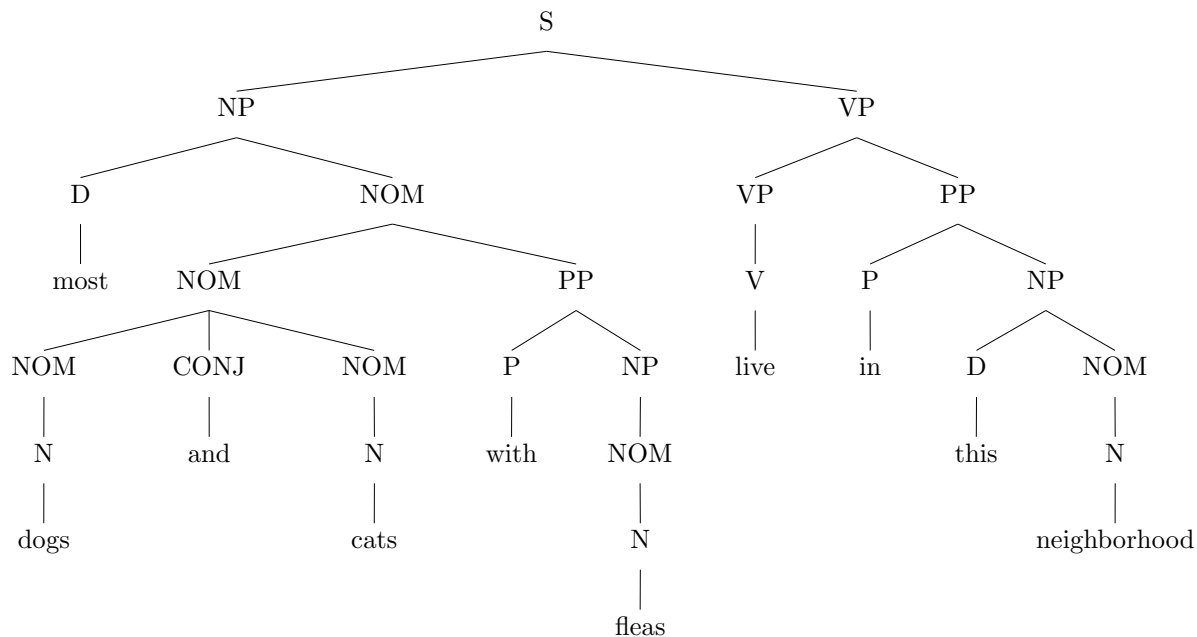


This structure corresponds to an interpretation in which most dogs live in this neighborhood and cats with fleas live in this neighborhood, but no commitment is made as to whether the dogs have fleas nor how many cats are in question.

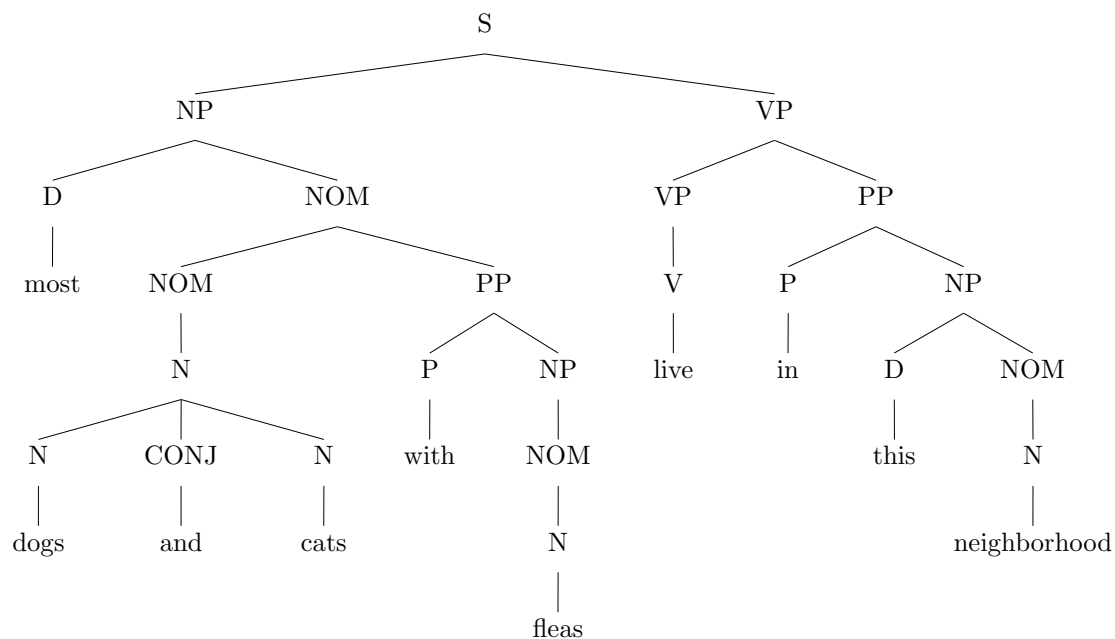


This structure corresponds to an interpretation in which a majority of the creatures that are either

cats with fleas or dogs (with or without fleas) live in this neighborhood.



This structure corresponds to an interpretation in which a majority of the creatures that both have fleas and are either dogs or cats live in this neighborhood.

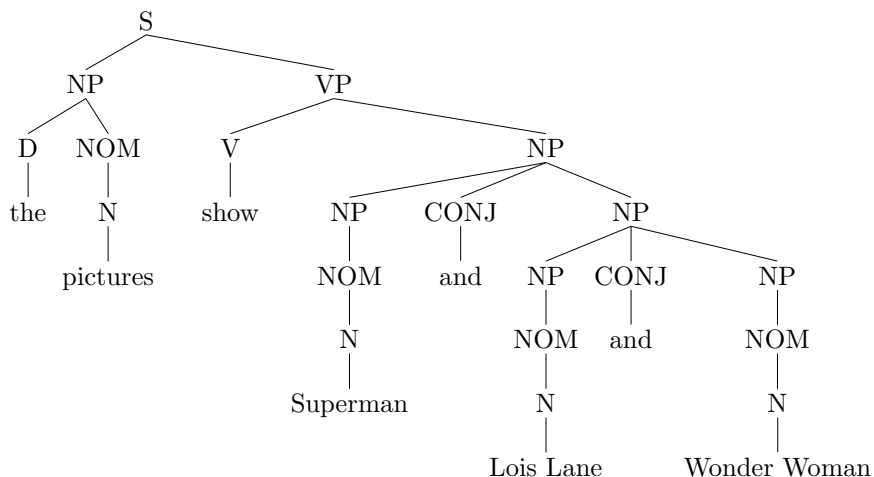
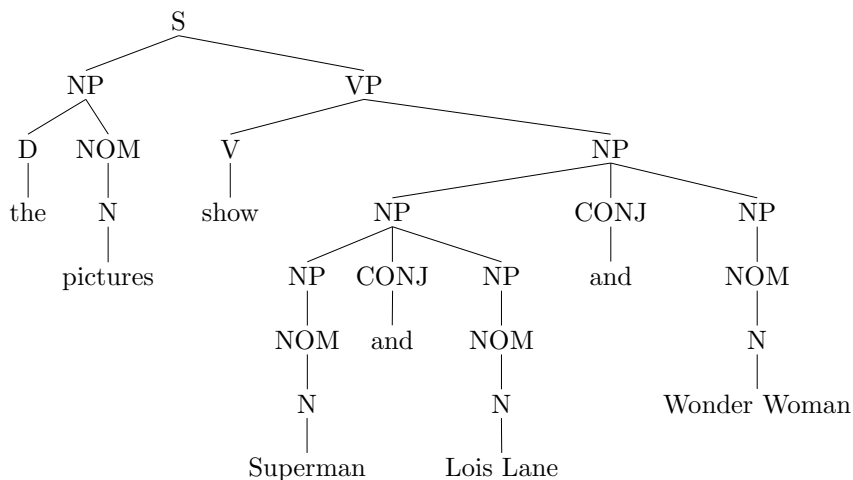


This structure would have the same interpretation as the previous one.

- (iii) Our current grammar actually provides twelve distinct trees for this sentence, but there are only two possible interpretations. This is because the conjunction can be at the level of NP, NOM, or N, but that doesn't make any difference to the meaning. The only semantically relevant structural choice is

whether Lois Lane is grouped with Superman or Wonder Woman. Note that a flat structure in which all three conjuncts are sisters is not possible with our grammar, since we allow only one conjunction per application of the coordination schema.

The two semantically distinct structures are represented in the following two diagrams.



The following five partial tree diagrams indicate the alternative structures possible for *Superman and Lois Lane and Wonder Woman*. Another five (perfectly analogous in structure) are possible with the first two conjuncts grouped together.

