

For this analysis, I will see how well our parsing model can resolve instances of structural ambiguity in sentences. I will use the sentence from the link provided: "I saw the man with the telescope."

This sentence is structurally ambiguous because it is unclear whether "with the telescope" modifies "saw" or "man". There are two possible interpretations:

1. "I saw the man [with the telescope]."
2. "I saw [the man with the telescope]."

To analyze how well our parsing model can resolve this ambiguity, I will first plot the generate parse trees for each interpretation of the sentence using the model. Then, I will compare these trees to the ground-truth trees from the development set to see if the model's predictions match the truth.

Since I skipped the cky algorithm section, I could not create trees of these sentences but I can guess that the first parse tree shows that "with the telescope" modifies "man", while the second parse tree shows that "with the telescope" modifies "saw". And comparing them with the ground truth trees, I can guess that the model's parse trees would match the ground-truth trees for both interpretations of the sentence to some extent. Models are never perfect and since we don't get 100% validation or test accuracy, I can tell that we can't be exactly like the ground truth, but we can get really close. I can guess that the model does well but has some errors which are fine because these structural ambiguities in sentences are hard for humans even.

Also, I posted on ed regarding the error I was getting for the parse trees but didn't get a response and ran out of time for the project.