

Ling 130 Guide to PS 4

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Quantification in Discourse

As mentioned in class, the major theme being addressed in Chapter 5 is the problem of accounting for how to logically interpret linguistic expressions beyond the level of the sentence (as proposition). This involves the interpretation of indefinite and definite NPs in ways that we have not encountered before, as well as the binding of pronouns with mechanisms unknown to the fragments of first-order logic that we have studied.

We have used two techniques to approach this phenomenon over the last couple of weeks:

- (1) a. Discourse Representation Theory (DRT): Developed by Kamp and further by Kamp and Reyle and others;
b. Dynamic Predicate Logic (DPL): Developed by Groenendijk and Stokhof.

These are reviewed in the notes for the class from the last few lectures, and you can find them on the webpage. Here I want to focus on specific points you should remember for the problem set.

1. DRT Problems

You need to construct the resulting DRT structure (DRS) for problems (1)-(3). Things to note:

- (2) a. Watch out for the effect of negation in 1.1;
b. Make sure a pronoun is introduced appropriately, and then bound by identity with its antecedent;
c. In 1.3, make sure the embedded indefinite is scoped correctly, and not too widely!

2. DPL Problems

For 2.1, you need to know what dynamic behavior is involved with both \exists and \wedge in the expression.

For 2.2, think back on your equivalences from previous chapters, in order to convert the expression to something we've already covered in class and from the paper. Then, you should be home-free on providing the interpretation!

Don't Panic!!!