HOMEWORK #7. Due May 11.
Do either a term paper proposal (instructions below), or exercises.

I. Instructions for a term paper proposal:

It is recommended, though not obligatory, that you come and talk to me before you finalize your term paper plans. I will give you feedback on your proposals, but you may well want to consult with me before that – I may be able to help you find a topic and recommend articles to read that would suit your interests.

The term paper proposal due May 11 should be at least 2-3 pages and should ideally include four parts:
(1) A statement of a problem, or description of a problem area (in semantics), and why you find it potentially interesting or puzzling. If it relates to other work you have done or are doing, describe that.
(2) One or more possible hypotheses related to the problem. These can be proposals taken from articles or books in the semantic literature, or hypotheses of your own.
(3) A plan of work. What will you do to investigate your topic or develop your hypotheses or analyze some phenomenon or try to resolve some dispute?
(4) A bibliography: two or more articles, or parts of books, that you will study in connection with your project.

This outline may not exactly suit every kind of proposal – you don’t have to follow it exactly. One kind of project might involve taking some work we’ve looked at in English and seeing whether and how it can be applied to your native language (if that isn’t English). Another kind of project might start from reading an article or two about a the semantics of a particular kind of construction in a particular language you’re interested in, and doing a report on that work, with some critical comments or questions or additions of your own. Another project could involve reading two articles that disagree with each other about some theoretical or descriptive phenomenon, and discussing the disagreement. Or you might just take some of the work we’ve done on English and try to extend it to cover some further phenomena in English.

The final term paper, due Monday, May 29, should be approximately 10-12 pages long, double-spaced, including bibliography. It is recommended, but not absolutely required, that you give me a rough draft on Monday May 22, which I will return with comments on May 24. And you are strongly encouraged to come see me at least once to discuss your project as you work on it.

II. Homework 7 exercises for those who choose not to write a term paper.

Choose two or three that suit your level and your interests. Feel free to modify the problems if you wish, and/or to work on or discuss near-equivalents.

1. a. Look back at Fragment 3 in Lecture 9. Near the end of Section 2 is a translation of \( \text{apred man} \), and the translation of \( \text{is apred man} \) is the same, namely \( \text{man} \). Work out how that translation results from compositional semantic rules plus simplification via lambda-conversion. (You’ve done this before – this part is review. The translation of \( \text{is} \) is given at the very end of Section 2 of Lecture 9.)
b. Show how the same translation could be achieved by first interpreting a man as a 
generalized quantifier (Montague’s translation), and then applying the BE type-shifting operator 
of Lecture 14 to shift the interpretation to type <e,t> (and simplifying the result by lambda-
conversion); the remainder of the derivation (combining with the be of Lecture 9, which is also 
the interpretation of be discussed in Lecture 14) would be the same, so you needn’t repeat it.

2. Show that the following claim made on page 124 of Partee (1986)¹ is true:
   (i) Whenever iota(king’) is defined, i.e. whenever there is one and only one king, then 
   \[ \text{lift(iota(king’))} = \text{THE (king’)} \]

3. Show that the following claims made on pages 124-125 of Partee (1986)² are true:
   (i) BE(THE (king’)) is of type <e,t>.
   (ii) If there is at most one king, then king’ = BE(THE (king’))

4. Related to Lecture 13: Fill in the missing steps in the derivation of reduced forms of 
translations of the example every student reads a book on syntactic derivation (ii) in section 3.
Use Montague’s generalized quantifier interpretations of every student and a book, as given in 
Fragment 3 in Lecture 9 and various other places. This is an exercise in compositional 
interpretation and lambda-conversion.

5. Review page 5 of Lecture 13. Given the examples
   \[ \parallel \text{Every} \parallel (A) = \{B| \forall x (x \in A \rightarrow x \in B)\} \quad \text{and} \]
   \[ \parallel \text{Some} \parallel (A) = \{B| \exists x (x \in A \land x \in B)\}, \]
what would the following be?
   a. \( \parallel \text{Not every} \parallel (A) \)
   b. \( \parallel \text{Most} \parallel (A) \)
   c. \( \parallel \text{No} \parallel (A) \)

¹ page 365 in the Portner and Partee collection; Section 3.2 of the paper.
² also on page 365 in the Portner and Partee collection; Section 3.2 of the paper.