Linguistics 001-601, Fall 2007 Instructor: Marjorie Pak November 2, 2007

Homework 8, due November 8 at the beginning of class.

Part 1: Semantic change *(3 points).* The best way to do this part of the assignment is by using the online Oxford English Dictionary (OED), which you can access through the Penn Library website (go to http://www.library.upenn.edu/, click on 'E-Resources' on the menu on the left and search for (matches) Oxford English Dictionary). If you're affiliated with another college, you may be able to access the OED through their library instead. You can also use an unabridged print dictionary as long as it has detailed word etymologies – The American Heritage dictionary is quite good.

Look up the etymology of any **three** of the following words:

a) hussy
b) assassin
c) dunce
d) silly
e) nice
f) cloak
g) check
h) hospital
i) duke
j) easel

Using the terms that were introduced on p. 1 of your Week 9 handout, discuss what types of semantic changes took place in the history of each word. Cite the earliest form and meaning you can for each word, plus any other forms that will help you discuss the changes the word went through. Write 3-5 sentences for each word.

Part 2. Syntactic structures and semantic roles *(2 points).* For each of the following sentences, (i) underline the **syntactic subject** (if there is one) and write 'subject' above it, and (ii) underline the **semantic agent** (if there is one) and write 'agent' above it. In each case, make sure to underline the entire constituent, not just the head noun.

1. The suspect was last seen at the 7-Eleven on 49th Street.

2. Julien ate all the chocolate-covered pretzels.

3. Please return your books by Wednesday.

4. Which song are the students complaining about now?

5. The temperature fell to 35 degrees.

(see next page…)

Part 3. Practice with predicate logic. *(3 points)*

1. Pick **any 3 examples** from Gregory, Exercise 8.15 (p. 55) and translate them into English. Provide **two** semantically equivalent translations for each example.

2. Pick **any 3 sentences** from Gregory Exercises 8.17-8.18 (p. 56) and translate them into predicate logic.

3. **Extra credit** *(up to 1 point):* answer question 8.20 on Gregory p. 56.

Part 4: Disambiguating sentences with predicate logic *(2 points)*. Each of the following sentences is ambiguous. For (1)-(3), I have provided two formulas for each sentence. Read each formula, paying close attention to the placement of parentheses and to the order of quantifiers with respect to negation, 'if-then,' etc. Then, **write an unambiguous paraphrase for each formula** showing that you understand what it means. Don't try to disambiguate the sentences with punctuation alone! To ensure that a paraphrase is unambiguous, you may find it helpful to provide a scenario where that particular formula would be true and the other formula in the pair would be false. This may not be possible in every case, though.

1. **Marjorie didn't grade an exam.**

   a) $\forall x$ (Exam(x) → ~Grade(marjorie, x))

   b) $\exists x$ (Exam(x) & ~Grade(marjorie, x))

2. **Claire won't be angry if Amy votes for Colbert.**

   a) VoteFor(amy,colbert) → ~Angry(claire)

   b) ~ (VoteFor(amy,colbert) → Angry(claire))

3. **If Andrew visits Moira then Jessica will visit Meg and Emma will visit Theresa**.

   a) Visit(andrew, moira) → (Visit (jessica, meg) & Visit(emma, theresa))

   b) (Visit(andrew, moira) → Visit (jessica, meg)) & Visit(emma, theresa)

For (4), I have provided two readings and one formula. Write the second formula.

4. (Announcement as train approaches station): **All doors won't open.**

   a) Unintended meaning ('No doors will open'): $\forall x$ (Door(x) → ~Open(x))

   b) Intended meaning ('Not all doors will open'): _____