LING-053 Semantics 1

Homework 2 (due Friday January 30 at the beginning of class)

1. Exercise 1 and 2 page 82-83 in Löbner’s Understanding Semantics.

2. Take three sentences, p, q, r as follows:

   p: John is reading a book
   q: Mary is writing a letter
   r: It is not the case that John is reading a book or Mary is writing a letter.

Make the working assumption that sentence r is ambiguous between the following two readings:

   (a) ¬(p ∨ q) (the whole sentence is negated) – call this reading A;
   (b) (¬p) ∨ q (only the first disjunct is negated) – call this reading B.

Use the truth-table for ¬ and inclusive ∨ to show the truth values of (a) and (b) above in the three situations below:

   (a) Situation 1: p = 1; q = 0
   (b) Situation 2: p = 1; q = 1
   (c) Situation 3: p = 0; q = 1

Remember that 1 stands for TRUE, and 0 stands for FALSE.

3. p → q means that p entails (= materially implicates) q. This can be paraphrased as “if p is true, then q is true too”. Explain why the following are cases of entailment (material implication), i.e. describe the type of situation in which these sentences would be false. Furthermore, describe a situation that makes clear why these cases are not cases of (material) equivalence:

   (a) If you answer three questions, you’ll pass the exam.
   (b) If it rains, Mary will stay at home.
   (c) If you are a citizen of Italy, you need a visa to work in the U.S.