# Assignment 5:  Due Friday, March 8 @ 5pm
## (by email or delivered to my office)

**I.   On success and failure**

What sorts of inferences are licensed by the verbs *succeed* and *fail*?

(1)      a.  John succeeded in losing weight.
          b.  John failed to lose weight.

To answer this question, first consider how (1a) differs from (2a), as well as how
(1b) differs from (2b):

(2)      a.  John lost weight.
          b.  John didn't lose weight.

Next, answer the following questions:

 (i)  does (1a) entail (2a)?
 (ii)  if so, is this an ordinary entailment, or does (1a) also presuppose (2a)?
(iii)  what other inference(s), if any, does (1a) license that (2a) does not?
(iv)  what is the status of the additional inference(s):  ordinary entailments,
        presuppositions, or both?

Then, answer these same questions for (1b) and (2b).  Be sure to justify all of your
conclusions with our tests for identifying entailments and presuppositions.

**II.  *Even***

**A.**  What is the contribution of the word *even* in (3)?

(3)      Even Stanley reads poetry.

To answer this question, begin by asking how (3) differs from the
corresponding sentence without *even*:

(4)      Stanley reads poetry.

Next, answer the following questions:

   (i)  does (3) entail (4)?
  (ii)  if so, is this an ordinary entailment, or does (3) also presuppose (4)?
 (iii)  what other inference(s), if any, does (3) license that (4) does not?
  (iv)  what is the status of the additional inference(s):  ordinary entailments,
        presuppositions, or both?

Be sure to justify all of your conclusions with our tests for identifying
entailments and presuppositions.

(Tip:  when constructing the negation of (3), use the phrase *it is not true that.*
You will be led astray if you use simple *not*.  Also, remember that the entire *S*-
family can be used to test for presupposition.  If you find the negated version
of (3) difficult to interpret, then consider the other members of the *S*-family.)

**B.**  Now, construct two other sentences of the form *Even X Y-s* or *Even X Y-ed*.
(In (3), *X* is *Stanley* and *Y* is *read poetry*.)  On the basis of (3) and your own
examples, make a generalization about the inferences licensed by a sentence
of the form *Even X Y-s* or *Even X Y-ed*.  Show how your generalization
works by characterizing the entailments and presuppositions of <u>one of your
constructed examples.</u>

**C.**  In (5), *even* immediately precedes the VP, rather than the subject NP.

(5)      Stanley even reads poetry.

How does the contribution of *even* in (5) differ from its contribution in (3)?
Again, start by asking how (5) differs from the corresponding sentence
without *even* in (4).  Then, answer (i)-(iv) from Part A, but this time address
the relationship between (5) and (4).  Be sure to justify all of your conclusions
with our tests for identifying entailments and presuppositions.

**D.**  Based on your answers to Parts A–C, give as precise a characterization as
possible of the relationship between the syntactic position of *even* and the
inferences that are licensed by an *even*-sentence.

## III.  Translating English Sentences into Predicate Logic

**A.**  Provide Predicate Logic translations for the following English sentences:

(1)     John gave ten dollars to Mary.
(2)     Mary was given ten dollars by John.
(3)     Toby was under the table.
(4)     Clive showed Maddy the photos.
(5)     China is east of Europe.
(6)     Sheila is a surgeon.
(7)     Max, Clyde and Damien partnered with Latoya, Gina and Britt
        respectively.
(8)     Jerry is Ben's brother.
(9)     Paul is the brother of Sheila.
(10)    Jerry and Ben are brothers.

Remember that you must provide a key for any predicate constants and individual constants that appear in your Predicate Logic translations.  To the greatest extent possible, you should recycle these constants in your translations.  For example:

SELL(x, y, z) : x sold y to z

a : Alan
b : Betty
c : the car

(i)   Alan sold the car to Betty.        SELL(a, c, b)
(ii)  Alan sold Betty the car.           SELL(a, c, b)
(iii) Betty was sold the car by Alan.    SELL(a, c, b)

In other words, you should **not** define a new predicate constant to translate each different occurrence of the English predicate *sell* in (i), (ii), and (iii).

(**Note:** in (1) and (2), you may translate the NP *ten dollars* with an individual constant.)

**B.**  Now, provide Predicate Logic translations for the following three sentences:

(11)    Clive hugged Marcia.
(12)    Marcia hugged Clive.
(13)    Clive and Marcia hugged.

Again, provide a key for any predicate/individual constants that appear in your translations.

**C.** Now, provide Predicate Logic translations for the following English sentences.  <u>If a sentence is semantically ambiguous, then provide separate logical translations for each of its interpretations</u>.  And again, provide a key for any predicate/individual constants that appear in your translations.

(14)    Either Sydney or Canberra is the capital of Australia.
(15)    Audrey went to Minneapolis and visited Rick or interviewed Cameron.
(16)    Alice didn't laugh and Bill didn't either.
(17)    Alice didn't laugh and nor did Bill.
(18)    Neither Bill nor Alice laughed
(19)    Frank is not both rich and generous.