Problem Set 8

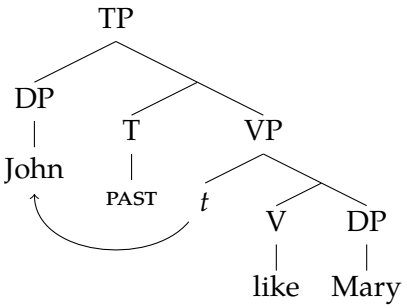
Due November 17 before class. Submit on IVLE > Files > Student Submission > PS8.

In this problem set, you will develop a new compositional approach to tense semantics, which resolves some of the problems identified in class.

Suppose we change all of our verbs so that they are of the form $\langle ..., \langle i, t \rangle \rangle$, where i is the type for time intervals. For example, assume:

(1) $[\![\text{like}]\!] = \lambda x_e \,.\, \lambda y_e \,.\, \lambda I_i \,.\, y$ likes x over the entire time interval I

a. Compute truth conditions for *John liked Mary*, assuming the tree below. (Again, ignore how the verb gets to be pronounced *liked*.) Note that the entire TP should have type t. You will need to define $[\![\text{PAST}]\!]$. (You can refer to an infinitesimally short time interval called NOW in your definition for $[\![\text{PAST}]\!]$.)



b. Propose a semantics for $[\![\text{yesterday}]\!]$ and compute truth conditions for the TP *John liked Mary yesterday*. Assume *yesterday* is adjoined to VP.

c. Compute truth conditions for *John did not like Mary*. You will need to define $[\![\text{not}]\!]$.

d. Consider the sentence *John did not like Mary yesterday*. What truth condition(s) does our proposal predict for this sentence?