Homework 4: Due October 28, 2014 in class

1 Determiner meanings

- Give type $\langle\langle e,t\rangle,\langle\langle e,t\rangle,t\rangle\rangle$ meanings for the following "determiners": *every*, *no*, *three*, *most*, *at least five but no more than ten*.

2 Reconstruction, covert subjects

- The sentence *most students didn't pass* is ambiguous. On one reading, the failing students are claimed to be more numerous than the passing ones. The other reading simply denies that more students passed than failed.

  ▷ Give a scenario where these two readings come apart, i.e. where one is predicted true and the other is predicted false.

  ▷ Exploit the generalization of traces and predicate abstraction explored in class (summarized and formalized in the box immediately below), along with the VP-internal subjects hypothesis, to give two LFs for this sentence. Give node-by-node interpretations of both LFs and indicate which LF corresponds to which reading.

  > **Generalized assignment functions:**
  >
  > An index is a **pair** $\langle n, \tau\rangle$ of a natural number n and a type τ.
  >
  > An assignment is a function g from indices to denotations such that, for any $\langle n, \tau\rangle$, $g(\langle n, \tau\rangle)$ has type τ.
  >
  > **Generalized interpretation rules:**
  >
  > For any pronoun or trace x, $[\![x_{\langle n,\tau\rangle}]\!]^g := g(\langle n,\tau\rangle)$
  >
  > $[\![\langle n,\tau\rangle\ X]\!]^g := \lambda\nu_\tau.[\![X]\!]^{g[\nu/\langle n,\tau\rangle]}$

- The sentence *everyone didn't meet a linguist* can be construed as denying that everyone did some linguist-meeting, i.e. with *not > everyone > a linguist*. Yet the LF in Figure 1 does not manage to derive this interpretation.

  ▷ Which interpretation *is* derived by this LF? You don't need to give a full calculation, but you should justify your answer.

  ▷ How can we derive the interpretation we seek? Again, a full calculation isn't necessary; give an LF and be explicit about why it works.

- **BONUS** (not required, but give it a shot). The first of the following two sentences is acceptable on the indicated reading. The second is not.

  (1)   Every woman$_i$ who married her$_i$ prom date was at the reunion.

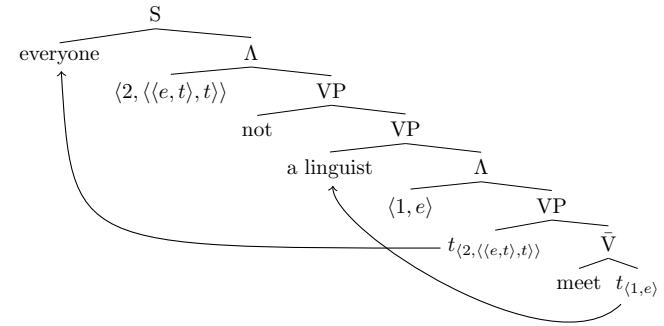 (2)   * Every wife$_i$ of her$_i$ prom date was at the reunion.

Figure 1: Possible LF for *everyone didn't meet a linguist.*

▷ How does this datum bear on whether type $\langle e,\langle e,t\rangle\rangle$ nouns such as *wife* can have covert subjects?

▷ Hint: begin by sketching an LF for the grammatical sentence. Consider how binding is achieved in this LF and then consider the ungrammatical sentence in this light.

3 Successive cyclic movement

- (Problem borrowed from Chris Kennedy.) Research in syntax suggests that wh-movement is **cyclic**: when a word moves out of a clause, it must make a pit stop at the clause's edge, as in the following structure:
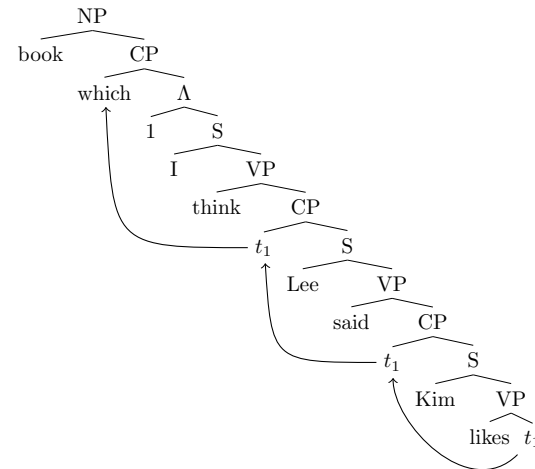

Figure 2: Possible LF for *book which I think Lee said Kim likes*?

▷ Explain in clear and precise terms why our system doesn't derive an interpretation for the structure in Figure 2. Propose a solution.