Sentences and topics for XTAG Semantics.

Maribel Romero, Sept 29, 2001.

A. PLAIN EASY SENTENCES.

It may be good to start with some trivial sentences to remind ourselves of how the derived trees and the semantics work.

1. Abram hired Browne.

2. Abrams showed the office to Brown.

B. Reflexives pronouns and binding.

I assume somebody must have worked on reflexives for TAG syntax. I'm curious to see how coreference (identification of the x and y arguments?) is encoded. Is there some kind of indexing mechanism enforced by the syntax? I would also like to see an example of binding (optional identification of two variables) as in (i).

3. The woman evaluated herself.

- 4. The woman showed an office to herself.
- 5. Abrams evaluated himself and Browne. (Hard case.)

| i. Every girl likes her mother. | Every girl x likes x' mother (binding reading) |
|---------------------------------|--|
| | Every girl x likes y's mother |

C. CONJUNCTION.

We talked a lot about conjunction last semester, but I am not sure what decisions we made. Has conjunction been implemented in any fashion?

C.1. Easy case: intersection

ii. Devito eats and drinks.

6. Chiang interviewed programmers and showed Browne an office.

C.2. Conjunction between individuals: forming plural individuals.

- 7. She and I interviewed Abrams.
- 8. Browne, Chiang and Devito work.
- 9. Devito interviewed a programmer and an engineer (who know each other).

Readings:

- Link, G. 1983. The logical analysis of plurals and mass terms: a lattice-theoretical approach. In Baeuerle, Scwarze and von Stechow, eds., *Meaning, Use and the Interpretation of Language*. De Gruyter, Berlin.
- Schwarzschild, R. 1991. *On the meaning of definite plural noun phrases*. Amherst, MA: GLSA.

D. RELATIVE CLAUSES.

Has Chung-hye's idea been implemented for (11)? See also free relatives and ATB movement.

10. Abrams hired a woman who was competent.

11. Abrams hired women [/a woman] whose manager was competent.

12. Abrams approved of what Chiang did. (Free Relative Clause) iii. Abrams ate what Chiang cooked.

13. Devito manages a programmer who Abrams interviewed and Browne hired. (Across The Board movement)

E. TENSE.

- 17. Abrams is working.
- 18. He hired her.
- 19. Abrams will hire Browne.

E.1. Where does the existential closure over times comes? Is it part of the temporal morpheme? Does it come from the main predicate?

Readings:

Bauerle, R. and A. von Stechow. 1980. Finite and non-finite temporal constructions in German. In C. Rohrer, ed., *Time, tense and quantifiers: Proceedings of the Stuttgart conference on the logic of tense and quantification*. Max Niemayer Verlag, Tuebingen.

Dowty, D. 1982. Tense, time adverbs and compositional semantic theory, *Linguistics and Philosophy* 5, 23-55.

Ogihara, T. 1996. Tense, attitudes and scope. Kluwer. GOOD SUMMARY.

E.2. How do temporal sensitive Noun Phrases get their temporal variable bound? (vi) The president of the U.S. was wearing shorts when...

Readings:

Abusch, D. 1997. Sequence of tense and temporal de re, *Linguistics and Philosophy* 20, 1-50.

Enc, M. 1987. Anchoring conditions for tense, Linguistic Inquiry 18, 633-657.

E.3. Time points vs. time intervals.

Readings:

Bennett, M. and B. Partee. 1972. Towards the logic of tense and aspect in English. Distributed by Indiana Univ. Linguistics club, Bloomington.

Dowty, D. 1979. Word meaning and Montague grammar: the semantics of verbs and times in generative semantics and in Montague's PTQ. Reidel, Dordrecht.

F. MODALS AND RAISING VERBS.

The sentences (14)-(15) should not be too problematic. The so-called "reconstructed" reading in (iv) needs to be made available. Note that there is scopal ambiguity between the NP and "must" in (iv), but the interaction of two modals does not yield ambiguity -- see (v)--, so we have to rethink scope underspecification for these cases. We can also add the semantics for attitude verbs ("think", "know", "want", "promise"...)

- 14. Abrams may hire Browne.
- 15. Abrams must hire Browne.
- 16. Abrams was known to be interviewing Browne.

(iv) A student must come.

- -- There is a student in particular that has that obligation.
- -- It is obligatory that a student –any—comes.
- (v) Mary may have to go.
 - -- Possibly, Mary has the obligation to go.
 - -- *For sure as far as I know, Mary is able. I.e.,"Mary must be able to go".

G. QUESTIONS.

Karttunen's semantics for questions distinguishes between the contribution of the core S, the complementizer (hidden "whether") and the wh-phrase itself. That allows him to have an elegant system to generate both single wh-questions and multiple wh-questions. How do we break down the semantics in TAG if we have the wh- S tree as a basic, unbreakable unit?

20. Who does Chiang employ?21. Who interviewed whom?

H. COMPARATIVES AND SUPERLATIVES.

Advanced topic. What is the syntactic treatment of "more/-er...than"? Current research compares it with generalized quantifiers, except that Barwise-Cooper's were over individuals and these would be over degrees.

22. Abrams is more competent than Browne.