Exercise 3
— Control, Long Distance Dependencies, Information Structure and Anaphora —

1 Control

1.1 Lexical Differences

Non-finite embedded clauses crosslinguisically generally do not realize an overt subject (But Portuguese for example is a famous exception). However, different control verbs work differently — control is thus a matter of lexical variation. Additionally, raising verbs exist.

For the sentences below, classify the verbs as subject control verbs, object control verbs (or both) or raising verbs. Which is which?

Provide a c-structure and f-structure analysis for (1a), (1b) and (1e).

(1) a. Kim expected to eat spinach.

b. Kim promised Sandy to eat spinach.

c. Kim expected Sandy to eat spinach.

d. Kim persuaded Sandy to eat spinach.

e. Kim appears to eat spinach.

1.2 Long Distance Dependencies

English allows long distance topicalization or "fronting" of constituents, as shown in (2).

(2) Beans, I like.

The dependency between a fronted argument and the verb that subcategorizes for it can in principle be infinitely long, hence the name *long distance dependency*.

(3) a. Beans, I think Kim likes.

    b. Beans, I think that Kim wants Sandy to like.

    c. Beans, I want Kim to think that Sandy likes.

    d. Beans, I think that Kim thinks that Sandy wants the dog to like.

    e. ...

1. How are such long distance dependencies dealt with within LFG?

2. Provide an f-structure analysis for (3c).

3. Go to the INESS XLE website (http://iness.uib.no/iness/xle-web) and see what the analysis for the sentence in (4) looks like.

    (4) Who did you think that Peter wanted to like?

    This is a type of long distance dependency as well. Write down the functional dependency path for the interrogative pronoun that describes the long distance dependency in this case.

2 Information Strucure

Notions such as topic and focus are relevant for understanding the structure of a discourse. In particular, they have been thought of as *information packaging*. That is, identifying what the topic and the focus of a clause is helps to package information in that old vs. new information is marked.

2.1 Discourse Fucntions vs. I-structure

There are two approaches to Topic, Focus and related notions in LFG. In one, Topic and Focus are seen to be similar to grammatical functions such as SUBJ and OBJ and are encoded at f-structure. In another approach, they are represented separately at i(nformation)-structure. What is an argument for the creation of a new i-structure projection within LFG?

2.2 Sample Analysis

Consider the following passage from *The Wind in the Willows* (by Kenneth Grahame).

(5) a. 'What are you looking at?' said the Rat presently, when the edge of their hunger was somewhat dulled, and the Mole's eyes were able to wander off the table-cloth a little.

   b. 'I am looking,' said the Mole, 'at a streak of bubbles that I see travelling along the surface of the water.

   c. That is a thing that strikes me as funny.'

1. Identify what the subject, the object, the topic and the focus are in (5b) (ignore the parenthetical "said the Mole") and explain how you determined this.

2. Provide a c-structure, f-structure and i-structure analysis for (5b) (again ignoring the parenthetical).

3 Binding Theory

Syntactic investigations have established that reflexives, pronouns and names work differently in terms of what they refer to, i.e, which antecedents they can take.

The generalizations of classic Binding Theory are given in a simplified form in (6).

(6) **Classic Binding Theory**
    Principle A   An anaphor (reflexive) must be bound in its governing category.
    Principle B   A pronoun must be free in its governing category.
    Principle C   An R-expression must be free everywhere.

In LFG, the f-structure has been established as the relevant domain for determining syntactically motivated antecedent (binding) relations. The following principles have been articulated for English.

1. Reflexives have to be bound in the minimal nucleus. A minimal nucleus is the minimal f-structure that contains a SUBJ.

2. Pronouns have to be free in their co-argument domain. The co-argument domain is the minimal domian of the pronoun and its co-arguments (within the domain of the PRED).

Use these principles to work out which antecedent the reflexives and pronouns in the following sentences refer to.

(7) a. Xena$_i$ knew that Gabrielle$_j$ loved her.

    b. Xena$_i$ knew that Gabrielle$_j$ loved herself.

    c. Gabrielle$_j$ threw the spear to herself.

    d. Gabrielle$_j$ threw the spear to her.

    e. Gabrielle$_j$ pulled the blanket around herself.

    f. Gabrielle$_j$ pulled the blanket around her.