

Exercise 1

— LFG Basics —

Please hand in this exercise on the 25th of November.

1 C-structure vs. F-structure

Please answer the following questions.

1. LFG has two core syntactic levels of analysis: the c-structure and the f-structure. What do each of these represent/encode?
2. Analyze the sentences in (1). Draw c-structure trees and f-structure representations for each of the sentences.
 - (1) a. The children bought a book.
 - b. Kim played.
 - c. The children will buy a book.

2 Grammatical Relations

LFG assumes the following Grammatical Functions (GFs).

$\text{SUBJ} > \text{OBJ} > \text{OBJ}_\theta > \text{OBL}_\theta$

These GFs are *arguments* of a predicate (typically a verb). In order to figure out which arguments of a predicate correspond to which GFs, you have to apply language specific tests (see Dalrymple's Chapter 2 for some discussion). Some tests that are generally applied involve agreement (e.g. subject-verb agreement), case marking (nominatives are often subjects, accusatives objects), passivization (objects are realized as subjects under passivization), etc.

Determine what the GFs of the arguments are For each of the sentences in (2)–(4). If you know German, you can choose to do tackle the German sentences instead of the English ones.

- (2) a. Der Magier gab den Kinder einen Zauberstab.
b. The magician gave the children a magic wand.
- (3) a. Der Magier hat den Lehrling von seinem Vorhaben abgebracht.
b. The magician accustomed the apprentice to magical habits.
- (4) a. Der Magier lehrte die Kinder das Fürchten.
b. The magician advanced the apprentice some money.

3 Lexical Rules

Transitive (agentive) verbs can generally be passivized across languages. Passivization is a lexically determined property, there LFG therefore assumes a general *lexical rule*, shown in (5) that can be applied to this class of verbs.

- (5) SUBJ \longrightarrow OBL_{ag}
OBJ \longrightarrow SUBJ
(\uparrow PASSIVE) =_c +

This lexical rule has the effect that an object in an active clause is rendered as a subject in the corresponding passive clause. The subject of the active clause becomes an oblique agent (or it can be realized as an optional adjunct, this is not shown in the rule in (5)).

The ‘=_c’ is a *constraining equation* which demands that the value for PASSIVE must be set to + by another part of the grammar. Generally this is done via the relevant verbal morphology.

In what follows, you can choose to either solve the German problem (Deutsch) or the English one.

3.1 Deutsch

Im Deutschen gibt es auch transitive Verben, die sich nicht auf diese Weise passivieren lassen. Wenn wir z.B. annehmen, dass im Deutschen Objekte (OBJ) immer mit dem Akkusativ markiert sind, dann muss das Objekt in (6a) eher als OBJ_θ , also als ein semantisch spezielles Objekt analysiert werden. Weiterhin nimmt man für das Deutsche generell an, dass Subjekte immer im Nominativ sein müssen.

- (6) a. Die Menschen glaubten dem Kanzler.
b. Dem Kanzler wurde von den Menschen geglaubt.
1. Schreiben sie eine lexikalische Regel, die auch den Fall in (6) abdeckt, d.h., die die passivierte Form in (6b) erzeugen kann und die die generellen Annahmen zu Kasus und grammatischen Relationen im Deutschen berücksichtigt.
 2. Welche andere Formen der Passivierung gibt es im Deutschen? (Zur Beantwortung dieser Frage kann man entweder in sich gehen, oder weitere Materialien heranziehen).

3.2 English

English shows verb alternations which have traditionally been analyzed in a manner similar to the passive lexical rule. One famous alternation is the *dative alternation* in (7), another one is the *spray/load* alternation in (8).

- (7) a. The cat gave a bone to the dog.
b. The cat gave the dog a bone.
- (8) a. The child sprayed the wall with paint.
b. The child sprayed paint onto the wall.
1. Write a lexical rule for (8) that is similar to the passive one. Follow the general assumptions that objects (OBJ) in English must always be directly adjacent to the verb (they are also the ones that can be passivized) and that prepositional phrases which are subcategorized for by the verb are analyzed as an oblique (OBL_θ).

2. What other kinds of verbs work like *spray* in (8)? What about words like *swarm*, can they participate in similar alternations? (To answer these questions, you can either think about the English language on your own, or look up some further materials.)

4 C-Structure Configurations

Urdu (mainly spoken in Pakistan and India) is an SOV (Subject-Object-Verb) language with relative free word order (all major constituents can scramble).

Consider the data in (9). Should a VP be posited for this language? That is, is there evidence for a VP constituent in this language?

What about the exocentric categorie S? Should/could one be assumed for Urdu?

Analyse the sentences in (9a) and (9e) by providing a c-structure tree and a corresponding f-structure.

- (9) a. billi=ne kutte=ko b^hagaya
cat=Erg dog=Acc chased.off
'The cat chased off the dog.'
- b. billi=ne b^hagaya kutte=ko
- c. b^hagaya billi=ne kutte=ko
- d. b^hagaya kutte=ko billi=ne
- e. kutte=ko b^hagaya billi=ne
- f. kutte=ko billi=ne b^hagaya