In class exercise: the syntax of coordination

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1 The competence–performance distinction

From Chomsky (1965):

> Linguistic theory is concerned primarily with an ideal speaker- listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance... We thus make a fundamental distinction between competence (the speaker-hearer's knowledge of his language) and performance (the actual use of language in concrete situations). Only under the idealization set forth in the preceding paragraph is performance a direct reflection of competence. In actual fact, it obviously could not directly reflect competence. A record of natural speech will show numerous false starts, deviations from rules, changes of plan in mid-course, and so on. The problem for the linguist, as well as for the child learning the language, is to determine from the data of performance the underlying system of rules that has been mastered by the speaker-hearer and that he puts to use in actual performance.

And, on the notion of "acceptability":

> For the purposes of this discussion, let us use the term "acceptable" to refer to utterances that are perfectly natural and immediately comprehensible without paper-and-pencil analysis, and in no way bizarre or outlandish. Obviously, acceptability will be a matter of degree, along various dimensions. One could go on to propose various operational tests to specify the notion more precisely (for example, rapidity, correctness, and uniformity 4 of recall and recognition, normalcy of intonation). For present purposes, it is unnecessary to delimit it more carefully. To illustrate, the sentences of (1) are somewhat more acceptable, in the intended sense, than those of (2):
>
> (1) (i) I called up the man who wrote the book that you told me about
>
> (ii) quite a few of the students who you met who come from New York are friends of mine

(iii) John, Bill, Tom, and several of their friends visited us last night

(2) (i) I called the man who wrote the book that you told me about up

(ii) the man who the boy who the students recognized pointed out is a friend of mine

[...] The notion "acceptable" is not to be confused with "grammatical." Acceptability is a concept that belongs to the study of performance, whereas grammaticalness belongs to the study of competence. The sentences of (2) are low on the scale of acceptability but high on the scale of grammaticalness, in the technical sense of this term. That is, the generative rules of the language assign an interpretation to them in exactly the way in which they assign an interpretation to the somewhat more acceptable sentences of (1).

2 Developing a grammar fragment

In class, we'll incrementally develop a grammar fragment that accounts for the following facts:

1. Prepositional phrases can modify not only noun phrases (*the joke about a woman*) but also verb phrases (e.g., *sleeping without a pillow*). Write a grammar fragment that accounts for this, and show that it accounts for the ambiguity of sentences like *The boy touched the stuffed animal with a flower*.

2. Words can be **coordinated** with *and* and *or*, and so can multi-word phrases. Extend your grammar fragment to account for this, and show that it accounts for the ambiguity of sentences like *I imagine dogs and cats on the street*, *They cooked and ate lentils*, and *Young boys and girls arrived*.

3. Adverbs can modify other adverbs, both in verb-modifying contexts (*I jog quite frequently*) and in adjective-modifying contexts (*an almost entirely blue shirt*). Extend your grammar fragment to include this behavior of adverbs.