ASSIGNED: Tue, Sep 17 DUE: by 10:30am on Tue, Sep 24

Q1:

Many (all?) languages with a singular-plural distinction have a class of items that are grammatically plural, but which nevertheless seem to refer to atomic individuals of cardinality 1. Some examples in English are *scissors*, *pants*, and *glasses* (in the visual-aid sense, not the vessel-for-drinking sense). An item of this sort is called a **plurale tantum** (plural: **pluralia tantum**). Note that pluralia tantum are not just plural in form; they also behave as plural syntactically (cf. *The scissors are/*is on the table*).¹

In class, we argued for a specific model for how syntactic structure is pronounced (=spelled out to PF) and interpreted (=spelled out to LF). In this model, the locus of "phonological insertion" could be, but doesn't have to be, the individual syntactic terminal; the locus of "semantic insertion" could be, but doesn't have to be, the individual syntactic terminal; and these two loci (of phonological insertion and of semantic insertion) could, but don't have to, align with one another in each case. This model was motivated on grounds unrelated to pluralia tantum.

How would you analyze an item that behaves as plural for the purposes of syntax, and has the morpho-phonology of a plural noun, but refers to an atomic individual of cardinality 1 in the semantics? (HINT: Assume that in a normal noun phrase, plurality originates in a distinct projection, NumP, and combines with the noun morphologically via a process analogous to Affix-Hopping in the verbal domain.)

Be as detailed in your answer as you can (e.g. if you're talking about a particular structure, don't just describe it in words; draw a tree of it).

Q2: *(extra credit)*

How would you block the occurrence of the stem of a plurale tantum (e.g. *scissor*) with singular morphosyntax (e.g. **a scissor*)?

Q3:

Many (all?) languages with a singular-plural distinction also have a class of items that are grammatically singular and do not inflect for number. These are typically called **mass nouns**, on the assumption that they refer to unindividuated (i.e., non-atomic) masses (e.g. *water*, *air*). However, like with pluralia tantum, properties of the denotatum are neither a necessary nor sufficient condition for a noun being a "mass noun." For example: if you can find the semantic reason why *rice* is a mass noun but *grains* or *oats* are count nouns, you're more clever than I am!

¹ For many pluralia tantum, one can imagine a diachronic story that explains how they came to be this way (e.g. they referred to a pair of identical items that never occurred in isolation, thereby "calcifying" into a plurale tantum). The point is that this pattern of occurrence is neither necessary nor sufficient to render something a plurale tantum, and so it can not serve as a description for what these items are in the synchronic mental grammar of the individual speaker.

So much for sufficient conditions. As for necessary conditions, consider *furniture*: the denotatum here is actually individuated! (If you take something that is 'furniture', and start dividing it in half, pretty quickly you'll have something that's not 'furniture' on your hands. Cf.: 'water'.) Mass nouns are (typically) morpho-phonologically singular, and (typically) behave syntactically as singulars (cf. *The water is/*are cold*).

Using the same model discussed in **Q1**, answer the following: How would you analyze an item that behaves as singular for the purposes of syntax, and has the morpho-phonology of a singular noun, but in the semantics, does not refer to an atomic individual of cardinality 1?

Be as detailed in your answer as you can (e.g. if you're talking about a particular structure, don't just describe it in words; draw a tree of it).

Q4:

In class, we discussed various reasons why one might think that the generative engine that assembles complex "words" is the same generative engine that assembles phrases and clauses (namely, **syntax**).

Now let us consider something we did not discuss in class. It has been observed that when an irregular verb participates in a "derived" construction, it loses its irregularity.² For example: the perfect of *fly* is (*have*) *flown* (*(*have*) *flied*, *(*have*) *flien*). However, there is an act in baseball known as *flying out* (hitting a ball up in the air that is caught by a defender without first hitting the ground; this is a negative act and results in an "out" being recorded, which is of no concern to you in solving this pset!). Importantly, the perfect of *fly out* is not *(*have*) *flown out* but (*have*) *flied out*! (Thus: *The player has flied out to center field*, and not **The player has flown out to center field*.) In other words, the irregularity of *fly* is lost. This is not an isolated example; the pattern is quite common.³

In light of these facts, answer the following two questions:

- a. Recall our discussion about the locality of allomorphy (e.g. *ABA in attributive-comparative-superlative triplets, as in the absence of *good-better-goodest*). In light of this, what would you say is the morphological constituency of the elements in the set {*fly, out,* PERF(=-*en*)}? In other words, are two of these elements closer to one another than the third is to either of them?
- **b.** We saw in class that perfect forms are assembled **transformationally** (via Affix-Hopping of –*en* across the verb). How might you use this—coupled with the view discussed in class of irregular forms as "PF idioms"—to analyze the *(have) flown* vs. *(have) flied out* alternation?

² This is something of a simplification, though as a tendency it is certainly real (see here: <u>https://</u><u>languagelog.ldc.upenn.edu/nll/?p=4211</u>). For the purposes of the pset, assume the effect is categorical; if we have time, we might discuss in class how to model the fact that it is not exceptionless.

³ This phenomenon, while apparently first discussed by George Lakoff, was made famous in a paper by Kim, Pinker, Prince & Prasada (1991, *Cognitive Science*).