1 Affix order

1.1 Nouns

[Exercise 4]
Gender in Catalan, Kramer (2016) from Picallo (1991):

(1) a. *el* *gos-ø*
the.M dog.M
b. *els* *goss-o-s*
the-PL dog-M-PL

(2) a. *la* *goss-a*
the.F dog-F
b. *les* *goss-e-s*
the.F.PL dog-F-PL

Schematic tree:

Yupik (Mithun 1999:43)

(4) a. yug-**pag**-cuar
person-big-little
'little giant'
b. yug-cuar-**pag**
person-little-big
'big midget'

English:

(5) glob-al-iz-ation

(6) novel-iz-ation-s

Let's draw a structure for (5):

Is this morphology or syntax? Does it matter, and if so, in what ways?

1.2 Building structure

Quick reminder: what is the evidence for hierarchical structure within words, as opposed to linear structure?

1.2.1 Ordering

(8) *unhelpful*:
  a. [un-[help-ful]]
  b. *[[un-help]-ful]

(9) *unpredictable*:
  a. _____
  b. *_____

(10) But also *unhappier* (a bracketing paradox, because *-er* normally attaches to smaller prosodic bases):
  a. *[un-[happi-er]]
  b. [[un-happi]-er]

See also Libben (2003) for processing aspects and Oseki and Marantz (2020) for modelling.
[[*en-joy*]-*ment*] vs *[*en-joy*]*ful*.

1.2.2 Ambiguity

Where there's structure, there can be structural ambiguity.

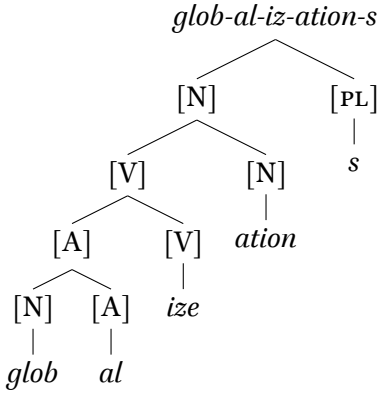
(11) I hit the clown with a banana.

(12) a. _____
  b. Compounds like _____

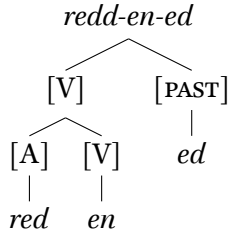
1.2.3 A formal implementation

Schematic trees for:

(13)



(14)



Are we putting everything in the same tree or is there some point in which we want to take the "morphological tree" and put it within a "syntactic tree"?

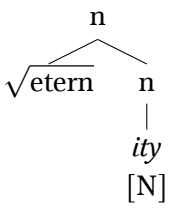
Now let's think back to inflection. If we assume that verbs always inflect for certain features in some language, then we often assume silent affixes (notated with the empty set symbol, Ø). This way the formal system is consistent (though not everyone is a fan of the concept of silent affixes; Paradigm Function Morphology for instance works very differently, Stump 2015):

(15) a. she walk-$s_{3SG.PRES}$
b. I walk-$Ø_{1.PRES}$
c. They walk-$Ø_{PL.PRES}$

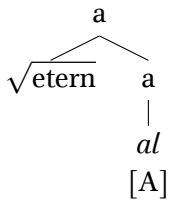
It's hard to talk about building up words (or phrases, or sentences) without a concrete theory of morphology, a concrete theory of syntax, and empirical domains in which to test them. I'm also of the opinion that it's extremely hard to talk about processing or computational aspects of morphology (or syntax) without a formal theory. So we'll flesh out one kind of theory that blurs the distinction between morphology and syntax somewhat, mostly in order to give ourselves a concrete starting point.

Back to technical concerns: what about bound roots?
We'll need some way of representing the abstract, bound root. Sometimes people borrow the mathematical square-root symbol:

(16) a. *eternity*

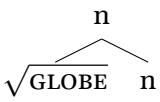


b. *eternal*



If we think that *some* words consist of a root and an affix providing the syntactic category, why not assume that all words are built this way? Then, for "ordinary" nouns like *globe*:

(17)



And once that's what we want to do, there's actually another choice point: now we would need grounds to decide which of the following two derivations to prefer for *global* (Grestenberger and Kastner 2022):

What does this mean crosslinguistically? We would expect to find languages in which all roots must be *categorized* as a noun, verb or adjective first. Semitic languages seems to fit the bill.
The Semitic philologists have been debating the notion of a categorized root for centuries, going back at least to grammarians of the Fertile Crescent in the 8th century (Borer 2013:563ff, citing Owens 1988). Arad (2003) makes this point in contemporary terms based on a range of observations about Hebrew.

1.3 Summary and discussion

Let's recap once more the typical differences between inflection and derivation. We want to see whether our way of building structure helps explain these.

Inflection	Derivation
Forced by syntactic context	Not forced by syntactic context
Productive in all lexical categories	Limited productivity
More regular (morphologically? Semantically?)	Less regular
Does not change category	Sometimes changes category
Does not change meaning (compositional)	Usually changes meaning
Doesn't create new stems	Creates new stems
Farther away from the base	Closer to the base

We can also look at meaning change again. Do we get meaning change with *every* derivational affix? Does our theory explain this? What about non-compositional meaning?

(19) a. globalization
b. novelization

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