

Class 5

Structure and Allomorphy: Bobaljik on *ABA; and Bracketing Paradoxes

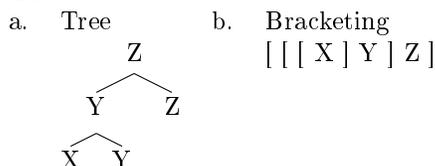
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1 Bobaljik (2012, 2015) summary

- The central argument from Bobaljik (2012, 2015):

(1) *The Containment-Suppletion Hypothesis* (Bobaljik doesn't exactly call it this)
Given a structure like (2) where X is contained in Y and Y is contained in Z, if X suppletes in the context of Y, X suppletes in the context of Z.

(2) Containment structure:



- i.e., if X takes a different form in the context of Y than it does when standing alone, it will also take a different form in the context of Z.

- This hypothesis makes testable predictions about the distribution of suppletive allomorphs in paradigms involving containment:

(3) Predictions (cf. Bobaljik 2012:29, ex. (32))

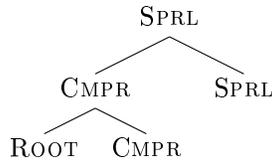
Pattern	Prediction	Description
AAA	✓	no suppletion
ABB	✓	same suppletive allomorph in the context of Y and Z
ABC	✓	different suppletive allomorphs in the context of Y and Z
ABA	✗	Y conditions a suppletive allomorph, but Z exhibits the default
AAB	?	Y exhibits the default allomorph, but Z conditions suppletion
<i>↪ depends on assumptions about locality and specific structures</i>		

- Bobaljik (2012) explores these predictions with respect to the comparative and superlative.
→ He finds them to be correct.
- Bobaljik (2015) [and in his Whatmough lecture] and Smith et al. (2019) [the paper resulting from the joint project he mentions frequently] extend the analysis to other constructions.
 - These include case, number, and verbal morphology.
 - Other literature has subsequently extended *ABA to other domains (see the references in Gouskova & Bobaljik 2020).

2 Comparative and superlative

- Bobaljik argues that the superlative degree always morphosyntactically contains the comparative degree (4).

(4) Structure of the superlative



- He provides (at least) two arguments independent of the suppletion facts:

1. In many languages, the affix that marks the comparative also surfaces in the superlative, alongside the superlative affix (5).

- The superlative morpheme never(?) comes between the comparative morpheme(s) and the root, which we expect if comparative is contained inside superlative (cf. Baker 1985).

(5) Containment of the comparative morphology inside the superlative (Bobaljik 2015:5, Table 4)

Language	POS	CMPR	SPRL	Gloss
Persian	kam	kam-tar	kam-tar-in	'little'
Cimbrian	šüa	šüan-ar	šüan-ar-ste	'pretty'
Czech	mlad-ý	mlad-ší	nej-mlad-ší	'young'
Hungarian	nagy	nagy-obb	leg-nagy-obb	'big'
Latvian	zil-ais	zil-âk-ais	vis-zil-âk-ais	'blue'
Ubykh	nüs ^o	ç'a-nüs ^o	a-ç'a-nüs ^o	'pretty'

2. The semantic denotation of the comparative is contained inside the semantic denotation of the (relative) superlative (Bobaljik 2012:96):

- Essentially, *comparative* = '[more X than]', (*relative*) *superlative* = '[more X than] all (others)'

→ Languages are obliged to split the relative superlative meaning into at least two distinct morphemes, because it is "too complex" for a single morpheme.

2.1 ABB

- If the comparative conditions a suppletive allomorph distinct from the positive (the basic form of an adjective), this requires a contextual VI rule:

(6) a. ROOT ⇔ B / [_CMPR]
 b. ROOT ⇔ A

- If the superlative contains the comparative (4), the context for (6a) is met also in the superlative [[[ROOT]CMPR]SPRL].

→ This derives the ABB pattern, which is the most common type of suppletion in Bobaljik's survey.

- Some examples are given in (7):

(7) Attested ABB patterns in adjective suppletion (Bobaljik 2015:3, Table 1)

Language	POS	CMPR	SPRL	Gloss
English	good	bett-er	be-st	Not applicable
	bad	worse	wor-st	Not applicable
Danish	god	bed-re	bed-st	'good'
Czech	špatn-ý	hor-ší	nej-hor-ší	'bad'
Estonian	hea	pare-m	par-im	'good'
Kildin Saami	sig'	per'-am	per'-mus	'good'
Basque	asko	gehi-ago	gehi-en	'many'

• Let's take a closer look at Basque: *asko* (A), *gehi-ago* (B), *gehi-en* (B):

(8) ABB in Basque: *asko*, *gehi-ago*, *gehi-en*

a. Positive: <i>asko</i> 'good'	b. Comparative: <i>gehi-ago</i> 'better'	c. Superlative: <i>gehi-en</i> 'best'
$\sqrt{\text{GOOD}}$ <i>asko</i>	CMPR $\sqrt{\text{GOOD}}$ CMPR <i>gehi</i> -ago	SPRL CMPR SPRL $\sqrt{\text{GOOD}}$ CMPR -en <i>gehi</i> \emptyset

• To derive this ABB pattern, we need a specific rule inserting the suppletive allomorph in the context of the comparative (9a).

- (9) a. $\sqrt{\text{GOOD}} \Leftrightarrow \textit{gehi} / _ \text{CMPR}$
 b. $\sqrt{\text{GOOD}} \Leftrightarrow \textit{asko}$

• We also need a specific rule that selects the / \emptyset / allomorph of the comparative in the context of the superlative (10a).

- (10) a. $\text{CMPR} \Leftrightarrow \emptyset / _ \text{SPRL}$
 b. $\text{CMPR} \Leftrightarrow \textit{-ago}$
 c. $\text{SPRL} \Leftrightarrow \textit{-en}$

• English *good* (A) ~ *bett-er* (B) ~ *be<tt>-<e>st* (B) is parallel but a little trickier:

(11) ABB in English: *good*, *better*, *best*

a. Positive: <i>good</i>	b. Comparative: <i>better</i>	c. Superlative: <i>best</i>
$\sqrt{\text{GOOD}}$ <i>good</i>	CMPR $\sqrt{\text{GOOD}}$ CMPR <i>bett</i> -er	SPRL CMPR SPRL $\sqrt{\text{GOOD}}$ CMPR -<e>st <i>be<tt></i> \emptyset

• If this worked like Basque, based on the behavior of the comparative (which has the regular comparative exponent *-er*), we should expect the superlative to be **bettest* (/bet-ɪst/ → *[bɛɪst]).

★ *What's going on historically?* (pieced together from <https://www.etymonline.com>, but there are better sources)

- Way back when, the superlative morpheme was /-st(ə)/ not /-ist/.

- (12) a. Mod Eng *nigh* [nai] < Old Eng *nēah* [nɛ:x]
 b. Mod Eng *near* [ni:r] < Old Eng *nēarra* [nɛ:rə] (← /nɛ:x-ra/ with pre-sonorant /x/ deletion)
 c. Mod Eng *next* [nɛkst] < Old Eng *nēahsta* [nɛ:xstə]

- Root-final /t/ deleted before the [st] cluster of the superlative suffix:

- (13) a. Mod Eng *late* [leɪt] < Old Eng *læt* [læt]
 b. Mod Eng *latter* [læɾər] < Old Eng *lætra* [lætrə]
 c. Mod Eng *last* [læst] < Old Eng *lætost* [lætəst] ~ [læst] (← /læt-st/ with epenthesis or deletion)

- The same deletion rule generates *best*:

- (14) a. Mod Eng *not preserved* < Old Eng *bōt* [bɔ:t] (cf. *to boot*)
 b. Mod Eng *better* [bɛɾər] < Old Eng *bettra* [betrə]
 c. Mod Eng *best* [bɛst] < Old Eng *beste* [bestə] (← /bet-sta/ with deletion), < earlier *betst*

→ Historically, *better* and *best* clearly have the same root.

- Can we make this work synchronically?

- We'd have to say that there is some sort of **readjustment rule** (≈ highly morphologically-specific phonological rule) that applies in just this case, something like (15).

- (15) /t/ → Ø / _SPRL / {√GOOD(, ...)}

* On readjustment rules, see originally Halle (1990), Halle & Marantz (1993).

◦ For a more recent argument in favor, see Harley & Tubino Blanco (2013).

◦ For a recent historical overview and critique (in favor of stem-listing/suppletion), see Haugen (2016).

- If this readjustment rule follows VI, then we can assume a single VI rule for the comparative and superlative of √GOOD (16a).

- (16) a. √GOOD ⇔ *bet* / _CMPR]
 b. √GOOD ⇔ *good*

- We will additionally need a special VI for the superlative in this context, to explain the absence of the suffix-initial vowel. (We'll also need this for the alternative immediately below.)

- (17) a. SPRL ⇔ *-st* / √GOOD(...)_
 b. SPRL ⇔ *-est*

* Maybe we could do this with a (morpho)phonological deletion rule to repair that specific hiatus?

◦ Based on the way that readjustment rules are usually taken to be triggered (by a subsequently merged (null) morpheme), we shouldn't be able to make this change via readjustment proper.

- I find this approach (and readjustment rules, generally) icky...

2.2 ABC

→ We might as well just continue to do this with suppletion, and assume distinct (if obviously historically related) suppletive allomorphs for the comparative and superlative:

- (18) a. $\sqrt{\text{GOOD}} \Leftrightarrow be / \text{[_CMPR] SPRL}$
- b. $\sqrt{\text{GOOD}} \Leftrightarrow bet / \text{[_CMPR]}$
- c. $\sqrt{\text{GOOD}} \Leftrightarrow good$

- In other words, there is an additional, more specific VI rule that includes the superlative in the context (18a), which blocks insertion of the moderately specific morph (18b).

- * This does, though, require the context to include two layers of morphosyntactic structure, which might start to give us pause...

→ This is an ABC pattern. These aren't thick on the ground (and Bobaljik doesn't treat *good*, *better*, *best* as an instance of ABC), but they do exist:

- (19) Attested ABC patterns in adjective suppletion (Bobaljik 2015:4, Table 2)

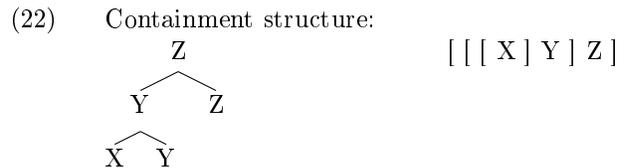
Language	POS	CMPR	SPRL	Gloss
Latin	bon-us	mel-ior	opt-imus	'good'
Welsh	da	gwell	gor-au	'good'
Old Irish	maith	ferr	dech	'good'
Middle Persian	xōb	weh/wah-īy	pahl-om/pāš-om	'good'

- We can simply slot the, e.g., Old Irish morphs into the frames given in (18) for English:

- (20) Old Irish
 - a. $\sqrt{\text{GOOD}} \Leftrightarrow dech / \text{[_CMPR] SPRL}$
 - b. $\sqrt{\text{GOOD}} \Leftrightarrow ferr / \text{[_CMPR]}$
 - c. $\sqrt{\text{GOOD}} \Leftrightarrow maith$

- The recipe for an ABC pattern for any containment relationship (22) is schematized in (21):

- (21) Deriving ABC
 - a. $X \Leftrightarrow C / \text{[_Y] Z}$
 - b. $X \Leftrightarrow B / \text{[_Y]}$
 - c. $X \Leftrightarrow A$



2.3 Fake ABA

- Bobaljik admits that this theory cannot rule out a pattern that looks like ABA:
 - The most specific rule (23a) happens to have the same exponent as the general rule (23c)
 - The intermediately specific rule has a distinct exponent (23b)

- (23) (Fake) ABA *compare* (24) ABC
 - a. $\text{ROOT} \Leftrightarrow \boxed{A} / \text{[_CMPR] SPRL}$ a. $\text{ROOT} \Leftrightarrow \boxed{C} / \text{[_CMPR] SPRL}$
 - b. $\text{ROOT} \Leftrightarrow B / \text{[_CMPR]}$ b. $\text{ROOT} \Leftrightarrow B / \text{[_CMPR]}$
 - c. $\text{ROOT} \Leftrightarrow A$ c. $\text{ROOT} \Leftrightarrow A$

- Bobaljik is (rightly, in my view) not concerned with this prediction: while this may be an ABA pattern in the descriptive sense, it is not an ABA pattern in the theoretical sense.

→ The A's, B's, and C's in these patterns refer to the VI *rules*, not the exponents.

- This is an ABC pattern because there are three distinct VI rules.
- The surface ABA distribution is accidental.

- Bobaljik hypothesizes that the general lack of ABA patterns follows from learning biases against positing homophonous VI rules of the sort in (23a) and (23c).

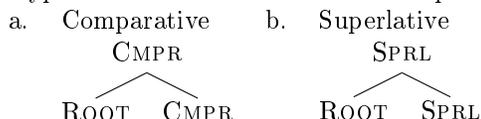
2.4 *ABA

- The tools that we need in order to generate the ABB and ABC patterns (including the clarification that fake ABA is really ABC) derive the prediction that there should be no real ABA patterns.

1. If there are only two VI rules and one mentions just CMPR in the context, that specific rule will always apply in the superlative as well (ABB), blocking application of the general rule (*ABA).
2. If there are three VI rules, one specifying only CMPR and one specifying CMPR and SPRL, all three VIs will apply in the three respective contexts (ABC).

- This crucially relies on the assertion that, universally, the (relative) superlative contains the comparative.
 - If a language could building the superlative by attaching it directly to the root (i.e., without an intervening CMPR head), then this prediction would not hold:

(25) Hypothetical non-containment for superlative



- If these were possible structures, and we had the simplified VI rules in (26) (with a specific rule only for the comparative), we could easily derive an “ABA” pattern (where the three slots continue to correspond to *positive, comparative, superlative*), as shown in (27).

- (26) a. $\sqrt{\text{GOOD}} \Leftrightarrow \text{bet} / \text{_CMPR}$
 b. $\sqrt{\text{GOOD}} \Leftrightarrow \text{good}$

- Rule (26a) applies only in the comparative (27b); its conditioning environment is not met in the superlative.
 - Therefore, the superlative (27c) will select the general morph (26b).

→ This would be *ABA.

(27) *ABA in non-containment *English': *good, better, *goodest*

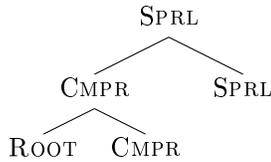
a. Positive: <i>good</i>	b. Comparative: <i>better</i>	c. Superlative: <i>*goodest</i>
$\sqrt{\text{GOOD}}$ <i>good</i>	$\sqrt{\text{GOOD}}$ CMPR <i>bett</i> <i>-er</i>	$\sqrt{\text{GOOD}}$ SPRL <i>good</i> <i>-est</i>

- Bobaljik’s claim is that no such patterns exist, in this domain or other equivalent domains. Therefore, these domains must universally have containment structures.

2.5 AAB?

- What does this theory have to say about potential AAB patterns? It seems to predict them.
 - Take our containment structure again (28). Now apply the rule set we needed for ABC (e.g. from our ABC suppletion analysis of *good, better, best*), but get rid of the middle rule (29):

(28) Containment structure



(29) Deriving ABB

- a. $\sqrt{\text{GOOD}} \Leftrightarrow \text{be} / \text{_CMPR} \mid \text{SPRL}$
- b. $\sqrt{\text{GOOD}} \Leftrightarrow \text{bet} / \text{_CMPR}$
- c. $\sqrt{\text{GOOD}} \Leftrightarrow \text{good}$

- The doubly-specific rule in (29) is needed on independent grounds for the ABC pattern, so we shouldn't be able to rule this out as a rule set.
 - Since (29a) is too specific for the comparative, the comparative should select the general morph (29c), yielding *good*, *gooder*, *best* (AAB).
 - Bobaljik (2012:§5.3) jumps through various hoops involving portmanteau exponence and Vocabulary Insertion into non-terminal nodes (cf. Caha 2009, Radkevich 2010, Svenonius 2012, Merchant 2015) to try to derive the absolute lack of AAB patterns in the comparative/superlative.
 - These fixes should hold across other constructions, predicting a total lack of AAB parallel to the lack of ABA.
- But Bobaljik (2015), previewing Smith et al. (2019), shows that there are AAB patterns in other domains, especially pronouns w.r.t case and number.
- Based on this, he asserts that the solution to the distribution of AAB (none in degree adjectives, some in pronouns) is the distribution of “domain delimiting” heads (\approx phase heads?) (Bobaljik 2015:13).
 - This though makes the ABC pattern hard to get in domains where AAB is disallowed.
 - So he will have to jump through those hoops again anyway.

3 Luismi’s excursus on the syntax and semantics of degree expressions and some potential problems for Bobaljik

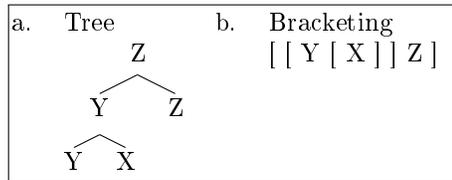
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4 Bracketing paradoxes

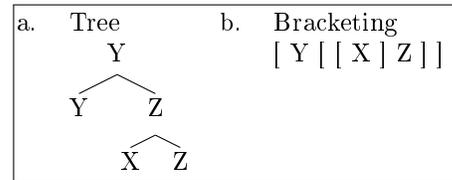
- Consider again the containment structure that Bobaljik uses to motivate the “Containment-Suppletion Hypothesis” from (2), modified very slightly as (30.i):

(30) Containment structure:

i. Parse 1



ii. Parse 2



- Given the order of elements *Y-X-Z*, there is at least one additional structural parse consistent with that order (30.ii), where X combines first with Z rather than Y.

- The *a priori* availability of these distinct parses has given rise in the literature to the idea of “Bracketing Paradoxes” (31):

(31) **Bracketing paradox:**

A word where (morpho)syntactic/semantic considerations point to one constituent (i.e. bracketing) structure but (morpho)phonological considerations point towards opposite structure.

- The concept was first introduced as such by Allen (1978) and Pesetsky (1979).
- See Newell (2019, 2021) for a recent historical survey and a new type of analysis.

★ Today I’ll focus on three types of bracketing paradoxes that have been claimed to exist in English.

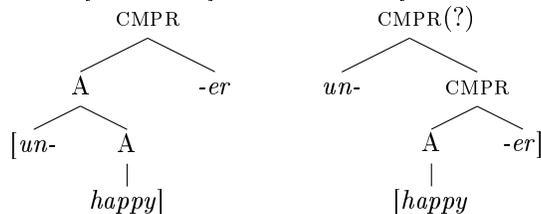
- As Newell alludes to, it’s not at all clear that “bracketing paradoxes” form a natural class of phenomena.
 - So we shouldn’t necessarily expect that they should all have the same kind of solution.
- She also points out that some/all of these are only paradoxes given other theoretical assumptions.
 - Therefore, one way to dispense with the “paradoxes” is to adjust our basic assumptions, rather than come up with special mechanisms to shoehorn them into the theory.

4.1 Negative comparatives: *un-ADJ-er*

- The first thing that always comes to mind when talking about bracketing paradoxes are words containing both the negative prefix *un-* and the comparative suffix *-er*, e.g. *unhappier* (32) and *unluckier* (33).
 - cf. two papers from the 1990’s: Sproat (1992) *Unhappier Is Not a “Bracketing Paradox”* vs. Kang (1993) *Unhappier Is Really a “Bracketing Paradox”*

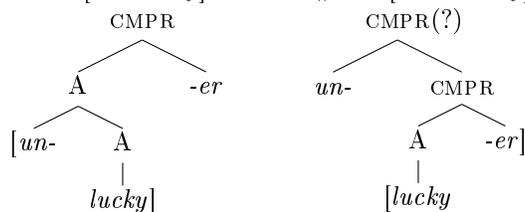
(32) Possible syntactic/semantic parses of *unhappier*

A. ‘more [not happy]’ B. #‘not [more happy]’



(33) Possible syntactic/semantic parses of *unluckier*

A. ‘more [not lucky]’ B. #‘not [more lucky]’



- These words always mean ‘more [not ADJ]’ (parse A), never ‘not [more ADJ]’.
- The structure in parse A accords not only with the semantics but with the selectional restrictions of the morphemes.
- This *un-* prefix selects adjectives and creates an adjective.
 - The comparative suffix *-er* selects adjectives and creates a comparative adjective.

★ So what’s the problem?

- The received wisdom (see Bauer, Lieber, & Plag 2013:Ch. 6.6, following Aronoff 1976:92, Rowicka 1988, and others) is that there are phonological restrictions on what types of bases can make a synthetic comparative (i.e. suffix *-er*).

* But see Graziano-King & Cairns (2005) for a claim that what is actually important is frequency and semantic type.

- What is (claimed to be) relevant here: you can't add *-er* to a base containing more than two syllables:

(34) Base types for synthetic vs. periphrastic comparatives

Base type	Example Base	Synthetic	Periphrastic
$\leq 2\sigma$	<i>stupid</i>	✓ <i>stupid-er</i>	? <i>more stupid</i>
$> 2\sigma$	<i>intelligent</i>	* <i>intelligent-er</i>	<i>more intelligent</i>

- This condition is not fully sufficient (there's many more factors determining whether $\leq 2\sigma$ -bases take *-er*), but the ban on longer bases is largely correct.

★ So, here's the (alleged) problem:

◦ If we take Parse A, the base that *-er* is attaching to is $> 2\sigma$, i.e. *unhappy* [ʌn.hæ.pi] or *unlucky* [ʌn.lʌ.ki], and thus should not allow *-er* suffixation.

◦ But if we took Parse B, where *-er* attaches to the adjective, then the base would $\leq 2\sigma$, i.e. *happy* [hæ.pi] or *lucky* [lʌ.ki], and thus should allow *-er* suffixation.

→ The logic of the paradox: the semantics and the morphosyntactic selection requirements favor Parse A, but the morphological or morphophonological selection requirements favor Parse B.

- Most analyses thus propose some sort of operation/rule that changes one structure into the other at some point in the derivation (see Newell 2019 for a summary).

★ But I think everyone's been missing something really obvious:

- All $\leq 2\sigma$ -bases ending in *(-)y* [(-)i] take *-er*.

- And, crucially, there's a well-agreed upon exception to the $> 2\sigma$ restriction: longer adjectives that end in (the suffix?) *-y* (or *-ly*?) take *-er*:

(35) Longer adjectives in *-y* that take *-er* (Rowicka 1988:141–142)

- slippery* → *slipperier*
- shadowy* → *shadowier*
- finicky* → *finickier*
- fidgety* → *fidgetier*

(36) Longer adjectives in *-ly* that (maybe) take *-er*

- heavenly* → ?*heavenlier*
- gentlemanly* → ?*gentlemanlier*

- As far as I can tell, all the supposed *un-ADJ-er* bracketing paradox forms end in *-y*.

◦ This could be encoded as a phonological restriction (along the lines of the syllable count restriction), or as a morphological restriction saying that *-er* can always attach to the adjective-forming *-y* suffix (à la Fabb 1988).

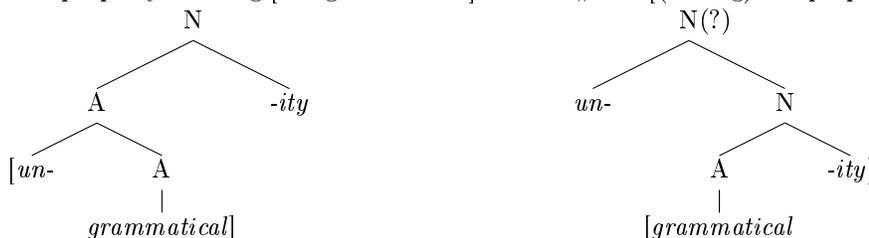
→ Either way, *unhappy*, *unlucky*, etc. then **don't** contradict the morpho(phono)logical selection requirements of *-er*, and there is no paradox: **we have Parse A all the way down.**

4.2 “Level ordering” paradoxes: *ungrammaticality*

- The second type of paradox is another one which is primarily a theory-internal problem.
- In Lexical Phonology and Morphology (LPM; Kiparsky 1982), following earlier work by Siegel (1974) and Allen (1978), affixes are divided up into two types:
 - Level 1 affixes (which attach earlier, and thus closer to the root)
 - Level 2 affixes (which attach later, and thus farther from the root)
- In English, this distinction is said to map onto not only ordering properties but onto consistent phonological distinctions:
 - Level 1 affixes can change the stress of the base, Level 2 affixes don’t
 - *productíve* → *productív-ity* vs. *productíve-ness*
 - Level 1 affixes protect underlying clusters, Level 2 affixes don’t
 - *columnn-ar* [kalól~~mn~~-ər] vs. *columnn-s* [kálə~~m~~-z]
 - Level 1 nasal-final prefixes assimilate, Level 2 ones don’t
 - *im-possible* vs. *un-productive*
- Take-away from “Level Ordering”: Level 1 affixes combine with the stem before Level 2 affixes do.
- ★ **Problem:** they don’t:

(37) Possible syntactic/semantic parses of *ungrammaticality*

A. ‘the property of being [not grammatical]’ B. #‘not [(having) the property of being grammatical]’



- In words like *ungrammaticality*, the semantics and the syntactic selectional requirements prefer attaching *un-* (a “Level 2” affix) before attaching *-ity* (a “Level 1” affix), i.e. Parse A.
 - Adhering to Level Ordering would lead us to Parse B.
- This problem is specific to theories that strongly adhere to level ordering.
- But not all theories of the phonology-morphology interface building in level ordering in this way.
 - Fabb (1988): ordering properties purportedly derived by level ordering are insufficient to capture the distribution of affix combinations in English, and that level ordering does not add additional explanatory value beyond his proposal to encode it with affix specific attachment requirements.
 - Stanton & Steriade (2014) et seq. capture the phonological properties with (clustered) affix-specific constraint rankings, which better captures the actual behavior (which doesn’t fall so neatly into two groups).

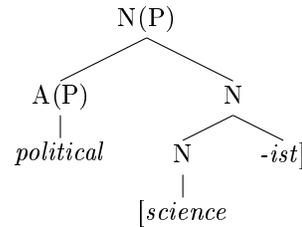
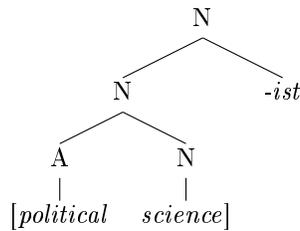
→ So, if you don’t buy full-on level ordering, there is no paradox.

4.3 Compounds: *nuclear physicist*

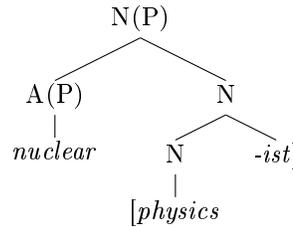
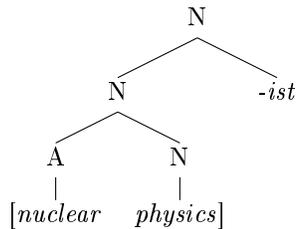
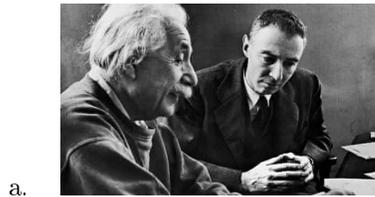
- The kind of bracketing paradox that I think is actually interesting is the kind involving compounds:
 - In a word(?) / phrase like *political scientist* (38) or *nuclear physicist* (39) there are two possible readings:

(38) Possible syntactic/semantic parses of *political scientist*

A. ‘a person who studies [political science]’ B. ‘a political [person who studies science]’



(39) Possible syntactic/semantic parses of *nuclear physicist*

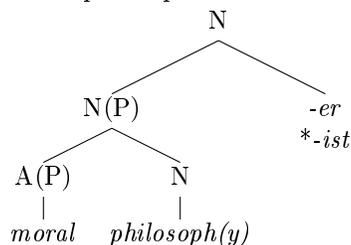


- Many others examples (see Beard 1991), including: *theoretical linguist*, *criminal lawyer*, *moral philosopher*, *discrete mathematician*.

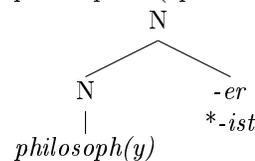
★ **What’s at issue here?**

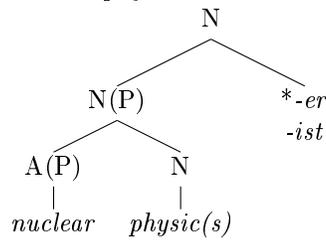
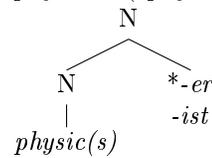
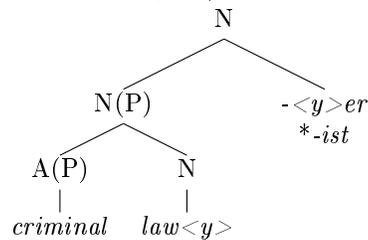
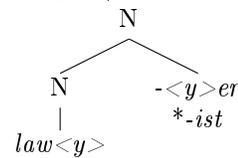
- Parse A involves the nominalizing affix attaching to a compound (or maybe it’s a phrase too).
- Nevertheless, the specific nominalizing affix *always* matches the one that would be selected for the righthand member in isolation (40–42b).
- Also, the allomorphy of the root under suffixation is always the same too:
 - *philosoph-y* → *philosoph-*, *physic-s* → *physic-*, *law-* → *lawy-*

(40) a. *moral philosopher*

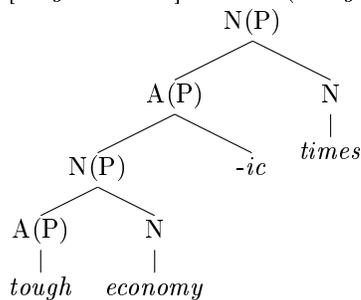


b. *philosopher* (**philosoph(y)ist*)



(41) a. *nuclear physicist*b. *physicist* (**physic(s)er*)(42) a. *criminal lawyer* (cf. *criminal law*)b. *lawyer* (**lawyer*, **law(y)ist*)

- And here's something similar that I've seen out in the wild:

(43) [*tough econom*]*ic times* (**tough econom*{-ous,-ish,-ic(-)al} *times*)

- This is additionally weird because it is clearly affixation to a phrase and not a word.

- These are bracketing paradoxes because the suffix+head noun looks morphologically like a unit to the exclusion of the first compound member (as it truly is in Parse B), but the semantics point to Parse A.
 - Also, the suffix can affect stress on the second member but never the first, but this probably just because of stress attraction works (it's local).

(44) *discrète mathématiques* → *discrète mathématique-ian*

- More interesting for our purposes: the allomorphy relations between the head noun and the nominalizing affix (or adjectivizing affix for *economic*) are not disrupted by the extra layer of structure in between them.
- What do we need to say?
 - VI is delayed until the whole nominalization structure is shipped off to Spell-out (à la Deal & Wolf 2017). **and**
 - The conditioning environment (in both directions) for allomorphy is not disrupted by this additional structure. **or**
 - Choice of suffix allomorph is deferred until the phonology (à la Bonet, Lloret, & Mascaró 2007 and Mascaró 2007), and the selection is made on a *linear* not *structural* basis.

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