

LING 110 || Spring 2011, Class #8

McFetridge, Chapter 9

We turn now to prefixes. These morphemes are “category preserving”, by which I mean this:

- if a prefix is added to a noun, the result is a noun
- if a prefix is added to a verb, the result is a verb

We sum up this fact in the rule $\text{Lex}_x \Rightarrow \text{prefix} + \text{Lex}_x$

There is a ton of these prefixes; stuff we use everyday, and it's all from Latin!

The ordering of prefixation, suffixation, and inflection is a subtle one — in at least some cases we must add a prefix first, before doing anything else.

A highly productive prefix is “ad-”, meaning “to”. In some cases, adding it to a root results in a transparent lexeme:

Root	ad +	other words with the same root
√i = go	adit	exit
√mit = send	admit	permit
√dic = say	addict	dictionary
√opt = choose	adopt	option
√orn = wear	adorn	ornament
√ven = come	adventure	convene
√voc = call	advocate	vocation

In other cases, there appears to be assimilation:

Root	ad +	other words with the same root
√lev = light	alleviate	levity
√fin = end	affinity	finite
√sta = stand	arrest	statue
√nihil = nothing	annihilate	nihilism
√sim = same	assimilate	similar
√plic = fold	applicant	implicate
√brev = brief	abbreviate	brevity
√greg = flock	aggregate	gregarious
√cord = heart	accord	cordial

In a nutshell, the [d] of ad- assimilates to a wide range of following consonant sounds.

The assimilation to [l] and [r] is familiar to us from our earlier examination of “in-”.

— to these we can now add assimilation of [d] to [p, b, g, k, s, f, n]

We would like to have a rule that collapses as many of these assimilation rules as possible. Such a rule could be framed in terms of the **MANNER OF ARTICULATION** of the C following the [d].

Roots beginning with a dental sound

So far we have left out of consideration roots that begin with a dental sound, e.g., [t].

— we know that with d + t (as in vīd + e + t + ion) and t + t (as in “passion” from √pat) we find assimilation to t + t and then assimilation to s + s.

Consider in this regard the following table:

Root	ad +	Other words with the same root
√tenu = thin	attenuate	tenuous
√tend = stretch	attend	tension
√test = witness	attest	testify

So we find assimilation, but NOT assibilation. Why?

— Because **prefixation is a newer process** than the formation of words from the past participle.

— The past participle is old. Most prefixes, on the other hand, were originally separate words (prepositions) and only later became adjoined phonologically to a following word.

There remains a final class of words to consider:

Roots beginning with [s] + another consonant

Root	ad +	Other words with the same root
√spir = breathe	aspire	inspire
√spec = look, see	aspect	inspect

We would expect [d] to assimilate to [s] yet we don't find forms like *asspire. Rather the "d" has disappeared entirely. Why?

Because the root has another C after the "s". So rather than an uninteresting and narrow rule like $d + sC \rightarrow sC$ we should assume instead that "d" DOES assimilate and then the resulting "s" deletes: $[s + sC \rightarrow sC]_{\text{Latin}}$. This is a mirror of "ss" converting to "s" AFTER a consonant, which we saw earlier.

This is a **consonant cluster simplification rule**. English does not like consonant clusters (say the word “fifths”) although this is not typical of all Indo-European languages.

The prefix dis- (off, away, opposite)

This is cognate with English “two” from PIE “dwis”. As you would expect, adding this prefix to some roots yields no phonological adjustments:

Root	dis +	other words from the same root
√cord = heart	discord	cordial
√tend = tense	distend	tense
√pell = drive (away)	dispel	repel
√pend = hang, weigh	dispense	pendant
√put = think, reckon	dispute	computer

At other times, there are indeed changes:

Root	dis +	Other words from the same root
√fer = carry	different	Lucifer
√fid = trust	diffident	fidelity
√frag = break	diffract	fragile

We can accommodate the foregoing with $[s + f \rightarrow f + f]$. But now...

Root	dis +	Other words from the same root
√ges = carry	digest	gesture
√lapid = stone	dilapidated	lapidary
√reg = rule	direct	regal
√vest = dress	divest	vestment

Here the “s” appears to delete before voiced consonants. That’s an unmotivated rule because it appears arbitrary.

— the better approach (because it’s consistent with prior experience) is to assume that “s” DOES assimilate and that it is [z] that deletes: [zC → C]_{Latin}.

— this at least suggests that it is voicing that leads to deletion over retention of a consonant and also accords with the fact that Latin did not use [z].

Naturalization

Proof of naturalization of “dis-” comes from evidence of its use in **hybrids**. Thus we can add “dis-” to certain English words to get “disband”, “disbelief”, “disbar”, etc.

— Note that the [s] of the prefix appears before a voiced C and does not delete.

Consider also these other newer words:

Root	dis +	Other words from the same root
√gust = taste	disgust	gustatory
√mit = send	dismiss	permission
√put = think, reckon	disrepute	reputation
√spec = see	disrespect	spectacle

The Latin deletion rule that would otherwise apply to these words does not because the words are not straight from Latin (OK, some bits of them are). Consider their most recent source and the date of their first attested usage in English:

disgust	Middle French	1616
dismiss	Medieval Latin	15 th C
dismember	Old French	14 th C
disrepute	English	1637
disrespect	English	1621
disrobe	Old French	1581

The prefix "ex-" meaning "out"

Root	ex +	Other words from the same root
√i = go	exit	transition
√ag = act, drive	exact	agent
√cīd = cut	excision	suicide
√pend = hang, weight	expend	pendulum
√port = carry	export	import
√tend = stretch	extend	tense

What we really want to explain though arises from the following:

Root	ex +	Other words from the same root
√spec = see	expect	spectacle
√spir = breathe	expire	inspire

Pretty easy. "ex" = [eks]. So take "expect" from eks + spec + e + t.

We've already got a rule that will delete one "s" out of the sequence "ss" if another C follows (slide 6). That's precisely the situation here!

Sometimes, however, "ex-" is reduced to just "e":

Root	ex +	Other words from the same root
√duc = lead	educate	induct
√merg = sink	emerge	submerge
√greg = flock	egregious	gregarious
√lev = light	elevate	levitate
√reg = rule	erect	regular



So where does “e” occur?

We need to explain why [k] deletes before [s] followed by a voiced stop, but NOT before [s] followed by a voiceless stop. Thus:

educate “eks + duc + a + t” **vs.** **extend** “eks + tend”

Your text proposes that “ks” assimilate in voice to the following “d”. This creates a “gCC”, i.e., “-gzd-”, sequence that reduces to CC by a cluster simplification rule.

We already have the rule [zC → C] so the “z” goes and we end up with “educate”, “emerge”, and so forth (see p. 190 of your text).

Of course an obvious shortcoming of all this is that “educate” is pronounced with the word-initial sounds [ɛdʒ-]. How do we explain [dʒ]?

And we’re still not done with “ex-”!

Consider these babies:

Root	ex +	Other words from the same root
√fort = strong	effort	comfort
√fer = bear	efferent	infer
√fig = mold	effigy	figure
√flu = flow	effluent	fluent

There's no easy way to get rid of the [k] in the prefix that doesn't involve ad hoc assumptions, e.g., [k] assimilates to a following [f]. That makes no phonetic sense and is thus poorly motivated. We'll just have to let these slide for the time being.

Unmentioned in your text is that all of these words have spent time in French. This may be significant.

The prefix "abs-" meaning "away"

Root	abs +	Other words from the same root
√trag = drag	abstract	tractor
√ced = go	abscess	secede
√duc = lead	abduct	deduce
√dic = say	abdicate	dictator
√rup = break	abrupt	rupture
√vert = turn	avert	verse
√hor = bristle	abhor	horror

“abs-” continued ...

We’ve already got rules that will give us words like “absolve”, i.e.,
[Cs + s → Cs +]_{Latin}.

Voicing assimilation and [zC → C]_{Latin} takes care of more forms like
“abduct” and “abrupt”.

“Abhor” is a problem, but then [h] is ambiguous in English between
being a consonant and being transparent. Insufficient data.

Ditto with “avert” where both the “s” and the “b” are lost.

The prefix “re-” meaning “back, again”

A naturalized productive prefix in English. So naturalized is it that it
has been re-analyzed, e.g, reopen, reread, react. The original form is
“red-”, which still exists in a few words whose roots begin with a
vowel:

Root	red +	Other words from the same root
√ag = drive, act	redact	react
√ol = smell	redolent	olfactory
√und = wave	redundant	undulate
√em = buy	redemption	preempt

Getting rid of the “d” in the prefix requires a kludge of a rule:

$$[e \ d + C \rightarrow e + C]_{\text{Latin}}$$

We need the “e” in there so we don’t conflict with the rule for the prefix “ad-” wherein the “d” assimilates to a following “t” rather than deletes.

The prefix “pro-” meaning “before, forth”

Another prefix that has been reanalyzed; was formerly “**prod-**”.

“pro(d)-” continued ...

Root	pro(d) +	Other words from the same root
√duc = lead	produce	educate
√mit = send	promise	permit
√misc = mix	promiscuous	miscellaneous
√ag = drive	prodigal	agent
√ag = say	prodigy	adage

As with red-, we find “pro-” before consonants and “prod-” before vowels. So we have the same kind of rule: $[od + C \rightarrow o + C]_{\text{Latin}}$.

Now that the prefix has been reanalyzed we find new forms like “proactive” and “pro-ana”.

The prefix “sed-” meaning “apart”

Same drill, except this prefix is no longer productive as either “sed-” or “se-”.

Root	se(d) +	Other words from the same root
√par = arrange	separate	prepare
√leg = read	select	legible
√i = go	sedition	transition
√duc = lead	seduce	duct

Rule Set: The prefix “ad-” requires an **assimilation rule**, but the prefixes “red-”, “prod-”, and “sed-” require a **deletion rule**. We can capture the behaviour of these prefixes with these two rules:

$ad + C_1 \rightarrow aC_1C_1$ (Assimilation) and $d + C \rightarrow C$ (Deletion)

This isn't really very satisfying. Even though these two rules are descriptively adequate, they fail to offer explanatory adequacy.

Let's see what **the prefix "sub" meaning "under"** has to offer:

Root	sub +	Other words from the same root
√tract = drag	subtract	tractor
√orn = wear	suborn	ornament
√jug = join	subjugate	junction
√port = carry	support	important
√ges = carry, bear	suggest	gestation
√sta = stand	substantial	statue
√fer = carry, bear	suffer	fertile
√ced = go	succeed	intercede
√duc = lead	subduct	reduce

Bottom line here is that the “b” of the prefix assimilates to c [k], p, f, and g, but not to dental sounds such as s, t, or d.

There remains an anomalous collection of words where the “b” of the prefix appears to reduce to “s” as in “sustenance”, “suspect”, and “susceptible”. No explanation for the behaviour of these.

The **prefix “ambi-” meaning “both”**

Root	ambi +	Other words from this root
√dextr = right	ambidextrous	dexterity
√i = go	ambition	transit
√val = be strong	ambivalent	value

The word “ambition” shows contraction: ambi + i + t + ion: two vowels contract to a single vowel.

The **prefix “trans-” meaning “across”** alternated between “trans-” and “tra-” in Latin, but that distinction is lost in English where we retain only the productive “trans-”.

Root	trans +	Other words from this root
√i = go	transit	exit
√fer = carry	transfer	infer
√ag = act, drive	transaction	agent
√port = carry	transport	import
√da = give	tradition	data
√jac = throw	trajectory	adjective
√duc = leave	traduce	educate

So we see that “trans-” reduces to “tra-” before voiced consonants. But this applied erratically and there are a number of lexemes where the rules don’t hold

Root	trans +	Other words from this root
√mont = hill	transmontane 1727	Montana
√mont = hill	tramontane 1593	Montana
√vert = turn	transverse 15 th C	revert
√vert = turn	traverse 14 th C	advertise
√duc = lead	transduce 1947	duct
√duc = lead	traduce 1573	induct

So how do we explain why “trans-” reduces to “tra-” in some instances but not in others?

Old words obey the old rules, new ones do not.

There are plenty of other prefixes that behave regularly and have transparent semantics and phonology, e.g., “post” (after) ⇒ **post**humous; “de” (down) ⇒ **de**cline; “super” (above) ⇒ **super**ficial.

Extensions

Latin prefixes derived from prepositions. Since prepositions can inflect like adjectives (at least in some cases, e.g., “near”, “nearer”, “nearest”) it should be no surprise that some Latin preps could also inflect.

When we use the Latin prefix, we don't concern ourselves with these inflections but rather consider them to be **extensions** of the original prefix having slightly different meanings from the originals.

Extensions continued ...

Consider the prefixes “in-”, “con-”, “ex-”, “sub-”, “pro-”, and “re(d)”. There are **three possible extensions** that could be added to these although not all three could add to each prefix. Note the meaning shifts depending on the extension used

in-	interject	intravenous	introduction
con-		contradiction	
ex-	external	extradition	extrovert
sub-	subterfuge		
pro-	preternatural		
re(d)-			retrospective

Consider in light of the foregoing the difference between “intranet” and “internet”. And on that happy note, I bid you adieu!