Derivation II

Prof. Joseph Pentangelo

Ling 350: The Structure of Words

14 March 2024

QUIZ #2

1. The following are simplified forms of several words in Kanien'kéha (a.k.a. Mohawk), an Iroquoian language.

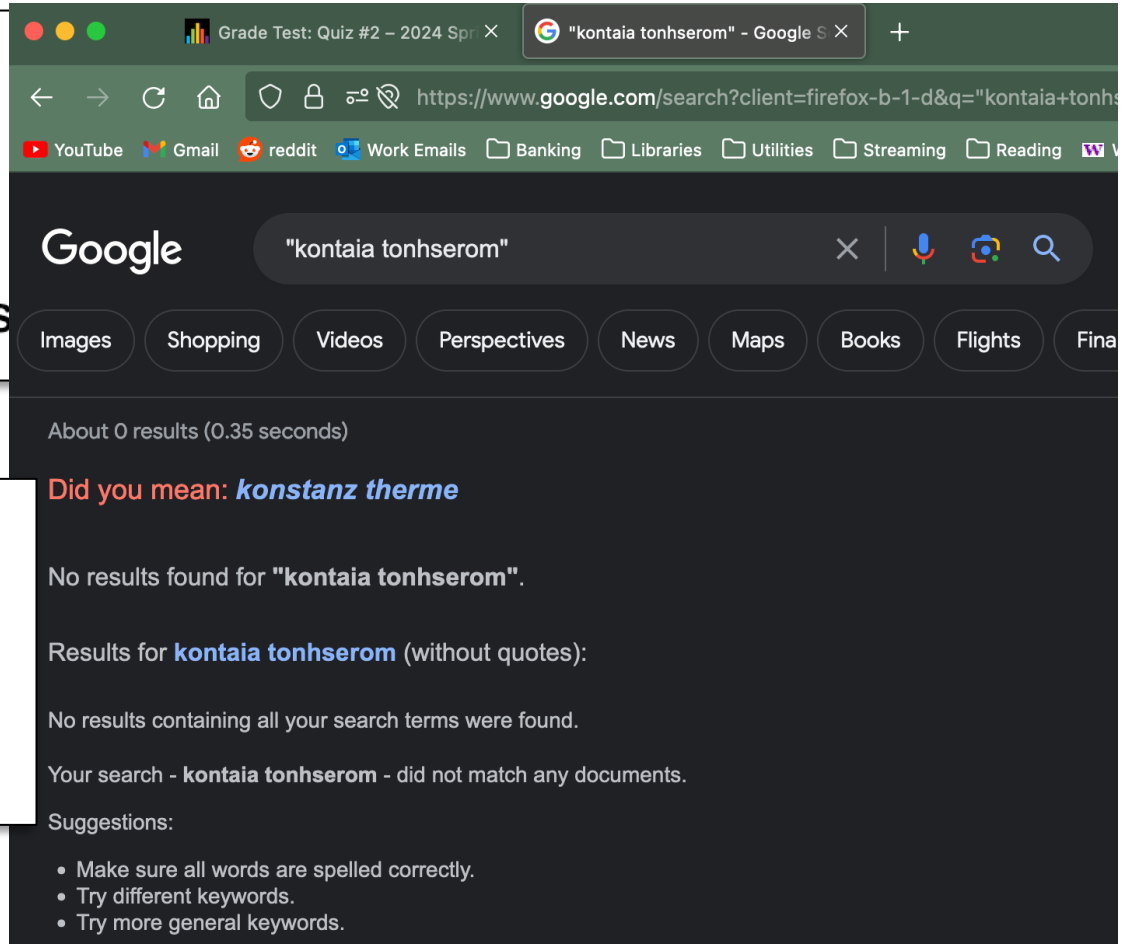
katorats “I hunt”
enkatorate “I will hunt”
satorats “you hunt”
ensatorate “you will hunt”
ratorats “he hunts”
enratorate “he will hunt”

Based on the above, identify the morphemes for “I,” “he,” and “you,” and the stem for the verb “hunt”. This question is worth 2 points. (The four morphemes mentioned are worth a half-point each.)

2. Answer this question using the Kanien'kéha data provided in question 1. If the stem for “wash” is –anohare–, how would you write “He washes” in Kanien'kéha?

QUIZ #2

Given Answer: "I" is "ne"
"he" is "e"
"you" is "te"
The stem for the verb "hunt" is



Given Answer:
"I" morpheme: ni-
"He" morpheme: o-
"You" morpheme: ki-
Hunt (verb) stem: -onts-

Given Answer: In Kanien'kéha, "I" is represented by the morpheme "ne," "he" by "se," and "you" by "kwi." The stem for the verb "hunt" is "raksa."

QUIZ #2

1. The following are simplified forms of several words in Kanien'kéha (a.k.a. Mohawk), an Iroquoian language.

katorats “I hunt”
enkatorate “I will hunt”
satorats “you hunt”
ensatorate “you will hunt”
ratorats “he hunts”
enratorate “he will hunt”

Based on the above, identify the morphemes for “I,” “he,” and “you,” and the stem for the verb “hunt”. This question is worth 2 points. (The four morphemes mentioned are worth a half-point each.)

2. Answer this question using the Kanien'kéha data provided in question 1. If the stem for “wash” is –anohare–, how would you write “He washes” in Kanien'kéha?

QUIZ #2

3. The table below shows the paradigm for the Czech noun meaning “hero.”

	Singular	Plural
Nom.	hrdina	hrdinové
Acc.	hrdinu	hrdiny
Gen.	hrdiny	hrdinu
Dat.	hrdinovi	hrdinum
Inst.	hrdinou	hrdiny
Loc.	hrdinovi	hrdinech
Voc.	hrdino	hrdinové

How many grammatical words are shown in the above paradigm?

4. On the above paradigm showing the Czech word for “hero,” there are several examples of syncretism. Please find all of them, and note the number and case of each example.

WA #2

Consider the following English words:

forbid, *forget*, *forgive*, *forgo*, *forswear*

What evidence is there for them being complex? What evidence is there for them being simplex? Which do you think they are?

Recap

- Last week, we introduced **derivation**, a process by which new lexemes are created.
- We discussed the **Right-hand Head Rule**.
- We discussed **category-changing affixes.**
- We explored the rules that govern the types of **inputs** and **outputs** of derivational processes.
- We introduced bracketed **templates** to illustrate derivational processes.

Discussion! (p.73 q.3)

- Do the following English denominal verbs form a problem for the Right- hand Head Rule for English: *encage, enchain, encircle, encourage, enfeeble*? (Bear in mind that possible words can form an intermediate stage in word-formation.)

Templates and the Lexicon

- Some words can be understood on the fly.
- *Resend* 'to send again' – you understand this by knowing what *re-* means and what *send* means.
- $[\text{re}\ [\text{X}]_{\text{V}}]_{\text{V}}$ – 'to X again'

What kind of input does this take?

What kind of output does this give?

- But not all words can be so easily understood. Many have info that doesn't follow right from the template.
- These words need to be stored separately in the lexicon.

What's the lexicon?

Templates and the Lexicon

German *-bar* ‘-able’

$[[X]_V$ bar$]_A$ – ‘able to be Xed’

lesen ‘to read’

-bar ‘-able’

lesbar ‘able to be read’

but...

essen ‘to eat’ → *essbar* ‘able to be safely eaten’

zahlen ‘to pay’ → *zahlbar* ‘payable, must be paid’

halten ‘hold, keep’ → *haltbar* ‘non-perishable’

“The predictable properties are partially inherited from their base verbs, and partially from the word-formation template for adjectives ending in –*bar*.” (63)

“A morphological template thus coexists with the individual complex words formed according to that template.” (63)

What kind of inputs does this take?

What kind of outputs does it give?

Are there English suffixes that provide similar examples?

Constraints

- We've seen input constraints last week (and earlier today). What're some examples?

What's an affix that can only attach to verbs?

What's an affix that can only attach to adjectives?

- These are input constraints because the limitation has to do with what kind of inputs can be used.

Constraints

- There are also <u>output</u> <u>constraints</u>.
- Consider the following affix we saw last week:

$[[X]_A\ en]_V$ – 'to make [something] X'

blacken	*redden*	**greenen*
whiten	*strengthen*	**bluen*
harden	*weaken*	**shinyen*
fasten	*quicken*	**dryen*
soften	*dampen*	**slowen*
		etc.

How do we explain this?

What's the pattern?

In all grammatical *Xen* words, X ends with a single obstruent.

An obstruent's a plosive, fricative, or affricate.

Remember: We care about sound, not spelling!

How do we know this is an output constraint and not an input constraint?

soft [sɔft]
soften [sɔfən]
- the [t] is eradicated

Other examples?

moisten

soften

Discussion! (p.74 q.9)

- The English negative prefixes *a-* and *an-* borrowed from Greek can both be attached to adjectives. What determines the choice between these prefixes?

amoral

atheistic

asexual

anarchic

analphabetic

anoxic ‘without oxygen’

Constraints

- The choice of an affix can also depend upon the preceding morphemes in the base.
- For example, *-ize* will be followed by *-ation*, not *-ion*

$[[\text{Xize}]_{V}\ \text{ation}]_{N}$

realize → realization

Other examples?

- Similarly, *-able* takes *-ity*, not *-ness*

$[[\text{Xable}]_{A}\ \text{ity}]_{N}$

kissable → kissability

Other examples?

What's going on with the pronunciation changing?

Doesn't necessarily depend upon *able* being a suffix – can be part of a simplex word, like *stable* → *stability*, and *able* → *ability*.

Constraints

- Other word-formation processes are informed by the internal morphological structure of words.
- What's conversion?

Where you use a word of one category (e.g. N) as another (e.g. V), without any overt affixation.

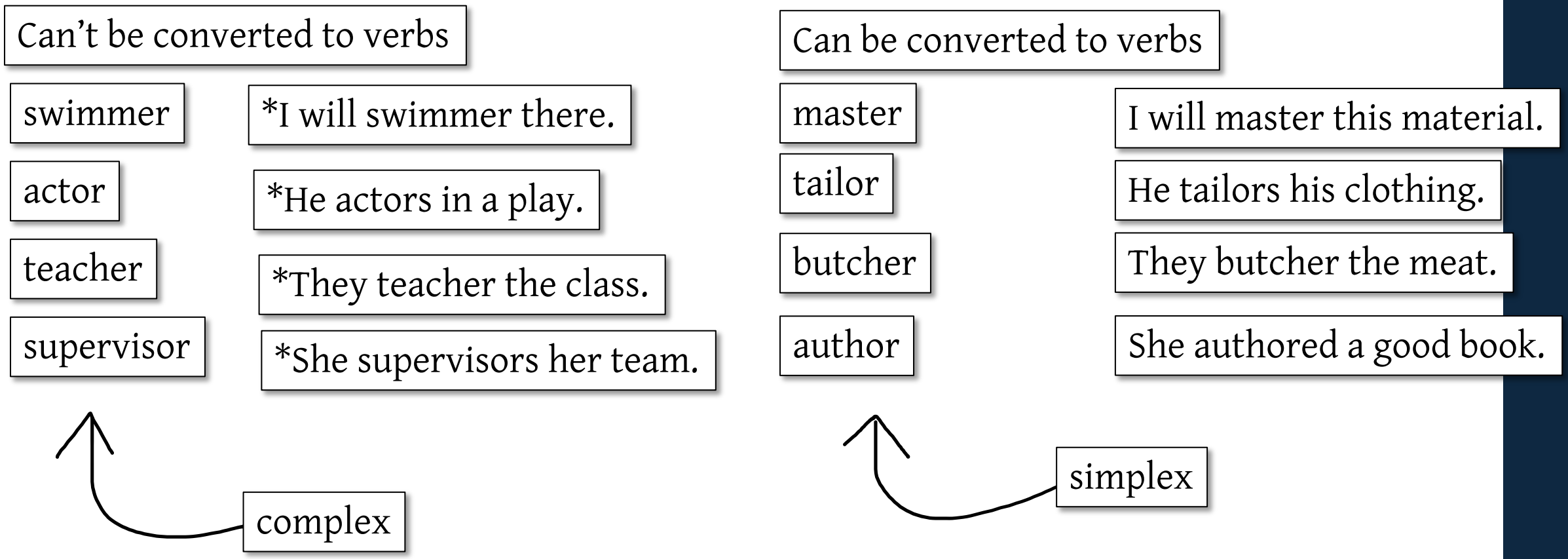
- What're some examples?

$[text]_N \rightarrow [[text]_N]_V$ $[tax]_N \rightarrow [[tax]_N]_V$ $[convert]_V \rightarrow [[convert]_V]_N$

- Conversion is an example of derivation "because it serves to coin new lexemes on the basis of existing ones" (57)

Constraints

- Interestingly, N→V conversion in English applies to simplex and compound nouns, but <u>not</u> suffixed nouns.



Constraints

There are natural semantic constraints, too – the meaning has to be possible.

- *Un-* can attach to verbs, but only those verbs that can be undone.
- Can't **unkill*, **unring* [a bell], **unask*, **unswim*, **unhammer*
- Can *unfold*, *unmake*, *unlock*, *undress*, *unscrew*
- Any other examples like this?

Discussion! (p.74 q.7)

- English has at least the following prefixes with some negative meaning: *de-*, *dis-*, *in-*, *non-*, and *un-*. Make a list of the (phonological, syntactic, semantic, and stratal) constraints that each of these prefixes imposes on its base words. What is the division of labour between these five prefixes?

Let's do five breakout groups. Make a list of words with the prefix, and then we'll come back together to see if we can find a pattern.

1. de-
2. dis-
3. in-
4. non-
5. un-

de-

dis-

in-

non-

un-

Productivity

- What does it mean for a morphological process to be productive?

  Can still be used to make new lexemes or word forms.

- Not all morphological processes that exist are productive. What are some examples?

  foot → feet ox → oxen actor → actress

- Even those that are productive are not equally productive.

"The degree of productivity of a word-formation pattern thus refers to the degree to which the structural possibilities of a word-formation pattern are actually used." (68)

Productivity

- Productivity can be informed by culture.

This can be illustrated as follows. Both in German and in Dutch female nouns can be coined by means of suffixation, in German by means of suffixation with *-in*:

(21)	Dozent "teacher"	Dozent-in "female teacher"
	Minister "minister"	Minister-in "female minister"
	Professor "professor"	Professor-in "female professor"
	Student "student"	Student-in "female student"

Dutch has the same female suffix *-in*, and some other female suffixes as well. Yet, it does not have equivalent words for these German female nouns.

p. 68

-in is more productive in German than in Dutch.

-ette and *-ess* used to be more productive in English than they are now.

Productivity

- Sometimes, two different morphemes with the same meaning compete. What are the two mentioned in the text?

  -*ity* and -*ness*

- We can examine productivity by consulting a corpus.
- What is a *corpus*? A body of texts.
- What is a *type*? A given word form.
- What is a *token*? A given instance of that word form.
- What is a hapax? A novel type that appears only once.

"The king of the world is a crownless king."

How many types?

7

How many tokens of each?

the: 2
king: 2
of: 1
world: 1
is: 1
a: 1
crownless: 1

Therefore, one might define the degree of productivity P of a particular morphological process as the proportion between the number of hapaxes of that type (n_1) to the total number of tokens N of complex words of that type in the sample (Baayen 1992: 115):

(22) $P = n_1/N$

The use of P as a measure of productivity is illustrated by the data in Table 3.1. These data are from the English Cobuild Corpus, a corpus of 18 million word forms of British English. N stands for the number of word tokens ending in these affixes, and V for the number of types. The table shows that the number of tokens in *-ity* is higher than that of the tokens in *-ness*. However, the number of types with *-ness* is higher, and—what is more important—the number of hapaxes as well. Hence, the suffix *-ness* is more productive than *-ity*.

p.70

Table 3.1. *Productivity measure for the English suffixes* -ity *and* -ness

Affix	N	V	n_1	P
-ity	42,252	405	29	0.0007
-ness	17,481	497	77	0.0044

Source: Baayen 1992: 116.

For next week...

- Midterm! Will be sent out this weekend.
- Read the first half of the chapter on compounding.