Prof. Joseph Pentangelo

Ling 350: The Structure of Words

21 March 2024

#### Tonight we'll cover:

- Fall 2024 classes
- The stuff we didn't get to last time
- Compounding
- Assignment

#### Fall 2024

I will be teaching the following courses:

#### Sociology of Language

- Ling 380 29663
- Hybrid:

W 6:30-8:10pm in-person.

Rest of time online.

Cross-listed with Soc 427

#### Sign Language Linguistics

- Ling 412 29705
- In-person:

Th 6:30-9:50

No ASL experience necessary!

## 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

 $ox \rightarrow oxen$ 

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.

-in is more productive in German than in Dutch.

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

p. 68

## 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?

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 <sub>1</sub>	P
-ity	42,252	405	29	0.0007
-ity -ness	17,481	497	77	0.0044

Source: Baayen 1992: 116.

#### Using corpora

• Depending on your research goals, it might be useful for you to build your own corpus. Lots of software to help you do this.

• In grad school, I built a corpus for a <u>fun little project</u> about the band The Misfits. It contained the lyrics to all their songs, as well as several songs by some comparable bands. I used this to do a simple stats-driven stylistic analysis. (The Misfits' lyrics were way darker and they also said "whoa" and "oh" a lot more than their peers.)

- You also might want to use a corpus that already exists.
- NOW corpus News on the Web
- COCA corpus Corpus of Contemporary American English (1990–2019)
- https://www.english-corpora.org/



The Misfits' logo, the Crimson Skull

- Compounding, like derivation, creates new lexemes.
- Unlike derivation, compounding works by combining existing lexemes (rather than appending affixes to a lexeme).
- Remember: affixes are bound morphemes, while lexemes are (usually) free morphemes.
- Compounding is very productive.

#### Practice! (p.94, q.4)

Consider the following recently coined words ending in gate coined on analogy to Watergate: Irangate, Monicagate, nipplegate. These three words denote scandals.

• Are these words cases of compounding, or of derivation? Explain your answer.

- The two (or more) lexemes that make up a compound are not always related in a clear way.
- How do the lexemes relate in the following?

soup bowl
Superbowl
hockey stick
match stick
black eye
blue eye

white House tree house bird house

 How do you know what these words mean?

## Practice! (p.94, q.8)

• Try to specify the semantic relation between the two constituents of the recently coined English compounds bear jam, deprivation cuisine, flash mob, information pollution, man breasts, office creeper, salad dodger. Which of them cannot be interpreted easily on the basis of the meanings of their constituent words? (Source www.wordspy.com).

- A compound may be either **endocentric** or **exocentric**.
- An endocentric compound has a head; an exocentric compound does not.
- What does a head do?
- What is the Right-hand Head Rule?
- In English, which constituent in an endocentric compound is (almost always) the head?

• The head assigns the syntactic category to the whole compound, as well as gender (in languages that mark gender).

```
het soepvlees "the soup meat" (neuter) de vleessoep "the meat soup"
/supflejs/ (non-neuter)
het modefeest "the fashion party" (neuter) de feestmode "the party fashion"
(non-neuter)
```

• We usually think of the whole as a "kind" of the head. A bird bath is a kind of bath, not bird; a church bell is a kind of bell, not church, etc.

• The head is almost always a content word: N, A, V.

• But the non-head can be almost anything:

[French history]<sub>NP</sub> teacher

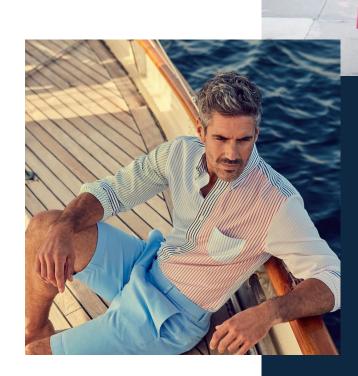
 $[20^{th} century]_{NP}$  welfare state

['one size fits all']<sub>S</sub> solution

[go to hell]<sub>S</sub> pants

[fun]<sub>A</sub> shirt

[chicken]<sub>N</sub> soup



- Crucially, a head can be inflected. The non-head cannot.
- For right-headed compounds, this means there is **no internal inflection**. (We'll come back to this later.)

file cabinet

\*files cabinet

dog house

\*dog's house

19<sup>th</sup> and 20<sup>th</sup> century religion

\*19<sup>th</sup> and 20<sup>th</sup> centuries religion

runaway train

\*running away train

\*runs away train

Cults, New Christianities and Religious Persecution in the Internet Age; a Q&A with Holly Folk

#### by John Thompson, Office of Communications

Holly Folk is an associate professor of Global Humanities and Religions at Western, and she is a historian who studies 19th and 20th century religion and culture. Her research addresses a



- There are also **exocentric**, or headless compounds.
- pickpocket<sub>N</sub> vs. file cabinet<sub>N</sub>
- cut-throat<sub>A</sub> vs. bird song<sub>N</sub>

Is a pickpocket a kind of pocket? Or a kind of pick?

Is "cut-throat" a kind of cut? Or throat? What's its syntactic category?

Italian porta-lettere "lit. carry letters, postman"

lava-piatti "lit. wash dishes, dish washer"

Spanish lanza-cohetes "lit. launch rockets, rocket launcher"

limpia-botas "lit. clean boots, bootblack"

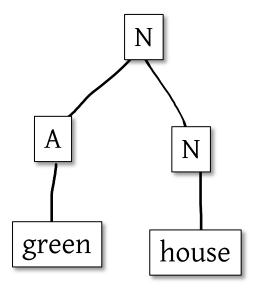
## Practice! (p.94, q.7)

Consider the following Italian verb-noun compound:  $[spazza]_V$   $[camino]_N]_N$  "lit. sweep chimney, chimney sweep(er)".

• Is this an endocentric or an exocentric compound?

• How do we represent compounds in bracket or tree notation?

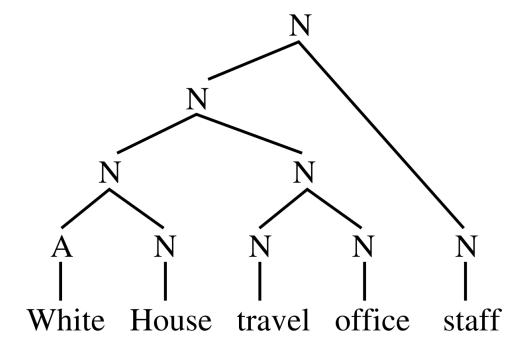
 $[[green]_A [house]_N]_N$ 





White House travel office staff

 $[[[[White]_A [House]_N]_N [[travel]_N [office]_N]_N]_N [staff]_N]_N$ 



Let's say this was a big staff. Where would the modifier "big" go?

## Practice! (p.93, q.2)

Give the complete morphological structure the following English compounds:

recreation hall

book keeping

truck driver

pickpocket

underdog

homegrown

• There are also copulative compounds, in which there is no head, and the two elements work together: "the relation between the constituent[s] is a relation of coordination" (80).

boyfriend-girlfriend

boy-girl

peanut-butter jelly

blue-green

washer-dryer

"Are they boyfriend-girlfriend?"

"Will it be a boy-girl party?"

"One peanut-butter jelly, please."

candrā-dityā-u moon-sun-DUAL "the moon and the sun"

devā-sura-s

god-demon-PL "three or more gods and demons"

raat-din "night and day" maa-pio "mother and father" sukh-dukh "happiness and sorrow"

Examples from Sanskrit

- How can we tell a syntactic phrase apart from a compound word?
- In other words, apart from spelling conventions, how do we know the difference between "the white house" and "the White House"?





• In English, compounds are marked by compound stress.

blackboard black board

greenhouse green house

grayscale gray scale

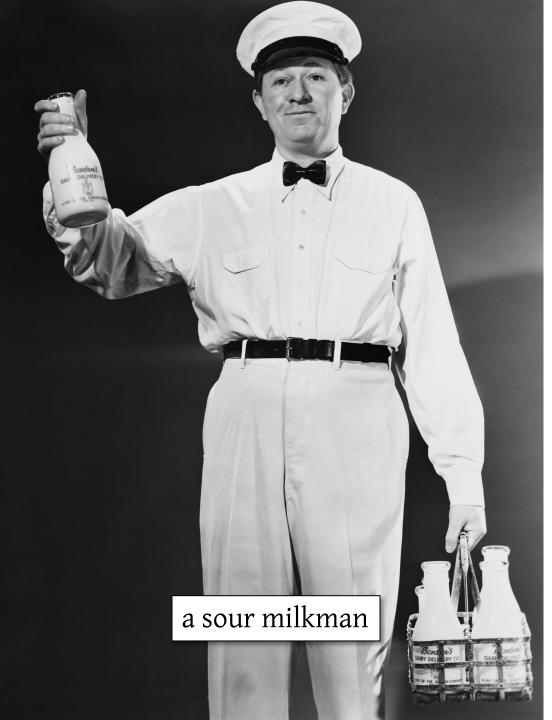
White Socks white socks

haircut hair cut

downtown down town

smartphone smart phone

• The first syllable in each of these compounds is stressed.



• Also, a compound's internal elements can't be modified with outside words.

\*a very blackboard

a very black board

a very black blackboard

- In the phrase "a sour milkman," what's sour? The milkman not the milk.
- How about "a big jailbreak" what's big? The jailbreak not the jail.
- What's hot in "a hot bathroom"?

The bathroom – not the bath.

• Compounds function as a single word. As mentioned earlier, they cannot have internal inflection.



bird house
bird bath
file cabinet
book store
blackboard
smartphone
man-eating

~bird's house

~bird's bath

\*files cabinet

\*books store

\*blackerboard

\*smarterphone

\*men-eating

These two are grammatical as phrases, but mean something different than the compounds. A "bird's house" could be a nest, and a "bird's bath" could be a puddle.

Exceptions are calques from French, e.g. attorneys-general.

#### For next time...

- Don't forget! Midterm is on Blackboard and is due by 11:59pm Sunday night.
- Read the rest of this chapter, pp.85–93.