

# **Morphology II:**

# **Allomorphy and Concatenation**

Reading: FRH Ch. 2

PLIN0006: Introduction to Language

#### **Recap: Allos in fiction**





#### CK and SM are in **complementary**

distribution:

where one appears, the other does not.

When someone is in danger

Elsewhere

#### Recap: Allos in phonology

Examples: top, tree, butter, stun



These variants of /t/ are also in **complementary distribution**: where one occurs, the others do not.

#### Allomorphy

The plural morpheme /-z/: cat-s, wish-es, dog-s



Allomorphs are also in **complementary distribution**.

### The English Indefinite Article

- an before vowels (an apple, an igloo)
- a before consonants (a book)

• But: a unicorn, not \*an unicorn. Why?

# Letters *¥* Sounds



### The English Indefinite Article (Continued)

- an before vowels (an apple, an igloo)
- a before consonants (a book)

- But: a unicorn, not \*an unicorn. Why?
- Answer: **unicorn** begins with a consonant: [juːnɪkɔːn].

#### **Historical Restructuring**

Old French: naperon

English ~1400: napron

English ~1600: apron



# Phonological Conditioning in Akan (Ghana)

• Negation in Akan:

Akan	Meaning
[mɪ pɛ]	'I like'
[mi mpɛ]	'I don't like'
[mɪ tɪ]	'I speak'
[mɪ ntɪ]	'I don't speak'
[mī kɔ]	ί go'
[mɪ <code>nkɔ]</code>	'I don't go'

• Homorganic nasal rule: Change the place of articulation of a nasal to agree with place of articulation of the following consonant.

## Nasal Homorganicity in English

- [**Im**] **im**-patient, **im**-balanced;
- [In] in-sincere, in-tolerable, in-operable;
- [**in**] **in**-correct, **in**-capable;
- [I] ir-regular, il-licit.

• Why is the UR of this morpheme /ɪn-/, and not /ɪm-/, /ɪŋ/, or /ɪ-/?

> Answer: /In-/ occurs before vowels, where there is no PoA to copy.

#### The Turkish Locative Suffix

Turkish	Meaning
lokanta	'a restaurant'
lokanta- <mark>da</mark>	'in/at a restaurant'
kap <del>i</del>	'a door'
kap <del>i</del> - <b>da</b>	'in/at a door'
randevu	'an appointment'
randevu- <mark>da</mark>	'in/at an appointment'

Turkish	Meaning
ba∫	'a head'
ba∫- <b>ta</b>	'in/at a head'
koltuk	'an armchair'
koltuk- <mark>ta</mark>	ʻin/at an armchair'
taraf	'a side'
taraf- <mark>ta</mark>	'in/at a side'

# Question:

How are morphemes combined

into words?

#### Affixation

• Affixes are **selective** ("choosy").

- Examples:
  - -able only attaches to verbs: doable, \*blueable
  - -ly only to adjectives: happily, \*doly
  - -un only to verbs and adjectives: undo, unhappy, \*undesk
  - -anti only to nouns: antimissile, \*antido, \*antihappy

# Compounding

• Compounding combines **two roots** with each other.

These can be nouns, verbs, or adjectives.

• Examples:

- Noun-Noun: wristwatch, bookshelf
- Adj-Noun: blackboard, greenhouse
- Adj-Adj: bittersweet
- Noun-Verb: spoonfed

#### Truncation

- Stems can undergo partial deletion to signal semantic modification or
  - grammatical function.
- Examples from Koasati (Muskogean, Louisana):

Koasati	Meaning
mis <mark>ip</mark> -li-n	'wink (sg)'
mis-li-n	'wink (pl)'
akocof <mark>ot</mark> -li-n	ʻjump down (sg)'
akocof-fi-n	ʻjump down (pl)'
acit <mark>ii</mark> -li-n	'tie sth. (sg)'
acit-li-n	'tie something (pl)'

• Truncation also happens in English: weblog  $\rightarrow$  blog, afro  $\rightarrow$  fro



• Morphemes are usually combined in a linear sequence.

This process is called (linear) concatenation.

 In concatenated words, morphemes are pronounced one after another (i.e., not at the same time).

• Example:

un+lock+able is [ʌnlokəbl], not \*[lʌwŋf]

#### Hierarchy

- Complex words have hierarchical structure:
  - Words consist of smaller groupings of morphemes, which themselves consist of smaller groupings of morphemes, etc., down to the root.
- Examples:
  - •[ un[[lock] able]] 'can't be locked' = un+(lockable)
  - •[[un [lock]]able ] 'can be unlocked' = (unlock)+able

#### Heads and Grammatical Category

- When two items are combined, one is the **head** of the new item.
- Words have a grammatical category, determined by their head.
- Examples English obeys the "right-hand head rule":
  - un-lock-able  $\rightarrow$  adjective
  - un-tie  $\rightarrow$  verb
  - black-**board**  $\rightarrow$  noun
  - bitter-sweet  $\rightarrow$  adjective
  - spoon-feed  $\rightarrow$  verb

#### Non-concatenative morphology

• Non-concatenative morphology is exponed by changes to the stem

other than adding to the linear sequence.

- Examples:
  - mouse (sg.) mice (pl.); tooth (sg.) teeth (pl.);
  - •swim (pres.) swam (past); spin (pres.) spun (past).
  - English ablaut is limited to inflectional morphology, and only arguably productive nowadays.

#### Mutation in Welsh

In some languages, the initial consonant or a stressed vowel of a word

change to expone a morphological feature. This is called mutation.

/tad/	'father'
[ə tad]	'the father'
[ <mark>ə n</mark> ad]	'my father'
[ <b>də da</b> d]	'your father'
[i <del>0</del> ad]	'her father'
[ <b>i da</b> d]	'his father'

### Templates in Egyptian Arabic

Semitic languages like Arabic use templatic morphology,

where a **root** is combined with a **template** to form a word.

Form	Meaning
katab	'he wrote'
ba <b>kt</b> ib	'I write'
iktib	'write!'
kaatib	'writer'
ma <mark>kt</mark> uu <mark>b</mark>	'written'

Form	Meaning
daras	'he studied'
ba <b>dr</b> is	'l study'
i <b>dr</b> is	'study!'
<b>d</b> aaris	'student'
ma <b>dr</b> uu <b>s</b>	'studied'

Table 1. Root: **k-t-b**; 'write'

Table 2. Root: d-r-s; 'study'



• Morphemes can be in **complementary** or **contrastive** distribution.

- Morphemes may have multiple realisations.
  - The choice of **allomorph** depends on its context.
- Multi-morphemic words consist of more than one morpheme. Complex words often have hierarchical and linear structure.

• Non-concatenative morphology involves non-linear modification.