Week 4
LING 105: Morphology
Apr. 28, 2023

1 Review

- **Concatenative** morphology: *morphemes can be connected to each other to form new words*
  e.g. /kat/- + -/s/=<cats>

- **Non-concatenative** morphology: *everything else*
  e.g. /'fʊt/ - /'fiːt/

- **Concatenative patterns** can be described by **affixation** and *compounding*

  - Affixation:
    What is the **combinatory potential** of an affix? Is it (entirely) predicted from an affix's meaning? *=>Ns*
    The types of words affixes can attach to

    (1) Negative <un>- Rule → *adj.* $[x]_{adj}$ → $[un[x]_{adj}]_{adj}$

    (2) -<tion> Rule $[x]_v$ → $[[x]_v \, tion]_n$

    (3) <re>- Rule $[x]_v$ → $[re[x]_v]_v$

  - Compounding: two <u>stems</u> (**base lexemes**) are concatenated to form a complex word (lexeme).

    (4) English N+N Compounding Rule → $[x_1]_n + [x_2]_n$ → $[[x_1]_n[x_2]_n]_n$

    (5) English N+V Compounding Rule → $[x_1]_N + [x_2]_v$ → $[[x_1]_N[x_2]_v]_N$

    * Which lexeme is the head? → *first one*

- Reduplication:

  (6) Malagasy: **full reduplication** for adjectives

be	'big, numerous'	be-be	'fairly big, numerous'
fotsy	'white'	fotsi-fotsy	'whitish'
maimbo	'stinky'	maimbo-maimbo	'somewhat stinky'
hafa	'different'	hafa-hafa	'somewhat different'

  (Keenan and Polinsky 1998: 571)

  (7) Ponapean: **partial reduplication** for verbs

Reduplication of a CV sequence before the base: Ponapean			
duhp	'dive'	du-duhp	'be diving'
mihk	'suck'	mi-mihk	'be sucking'
wehk	'confess'	we-wehk	'be confessing'

  (Rehg 1981: 78)

- Morphological rules:

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- **Morpheme-based model**: morphological rules combine morphemes in much the same way that syntactic rules combine words

  * Word-structure rules:

Word-structure rules	
a. word-form	= stem (+ inflectional suffix)
b. stem	= (i) $\Big|$ (deriv. prefix +) root (+ deriv. suffix) $\Big|$ (ii) $\Big|$ stem+stem
c. inflectional suffix	= -s, -er, ...
d. derivational prefix	= un-, ...
e. root	= bag, event, cheese, board, happy, ...
f. derivational suffix	= -ful, -ness, ...

(8) Derive the following words using word-structure rule

     a. unsustainable

     b. gingerbread

  * Alternative formalism for word-structure: all morphological properties are reduced to the description of the lexical entries of morphemes
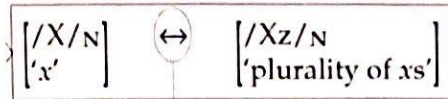
a. *bag*	b. *-s*	c. *happy*	d. *un-*
$\begin{bmatrix} /bæg/ \\ N \\ \text{'bag'} \end{bmatrix}$	$\begin{bmatrix} /z/ \\ N— \\ \text{'plural'} \end{bmatrix}$	$\begin{bmatrix} /hæpi/ \\ \Lambda \\ \text{'happy'} \end{bmatrix}$	$\begin{bmatrix} /\Lambda n/ \\ —A \\ \text{'not'} \end{bmatrix}$

  * What are some advantages and limits of morpheme-based model? Hard for non-concatenative patterns

- **Word-based model**: morphological relationship between complex words is captured by word-schemas which represent their morphological similarities

a. Words: *bags, keys, gods, ribs, bones, gems*, ...			
b. Lexical entries for words			
$\begin{bmatrix} /bægz/_N \\ \text{'bags'} \end{bmatrix}$	$\begin{bmatrix} /k^hijz/_N \\ \text{'keys'} \end{bmatrix}$	$\begin{bmatrix} /gɑdz/_N \\ \text{'gods'} \end{bmatrix}$	$\begin{bmatrix} /rɪbz/_N \\ \text{'ribs'} \end{bmatrix}$
c. Word-schema $\begin{bmatrix} /Xz/_N \\ \text{'plurality of xs'} \end{bmatrix}$			

a. Words: *bag, key, god, rib, bone, gem*, ...			
b. Lexical entries			
$\begin{bmatrix} /bæg/_N \\ \text{'bag'} \end{bmatrix}$	$\begin{bmatrix} /k^hij/_N \\ \text{'key'} \end{bmatrix}$	$\begin{bmatrix} /gɑd/_N \\ \text{'god'} \end{bmatrix}$	$\begin{bmatrix} /rɪb/_N \\ \text{'rib'} \end{bmatrix}$
c. Word-schema $\begin{bmatrix} /X/_N \\ \text{'x'} \end{bmatrix}$			

$\rightarrow$ the morphological relationship between these sets

$$\left[\begin{array}{l} /X/_{\text{N}} \\ 'x' \end{array}\right] \quad \leftrightarrow \quad \left[\begin{array}{l} /Xz/_{\text{N}} \\ '\text{plurality of } xs' \end{array}\right]$$

- What are the advantages and limits of word-based model?

(9) Formulate the morphological rule in the word-based model for the following pairs of words
    a. name-rename
    b. reason-reasonable
    c. reasonable-unreasonable
    d. unreasonable-unreasonably

2 Puzzle

Formulate the morphological rule for the following Tagalog lexeme pairs:

búhay	'life'	buháy	'alive'
gútom	'hunger'	gutóm	'hungry'
tákot	'fear'	takót	'afraid'
hába?	'length'	habá?	'long'
gálit	'anger'	galít	'angry'

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