Chapter 3

Morphology and Phonology

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- Root-and-pattern morphology
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- Secret languages

Allomorphs

- Allomorphs are (phonologically) predictable variants of one and the same morpheme
  - allomorphs are created by regular phonological rules, e.g. assimilation, insertion, deletion, etc.
  - e.g. English plural
    - regular allomorphs (-s, -z, -iz) *phono*
    - lexical exceptions (Ablaut, no change, -en, ...) [beaver?]
    - exceptions have a tendency to be regularized [cow]

Prosodic Morphology

- Interaction between morphology and prosodic (=suprasegmental) structure (length [moras], syllables, feet)

- Prosodic constraints on words:
  - minimality (*/hɛ/ in English)
    - always need long vowel or closed syllable
    - clear in short name formation (Di, John, *Pa)

Root-and-pattern morphology

- Semitic languages, e.g. Arabic, Hebrew
  - triconsonantal roots such /k t b/ 'write'
  - vowels in between indicate tense, aspect
    - e.g. for verb tenses _a_a_ : [katab] 'he writes' (see next slide)
    - or nouns [kitab] 'book'

  - "non-concatenative": not like affixes

Arabic k-t-b

kataba	'he wrote'	kitab	'book'
katabna	'we wrote'	kutub	'books'
yaktubu	'he writes'	maktub	'letter'
naktubu	'we write'	maktab	'school'
katib	'writer'	miktab	'type-
aktaba	'he dictated'		writer'
kutubi	'bookseller'	mukataba	'corre-
			spondence'

Etc.: root and pattern, but **also** some affixes, e.g. ya- and na-!

Reduplication

- <u>Complete</u> reduplication: whole word is repeated (e.g. Indonesian plurals)
- <u>Partial</u> reduplication: part of the word is repeated: pus-pusa 'cats' in Ilokano (Philippines): syllable
- <u>Reduplication with infixation</u>:
  Timugon Murut (Borneo)
  - ulampoy - u-**la**-lampoy   (n.g.)
  - indimo –   in-**di**-dimo   'five times'
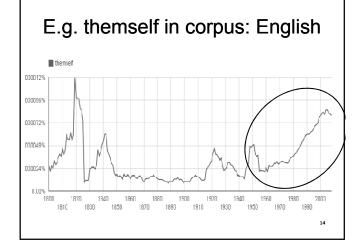
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Reduplication: Underlying form

- Underlying form of 'normal' affix: /un-/, /-d/, etc.
- Not possible for reduplicating affix

- Underlying form of reduplicating affix
  - /σ/ (syllable)
  - morphological, semantic, etc. information
    - prefix / suffix
  - **interaction with phonology** may make it an infix (nice analysis possible in Optimality Theory)
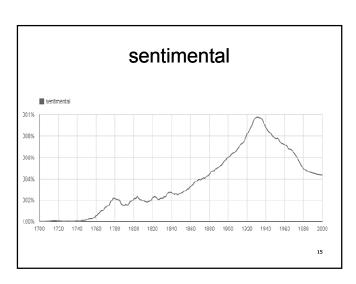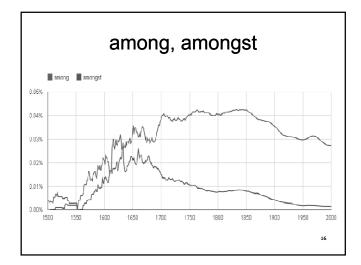
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Primary/secondary affixes

- Mendel - Men**del**ian   - **Men**delism
  -ian causes a stress shift; –ism doesn't

- Other examples:
  grammar – gram**ma**rian   vs.
  capital – **ca**pitalism

- un- vs. in- prefixes (unknown; innocent)
- two kinds of –able (reparable; repairable)

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Historical morphology

- Just like words, morphemes may change over time (meaning, shape, disappear)
- Exaptation: new use for something that has lost its original purpose
  - example: larynx in humans
  - in morphology: affixes that have lost their productivity for one meaning, may start to become used productively with another meaning
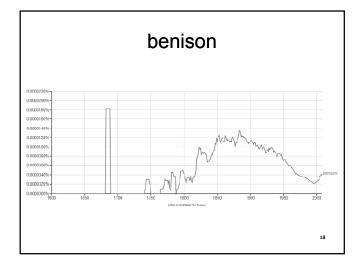   - historical tool: Google Ngram: *books.google.com/ngrams*

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E.g. themself in corpus: English

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sentimental

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2

among, amongst

■ among ■ amongst

0.05%
0.04%
0.03%
0.02%
0.01%
0.00%
1500 1550 1600 1650 1700 1750 1800 1850 1900 1950 2000

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Also...

- Part-of-speech Tags (N, V, Adj, Det, ...)
- Ngram Compositions (+, -, /, *, and :) : = different corpora
- American English, British English, Chinese, General English, French, German, Hebrew, Spanish, Russian, Italian
  - http://books.google.com/ngrams/info

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benison

0.0000220%
0.0000200%
0.0000180%
0.0000160%
0.0000140%
0.0000120%
0.0000100%
0.0000080%
0.0000060%
0.0000040%
0.0000020%
0.0000000%
1600 1650 1700 1750 1800 1850 1900 1950 2000

benison

(click on line/label for focus)

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Analogy

- Weeding out irregularities. Following majority

- A : B = C : X ('solve X')
  - stone : stones = cow : X
  - X = cows, replacing earlier 'kine'

- Very strong force in historical change
  - sometimes one irregularity is replaced by another one (e.g. *spit* verb example in English)

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Secret languages

- Phonologically / morphologically regular ways of **disguising speech**
  - as games
  - within certain professions / groups
- Pig Latin = ig**p**ay atin**l**ay (amscray)

- Such "languages" use notions like 'onset' and 'syllable' (and thus provide evidence in favour of these notions)
- Often: tone/stress independent of segments
- May have phonotactics different from language they are based on (e.g. -gp-)

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Important

- Interaction between morphology and phonology
- Often prosody (syllable structure) plays a role
- some types of morphology are non-concatenative (Arabic, reduplication)
- Primary/secondary types of affixes (levels in the grammar?)
- History of morphemes / ngram
- Secret languages

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Homework

- Read chapter 3 very carefully; note down any questions

- Please prepare exercises **1-6, 8,9** for class

- Don't forget ur new English (or Chinese) words!

- Thank you

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