

Language Structure: Words

Sentence Structure, No Meaning

Lewis Carroll

'Twas brillig, ***and the*** slithy toves
Did gyre ***and*** gimble ***in the*** wabe:
All mimsy ***were the*** borogoves,
And the mome raths outgrabe.

Word Classes

- Function Words

- Auxiliaries
- Articles
- Pronouns
- Prepositions
- Complementizers
- Conjunctions

Sentence scaffolding

Closed class

- Content Words

- Nouns
- Adjectives
- Verbs
- Adverbs

Conveys meaning

Open class

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Chomsky

Color**less** green ideas sleep furious**ly**.

vs.

Color green idea sleep furious.

Building Words

- Morphemes
 - Smallest meaningful units in a language.
 - e.g., irreplaceable → ir+replace+able
- Morphology
 - The internal structure of words.
 - Hierarchical structure
- Types of morphemes/structure
 - Inflectional
 - Derivational

Inflectional Morphemes

Morphemes that modify a word to fit into the structure of a sentence.

duck → duck+s

drive → drive+s

bake → bake+ed

run → run+ing

Free(er) Word Order

Richer inflectional systems, *e.g.*, Czech:

	<u>NOUNS</u>	<u>masc. sg.</u>	<u>fem. sg.</u>
1.	Nominative	most	knih <u>a</u>
2.	Genitive	most <u>u</u>	knih <u>y</u>
3.	Dative	most <u>u</u>	knize <u>e</u> (knih+ <u>ě</u>)
4.	Accusative	most	knih <u>u</u>
5.	Vocative	most <u>e</u>	knih <u>o</u>
6.	Prepositional	most <u>ě</u>	knize <u>e</u> (knih+ <u>ě</u>)
7.	Instrumental	most <u>em</u>	knih <u>ou</u>

Fixed vs. Free(er) Word Order

English:

S

DO

Max read the book.

S

DO

The book read Max.

Czech:

S

DO

Max read the booku.

DO

S

The booku read Max.

Agglutinative Languages

Very rich inflectional systems, e.g., Finnish:

Taloissanikinko?

'[Do you mean] in my houses, too?'

talo = house

i = plural marker

ssa = an inessive case (corresponding here to “*in*”)

ni = first person singular possessive

kin = an enclitic particle meaning 'also, too'

ko = a particle indicating a question

Derivational Morphemes

Morphemes that modify the meaning of a word and can change its part of speech.

duck → duck+ly

drive → drive+able

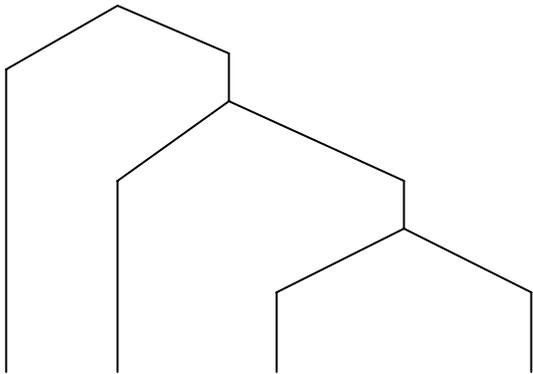
bake → bake+er

run → run+y

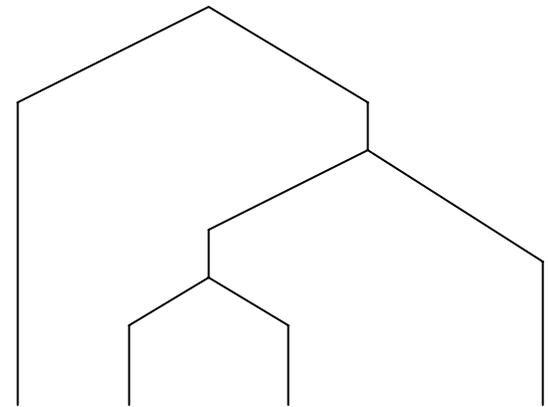
Generativity!

- (V) *floccinaucinihilipilificate*
- (N) *floccinaucinihilipilification*
- (Adj) *floccinaucinihilipilificational*
- (V) *floccinaucinihilipilificationalize*
- (N) *floccinaucinihilipilificationalization*
- (Adj) *floccinaucinihilipilificationalizational*
- (V) *floccinaucinihilipilificationalizationalize*

Hierarchical Structure



non ir replace able



non ir replace able

Other Ways to Make New Words

- Borrow 'em
banana, canoe, legal, justice, garage, crescent,
curry, lexicon, language...
- Compound 'em
hotdog, armhole, toothbrush, grandmother,
armchair...
- Invent 'em
transmogrify, floccinaucinihilipilification, jazz,
dude, ...

The Mental Lexicon

- Morphology describes the productive aspect of word generation
- The **lexicon** represents the fixed aspect of word use.
 - Lexicon = Dictionary
 - A medium-sized vocabulary is 60,000 words!
 - Roots (word stems), Proper Names, Foreign Words, Acronyms, Jargon, etc.

Regular Irregularities

Vowel alternations

(N) goose : geese, mouse : mice, (house : hicc)

(V) sing : sang : sung; ring : rang : rung;
(wink : wank : wunk)

(V) catch : caught, teach : taught, sneak : snuck

Irregular endings

(N) ox : oxen, datum : data, quantum : quanta

Word Structure Summary

- There are two broad categories of words: **Function** and **Content** words.
- Function words are fairly fixed in a language (**closed class**), content words are easily added (**open class**).
- **Morphemes** are the smallest meaningful units in a language.
- There are grammatical morphemes (**inflectional**) and morphemes that create new words (**derivational**).
- Morphemes are organized hierarchically into words.
- **Morphology**
 - The rules that describe how morphemes are organized relative to one another.
 - The rules are productive (new words can be continually generated)