Ch. 3 Morphology: The Words of Language
The Words of Language

• In spoken language we don’t pause between most words

• So when you hear a sentence in a language you don’t know, you won’t be able to tell where one word ends and the next begins

• Most English speakers can pick out all of the words in *The cats sat on the mat* because they can identify all those words
The Words of Language

• These boundaries between words can be played with for humor, as in the credits for NPR’s Car Talk:
  • Copyeditor: Adeline Moore
  • Pollution Control: Maury Missions
  • Legal Firm: Dewey Cheetham
The Words of Language

• **Lexicon**: Our mental dictionary of all the words we know

• **Lexicographers** aim to create written records of our lexicons (dictionaries)

  • Dictionaries describe the spelling, standard pronunciation, definitions of meaning, and parts of speech of each word

  • They may also prescribe language use
Content and Function Words

• **Content words**: the words that convey conceptual meaning (nouns, verbs, adjectives, etc.)
  • Open class: new types of content words can be added all the time
    • E.g. a new noun called a *flurg* would be fine

• **Function words**: the words that convey grammatical meaning (articles, prepositions, conjunctions, etc.)
  • Closed class: new function words are very rarely added to a language
    • English does not have a gender-neutral third person singular pronoun, and rather than adopt a new pronoun, many people use *they* instead of choosing between *he* and *she*. 
Content and Function Words

• The brain treats content and function words differently

  • Some aphasics are unable to read the function words *in* and *which* but can read the content words *inn* and *witch*.

  • Content words may be inadvertently switched in speech, but there is no documentation of function words being switched in this way.

  • Children often omit function words from their speech when learning their first language (“doggie barking”)

Morphemes

• **Morphology**: the study of the structure of words and the rules for word formation

• **Morpheme**: the minimal units of meaning

  • Morphemes can be words on their own, and/or can often be combined with other morphemes to make words
    • E.g. the word *book* has one morpheme
    • E.g. the word *books* has two morphemes:
      
      \[
      \begin{align*}
      \text{book} & \quad + \quad -s \\
      \text{N} & \quad \text{plural marker}
      \end{align*}
      \]
Morphemes

• Discreteness
  *(consisting of distinct or unconnected elements)*
In all languages, sounds combine to make morphemes, morphemes combine to make words, and words combine to make sentences

• Creativity: We can combine morphemes in new ways to create new words that can easily be understood
  • *writable*
  • *rewritable*
  • *unrewritable*
Bound and Free Morphemes

- **Free**: morphemes that can stand alone
  
  E.g. *love* is a single morpheme that can be uttered with no other morphemes connected to it

- **Bound**: morphemes that cannot stand alone, but must be attached to other morphemes
  
  E.g. *un-* and *-ish* are bound morphemes because they cannot stand alone
Affixes

• **Prefixes**: bound morphemes that attach to the *beginning* of a root
  • E.g. *un-* as in *untie*

• **Suffixes**: bound morphemes that attach to the *end* of a root
  • E.g. *-ness* as in *kindness*
Bound and Free Morphemes

- **Infixes**: morphemes that are inserted *inside* a root
  - Bontoc (Philippines):
    
    - fikas “strong”
    - fumikas “to be strong”
    - kilad “red”
    - kumilad “to be red”

- **Circumfixes**: affixes that attach to both *the beginning and the end* of a root
  - Chickasaw (USA):
    - chokma “he is good”
    - ikchokmo “he is not good”
    - lakna “it is yellow”
    - iklakno “it is not yellow”
Roots and Stems

• **Roots**: the morpheme base upon which other morphemes are attached to create complex words: *un-love-able*

• **Stems**: once an affix has been attached to a root, the result is called a stem to which more morphemes may be attached: *un-lovable*

• **Affixes**: morphemes which attach to roots and stems: *un-love-able*
Roots and Stems

• **Bound roots:** Roots that cannot stand alone and can only occur in combination with other morphemes

  • -ceive: *receive*, *conceive*, *perceive*, *deceive*

  • *Huckleberry, lukewarm, cranberry*
Rules of Word Formation

• Derivational morphemes
• Inflectional morphemes
Rules of Word Formation

• **Derivational morphemes** change the meaning and/or part of speech of a root

  • Adding –*un* to the word *do* changes the meaning drastically

  • Adding –*ish* to the noun *boy* creates the adjective *boyish*

• Derivational morphemes carry semantic meaning and are like the affix version of content words
Rules of Word Formation

• When a new word is created through derivation, other possible derivations may be blocked
  • *Communist* exists, therefore we can’t have *Communite* or *Communian*

• Some derivations trigger pronunciation changes, while others do not
  • *specific* $\rightarrow$ *specificity* and *Elizabeth* $\rightarrow$ *Elizabethan* vs.
  • *bake* $\rightarrow$ *baker* and *wish* $\rightarrow$ *wishful*
Rules of Word Formation

- **Inflectional morphemes** have only grammatical function (similar to function words) and never change the part of speech of the root
  
  - *waited, waits, waiting*

- Inflectional morphemes are always suffixes in English and always follow any derivational morphemes
  
  - *commit + ment* can become *commit + ment + s* but not *commit + s + ment*
Rules of Word Formation

• Inflectional morphemes are **productive**, meaning they apply freely to almost any appropriate base
  
  • Most nouns will take the inflectional suffix –s to make a plural noun
  
  • Only some nouns will take the derivational suffix –ize to make a verb
Rules of Word Formation

• Some languages use **case morphology**, where the grammatical relations of nouns are marked with inflectional morphemes

• Türkcelle bağlan hayata.
  Bağlan hayata Türkcelle.
  Hayata Türkcelle Bağlan.

• In Russian, the sentence “Maxim defends Victor” can have a variety of word orders:  
  - Maksim zašiščajet Viktora.
  - Maksim Viktora zašiščajet.
  - Viktora Maksim zašiščajet.
  - Viktora zašiščajet Maksim.

• This is because the –a in **Viktora** marks the object of the sentence, regardless of the word order.
Hierarchical Structure of Words

• Morphemes are added to a base in a fixed order which reflects the structure of a word

• *unsystematic* = *un* + *system* + *atic*
Hierarchical Structure of Words

• The example of *unsystematic* represents the application of two morphological rules:
  • Noun + *-atic*  →  Adjective
  • *un-* + Adjective  →  Adjective

• In the case of *unsystematic*, this is the only possible hierarchy, as *
  *unsystem* is not a word
Hierarchical Structure of Words

- The hierarchical structure of words can help disambiguate ambiguous words:
- *unlockable* could mean:
  1) “not able to be locked” or 2) “able to be unlocked”
Rule Productivity

Derivational affixes are productive to different extents:

- *-able* can be affixed to any verb to create an adjective

- *un-* is most productive for adjectives derived from verbs and words with polysyllabic bases
  - *un*asiled, *unenlightened*, and *unhappy*, but not *unsad*, *unbrave*, or *untall*
Rule Productivity

• Exceptions and **Suppletions:**
  
  • Not all words undergo regular morphological processes (e.g. Irregular verbs and nouns such as; *feet, went, sing, children*)
    • These words must be learned separately since rules don’t apply to them
  
  • When new words enter the language, regular morphological rules generally apply to them
    • The plural of *fax* became *faxes* rather than *faxen vs ox => oxen*
  
  • Borrowed words may retain borrowed morphology
    • Latin *datum* and *data* (rather than *datums*)
  
  • Some words have no change when made plural or past tense
    • *sheep* (singular) and *sheep* (plural)
    • *hit* (present tense) and *hit* (past tense)
Hierarchical Structure of Words

• **Lexical Gaps** (Accidental Gaps): words that could be in a language but aren’t

  • Some permissible sound sequences have no meaning (e.g. *blick*)

  • Some combinations of morphemes are never used (e.g. *curiouser*)
Other Morphological Processes

• **Back-formations**: new words can be created through misanalysis of morpheme boundaries

  • *pease* $\rightarrow$ *pea*
  • *bikini* $\rightarrow$ *monokini*
  • *editor* $\rightarrow$ *edit*
  • *television* $\rightarrow$ *televise*
Portmanteau

• A portmanteau is a word or morpheme whose form and meaning are derived from a blending of two or more distinct forms, e.g., smog from smoke and fog.
• Liger, from lion and tiger
• Brangelina, from Brad Pitt and Angelina Jolie
• Brexit, from Britain and exit
Blending

Blending

A blend is a word formed by joining parts of two words after clipping. An example is *smog*, which comes from *smoke* and *fog*, or *brunch*, which comes from 'breakfast' and 'lunch'.

One subcategory of blending is the reduction of a word to one of its parts, e.g., *fax* (facsimile), *flu* (influenza) and *bot* (robot). Such clipped words may not retain their original meaning. For example, "playing a video game against a *bot*" is not the same as "playing a video game against a *robot*".
A calque is a word or phrase borrowed from another language by literal, word-for-word or root-for-root translation.

"Calque" itself is a loanword from the French noun calque ("tracing; imitation; close copy");

The word "loanword" is itself a calque of the German word Lehnwort, just as "loan translation" is a calque of Lehnübersetzung.
Neologism

• A neologism is a relatively recent or isolated term, word, or phrase that may be in the process of entering common use, but that has not yet been fully accepted into mainstream language

• Google (v)

• Laser (from Light Amplification by Stimulated Emission of Radiation)

• LED (Light Emitting Diode)

• The use and over-use of brand names is another example of neologism creation. The terms "coke" or "cola" may be used in reference to any Coca-Cola like beverage regardless of brand. Kleenex is used in reference to any facial tissue.
Retronym

• A retronym is a word created to differentiate between two words, where previously no clarification was required.

• Advances in technology are often responsible for the coinage of retronyms. For example, the term "acoustic guitar" was coined at the advent of electric guitars and analog watches were thus named to distinguish them from digital watches.

• Abbreviation
Acronym

An acronym is a word or name formed as an abbreviation from the initial components in a phrase or a word, usually individual letters.

- NATO – North Atlantic Treaty Organization
- LASER – Light Amplification by Stimulated Emission of Radiation
- RADAR - Radio Detection And Ranging
- and sometimes syllables
  as in Benelux – Belgium-Netherlands-Luxembourg
Other Morphological Processes

**Compounds**: joining two or more words together to make a new word (e.g. *landlord*)

- The rightmost word in a compound is the head, which determines its meaning and part of speech
  - Noun + adjective = adjective (*headstrong*)

- The stress on English compounds falls on the first word
  - *greenhouse* vs. *green house*

- Two-word compounds are the most common, but there may not be an upper limit
  - Dr. Seuss’s “Tweetle beetle puddle paddle battle”
Other Morphological Processes

• The meaning of a compound is not always the sum of the meaning of its parts
  
  • *Blackboard*
  • *Cathouse*
  • *Turncoat*
“Pullet Surprises”

• We can use our knowledge of morphemes and morphological rules to guess the meaning of words we don’t know

• Our guesses may be wrong but they are based on morphological (mis)analysis

• *deciduous* “able to make up one’s mind”
• *bibliography* “holy geography”
• *gullible* “to do with sea birds”