INTD0112 Introduction to Linguistics

Lecture #10
March 20th, 2007

Announcements

- Any questions on the midterm?
- A slight change from the original syllabus: We'll cover semantics (or at least part of it) on Thursday, and we'll do syntax right after the break.
- Friendly reminder that you need to find a partner for the research project as well as a topic. Let's set **April 10th** as a deadline for finding a partner and submitting a one-page paper proposal.

Morphology cont.

- So far, we talked about how morphology studies word structure in human language. The central notion is the *morpheme*: free vs. bound types, and derivational vs. inflectional types.
- Recall also that the same morpheme may have several variants, each of which is called an *allomorph*.

Today's plan

- Today we look at a couple of other relevant topics to morphological structure:
  A. **Word-formation processes**: How speakers of human languages create new words and add them to their mental lexicon.
  B. **Morphological typology**: How languages differ morphologically,

Processes of word-formation

- There are systematic word-formation processes that take place across human languages. Depending on the language, some of these processes might be available in particular languages, whereas others may not. But the result is the same: new words are always created and added to the dictionary of the language.

Derivation

- The most productive process of word formation in a language is the use of *derivational* morphemes to form new words from already existing forms, as we discussed last week.
- So, for example, from *govern* we derive *government*, from which we can still derive *governmental*, from which we can yet get *non-governmental*.

Word coinage

- Word coinage happens when a name of a product acquires a general meaning and gets used to refer to anything that has the same function of the original product:

  kleenex, kodak, nylon, Dacron

Conversion: Have you folks been *menued* yet?

- **Conversion** (aka **zero derivation**) is the extension of the use of one word from its original grammatical category to another category as well.
- For example, the word *must* is a verb (e.g. "You must attend classes regularly"), but it can also be used as a noun as in "Class attendance is a must".
- Same applies to "vacation", a noun that can also be used as a verb, and "major", an adjective that can be used as a noun and a verb.

Borrowing

- New words also enter a language through borrowing from other languages. English, for example, borrowed a lot of French words as a result of the Norman invasion which took place in 1066, and that's why the English lexicon has a Latinate flavor to it, even though English did not descend from Latin.
- Here are some examples of foreign words that found their way into English:

  leak, *yacht* (from Dutch)
  barbecue, *cockroach* (from Spanish)
  piano, *concerto* (from Italian)

Loan translations

- Related to borrowings are *loan translations*, where a new word or expression is created via translation of a foreign term, rather than actual borrowing of the term in the language, e.g.,

  marriage of convenience (from French *mariage de convenance*)
  perros calientes (from English *hot dogs*)

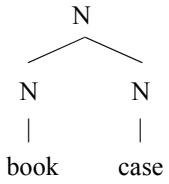
Compounding

- New words are also created through the common process of compounding, i.e. combining two or more words together to form a new complex word. Here are some examples of compounding:

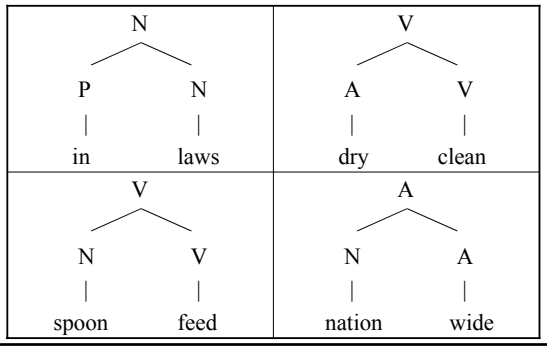
  post + card → postcard
  post + office → post office
  book + case → bookcase
  sister + in + law → sister-in-law

Compounding

- Like word structure, the internal structure of a compound can be represented using trees:

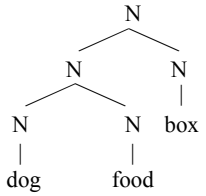


Structure of compounds



Structure of compounds

- We can also use trees to represent the internal structure of cases of multiple compounding such as *dog food box*:



Stress placement in English compounds

- English A-N compounds are typically distinguished from the noncompound adjective-noun string by stress placement:
  greénhouse vs. *green hoúse*
  bláckboard vs. *black boárd*

Endocentric vs. exocentric compounds

- Semantically, compounds can be divided into two types:
  A. Endocentric compounds, which denote a subtype of the concept denoted by the rightmost component of the compound, e.g,,
  dog food is a type of food
  sky blue is a type of blue
  B. In exocentric compounds, by contrast, the meaning of the compound does not follow from the meanings of its parts, e.g.,
  redneck is not a type of neck
  redhead is not a type of head.

Acronyms

- Acronyms are words created from the initial letters of several words. Typical examples are NATO, FBI, CIA, UN, UNICEF, FAQ, WYSIWYG, *radar*, *laser*.
- Sometimes acronyms are actually created first to match a word that already exists in the language, e.g., MADD (Mothers against Drunk Drivers).

Back-formation

- Back-formation of words results when a word is formed from another word by taking off what looks like a typical affix in the language.
- For example, one of the very productive derivational morphemes in English is *–er*, which may be added to a verb to create a noun meaning "a person who performs the action of the verb", e.g. *teacher*, *writer*.

Back-formation

- Sometimes, however, the reverse happens: A noun ending with an *-er* enters the language first and then a verb is "back-formed" from it by taking off the "*er"*. This was the case with the verb *edit*, which entered English as a back-formation from *editor.* Same applies to the pairs *television-televise, self-destruction-self-destruct, donation-donate.*

Clipping

- Another process of word-formation is clipping, which is the shortening of a longer word. Clipping in English gave rise to words such as *fax* from *facsimile*, *gym* from *gymnasium*, and *lab* from *laboratory*.

Blending

- Blending is another way of combining two words to form a new word. The difference between blending and compounding, however, is that in blending only parts of the words, not the whole words, are combined. Here's a couple of examples:

  smoke + fog → smog

  motor + hotel → motel

  information + commercial → infomercial

Eponyms

- Eponyms are words derived from proper names, e.g., "sandwich" from the Earl of Sandwich; "lynch" after William Lynch.

Cliticization

- Cliticization is a morphological operation that, while does not create new words, combine two morphemes together in one word.
- English shows cliticization in cases of contraction, e.g.,

  I am → I'm

  we have → we've
- French and other Romance languages show cliticization with pronouns, e.g.,

Je t'aime.	Suzanne les voit.
I you-like	Suzanne them sees
"I like you."	"Suzanne sees them."

Morphological typology

How do languages differ in their word structure?

Synthesis: How many morphemes does your language have per word?

- One aspect of morphological variation has to do with ***synthesis***: Some languages may choose to "stack" morphemes on top of one another within words; others may elect to use at most one morpheme per word, and many others will fall somewhere between these two extremes.
- Let us start by comparing Yay to Oneida (examples cited in Whaley 1997:127):

Synthesis: How many morphemes does your language have per word?

Yay:

a. mi ran tua ŋwa lew
   not see CLASS snake CMPLT
   "He did not see the snake."

Oneida:

b. yo-nuhs-a-tho:lé:
   3NEUT.PAT-room-epenthetic-be.cold.STAT
   "The room is cold."

- Notice how the Yay sentence involves no affixation and all the words are monomorphemic. The Oneida sentence, by contrast, consists of one word with multiple affixes.

Morphological typology: Index of synthesis

- On the so-called *index of synthesis* for morphological typology (Comrie 1989), understood as a continuum, Yay is considered an ***isolating*** language, whereas Oneida would be closer to the ***synthetic*** end of the scale, with English closer to the Yay-end than to the Oneida-end:

Isolating <--x-------x----------x--->Synthetic
Yay English Oneida

Morphological typology: Index of synthesis

- Some languages take synthesis to the extreme, though, marking all grammatical relationships on the verb with extensive affixation, thereby creating ***long and complex words*** that would correspond to whole sentences in languages like English, as the case is in Tiwa (example from Whaley 1997:131):

  men-mukhin-tuwi-ban
  Dual-hat-buy-PAST
  "You two bought a hat."

Morphological typology: Index of synthesis

- Or Eskimo:

  iglu-kpi-yuma-laak-tu-ŋa
  house-build-intend-anxious-reflexive-I
  "I'm anxious to build a house."
- Or Mohawk (from Baker 2001:88) :

  Katerihwaiénstha'
  "I am a student. [Literally: I habitually cause myself to have ideas.]"

Morphological typology: Index of synthesis

- Or Mohawk again, though rather more ridiculously:

  Washakotya'tawitsheraherkvhta'se'
  "He made the thing that one puts on one's body (i.e., the dress) ugly for her."

- We call languages like Tiwa, Eskimo, and Mohawk, ***polysynthetic*** languages.

Making sense of polysynthetic word structure: Incorporation

- The key to understanding why words in polysynthetic languages tend to be long and complex is the morpho-syntactic operation of ***noun incorporation***. Consider Mohawk again:
  a. Owira'a wahrake' ne o'wahru (plain version)
     baby ate the meat
  b. Owira'a waha'wahrake' (incorporation version)
     baby meat-ate

Noun incorporation

- Noun incorporation is pretty common in Mohawk:

Wa'eksohare'.	"She dish-washed."	(*ks* "dish" + *ohare* "wash")
Wa'kenaktahninu'.	"I bed-bought."	(*nakt* "bed" + *a* + hninu "buy")
Wahana'tarakwetare'.	"He bread-cut."	(*na'tar* "bread" + *a* + *kwetar* "cut")

Verb incorporation

- Mohawk, however, shows not only noun incorporation, but also ***verb incorporation***. Consider the following pair:
  a. Ashare' tu*hsu*'ne'.
     knife fell-down
     "The knife fell."
  b. Uwari tayú*hsuht*e ne ashare'
     Uwari made-to-fall the knife
     "Uwari made the knife fall."

Morphological typology: Index of fusion

- Synthetic languages, in turn, differ in whether morphemes are easily segmentable or not. Consider this paradigm from Michoacan Nahuatl, for example:

no-kali	"my house"	no-pelo	"my dog"
no-kali-mes	"my houses"	mo-pelo	"your dog"
mo-kali	"your house"	mo-pelo-mes	"your dogs"
i-kali	"his house"	i-pelo	"his dog"

Morphological typology: Index of fusion

- But now compare with Ancient Greek:

  lu-ō "1sg.Pres.Act.Ind (I am releasing)"
  lu-ōmai "1sg.Pres.Act.Sbjv (I should release)"
  lu-omai "1sg.Pres.Pass.Ind (I am being released)"
  lu-oimi "1sg.Pres.Act.Opt (I might release)"
  lu-etai "3sg.Pres.Act.Ind (He is being released)"

Morphological typology: Index of fusion

- On the so-called *index of fusion* for morphological typology, also conceived of as a continuum, Michoacan Nahuatl is considered an ***agglutinative*** language, whereas Ancient Greek would be closer to the ***fusional*** end of the scale:

Agglutinative <---x----------x-->Fusional

Nahuatl Greek

How grammatical functions are realized?

- One final morphological variation among human languages has to do with whether languages mark grammatical functions such as "subject of" and "object of" on the ***head*** or on the ***dependents***.
- Languages that mark grammatical functions on heads are called ***head-marking languages***; languages that mark grammatical functions on dependents are called ***dependent-marking languages***.
- Compare Japanese with Mohawk:

Head-marking vs. dependent-marking

a. John-**ga** Mary-**o** butta — Japanese
   John-**SU** Mary-**OB** hit
   "John hit Mary."

b. Sak Uwári **shako**-núhwe's — Mohawk
   Sak Uwari he/her-likes
   "Sak likes Uwari."

c. Sak Uwári **ruwa**-núhwe's — Mohawk
   Sak Uwari she/him-likes
   "Mary likes Jim."

Further aspects of morphological typology

Case and agreement systems: Japanese

- Consider the following sentence from Japanese, for example:
  John-**ga** Mary-**ni** hon-**o** yatta
  John-**SU** Mary-**IOB** book-**DOB** gave
  "John gave Mary a book."
- As you can see, each noun in the Japanese sentence appears with a marker at the end indicating what role the noun plays in the sentence. Each of these markers is called a ***case***.
- So, subjects appear with *nominative* case; direct objects appear with *accusative* case; and indirect objects appear with *dative* case.

Case and agreement systems: Japanese

- Notice, crucially, however, that in intransitive clauses (those without an object), the case marker on the subject of a Japanese sentence remains the same (i.e., *-ga*):
  John-**ga** Kobe-ni itta
  John-**NOM** Kobe-to went
  "John went to Kobe."

Case and agreement systems: Greenlandic

- As it turns out, not all languages behave that way. There are languages with a different case system.
- Compare, for example, the case marking in the following transitive and intransitive sentences from Greenlandic Eskimo (CM stands for "case marker"):

Case and agreement systems: Greenlandic

a. Juuna-**p** atuaga-**q** miiqa-**nut** nassiuppaa
Juuna-**CM** book-**CM** child-**CM** send
"Juuna sent a book to the children."

b. atuaga-**q** tikissimanngilaq
book-**CM** hasn't come
"A book hasn't come yet."

Case and agreement systems: Greenlandic

- What do you notice here?
- The subject of an intransitive clause carries the same case marker as the object of a transitive clause. Such case is typically referred to as "***absolutive***," as opposed to the "***ergative***" case marker on the subject of a transitive verb.
- Greenlandic has a different case system than Japanese. We call Japanese-type languages "***nominative-accusative***" languages. And we call Greenlandic-type languages "***ergative-absolutive***" languages.

Tense

- Tense can be defined as a relation of event time to speech time.
- The main distinctions are between past and non-past, or future and non-future, though some languages will have more fine-grained distinctions within "past" or "future".

Tense

- English:
  - a. I work$_{Ø}$. (present)
  - b. I work***ed***. (past)
  - c. I ***will*** work. (future)
- Lithuanian:
  - a. dirb-***u*** "I work"
  - b. dirb-***au*** "I worked"
  - c. dirb-***siu*** "I will work"

Tense

- Some languages do not mark tense on the verb. Rather they use time expressions and modality markers for that. Burmese is an example:

a. sãneineì-taiñ mye? hpya?-te
Saturday-every grass cut-REAL
"He cuts the grass every Saturday."

Tense

b. da-caúñmoú mã-la-ta
that-because not-come-REAL
"because of that they didn't come."

c. mãne?hpañ sá-me
tomorrow begin-IRR
"We will begin tomorrow."

Tense

- Chibemba (Bantu) changes the verb to indicate if the event took place before yesterday, yesterday, earlier today, or if it just happened. And it has a similarly fine-grained scale for future as well:

Chibemba past tense system

a. Remote past (before yesterday):
Ba-àlí-bomb-ele "they worked"
b. Removed past (yesterday):
Ba-àlíí-bomba "they worked"
c. Near past (earlier today):
Ba-àcí-bomba "they worked"
d. Immediate past (just happened) :
Ba-á-bomba "they worked"

Chibemba future tense system

a. Immediate future (very soon):
Ba-áláá-bomba "they"ll work"
b. Near future (later today):
Ba-léé-bomba "they"ll work"
c. Removed future (tomorrow):
Ba-kà-bomba "they"ll work"
d. Remote future (after tomorrow):
Ba-ká-bomba "they"ll work"

Next class agenda

- Semantics: Chapter 6.

Abbreviations used on the slides

CLASS = classifier
CMPLT = complete
NEUT = neuter
PAT = patient
STAT = stative
SU = subject marker; DOB = direct object marker; IOB = indirect object marker

References

- Baker, M. 2001. *The atoms of language*. New York: Basic Books.
- Comrie, Bernard. 1989.*Language universals and linguistic typology.* 2nd edition. Chicago: University of Chicago.
- Whaley, L. 1997. *Introduction to typology: The unity and diversity of language*. Sage Publications.