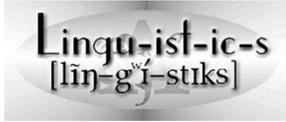


LNGT0101

Introduction to Linguistics



Lecture #11
Oct 17th, 2011

Today's agenda

- Finish our talk about morphological typology.
- Start talking about syntax.

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Morphological typology cont.: Head-marking vs. dependent-marking languages

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How are grammatical functions marked?

- One aspect of morphological variation among human languages has to do with whether languages mark grammatical functions such as “subject of” and “object of” on the *head* of the clause 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:

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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 | |
| “Uwari likes Sak.” | |

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Case-marking systems

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Case-marking: Japanese

- Dependent-marking is what is referred to as *case-marking*. Consider, for example, the following sentence from Japanese:

John-**ga** Mary-**ni** hon-**o** yatta
John-**SU** Mary-**IOB** book-**DOB** gave
“John gave Mary a book.”

- Each noun inflects for *case*: subjects appear with *nominative* case; direct objects appear with *accusative* case; and indirect objects appear with *dative* case.

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Case-marking: 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.”

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Case-marking: 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”).

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Case-marking: 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.”
- What do we notice here?

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Case and agreement systems: Greenlandic

- 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 “*absolute*,” as opposed to the “*ergative*” case marker on the subject of a transitive verb.
- We call Japanese-type languages “*nominative-accusative*” languages, and Greenlandic-type languages “*ergative-absolute*” languages.
- There are also languages with a “*split*” system: They behave nominative-accusative in some contexts, but ergative-absolute in others. You need to bear this in mind in case your LAP language is of that kind.

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Morphology of Some Verbal Categories

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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 finer-grained distinctions within “past” or “future”.

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Tense

- English:
 - a. I work_o. (present)
 - b. I worked. (past)
 - c. I **will** work. (future)
- Lithuanian:
 - a. dirb-**u** “I work”
 - b. dirb-**au** “I worked”
 - c. dirb-**siu** “I will work”

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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:

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Chibemba past tense system

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

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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-kâ-bomba “they’ll work”
- d. Remote future (after tomorrow):
Ba-ká-bomba “they’ll work”

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Aspect

- Aspect has to do with the internal temporal structure of an event, e.g., whether it is temporally bounded or not.
 - Perfective* aspect: “He wrote three letters.”
 - Imperfective* (or habitual) aspect: “He writes letters.”
 - Progressive* aspect: “He is writing letters.”

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Aspect

- Some languages like Russian and Egyptian Arabic express aspect by means of verbal affixes:
Russian: Ja čítal “I was reading”
Ja **pročítal** “I (did) read”
Egyptian Arabic: katab “he wrote”
bi-yiktib “he is writing”
- Other languages like Finnish use case-marking (accusative vs. partitive) to signal aspect:
Hän luki kirjan_{ACC} “He read the book”
Hän luki kirjaa_{PART} “He was reading the book”.

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Mood

- Mood is a grammatical category through which speakers of a language can indicate whether they believe that an event or a state actually occurs, does not occur, or has the potential to occur.

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Mood

- *Indicative* mood asserts the truth of a proposition, e.g., “It is raining.”
- *Subjunctive* mood typically indicates an attitude of uncertainty on the part of the speaker or a hypothetical situation, e.g., “It is essential that it rain.”
- Commands are said to be in the *imperative* mood.

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Modality

- Modality has to do with obligation/desire (deontic), or with degrees of possibility (epistemic) regarding an event.
John must come tomorrow.
We really should go now.
vs.
John must have left the door open.
My guess is that it should rain tomorrow.

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Evidentials

- Some languages indicate epistemic modality by means of morphological markers, called *evidentials*, e.g., Tuyuca (Brazil and Colombia):
 - a. díga apé-*wi*
soccer play-VISUAL
“He played soccer (I saw him).”

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Evidentials

- b. díga apé-*ti*
soccer play-NON-VISUAL
“He played soccer (I heard him playing).”
- c. díga apé-*yi*
soccer play-APPARENT
“He played soccer (I have evidence but I didn’t actually witness the game in any way).”

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Evidentials

- d. díga apé-*yigi*
soccer play-SECONDHAND
“He played soccer (Someone told me).”
- e. díga apé-*hiyi*
soccer play-ASSUMED
“He played soccer (It seems reasonable that he did).”

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Are you ready for some Syntax?

Me too, but let’s look at a few puzzles first.

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A visual puzzle

- http://www.magicmgmt.com/gary/oi_pac_tri/#

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Visual puzzles (Nieder 2002)



Fig 2.4 Rectangles constructed by visual system—of humans and bees, who can be trained to treat the two figures as members of an equivalence class in terms of orientation.



Fig 2.5 The bees do not treat the illusory rectangle above as the same as either of these two figures.

Images from Isac and Reiss's book "I-Language"

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A rat behavior puzzle (Seth Roberts)

- Press a lever for food 40 seconds after hearing a tone.
- Press a lever for food 40 seconds after seeing a light.
- Ok, Ratty, here's 20 seconds of sound, followed by 20 seconds of light. What are you going to do?

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And your point is ... ?

- Something that I've been stating repeatedly, but now you should have seen evidence for it in language:

We need *abstraction*.

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Phonological and Morphological puzzles

- Phonetically different sounds are perceived as similar: [t] in *star*, [tʰ] in *tar*, [r] in *butter*, and [ɾ] in *bat*.
- Phonetically similar sounds are perceived as different: [ɾ] in *waiting*, and [r] in *wading*.
- The morpheme of past tense in English is pronounced as [t], [d], or [əd], depending on the value of the voicing feature of the verb's final sound.
- In Cebuano, the rule forming language names has to target the 'nucleus' of the first syllable of a noun.

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The puzzle of the Turkish plural

singular	plural	meaning
ip	ipler	"rope"
kıl	kıllar	"body hair"
sap	saplar	"stalk"
uç	uçlar	"edge"
son	sonlar	"end"
öç	öçler	"vengeance"
gül	güller	"rose"
ek	ekler	"junction"

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The puzzle of the Turkish plural

singular	plural	meaning
dev	devler	"giant"
kek	kekler	"cake"
can	canlar	"soul"
cep	cepler	"pocket"
tarz	tarzlar	"type"
kap	kaplar	"recipient"
çek	çekler	"check"
saç	saçlar	"hair"

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	NON-BACK		BACK	
HIGH	i	ü	ı	u
NON-HIGH	e	ö	a	o
	NON-ROUND	ROUND	NON-ROUND	ROUND

singular	plural	meaning
ip	ipler	"rope"
kıl	kıllar	"body hair"
sap	saplar	"stalk"
uç	uçlar	"edge"
son	sonlar	"end"
öç	öçler	"vengeance"
gül	güller	"rose"
ek	ekler	"junction"

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Possible solution?

- An abstract vowel that is non-pronounceable needs to be posited for the plural morpheme:

$$l \begin{bmatrix} V \\ -High \\ -Round \\ \alpha Back \end{bmatrix} r$$

where the value of α is determined by the backness value of the stem vowel.

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A couple of more puzzles

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Let's look at another puzzle (from Isac and Reiss's book)

- Do you know if anyone is here yet?
I know Mary is here.
- Do you know if anyone is here yet?
I know Mary's here. (so, copula contraction is possible)
- Do you know if anyone is here yet?
I know Mary is. (so, deletion of predicate is possible)
- Do you know if anyone is here yet?
**I know Mary's.* (hmmm ... ???)

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Maybe it's phonetic deficiency?

- Let's see:
Do you know anyone's mother?
I know Mary's.

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Maybe the contracted form can not be followed by a pause?

- But:
Do you know if anyone is here yet?
**I know Mary's and Bill's coming soon.*
- Or:
**I know Mary's but she has to leave soon.*

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Solution?

- Well, what does a pause and "and/but" have in common?
- Right. They mark a clause boundary. So, perhaps this is the right generalization, then:
Copula contraction is not possible at a clause boundary.
- Eureka. But look what we did. We had to rely on an abstract concept to explain the puzzle: The notion of 'clause'; we had to refer to 'structure.' Our explanation was "structure-dependent."

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Another puzzle: Let's form a yes-no question

- *John must leave.*
Must John leave?
- Rule #1 (structure-independent): Invert the first word and the second word of a declarative sentence to form a yes-no question.
- Does it work?
This boy must leave.
**Boy this must leave?*

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Another puzzle: Let's form a yes-no question

- Rule #2 (structure-independent): Move the auxiliary verb of a declarative sentence to the front to form a yes-no question.
- Does it work?
This boy must leave.
Must this boy leave?
- But:
The boy should have left.
Should the boy have left? OK
- But:
**Have the boy should left? Not OK*
- Can we do better?

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Another puzzle:

Let's form a yes-no question

- Rule #3 (structure-independent): Move the first auxiliary verb of a declarative sentence to the front to form a yes-no question.
- Does it work? How about this?
The boy who must leave has been sick.
**Must the boy who leave has been sick?*
- This is not English, obviously.

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Another puzzle:

Let's form a yes-no question

- Rule #4 (structure-dependent): Invert the auxiliary verb of the **main clause** and its **subject** to form a yes-no question.
- Does it work?
[_{main-clause} *The boy* [_{sub-clause} *who must leave*] *has been sick*].
Has the boy who must leave been sick?
- That worked. But we had to refer to “structure.”

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One more puzzle: *wanna*-contraction

- Who do you want to kiss?
Who do you *wanna* kiss?
- Who do you want to kiss Mary?
**Who do you wanna kiss Mary?*
- Compare: I want to kiss Mary.
I *wanna* kiss Mary.
- Think about that till Wednesday?

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Next class agenda

- Syntax: Continue reading Chapter 4 of the textbook.

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Abbreviations used on the slides

- CLASS = classifier
- CMLT = complete
- NEUT = neuter
- PAT = patient
- STAT = stative
- SU = subject marker; DOB = direct object marker; IOB = indirect object marker
- CM = case marker

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