

## Inflection

### 1. Introduction

**Inflection:** word-formation ... that expresses a grammatical [i.e. syntactic] distinction (Lieber: 201)

- Recall: three main kinds of word-formation are traditionally distinguished:

|                          |  |
|--------------------------|--|
| derivation: root + affix | e.g. move+ment, drink+able, plain+ly   |
| inflection: root + affix | e.g. eat+s, dog+s, girl+'s, roast-ed   |
| compounding: root + root | e.g. tooth+pick, red+neck, pick+pocket |

### 0.1 Distinguishing inflection from derivation

- Distinguishing compounding is easy: only compounding involves root + root concatenation. But how do we distinguish between inflectional and derivational affixation which are both root+affix?
- The derivation/inflection contrast has long been a source of debate, but there are several criteria that linguists tend to converge on:

#### (i) meaning and function

- derivation adds meaning
- inflection signals a word's function in the syntax, or its relation to other elements in the syntax, or the presence of inherent syntactic features

#### 1) Derivation vs Inflection

- |    |      |   |  |
|----|------|---|--|
| a. | work | ⇒ | worker, work <b>aholic</b> , work- <b>day</b> , <b>homework</b> , work <b>able</b> |
| b. | work | ⇒ | work: I/you/we work- <b>Ø</b> all day.   |
|    |      |   | works: She work <b>s</b> all day.  |
|    |      |   | work <b>ed</b> : She work <b>ed</b> yesterday.                                     |
|    |      |   | work <b>ing</b> : She is work <b>ing</b> right now.                                |

#### (ii) category

- Derivation can change the category of a word. Inflection typically does not.

#### (iii) morpheme order

- When a complex word has both inflectional and derivational affixes, the inflectional affixes appear *outside* any derivational affixes.

e.g. *music-ian-s* not \**music-s-ian*

#### (iv) productivity

- Inflectional morphology is generally thought to be more productive than derivational morphology

## 2. Inflectional subcategories of Verbs

(This week we focus on verbal inflection. In week 10 we will focus on nouns.)

### 2.1 Tense

- Tense is concerned with the sequence of events in real time. It is a morphological expression of the relation to the time of an event to some other reference point, usually the moment of speech.
- Conceptually, it is common to view tense systems in terms of a three-way distinction: past vs. present vs. future.
- Morphologically, however, languages (including English) usually only grammaticalize a two-way distinction, either past/non-past or future/non-future.

- 2) They will cook (tomorrow) *'future'* NON-PAST  
 They cook (every day) *'present' (habitual)*

-----  
 They cooked (yesterday) *past* PAST

- Some languages, though, make many more tense distinctions. For example, Yagua allows five tense distinctions in the past and two in the future.

#### 3) Yagua tense distinctions

|          |        |          |        |                                   |   |                   |    |
|----------|--------|----------|--------|-----------------------------------|---|-------------------|----|
| ant past | ar ago | onth ago | ek ago | mediate Past<br>(today/yesterday) | / | mediate<br>Future | re |
|----------|--------|----------|--------|-----------------------------------|---|-------------------|----|

- Languages differ with respect to how tense is lexicalized. Most often it is part of the verb word or at least the verb phrase, but even within a language there can be variation as to whether tense is expressed lexically, morphologically, or periphrastically:
- 4) is > was *past* (lexically expressed)  
 walk > walked *past* (morphologically expressed)  
 eat > did eat *past* (periphrastically expressed)
- Tense is a syntactic category, it is specified in the syntax. How do we know? Whether or not a verb bears tense depends on its syntactic configuration in a clause:
- 5) a. John eats cookies  
 b. John does not eat cookies  
 c. John has eaten cookies  
 d. John is eating cookies  
 e. John has been eating cookies

## 2.2 Aspect

- Aspect reflects the temporal structural events (as opposed to whether the event occurs before/after/simultaneous to some reference point like the moment of speech).
- **Viewpoint aspect** has to do with whether the event expressed in a clause is complete or incomplete (nb: this is different from whether it happens before or after the moment of speech). **Perfective** aspect involves an event that is completed. **Imperfective (aka progressive)** aspect involves an event that is ongoing.

- 6) a. John has eaten cookies      Perfective  
b. John had eaten cookies
- 7) a. John is eating cookies      Imperfective  
b. John was eating cookies

- Other aspectual categories (in Lieber):

*inceptive*: expresses the starting point of an event

*continuative*: focuses on the middle of the event as it progresses

*completive*: expresses the completion of an event.

*semelfactive*: actions done just once

*iterative*: where a punctual event takes place several times in succession

*habitual*: action that is usually/characteristically done

### 8) Lieber's (17)

- a. *Inceptive*  
məhak-nə phu-gət-li  
he-NOM beat-start-NON.FUT  
'He began to beat it (and would continue to do so)'
- b. *Continuative*  
tombə layrik pa-rì  
Tomba book read-CONT  
'Tomba is reading the book'
- c. *Completive*  
yumthək ədu yu-rəm-mì  
roof that leak-COMP-CONT  
'That roof had been leaking (but not any more)'

### 9) Lieber's (18)

- a. *Koyukon semelfactive*  
yeeltleṭ  
'she chopped it once, gave it a chop'
- b. *West Greenlandic iterative*  
quirsur-tar-puq  
cough-ITERATIVE-3rd.SG.INDIC  
'He coughed repeatedly'
- c. *West Greenlandic habitual*  
qimmi-t qilut-tar-put  
dog-PL. bark-HABITUAL-3rd.INDIC  
'Dogs bark'

## 2.3 Mood

- Mood describes the speaker's attitude toward a situation, including belief in its reality or likelihood.
  - Three major mood contrasts traditionally identified: declarative, interrogative, imperative
- 10) a. You closed the window.  
b. Did you close the window?  
c. Close the window!
- Other commonly identified mood categories
    - **realis**: prototypically asserts that an event or state of affairs has actually happened or actually holds true. (e.g. affirmative declaratives)
    - **irrealis**: prototypically indicates that the situation/event is not known to have happened (e.g. interrogatives, negated declaratives)
    - **evidentiality**: expresses relative degrees of certainty (e.g. second-hand knowledge vs. direct experience). (See Yup'ik and Quechua examples).
- 11) hearsay particle in Yup'ik  
tua-llu-gguq    nunaa-tuku-t    uita-lri-it  
then-and-hsy    village-abs    dem-abs    be-past-3  
'And then there was this village, they say.'
- 12) inferential enclitic in Yup'ik  
Ak'a-ggem    ayag-llru-uq  
already-infer    leave-past-3  
'It seems he already left.'

## 13) Huallaga Quechua

qam-pis          maqa-ma-shka-nki    -mi    (i)

you-also        hit-1-perf-2                    -shi    (ii)

'You also hit me.'                    -chi    (iii)

i. I saw/felt you hit me and I was conscious

ii. I was drunk, and someone informed me that you hit me.

iii. Some people beat me up, &amp; I think you may have been among them.'

## 2.4 Modality

- Modality expresses possibility (e.g. might), obligation (e.g. must), necessity (e.g. must), desire, etc.

## 14) Quechua

|      |   |               |            |
|------|---|---------------|------------|
| noqa | $\left\{ \begin{array}{l} -mi \\ -shi \\ -chi \end{array} \right\}$ | chaya-a-man   | away-r-qa  |
| 1.sg |   | arrive-1-cond | go-adv-top |
|      |   |               |            |

'I would (-mi)/could (-shi)/ might (-chi) arrive, if I were to go.'

- *epistemic modality*: concerned with possibility of a proposition being true  
e.g. *John must be home by now*. (It is necessarily the case that John is home now, because he left 2 hours ago).
- *deontic modality*: concerned with necessity of a proposition in terms of freedom of action (cf. notions of obligation and permission)
- *John must leave now* (John is required to leave now, because he has been ordered to do so by his boss)

## 2.4 Agreement

- Agreement is a way of indexing on the verb selected features of its argument(s).

- 15) a. Marco sleeps until 8am every morning.  
b. We sleep until 8am every morning.

- In some languages, agreement only tracks the subject of a clause

## 16) Iatmul (Papua New Guinea)

a.        ntiw    yi-nti  
          man   go-3.sg.masc  
'The man went.'

b.        takwe        kiya-li  
          woman       die-3.sg.fem  
'The woman died.'

- c.     ntiw   takwe            vi-nti  
        man   womansee-3.sg.masc  
        'The man saw the woman.'
- d.     takwe ntiw   vi-li  
        womanman   see-3.sg.fem  
        'The woman saw the man.'

- In other languages, agreement tracks multiple arguments

#### 17) Northern Ostyak (Uralic)

- d.     *ma tām kālāŋ wel-sə-l-am*  
        I   these reindeer kill-T-PL-1SG  
        I killed these reindeer.
- e.     *ma tām kālāŋ wel-sə-ŋil-am*  
        I   these reindeer kill-T-DU-1SG  
        I killed these (two) reindeer.

- In some languages, agreement follows complex rules and can be sensitive to specific features of arguments.

#### 18) Georgian (Caucasian)

With 3rd person object: X draw(s) 3rd person

- |                     |                     |
|---------------------|---------------------|
| v-xatav             | b. v-xatav-t        |
| 'I draw him'        | 'we draw him'       |
| ∅-xatav             | d. ∅-xatav-t        |
| 'you (sg) draw him' | 'you (pl) draw him' |
| xatav-s             | f. xatav-en         |
| 'he draws him'      | 'they draw him'     |

With 3rd person subject: 3rd person draws X

- |                     |                     |
|---------------------|---------------------|
| g. m-xatav-s        | h. gv-xatav-s       |
| 'he draws me'       | 'he draws us'       |
| i. g-xatav-s        | j. g-xatav-(s)-t    |
| 'he draws you (sg)' | 'he draws you (pl)' |
| k. xatav-s          | l. xatav-s          |
| 'he draws him'      | 'he draws them'     |

## I-you and you-me forms

- m. g-xatav  
'I draw you (sg)'
- n. m-xatav  
'you (sg) draw me'
- o. g-xatav-t  
'we draw you (sg or pl)' or 'I draw you (pl)'
- p. gv-xatav  
'you (sg) draw us'
- q. gv-xatav-t  
'you (pl) draw us'

**2.5 Verb class**

- Some languages have more than one set of verbal inflectional markers with the same functions. This may be familiar to you from French (e.g. the conjugational difference between verbs ending in *-er* and *-ir*). The verb class of a verb is a root property (lexically specified) that determines which inflectional set to use.

- |             |                     |                   |
|-------------|---------------------|-------------------|
| 19) Spanish | cant-ar ('to sing') | com-er ('to eat') |
| 1.sg        | cant-o              | com-o             |
| 2.sg        | cant-as             | com-es            |
| 3.sg        | cant-a              | com-e             |
| 20) English | strong verbs        | weak verbs        |
| present     | sing                | cook              |
| past        | sang                | cooked            |