Lecture 11
Morphology: derivation & inflection, and typology

Two basic types of morphological composition:

Inflection and derivation.

Inflectional morphology creates different forms of the same word, indicating specific grammatical information, but not changing the core meaning.
- govern, governs, governed, and governing differ in inflectional suffixes.

Derivational morphology creates different words out of the same root, with different meanings, grammatical categories, etc.
- govern, governor, and government differ in derivational suffixes.

This sense of “word” is also called a lexeme:
- derivation creates different lexemes; inflection various forms of one lexeme.
- Intuitively, a “lexeme” may be thought of as a dictionary entry.

Words created by derivation may still require inflection for use in context; e.g., governor needs the inflectional suffix -s in order to be used as a plural.

Differences between inflection and derivation:

Derivation can change part of speech of a word; inflection does not:
- govern, governs, governed all verbs, but governor and government are nouns.

Inflection is fully productive and paradigmatic:
- every inflectional affix can be added to all words of the appropriate type;
- and each language has a specific set of features that it uses inflection to mark.

Part of knowing a word is knowing how to inflect it for all relevant features —i.e., knowing its paradigm.

E.g., the English verb paradigm is:
- basic form: walk, see
- 3d-person singular present: walks, sees
- past tense: walked, saw
- active participle: walking, seeing
- passive participle: walked, seen

All verbs have these forms; some are irregular, but regular allomorphs exist.

Derivation isn’t always productive:
- the suffix -hood attaches to nouns to create sisterhood, fatherhood, knighthood;
- but it can’t attach to all nouns: friendship isn’t a word.

You can’t necessarily create a noun meaning ‘state of being X’ for all nouns X,
the way you can create a plural for all nouns using inflectional morphology.
Derivation can produce unpredictable meanings, while inflection doesn’t: neighborhood doesn’t mean ‘state of being a neighbor’.

But the plural affix has the same meaning for all nouns.

Derivational affixes are almost always closer to the root than inflectional affixes: neighbor-hood-s, not neighbor-s-hood (though there are many neighbors in one!). Derivation determines the part of speech; part of speech determines what inflection is needed.

Inflection often depends on grammatical structure of the sentence and context; derivation doesn’t depend on grammatical connections with other words.

E.g., many languages inflect adjectives and/or verbs to agree in some feature with the nouns they’re associated with.

Spanish niñas pequeñas ‘small girls’: pequeño- is the morpheme meaning ‘small’; -as marks the adjective as feminine and plural to match features of the noun.

English Steve talks: -s marks talk as third-person singular, agreeing with subject.

English only marks verb/subject agreement in 3d-person singular present tense; many other languages have much richer agreement systems. E.g. Spanish:

<table>
<thead>
<tr>
<th></th>
<th>present tense</th>
<th>past tense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>singular</td>
<td>plural</td>
</tr>
<tr>
<td>1st person</td>
<td>hablo</td>
<td>hablamos</td>
</tr>
<tr>
<td>2d person</td>
<td>hablas</td>
<td>habláis</td>
</tr>
<tr>
<td>3d person</td>
<td>habla</td>
<td>hablan</td>
</tr>
</tbody>
</table>

Morphological typology:

Languages differ substantially in what features are expressed through inflection.

English marks verb tense, and subject agreement very weakly (as above);

Spanish has much richer subject agreement morphology.

Japanese doesn’t inflect verbs for subject agreement, but does inflect for negation, passive voice, and causative construction:

tabeta ‘ate’
tabeseta ‘made (someone) eat’
taberareta ‘was eaten’
tabesaserareta ‘was made to eat’
tabenai ‘doesn’t eat’
tabesasenai ‘doesn’t make (someone) eat’

So -nai, -rare, -sase are inflectional suffixes for negation, passive, and causative; in English and Spanish, these concepts are expressed by separate words, not morphology at all.
Some languages mark **evidentiality** of verbs through inflection: verbs indicate **how strongly** or **why** the speaker believes what they’re saying. E.g., Turkish: *Ahmet geldi* and *Ahmet gelmiş* both translate to ‘Ahmet came’, but you’d use *geldi* if you have **first-hand knowledge** and saw Ahmet arrive, and *gelmış* if you found out from some other source.

English has little inflection for nouns (just **singular** and **plural** numbers); other languages have a greater variety of numbers (**dual** for exactly two!) or inflect for features such as **case** (what **role** the noun plays in the sentence).

**Non-affixal morphology:**

**Not all bound morphemes are affixes.** Other approaches include the following:

**Reduplication:**
- a morpheme that doesn’t have its own phonological content, but just copies part of the phonology of the base it’s attached to.

In **Tagalog**, the **future tense** morpheme is **reduplication** of **first syllable of root**:

- *bili* ‘buy’ → *bibili* ‘will buy’
- *pasok* ‘enter’ → *papasok* ‘will enter’

It acts like a prefix, but copies a syllable instead of having its own phonology.

**Stem-internal changes:**
- instead of overtly adding something to the base like a prefix or suffix, some morphemes just **change the phonological content** of the base.

Some **irregular** English allomorphs of plural and past-tense morphemes do this:

- *sing* / *sang*; *take* / *took*; *drive* / *drove*  
- *goose* / *geese*; *mouse* / *mice*

Morphemic changes to a root vowel are also called **ablaut** or **apophony**.
Some English irregular verbs use **both** ablaut and an affix: *tell* / *told*; *keep* / *kept*.

**Semitic languages** such as Hebrew and Arabic use **templatic** morphology:
- the overall **patterns of consonants and vowels** are separate morphemes.

- *kitāb* ‘book’ → *kutub* ‘books’
- *nafs* ‘soul’ → *nufus* ‘souls’

Here the consonants alone make up the content morphemes ‘book’ and ‘soul’; the vowels -u-u- make up the inflectional function morpheme ‘plural’.

The most extreme type of **irregular** stem-change allomorphy is **suppletion**:
- the root is **completely replaced** with a phonologically unrelated form:

- *go* / *went*  
- *bad* / *worse*
Four basic **morphological types** of language: Languages differ in **how much inflection** they have.

**Isolating** (or **analytic**) languages **don't use inflectional morphology** at all; features that are expressed through morphology in other languages are expressed through separate words or other grammatical constructions.

Example: Mandarin:

- Wo man tan tchin la  ‘We played the piano’
- I plural play piano past  (ignoring tone)

Even features like **number** and **tense** are separate words, not affixes!

**Agglutinative** languages add **several distinct inflectional affixes** to each root; each affix typically represents a **single inflectional feature**.

Example: Swahili:

- Ni-na-soma  ‘I am reading’
- U-na-soma  ‘You are reading’
- A-na-soma  ‘He or she is reading’

- Ni-li-soma  ‘I was reading’
- U-li-soma  ‘You were reading’
- A-li-soma  ‘He or she was reading’

Each word has one morpheme representing subject agreement (ni-, u-, or a-) and a **separate morpheme** representing tense (-na- or -li-).

**Fusional** languages have affixes representing **multiple inflectional features**.

Example: Spanish:

- hablo ‘I speak’
- hable ‘I spoke’
- habla ‘he or she speaks’

The affixes -o, -e, -a represent **first-person singular present**, **first-person singular past**, and **third-person singular present**, respectively; there’s **no individual morpheme** that means just ‘first-person’ or ‘present’ alone.

**Polysynthetic** languages combine **several roots and affixes** into a single word; in effect, they use **compounding** like part of their inflectional morphology. An entire sentence might be a single word, incorporating many content and function morphemes.

Example: Inuit:

- tusaa-tsia-runna-ngit-tualuu-junga ‘I can’t hear very well’
- hear-well-able- not- much-1st.present

Example: Sora:

- pen-ədʒ-ədʒə- dar-si -əm ‘I will not receive rice from your hands’
- I- not-receive-rice-hand-you

Even content morphemes like ‘rice’ and ‘hand’ are incorporated into the verb.

These aren’t strict categories; many languages have **features of more than one**. E.g., English is **mostly isolating**, but has **some fusional morphology** too (like third-person-singular-present-tense -s).