

- **Derivation**
- **Inflection**

Background reading:

- CL Ch 4, §2 (except §2.2)
- CL Ch 4, sec 4

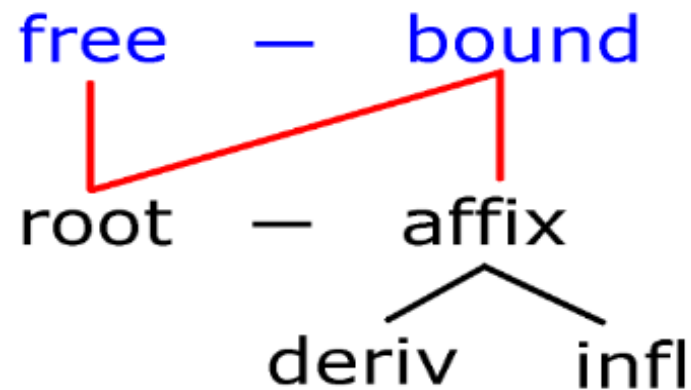
1. Words and morphemes

- We've seen that **morphemes** are either **free** or **bound**, and are either **roots** or **affixes**
 - **Affixes** are always **bound**
 - **Roots** may be **free** or **bound**
- **Words** are, by definition, **free**
 - A word may be composed of **one**, or **more** than one, **morpheme**
 - Every word contains at least one **root**

1. Words and morphemes

- **Affixes** can be further classified as either **derivational** or **inflectional**

- Summary diagram:



2. Derivational affixes

- A **derivational affix** “build[s] a word with a meaning and/or category distinct from that of its base” (CL, p 129)
 - **Some** derivational affixes change the category of the word they attach to
 - Some do **not**

2. Derivational affixes

- Try it: Can you state meanings and **word-formation rules** for these derivational affixes?

-y

cloud + *y* → *cloudy* 'full of clouds'

fog + *y* → *foggy* 'characterized by fog'

dream + *y* → *dreamy* 'like a dream'

wiggle + *y* → *wiggly* 'full of wiggles'

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Word-formation rule: N + /i/ → A

Meaning (approximate): 'full of or characterized by N'

2. Derivational affixes

- Try it: Can you state meanings and **word-formation rules** for these derivational affixes?

un-

un + wrap → *unwrap* 'make not be wrapped'

un + tie → *untie* 'make not be tied'

un + lock → *unlock* 'make not be locked'

un + hook → *unhook* 'make not be hooked'

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Word-formation rule: /ʌn/ + V → V

Meaning (approximate): 'reverse the action of V'

2. Derivational affixes

- Sometimes a word formed by derivation takes on a specialized, **unpredictable** meaning
- Which meaning is **predictable**?
 - *transmit* + [ʃ]ion → *transmission*
 - 'act/result of transmitting'
 - 'part of a car'
 - *recite* + al → *recital*
 - 'act/result of reciting'
 - 'music/dance performance'

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- Sometimes a word formed by derivation takes on a specialized, **unpredictable** meaning
- Which meaning is **predictable**?
 - *transmit* + [ʃ]ion → *transmission*
 - 'act/result of transmitting' | predictable
 - 'part of a car' | unpredictable
 - *recite* + al → *recital*
 - 'act/result of reciting' | predictable
 - 'music/dance performance' | unpredictable

2. Derivational affixes

- Sometimes a word formed by derivation takes on a specialized, **unpredictable** meaning
- What are the implications, in terms of mental grammar, when this occurs?
 - Where in the linguistic system is **unpredictable** information handled?

2. Derivational affixes

- Sometimes a word formed by derivation takes on a specialized, **unpredictable** meaning
- What are the implications, in terms of mental grammar, when this occurs?
 - A word formed by derivation that develops an **unpredictable** meaning must be **memorized** (stored in the **mental lexicon**)
...even though it was built from morphemes that already have their own lexical entries!

3. Inflectional affixes

- An **inflectional affix** “modifi[es]...a word’s form to indicate grammatical information of various sorts” (CL, p 138)

Examples:

- **number** (singular/plural) for N
- **tense** and **aspect** for V
- **comparative/superlative** for A

- Inflectional affixes **do not change the category** of the word they attach to

3. Inflectional affixes

- Inflection can be marked irregularly, as by vowel changes (s[æ]ng) or irregular affixes (*children*)
- Inflection and mental grammar
 - Irregular inflectional form: stored in **mental lexicon**
 - Regular inflectional form: generated by **rule**

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 - Irregular inflectional form: stored in **mental lexicon**
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Side note: Some interesting evidence for this difference

- Word frequency affects word-recognition speed (=speed of accessing stored form in lexicon)
- We see frequency effects for *irregular* verb past forms (stored in lexicon)
- But not for *regular* past verb forms (made by rule!)

4. Distinguishing inflection and derivation

- **Meaning** difference:
 - **Derivation** actually **changes** the meaning (and/or the word category)
 - **Inflection** only adds “**grammatical** meaning” (like plural or past tense)
- English has only 8 regular inflectional affixes (see *CL* Table 4.15, p 138)
 - Memorize them?

4. Distinguishing inflection and derivation

Some additional differences

- Inflectional affixes
 - Typically **more productive** (irregulars aside); apply generally to many N, V, etc.
 - Typically have a very **predictable meaning**
- Derivational affixes
 - Typically **less productive**; may apply only to specific sets of words
 - May take on an **unpredictable meaning** (as seen above)

4. Inflection vs. derivation

- Try it: Are these affixes derivational or inflectional?

soften *The cloth is soft.*
Heating the wax may soften it.

kingdom *That castle belongs to the king.*
The knight rode across the kingdom.

4. Inflection vs. derivation

- Try it: Are these affixes derivational or inflectional?

soften *The cloth is soft.* | A
Heating the wax may soften it. | V

- Word category change → **Derivational**

kingdom *That castle belongs to the king.* | N
The knight rode across the kingdom. | N

- No word-category change, but...
- Meaning change (person vs. domain) → **Derivational**

4. Inflection vs. derivation

- Try it: Are these affixes derivational or inflectional?

readinging *I can read.*
I am reading a book.

readinging *I can read.*
The reading of the poem was lovely.

- Are these *-ing* suffixes the **same** morpheme?

4. Inflection vs. derivation

- Try it: Are these affixes derivational or inflectional?

reading *I can read.* | V

I am reading a book. | V

- Change in grammatical meaning (to ongoing action) → **Inflectional**

reading *I can read.* | V

The reading of the poem was lovely. | N

- Word category change → **Derivational**
- Are these *-ing* suffixes the **same** morpheme? | **No!**

4. Inflection vs. derivation

- When a word has an inflectional affix, this can make it more difficult to apply the **distributional tests for word category**
 - Try it with *I am reading a book*
I walked to the store

4. Inflection vs. derivation

- If both inflectional and derivational affixes are added to the same root, what is the **order** in which they are added?

construct + (t)ion + s

**construct + ed + (t)ion*

cloud + y + est

**cloud + s + y*

modern + ize + ing

**small + est + ize*

Remember that '*' means 'ungrammatical'

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→ **Derivation** occurs before **inflection**