Derivation and Inflection

Derivation and Inflection are two functional categories of change in morphology (suffix, prefix, etc. are formal categories, since they refer to the form of the change). An affix or other chunk of morphology is usually either deriva­tional or inflectional, though there is a certain grey area between them.

Most of the affixes we are familiar with in English are derivational; English has only 8 inflectional affixes. On the other hand, all of the commonly-studied European languages are much more inflected than English, and most of the affixes we study in learning German, French, Spanish, or Russian are inflections. It is the fact that English speakers aren’t used to using a lot of inflections that makes these languages as hard as they are for English speakers to learn. That same fact makes it a bit difficult to explain the difference. But we’ll try.

Below are 5 characteristics that distinguish inflections from derivations. Remember that these can apply to any formal class — suffixes, prefixes, infixed, root change, suppletion, reduplication, etc.

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<th>Derivational Morphemes ...</th>
<th>Inflectional Morphemes ...</th>
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<tr>
<td>1. Can change part of speech or meaning; e.g., -ment forms nouns such as judgment from verbs such as judge.</td>
<td>Do not change part of speech or meaning; e.g., big and bigger are both adjectives.</td>
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<td>2. Typically indicate semantic relations within the word, e.g., the morpheme -ful in painful has no particular connection with any other morpheme in a sentence, beyond the word painful itself.</td>
<td>Typically indicate syntactic or semantic relations between different words in a sentence, e.g., the present tense morpheme -s in waits shows agreement with the subject of the verb (both are third person singular).</td>
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<td>3. Typically occur with only some members of a class of morphemes, e.g., the suffix -hood occurs with just a few nouns such as brother, neighbor, and knight, but not with most others, e.g., friend, daughter, candle, etc.</td>
<td>Typically occur with all members of a of some large class of morphemes, e.g., the plural morpheme -s occurs with almost all count nouns in English.</td>
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<td>4. Typically occur before inflectional suffixes (and after inflectional prefixes, though not in English); e.g., in chillier, the derivational suffix -er comes before the inflectional -er.</td>
<td>Typically occur at the margins of words, e.g., the plural morpheme -s always comes last in an English word, as in babysitters or rationalizations.</td>
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| 5. Instantiate a single category, which may be complex, but never occurs in a paradigm; e.g., there is no paradigm of all the ways there are of forming verbs from nouns, just scattered processes on different words. | Can instantiate categories that occur in paradigmatic sets, e.g., the categories of number and person produce the various forms of the verb: I am, you are, he is, we are, you are, they are.
Some Inflectional Categories

1. NUMBER (a category of Nouns; often agrees on other kinds of word)
   a. English: robot, robots
   b. Samoan: ?oe 'you (one)'
      ?oulua 'you two'
      ?outou 'you (more than two)'
   c. French: le livre ennuyant 'the boring book'
      les livres ennuyants 'the boring books'

2. GENDER (a category of Nouns; often agrees on other kinds of word)
   a. Spanish: las muchachos mexicanos
      las muchachas mexicanas
   b. Bariba: dum baka 'a big horse'
      yam baka 'a big space'
      kpèè baka 'a big stone'
      tam baka 'a big yam'
      boo bako 'a big goat'
      gàà bakanu 'a big thing'
      donon bako 'a big fire'
   c. Swahili: watu wamefika 'The men have arrived'
      visu vimeaunguka 'The knives fell'
      mitti imekauka 'The tree withered'

3. CASE (a category of Nouns; often agrees on Adjectives)
   a. English: student, student’s; we, us, our, ours;
   b. Finnish: ‘house’
      talo nominative (subject) talolle allative (‘to’)
      talon accusative (object) talona essive (‘as’)
      talong genitive (‘of’) taloga partitive (‘(part) of’)
      talossa inessive (‘in’) taloksi translative (‘(changes) into’)
      talolga elative (‘out of’) talotxa abessive (‘without’)
      taloon illative (‘into’) taloin instructive (‘with’, ‘by’)
      talolla adessive (‘on’) taloing comitative (‘together with’)
   c. Persian: Hasan yek ketáb did ‘Hasan saw the book’
      Hasan ketáb rá did ‘Hasan saw the book’
      Hasan ketáb did ‘Hasan saw a book/books’
   d. Warlpiri: γatu kuŋa puŋami 'I shout'
      γatułułu kuŋaŋku nuntu nγanγi 'I see you'
      nγuntułułu kanpatu γatu nγanγi 'you see me'
   e. German: der gute Mann 'the good man'
      der guten Mannes 'of the good man'
Some Inflectional Categories

4. PERSON (a category of Nouns often marked on Verbs in agreement)
   a. English: speak, speaks
   b. Old Eng.: folgīe (1pers), folgast (2pers), falgah (3pers) ‘follow (sg)’
   c. Samoan: ima:ua ‘we two (excl)’ ima:tou ‘we (excl)’
      ita:ua ‘we two(incl)’ ita:tou ‘we (incl)’
   d. Cree: okimaw iskwewa kitotew
      ‘the chief (prox) talks to the women (obv)’
      okimawa iskwew kitotik
      ‘the chief (obv) talks to the women (prox)’

5. TENSE (a category of Verbs, marking time)
   a. English: walk, walked
   b. French: il parle ‘he speaks’
      il parlera ‘he will speak’

6. ASPECT (a category of Verbs, related to Tense, marking point of view)
   a. Russian: ja pročital roman ‘I read (and finished) the book’
      ja čital roman ‘I read (unclear if finished) the book’
   b. Irish: d’ól sé é ‘he drank it’
      d’óladh sé ‘he used to drink’

7. MOOD (a category of Verbs, marking speech act type and possibility)
   a. French: tu parles ‘you speak’
      Parle! ‘Speak!’
   b. Luiseño: nóo qéeq ‘I am leaving’
      noo qéevičeq ‘I want to leave’
   c. Turkish: kirajaksan ‘if you are going to break’
      kir + afak + sa + n

8. VOICE (a category of Verbs, marking agent-patient relations)
   a. Latin: puella amat ‘the girl loves’
      puella amatūt ‘the girl is loved’
   b. Amharic: lakkama ‘he picked’
      telojjama ‘he was picked’
      alakkama ‘he himself made someone pick’
      aslakkama ‘he caused others to make someone pick’
      allakkama ‘he helped to pick’

* All nouns are 3rd person, by definition; only personal pronouns are 1st or 2nd.
## The Inflectional Suffixes of English

### Applies to: Name: Symbol:

1. **Nouns**
   - **Plural Number**
     - Regular suffixal allomorphs (phonologically conditioned; preceded by epenthetic central vowel after sibilants):
       - `-s/` after voiceless sounds
       - `-z/` after voiced sounds (including vowels)
   - Irregular suffixal allomorphs (lexically conditioned):
     - `-Ø` [i.e., Zero] in *sheep, moose, fish, etc.* `-ø/` in *data, phenomena opera, etc.*
     - (Latin and Greek neuter nouns); `-ay/` in *alumni, syllabi, etc.* (Latin masculine nouns); `-el/` in *alumnae* (Latin feminine nouns); `-an/` in *oxen* (Old English)
   - Irregular root modifications (lexically conditioned):
     - Final voiceless fricatives are voiced (`/lh/` -> `/lv/`, `/dh/` -> `/δ/`, `/sl/` -> `/z/`) before adding regular suffixes in a class of nouns including *hoof, leaf, life, path, and house*.
     - Stem vowel change in:
       - mice, lice: `/iw/` -> `/ai/`, plus Zero suffix
       - men: `/m/` -> `/æ/`, plus Zero suffix
       - women: `/v/` -> `/u/`, plus Zero suffix
       - children: `/ai/` -> `/u/`, plus irregular suffix `-an/`

2. **Nouns**
   - **Possessive Enclitic**
     - Regular suffixal allomorphs — identical to (1) above.
     - Note: this inflection is changing from suffix to enclitic status; it now attaches to the last word in a *Noun Phrase* (NP), instead of a Noun, e.g., *The Prince of Denmark's soliloquy*, not *The Prince's of Denmark* soliloquy.

3. **Verbs**
   - **Present Tense, 3rd Person, Singular Number**
     - Regular suffixal allomorphs — identical to (1) above.
     - Irregular suffixal allomorph (lexically conditioned):
       - `-Ø` in *she can, she will, she may, etc.* (modal auxiliaries)
     - Irregular root modification (be + `-z/`) = `/hæz/` (`/v/` -> `-Ø` before `-z/`)
     - Irregular root suppletion: `(be + `-z/`) = `/z/`

4. **Verbs**
   - **Past Tense**
     - Regular suffixal allomorphs, phonologically conditioned:
       - `/t/` after voiceless sounds, `/d/` after voiced sounds (including vowels)
     - (preceded by epenthetic `/ø/` or `/u/` after dental stops `/d/` and `/t/`)
     - Irregular suffixal allomorphs (lexically conditioned):
       - `-Ø` in *some 1-syllable /d/- or /u/-final verbs: bear, bet, burst, cast, cost, cut, hit, hurt, knit, let, put, rid, set, shed, shut, slit, spit, split, spread, and thrust*
       - `/dh/` -> `/θ/` in *some 1-syllable /d/-final verbs: bend, build, lent, sent, and spent.*
       - `/l/` after some vowel-changed roots (others take `-Ø`; see below)

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1. All forms but one of *be* are irregular: `/bæt/`, `/lɔt/`, `/læt/`, `/twæt/`, `/tɔt/`, `/tæt/`, `/biə/`, cf. `/bɪə/`
The Inflectional Suffixes of English

(4) **Verbs**  
Past Tense  
\(-\text{ED}\)  
(Continued)  
Irregular root modifications (lexically conditioned):  
Pure vowel changes: hid, ate, lay, came, read, ran, sang, swung, struck, got, shot,  
wound, swore, saw, fought, wrote, chose, stole, shook, grew, drew, etc.  
Other root modifications: slept, dealt, bought, sold, said, lost, sought, left, made, etc.  
Irregular root suppletion (lexically conditioned):  
\(\{\text{go + ED}\} = \text{went}\)

(5) **Verbs**  
Past Participle  
\(-\text{EN}_1\)  
Regular suffixal allomorphs — identical to (4) above. Many irregulars are also  
identical to the past tense form: fought, dug, read, won, struck, got, shot, etc.  
Others are identical to the present, even if the past is irregular: come, run, etc.  
Irregular suffixal allomorph (lexically conditioned):  
/\-\text{en}/ in some “strong” verbs: shaken, beaten, spoken, broken, bitten, etc.  
/\-\text{en}/ in others, especially after vowels: known, torn, done, drawn, seen, etc.  
Irregular root modifications (lexically conditioned):  
Pure vowel changes (all /\text{a}/): sung, swung, drunk, swum, sprung, etc.

(6) **Verbs**  
Present Participle (Gerund)  
\(-\text{ING}\)  
Regular suffixal allomorph — /\-\text{en}/  
Note: This morpheme has no irregularities. (This is meta-irregular.)

(7) **Verbs**  
Infinitive  
\(-\phi\)  
Regular suffixal allomorph — Zero  
Note: This morpheme has a distinct form only in the verb be.

(8) **Adjectives**  
Comparative  
\(-\text{ER}_1\)  
Regular suffixal allomorph — /\-\text{er}/  
Note: This morpheme applies only to monosyllabic adjectives and adverbs, bisyllabic ones that end in /\-\text{i}/ (e.g., heavier, happier), and some bisyllabic ones  
that end in /\-\text{er}/ (e.g., shallower, narrower, but not *meller).  
Irregular suppletive forms:  
\(\{\text{good/well + ER}_1\} = \text{better}\)  
\(\{\text{bad + ER}_1\} = \text{worse}\)  
\(\{\text{much + ER}_1\} = \text{more}\)

(9) **Adjectives**  
Superlative  
\(-\text{EST}\)  
Regular suffixal allomorph — /\-\text{est}/  
Note: This morpheme has the same lexical and phonological restrictions as (7)  
above; if a given adjective or adverb takes (7), it will take (8), and if it has an  
irregular allomorph of (7), it has an irregular allomorph of (8).  
Irregular suppletive forms:  
\(\{\text{good/well + EST}\} = \text{best}\)  
\(\{\text{bad + EST}\} = \text{worst}\)  
\(\{\text{much + EST}\} = \text{most}\)