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, infixes, root change, suppletion, reduplication, etc.

Derivational Morphemes ...

1. **Can** change part of speech or meaning; e.g, *-ment* forms nouns such as *judgement* from verbs such as *judge.*

2. Typically indicate semantic relations **within** the word, e.g, the morpheme *-ful* in *painful* has no particular connection with any other morpheme in in a sentence,beyond the word *painful.* itself.

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.

4. Typically occur **before** inflectional **suffixes** (and **after** inflectional **prefixes,** though not in English); e.g, in *chillier,* the derivational suffix *-y* comes before the inflectional *-er.*

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.

Inflectional Morphemes ...

Do **not** change part of speech or meaning; e.g, *big* and *bigger* are both adjectives.

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).

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.

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.*

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.*

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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: los muchachos mexicanos
                 las muchachas mexicanas

   b. Bariba: dum baka   'a big horse'   yam bakam 'a big space'
               kpèè bakaru 'a big stone'   tam bakasu 'a big yam'
               boo bako   'a big goat'   gàà bakanu 'a big thing'
               dònòn bako   'a big fire'

   c. Swahili: watu wamefika   'The men have arrived'
                visu vimeanguka   'The knives fell'
                miti 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')
talon	genitive ('of')	taloa	partitive ('(part) of')
talossa	inessive ('in')	taloksi	translative ('(changes) into')
talosta	elative ('out of')	talotta	abessive ('without')
taloon	illative ('into')	taloin	instructive ('with', 'by')
talolla	adessive ('on')	taloine	comitative ('together with')

   c. Persian: Hasan yek ketāb did 'Hasan saw the book'
               Hasan ketābrā did   'Hasan saw the book'
               Hasan ketāb did   'Hasan saw a book/books'

   d. Warlpiri: ŋatʸu kaṇa puḷami   'I shout'
                ŋatʸuluḷu kaṇaŋku nʸuntu nʸanʸi 'I see you'
                nʸuntuluḷu kanpatʸu ŋatʸu nʸanʸi 'you see me'

   e. German: der gute Mann   'the good man'
               des guten Mannes   'of the good man'

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Some Inflectional Categories

4. **PERSON** (a category of Nouns* often marked on Verbs in agreement)

    a. English: speak, speaks

    b. Old Engl: folg_ie_ (1pers), folg_ast_ (2pers), falga_þ_ (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 iskwew_a_ kitot_ew_'
                 'the chief (prox) talks to the women (obv)'
                 okimaw_a_ iskwew kitot_ik_
                 'the chief (obv) talks to the women (prox)'

5. **TENSE** (a category of Verbs, marking time)

    a. English: walk, walk_ed_

    b. French: il parle   'he speaks'
                il parler_a_ 'he will speak'

6. **ASPECT** (a category of Verbs, related to Tense, marking point of view)

    a. Russian: ja pro_č_ital roman 'I read (and finished) the book'
               ja _č_ital 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 ŋéeq   'I am leaving'
                noo ŋéevíčuq   'I want to leave'

    c. Turkish: kɨraǰaksan   'if you are going to break'
                kɨr + aǰak + sa + n

8. **VOICE** (a category of Verbs, marking agent-patient relations)

    a. Latin: puella amat   'the girl loves'
              puella amat_ur_ 'the girl is loved'

    b. Amharic: ləkkəmə   'he picked'
              tələjjəmə   'he was picked'
              aləkkəmə   'he himself made someone pick'
              asləkkəmə   'he caused others to make someone pick'
              alləkkəmə   'he helped to pick'

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* 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 $\{-Z_1\}$

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. /-ə/ in *data, phenomena opera.,*, etc.

   (Latin and Greek neuter nouns); /-ay/ in *alumni, syllabi,* etc. (Latin masculine

   nouns); /-e/ in *alumnae* (Latin feminine nouns); /-ən/ in *oxen* (Old English)

Irregular root modifications (lexically conditioned):

   Final voiceless fricatives are voiced (/f/ -> /v/, /θ/ -> /ð/, /s/ -> /z/) before add
   ing regular suffixes in a class of nouns including *hoof. leaf. life, path,* and *house.*

   Stem vowel change in: *mice, lice*   (/aw/ -> /ay/), plus Zero suffix

   men   (/æ/ -> /ɛ/),   plus Zero suffix

   women   (/ʊ/ -> /ʊ/),   plus Zero suffix

   children   (/ay/ -> /ʊ/),   plus irregular suffix /-rən/

(2)   Nouns   Possessive Enclitic $\{-Z_2\}$

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 <u>Noun Phrase</u> (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 $\{-Z_3\}$

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: $\{have +Z_3\}$ = /hæz/ (/v/ -> Ø before /-z/)

Irregular root suppletion: $\{be +Z_3\}$ = /ɪz/[1]

(4)   Verbs   Past Tense $\{-ED\}$

Regular suffixal allomorphs, phonologically conditioned:

   /-t/ after voiceless sounds, /-d/ after voiced sounds (including vowels)

   (preceded by epenthetic /ə/ or /ɪ/ after dental stops /d/ and /t/)

Irregular suffixal allomorphs (lexically conditioned):

   -Ø in some 1-syllable /d/- or /ʊ/-final verbs: *beat, bet, burst, cast, cost, cut, hit,
   hurt, knit, let, put, rid, set, shed, shut, slit, shit, spit, split, spread,* and *thrust*
   /d/ -> /ʊ/ in some 1-syllable /d/-final verbs: *bent, built, lent, sent,* and *spent.*
   /-ʊ/ after some vowel-changed roots (others take -Ø; see below)

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1. All forms but one of {*be*} are irregular: /ɛm/, /ɪz/, /ɑr/, /wəz/, /wər/, /bɪn/; cf. /biyɪŋ/

The Inflectional Suffixes of English

(4) Verbs   Past Tense   {-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):   {*go* + ED} = /wɛnt/

(5) Verbs   Past Participle   {-EN₁}

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):
  /-ən/ in some "strong" verbs: *shaken, beaten, spoken, broken, bitten,* etc.

  /-n/ in others, especially after vowels: *known, torn, done, drawn, seen,* etc.

Irregular root modifications (lexically conditioned):
  Pure vowel changes (all /ə/): *sung, swung, drunk, swum, sprung,* etc.

6) Verbs   Present Participle (Gerund)   {-ING}

Regular suffixal allomorph — /-ɪŋ/
Note: This morpheme has <u>no</u> irregularities. (This is meta-irregular.)

(7) Verbs   Infinitive   {-φ}

Regular suffixal allomorph — Zero
Note: This morpheme has a distinct form only in the verb *be*.

(8) Adjectives   Comparative   {-ER₁}

Regular suffixal allomorph — /-ər/
Note: This morpheme applies only to monosyllabic adjectives and adverbs, bisyl-
    labic ones that end in /-i/ (e.g. *heavier, happier*), and <u>some</u> bisyllabic ones
    that end in /-o/ (e.g. *shallower, narrower,* but not *mellower).

Irregular suppletive forms: {*good/well* + -ER₁} = *better*
                  {*bad* + -ER₁} = *worse*
                  {*much* + -ER₁} = *more*

(9) Adjectives   Superlative   {-EST}

Regular suffixal allomorph — /-əst/
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: {*good/well* + -EST} = *best*
                  {*bad* + -EST} = *worst*
                  {*much* + -EST} = *most*