Universidad de Los Andes
Facultad de Humanidades y Educación
Escuela de Idiomas Modernos

Unit 1: Types of Words and Word-Formation Processes in English

The Morpheme

The smallest units of language that have a meaning or a grammatical function and form words or parts of words are called **morphemes**. In writing, individual **morphemes** are usually **represented** by their graphic form, or spelling; e.g., *-es, -er, un-, re-*; or by their graphic form between bracers, { }; e.g., {-es}, {-er}, {un-}, {re-}. The branch of linguistics in charge of studying the smallest meaningful units of language (i.e., morphemes), their different forms, the internal structure of words, and the processes and rules by which words are formed is called **morphology**.

Types of Morphemes

Depending on the way morphemes occur in an utterance, they are grouped into two large groups: free morphemes and bound morphemes.

1. **Free or independent morphemes** are those morphemes which can occur alone as words and have a meaning or fulfill a grammatical function; e.g., *man*, *run*, *and*. There are two types of free morphemes.

a. **Lexical** (**content or referential**) **morphemes** are free morphemes that have semantic content (or meaning) and usually refer to a thing, quality, state or action. For instance, in a language, these morphemes generally take the forms of nouns, verbs, adjectives and adverbs; e.g., *dog, Peter, house, build, stay, happy, intelligent, quickly, always*. Actually, lexical morphemes constitute the larger class of morphemes. They form the **open class of words** (or **content words**) in a language, i.e., a class of words likely to grow due to the incorporation of new members into it.

b. **Function(al)** or **grammatical morphemes** are free morphemes which have little or no meaning on their own, but which show grammatical relationships in and between sentences. For instance, in a language, these morphemes are represented by prepositions, conjunctions, articles, demonstratives, auxiliary verbs, pronouns; e.g., *with, but, the, this, can, who, me*. It should be said that function words are almost always used in their unstressed form.

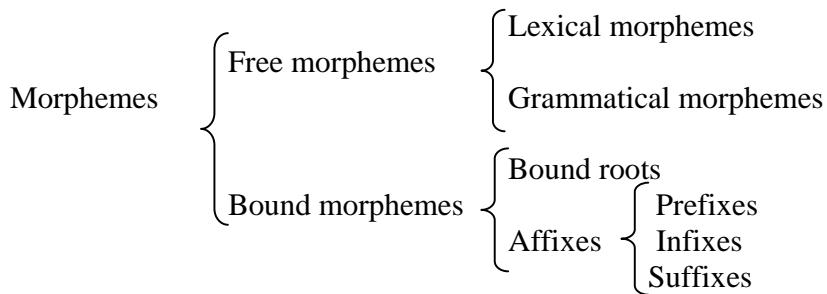2. **Bound** (or **dependent**) **morphemes** are those morphemes which never occur alone as words but as parts of words; they must be attached to another morpheme (usually a free morpheme) in order to have a distinct meaning; e.g., *-er* in *worker*, *-er* in *taller*, *-s* in *walks*, *-ed* in *passed*, *re-* as in *reappear*, *un-* in *unhappy, undo*, *-ness* in *readiness*, *-able* in *adjustable*; *-ceive* in *conceive, receive*, *-tain* in *contain, obtain*, etc. There are two types of bound morphemes: bound roots and affixes.

a. **Bound roots** are those bound morphemes which have lexical meaning when they are attached to other bound morphemes to form content words; e.g., *-ceive* in *receive, conceive; -tain* in *retain, contain; plac-* in *implacable, placate; cran-* in

1

cranberry, etc. Notice that bound roots can be prefixed or suffixed to other af-
fixes. (See Appendix).
   b. **Affixes**[1] are bound morphemes which are usually marginally attached to words
   and which change the meaning or function of those words; e.g., *-ment* in *devel-*
   opment, en- in *enlarge*; *'s* in *John's; -s* in *claps, -ing* in *studying*, etc.

Figure 3: Classification of morphemes

Morphemes
  Free morphemes
    Lexical morphemes
    Grammatical morphemes
  Bound morphemes
    Bound roots
    Affixes
      Prefixes
      Infixes
      Suffixes

Types of Affixes

   Affixes can be classified into two different ways: according to their position in the
word and according to their function in a phrase or sentence.

   1. According to their **position in the word** (or **side of the word they are attached to**),
affixes are classified into prefixes, infixes and suffixes.
   a. **Prefixes** are bound morphemes that are added to the beginning of the word; e.g.,
   un- in *unnoticed, a-* in *amoral, sub-* in *subway*, etc. Notice that prefixes are rep-
   resented by the morphemes followed by a **hyphen** (-).
   b. **Infixes** are bound morphemes that are inserted within the words. There are no in-
   fixes in the English language, but in the languages such as Tagalog and Bontoc
   (in the Philippines), Infixes are represented by the morphemes preceded and fol-
   lowed by a hyphen; e.g., *-um-*.
   c. **Suffixes** are bound morphemes which are attached to the end of the word; e.g., *-*
   able in *noticeable*, *-less* in *careless*, *-s* in *seeks*, *-en* in *shorten*, etc. Notice that
   suffixes are represented by the morphemes preceded by a hyphen.

   2. According to the **function** affixes fulfill in the language, affixes are classified into
derivational affixes (derivational morphemes or derivations) and inflectional affixes (inflec-
tional morphemes or inflections).

   a. **Derivational affixes** are morphemes that create (or derive) new words, usually by
either changing the meaning and/or the part of speech (i.e., the syntactic category), or both,

---

[1] Affixes may also consist of suprasegmental elements such as pitch or stress; in this case they are referred to
  as **superfixes** (Lehmann, 1983).

of the words they are attached to (Godby et al., 1982). In English, derivational morphemes can be either prefixes or suffixes. For example, *un-+ happy* (adj.) = *unhappy* (adj.); *re-+ classify* (v) = *reclassify* (v.); *by-+ product* (n.) = *by-product*. (See Appendix for a list of derivational prefixes and suffixes in English).

b. **Inflectional affixes**, for their part, are morphemes which serve a purely grammatical function, such as referring to and giving extra linguistic information about the already existing meaning of a word (e.g., number, person, gender, case, etc.), expressing syntactic relations[2] between words (e.g. possession, comparison), among others. For instance, the different forms of the verb *speak* are all considered to be verbs too, namely, *speak, spoken, speaking*. In a like manner, the comparative and superlative forms of the adjective *strong* are also adjectives, namely, *stronger, strongest*. In English, there are only eight inflections. They are *-(e)s*[3] (third person singular marker of verbs in present tense), as in *speaks, teaches; -(e)s*[5] (regular plural marker) as in *books, oranges; 's* (possessive marker) as in *John's house; -(e)d*[5] (regular past tense marker) as in *helped, repeated; -en*[5] (past participle marker) as in *spoken, eaten; -ing* (present participle marker) as in *eating, studying; -er* (comparative marker) as in *faster, happier;* and *-est* (superlative marker) as in *fastest, happiest*.

Roots and Stems

Roots (or **bases**) are the morphemes (free or bound) that carry the principal or basic concept, idea or meaning in a word. They generally constitute the nuclei or cores of words. When roots are free morphemes, they constitute content (and function) words by themselves, such as *book, dog, house, carry, quick, early, etc.* When roots are bound morphemes,[4] they form parts of words, such as *-ceive* in *perceive, -tain* in *attain, -sume* in *presume,* etc.

For their part, **stems** are free roots to which derivational affixes have been added or are likely to be added. In this sense, a stem = a root, as in *fish, place;* a stem = a root + one or more derivations, as in *comfortable, uncomfortable, uncountableness*. Notice that stems are words without inflectional morphemes. For example, in the word *disestablishment, disestablish, establishment,* and *establish* (which is a root at the same time) are stems.

---

[2]In fact, some grammatical relations can be expressed either inflectionally (i.e., morphologically) or syntactically. E.g., *The boy's book = The book of the boy; He loves books = He is a lover of books; She is hungrier than you = She is more hungry than you* (cf. Fromkin & Rodman, 1983). In general, when there are few inflectional affixes in a language, word order and function words are used to express certain grammatical meanings and relationships (cf. Byrne, 1978).

[3]Some linguists prefer to use *-(e)s*[1] for the third person singular and *-(e)s*[2] for the plural. Similarly, *-(e)d*[1] is often used for the past and, instead of *-en, -(e)d*[2] is used for the past participle. *-en* is reserved for the past participle form of irregular verbs.

[4] In this course we will be considering mostly free roots; then our morphological analysis of words will almost always end with a free morpheme.

General Morphological Processes Involved in the Formation of New Words.

In this course, we will study five major morphological processes that affect roots and stems and which lead to the production of new words. Those processes are affixation, compounding, symbolism, reduplication and suppletion.

A. Affixation

Affixation consists in adding derivational affixes (i.e., prefixes, infixes and suffixes) to roots and stems to form new words. For example, if the suffix **-able** is added to the word *pass,* the word *passable* is created. Likewise, if to the word *passable* the prefix **in**- (or rather its allomorph **im**-) is attached, another word is formed, namely *impassable.* Affixation is a very common and productive morphological process in synthetic languages. In English, **derivation** is the form of affixation that yields new words.

B. Compounding

Compounding consists in the combination of two or more (usually free) roots to form a new word. For example, the word *blackboard, heartfelt, brother-in-law* are compound words; they are made up of the roots (at the same time words themselves) *black* and *board, heart* and *felt, brother, in* and *law,* respectively.

Compounding is a very common process in most languages of the world (especially among synthetic languages). In English, for instance, **compound words** have the following **characteristic**s:

1. Compounds words behave grammatically and semantically as single words.

2. Since compound words behave as units, between their component elements no affixes (whether inflections or derivations) can usually occur; inflectional suffixes can appear only after compound words. For example, *bathrooms, school, buses, water resistant.* Exceptions: *passersby, brothers-in-law, courts-martial.*

3. Compound words can be written in three different ways:

   a.. **Open**, i.e., with a space between the parts of the compound; e.g., *toy store, diving board, flower pot.*

   b. **Hyphenated**, i.e., with a **hyphen** (-) separating the elements of the compound; e.g., *flower-pot, air-brake, she-pony.*

   c. **Solid**, e.g., without a space or hyphen between the component elements of the compound; e.g., *flowerpot, washrooms, pickpocket.*

Preference for a particular form of writing the compound word depends largely on lexicographical conventions and the variety of English use. For instance, **hyphenation** (i.e., separating the elements of a compound with a hyphen) is more common in British English than in American English. In American English, the tendency is to write the compounds open or solid (Quirk et al., 1985). However, hyphenation is quite common practice in both

varieties of the language when **ad hoc premodifying compounds**[5] are used; e.g., a *much-needed* rest; a *state-of-the-art* report.

4. The global meaning of the compound word can often be guessed from the individual meaning of each element of the compound. For example, a *boathouse* is 'a shed in which boats are stored'; a *bookstore* is 'a store which sells books'; and so on. But there are a few compound words whose global meanings have to be learned as if they were single words because such meanings cannot be guessed from the individual meanings of the component elements of the compounds. For instance, a *Redcoat* is 'a British soldier', not 'a coat that is red'. Similarly, a *flatfoot* is 'a detective or policeman', a *turncoat* is 'a traitor', a *hot dog* is 'a kind of fast food', etc.

5. Compound words usually have the primary stress on the first element of the compound; e.g., 'air-,crafts, 'chewing-,gum. This fact differentiates compounds from phrases that have the same elements and order as compounds. Phrases usually have their primary accent on the second (or nominal) element; e.g., *a 'red ↘ coat* vs. *a 'Red ,coat; a 'flat ↘ foot* vs. *a 'flatfoot; the 'white ↘ house* vs. *the 'White ,House.* Of course, there are a few compounds which have their primary stress on the second element as phrases; e.g., ,working 'man, *flying 'saucer, woman 'writer, , fancy 'dress.*

6. The second element (or **head word**) of the compound usually determines the grammatical category to which the whole compound belongs. Following are a few possible combinations:

n + n = n; e.g., *sunrise, dancing girl, hand-shake, air-conditioning, cigar smoker,*
    windmill.
v + n = n; e.g., *rattlesnake, call-girl, dance-hall.*
adj. + n = n, e.g., *darkroom, highbrow.*
n + adj. = adj.; e.g., *airsick, bottle-green.*
pron. + n = n; e.g., *she-pony, he-goat.*
prep. + v = v; e.g., *overtake, undergo.*
prep. + n = n; e.g., *onlooker, off-day.*
adj. + adj. = adj.; e.g., *gray-green, Swedish-American.*

However, there are some cases in which the headword does not determine the grammatical class of the compound; for example:

n + v = adj.; e.g., *man-eating, ocean-going, heartfelt.*
adj./adv. + v = adj.; e.g., *hard-working, good-looking, dry-cleaned.*
n + prep. = n; e.g., *passer-by, hanger-on.*
v + (adv.) prep. = n; e.g., *show-off, holdup.*
v + adv. = n; e.g., *have-not, get-together.*

It is important to point out that some compound words are made up of a bound root (or **'special' combining form**, as Quirk et al. (1985) call it), e.g., **socio-, psycho**-*,* and a free

---

[5]**Ad hoc premodifying compounds** could be defined as groups of words that do not occur as established compounds in the language but as a group of words that as a whole modifies another word. They do not often appear in the dictionaries as separate entries as true compounds do.

root; e.g., *socioeconomic, psychoanalysis, biotechnology.* The compound may also consist of two bound roots; e.g., *Laundromat, nephrolithotomy, pornography.*

7. Compounding is a **recursive process**; i.e., one compound itself may become a constituent of a larger compound; e.g., *lighthouse keeper, living-room furniture.*

C. Symbolism

Symbolism (or **morpheme internal change**) consists in altering the internal phonemic structure of a morpheme to indicate grammatical functions (cf. Pei, 1966). For example, in order to form the plurals of *goose* /ɡuːs/ and *tooth* /tuːθ/ in English, the phoneme /uː/ is replaced by the phoneme/iː/, thus yielding the plural forms *geese* /ɡiːs/ and *teeth* /tiːθ/, respectively.

Other words that form their plurals in a similar way are *man* /mæn/ → *men* /men/, *woman* /ˈwʊmən/ → *women* /ˈwɪmən/, *mouse* /mɑʊs/ → *mice* /maɪs/, *louse* /lɑʊs/ → *lice* /laɪs/, etc. Similarly, a few verbs indicate their past tense and past participle forms just by undergoing internal changes, as in the following cases:

sing	/sɪŋ/	sang	/sæŋ/	sung	/sʌŋ/
swim	/swɪm/	swam	/swæm/	swum	/swʌm/
sink	/sɪŋk/	sank	/sæŋk/	sunk	/sʌŋk/
bring	/brɪŋ/	brought	/brɒt/	brought	/brɒt/
teach	/tiːtʃ/	taught	/tɒt/	taught	/tɒt/

Notice that some of these verbs, in addition, take the inflectional morpheme -**en** /-ən/ to indicate the past participle, as in:

break	/breɪk/	broke	/brəʊk/	broken	/ˈbrəʊkən/
eat	/iːt/	ate	/eɪt/	eaten	/ˈiːtn̩/
write	/raɪt/	wrote	/rəʊt/	written	/ˈrɪtn̩/
ride	/raɪd/	rode	/rəʊd/	ridden	/ˈrɪdn̩/

It is important to point out that the new words created by the process of symbolism are usually considered **irregular forms** and have come to be as a result of historical changes in the development of the language.

D. Reduplication

Reduplication consists in the repetition of all or of part of a root or stem to form new words. If the entire root or stem is repeated, the process is called **complete** (or **total**) **reduplication,** and the new word is considered as a **repetitive compound**. Total reduplication is fairly frequent in Indonesian, Tojolabal (Mexico), Hausa (Sudan), and Hawaiian. For example, in Tojolabal [-otʃ] means 'to enter', [-otʃotʃ] 'to enter little by little'. (cf. Nida, 1949). Similarly, in Indonesian, total reduplication is used to form the plural of nouns, as in [rumah] 'house', [rumahrumah] 'houses'; [ibu] 'mother' [ibuibu] 'mothers'; [lalat] 'fly', [lalatlalat] 'flies'. In Hawaiian, *holo* means 'run', *holoholo* 'go for a walk or ride'; *lau* means 'leaf', *laulau* 'leaf food package'.

If only a part of the root or stem is repeated, the process is called **partial reduplication,** and the repeated portion is called a **reduplicative**. Such reduplicatives may occur preposed, interposed, and postposed to the root or stem (cf. Nida, 1949); however, reduplica-

tives are more common word-initially and word-medially. Partial reduplication is fairly-common in Snohomish and Tagalog.

In English, partial reduplication is a little bit more common than total reduplication. Quirk et al. (1985) refer to the words formed by either type of reduplication as **reduplica-tives** (also called '**jingles**'). As an example of total reduplication, they give *bye-bye, goody-goody* ('a self-consciously virtuous person'). As to partial reduplication, they say that the constituents of the reduplicatives may differ in the initial consonants, as in *walkie-talkie,* or in the medial vowels, e.g., *criss-cross.* The same authors add that most reduplicatives are highly informal or familiar, and many belong to the sphere of child-parent talk, e.g., *din-din* (dinner').

Quirk et al. (1985) in addition state that the most common uses of reduplicatives are the following:

  a. To imitate sounds, e.g., *rat-a-tat* (knocking on door), *tick-tack* (of a clock), *ha-ha* (of laughter), *bow-wow* (of dog).
  b. To suggest alternating movements, e.g., *see saw, flip-flop, ping-pong.*
  c. To disparage by suggesting instability, nonsense, insincerity, vacillation, etc., e.g., *higgledy-piggledy, hocus-pocus, wishy-washy, dilly-dally, shilly-shally, willy-nilly.*
  d. To intensify, e.g., *teeny-weeny, tip-top.*

E. Suppletion

Suppletion consists in a complete change in the form of a root (i.e., a word) or in the replacement of root by another morphologically unrelated root with the same component of meaning in different grammatical contents (cf. Richards et al., 1985; Byrne, 1978; Pei, 1966). For example, *good* and *well* change to *better* and *best* in the comparative and super-lative. Similarly, *bad* and *badly* change to *worse* and *worst.* Likewise, *be* changes to *am, are,* and *is* in the present; *am/is* change to *was* and *are* to *were* in the past. Another example is *go* which changes to *went* in the past. As can be seen, this process yields completely ir-regular forms. Suppletive forms help to fill gaps in grammatical paradigms of the language (cf. Pei, 1966).

Word-Formation Processes in English

In English, the following processes have been used in the formation of new words. No-tice that such processes are not necessarily of a morphological nature.

A. Acronymy

Acronymy is the process whereby a new word is formed from the initial letters of the constituent words of a phrase or sentence. For example, from the initial letters of the words of the phrase <u>N</u>orth <u>A</u>tlantic <u>T</u>reaty <u>O</u>rganization, the word *NATO* / ˈneɪtəʊ/ is formed. Similarly, from the initial letters of the constituent words of the phrase <u>u</u>nidentified <u>f</u>lying <u>o</u>bject, the word *UFO* /ˌjuːef ˈəʊ/ (or/ ˈ juːfəʊ/) is formed. In a like manner, from the con-stituent words of the sentence <u>I</u> <u>o</u>we <u>you,</u> the word *IOU* / ˌaɪəʊˈjuː/ (notice the adaptation in

spelling) is formed. And from the *Situation normal, all fouled up*, *snafu* /snæˈfuː/ (army slang) is formed. The words created by this process are called **acronyms**; all of them function as nouns.

Types of Acronyms

According to Quirk et al. (1985), there are two main types of acronyms, namely:

1. Acronyms which are pronounced as a word; e.g., *NASA* / ˈnæsə/ (= National Aeronautics and Space Administration*)*, *radar* / ˈreɪˌdɑːr/ *radar* / ˈreɪˌdɑːr/ (radio detecting and ranging), laser (= light amplification by stimulated emission of radiation), *UNESCO* /juːˈneskəʊ/ (= United Nations Educational, Scientific and Cultural Organization), *BASIC* / ˈbeɪsɪk/ (= Beginners' All-purpose Symbolic Instruction Code), COBOL / ˈkəʊbɒl/ (Common Business Oriented Language*)*, etc

As can be seen, acronyms of this type often derive from phrasal names. Many of them belong to the **jargon** (i.e., specialized language) of particular occupations, organizations or fields of study (esp. scientific, administrative, political) and might be completely meaningless to the persons who are not familiarized with them. Notice also that some of these acronyms are of so frequent an occurrence that people often use them without the slightest idea of what the words stand for; e.g., *laser, radar*.

2. Acronyms which are pronounced as sequences of letters (also called **'alphabetisms'**); e.g., *C.O.D.* / ˌsiːəʊˈdiː/ (*= cash on delivery*), *MIT* / ˌemaɪˈtiː/ (= Massachusetts Institute of Technology), *VIP* / ˌviːaɪˈpiː/ (= very important person). In writing, the more institutionalized formations have no periods between their component letters. This tendency is especially more common in British English than in American English; e.g., *DIY* / ˌdiːaɪˈwaɪ/ (= do-it-yourself), *FBI* / ˌefbiːˈaɪ/ (= Federal Bureau of Investigations).

Note that each constituent letter of these acronyms usually represents a full word or constituent in the compound, or just a part of a word, as in the following examples: *TB* / ˌtiːˈbiː/ (= tuberculosis), *TV* /ˌtiːˈviː/ (= television), *c/o* (= (in) care of).[6] Likewise, notice that some of these acronyms are given a quasi-phonetic written form; e.g., *Emcee* for *M.C.* (= Master of Ceremonies), *Deejay* for *DJ* (= disc jockey), etc.

B. Clipping

Clipping is the processes whereby new words are formed by shortening other words; i.e., by eliminating the initial part, the last part, or both parts, of those words. E.g., *phone* from (*tele)phone*, *plane* from *(air)plane, ad (advert (*BrE*))* from *ad(vertisement)*, *exam* from *exam(ination), flu* from *(in)flu(enza), fridge*(esp. BrE) from *refrigerator.*

Notice that the short form or **clipping** represents the word in its entirety; however, that fragment does not have to be the salient part of the original word, neither prosodically nor semantically. Also, the clipping may not be used in the same contexts as the longer word. For example, the word *exam* is mostly used to refer to academic examinations or tests, not to medical examinations or check-ups.

---

[6] In fact, some acronyms are not often read as a sequence of letters but preferably as the words they stand for; for example, *e.g.* is read *for example*; *i.e.* is read *that is, namely*; *c/o* is read *(in) care of*, and so on.

Clipped forms generally show a certain tone of informality, which is often reflected in their spellings; e.g., *showbiz* for *showbusiness*, *'cause* (*'cuz* or *cos*) for *because*, *praps* for *perhaps*. Note that in some cases the spelling is adapted to suit the pronunciation of the original word, as in *mike* for *microphone*, *Mike* for *Michael*, *nark* for *narcotics*, *bike* for *bicycle*. In other cases, the pronunciation changes, as in soc /ˈsɑk/ (BrE) for *society* /səˈsaɪəti/. Still in other cases, neither spelling nor pronunciation changes as in *veg* /ˈvedʒ/ for *vegetable* (or *veggies* /ˈvedʒiz/ for *vegetables*). Also, some clipped forms retain a final –**s** present in the original longer forms, as in *maths* (esp. BrE) for *mathematics*, *specs* for *spectacles*. The tone of informality of some clippings is usually lost when they become well established in the language; e.g., *plane, stereo* (from *stereophonic*), *taxi* (from *taxicab*), *cab* (from *cabriolet*), *pram* (BrE for *perambulator*) and so on.

In many long-established cases, the fuller form is rarely used or is not ordinarily known, as in *omnibus* for *bus* and *mobile vulgus* for *mob* (cf. Quirk et al., 1985). Other common clippings are *cosec* /ˈkəʊsek/ from *cosecant* /kəʊˈsiːkənt/ (in trigonometry), *demo* for *demonstration, Doc* from *Doctor, Ed* from *Education, French fries* (AmE) from *French fried potatoes, gas* from *gasoline, gents* from *gentlemen's room* (lavatory)*, gym* from *gymnasium, lab* from *laboratory, lib* form *liberation* as in Women's Liberation Movement*, mart* from *market, nark* from *narcotics (agent), photo* from *photograph, prof* from *professor*, *pseud* (BrE) from *pseudo (-intellectual)*, *lit* from *literature, pub* from *public house, Stat* from *Statistics, telly* (BrE) from *television*, *hanky* from *handkerchief*, *tec or dick* from *detective, turps* (BrE) from *turpentine*, *van* from *caravan* (or *vanguard),* etc.[7]

C. Blending

Blending is the process whereby new words are formed by combining parts of two words, usually the beginning of one word and the end of another (cf. Godby et al,. 1982). For example, *smog* (smoke + fog), *brunch* (breakfast + lunch), *heliport* (helicopter + airport), *motel* (motor + hotel), *FORTRAN* (formula translation), etc. Notice that enough of each word is normally retained so that the complex whole remains fairly readily analyzable.

Following is a partial list of other common blends: *breathalyzer* (breath + analyzer), *electrocute* (electro + execute)*, Eurovision* (European + television), *multiversity* (multiple + university), *newscast* (news + broadcast), *paratroops* (parachute + troops), *telecast* (television + broadcast), *travelogue* (travel + catalogue), *telex* (teleprinter + exchange). According to Quirk et al. (1985), acronymy, clipping and blending are three highly productive ways in which **abbreviation** (i.e., the shortening of words) is involved in English word-formation.

D. Borrowing

Borrowing is the process whereby new words are formed by adopting words from other languages together with the concepts or ideas they stand for (cf. Brun, 1983; Pei 1966). E.g., *tango, mango, taco, burrito* from Spanish; *fiancé, very* (adapted from Old French *verai*), *garage* from French; *pizza, mafia* from Italian; and so on. Usually, the pronunciation and morphology of the **borrowings** (**borrowed terms** or **loanwords**) are adapted to the phonology and morphology of the **host language** (i.e., the language which

---

[7] Abbreviations such as *Dr.* for Doctor*, Mr.* for *Mister, etc.* for *etcetera* could also be considered as clippings.

adopts the terms); e.g., *guerrilla* /ɡəˈrɪlə/ (English), /ɡeˈīija/ (Spanish); *banana* /bəˈnænə/ (English), /baˈnana/ (Spanish); *mango* (sing), *mangoes* (pl.) (English), *mangos* (Spanish).

It is important to remark that, in many cases, words are borrowed due to historic occurrences, such as conquests and invasions, or to geographical proximity. The borrowed term may substitute for a native term or may live along with the native term in different social contexts. E.g., *beginning* and *début* (French), *donkey* and *burro* (Spanish). However, the most common reason for a language to borrow words is to fill lexical and semantic gaps, i.e., to express new concepts and ideas for which the borrowing language has no terms, such as in the fields of science, politics, culture (esp. cooking and music); e.g., *guerrilla, taco, tango, piano, junta, matador, arena, cole slaw* (Dutch)*, alcohol, radio,* etc.

E. Back-formation

Back-formation is the process by which new words are formed by the deletion of a supposed affix from an already existing word (cf. Quirk et al., 1985; Fromkin & Rodman, 1983; Richards et al. 1985). For example, the verbs *peddle, edit, hawk, enthuse, stoke, swindle, televise, donate, sculpt, buttle* have been created form the pre-existing nouns *peddler, editor, hawker, enthusiasm, stoker, swindler, television, donation, sculptor* and *butler*, respectively. The nouns have been thought to be derivatives of verbs on the analogy of cases such as *revision, creation, formation, transmission*, to name a few, which are true derivatives form the verbs *revise, create, form, transmit*, respectively. Notice that this process normally involves the transformation of one part of speech into another.

F. Word Coinage

Word coinage (or **invention**) is the process whereby new words are created outright, either deliberately or accidentally, to fit some purpose. Usually, words are **coined** to express new ideas, processes, products, etc. in the language. For example, brand names such as *Xerox, Kodak, Exxon, Kleenex,*[8] *Nylon, Dacron*, etc.; *pooch, snob, nerd, blurb, googol,* etc.

It is worth pointing out that the invention of new words is sometimes based on existing words, such as *Jell-o* on *gel, Kleenex* on *clean*. Many acronyms such as *Cobol, laser*, etc. are based on phrases for which they stand. However, words are more often created out of thin air, i.e., without basing on any other pre-existing word.

G. Functional shift

Functional shift (**conversion** or **zero derivation**) is the process by which new words are created by using a word in new functions (i.e., by shifting, changing or converting its original grammatical class to another class), without any change in its form (cf. Godby et al., 1982; Byrne, 1978; Pei, 1966). For example, when the word *water* is used in the following sentence *Give me some water, please* it is used as a noun, which is probably its original (and more common) use. But when *water* is used in the sentence *The children water the plants every morning,* it is used in a new syntactic function, namely, as a verb, and no

---

[8] Sometimes brand names are used in a **generic** way to refer to the product itself, or to a process; e.g., a *kleenex* is a facial tissue, *to xerox* is to photocopy, and so on.

change in spelling or pronunciation has been made. In other words, the grammatical category of the word *water* has shifted from noun to verb.

Another example of this process is the use of the word *walk* in the following sentences:
a. *If the shop isn't too far away, we can walk over there.*
b. *I take a walk around the block every evening.*

In (a), *walk* is used as a verb (probably its most common use); in (b), it is used as noun. As we can see, the very same word *walk*, without undergoing any change in its spelling or pronunciation, passed from verb to noun.

Among the changes in pronunciation are the following:

1. **Voicing of final consonant sounds**. The final consonant sounds in some nouns, usually the unvoiced fricatives /f,θ,s/, are voiced to /v,ð,z/, respectively, in the corresponding verb forms. For example:

Noun →	Verb	Noun →	Verb
abuse /-s/	abuse /-z/	relief /-f/	relieve /-v/
advice /-s/	advise /-z/	shelf /-f/	shelve /-v/
house /-s/	house /-z/	thief /-f/	thieve /-v/
use /-s/	use /-z/	mouth /-θ/	mouth /-ð/
belief /-f/	believe /-v/	sheath /-θ/	sheathe /-ð/
grief /-f/	grieve /-v/	wreath /-θ/	wreathe /-ð/
half /-f/	halve /-v/		

In the examples that follow, besides voicing of the final consonant, there is a substantial change of pronunciation (esp. of the internal vowel sound):

Noun →	Verb
breath /breθ/	breathe /briːð/
bath /bæθ/ (or /bɑːθ/)	bathe /beɪð/
glass /ɡlæs/ (or /ɡlɑːs/)	glaze /ɡleɪz/

2. **Shift of stress and vowel reduction**. When two- (or three-) syllable verbs are converted into nouns, the primary stress is sometimes shifted from the second to the first syllable. The first syllable, typically a Latin prefix, often has the reduced vowel /ə/ (or /ɪ/) in the verb form but a full vowel in the noun form. Following is a fairly complete list of such words. The transcription provided below is quite standard; however, the stress distribution may be different in American English and British English. Likewise, in some cases, the reduced vowel in the first syllable of the verb may be pronounced as a full vowel.

	Verb	Noun		Verb	Noun
abstract	/əb'strækt/	/ 'æb ˌstrækt/	incense	/ɪn'sens/	/ 'ɪnˌsens/
accent	/ək'sent/	/ 'ækˌsent/	incline	/ɪn'klaɪn/	/ 'ɪnˌklaɪn/
address	/ə'dres/	/ 'ædres/	increase	/ɪn'kriːs/	/ 'ɪnˌkriːs/
combine	/kəm'baɪn/	/ 'kɑmˌbaɪn/	insult	/ɪn'sʌlt/	/ 'ɪnˌsʌlt/
compound	/kəm'paʊnd/	/ 'kɑmˌpaʊnd/	misprint	/mɪs'prɪnt/	/ 'mɪsˌprɪnt/
compress	/kəm'pres/	/ 'kɑmˌpres/	perfume	/pər'fjuːm/	/ 'pɜːrˌfjuːm/
concert	/kən'sɜːrt/	/ 'kɑnˌsɜːrt/	overflow	/əʊvər'fləʊ/	/ 'əʊvərˌfləʊ/
conduct	/kən'dʌkt/	/ 'kɑnˌdʌkt/	permit	/pər'mɪt/	/ 'pɜːrˌmɪt/
confine	/kən'faɪn/	/ 'kɑnˌfaɪn/	pervert	/pər'vɜːrt/	/ 'pɜːrˌvɜːrt/
conflict	/kən'flɪkt/	/ 'kɑnˌflɪkt/	produce	/prə'djuːs/	/ 'prɑˌdjuːs/
conscript	/kən'skrɪpt/	/ 'kɑnˌskrɪpt/	progress	/prə'gres/	/ 'prɑgres/
consort	/kən'sɔːrt/	/ 'kɑnˌsɔːrt/	protest	/prə'test/	/ 'prəʊˌtest/
construct	/kən'strʌkt/	/ 'kɑnˌstrʌkt/	rebel	/rɪ'bel/	/ 'rebɫ/
consult	/kən'sʌlt/	/'kɑnˌsʌlt/	record	/rɪ'kɔːrd/	/ 'rekərd/
contest	/kən'test/	/ 'kɑnˌtest/	refill	/rɪ'fɪl/	/ 'riːˌfɪl/
contrast	/kən'træst/	/ 'kɑnˌtræst/	refit	/rɪ'fɪt/	/ 'riːˌfɪt/
convert	/kən'vɜːrt/	/ 'kɑnˌvɜːrt/	refund	/rɪ'fʌnd/	/ 'riːˌfʌnd/
convict	/kən'vɪkt/	/ 'kɑnˌvɪkt/	regress	/rɪ'gres/	/ 'riːˌgres/
decrease	/dɪ'kriːs/	/ 'diːˌkriːs/	resit	/rɪ'sɪt/	/ 'riːˌsɪt/
dictate	/dɪk'teɪt/	/ 'dɪkˌteɪt/	retail	/rɪ'teɪl/	/ 'riːˌteɪl/
digest	/də'dʒest/	/ 'daɪˌdʒest/	segment	seg'ment/	/ 'segˌment/
discard	/dɪs'kɑːrd/	/ 'dɪsˌkɑːrd/	survey	/sər'veɪ/	/ 'sɜːrˌveɪ/
discount	/dɪs'kaʊnt/	/ 'dɪsˌkaʊnt/	suspect	/sə'spekt/	/ 'sʌspekt/
discourse	/dɪ'skɔːrs/	/ 'dɪskɔːrs/	torment	/tɔːr'ment/	/ 'tɔːrˌment/
envelop	/ɪn'veləp/	/ 'envəˌləup/	transfer	/ˌtræns'fɜːr/	/ 'trænsˌfɜːr/
escort	/ɪ'skɔːrt/	/ 'eskɔːrt/	transform	/ˌtræns'fɔːrm/	/ 'trænsˌfɔːrm/
export	/ ɪk'spɔːrt/	/ 'ekˌspɔːrt/	transplant	/ˌtræns'plænt/	/ 'trænsˌplænt/
extract	/ɪk'strækt/	/ 'ekˌstrækt/	transport	/ˌtræns'pɔːrt/	/ 'trænsˌpɔːrt/
ferment	/fər'ment/	/ 'fɜːrˌment/	upset	/ʌp'set/	/ 'ʌpˌset/
import	/ɪm'pɔːrt/	/ 'ɪmˌpɔːrt/			
impress	/ɪm'pres/	/ 'ɪmˌpres/			

It is important to note that in the cases just presented, the noun and verb forms do not always have the same **semantic range** (i.e., applications, uses, meanings or senses). That is to say, words are usually converted to another class in some specific senses, not in all of them. For example, *paper* can only be a verb when it refers to 'covering a wall with wallpaper', as in *We have to paper the walls of your bedroom;* we do not say 'to paper a research'. Moreover, when there are two words that could be converted, only the lexical item of more general meaning lends itself to conversion. For example, you can say 'to *carpet* a bedroom' but not 'to *rug* a bedroom' (cf. Quirk et al., 1985).

---

[9] In British English, /'rekɔːd/.

In addition to the many examples mentioned above, there are many examples of disyllabic verb-noun pairs that do not differ in stress. For example, *debate* /dɪˈbeɪt/ (n. & v.) and *result* /rɪˈzʌlt/ (n. & v.) both have syllable-final stress. Similarly, *contact* / ˈkɑnˌtækt/ (n. & v.) and *process* / ˈprɑses/ (n. & v.) both have word-initial stress, as is usual when the noun gives rise to the verb (cf. Quirk et al., 1985).

Other Cases of Conversion

Following are some other common cases of conversion (cf. Quirk et al., 1985):
1. **Conversion to noun**
   a. **From verbs**: answer, attempt, bet, blow-out, bore, catch, cheat, coach, cover, desire, dismay, divide, doubt, drive-in, fall, find, hand-out, hit, laugh, lay-by, lift, love, raise, release, retreat, rise, search, show-off, shut-down, smell, stand-in, swim, taste, throw, turn, walk, want, wrap, walk-out, wrench, etc.
   b. **From adjectives (1)**: bitter (type of beer), comic, daily (newspaper), final (race), marrieds (married people), natural (a naturally skilled player), roast, red, regular (customer), wet, etc.
   c. **From adjectives (2)**:[10] (the) ignorant, (the) poor, (the) poorest, (the) rich, (the) wealthy, (the) wealthier, (the) wicked, etc.
   d. **From closed-class words**: buts, downs, how, ifs, a must, ups, why, etc.
   e. **From affixes**: isms.
   f. **From phrases**: also-rans, been-to, do's and don'ts, down-and-out, free-for-all, has-been, high-ups, know-it-all, low-down, etc.
2. **Conversion to verb**
   a. **From nouns**: baby, bicycle, boat, bottle, brake, butter, canoe, carpet, catalogue, cash, chaperon, coat, commission, core, corner, cripple, elbow, father, fiddle, finger, floor, garage, glue, grease, group, gut, hand, knife, mail, mask, mother, motor, muzzle, nurse, oil, parrot, peel, pit, pilot, plaster, porch, position, rack, shelve, skin, etc.
   b. **From adjectives**: calm, calm down, dirty, dry, empty, humble, lower, narrow, sober up, smooth out, soundproof, weary, yellow, etc.
3. **Conversion to adjectives from nouns**: (in both predicative and attributive position) brick, cotton, nylon, reproduction (furniture), wool, Worcester (porcelain), etc.

H. Morphological Misanalysis

Morphological misanalysis (or **false etymology**) is the process whereby new morphemes or words are introduced into the language due to an erroneous analysis of the structure of some words, in which the language speaker seems to see or hear familiar ele-

---

[10] This kind of conversion is called **partial conversion** because a word of one grammatical class appears in a function that is characteristic of another word class (Quirk et al., 985). When these 'nouns' are subjects, the main verb must be in the plural form; e.g. *The rich live in large houses, and they travel a lot.* Likewise, they have plural **referents**.

ments (cf. Godby et al., 1982). For example, the suffix **–burger** results from misanalyzing the word *hamburger* as if it were composed of the word *ham* plus *–burger*. In fact, the word *hamburger* is a one-morpheme word and is short for *Hamburger steak*. The "suffix" **–burger** has since been used to form new words which refer to other types of food; namely, *cheeseburger, pizzaburger, salmonburger, steakburger.*

Similarly, the word *alcoholic* has been misanalyzed as if it contained the suffix **-(a)holic**, and this has been used in the formation of words such as *workaholic* (= addict to work), *sugarholic*. In a like manner, the word *bikini* has been misanalyzed as if it had the prefix **bi-,** as in *bipolar* or *binational,* plus the "suffix" **–kini**. This misanalysis has given rise to the word *monokini*, which contains the prefix **mono-** as in *monophonic* or *monogamy*. The word *bikini* comes from the name of the Bikini Atolls in the Marshal Islands, near New Zealand.

I. Eponymy

Eponymy is the process by which a number of words for places, inventions, activities, etc. have been derived from (or based on) the proper names of persons somehow connected with such places, inventions, activities, etc. For example, *Washington, D. C.* has been named for George Washington and *District of Columbia* for Christopher Columbus. Other **name words** are *kaiser* and tsar for Julius Caesar; *ohm* for George Simon Ohm; *watt* after James Watt; *sandwich* after the 4th Earl of Sandwich; *jumbo (jet)* after the name of a huge elephant taken to the US by P. T. Barnum; *denim* for de Nimes (France), *picasso* for the famous painter Picasso, and so on.

APPENDIX

Table 1. Suffixes that change the grammatical class of the words they are attached to.

Noun-forming suffixes:					*Adjective-forming suffixes:*				
v	**+**	**~**	**=**	**n**	**v**	**+**	**~**	**=**	**adj.**
assist	+	-ance	=	assistance	eat	+	-able	=	eatable
assist	+	-ant	=	assistant	reduce	+	-ible	=	reducible
confide	+	-ence	=	confidence	differ	+	-ent	=	different
confide	+	-ent	=	confident	signify	+	-ant	=	significant
permute	+	-ation	=	permutation	act	+	-ive	=	active
compete	+	-ition	=	competition	compulse	+	-ory	=	compulsory
attend	+	-tion	=	attention					
confess	+	-ion	=	confession	**n**	**+**	**~**	**=**	**adj.**
adhere	+	-sion	=	adhesion	fashion	+	-able	=	fashionable
employ	+	-ee	=	employee	response	+	-ible	=	responsible
work	+	-er	=	worker	magic	+	-al	=	magical
act	+	-or	=	actor	planet	+	-ary	=	planetary
beg	+	-ar	=	beggar	affection	+	-ate	=	affectionate
develop	+	-ment	=	development	disease	+	-ed	=	diseased
observe	+	-(at)ory	=	observatory	gold	+	-en	=	golden
close	+	-ure	=	closure	Burma	+	-ese	=	Burmese
break	+	-age	=	breakage	picture	+	-esque	=	picturesque
type	+	-ist	=	typist	peace	+	-ful	=	peaceful
survive	+	-al	=	survival	dictator	+	-ial	=	dictatorial
					poet	+	-ic	=	poetic
adj.	**+**	**~**	**=**	**n**	child	+	-ish	=	childish
young	+	-ster	=	youngster	tree	+	-less	=	treeless
industrial	+	-ist	=	industrialist	god	+	-like	=	godlike
crude	+	-ity	=	crudity	coward	+	-ly	=	cowardly
dry	+	-ness	=	dryness	poison	+	-ous	=	poisonous
free	+	-dom	=	freedom	quarrel	+	-some	=	quarrelsome
					praise	+	-worthy	=	praiseworthy
					dust	+	-y	=	dusty
					Brazil	+	-ian	=	Brazilian

Verb-forming suffixes:									
v	**+**	**~**	**=**	**v**	**n**	**+**	**~**	**=**	**v**
black	+	-en	=	blacken	beauty	+	-ify	=	beautify
solid	+	-ify	=	solidify	computer	+	-ize	=	computerize
					length	+	-en	=	lengthen

Table 2: Prefixes that change the grammatical class of the words they are attached to.

~	+	**n**	=	**adv.**
a-	+	bed	=	abed

~	+	**v**	=	**adv.**
a-	+	sleep	=	asleep
a-	+	singing	=	a-singing

~	+	**n**	=	**v**
be-		friend		befriend
en-	+	danger	=	endanger
em-	+	power	=	empower

~	+	**adj.**	=	**v**
be-		little	+	belittle
en-	+	large	=	enlarge

Table 3: Suffixes that do not change the grammatical class of the words they are attached to.

n	+	**~**	=	**n**	*Meaning of Morpheme*
lemon	+	-ade	=	lemonade	
Mexico	+	-an	=	Mexican	
Africa	+	-ana	=	Africana	'collection of facts, objects, etc. related to'
discipline	+	-arian	=	disciplinarian	'practice of'
function	+	-ary	=	functionary	
director	+	-ate	=	directorate	
boot	+	-ee	=	bootee	'diminutive'
mountain	+	-eer	=	mountaineer	'person concerned with the **n**'
philosophy	+	-er	=	philosopher	'practicer of'
fish	+	-ery	=	fishery	'place where an action is carried out'
cook	+	-ery	=	cookery	'art of, practice of'
snob	+	-ery	=	snobbery	
rival	+	-ry	=	rivalry	'state, quality, character of'
journal	+	-ese	=	journalese	'in the (literary) style of'

n	+	**~**	=	**n**	*Meaning of Morpheme*
lion	+	-ess	=	lioness	'female of **n**'
cigar	+	-ette	=	cigarette	'diminutive'
usher	+	-ette	=	usherette	'female'
flannel	+	-ette	=	flannelette	'imitation'
hand	+	-ful	=	handful	'amount that fills'
boy	+	-hood	=	boyhood	'status, rank, condition of life'
mathematics	+	-ian	=	mathematician	'specialist in'

16

music	+	-ian	=	musician	
dog	+	-ie	=	doggie	'pet name or familiar name'
pig	+	-y	=	piggy	
hero	+	-ism	=	heroism	'showing qualities typical of'
Buddha	+	-ism	=	Buddhism	'specific doctrine, principle or movement'
drama	+	-ist	=	damatist	'agent of an **–ize** verb' (e.g. dramatize)
king	+	-dom	=	kingdom	'domain'
pound	+	-worth	=	poundsworth	'using the amount of'
tobacco	+	-ist	=	tabacconist	'person concerned with a specific activity'
Labor	+	-ite	=	Laborite	'follower, devotee of a person or organization'
pig	+	-let	=	piglet	'diminutive'
duck	+	-ling	=	duckling	'diminutive'
hire	+	-ling	=	hireling	'person connected with' (used dispairingly)
country	+	-man	=	countryman	'dweller in'
milk	+	-man	=	milkman	'somebody connected by a specific activity to'
fish	+	-monger	=	fishmonger	'somebody who deals in'
song	+	-ster	=	songster	'somebody connected with the **n**'
land	+	-scape	=	landscape	'a stretch of scenery'
friend	+	-ship	=	friendship	'a state of being, status, office'
musician	+	-ship	=	musicianship	'skill, proficiency as'
photograph	+	-y	=	photography	'system of'

adj.	+	~	=	**adj.**	
outer	+	-most	=	outermost	'superlative of **adj.**, very'
two	+	-fold	=	twofold	'of (so many) parts'
red	+	-ish	=	reddish	'somewhat, near to'

17

Table 4: Derivational prefixes that do not change the grammatical class of the words they are attached to.

a-	/eɪ-, ə-, æ/	'not, without': *amoral; aseptic; atheist (n.).*
ante-	/æntɪ-/	'in front of': *anteroom;* 'before, previous to': *antenatal.*
anti-	/æntɪ-/	1. 'opposed to, against': *antisocial; antiseptic;* 2. 'instead of': *anti-hero.*
arch-	/ɑːrk-, ɑːrtʃ-/	'first, chief, head': *archetype; archbishop.*
audio-	/ɔːdiəʊ-/	'of hearing, of sound': *audiovisual; audio-frequency.*
be-	/bɪ-/	1. (~ + v = v) 'all over, all around, in all directions': *bedeck; bespatter.* 2. (~ + n or adj. = v) 'make, become': *befriend; belittle.* 3. (~ + v_intr = v_tr): *bemoan; bewail.*
bi-	/baɪ-/	1. 'occurring twice in a period': *bi-monthly; bi-annual.* 2. 'occurring once in a period of two': *bicentenary; biennial.* 3. 'having two': *biped; bilingual.*
by-, bye-	/baɪ-/	'of secondary importance; incidental': *by-election; bye-law; by-product.*
co-	/kəʊ-/	'together, jointly, equally': *cohabit; co-author; co-operate; co-education.*
de-	/diː-, dɪ-/	(used with a v.) 'the negative, reverse, opposite of': *depopulate; defrost; defuse.*
dis-	/dɪs-/	(used with a v.) 'the negative, reverse, opposite of': *disbelieve; disorder; disagree.*
equi-	/iːkwɪ-, ekwɪ-/	'equal, the same': *equidistant; equivalent.*
ex-	/ɪks-, eks-, ɪgz-, egz-/	1. 'out, out of, from': *exclaim; extract.* 2. /eks-/ 'former, at one time': *ex-wife, ex-president.*
extra-	/ekstrə-/	1. 'outside, beyond': *extra-marital, extrasensory.* 2. 'very': *extra-thin.*
fore-	/fɔːr-/	'before, in front of': *foretell; foreground.*
hyper-	/haɪpər-/	'to a large or extreme degree': *hypercritical; hypersensitive.*
in-, il-, im-, ir-	/ɪn-, ɪl-, ɪm-, ɪr-/	1. (~ + v = v or n) 'in, on': *intake; imprint.* 2. (~ + adj. = adj.) 'not': *infinit; illicit; immoral; irrelevant.*
inter-	/ɪntər-/	'between, from one to another': *international; interplanetary.*
intra- intro-	/ɪntrə-/	'inside': *intravenous; intra-uterine; introspection.*
mal-	/mæl-/	'bad, wrong, not': *maladjustment; malnutrition.*
mis-	/mɪs-/	'bad, wrong, not': *misconduct; misdirect; mistrust.*
multi-	/mʌltɪ-/	'many': *multistage; multicolored.*
neo-	/niːə-/	'new, revived, later': *neologism; neo-classical.*
non-	/nɒn-/	'bit': *nonsense; non-stop.*
out-	/aʊt-/	1. 'located outside': *outhouse; outpost.* 2. 'surpassing to a greater extent': *outnumber; outmaneuver.* 3. 'with the various senses of* **out**': *outcry; outspoken.*
over-	/əʊvər-/	1. 'across, above': *overland; overhead.* 2. 'to excess, too

		much': *overcharge; overwork.* 3. 'with the various senses of **over**': *overthrow; overpower.*
pan-	/pæn-/	'all, throughout': *panchromatic; Pan-African.*
photo-	/fəʊtə-, fə'tɒ-/	1. 'of light': *photoelectric.* 2. 'of photography': *photocopy; photogenic.*
physi(o)-	/fɪzi(ə)-/	'of the body, of living things': *physiotherapy; physiology.*
poly-	/pɒli-/	'many': *polygamy; polysyllabic.*
post-	/pəʊst-/	'after': *postcript; posthumous; post-graduate.*
pre-	/prɪ-/	'before': *prefabricate; premature; pre-recorded.*
pro-	/prəʊ-/	1. 'supporting, in favor of': *pro-Chinese; pro-revolutionary.* 2. 'acting as': *pro-Vice-Chancellor.*
proto-	/prəʊtə-/	'first, original, basic': *prototype; protoplasm.*
pseudo-	/suːdə-/	'false, fake': *pseudonym; pseudo-intellectual.*
psycho-	/saɪkə(ʊ)-/	'of the mind': *psychiatry; psycho-analysis.*
quasi-	/kweɪsaɪ-/	'almost, seemingly': *quasi-serious; quasi-explanation.*
re-	/riː-/	'again': *re-echo; reinstate.*
retro-	/retrəʊ-/	'backwards, behind': *retrospective; retro-rocket.*
self-	/self-/	'of one's self, alone': *self-taught; self-service.*
semi-	/semi-/	'half, partially, midway': *semi-circular; semi-detached; semi-final.*
sub-	/sʌb-/	1. 'under': *subway; subsoil.* 2. 'secondary, lower in rank': *sub-committee; sub-species.* 3. 'not quite': *sub-tropical; sub-normal.* 4. (~ + v) 'secondary repetition': *sublet; subdivide.*
super-	/suːpər-/	1. 'above, over': *super-structure; superimpose.* 2. 'superior to, more than': *superhuman; supernatural.*
trans-	/trænz-/	1. 'across': *transatlantic; trans-continental.* 2. 'to a changed state': *transplant; transform.*
tri-	/traɪ-/	'three': *triangle; tricolor.*
un-	/ʌn-/	1. (used with an adj. or n.) 'not': *unable; untruth.* 2. (used with v.) 'negative, reverse, opposite of': *uncover; unpack.*
under-	/ʌndər-/	1. 'located beneath': *undercurrent; undergrowth.* 2. 'not enough': *underestimate; undersized.* 3. 'lower in rank, im-portance': *undersecretary; understudy.*
uni-	/juːni-/	'one, the same': *uniform; unisex.*
up-	/ʌp-/	'to a higher or better state': *uphill; upgrade.*
vice-	/vais-/	'somebody who is next in rank to and may act for another': *vice-consul; vice-president.*
ultra-	/ʌltrə-/	'beyond; to excess': *ultraviolet; ultra-liberal.*
well-	/wel-/	(~ + pp. of v. = adj.) 1. 'fortunately': *well-born.* 2. 'properly, thoroughly': *well-informed; wellworn.*

Table 5: Derivational prefixes that change the grammatical class of the words they are attached to.

a-	/ə-/	1. (~ + n. = adv.) 'in': *abed;* 'on, at': *afield; ashore.* 2. (~ + v. = adv.) 'in the state of, in the process of': *asleep, ablaze.* 3. (old use) (~ + gerund = adv.) 'in the act of': *a-running; a-singing.*
be-	/bɪ-/	(~ + n. or adj. = v) 'make, become': *befriend; belittle.*
en-, em-	/ɪn-, en-; ɪm-, em-/	1. (~ + n. = v) 'put in, on': *encase; endanger; enplane.* 2. (~ + n. or adj. = v.) 'make into, cause to be': *enlarge; enrich; em-power.*

Table 6: Derivational prefixes that are attached to bound roots to form content words.

ab-	/æb-, əb-/	'from, away from': *absent; abduct.*
ad-	/əd-, æd-/	'to, towards': *advance; adjoin.*
aero-	/erə-/	'of aircraft': *aerodynamics; aeronaut.*
ambi-	/æmbɪ-/	'both, double, two': *ambiguous; ambi-dextrous.*
an-	/æn-, ən-/	'not, without': *anaesthetic; anonymous.*
anthropo-	/ænθrəpə-/	'of man; of mankind': *anthroopoid; an-thropology.*
astro-	/æstrə-/	'of the stars, of outer space': *astronomy; astronaut.*
biblio-	/bɪbliə-/	'of books': *bibliography; bibliophile.*
bio-	/baɪə-/	'of life, of living organisms': *biography; biology; biotic.*
centi-	/sentɪ-/	'a hundred, a hundredth': *centigrade; centimeter.*
chrono-	/krɒnə-/	'of time': *chronology; chronometer.*
con-, col-, com-, cor-	/kɒn-, kən-; kəl-; kɒm-, kəm-; kɒr-, kər-/	'with, together': *conduct; collaborate; combine; correlate.*
contra-	/kɒntrə-/	'against; opposite to': *contraception; contradict.*
demi-	/demɪ-/	'half, partly': *demimonde; demigod.*
di-	/daɪ-, dɪ-/	'twice, double': *dilemma; dioxide.*
dia-	/daɪə-/	'through, across': *diameter; diagonal; diaphragm.*
electro-	/ɪlektrə-/	'concerned with, caused by electricity': *electrocute; electromagnet.*
geo-	/dʒiːə-/	'of the earth': *geography; geology.*
hemo-, haemo-	/hiːmə-, hemə-/	'of the blood': *hemoglobin; hemor-rhage.*
hetero-	/hetərə-/	'the other, the opposite, different': *het-erogeneous; heterosexual.*

homo-	/hɒmə-, həʊmə-/	'the same': *homogenous; homosexual.*
hydro-	/haɪdrə-/	'of water': *hydrant; hydro-electric.*
macro-	mækrə(ʊ)-/	'relatively large; extending': *macro-cosm; macrobiotic.*
matri-	/mætrɪ-, meɪtrɪ-/	'mother': *matriarch; mat-ricide.*
mega-	/megə-/	1. 'large': *megalith.* 2. 'one million': *megaton.*
micro-	/maɪkrə(ʊ)-	1. 'relatively small': *micro-film; micro-wave.* 2. 'of examining or reproducing small quantities': *micro-scope; micro-phone.*
milli-	/mɪlɪ-/	'a thousandth part of': *milligram; milli-meter.*
mono-	/mɒnə(ʊ)-/	'one, a single': *monosyllable; monotone.*
neuro-	/nʊrə-/	'of the nervous system': *neuralgia; neu-rology.*
ortho-	/ɔːrθə-/	'correct, standard': *orthodox; orthopae-dic.*
paleo-, pa-laeo-	/pælɪə-/	'of ancient times': *paleolithic; paleon-tology.*
patri-	/peɪtrɪ-,pætrɪ-/	'father': *patriarch; patricide.*
phono-	/fə(ʊ)nə-	'of sound': *phonetic; phonology.*
socio-	/səʊsɪə(ʊ)-, səʊʃɪə(ʊ)-	'of society': *sociology; socio-economic.*
sym-, syn-	/sɪm-, sɪn-/	'sharing with, together': *sympathy; syn-chronize.*
techno-	/tekn(ɒ)-/	'of applied science': technocracy; tech-nology.
tele-	/telɪ-, telə-/	'of linking across distances': *telepathy; television.*
theo-	/θiː(ɒ)-/	'of God': *theocracy; theology.*
thermo-	/θɜːrmə-/	'of heat, of temperature': *thermostat; thermometer.*

Table 7: Derivational suffixes that do not change the grammatical class of the words they are attached to.

-ade	/-eɪd/	*lemonade*
-ana, iana	/-ænə, -ɪænə/	'collection of facts, objects, etc.; relating to': *Africana*
-arian	/-erɪən/	'practicer of': *disciplinarian; vegetarian.*
-ate	/-ət, -ɪt/	*directorate*
-cide	/-saɪd/	'killing, killer': *suicide; insecticide.*

-cracy	/-krəsi/	'government or rule by, class characterized by': *democracy; aristocracy.*
-crat	/-kræt/	'member or supporter of a **–cracy**': *democrat; aristocrat.*
-(a)cy	/-(ə)si/	'condition, quality': *accuracy; infancy; supremacy.*
-ee	/-iː/	'diminutive': *bootie; coatee.*
-eer	/-ɪər/	'person concerned with the **n**': *auctioneer; mountaineer.*
-er	/-ər/	'practicer of': *astronomer; philosopher.*
-ese	/-iːz/	'in the (literary) style of': *journalese; officialese.*
-ess	/-əs, -ɪs, -es/	'female': *lioness; actress; mistress.*
-ette	/-et/	1. 'diminutive': *cigarette; kitchenette.* 2. 'female': *usherette; suffragette.* 3. 'imitation': *flannelette; leatherette.*
-fold	/-fəʊld/	1. 'multiplied by': *tenfold; hundredfold.* 2. 'of (so many) parts': *twofold.*
-form	/-fɔːrm/	'having the shape or character of': *uniform; cuneiform.*
-gamy	/-gəmi/	'of marriage': *monogamy; polygamy.*
-gon	/-gɒn/	'angles, corner': *polygon; pentagon.*
-gram	/-græm/	'something written down or drawn': *telegram; monogram; diagram.*
-graph	/-græf; grɑːf/	'something written down, of writing': *autograph; telegraph.*
-graphy	/-grəfi/	*calligraphy; orthography.*
-ful	/-fʊl/	'amount that fills': *handful; mouthful; spoonful.*
-hood	/-hʊd/	'status, rank, condition of life': *boyhood; brotherhood.*
-ian	/-ɪən/	1. 'belonging to': *Brazilian; Shakespearean.* 2. 'specialist in': *optician, pediatrician; mathematician.*
-ics	/-ɪks/	'science or specific activity': *physics; politics; athletics.*
-ide	/-aɪd/	'chemical compound': *chloride; sulphide.*
-ie, -y	/-ɪ/	'pet name or familiar name': *piggy; doggie; Susie.*
-ish	/-ɪʃ/	'somewhat, near to': *reddish; twentyish.*
-ism	/-ɪzəm/	1. 'showing qualities typical of': *Americanism; heroism.* 2. 'specific doctrine, principal or movement': *Buddhism; Communism.*
-ist	/-ɪst/	1. 'agent of an **–ize** verb': *dramatist; publicist.* 2. 'follower, practicer of an **–ism**': *industrialist; fascist.* 3. 'person concerned with a specific activity or thing': *tobacconist; motorist.*
-ite	/-aɪt/	1. 'follower, devotee of a person or organization': *Laborite.* 2. 'specific chemical substance': *anthracite; dynamite.*
-itis	/-aɪtɪs/	'inflammation of': *appendicitis; tonsilitis.*
-let	/-lət/	'diminutive': *piglet; booklet.*
-ling	/-lɪŋ/	1. 'diminutive': *duckling; fledgling.* 2. 'person connected with (often used disparingly)': *hireling; underling.*
-log(ue)	/-lɒg/	'something spoken': *dialogue; monologue; travelogue.*
-logy	/-lədʒi/	'branch of learning': *biology; sociology.*
-man	/-mən, -mæn/	1. 'dweller in': *Irishman; countryman.* 2. 'somebody connected by a specific activity to': *guardsman; doorman; businessman;*

		milkman.
-mania	/-meɪnɪə/	'abnormal behavior, excessive enthusiasm': *kleptomania; bibliomania.*
-manic	/-meɪniæk/	'somebody affected by a –**mania**': *kleptomaniac.*
-meter	/-mɪtər, miːtər/	1. 'a means of measuring': *speedometer; kilometer.* 2. 'a part of a meter': *centimeter.*
-monger	/-mʌŋgər/	'somebody who deals in': *fishmonger; scandalmonger.*
-most	/-məʊst/	'superlative; very': *inmost; outermost.*
-oid	/-ɔɪd/	'resembling in shape': *asteroid; rhomboid.*
-osis	/-əʊsɪs/	'a process, change': *hypnosis; metamorphosis.*
-phile	/-faɪl/	'lover of something in excess': *Anglophile; bibliophile.*
-philia	/-fɪlɪə/	'excessive love of': *Anglophilia; bibliophilia.*
-phobe	/-fəʊb/	'fearer of': *xenophobe.*
-phobia	/-fəʊbɪə/	'excessive fear of': *claustrophobia; xenophobia.*
-phobic	/-fɒbɪk/	'fearful in excess of': *claustrophobic; xenophobic.*
-phone	/-fəʊn/	'means of reproducing a sound': *megaphone; telephone.*
-phonic	/-fɒnɪk/	'relating the means of reproducing sounds': *stereophonic.*
-scape	/-skeɪp/	'a stretch of scenery': *landscape; moonscape.*
-scope	/-skəʊp/	'means of observing or showing': *microscope; stroboscope.*
-ship	/-ʃɪp/	1. 'a state of being, status; office': *friendship; ownership; professorship.* 2. 'skill, proficiency as': *musicianship; scholarship.*
-sphere	/-sfɪər/	'spherical, of a sphere': *hemisphere; atmosphere.*
-ster	/-stər/	1. 'somebody connected with the **n**': *songster; gangster.*
-tude	/-tuːd/	'condition': *magnitude; exactitude.*
-ule	/-juːl/	'relative smallness': *capsule; globule.*
-worth	/-wɜːrθ, wərθ/	'using the amount of': *poundsworth; daysworth.*

Reference:

Zapata Becerra, A. A. (2000). <u>Handbook of general and applied linguistics</u>. Trabajo de Ascenso sin publicar. Mérida, Venezuela: Escuela de Idiomas Modernos, Universidad de Los Andes.