File 5.4

Word Formation Processes

Language Files: Materials for an Introduction to Language & Linguistics

In the previous files of this section on morphology, we have been looking at how words are put together out of smaller parts. We have seen that English makes use of derivational morphemes to create more words than would exist with only free morphemes. Of course, English is not the only language that enlarges its vocabulary in this way. When linguists observe a language which uses the combining of bound and free morphemes to form additional words, they note that the occurring combinations are systematic, i.e., rule-governed, as we have certainly seen is the case in English. To illustrate, recall that the prefix *un-*, meaning 'not', attaches only to adjectives, the prefix *re-* attaches only to verbs, and the suffix *-ful* attaches only to nouns. Because these combinations are rule-governed, we can say that a *process* is at work, namely, a **word formation process**, since new words are being formed. What we will consider in this file are the ways in which languages create new words from bound and free morphemes. There are other ways in which new words come into use in a language, but they will be discussed in Files 10.6 and 10.7, under Historical Linguistics.

Before describing some of the word formation processes found in the world's languages, we must first address the question, in what sense is it meant that new words are being "formed"? Do we mean that every time a speaker uses a morphologically complex word that the brain reconstructs it? Some linguists would maintain that this is the case. They would claim that in a speaker's mental dictionary, called the **lexicon**, each morpheme is listed individually, along with other information such as its meaning, its part of speech (if a free morpheme), and possibly a rule naming what it can combine with, if it is a bound morpheme. Thus, each time a word is used, it is re-formed from the separate entries in the lexicon. However, there is evidence that indicates this is not actually the case; even morphologically complex words apparently have a separate entry in the adult lexicon. There are other reasons, though, to consider *derivation* a process of word formation. A linguist analyzing a language uses the term *formation* to mean that the lexicon of a language includes many items that are systematically related to one another. Speakers of a given language, however, are also often aware of these relationships. We see evidence of this when new words are formed based on patterns that exist in the lexicon. For example, a speaker of English may never have heard words such as *unsmelly, smellness,* or *smellful* before, but he or she would certainly understand what they mean. The word *stick-to-it-ive-ness* causes some prescriptivists to wail; why create this new word when a perfectly good word, *perseverance,* already exists? This word illustrates that speakers of a language have no problem accessing the patterns in their lexicons and applying them for new creations. Thus, the term *formation* is applicable. Rules that speakers actually apply to form words that are not currently in use in a language are termed **productive**. English has examples of nonproductive morphemes as well; for example, the suffix *-tion* is not used by speakers to form new nouns, whereas the suffix *-ness* is.

Affixation

Words formed by the combination of bound affixes and free morphemes are the result of the process of **affixation**. Although English uses only prefixes and suffixes, many other languages use **infixes** as well. Infixes are inserted within the root morpheme. Note that English really has no infixes. At first glance, some students think that *-ful* in a word like *doubtfully* is an infix because it occurs in the middle of a word. Recall from File 5.3, however, that *doubtfully* has a hierarchical structure that indicates that the

-ly suffix attaches not to the affix *-ful* but rather to a complete word, *doubtful*. Thus *-ful* attaches to the word *doubt* as a suffix and does not break up the morpheme *doubt*. Tagalog, one of the major languages of the Philippines, uses infixes quite extensively. For example, the infix *-um-* is used to form the infinitive form of verbs:

Verb Stem		*Infinitive*	
[sulat]	*write*	[sumulat]	*to write*
[bili]	*buy*	[bumili]	*to buy*
[kuha]	*take, get*	[kumuha]	*to take, to get*

Compounding

Compounding is a process that forms new words not from bound affixes but from two or more independent words. The words that are the parts of the compound can be free morphemes, words derived by affixation, or even words formed by compounding themselves. Examples in English of these three types include:

girlfriend	air conditioner	lifeguard chair
blackbird	looking glass	aircraft carrier
textbook	watch maker	life insurance salesman

Notice that in English compound words are not represented consistently in the orthography. Sometimes they are written together, sometimes they are written with a hyphen, and sometimes they are written separately. We know, however, that compounding forms *words* and not just syntactic phrases, regardless of how the compound is spelled, because the stress patterns are different for compounds. Think about how you would say the words *red neck* in each of the two following sentences:

1. The wool sweater gave the man a red neck.
2. If you want to make Tim really angry, call him a redneck.

Compounds that have words in the same order as phrases have primary stress on the first word only, while individual words in phrases have independent primary stress. Some other examples are listed below. (Primary stress is indicated by ´ on the vowel.)

Compounds	*Phrases*
bláckbird	bláck bírd
mákeup	máke úp

Other compounds can have phrasal stress patterns, but only if they can't possibly be phrases. These same compounds might also have stress on the first word only, like other compounds. For example:

eásy-góing	eásy-going
mán-máde	mán-made
hómemáde	hómemade

German is one of the many languages that also use compounding to form new words. Some examples of the numerous compounds in German are:

Muttersprache	'native language'	< 'mother tongue'
Schreibtisch	'desk'	< 'writing table'
stehenbleiben	'stand (still)'	< 'stay remain'
Wunderkind	'child prodigy'	< 'miracle child'
Geschwindigkeitsbegrenzung	'speed limit'	< 'speed limit'

Reduplication

Reduplication is a process of forming new words either by doubling an entire free morpheme (**total reduplication**) or part of it (**partial reduplication**). English makes use of reduplication very sporadically. Some English examples are *higglety-pigglety*, *hoity-toity*, and *hocus-pocus*. However, note that these partial reduplications are not a single morpheme. Other languages, however, do make use of reduplication more extensively. Indonesian uses total reduplication to form the plurals of nouns:

Singular		*Plural*	
[rumah]	*house*	[rumahrumah]	*houses*
[ibu]	*mother*	[ibuibu]	*mothers*
[lalat]	*fly*	[lalatlalat]	*flies*

Tagalog uses partial reduplication to indicate the future tense:

Verb Stem		*Future Tense*	
[bili]	*buy*	[bibili]	*will buy*
[kain]	*eat*	[kakain]	*will eat*
[pasok]	*enter*	[papasok]	*will enter*

In conjunction with the prefix *-maŋ* (which often changes the initial consonant of a following morpheme to a nasal with the same place of articulation as the original initial consonant), Tagalog uses reduplication to derive words for occupations:

[mamimili]	*a buyer*	< /maŋ +bi+bili/	(cf. [bili] *buy*)
[manunulat]	*a writer*	< /maŋ +su+sulat/	(cf. [sulat] *write*)
[maŋʔiʔisda]	*a fisherman*	< /maŋ +ʔi+ʔisda/	(cf. [ʔisda] *fish*)

Morpheme-internal Changes

Besides adding an affix to a morpheme or copying all or part of the morpheme to make new words or make morphological distinctions, it is also possible to make morpheme-internal modifications. There are a few examples of this in English.

1. Although the usual pattern of plural formation is to add an inflectional morpheme, some English plurals make an internal modification:

man	men
woman	women
goose	geese
foot	feet

2. The usual pattern of past and past participle formation is to add an affix, but some verbs also show an internal change:

ring	rang	rung
sing	sang	sung
swim	swam	swum

   Some verbs show both an internal change and the addition of an affix to one form:

break	broke	broken
bite	bit	bitten

3. Some word class changes are also indicated only via internal changes:

strife	strive
teeth	teethe
breath	breathe
life	live (V)
life	live (adj.)

Suppletion

Languages that employ morphological processes to form words will usually have a regular, productive way of doing so according to one or more of the processes discussed above. They might also have some smaller classes of words that are irregular because they mark the same morphological distinction by another of these processes. Sometimes, however, the same distinction can be represented by two different words that don't have any systematic difference in form—they are exceptions to all of the processes. This completely irregular situation is called **suppletion** and usually occurs only in a few words of a language.

   In English, for example, the regular past tense is formed by the ending realized by the allomorphs [t], [d], or [əd]. Most English verbs, and any newly made-up words such as *scroosh* or *blat*, will have this past tense form:

[wak]	*walk*	[wakt]	*walked*
[skruš]	*scroosh*	[skrušt]	*scrooshed*
[blæt]	*blat*	[blætəd]	*blatted*

There are also some smaller classes of very common words that form the past tense by an internal vowel change:

[sɪŋ]	*sing*	[sæŋ]	*sang*
[rʌn]	*run*	[ræn]	*ran*

But a small number of individual verbs have **suppletive** past tenses:

[æm]	*am*	[wʌz]	*was*
[go]	*go*	[wɛnt]	*went*

Note that there is no systematic similarity between the past and present tense forms of these verbs.

Classical Arabic provides another example of suppletion (as could most languages). The normal plural form for nouns ending in [at] in Arabic involves the lengthening of the vowel of this ending (a morpheme internal change):

[diraːsat]	*(a) study*	[diraːsaːt]	*studies*
[harakat]	*movement*	[harakaːt]	*movements*

There are also some irregular plurals of nouns ending in [at] that involve other internal changes:

[ǰumlat]	*sentence*	[ǰumal]	*sentences*
[fikrat]	*thought*	[fikar]	*thoughts*

However, the plurals of other forms are clearly cases of suppletion, for example:

[marʔat]	*woman*	[nisaːʔ]	*women*

Exercises

1. Imagine for a moment that *-ful* is an infix in English. How would it attach to a morpheme like hope? What would the entire word look like? (Note that there are two possibilities.)

2. Think up other examples of suppletion in English. (Hint: start with some common adjectives.)