

# 6 Morphology

BAMBIFICATION: The mental conversion of flesh and blood living creatures into cartoon characters possessing bourgeois Judeo-Christian attitudes and morals.

Coupland (1991)

Throughout Chapter 5, we approached the description of processes involved in word formation as if the unit called the "word" was always a regular and easily identifiable form, even when it is a form such as *bambification* that we may never have seen before. This doesn't seem unreasonable when we look at a text of written English, since the "words" in the text are, quite obviously, those sets of things marked in black with the bigger spaces separating them. Unfortunately, there are a number of problems with using this observation as the basis of an attempt to describe language in general, and individual linguistic forms in particular.

## Morphology

In many languages, what appear to be single forms actually turn out to contain a large number of "word-like" elements. For example, in Swahili (or Kiswahili, spoken throughout East Africa), the form *nitakupenda* conveys what, in English, would have to be represented as something like *I will love you*. Now, is the Swahili form a single word? If it is a "word," then it seems to consist of a number of elements that, in English, turn up as separate "words." A rough correspondence can be presented here:

ni-	ta-	ku-	penda
I	will	you	love

It would seem that this Swahili "word" is rather different from what we think of as an English "word." Yet there clearly is some similarity between the languages, in that similar elements of the whole message can be found in both. Perhaps a better way of looking at linguistic forms in different languages would be to use this notion of "elements" in the message, rather than depend on identifying only "words."

The type of exercise we have just performed is an example of investigating basic forms in language, known as **morphology**. This term, which literally means "the study of forms," was originally used in biology, but since the middle of the nineteenth century has also been used to describe the study of all those basic "elements" used in a language. What we have been describing as "elements" in the form of a linguistic message are technically known as "morphemes."

## **Morphemes**

We do not actually have to go to other languages such as Swahili to discover that "word forms" may consist of a number of elements. We can recognize that English word forms such as *talks*, *talker*, *talked* and *talking* must consist of one element *talk*, and the other four elements -s, -er, -ed and -ing. All these elements are described as **morphemes**. The definition of a morpheme is "a minimal unit of meaning or grammatical function." Units of grammatical function include forms used to indicate past tense or plural, for example. So, we can take words apart, as shown in Table 6.1 with *re-new-ed* and *tour-ist-s*, to reveal the different elements in their morphology.

TABLE 6.1

Morphemes: minimal units of meaning	or grammatical function
re- ("again") new ("recently made")	-ed (past tense)
tour ("travel for pleasure") -ist ("person who")	-s (plural)

#### Free and Bound Morphemes

Looking at the examples in Table 6.1, we can make a broad distinction between two types of morphemes. There are free morphemes, that is, morphemes that can stand by themselves as single words, for example, *new* and *tour*. There are also **bound morphemes**, which are those forms that cannot normally stand alone and are typically attached to another form, exemplified as *re-*, *-ist*, *-ed*, *-s*. These forms were described in Chapter 5 as affixes. So, we can say that all affixes (prefixes and suffixes) in English are bound morphemes. The free morphemes can generally be identified as the set of separate English word forms such as basic nouns, verbs, adjectives and adverbs. When they are used with bound morphemes attached, the basic word forms are technically known as **stems**. For example:

undressed			carelessness		
un-	dress	-ed	care	-less	-ness
prefix	stem	suffix	stem	suffix	suffix
(bound)	(free)	(bound)	(free)	(bound)	(bound)

We should note that this type of description is a partial simplification of the morphological facts of English. There are a number of English words, typically derived from Latin, in which the element treated as the stem is not a free morpheme. In words such as receive, reduce and repeat, we can identify the bound morpheme re- at the beginning, but the elements -ceive, -duce and -peat are not separate word forms in English and hence cannot be free morphemes. These types of forms are sometimes described as "bound stems."

#### Lexical and Functional Morphemes

What we have described as free morphemes fall into two categories. The first category is that set of ordinary nouns (girl, house), verbs (break, sit), adjectives (long, sad) and adverbs (never, quickly) that we think of as the words that carry the "content" of the messages we convey. These free forms are called lexical morphemes. We can add new lexical morphemes to the language rather easily, so they are treated as an "open" class of words.

Other types of free morphemes are called **functional morphemes**. Examples are articles (a, the), conjunctions (and, because), prepositions (on, near) and pronouns (it, me). Because we almost never add new functional morphemes to the language, they are described as a "closed" class of words.

#### **Derivational Morphemes**

The set of affixes that make up the category of bound morphemes can also be divided into two types. One type is described in Chapter 5 in terms of the derivation of words. These are **derivational morphemes**. We use these bound forms to make new words or to make words of a different grammatical category from the stem. For example, the addition of the derivational morpheme *-ment* changes the verb *encourage* to the noun *encouragement*. The noun *class* can become the verb *classify* by the addition of the derivational morpheme *-ify*. Derivational morphemes can be suffixes like *-ment* and *-ify* and also prefixes, such as *re-*, *pre-*, *ex-*, *mis-*, *co-*, *un-*.

#### Inflectional Morphemes

The second set of bound morphemes contains **inflectional morphemes** (or "inflections"). These are not used to produce new words in the language, but rather to indicate the grammatical function of a word. Inflectional morphemes are used to show if a word is plural or singular, past tense or not, and if it is a comparative or possessive form. English has only eight inflectional morphemes, all suffixes.

Jim's two sisters are really different.

One likes to have fun and is always laughing.

The other enjoyed school as a child and has always been very serious.

One is the loudest person in the house and the other is quieter than a mouse.

In the first sentence, both inflections are attached to nouns, marking possessive (-'s) and plural (-s). There are four inflections attached to verbs: -s (3rd person singular, present tense), -ing (present participle), -ed (past tense) and -en (past participle). Two inflections attach to adjectives: -er (comparative) and -est (superlative).

There is some variation in the form of these inflectional morphemes. For example, the possessive sometimes appears as a plural form -s' (those boys' bags) and the past participle is often -ed (they have talked already). Table 6.2 has a summary.

TABLE 6.2

	Nouns	Verbs	Adjectives
Derivational	critic-ism	critic-ize	critic-al
	encourage- <b>ment</b>	class-ify	wonder-ful
Inflectional	Jim-'s	like- <b>s,</b> laugh- <b>ing</b>	quiet- <b>er</b>
	sister- <b>s</b>	enjoy- <b>ed</b> , be-e <b>n</b>	loud-est



### **Morphological Description**

The difference between derivational and inflectional morphemes is worth emphasizing. An inflectional morpheme never changes the grammatical category of a word. For example, both *old* and *older* are adjectives. The *-er* inflection here (from Old English *-ra*) simply creates a different version of the adjective. However, a derivational morpheme can change the grammatical category of a word. The verb *teach* becomes the noun *teacher* if we add the derivational morpheme *-er* (from Old English *-ere*). So, the suffix *-er* in Modern English can be an inflectional morpheme as part of an adjective and also a distinct derivational morpheme as part of a noun. Just because they look the same (*-er*) doesn't mean they do the same kind of work.

Whenever there is a derivational suffix and an inflectional suffix used together, they always appear in that order. First the derivational (-er) is attached to teach, then the inflectional (-s) is added to produce teachers. Armed with all these terms for different types of morphemes, we can now take most sentences of English apart and list all the "elements." For example, in the sentence The teacher's wildness shocked the girls' parents, we can identify thirteen morphemes.

The	teach	-er	-'s	wild	-ne	ess
functiona	l lexical	derivational	inflectio	nal lexical	deriva	tional
shock	-ed	the	girl	-s <b>'</b>	parent	<b>-s</b>
lexical	inflectional	functional	lexical	inflectional	lexical	inflectional

A useful way to remember all these different types of morphemes is presented in Figure 6.1.

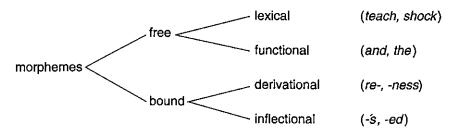


Figure 6.1

## Morphs, Allomorphs and Special Cases

The rather neat chart presented in Figure 6.1 conceals a number of outstanding problems in the analysis of English morphology. The inflectional morpheme -s is added to cat and we get the plural cats. What is the inflectional morpheme that makes sheep the plural of sheep, or men the plural of man? These two words are clearly exceptions to the general pattern and have to be treated as special cases.

One way to describe more regular differences in inflectional morphemes is by proposing variation in morphological realization rules. In order to do this, we draw an analogy with processes already noted in phonology (Chapter 4, page 45). Just as we treated phones as the actual phonetic realization of phonemes, so we can propose morphs as the actual forms used to realize morphemes. For example, the form *cats* consists of two parts,  $/k\omega t/ + /-s/$ , with a lexical morpheme ("cat") and an inflectional morpheme ("plural"). The words *dogs* and *horses* also consist of two parts, /dog/ + /-z/ and /hors/ + /-az/, each consisting of a lexical morpheme and an inflectional morpheme ("plural"). So we have at least three forms (/-s/, /-z/ and /az/) used to realize the inflectional morpheme "plural." Just as we noted that there were "allophones" of a phoneme, so we can recognize the existence of allomorphs of a morpheme, again using the prefix "allo-" (= one of a closely related set). The three allomorphs of the one morpheme ("plural") are shown in Table 6.3.

TABLE 6.3

Morpheme	Allomorphs	
	/-s/	("cat <u>s</u> ")
plural	/-z/	("dog <u>s</u> ")
	/-ə <b>z/</b>	("hors <u>es</u> ")

Returning to our special cases, we could propose that there may be a "zero-morph" involved when we add the "plural" morpheme to a word like *sheep*, so that the plural of *sheep* can be analyzed as /ʃip/ + / $\bigcirc$ /, adding another form (/ $\bigcirc$ /) to the set of allomorphs of "plural." When we add "plural" to /mæn/, we could have a vowel change in the word ( $\alpha \to \epsilon$ ) as the morph that produces the "irregular" plural form *men*. However, it is more likely that we treat the two forms /mæn/ and /mɛn/ as two distinct lexical morphemes.

There is a similar pattern in the way "past tense" is realized in English. The inflectional suffix -ed is used in the typical derivation: flirted, hugged and kissed. The irregular forms are like separate lexical morphemes: go/went, be/was/were. See Task C, on page 81, for more on the allomorphs of past tense in English.