***Morphology***

***Introduction***

 The range of constructions that is studied by grammar is very large, and grammarians have often divided it into sub-fields. The oldest and most widely- used division is that between morphology and syntax.

***What is morphology?***

 Morphology is a branch in grammar. It is the study of the internal structure of words, and of the rules by which words are formed. Therefore, it is the study and the analysis of the structure ( morpheme), forms(size) and classes( adj , adv, n, v ..) of a word.

e.g., unhappiness un- happy- ness

horses horse –s

talking talk-ing

yes yes

 *Yes* has no internal structure. We could analyse its constituent sounds, /j/, /e/, /s/, but none of these has a meaning in isolation. By contrast, *horse, talk, happy* plainly have a meaning, as do the elements attached to them (the affixes): *un*-carries a negative meaning; --*ness* expresses plural; and –*ing* helps to convey a sense of duration. The smallest meaningful elements into which words can be analysed are known as morphemes; and the way morphemes operate in language provides the subject matter of morthology.

3 We’ll ignore the change of *y* to *i*, a convention of English spelling.

**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 a number of other elements such as -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. In the sentence The police reopened the investigation, the word reopened consists of three morphemes. One minimal unit of meaning is open, another minimal unit of meaning is re- (meaning “again”) and a minimal unit of grammatical function is -ed (indicating past tense). The word tourists also contains three morphemes. There is one minimal unit of meaning tour, another minimal unit of meaning -ist (marking “person who does something”), and a minimal unit of grammatical function -s (indicating plural).

***Recognition of Morphemes***

 Speakers of a language have the knowledge to perceive the component morphemes of a word since their mental grammars include a mental lexicon of morphemes and the morphological rules for their combination.

 Suppose you didn’t know English and were a linguist from the planet Mars wishing to analyze the language. How would you discover the morphemes of English? How would you determine whether a word in that language had one, two, or more morphemes?

 The first thing to do would be to ask a native speaker how they say various words.

Assume you are talented in mining and manage to collect the following sets of paradigms of forms:

Adjective meaning

Ugly very unattractive

Uglier more ugly

Ugliest most ugly

Pretty nice looking

Prettier more nice looking

Prettiest most nice looking

Tall large in height

Taller more taller

Tallest most tall

 To determine what the morphemes are in such a list, the first thing a field linguist would do is to see if there are forms that mean the same thing in different words, that is, to look for recurring forms.

- Compare between different forms.

-Look for utterances which are partially the same.

 We find:

Ugly occurs in ugly – uglier – ugliest all the three words include the meaning very unattractive

Er occurs in prettier and taller adding the meaning more to the adjective to which it is attached

Est occurs in prettiest and tallest adding the meaning most to the adj to which it is attached

Furthermore, by asking the native speaker additional questions we find that er and est do not occur in isolation with the meanings of more and most

Thus, we conclude ugly root morpheme

 Pretty root morpheme

 Tall root morpheme

Er bound morpheme (comparative)

Est bound morpheme (superlative)

 As we proceed we find other words that end with-**er**( singer, lover, writer, teacher..)in which the –er ending does not mean “comparative” but when attached to a verb, changes to a noun who ‘verbs’(e.g., sing, loves, writes, teaches..). So we conclude that this is a different morpheme even though it is pronounced the same as the comparative. We go on we find words like *number, somber, umber, butter, member* and many others in which the erhas no separate meaning at all-a *somber* is not “one who sombs and a *member* does not memb- and therefore these words must be monomorphemic.

**Classification of Morphemes:**

**Free and bound morphemes** :

From these examples, 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, open 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. 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, adjectives, verbs, etc. When they are used with bound morphemes attached, the basic word forms are technically known as stems. For example:

undressed (prefix stem suffix/ (bound) (free) (bound))

carelessness (stem suffix suffix/ (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 in which the element treated as the stem is not, in fact, 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 and hence cannot be free morphemes. These types of forms are sometimes described as “bound stems” to keep them distinct from “free stems” such as dress and care.

**Lexical and functional morphemes**:

 What we have described as free morphemes fall into two categories. The first category is that set of ordinary nouns, adjectives and verbs that we think of as the words that carry the “content” of the messages we convey. These free morphemes are called lexical morphemes and some examples are: girl, man, house, tiger, sad, long, yellow, sincere, open, look, follow, break. 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 and, but, when, because, on, near, above, in, the, that, it, them. This set consists largely of the functional words in the language such as conjunctions, prepositions, articles and pronouns. Because we almost never add new functional morphemes to the language, they are described as a “closed” class of words.

Derivational and inflectional morphemes :

The set of affixes that make up the category of bound morphemes can also be divided into two types. One type is described are the derivational morphemes. We use these bound morphemes to make new words or to make words of a different grammatical category from the stem. For example, the addition of the derivational morpheme -ness changes the adjective good to the noun goodness. The noun care can become the adjectives careful or careless by the addition of the derivational morphemes -ful or -less. A list of derivational morphemes will include suffixes such as the -ish in foolish, -ly in quickly, and the -ment in payment. The list will also include prefixes such as re-, pre-, ex-, mis-, co-, unand many more.

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

Jim’s two sisters are really different. One likes to have fun and is always laughing. The other liked to read as a child and has always taken things seriously. One is the loudest person in the house and the other is quieter than a mouse. In the first sentence, both inflections (-’s, -s) are attached to nouns, one marking possessive and the other marking plural. Note that -’s here is a possessive inflection and different from the -’s used as an abbreviation for is or has (e.g. she’s singing, it’s happened again). There are four inflections attached to verbs: -s (3rd person singular), -ing (present participle), -ed (past tense) and -en (past participle). There are two inflections attached to adjectives: -er (comparative) and -est (superlative). In English, all the inflectional morphemes are suffixes.

Noun + -’s, -s Verb + -s, -ing, -ed, -en Adjective + -er, -est There is some variation in the form of these inflectional morphemes. For example, the possessive sometimes appears as -s’ (those boys’ bags) and the past participle as -ed (they have finished).

**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.

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 child’s wildness shocked the teachers, we can identify eleven morphemes.

The              child     -’s               wild           -ness       shock

functional lexical inflectional lexical derivational lexical

-ed                       the             teach          -er     -s

inflectional functional          lexical  derivational inflectional

A useful way to remember all these different types of morphemes is in the following chart.

|  |
| --- |
|                                            morphemes |
|                     bound |                      free |
| Derivational(re-, -ness) |      Inflectional-’s, -ed)  | Lexical(child, teach) | Functional(and, the) |
|  |  |  |  |

***Morphs and Allomorphs***

Any language has a register of morphemes.

 Sometimes the morpheme has one phonological form

e.g., landlyland /lænd/ + ly/lɪ/

friendly friend /frend/ + ly/lɪ/

The physical realizations of morphemes are called ***morphs, allomorphs or variants***. While morphemes remain ideal abstract units, the corresponding morphs may show some variation. These variations sound and look differently:

For example, the English past tense morpheme that we spell *-ed*has various morphs. It is realized as [t] after the voiceless [p] of *jump* (cf. *jumped*), as [d] after the voiced [l] of *repel* (cf. *repelled*), and as [ɪd] after the voiceless [t] of *root* or the voiced [d] of *wed* (cf. *rooted* and *wedded*).

 Ed

/t/ /d/ /ɪd/

Jumped repelled rooted- wedded

 The appearance of one morph over another in this case is determined by voicing and the place of articulation of the final consonant of the verb stem.

Let’s take another example, in English the plural morpheme is often shown in writing by adding**-s** to the end of a word. Sometimes this morpheme is pronounced /z/ ,/s/ or /ɪz/

s

/s/ /z/ /ɪz/

Cats dogs classes

/kæts/ /dᴅgz/ /klɑ:sɪz/

/s/, /z/ and /ɪz/ all have the same grammatical function in these examples, they all show plural; they are all allomorphs of the plural morpheme **s.**

In morphological transcription, morphs are commonly put in-between braces. The plural

morph in "cats" thus becomes {cat}+{s} in morphological transcription.

***Phonological and lexical Conditioning***

***Phonological Conditioning***

The sounds /s/,/z/ and /iz/ are all phonologically conditioned allomorphs of the English plural morpheme that is each allomorph occurs in predictable set of environment.

 /z/ occurs after most voiced phoneme as in dogs, lamps, bees.

 /s/ occurs after most voiceless phonemes as in cats or giraffes.

 /iz/ occurs after sibilants(s,ts..) as in horses, fishes.

Phonologically conditioned allomorphy

***Lexical Conditioning***

 Consider the following examples:

Sheep sheepsheep+ plural (zero morpheme)

Oxen oxox+ plural

Children childchild+ plural

Goose geese geese+plural

Men manman+plural

morphologically conditioned allomorphy

 Although these words function as plural in the same way as cat, horses and so on, they are not marked as plurals in the same way such lexically conditioned plurals don’t follow any specific rule. Each one has to be learned separately.

These words are syntactically equivalent to cats, horses.., because they fit in the same place in the sentence:

 The workers are making a lot of noise.

 Cats

 Sheep

 Oxen

***Other Problems of Morphemes Division***

 Different problem of morpheme division is presented by words such as:

Cranberry hamburger raspberry

-At first, they appear to consist of two morphemes: cran-berry rasp-berry

-At second, it is difficult to justify cran and rasp as independent morphemes( because we find cran only with berry not anywhere else). These elements occur only in these words. So, slitting up words seems unjustifiable.

 Linguists differ as to the solution they adopt the majority possibly regard cranberry as two morphemes in order to bring it in line with words such as blackberry.

Cran thus is regarded as a unique morpheme that is one which occurs only once.

 A different problem arises with words such as hamburger, most people regard it as devisable into two morphemes. But where does the division come?

Some people would suggest hamburg+er on the basis of cheeseburger or beefburger

Remembering that the hamburger was named the division should obviouslybe ham+burger

After Hamburg its town of origin

Nowadays burger seems to be treated as a suffix. It has been related to other word.

Most people forgot the German origin of this food, and historical consideration should never be taken into account in a descriptive analysis.