

Morphemic Analysis. Classification of morphemes.

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Abstract. Close observation and comparison of words clearly shows that a great many words have a composite nature and are made up of smaller units, each possessing sound-form and meaning. These are generally referred to as morphemes defined as the smallest indivisible two-facet language units. Like a word a morpheme is a two-facet language unit, an association of a certain meaning with a certain sound-pattern. Unlike a word a morpheme is not an autonomous unit and can occur in speech only as a constituent part of the word.

Key-words: allomorph, morpheme, morphemic analysis, monomorphemic words, polymorphemic words.

The basic unit at the morphemic level is the morpheme which is defined as the smallest language unit possessing both sound form and meaning. (The term morpheme is derived from two Greek morphemes: morphē meaning form and the suffix -eme that has been adopted by linguists to denote the smallest unit or the minimum distinctive feature, phoneme).

Thus we may see a certain similarity between morphemes and words. But unlike words morphemes are not independent or autonomous and are found in actual speech only as integral parts of the word (although some morphemes may be homonymous to words and even to sentences).

English words are composed of morphemes of different types. According to the role they play in constructing words, morphemes may be divided into:

1. root - morphemes,
2. affixation morphemes.

1. The root - morpheme is the main carrier (vehicle) of a given idea in a given language at a given stage of its development. A root may also be regarded as the ultimate constituent element which remains after the removal of all affixes and does not admit any further analysis. It is the lexical nucleus of the word having a very general and abstract lexical meaning common to a set of semantically related words constituting one word-family.

Root-morphemes are regarded as not possessing any grammatical meaning. Thus - heart - is the common root of the following family of words: heart, hearten, dishearten, hearty, heartily, heartless, heartiness etc.

Unlike the word heart, the root-morpheme - heart - possesses only the lexical meaning and does not possess the grammatical meaning of case and number observed in the word.

This absence of grammatical meaning is assumed to be one of the semantic features of root - morphemes distinguishing them from words and stems.

2. Affixation morphemes are subdivided either according to their function or according to their position

with respect to the root. According to their function there are inflectional and derivational affixes.

Inflections (endings) carry only grammatical meaning and are used to build only word-forms, e.g. the plural of nouns: a book - books, or the p.t. and the p.p. of verbs: to work - worked, whereas derivational affixes build various types of words, e.g. dark - darkness, use - useful, slow - slowly etc.

Lexicology is concerned only with derivational affixes. Unlike root-morphemes, most of the derivational affixes have the part-of-speech meaning, which makes them structurally very important as they specify the lexico-grammatical class the word belongs to. The lexical meaning of the derivational affixes is, as a rule, of a more generalizing character than that of the root-morphemes.

The suffix -er carries the meaning of the agent, the doer of the action the suffix - less denotes the lack or absence of something. But in most derivational morphemes the lexical and the part-of-speech meanings are so blended as to be practically inseparable, e.g. - er shows in addition to its lexical meaning that the word is a noun, - less that it is an adjective.

Affixation morphemes are subdivided according to their position into: prefixes, suffixes, infixes. Unlike roots, affixes are always bound forms.

A prefix is a derivational morpheme standing before the root and modifying meaning.

A suffix is a derivational morpheme following the stem and forming a new derivative in a different part of speech or a different word class.

An infix is an affix placed within the word, e.g. stand. The type is not productive.

Just as in words lexical meaning in morphemes may also be analysed into denotational and connotational components found in morpheme of different types. At least three more components of meaning may be observed in morphemes, namely: the differential, the functional and the distributional meaning.

Differential meaning is the semantic component that serves to distinguish one word from all others containing an identical morpheme. For example, in bookshelf the

morpheme - shelf serves to distinguish the word from such words as bookcase, bookcounter, etc.

Denotational and differential meanings in the morpheme -shelf in bookshelf are co-existent. In other cases, however, it is difficult or even impossible to find any denotational meaning in the morphemes and their meaning is said to be exclusively differential (at least synchronically).

For instance, if we assume that such words as deceive, receive, conceive, perceive consist of two morphemes -ceive and de-, re-, con-, per-, we shall not be able to assign denotational meaning to them, only a differential one.

Functional meaning can be found in derivational morphemes only. It may be defined as the carrier of the part-of-speech meaning, as e.g. the morpheme -ice in the word justice serves to transfer the adjectival part-of-speech meaning of the stem just- into that of noun. But as has been stated above in most derivational morphemes the lexical and part-of-speech meanings are blended.

Distributional meaning is the meaning of the order and arrangement of morphemes making up the word. It is found in all words containing more than one morpheme. A different arrangement of the same morphemes would make the word meaningless.

For example the word boyishness with a different pattern of morpheme distribution would turn into a meaningless string of sounds: nessishboy.

From the point of view of their independence, distinction is made between free and bound morphemes.

Free morphemes coincide with word-forms of independently functioning words.

Bound morphemes are those which do not coincide with separate word-forms.

Root-morphemes may be both bound and free. The root-morpheme desire- in the word undesirable is free, the root morphemes theor- in the words theory, theoretical, or horr- in horror, horrible, horrify are bound, as there are no identical word-forms. Most derivational morphemes e.g. -ness, -able, -er, un-, dis-, can be only bound.

Allomorphs

Morphemes may have different phonemic shapes. Thus in the word family or cluster please, pleasure, pleasant the root- morpheme is represented by the phonemic shapes [pli:z], [ple3], [plez]. Such morpheme variants are called allomorphs of that morpheme.

Another example of allomorphs is [pu3] / [pcv] in the words poor-poverty. (The term allomorph comes from Greek allos = other and morphe = form, i.e. another form, a variant of the form).

It is used in linguistic terminology to denote elements of a group whose members together constitute a structural unit of the language (allophones, allomorphs). Thus, for example: -ion/-tion/ -sion/ -ation are the positional variants of the same suffix.

They do not differ in meaning or function but show a slight difference in sound form depending on the final phoneme of the preceding stem. They are considered as

variants of one and the same morpheme and called its allomorphs.

Allomorph is also defined as a positional variant of a morpheme occurring in a specific environment and so characterized by complementary description.

Complementary distribution is said to take place, when two linguistic variants cannot appear in the same environment.

Different morphemes are characterized by contrastive distribution i.e. if they occur in the same environment they signal different meanings. The suffixes -able and -ed, for instance, are different morphemes, not allomorphs, because adjectives in -able mean 'capable of beings'.

Allomorphs will also occur among prefixes. Their form then depends on the initials of the stem with which they will assimilate. Two or more sound forms of a stem existing under conditions of complementary distribution may also be regarded as allomorphs, as, for instance, in the following examples: long a and length n.

Classification of words on the level of morphemic analysis

According to the number of morphemes words can be classified into monomorphemic and polymorphemic. Monomorphemic or root-words consist of only one root-morpheme, e.g. small, dog, man, give, etc. All polymorphemic words fall into the following subgroups: derived and compound words. Derived words are composed of one root-morpheme and one or more derivational morphemes, e.g. readable, outdo, disagreeable.

Compound words contain at least two root-morphemes, the number of derivational morphemes being insignificant. In compounds there can be only root-morphemes, as in snow-white, lamp-shade etc. and both root-and derivational morphemes, as in pen-holder, light-mindedness, etc.

According to some statistic word-counts made in different parts of speech, it has been found that derived words numerically constitute the largest class in the vocabulary: derived nouns comprise approximately 67 per cent of the total number, adjectives - about 86 per cent.

But if we take into consideration the frequency value of these words in actual speech, it will become clear that it is the root or monomorphemic words that occupy a predominant place in the English vocabulary. About 60 per cent of the total number of nouns and 62 per cent of adjectives in current use are root-words. Thus it is the root-words that constitute the foundation of the English vocabulary and are of the greatest importance in speech. Root-words also serve as basis for all types of word derivation and composition.

Principles of Morphemic Analysis

In most cases the morphemes structure of words is transparent enough and individual morphemes clearly stand out within the word. The segmentation of words is generally carried out according to the method of

Immediate and Ultimate Constituents. This method is based on the binary principle, i.e. each stage of the procedure involves two components the word immediately breaks into. At each stage these two components are referred to as the Immediate Constituents. Each Immediate Constituent at the next stage of analysis is in turn broken into smaller meaningful elements. The analysis is completed when we arrive at constituents incapable of further division, i.e. morphemes. These are referred to Ultimate Constituents.

A synchronic morphological analysis is most effectively accomplished by the procedure known as the analysis into Immediate Constituents (ICs). Immediate Constituents are the two meaningful parts forming a large linguistic unity.

The method is based on the fact that a word characterized by morphological divisibility is involved in certain structural correlations. To sum up: as we break the word we obtain at any level only ICs one of which is the stem of the given word. All the time the analysis is based on the patterns characteristic of the English vocabulary. As a pattern showing the interdependence of all the constituents segregated at various stages, we obtain the following formula:

un+ {[(econom- + -ic) + -al] + -ly}.

Breaking a word into its Immediate Constituents we observe in each cut the structural order of the constituents. A diagram presenting the four cuts described looks as follows:

1. un- / economically
2. un- / economical / -ly
3. un- / economic / -al / -ly
4. un- / econom / -ic / -al / -ly

A similar analysis on the word-formation level shows not only the morphemic constituents of the word but also the structural pattern on which it is built. The analysis of word-structure at the morphemic level must proceed to the stage of Ultimate Constituents.

For example, the noun friendliness is first segmented into the ICs: [frendli-] recurring in the adjectives friendly-looking and friendly and [-nis] found in a countless number of nouns, such as unhappiness, blackness, sameness, etc. The IC [-nis] is at the same time an UC of the word, as it cannot be broken into any smaller elements possessing both sound-form and meaning. Any further division of -ness would give individual speech-sounds which denote nothing by themselves. The IC [frendli-] is

next broken into the ICs [-li] and [frend-] which are both UCs of the word.

Morphemic analysis under the method of Ultimate Constituents may be carried out on the basis of two principles: the affix principle and the root principle.

According to the affix principle the splitting of the word into its constituent morphemes is based on the identification of the affix within a set of words, for example the identification of the suffix -er leads to the segmentation of words singer, teacher, swimmer into the derivational morpheme -er and the roots teach-, sing-, drive-.

According to the root principle, the segmentation of the word is based on the identification of the root-morpheme in a word-cluster, for example, the identification of the root-morpheme agree- in the words agreeable, agreement, disagree.

As a rule, the application of these principles is sufficient for the morphemic segmentation of words. However, the morphemic structure of words in a number of cases defies such analysis, as it is not always as transparent and simple as in the cases mentioned above.

Sometimes not only the segmentation of words into morphemes, but the recognition of certain sound-clusters as morphemes becomes doubtful which naturally affects the classification of words. In words like retain, detain, contain or receive, deceive, conceive, perceive the sound-clusters [ri-], [di-] seem to be singled quite easily, on the other hand, they undoubtedly have nothing in common with the phonetically identical prefixes re-, de- as found in words re-write, re-organize, de-organize, de-code.

Moreover, neither the sound-cluster [ri-] or [di-], nor the [-tein] or [-si:v] possess any lexical or functional meaning of their own. Yet, these sound-clusters are felt as having a certain meaning because [ri-] distinguishes retain from detain and [-tein] distinguishes retain from receive. It follows that all these sound-clusters have a differential and a certain distributional meaning as their order arrangement point to the affixal status of re-, de-, con-, per- and makes one understand -tain and -ceive as roots.

The differential and distributional meanings seem to give sufficient ground to recognize these sound-clusters as morphemes, but as they lack lexical meaning of their own, they are set apart from all other types of morphemes and are known in linguistic literature as pseudo-morphemes.

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