

Word Formation: A Morphological Analysis

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Abstract

New words are required not only to increase our vocabulary but also to create new sentences. New words are acquired by the process of word formation which can be done in several ways. One of the most commonly used ways to form new words is affixation either through prefixation or suffixation. Confixation or infixation is hardly ever used and is evidenced in the Indonesian Language. Other methods of word formation include coining, clipping, blending, acronym, and compounding. A difficulty arises when one has to decide which morpheme comes first, if he encounters a word with bound morphemes at both sides, since the two bound morphemes are not simultaneously attached to the root. Confixation occurs when morphemes are bounded both ends of the root simultaneously. Confixation can be seen in the Indonesian language.

Key words: word formation, bound morphemes at both sides

What is word?

Words have a pivotal role in communication both in written and oral form. Without words, communication is almost impossible because a sentence, a group of words which is semantically acceptable and grammatically correct, allows us to communicate effectively. Without communication, life could cease to exist. So important are the words we use that we have to select them carefully when we talk. Diction or word choice is an important factor to consider before we talk or write. We try not to hurt other people with words we use when talking or writing.

Words can be viewed from several aspects. If they are seen from their internal structure, they can be classified into simple and complex words. Simple words are those which cannot be further segmented. For example, *water*, is a simple word because it cannot be further divided. Whereas complex words are those which can be further divided. For example, *watered*, is a complex word, because it can be further segmented into *water* and {-ed} as a bound morpheme.

If words are viewed from their class, they can be grouped into content and structural words which altogether form the parts of speech. Content words include noun, verb, adjective and adverb. Structural words include conjunctions, prepositions, articles, numerals, pronouns, and interjections.

But, what is a word really? It is not easy to give a precise definition of a word because what seems to be a word to the speakers of one language many not be a word to the speakers of another language. For example, **amo** in Latin, for most of us it seems like a word but actually it is a sentence which means **I love**. Words are the minimum free form that is the smallest form that can occur by itself (Aitchison, 1978: 3). Thus, a form that can stand by itself is called a word. The form *book* for example is a word because it can occur by itself. Richards (1985: 311) gives a similar definition that a word is the smallest linguistic unit that occurs on its own in speech and writing. The form “a” in English is a word although it consists of only a letter. However, {-s} in “books” is not a word despite the fact that it is also a letter. The word *undesirable* is a single word but has three morphemes. If the most elemental units of

meaning are assumed to be the words of a language, then {un-} has the same meaning in *unlikely*, *untouchable*, and *unchangeable* as it has in *undesirable* because they all consists of two units of meaning: {un-} + desirable, likely, touchable, changeable (Fromkin and Robert, 1974: 103). However, {un-} is not a word because it cannot stand by itself. Although it constitutes a certain meaning, it can only be meaningful if it is attached to another word. Therefore, a word should be distinguished from a morpheme. A word must be a morpheme, that is a free morpheme, but a morpheme is not necessarily a word like in the example above “undesirable”, {un-} is not a word but a morpheme, a bound morpheme, which never occurs on its own but it is always attached to another morpheme. So, “undesirable” is one word but it has three morphemes.

Bauer (1983: 12-13) shows the difference between word form and lexeme. The word form “shot” is a form of the lexeme “shoot”. Likewise, the words “shoots”, “shooting” and “shot” are all the from the lexeme “shoot”. In other words, it can be said that the words, *shoot*, *shoots*, *shooting* and *shot* are all subsumed under the lexeme **shoot**.

Todd (1987: 49) states that we can isolate four of the most frequently implied meaning of “word”: the orthographic, the morphological, the lexical, and the semantic word. An orthographic word is one which has a space on either side of it. For example, *He had a book*. There are four words in this sentence because each has a space on either side of it. A morphological word is a unique form which considers only form not meaning. The word “table”, for instance, is one morphological word, but “tables” are two morphological words. A lexical word covers the various forms of items which are closely related by meaning. Thus, *take*, *takes*, *taking*, *took*, *taken*, are five morphological words but only one lexical word. This is really similar to what Bauer (1983) defines as lexeme and word form. A semantic word involves distinguishing between items which may be morphologically identical but have a different meaning. The word *table*, for instance, can refer to a piece of furniture or to a schedule. Thus, they belong to the same morphological word but they are also two semantic words

because they are not closely related in meaning.

How is a word developed?

We will have a limited number of sentences if there are no new words produced. This means that not all our needs can be expressed by a limited number of words. New words can be developed from existing words or invented due to technological advancement. According to Akmajian, et.al (1991: 21-24) new words can be formed by coining and compounding. Whereas Rachmadie (1985: 48-67) adds that words can also be formed by blending, clipping, and through acronyms. But the most commonly used way used to form new words is affixation.

1. Affixation

Affixation is a process of attaching an affix to the root either to the left side or right side of the root. When an affix is attached to the end of the root or to the right side of the root, it is called a suffix. For example, free + {-dom} → freedom. When an affix is attached to the front of the root or the left side of the root, it is called a prefix. For example, {dis-}+ continue → discontinue. Prefixes and suffixes are affixes attached to the bases or to various combinations of the morphemes (Wardhaugh, 1977: 84). Wardhaugh further states that English does not use infixes, the nearest equivalent being the kind of situation that occurs in the plural of man → men. In general, suffix changes the category of the word, except those of inflectional morphemes. Whereas hardly any prefix changes the category of the word.

{dis-} + continue (verb) → discontinue (verb)
 good (adjective) + {-ness} → goodness (noun)
 free (adjective) + {-dom} → freedom (noun)
 leap (verb) + {-y} → sleepy (adjective)
 {un-} + true (adjective) → untrue (adjective)

From the examples above, it can be seen that suffixes change the category of the word, while prefixes do not. However, there is a prefix which can change the category of the word, that is the prefix {en-}.

{en-} + danger (noun) → endanger (verb)
 {en-} + rich (adjective) → enrich (verb)

This is the only prefix which can change the category of the word, other prefixes do not change the category of the word they are attached to. Nevertheless, the process of affixation is the most commonly used way to form new words.

2. Coining or Inventing Words

Coined words are those words which keep entering a language. The speakers invent new words to name previously non-existent objects that result from technology, such as Xerox, klenex, Kodak, laptop, computer, e-mail, digital, etc. In other words, coining words is the creation of new original words by writers, inventors, scientists, and others who are in need of a term to express a certain meaning or to name a product like coca cola, pentium, camera, tip-ex, laser disc, etc. Some coined words like *radar* and *laser* were originally created as acronyms, *radio detecting and ranging*, *light amplification by stimulated emission of radiation*. But people quickly forget such origins and they become new independent words. They do not realize that such words are in fact the result of acronym but since they are already familiar with them they do not regard them anymore as acronyms.

3. Clipping Words

Clipping is the process of shortening a longer word. It occurs when the long word has a very common use and the shorter form results because it is simpler and more easily understood. These clipped forms are usually appropriate in informal conversation but some of them are also used in standard English.

pub → clipped from public
 mag → clipped from magazine
 dorm → clipped from dormitory
 pro → clipped from professional

There is no exact rule of how to clip longer words. In general, only the first syllable and the first phoneme of the second syllable are taken as a clipped word if the word consists of two or three syllables. The clipped word "dorm" is taken from the first syllable and the

first phoneme of the second syllable of the word *dormitory*.

However, this is not always the case. Sometimes, a word of four syllables is clipped into two syllables or one only. For examples :

composition → compo
 professional → pro
 advertisement → ads
 cafeteria → café
 dormitory → dorm

From the examples above, the word *composition* and *cafeteria* are consistently clipped, but not with the other words in spite of being four syllables. In the word *composition* and *cafeteria*, the first and the second syllable are taken to form the clipped word, but the rest are not similarly treated. In the word *professional* only the first syllable is taken to form the clipped word as if it were a word of two or three syllables. The word *dormitory* should be clipped as "dormi" like the previous examples of *composition* and *cafeteria*. But people say "dorm" instead of "dormi". Therefore, the process of clipping cannot be applied to all words in the same way.

4. Blending Words

Blending is the fusion of two words into one, usually the first part of one word with the last part of another, so that the resultant blend consists of both original meanings. For example:

motor + hotel → motel
 smoke + fog → smog
 breakfast + lunch → brunch

The word *motel* is used to mean a hotel for motorists, *smog* is used to mean smoke and fog, and *brunch* is used to mean a meal taken instead of both breakfast and lunch.

Again, the process of blending does not follow an exact rule. Like clipping, it is formed according to the speaker's ease, meaning easy to say and easy to recall. Here below some more examples of blends.

radio + telegram → radiogram
 biological + mechanic → bionic

American + Asian → Ameronesia
medical + care → medicare
mono + rail → monorail
turbo+ propeller → turboprop
cheese + hamburger → cheeseburger

From the examples above, it can be seen that there is no exact rule in forming a blend as shown above. It seems that practicality becomes one of the factors taken into consideration to make a blend.

5. Acronym

An acronym is the result of forming a word from the first letter or letters of each word in a phrase. This process happens because the name of the phrase is too long to say, therefore the speakers create a shorter way to say the phrase. For examples:

Aeronautics and Space Administration
→ NASA
Test of English as a Foreign Language
→ TOEFL
Very important person
→ VIP
World Health Organization
→ WHO
Teaching English as a Foreign Language
→ TEFL

Acronyms usually name political, industrial, and social institutions, not single or compound words. They usually consist of a long phrase which is then made into an acronym and formed into a word. However, some acronyms have already become permanent entries in the lexicon of English such as radar (radio detecting and ranging), laser (light amplification by stimulated emission or radiation), and scuba (self-contained under water breathing apparatus). People have forgotten that they are acronyms, instead they regard them as new entries in English.

Besides the long phrases which are made into acronyms, there are some short phrases as well which one made into acronyms.

Down payment → D.P
Brought in dead → BID
Delivery order → D.O
Ante cenam → a.c (before meals)

God bless you → G.B.U
air conditioned → a.c
Post merediem → P.M
Over dose → O.D
Ante merediem → A.M
road traffic accident → R.T.A

These kinds of acronyms are now used a lot in text messages, and everybody understands their meaning even when seeing them for the first time. The phrase “by the way” is made into btw, and “God bless you” into GBU. Words are clipped irregularly such as “thanks” becomes *thx*, “you” becomes *u*, and Christmas becomes *Xs*.

6. Compounding

Compound words are formed by combining two or more words into one unit with a perceptible meaning. For examples:

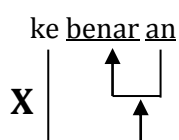
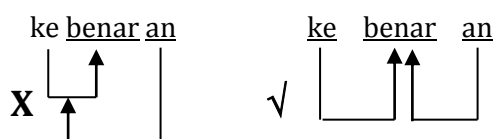
class (noun) + room (noun) → classroom
green (adjective) + house (noun) → greenhouse
sun (noun) + bathe (verb) → sunbathe
pick (verb) + pocket (noun) → pickpocket, cut-throat
hit (verb) + run (verb) → hitrun
cut (preposition) + cast (verb) → outcast

These compound words can be made of many combinations but the most frequent combination is those of noun and noun. This is the largest sub-grouping of compounds. Many types of semantic relationship can be isolated within this grouping (Bauer, 1983: 202). It can be difficult to decide whether a combination of words is a compound or simply a noun phrase. The criterion taken to distinguishing between the two is the stress. If the stress is on the first word, then it is a compound. This is not difficult if the combination consists of a noun and a noun – like *movie star*, *classroom*, *ticket agent*, etc. But when the combination consists of an adjective and a noun like *deep structures* or *dancing teacher*, it can result in a different meaning. When the stress is on the left, *deep structure*, then it is a compound word which refers to a part of transformational grammar. When it is a phrase with the stress on the right or on the second element, the meaning is “a structure which is deep”. Likewise, “dancing teacher, when it is a compound

word with the stress on the left, it means a teacher who teaches dancing. Whereas when it is a noun phrase with the stress on the right, it means a teacher who is dancing. However, these cases are quite rare, and only those with the -ing form can result in difficulty. One way to decide whether a form is a compound or a phrase is through its meaning. If the meaning can be unveiled by a relative pronoun, then it must be a phrase. On the contrary, if the meaning can be unveiled by a preposition, then it must be a compound. For example, *dining table*, it must be a compound since the meaning is a *table for dining*, not *a table which is dining*. Some, however, can be confusing like dancing teacher, hunting dog, flying planes, etc.

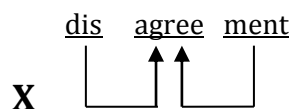
7. Bound Morphemes on Both Sides

In English there is no so-called confixes like in Indonesian. Confixes are affixes which are simultaneously attached to both side of the root. Thus the word, **disagreement**, does not undergo the same process as the word **kebenaran** in Indonesian. {ke - an } in Indonesian is called confix because it must be attached simultaneously, not one by one.

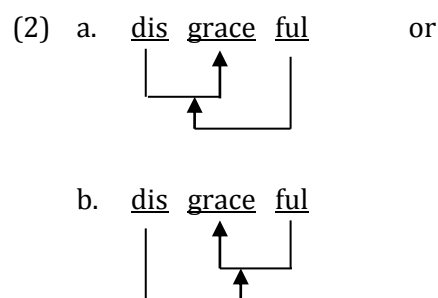
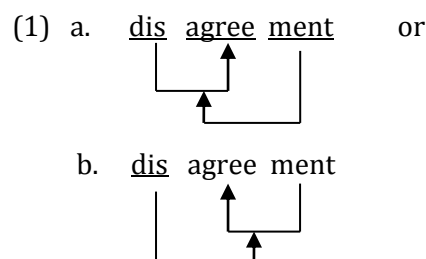


The description in the middle is the correct one because the confix {ke - an } should come together to the root “benar”, then we have kebenaran. There is no “kebenar”, then suffix {-an} is attached, nor “ benaran”, then prefix {ke-} is attached to it. Because of the existence of confixation in Indonesian, words are not formed by adding a prefix then a suffix or vice versa.

On the contrary, confixation is not found in English. It is sometimes difficult to decide which affix is attached to the root first if a word has affixes on both sides. Look at this example below.



The process of confixation is not used in English. Both affixes are not simultaneously attached, but they are attached one by one. The problem is which is attached first, the prefix or the suffix.



If we are faced with successive peripheral constituents on both sides of the root, we have two ways to analyze, (1) by analyzing the meaningful relationship, and (2) by studying the structural parallels (Nida, 1949: 89). By meaningful relationship it can be decided that in (1a) {-ment} as a modifier of **disagree**, meaning “being disagreed”, or in (1b) {dis-} + agreement, meaning “no agreement”. Likewise, in example (2a) {ful-} functions as a modifier of “disgrace”, meaning “full of disgrace”; or in (2b) {dis-} + graceful, meaning “not graceful”. Whereas by structural parallels, we have to compare various types of combination with {dis-} and {-ment}, and {dis-}{ and {-ful}.

The prefix {dis-} mostly occurs with a noun and a verb, and the resultant combination remains such *disagree*, *discolor*, *disrespect*, etc. They remain as verbs since the prefix {dis-} does not change the category of the word. Although the prefix {dis-} may

occur with a noun, it is not productive like {dis-} + harmony → disharmony. Whereas the suffix {-ment} occurs with verb, and the resultant combination is a noun such as agreement, repairment, attonment, endowment, employment, etc. The suffix {-ment} changes the category of the word to which it is attached. Likewise, in example (2a) the suffix {-ful} occurs with the noun and the resultant combination is an adjective such as careful, tasteful, beautiful, handful, etc. In other words, the suffix {-ful} changes the category of the word to which it is attached.

Therefore, by doing structural parallel analysis, the most acceptable analysis is the alternative (a) not (b) although the alternative (1b) indicates a noun like “agreement”, but that is not acceptable because the noun “agreement” is a complex word, not a root. The prefix {dis} + noun is not productive, except with “harmony” as shown above. If we tolerate the alternative (1b), then we might have other combinations of {dis-} such as disshipment, disemployment, discommandment, etc which are all rejected. Likewise, in example (2a), this procedure is acceptable, and (b) is not because disgrace + {-ful} becomes an adjective, that is the function of suffix {-ful} to change the noun into an adjective. If we employ procedure (b) {dis-} + graceful, it still remains adjective, but contrary to the prefix {dis-} which is always attached to a verb or a noun and never to an adjective. Take another example, “disrespectful”, the root’s precisely bound-base “respect”, must be a noun, not a verb. If it were a verb, then the prefix {dis-} is attached to it, it is still acceptable, but suffix {-ful} is never attached to a verb in order to change it into an adjective. The suffix {-ful} is attached to a noun to form an adjective. Therefore, we have to use the structural parallel analysis to decide which morpheme comes first if we have successive peripheral constituents on both sides of the root.

Conclusion

The coverage of word formation in English is quite wide. One of the most widely used ways to form new words is affixation, comprising prefixation and suffixation. Whereas coining, clipping, blending, acronym and compounding have their own rules in

forming new words. Since confixation is not known in English, one has a difficulty to determine how a word with bound morphemes on both sides of the root is formed. A question may arise which morpheme is firstly attached, the prefix or the suffix. The prefix and the suffix cannot be simultaneously attached because confixation is not available in English.

References

- Aitchison, Jeans. *Foundations of General Linguistics*. New York: Rinehart and Winston, Inc., 1987.
- Akmajian, Adrian. *et.al. Linguistics: An Introduction to Language and Communication*. Third Edition. Cambridge: The MIT Press, 1991.
- Bauer, Laurie. *English Word Formation*. Cambridge: Cambridge University Press, 1983..
- Fromkin, Victoria, and Robert Rodman. 1974. *An Introduction to Language*. New York: Holt, Rinehart and Winston, Inc., 1974.
- Nida, Eugene. *Morphology: The Descriptive Analysis of Words*. Ann Arbor: The University of Michigan Press, 1949.
- Rachmadie, Sabrony. *Buku Materi Pokok: Vocabulary*. Jakarta: Depdikbud, Universitas Terbuka, 1985.
- Richards, Jack. *et.al. Dictionary of Applied Linguistics*. London: Longman Group, Ltd., 1985.
- Todd, Loreto. *An Introduction to Linguistics*. Essex, U.K.: Longman Group, Ltd., 1987.
- Wardhaugh, Ronald. *Introduction to Linguistics*. Second Edition. New York: McGraw Hill, Inc., 1987.