Vressick-Chilborn, S., & Rachman, M. O. (2020). Syntactic structure, morphology, free morphemes and bound morphemes. *Macrolinguistics and Microlinguistics*, 1(2), 85–92.

Syntactic Structure, Morphology, Free Morphemes and Bound Morphemes

Simberley Vressick-Chilborn

University of Technology Sydney, Sydney, Australia

Mohammad Ozinan Rachman

London Metropolitan University, London, United Kingdom

Abstract—This study aims to explain the meaning of syntax, syntactic structure in English. The root is a term to refer to a word form that cannot be further divided, cannot be analyzed again, there is no additional affix. This root is always there, although in the form of various modifications of a lexeme. For example; walk, which is a root, can appear in the form of words, such as walks, walking, walked. Drink, is a root, can appear in the form of words, such as drinks, drinking, drunk.

Keywords---syntactic structure, morphology, free morphemes, bound morphemes, English, root, words form.

Introduction

The term syntax in English comes from Greek, namely syntaxis, which means an arrangement or setting out together. The syntax of the Indonesian term comes from Greek, namely "sun" which means "with" and the word "tattein" which means "to place". Etymologically, syntax means putting together words into groups of words/sentences. Syntax is a grammar that discusses the relationship between words in speech. Speech is what someone says. One of the units of speech is a sentence. Sentence is a unit that is a whole that has a certain intonation as a marker of the whole. Basically, syntax deals with the relationship between words in sentences (Haarmann & Kolk, 1992; Nilipour, 1989; Marini et al., 2008). For example, it smells

^{© 2020} by The Author(s).

This journal is licensed under a Creative Commons Attribution 4.0 International License.

Corresponding author: Vressick-Chilborn, S. | Email: vressick-chilborn@uts.edu.au

Manuscript submitted: 9 March 2020 | Manuscript revised: 27 April 2020 | Accepted for publication: 18 May 2020

good. If it is understood that there is a meaningful relationship between (it+smells+good) not (good+smells+it). The relationship is shown based on the word order.

Segmental morphemes are morphemes formed by segmental phonemes, such as morphemes (see), (lah), (brush), and (ber). So all morphemes in the form of sound are segmental morphemes. While suprasegmental morphemes, such as pressure, tone, duration, and so on. In Indonesia there seems to be no such suprasegmental. In descriptive linguistics, there is the concept of zero or zero allomorph morphemes, namely one of the allomorphs is neither a segmental sound nor prosody (suprasegmental element) but in the form of a void (Mitchell, 2006; Taft & Zhu, 1995; Kean, 1977). There are many zero-allomorph morphemes in English for the plural and past tenses. For example, the plural form of sheep is sheep, so it can be written sheep \rightarrow sheep +. Or other forms such as foot whose plural form is feet, you can write feet \rightarrow foot +.

Method

The root is a term to refer to a word form that cannot be further divided, cannot be analyzed again, there is no additional affix. This root is always there, although in the form of various modifications of a lexeme. For example; walk, which is a root, can appear in the form of words, such as walks, walking, walked. Drink, which is a root, can appear in the form of words, such as drinks, drinking, drunk (Stemberger, 1985; Marquis & Shi, 2012).

Word forms that represent the same morpheme do not necessarily have the same morpheme root, for example, the word forms good and better are the same lexeme as good, but only good is phonetically the same as good. Many words have independent roots. Roots that can stand alone are called free morphemes. Examples of free morphemes: man book tea sweet cook bet very drink pain walk The words above are independent morphemes. The free morpheme in the above example is an example of lexical morpheme; namely: nouns (nouns), adjectives (adjectives), verbs (verbs), prepositions (prepositions), and adverbs (adverbs). These morphemes carry meaning in speech; such as referring to someone (noun or noun John, mother), relating to nature (adjective clever, kind), describing an action or process (verbs hit, write, rest), and so on, expressing relationships (prepositions in, on, under), describe conditions (such as kindly) (Haryu & Kajikawa, 2016; Bhatnagar & Whitaker, 1984; Webster et al., 2007). Meanwhile, several other types of free morphemes are function words. Unlike lexical morphemes which carry meaning, function words give grammatical markers or relationships in sentences. Examples of function words are:

- Articles : a, an, the
- Pointer : this, that, these, those

- Pronouns : I, you, we, they; my, your, his, her, who, whom, which, whose
- Conjunctor : and yet but if however

To distinguish between lexical and grammatical morphemes usually see their use and can be seen directly. But there are also free morphemes that can be both, for example: though. This morpheme is a marker of grammatical relationships and also has semantic meaning. Only roots can be free morphemes, but not all roots are free morphemes. Some roots cannot be separated and are bound to other word-forming elements. The root (root) is called a bound morpheme (bound morpheme), for example below:

- -mit as in permit, remit, commit, admit
- -ceive as in perceive, receive, conseive
- pred- as in predator, predatory, depredate
- sed- as in sedan, sedate, sedentary, sediment Bound roots --mit, -ceive, pred-, sed- can also appear with the same pattern for de-, re-, -ate, -ment in the form of prefixes or suffixes. None of these roots can stand alone.

Result and Discussion

Stems are parts of words before they are added with inflectional affixes. See example: cat + -s becomes cats, worker + -s becomes workers. In the cat form, and inflectional suffix is added to the cat stem, which is also the root. In the word workers, an inflectional suffix (plural marker) is added to the worker. Worker is the stem, while work is the root (Seidenberg & Gonnerman, 2000; Hustad, 2006; Mayberry & Eichen, 1991).

Base (base form) is a form that becomes the basis in the morphological process, where affixes can be added; both inflectional and derivational affixes. In other words, all roots are also bases. Identify the root, base, stem, and affixes below:

Faiths	frogmarched	
Faithfully	bookshops	
Unfaithful	window-cleaners Faithfulness	hardships

The explanation is as follows:

Inflectional Derivational		Roots	Stems	Bases
-ed	un-	faith	faith	faith
-S	-ful	frog	forgmarch	frogmarch
	-ly	march	bookshop	frogmarch
	-er	clean	window	cleaner

a coo la cal de la calcia de la c	
-ness hard hardship h	ardship

The example above shows that it is possible to form a word by adding affixes to one or two roots. Examples of 2 independent words frog and march can be combined into a base or stem, frog-march, and even the suffix /-ed/ can be added to frogmarched. Similarly, window and clean can be combined to form the base, window-clean, derivational suffix /-er/ can be added to window-cleaner, thus becoming stem, and the meaning is of course different. The meanings in polysemy, although different, can be traced etymologically and semantically, that the meanings still have a relationship (Huysmans et al., 2014; Compton & Pittman, 2010; Harley, 2013). On the other hand, the meaning of the two homonyms has no relationship at all.

Hyponymy

Hyponymy is a semantic relationship between a form of speech whose meaning is included in the meaning of another form of speech. For example between the word dove and the word bird. Here we see that the meaning of the word dove is included in the meaning of the word bird. Pigeons are birds, but birds are not just doves.

Ambiguity/impact

Ambiguity is a symptom of the occurrence of multiple meanings due to different grammatical interpretations. This different grammatical interpretation generally occurs in written language, because in written language suprasegmental elements cannot be described accurately. For example, the form of a new history book can be interpreted to mean that the history book has just been published, or the book contains the history of a new era (Oz, 2014; van Hoogmoed et al., 2013; Rochon et al., 2000).

Inaccuracy in spoken language is usually due to inaccuracies in constructing anaphoric constructions. What needs to be remembered is the concept that homonymy is two or more forms that happen to have the same shape, while ambiguity is a form with two or more interpretations of meaning.

Redundancy

Redundancy is defined as the excessive use of segmental elements in a form of speech. For example, the sentence that the ball was kicked by Dika would have no different meaning if it was said that the ball was kicked by Dika. The meaning of a word or lexeme will not change synchronously, but diachronically it is possible to change. That is, in a relatively short period of time, the meaning of a word will remain the same, unchanged; but in a relatively long time there is a possibility the meaning of a word will change (Thompson et al., 2002; Fu et al., 2008; Garrett, 1975). The factors causing the change in meaning are as follows.

First, developments in the field of science and technology. For example, the word literature originally meant 'writing, letters, then changed to 'reading'; then changed again to mean 'a book with good content and good language', and so on. Second, socio-cultural development. The word brother, for example, was original 'asperut' or 'a person born from the same womb,' but now the word brother is also used to refer to other people, as a greeting, equal. Third, the development of the use of words. For example, the word working from agriculture is also used in other fields with the meaning, working, making. Fourth, the exchange of sensory responses. For example, a spicy taste that should be perceived by the tongue's sense of taste becomes perceived by the ear's ear, as in the speech the words are very spicy.

And fifth, the association. An envelope is a 'letter cover'. But the envelope also means 'bribery'.

Changes in the meaning of the word there are several kinds, namely changes that expand, narrow, change completely. Widespread changes, meaning that previously a word had the meaning of "A", then it became the meaning of 'B'. For example, the word clothes originally meant 'top clothing from the waist to the shoulders. But in the sentence 'Students wear uniforms, this means not only shirts but also pants, shoes, ties, and hats. Narrowing changes, meaning that previously a word or unit of speech had a very general meaning but now its meaning has become very special (Lukatela et al., 1988; Wang et al., 2009).

Meaning field and meaning components

Words that are in one group are often called words that are in one field of meaning or one lexical meaning. Meanwhile, the attempt to analyze a word or lexeme on the elements of its meaning is called an analysis of meaning components or an analysis of the characteristics of meaning, or also an analysis of lexical characteristics. The field of meaning or lexical field is a set of lexical elements whose meanings are interconnected because they describe part of the field of culture or reality in a particular universe (Hoosain, 1992; Friedmann & Grodzinsky, 1997). The color field in Indonesian recognizes the names red, brown, blue, green, yellow, gray, white, and black. For different nuances, Indonesian provides comparative descriptions such as blood red, pink, brick red. In the study of meaning, words are usually divided into 4 groups, namely the object group (entity), the event group (event), the abstract group, and the related group.

Based on the nature of the semantic relationship, lexeme groups are divided into collocation fields and set fields. Collocation refers to the syntactic relationship that exists between the words or the lexical element (Cinque, 2002; Taft & Kougious,

2004; Miceli et al., 1989). For example, chili, onion, shrimp paste, salt, pepper, and pepper are in one collocation, namely 'kitchen spices'. Collocations show a syntagmatic relationship. Words that are in a set group indicate a paradigmatic relationship because words that are in a set group can be substituted with each other. For example, the word teenager is a stage of development from childhood to adulthood. While cool is the temperature between cold and warm.

Conclusion

The meaning of each word consists of some components called meaning components that make up the overall meaning of the word. For example, the word father has a meaning component of /+ human,/+adult,/+manly,/+married, and /+has children and the word mother has a meaning component of/+human,/+adult,/-male,/+married, and // have children. (Note: the + sign has a meaning component, - does not have a meaning component). Another use of component analysis is to predict the grammatical meanings of affixation, reduplication, and composition in Indonesian. For example, the process of affixation with prefixes to nouns that have a meaning component of /+tool?, has a grammatical meaning of 'acting with tools' such as sawing, sculpting.

The reduplication process occurs at the base of the verb which has a meaning component of /+ momentary/ giving the grammatical meaning 'repeatedly' as in chopping, beating. Meanwhile, verbs that have a meaning component /+bersaat/ give a grammatical meaning 'done without a purpose', such as bathing, sitting around. So, in the reduplication process, it is seen that verbs that have a meaning component of /+ momentary/ have different grammatical meanings from verbs that have a meaning component of /-momentary/. In the process of composition, or the process of merging lexemes with lexemes, it is also seen that the meaning component of the basic form seen in the process determines the grammatical meaning it produces. For example, the grammatical meaning of 'belonging' can only occur if the second constituent of the composition has a meaning component of /+human/ or /+ is considered human, for example, Dika's bicycle, uncle's house. If it does not have a component, the grammatical meaning of 'owned' will not appear.

References

- Bhatnagar, S., & Whitaker, H. A. (1984). Agrammatism on inflectional bound morphemes: A case study of a Hindi-speaking aphasic patient. *Cortex*, 20(2), 295-301.
- Cinque, G. (2002). Mapping functional structure: a project. *Functional structure in DP and IP: The cartography of syntactic structures*, 1, 3-11.
- Compton, R., & Pittman, C. (2010). Word-formation by phase in Inuit. *Lingua*, 120(9), 2167-2192. https://doi.org/10.1016/j.lingua.2010.03.012

- Friedmann, N. A., & Grodzinsky, Y. (1997). Tense and agreement in agrammatic production: Pruning the syntactic tree. *Brain and language*, 56(3), 397-425. https://doi.org/10.1006/brln.1997.1795
- Fu, G., Kit, C., & Webster, J. J. (2008). Chinese word segmentation as morphemebased lexical chunking. *Information Sciences*, 178(9), 2282-2296. https://doi.org/10.1016/j.ins.2008.01.001
- Garrett, M. F. (1975). The analysis of sentence production. In *Psychology of learning and motivation* (Vol. 9, pp. 133-177). Academic Press. https://doi.org/10.1016/S0079-7421(08)60270-4
- Haarmann, H. J., & Kolk, H. H. (1992). The production of grammatical morphology in Broca's and Wernicke's aphasics: Speed and accuracy factors. *Cortex*, 28(1), 97-112. https://doi.org/10.1016/S0010-9452(13)80168-2
- Harley, H. (2013). External arguments and the Mirror Principle: On the distinctness of Voice and v. *Lingua*, 125, 34-57. https://doi.org/10.1016/j.lingua.2012.09.010
- Haryu, E., & Kajikawa, S. (2016). Use of bound morphemes (noun particles) in word segmentation by Japanese-learning infants. *Journal of Memory and Language*, 88, 18-27. https://doi.org/10.1016/j.jml.2015.11.007
- Hoosain, R. (1992). Psychological reality of the word in Chinese. In Advances in psychology (Vol. 90, pp. 111-130). North-Holland. https://doi.org/10.1016/S0166-4115(08)61889-0
- Hustad, K. C. (2006). A closer look at transcription intelligibility for speakers with dysarthria: Evaluation of scoring paradigms and linguistic errors made by listeners. https://doi.org/10.1044/1058-0360(2006/025)
- Huysmans, E., De Jong, J., van Lanschot-Wery, J. H., Festen, J. M., & Goverts, S. T. (2014). Long-term effects of congenital hearing impairment on language performance in adults. *Lingua*, 139, 102-121. https://doi.org/10.1016/j.lingua.2013.06.003
- Kean, M. L. (1977). The linguistic interpretation of aphasic syndromes: Agrammatism in Broca's aphasia, an example. *Cognition*, 5(1), 9-46. https://doi.org/10.1016/0010-0277(77)90015-4
- Lukatela, K., Crain, S., & Shankweiler, D. (1988). Sensitivity to inflectional morphology in agrammatism: Investigation of a highly inflected language. *Brain and Language*, 33(1), 1-15. https://doi.org/10.1016/0093-934X(88)90050-8
- Marini, A., Tavano, A., & Fabbro, F. (2008). Assessment of linguistic abilities in Italian children with specific language impairment. *Neuropsychologia*, 46(11), 2816-2823. https://doi.org/10.1016/j.neuropsychologia.2008.05.013
- Marquis, A., & Shi, R. (2012). Initial morphological learning in preverbal infants. *Cognition*, 122(1), 61-66. https://doi.org/10.1016/j.cognition.2011.07.004
- Mayberry, R. I., & Eichen, E. B. (1991). The long-lasting advantage of learning sign language in childhood: Another look at the critical period for language acquisition. *Journal of memory and language*, 30(4), 486-512. https://doi.org/10.1016/0749-596X(91)90018-F

- Miceli, G., Silveri, M. C., Romani, C., & Caramazza, A. (1989). Variation in the pattern of omissions and substitutions of grammatical morphemes in the spontaneous speech of so-called agrammatic patients. *Brain and language*, *36*(3), 447-492. https://doi.org/10.1016/0093-934X(89)90079-5
- Mitchell, E. (2006). The morpho-syntax of negation and the positions of NegP in the Finno-Ugric languages. *Lingua*, 116(3), 228-244. https://doi.org/10.1016/j.lingua.2004.08.005
- Nilipour, R. (1989). Task-specific agrammatism in a Farsi-English bilingual patient. *Journal of Neurolinguistics*, 4(2), 243-253. https://doi.org/10.1016/0911-6044(89)90016-X
- Oz, H. (2014). Morphological awareness and some implications for English language teaching. *Procedia-Social and Behavioral Sciences*, 136, 98-103. https://doi.org/10.1016/j.sbspro.2014.05.296
- Rochon, E., Saffran, E. M., Berndt, R. S., & Schwartz, M. F. (2000). Quantitative analysis of aphasic sentence production: Further development and new data. *Brain* and language, 72(3), 193-218. https://doi.org/10.1006/brln.1999.2285
- Seidenberg, M. S., & Gonnerman, L. M. (2000). Explaining derivational morphology as the convergence of codes. *Trends in cognitive sciences*, 4(9), 353-361. https://doi.org/10.1016/S1364-6613(00)01515-1
- Stemberger, J. P. (1985). Bound morpheme loss errors in normal and agrammatic speech: one mechanism or two?. Brain and Language, 25(2), 246-256. https://doi.org/10.1016/0093-934X(85)90084-7
- Taft, M., & Kougious, P. (2004). The processing of morpheme-like units in monomorphemic words. *Brain and Language*, 90(1-3), 9-16. https://doi.org/10.1016/S0093-934X(03)00415-2
- Taft, M., & Zhu, X. (1995). The representation of bound morphemes in the lexicon: A Chinese study. *Morphological aspects of language processing*, 293-316.
- Thompson, C. K., Fix, S., & Gitelman, D. (2002). Selective impairment of morphosyntactic production in a neurological patient. *Journal of neurolinguistics*, 15(3-5), 189-207. https://doi.org/10.1016/S0911-6044(01)00038-0
- van Hoogmoed, A. H., Knoors, H., Schreuder, R., & Verhoeven, L. (2013). Complex word reading in Dutch deaf children and adults. *Research in developmental disabilities*, 34(3), 1083-1089. https://doi.org/10.1016/j.ridd.2012.12.010
- Wang, M., Ko, I. Y., & Choi, J. (2009). The importance of morphological awareness in Korean–English biliteracy acquisition. *Contemporary Educational Psychology*, 34(2), 132-142. https://doi.org/10.1016/j.cedpsych.2008.12.002
- Webster, J., Franklin, S., & Howard, D. (2007). An analysis of thematic and phrasal structure in people with aphasia: What more can we learn from the story of Cinderella?. *Journal of Neurolinguistics*, 20(5), 363-394. https://doi.org/10.1016/j.jneuroling.2007.02.002