Morphological Analysis on the Language Acquisition

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Abstract
The paper highlights the importance of Morphology in Linguistics and in the acquisition of new language. It outlines various elements forming the domain of morphology in brief and its role in learning of a new language in detail. Language acquisition is an interesting topic studied by most linguists from the time of inception of language learning as a cognitive science. The topic is still frequently studied by linguistic enthusiasts especially through the lens of morphological analysis. It is a secondary research paper.

Introduction
In the present context, Morphology is defined as the study of the internal structures of words, its formation and the set of rules that forms these words. The first occurrence of the word was witnessed in Greek literature. Morphology refers to the root word ‘morph’ meaning ‘forms or formations’ or ‘shape’ (Clark, 2017). Etymologically it is of Greek origin coined primarily by the German writer and philosopher Von Goethe (1840) in the early 19th century. The term was originally used in the field of biology where morph means ‘structure or form of organisms’; while in geology it relates to the study of land formations, their evolution and configuration. Similarly in Linguistics, morphology refers to the formation of words and their structure (Clerk, 2017).

Morphology, over the time has been developed into a branch of linguistics that includes formation of words, their internal structures and all its derivational forms (Domínguez, 1991). Understanding of the formation and structural creation of words has taken a front seat as it has proven to be functional in language learning. A sound understanding of morphology enables learners to understand the existence of words into a language, how various derivations are formed and the different combinations by adding other morphological components to the root words (Booij, 2010). Studies have also shown that students with a greater morphological understanding tend to have a wider vocabulary and can use words in a wider range in by using it creatively. Morphology can also be an effective instructional device to acquire better comprehensive reading and writing abilities.

Thus, morphology is essential to learn a language. Teachers and linguists consider this branch as the most effective way to increase the lexical capacity of students and speakers (Saricoban, 2013). Morphology is one of the dominant components of linguistics as it draws scientific explanations in the study of language (Yang, 2016). Morphology connects Grammar and Lexicon. Grammar is the rules-based component of language while Lexicon deals with rote-learning. It aims at the understanding of words in terms of their meaning and formation and justifying them through the grammatical structure and function of these words accordingly.
Morphology and Language Acquisition: Relation and Contention

How Morphology helps Language Acquisition

Language is the building block of all human development. It is an enabler of all humane activities and communication. It is also an exclusively human trait to be able to use language effortlessly since the conception of normal cognitive skills in a child since a very early age. As first language (native or mother tongue) is one of the most easily acquired skills among others during the developmental stages of life and all normal humans learn to us language without much effort, the process of learning and developing language skills have mostly remained undermined. As per the renowned linguist, 'We lose the sight of the need for explanation when phenomena are too familiar and obvious (Chomsky, 1972). Language acquisition is one of the most interesting fields of research as it is the only species that has managed to excel it (Lidz, 2018). A child from a very young age –within a few months of birth learns to speak the mother tongue without any formal lessons. The study of language and its acquisition can be said to be as old as human existence. Hence, it has been a vividly researched topic especially the acquisition of language by children. It is not only interesting to the linguist scholars but also through the lens of psychology and cognitive science (De Villiers et al., 1978).

Generally, children start to utter their first words between 12 and 20 months of age. They can produce systematic morphological modulations of the acquired words within a year of talking. Moving towards more complex constructs, grammar and morphemes are added to the sentences. Prefixes, suffixes, grammar elements and their inflections, prepositions are added next. They identify and learn the morphological inflexions such as adding morphemes to nouns to change case, gender and number on verbs they can make changes according to tense, person and aspect (Oz, 2014).

Children need to acquire noun and verb morphology in order to master the further affixations. By analyzing the basic structure of sentences, differentiating between stem and affixes and mapping the recurring patterns and meaning they can then begin to use morphemes creatively and form new combinations. These technique and methods lead to the acquisition of inflectional and derivational morphology. They then proceed to learn other types of morphological combinations such as root compounds. In the second year of learning they are able to form derivational affixes (Randall, 1982). Novel innovations using more compound morphemes continue to acquire in third and fourth years.

The Role of Morphology in Language Acquisition

Morphology consists of rules that enable learners to improve their linguistic competence through its application. Linguistic scholars, tutors and psychologists are interested in morphology as it is an effective medium to relate and study the speakers’ strategies to use and learn the language systematically awhile gradually increasing their lexical capabilities. Morphology is essential in using language to coin new words as and when required. With a sound knowledge of morphemes and their compositions, new speakers can form words with ease and accuracy. This can also be a devise for cognitive scientists to incur knowledge about the learner’s process of language acquisition. It might offer new pathways to learn language. Morphological understanding of the brain and its study will also open more economical alternatives to apply it to artificial intelligence (Schmid, 2015).

Morphological Importance in Grammar

As mentioned above, morphology bridges the components of grammar and lexical composition in linguistics. Linguists have elevated the importance of morphology as a device to learn language in an effective way. Though some believe that morphology is not a separate branch
of linguistics in itself, it still manages to link various branches in order to form a homogenous learning process for new learners. Morphology is considered as a productive process for formation of new words. This, in turn makes it a very important component to learn the rule-based grammar structures. The morphological operations need to be supported by its grammatical counterpart in order to form logical words with proper form and functions. For instance,

The adjective {social} can be changed to a verb by addition of the attachment {-ize} to form a new word socialize. Such a morphological operation can only occur if one of the base is a major grammar component such as noun, verb, adjective or adverb and the resultant word is also one of the major parts of speech component.

Another rule called the adjustment rule also suffices the condition of inflexional or derivational morphological composition. For instance, the word social changes to society by adding {-ety} to root word.

Components of Morphological acquisition of Language

Rules-based Learning v/s Rote Learning

Language is a vast collection of words and it takes several years for children to come across a wider range of vocabulary and use it in their speech or writing. The question is that while acquiring a language, can learners apply the inflections or derivatives to unfamiliar words? Can they identify the generalized patterns of the inflections? The answer to this can be found in J Berko’s 1958 paper ‘The Child’s Learning of English Morphology’. Berko stated that children aged five to seven showed the ability to readily use the different inflections with unfamiliar root words. There was a consistent effort by children in using plural and possessive forms of nouns and tenses in verb. Children can apply an identified inflection to affix stem meanings in the way they want to modulate them, for instance, adding past tense to a newly acquired verb. However the point of contention here is that not all verbs stake the regular inflections. Some are different while some completely change the base form. Thus, at an early stage of acquisition, over regularization is one problem faced by children. Such an issue is also faced during the second language acquisition among adults. In children, this trend is said to reduce with age (Sureshkumar, 2002). However, such over regularization does not occur at the same level in all children. Some data shows as much as 20-50% of times at a certain age while other data show a minimal rate of 3-10% at the same age group. The reason for this could be the misinterpretation of the irregular forms as regular or a failing memory. Such occurrences reduce over age as they notice that adults do not utter the given word inflection in the regular morphological sequence. Children learn the most regular sequences at an early stage and gradually move towards the rare, special or more uncommon paradigms which may be acquired over the course of months or a few years.

Case Marking

Children typically learn to identify case from around twelve to fourteen months of age. They first learn any one form of noun either accusative of normative. The next thing they acquire is a determinant that appears forms of nouns as an affix that serves all the nouns. They show a mastery of case contrast at a very early age. They also excel at case markings in certain less inflectional languages. They acquire contrast between accusative and nominative cases. The higher number of forms may make it difficult for the children to learn cases in certain languages. Number and gender both interact with case. In gender based languages like German and Arabic, the number of affixes multiplies with each case. When the number of affixes is many, learners usually adhere to just one affix shape to mark all stems of a particular case.
Such affixation regardless of gender and number, used by children in initial stage is called “inflectional imperialism”. The overall nature of language and range of forms of affixes along with the interaction of case with gender and number is a decisive factor for how long will children take to learn case inflections.

**Typology and Acquisition**

The data of language acquisition in children shows that they can process certain information more quickly than other (Clark & Amaral, 2010). It has been observed that children learn suffixes much ahead of prefixes. When Children are given nonsense prefixes and suffixes to imitate, they find suffixes easier than prefixes (Kuczaj 1979). A liking for formations with added meaning by adding affixes is seen among children. For instance, when given various forms of singular to plural i.e. by adding affix, with zero affix and subtraction of a morpheme; children prefer the first option. As phonology analyses the words in terms of phonemes and syllables: Speak (means to utter words from mouth) followed by a nominalising suffix- er (doer of an action).speaker is an affixed form of speak. Most words in English are affixed forms of root words such as walk-walking, shoe-shoes, ox- oxen, play- played and so on; while some like phone, storm, shut etc. are morphemes by themselves. When the subject is third person singular play becomes plays with the addition of the suffix {-s}, played when used in past tense and playing when the sentence is in other tenses. It is also noteworthy, that inflexional suffix occurs only at the end of the words and no suffixes can be further added to them. It only changes the sub class of the grammatical form of the word without changing its part of speech unlike the derivational morphemes.

Moreover, apart from the above mentioned morphemes, word-formation also includes; (1) Compounding: two root morphemes combined to form a compound word. e.g. - employment agency, educational institute, weather forecast; (2) Blending: joining root morphemes to form a new word. e.g.- infotainment-information and entertainment; (3) Clipping: a part of word replaces the meaning using one morpheme e.g- flu- influenza.

It can be identified by the native speakers of a language that a similar word with the same root can have number of forms. For example English words like write, writes, writer, written and writing can be split into parts. They have one common unit write and a number of other units like –s, -er, -en, -ing. All these independently are called morphemes. Thus it shows that morphemes include both- lexical units that carry meanings ex. write, play and grammatical units that convey tenses and plurals ex. –s, -es, -ing. Similarly the word visitors is made up of three morphemes; 1) minimal meaning bearing unit visit 2) unit of meaning –or (a doer of something) 3) the minimal unit showing the grammatical function of plural –s. Likewise, the word reopened consists of three morphemes; (1) The meaning bearing unit – {open}; (2) Another minimal unit meaning “again”- {re}; (3) Grammatical unit that shows past tense-{ed}

Conventional representation of morphemes are written between braces {re}+{open}+{ed}

**Other Morphemic Constructions**

When one morphologically analyses the words, it is observed that some words can be divided into multiple morphemes whiles some are morphemes by themselves and cannot be further divided. Such morphemes that can stand alone by themselves and can be identified as words are called free morphemes. For instance words like {sugar}, {food}, {grow}. Compound words are mostly joined by two morphemes. The word mailbox consists of two morphemes {mail} and {box}, both of which has a meaning of their own. Thus, they are not co-dependent and can also exist on their own as independent words with meaning. Another type of morphemes are ones that occurs only with other morphemes. Such morphemes are attached to the other morphemes to form words. These are called bound morphemes. They have a meaning attached
to them but they do not exist independently. They occur as a sub part of a word. They are called prefixes and suffixes. {pre-}, {re-}, {-ness}, {-ly} are examples of compound morphemes. In the word unknowingly, {un-} is a prefix, {know} is a free morpheme while {-ing} and {-ly} are suffixes. The bound morphemes that are attached to the free morphemes are called affixes. Affixes may consist of prefix, suffix or infix.

Furthermore morphemes are divided into two morphological operations: Derivational Morphology & Inflexional Morphology

Derivational morpheme comes from the compound morpheme type. As the name suggests a new word is derived by adding a compound morpheme to a free one. When a bound morpheme is added to a root to form a new word, it is called a derivational morpheme. For example in the word happiness, the suffix {-ness} is added to the root {happy} in order to form the word happiness. Similarly, if the prefix {-un} is added to the same word {happy} it forms the word unhappy. Here, it is to be noted that derivational morphemes have a twofold effect on the word with respect to grammatical construction. In the word happiness, by adding the suffix –ness, there is change in the grammatical form, i.e. adjective to noun. However the meaning remains the same. On the contrary, in the word unhappy, by adding the prefix {-un-}, the form remains the same but the meaning of the word changes. This shows that by adding prefix to root word the meaning of words changes while by adding suffix the meaning remains same but the part of speech or grammatical form i.e. number, tense, form, case changes.

Inflexional morphemes are a combination of a grammatical attachment to the lexical stems. Inflexional morpheme deals with grammatical constructions like tense, case, aspect or number. It primarily gives new form to existing words through inflexional changes rather than forming new words. For instance, the verbs {play} being a root morpheme can be used in its original form (base form) when no inflexional morpheme is added. It changes form in different types of sentences with suitable suffixes as the sentence structure changes.

Conclusion

Morphology is the connecting branch between various linguistic compounds. It is evidently the most essential component to acquire language in an effective, quick and sustainable manner. Morphological analyses with respect to language acquisition are a vast domain which the paper throws brief light on. It can be derived from the afore mentioned arguments that morphological analysis is the most sought after subject and medium for language acquisition.

References


