Investigating the Role of Affixation in Learning and Understanding English Lexis

Dr Da'oud Mohamed Gubair[1, 2], Rihab Osman Suleiman Ibrahim[2, 3]

[1]Jouf University, Kingdom of Saudi Arabia
[2]University of Khartoum, Sudan
[3]Dalanj University, Sudan

Abstract: *The aim of this paper is to investigate the role of the learners' knowledge of lexeme formation processes in EFL lexis learning and understanding. The focus is mainly on the role of affixation in enhancing EFL learners' lexical learning and understanding. The study adopted a descriptive and analytical approach in the analysis of the qualitative data collected. The study samples were randomly selected from a pool of around 300 students, majoring in English language at the English department of the Faculty of Education, University of Dalanj. The subjects were 20 students from both genders. For the collection of the primary data, two tests (pretest and posttest)were used. The data then were processed and the percentages of the students' performances in the tests were calculated and compared. The attained results have shown that learning and getting acquainted with affixation process helps EFL learners learn better. The results also indicated that the use of the suggested leaning strategies was effective and efficient as it helped the learners to understand the affixation process and the English lexemes produced by the process. The study recommends exposing learners to affixation process as an effective learning strategy for learning English lexis instead of hammering on the use dictionaries, no matter how important they are.*

1. Background

Learning English language has become an urgent, inevitable necessity. Learning vocabulary represents an important component of language which learners could not be able to step forward without, no matter how well they learn grammar or the sounds of the foreign language. It represents an essential component of learning the language for communicating a wide range of meanings. So lexis are worthy of studying. However, English lexis with their large number and diversity of sources pose a problem to learners. The current paper investigates the role of lexeme formation process on EFL lexical learning and understanding. The focus of the study is on the process involved in lexical formation, which is referred to as affixation. The study is based on the premises that knowledge of affixation process would enhance foreign learner's ability of lexical learning and understanding. Hence, learners need to be acquainted with this productive process of word formation. Moreover, they need to how the process works in making words, how to identify the different semantic categories of affixation and how to put their knowledge into practice. Research shows that six-year-old children learn about ten thousand words and eighteen-year-old students learn sixty thousand words. The bulk of is large amount of words is not the kinds of words that are found in dictionary entries. However, they are record somehow in the students' mental lexicons. The process of affixation plays a great role in enriching the learners' mental lexicons.

2. Statement of the Problem

It has been noticed that most university freshman students at the University of Dalanj have trouble in dealing with lexical learning and lexical understanding. Lack of training in lexeme formation processes is thought to be behind this obstacle, which impedes the learners' lexical comprehension abilities and demotivates them to go with their EFL vocabulary learning. In the current paper, the researchers attempt to find out about the role of lexeme formation knowledge on lexical learning and lexical understanding, with the purpose of finding ways for alleviating the problem of meaning, and enhancing students' lexical learning and understanding.

Research questions
The paper seeks to answer the following questions:
1) What challenges do EFL learners have with lexical learning?
2) What problems do they have with lexical understanding?
3) Is there any connection between these challenges and the students' awareness of lexeme formation processes? In other words, does lexeme formation awareness enhance students' lexical comprehension?
4) To what extent does the knowledge of the affixes make a difference among EFL learners?

Hypotheses of the study
1) EFL learners' have great challenges in lexical learning as they rely mostly on memorizing new lexemes. When they come across a new word, they immediately think of looking it up in the dictionary or ask someone about its meaning. They never try to get the meaning by analyzing the word into it components.
2) The students have problems with understanding new words, as they have only two strategies only in dealing with them: consult a dictionary or ask someone who knows them. In situation where there is no access to these resources, they stop attempts to find the meaning of new words.
3) The challenges that EFL learners experience with lexical learning and lexical comprehension have their roots in lexeme formation rules. Being unfamiliar these rules impedes lexical learning and lexical understanding; the knowledge of lexeme formation rules provides channels for getting meanings of new lexis and improves the EFL learners' lexical learning abilities, as well as lexical understanding.
4) Knowledge of the affixes make a difference among EFL learners.

Objectives of the Study

The objective of the present study is to help learners understand the meaning of lexical items by training on and exposure to lexeme formation rules, specifically affixation process.

Significance the study

The significance of the study emerges from the fact that English language lexis, come from different sources, which makes it difficult for learners to unlock lexeme meanings. Hence, a comprehensive exposure to these sources and training the students on them will help learners to deal with the challenges of lexis, lexical learning and comprehension easily. Lexis are considered to be structure and the frame around which the language skills are established. Language comprehension or retention depends on the reader's knowledge of lexis construction mostly, though there are other factors.

Delimitations of the Study:

Lexeme formation rules include affixation, compounding, coinage, backformation, blending, acronym, initialism, and clipping. The study is confined to affixation process only as it is the most productive and complex process. Anything other than affixation is beyond the scope of the study. The scope sets the delimitations and establishes the boundaries of the study as the following:

3. Literature Review

Radford (1997:8) says that learners should have linguistic experience if they are to reach a high level of acquisition or learning, the thing that can only be gained with a deep insight in language. The study of lexis is the central business of morphology. Morphology is the study of how words are formed in a language. A good deal of English words are formed by adding affixes to already existing words. The affixes include prefixes, suffixes and infix. The word to which affixes (prefixes and suffixes) are added is termed the 'base' as it forms the basis of a new word. The base may stand as a word on its own or remain bound to another morpheme. When a base can stand on its own, it is called free base. However, it is called bound base when it cannot stand on its own. For example, the word lovely consists of the free base 'love' and the suffix '- ly'. In contrast, the bound base does not typically form a stand-alone word on its own. For example, the word reject is made up of the prefix 're-' and the Latin bound base 'ject, ' which is not a stand-alone word.

Affixation

Affixation process is defined as the process of forming new words by adding affixes to base, (Rochelle Lieber:2010). Affixes include prefixes, suffixes and infixes. Prefixes attach before the base. In the word unhappy, 'un' is a prefix. Suffixes come after the base. In the 'happiness', 'ness' is a suffix. Infixes spilt the base. In English language, infixes are not very common. It is a minor process, which is not a very productive, (Rochelle Lieber: 2010). A frequently used example is the word 'fan-bloody-tastic', in which 'bloody' is an infix and 'fantastic' is the base. The affixation process of word formation has two classes: derivational process and inflectional. The derivation process forms new lexemes and the inflectional process adds grammatical meaning, (Crystal: 1985).The derivation process includes forming words by adding prefixes, suffixes or infixes to a base. The derivational process can change the meaning of the base, change its category or change both the meaning and category. Inflectional process on the other hand does not change the meaning or class of the base, but changes the form of the word to fit in the grammatical context where the word appears and adds grammatical meaning. The knowledge of these processes is important in the acquisition of English as a foreign language and helps students to learn and understand lexemes better. It is far easier to recognize words depending on their morphological structure than memorizing each word separately, (Monson, 1968). Words are easier to memorize when classified by meanings and word-classes than when arranged alphabetically (Thakur, 1997).

The English affixes are various. They vary in their forms, the place where they are attached, the category of the bases they are attached to, and the meaning expected to yield when added to the specific bases. For example, the affixes un-, -ness, -ity attach to adjectives. The first affix (un-) changes meaning (unhappy = not happy), while the remaining two change the category of their bases, e.g., happiness (happy (adj) + ness = noun) and purify (pure (adj) + -ity = noun). As well, re, er, -ee and- tion attach to verbs. The prefix re does not change categories, and so do almost all prefixes (except 'de' in delouse), which changes the noun 'louse' into verb 'delouse'. They only modify the meaning of their bases in some way or the other. However, the three remaining ones change the category of their bases. It is interesting to note that the affixes ''-er and '-ee' when attached to the same verb they change it into nouns of difference cases. For example, when we add '-er' and '-ee' are to the verb 'train', we get the nouns: trainer (agent) and trainee (patient).

Learners need to be exposed to different affixes and the lexeme formation rules connected with these affixes. Moreover, learners need to be made aware of the common semantic categories associated with the different affixes. The common semantic categories as presented in Rochelle Lieber (2010) include personal affixes, negative and privative, prepositional and relational affixes, quantitative affixes, and evaluative. Personal affixes create 'people nouns; negative and privative add the meanings 'not' or 'without'; prepositional and relational affixes convey the notions of space and/or time; , quantitative affixes have something to do with the amount; and evaluative affixes signal a smaller or a bigger version of the base.

Previous Research on Affixes

Studies of L2 learners' vocabulary learning have been carried out with respect to the breadth and depth of vocabulary (how much vocabulary learners need to know and what is required when learning a word). Morphological knowledge has been highlighted as a particularly important aspect of vocabulary learning (Schmitt, 2000; Nation, 2001). Many researchers claim that using knowledge of affixes to learn vocabulary is a useful and commonly used strategy to facilitate vocabulary acquisition (Bauer & Nation, 1993; Nation & Waring, 1997; Nation, 2001). According to Nation, one advantage of using affix knowledge for

vocabulary learning is that it can help students learn unfamiliar words by connecting them to known roots or connecting them to known affixes (p. 264). Thereby, the strategy can lighten the "burden" of acquiring vocabulary by: dividing words into known word parts and b) perceiving words as part of a word family. Numerous studies have been done on English affixes. Most research, however, focus primarily on the affix itself. Issues investigated include assessing the knowledge and the acquisition of affix (Tyler & Nagy, 1989; Nagy, Diakidoy& Anderson, 1993; Schmitt & Zimmerman, 2002); the ordering of affixes in English (Mochizuki & Aizawa, 2000; Hay, 2002; Plag & Baayen, 2009); and the classification of affixes for teaching and learning purposes (Bauer and Nation, 1993).Inaddition, some researchers have attempted to look at the relationship between affix knowledge and overall vocabulary size (Schmitt & Meara, 1997; Mochizuki & Aizawa, 2000). Very few studies (Nakayama, 2008; Ward & Chuenjundaeng, 2009) focus on the efficiency aspect of using word part strategy or affix knowledge to learn vocabulary.

Nakayama (2008) looked at the efficiency of systematic vocabulary teaching using affix knowledge. The focus was on five prefixes. The study aimed to investigate whether teaching affix knowledge facilitates vocabulary learning. Two groups of students took part in Nakayama's study; the only difference between the two groups being that one was given a short lecture about affixes while the other was not. The two groups of students were then given the same time to guess the meaning of sixty words by filling out a work sheet. They were subsequently given the L1 translations of the sixty words to memorize. Finally, the students took a vocabulary test in which they were required to fill in the L1 meaning of the sixty words. The same test was taken a week later. As for the short lecture about affixes in Nakayama's study, it was a three-minute PowerPoint display: the explanation of prefixes and their visualized images were shown at first and then a display of the target words with these prefixes.

Ward & Chuenjundaeng (2009), investigated the role of word-building whether a learning or teaching strategy in facilitating vocabulary learning. The researchers tried to find out if the knowledge of a word would facilitate understanding of other words within the same word family. The results the study suggest that learning roots can facilitate learning the derived form of the root, but not vice versa. Their study also suggests that in order to acquire word-building strategy, the frequency of exposure seems to be indispensable.

Ibrahim, M. A. H., (2004) studied the role of affixes and contextual clues in learning English with the purpose of investigating the role of affixes and contextual clues in understanding English lexis meaning.

4. The Current Study

The study has a lot in common with the previous research, in that it investigates the role of knowing the word formation process, which referred to as affixation in enhancing the EFL learners' ability to learn and understand English lexis. However, this paper differs from the previous studies in a number of ways. It differs in the context where the study took place, in the subjects, the specific tools for data collection and he methodology adopted. Hence, we expect the results the study arrives at will enrich the literature in the field of vocabulary learning and draws attention to word formation processes as powerful tools for vocabulary learning.

The aim of the present study is similar to the former two studies (Nakayama, 2008; Ward & Chuenjundaeng, 2009), i.e. to investigate the efficiency of word part strategy. However, the focus, the method and subjects are totally different. In the present study, both the prefixes and suffixes were examined and the focus was on how affix knowledge can help students to understand new words and facilitate vocabulary learning. Two tests were designed for the purpose. Test A was created by the writer while test B was a modification of Nation's format

5. Methodology

This paper investigates the role of affixation in enhancing the students' vocabulary comprehension, and hence developing the students' reading comprehension skill. The study adopts a quantitative methodology, using two tests as tools for data collection. The subjects of the study were randomly chosen from students of the English department of the Faculty of Education, University of Dalanj. About thirty students studying English as a foreign language at the English department were subjected to two: a pre-test and post-test after intervention. The tests aim to measure the students' abilities to use and understand lexical items, before and after n intervention, and the ultimate goal is find out about the role of affixation in enhancing lexical knowledge without consulting dictionaries. The students' performance was assessed and calculated using statistical package of SPSS. The results were analyzed and discussion in chapter four.

Participants
The participants in the study were randomly selected from students of English language at the English department, Faculty of Education, University of Delanj. They were twenty in total. They were both genders and their ages range twenty to forty year.

Tools for data collection
The researcher used two tests. A pretest, which aims to probe the students' lexical knowledge and the problems, which they experience with lexis learning and lexical comprehension. After the researcher have collected enough information about the subjects' lexical problems, moved to stage two, which was an intervention to fix the problem. The subjects were introduced to the concept of affixations and were taught affixation thoroughly for(Two month). They were made to practice forming news using affixation process. They were also trained on how to analyze complex words and understand their meanings. When the subjects were fully understood the word formation process of affixation, they were subjected to a posttest. This was done with the premise that, if a noticeable difference in the subjects performance was found then the intervention is successful and this consolidate the hypothesis that the

knowledge of affixation process enhances the learners' vocabulary learning abilities and their lexical comprehension and there for improves their reading ability. The subjects' performance in the two tests was assessed and the results were calculated with statistical tools and tabulated.

6. Procedure

The test was composed of five questions. A comprehension passage was used to check the effects of the techniques on students' comprehension and understanding of lexical meaning. Therefore, the passage was followed by comprehension questions and underlined lexical meaning items for students to find their meaning in second question. The third and four questions contained prefixes and suffixes. The subjects were asked to add them to accompanying list of words to form new words to be used to complete provided sentences. Question 5 provides a list of complex lexical items. The subjects were asked to find their meaning by analyzing them into their constituents (root, prefixes and or suffixes). The two tests lasted for 120 minutes, 60 minutes for each test.

As mentioned above, the pretest aimed to find out about the subject difficulties in lexical learning and vocabulary

understanding. It was hoped to pave the way for intervention to take place. The researcher used the information collected by the pretest, regarding the students' lexical knowledge and the difficulties, which they experienced with lexis during the test. The data collected by pretest could be used as an index for the subjects lexical gaps, based on which the researcher intervention to fill the lexical gap and correct the situation. When the researcher was convinced that the subjects had enough training on affixation, the posttest was administered.

7. Data Analysis and Discussion

The study sets to investigate the impact of the lexical knowledge through affixation process on the EFL subjects' learning and comprehension of English lexis. The subjects were (20), randomly selected from students studying language at the English department of the Faculty of Education, University of English Dalanj. The subjects took two tests. A pre-test, which aimed to probe the students' knowledge of affixation process and a posttest, which took place after intervention to reflect the impact of the intervention on the students' performance. The tests were marked out of 100. Each test consisted of five questions and each question was marked out of ten marks. The results were tabulated in table (1) and table (2) below.

Table 1: The students' performance in the pretest

		Excellent	Very good	Good	Weak	Total
Lexis	number	0	0	2	18	20
	percentage	0%	0%	10%	90%	100%
Comprehension	number	0	0	15	5	20
	percentage	0%	0%	74%	26%	100%
Prefixes	number	0	0	16	4	20
	percentage	0%	0%	80%	20%	100%
Suffixes	number	0	2	14	4	20
	percentage	0%	10%	70%	20%	100%
Analysis	number	0	0	3	17	20
	percentage	0%	0%	14%	86%	100%
Total	number	0	0	5	15	20
	percentage	0%	0%	26%	74%	100%

10-9: excellent, 8-7: very good, 6-5: good, less than5: weak

The subjects' performance in the pretest
As shown in table (1) above, the students' general performance in the pretest was weak. Few students scored excellent in any of the five sections of the test; and only two students scored very good in the suffix question. The majority of the subjects scored either good (in comprehension question, prefixes and suffixes) or weak(in lexis formation and lexical analysis. These results indicate a gap in the subjects' knowledge of affixation process. Based

on this result, the researcher planned an intervention strategy to bridge this knowledge gap. The subjects were taught the affixation process thoroughly within (12) weeks. They were trained on word formation process and complex words analysis. When the researcher felt that the subjects were made fully aware of the affixation process mechanism, they were subjected to posttest and the results were shown in Table (2) below.

Table 2: The students' performance in the posttest

	N + Per	Excellent	Very good	Good	Weak	Total
Lexis	Number	5	12	3	0	20
	percentage	24%	60%	16%	0%	100%
Comprehension	Number	9	11	0	0	20
	percentage	44%	56%	0%	0%	100%
Prefixes	Number	14	3	3	0	20
	percentage	70%	14%	16%	0%	100%
Suffixes	Number	14	5	1	0	20
	percentage	70%	24%	6%	0%	100%
Analysis	Number	2	16	2	0	20
	percentage	10%	80%	10 %	0%	100%
Total	Number	4	13	3	0	20
	Percentage	20%	66%	14%	%	100%

10-9 : excellent, 8-7: very good, 6-5: good, less than5: weak

The subjects' performance in the posttest:

After the intervention, the subjects' performance as shown in table (2) above has improved a lot. Their general performance ranges between very good and excellent. None of the subjects was identified weak, and only between 10% to 16% of them were identified good. The rest were either very good or excellent. However, as in the pretest, their performance was better in comprehension, suffixes and prefixes than their performance in the two other questions, namely, lexis and lexical analysis. They scored in these three questions 44%, 70% and 70% , respectively. The researcher will try to explain this interesting remark in the discussion section. Next, the researcher will compare and contrast the subjects' performance in each question of the two tests separately.

The Students' performance in the question of lexis in the two tests:

It is clear from figure (1) below that there was a very big difference between the students' performance in the first question concerning word formation knowledge. While almost all of the subjects were identified weak, based on their performance in the pretest, none of them was identified weak in the posttest. Moreover, 25% of the subjects were excellent in posttest and 60% of them were very good, whereas none of them was excellent or very good in the pretest. In spite of the clear difference the subjects' performance in lexis, their performance in lexis remain the least when compared with their performance in the four other questions. We will discuss this point later.
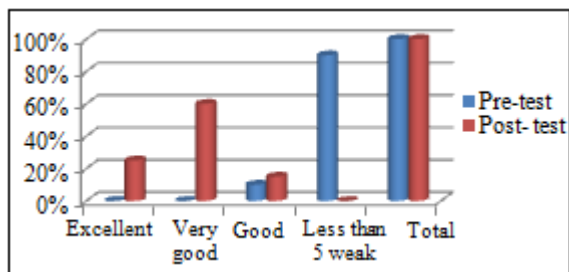

Figure 1: Students' performance in Lexis

The Students performance in comprehension in the two tests:

As figure (2) below shows, there was very big difference also among the students' performance regarding comprehension. While almost all of the subjects performed weakly in the pretest, their performance improved a lot in the posttest. Almost 45% of the subjects were excellent in posttest and 55% of them were very good. In state of apparent difference the subjects' performance in comprehension, their performance remained the least when compared with their performance in the four other questions.

Figure 2: Students performance in comprehension

The Students' performance in prefixes in the two tests:

As shown in figure (3) below, few students scored excellent or very good in the pre-test. Their general performance is either good (80%) or weak. Almost all of the subjects got weak in this section of the pretest. However, their performance ranged between excellent (70%) and very good or good (30%) in the posttest. None of them was identified weak. In the pretest on the other hand, 80% of the subjects were identified good and the rest were weak.
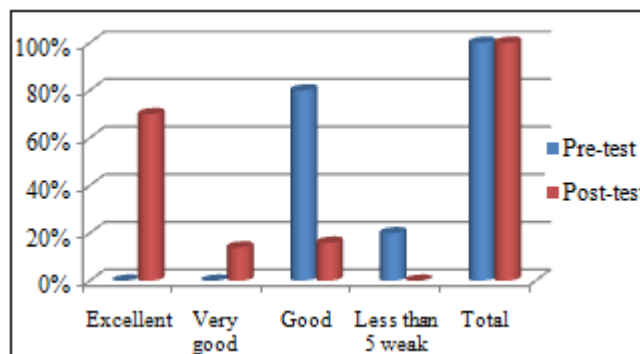

Figure 3: The performance of the Students in prefix in pre and post -test

The Students performance in suffixes in the two tests

The shift of the curve from right to the left as figure (4) shows indicates noticeable improvement in the students'

performance. In the pretest, the curve was to the right. The students' performance was either good (70%) or weak (30%). In the posttest, however, it was shifted to the left. 70% of the subjects were identified excellent, nearly 30% were very good and only a few were good.
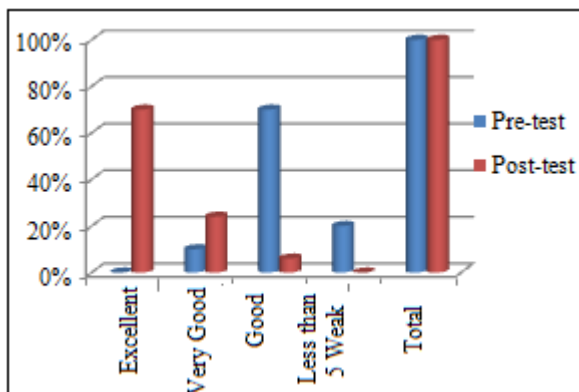

Figure 4: Students' performance in suffix

The performance of the Students of suffix in pre and post -test

Figure (5) below shows apparent differences in the students' performance in the two tests regarding the analysis. Moreover, there was a noticeable change in the students' performance to the better. While almost 90% of the subjects were identified as excellent in the posttest, none of them were identified excellent in the pretest.
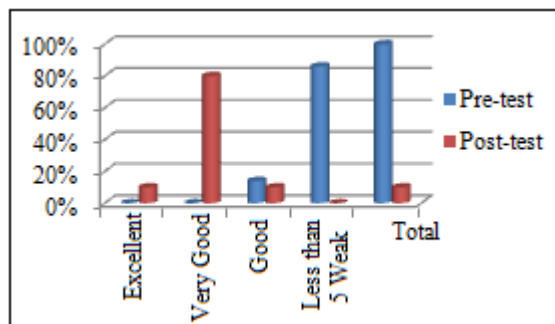

Figure 5: Students' performance in lexical analysis

8. Discussion of the Results

This paper is an attempt to approach Learning and understanding English language lexis without the help of a dictionary. A quantitative methodology was adopted and two tests were used for data collection. The study was based on the premises that the awareness of word formation process enhances vocabulary learning and understanding. The analysis of the data collected showed remarkable differences between the performances of the subjects in the two tests. The subjects' performance in the posttest is far cry better than their performance in the pretest. Two conclusions can be drown from this result. The first is that most of the subjects lacked the awareness of affixation when they sat for the pretest. This means than a powerful tool in the subjects' repertoire, which might help in understanding and learning English vocabulary, was missing. The second conclusion

was that the intervention was successful and the knowledge gap was met and therefore the students' performance improved a lot in the posttest. The shift of the subjects' performance curve from the right to left in lexis understanding, prefixes, suffixes and analysis is a clear indicator of the filling of the subjects' knowledge gap in word formation process, especially affixation. The shift also confirms the hypotheses of the paper. The hypotheses include: (1) the reliance on memorizing learned lexemes rather than understanding new word by analyzing them into their immediate constituents; (2) the use of different strategies when dealing with new lexis; and (3) the knowledge of lexeme formation rules, which in turns improves lexical comprehension and lexical learning abilities, and provides channels for getting meanings of new lexis.

9. Conclusions and Recommendations

This paper investigated the role of the knowledge of lexeme formation rules on lexical Learning and lexical understanding in English language. The study tried to link the process of word formation known as affixation with learning and understanding lexis without the help of a dictionary. A quantitative methodology was adopted and two tests were used for data collection. The analysis and the results were discussed and analyzed. The study arrived at the following findings:

1) There is strong connection between vocabulary learning and vocabulary understanding and the knowledge of word formation processes. The more the learners are knowledgeable and aware of lexeme formation rules, the more their performance in the tests improves.
2) The knowledge of word formation processes improves vocabulary understanding and vocabulary learning.
3) Formal instruction of word formation makes a difference in learning and understanding lexis.
4) The awareness of lexeme formation rules enhances overall comprehension of a text in English.

The findings of this study might be useful for classroom practitioners, Course book writers, decision makers and language planners. However, as the number of the subjects involved in the study is somewhat small compared with the large number of EFL learners in the University of Kordofan, the reliability of such findings needs to be check and recheck to ascertain it. In order for the findings to be more reliable we suggest a further study using the same tools with large number of participants in longer periods of training in all well-known word formation process, not affixation only.

References

[1] Aronoff, Mark. (1976). Word Formation in Generative Grammar. Cambridge, MA: MIT Press.
[2] Arthur, Mc Tom (1998). Oxford Concise Companion of the English Language OUP.
[3] 3. Blair, R. W. (1982). Innovative Approaches toLanguage Teaching. Newbury House publishers, Cambridge.
[4] Brandford, W. (1967). The Elements of English. Richard Clay. (The Chaucer press) Ltd. Brirain.

[5] BrouGhton, G. et a I (1980). Teaching English as a Foreign Language. Routledge and Keganpaul London and New York.

[6] Corder, S. P. I .T., (1973). Reading for Applied Linguistics. Oxford University press.

[7] Bybee, Joan(1985). Morphology: A Study of the Relation Between Meaning and Form. Amsterdam: John Benjamins.

[8] Nation, I.S.P (1990). Teaching and Learning Vocabulary. Heine and Heine Publishers Massachusetts

[9] Hubbard, P., H. Jones, and R. (1986). Wheeler A Training Course for TEFL . OUP.

[10] Kailani, T.Z and L. Muquttash (1995) ELT Methodology (1) AlQuds Open University .

[11] Richards, J. Platt and H. Weber(1989) Longman Dictionary of Applied Linguistics Longman.

[12] Rochelle Lieber (2010).Introducing Morphology .Cambridge University Press

[13] Ibrahim, M. A. H., (2004).The Role of Affixes and Contextual Clues in Learning English, University of Gezira (Unpublished)