
Investigating the Students' Recognition and Production of Pronunciation Change After Adding Suffixes□

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Abstract:

Suffixes are group of letters or a letter that is attached to the root of words. In addition that suffixes change the part of speech of the word or change its lexical meaning, they also have an effect on the pronunciation of the original word. This is due to the origin of that suffix.

The present study aims at investigating third-year college students' awareness of changing the pronunciation of the original word after adding suffixes. To achieve this aim, the researchers have constructed a test, which contains two questions: a multiple-choice question at the recognition level and a completion question at the production level.

المستخلص:

أستقصاء وعي الطلاب في تغير الأصوات بعد أضافة المقاطع

المقاطع هي مجموعة من الاحرف او حرف واحد فقط تضاف الى اصل الكلمة. بالأضافة الى أن المقاطع تغير في أقسام الكلام او تغير بالمعنى اللغوي فأنها تؤدي الى التأثير في لفظ هذه الكلمات .وهذا نتيجة أصل هذه المقاطع المضافة .

تهدف الدراسة الحالية الى استقصاء وعي طلاب الجامعة في المرحلة الثالثة للتغير الحاصل في تلفظ الكلمة الأصلية بعد أضافة المقاطع .ولتحقيق هذا الفعل قامت الباحثتان ببناء أختبار يتكون من سؤالين , سؤال اختيار من متعدد لمستوى التعرف وسؤال التكملة لمستوى الأنتاج .

Section One

1.1 The Problem

Everybody wants to be able to speak English like a native speaker since pronunciation plays an important role in communication. English pronunciation is always a big problem to learners especially to EFL learners. Learners want to make their pronunciation close to the standards but only some of them can reach to this level.

Bad English pronunciation may confuse people even if you use advanced English grammar. We can use simple words and simple grammar structures that make people understand but we cannot use simple pronunciation. Learning good pronunciation is just as important as learning grammar if not more. On the other hand, good English pronunciation will make people understand you easily and be willing to listen to you as your English is pleasant. This is a simple problem that is related to simple English words. (*Szynalski, 2011*)

The problem with pronunciation becomes greater with complex words i.e. when EFL learners add suffixes to the words as their language develops and as the requirements of the language need. EFL learners often overlook that the pronunciation of some roots will be changed when adding suffixes. The reason for this is that some of the suffixes do change and some of them do not. And since EFL learners

struggle to have good pronunciation that resembles native speakers or at least to acceptable and understandable pronunciation that do not let them signaled out as foreigners, they need to emphasize on this kind of area.

The interface between phonology and morphology is an important and complex area that is often confused by many learners (Booij ,2001), for this reason the subject is worthy to be investigated.

1.2 The Aim of the Study

The aim of this study is to investigate EFL college students' awareness of the pronunciation change after adding suffixes to English words.

1.3 Hypothesis of the Study

It is hypothesized that third-year college students are unaware of the pronunciation change after adding suffixes to English words.

1.4 Limits of the Study

This study is limited to third-year college students, Department of English, college of Education for women of the academic year (2010-2011). It is also limited to the suffixes (-ty, ic, tion, ive)

1.5 The Significance of the Study

The present study sheds light on third-year college students' awareness of the pronunciation change after adding suffixes to English words. Hence, Iraqi EFL learners face

difficulties in pronouncing the English vowel sounds system because of the difficulty of the English vowel sound system, but when suffixes are added the problem is even greater.

Section Two: A general survey on English suffixes

2.1 Introduction

The number and the form of suffixes in English are so great, that an attempt to present them would be a hard task. (Nordquist , 2009). Suffixes are important in any language as they add meaning to the original word since each suffix has its own meaning. Suffixes convey syntactic information. They help the learner to know the part of speech of the word i.e. through the kind of suffix one can know whether the word is a noun, a verb, an adjective or an adverb (Ember ,2009). They make learning much easier. Adding suffixes is not an easy task as they have many effects on the original word.

2.2 Definition of Suffixes

A suffix is a letter or a group of letters added to the end of a word or root that and has special meaning .Several different words can be formed from a root by adding different suffixes. For example, by adding suffixes to the root word DANGER, we may have dangerous, dangerously, dangerousness.

Suffixes can alter the grammatical function of the original word, the part of speech of the word or its meaning. (Nordquist,2009)

2.3 Kinds of suffixes

Suffixes can be of two basic types:-

1-Inflectional suffixes

2- Derivational suffixes

Inflectional suffixes produce forms of the same word e.g compute, computing, computes; they are all related by inflection since they are all forms of the same word (lexeme) COMPUTE. They are said to change the grammatical function of the word.

Inflection is viewed as the process of adding very general meanings to existing words, not the creation of new words. (Rubba, 2004)

Inflection typically encodes categories such as number (in nouns), tense/tense (in verbs), gender (in nouns), case and comparison (in adjectives) which are relevant to syntax. Inflection thus seems to be just the morphology that is accessible to or manipulated by rules of the syntax. (Nordquist, 2009)

Derivation: is the process by which affixes combine with roots to create new words. It is viewed as using existing words to make new words i.e produce new words (Rubba, 2004) (in the sense of lexemes) e.g the words compute ,

computer , computerize , re-compute are all related by derivation since they are different words (lexemes), though have the same root (COMPUTE). Derivational suffixes have the potential to change the grammatical class of the base to which they are added. (Nordquist,2009)

2.3.1 Inflectional suffixes

Inflectional suffixes are of limited number and they can be mastered easily as they are finite group, they are fossilized class category since there is no change in their number, meaning and class (Kelley, 1998).They include the following:

1. **-s** third person singular present
2. **-ed** past tense
3. **-ing** [progressive](#)/continuous
4. **-en** [past participle](#)
5. **-s** plural
6. **-en** plural (irregular)
7. **-er** [comparative](#)
8. **-est** [superlative](#)
9. **-n't** [negative](#)

2.3.2 Derivational suffixes

Derivational suffixes are suffixes that change the part of speech of the root as mentioned earlier. According to Quirk et al (1985:1552-1555), derivational suffixes include the following types:

1-Denominal nouns: They are suffixes that are attached to nouns to change them into concrete or abstract nouns. These suffixes include (age , dom , ery , full , hood , ing , ism , ocracy , ship , eer , er , ette , let , ling , ster.

2- Deverbal nouns: They are suffixes that are attached to verbs to change them into abstract and concrete nouns. These suffixes include (ant , ee , er , or , age , al , ation , ment , sion.

3- De-adjectival nouns: They are suffixes that are attached to adjectives to change them into nouns. These suffixes include (ity , ness).

4-Denominal adjectives: They are suffixes that are attached to nouns to change them into adjectives. These suffixes include (ed, full, ish , less , like , ly , y , al , ial , ical , esque , ic , ous).

5- Deverbal adjectives: They are suffixes that are attached to verbs to change them into adjectives. These include (able, ive).

6- Advrebial suffixes: They are suffixes that form adverbs out of nouns or adjectives. These suffixes include (ly, ward, wise)

7- Deverbal suffixes: different suffixes are attached to form verbs, these include (ate , en , ify , ize).

8- Miscellaneous suffixes; These suffixes can be used to form adjectives or nouns out of nouns, these include (ese, ian , ist , ite). (Ibid)

2.4 Historical Background of Suffixes

English language in general is affected by other languages and so do affixes. We can trace back the suffixes and from where they are derived. The origin of these suffixes matters much in many ways.

2.4.1 The origin of suffixes

English language as well known is an Indo-European language this means that it is not a pure language but it is a mixed language that is affected by the numbers of the languages that composes it. Each language has somehow different grammar, vocabulary, phonetics from the other. The vocabulary, the grammar, the pronunciation are all affected by the languages that compose English language. (Bloomfield,1933:61). For this reason Suffixes in general according to McCarthur (1998) can be classified into:

1- Vernacular suffixes

These kinds of suffixes can be traced back to Old English and other Germanic languages. They include the all inflectional suffixes and some derivational suffixes like (dom, ed , en ,ful ,ness , hood , ish , less , let , ship , al , like , ing).

2- Romance suffixes

These kinds of suffixes come from Old French. They include (ant , cy , age , ism ,er, ist , ment , ure).

3- Greek suffixes

These kinds of suffixes come from Neo-Latin and French. They include (ee, eer , ese , ation , ition , atic , ify , ic , ity , ize , ous , ian, ive)

2.4.2 The etymology of the selected suffixes

1- ation

It is a 14th century borrowing form the French .This suffix has the meaning of "act of", "state of", "result of". It has many forms (-tion, -sion,-ion). It turns verbs into nouns. For example, imagination, creation, examination. (Wiktionary,2011).

2-ive

It can be said that it is a 14th century borrowing from old French *-if*, *-ive* but originally from the Latin language It is used to transform adjectives into verbs. In its original form it is attached mainly to the past participle Latin verbs, but they can be attached to present Latin verbs also. In its modern form it is largely used to adapt Latin words, or to form words on Latin analogies. It has the meaning of ‘having a tendency to,

having the nature of, character, or quality of, given to (some action).’ the meaning implies a ‘permanent or habitual quality or tendency, for example *acting*, *active*. Variations of this suffix include *-sive*, *-tive*, *-ative*. (Kelley, 1998)

3-ity

It is a 14th century borrowing form the French *-ité* but originally from the Latin language. It did not come into real popularity until the 16th century. The suffix has the meaning of "quality of", "state of" or degree. For example *opacity*, *lucidity*, *mentality* .It turns adjectives into nouns or concrete nouns into abstract nouns.(Ibid)

4 -ic

It is originally Latin suffix which later entered the Germanic languages and subsequently English. The suffix *ic* is used to form adjectives with the meaning of “having some nature, characteristics of" or "have some relation to". This suffix is related with science and arts .For example arithmetic and economic.(Ibid)

2.4.3 The relationship between origin and stress shift

The origin of suffixes affects the root of the word and this causes in many cases to shift the stress into different places depending on the number of syllables of the root and consequently this may cause a change in pronunciation of some sounds of the root.

The first case, if the suffixes can be traced back to Old English (vernacular), this may cause no stress shift. (Booij ,2001).

The second case, if the suffixes come from Romance languages, there is also no change in stress shift. (Ibid)

The third case, if the origin of the suffix is Greek, there may cause stress shift (Booij ,2001), and this may differ whether the suffixes have one or two syllables and thus the stress shift falls according to him into:-

- 1- On the only syllable of the suffix e.g refere'e , engine'er , Japane'se.
- 2- On the first syllable of a suffix with two syllables e.g commend'ation , compos'ition , doma'tic , energy;etic.
- 3- On syllables before the suffix e.g econ'omic , compl'exity ,Can'dian, hum'idify.
- 4- Two syllables before the suffix e.g cens'orious , lab'orious , re'alize , dec'entraize , col'onial , indu'strial , mol;ecular.

2.5 The lexical-etymological relationship between lax and tense sounds

2.5.1 The meaning of tense and lax sounds

The relationship between tense and lax sounds is very important in our subject. So a distinction must be made. There are three clear distinctions between lax and tense sounds. According to Donna et al (1996:96), the following distinctions are stated:-

- 1-** The tense vowels /iy, ey, o,O, ow, uo/ need muscle tension to be pronounced which leads to make them less centered in comparison with lax vowels /i,~, a, ^, U/ that have less muscle tension and more centralized.
- 2-** Tense vowels are accompanied by a glide since they consist of two pure vowels while lax vowels have no glide as they are pure vowels.
- 3-** Tense vowels can occur in both stressed (open and closed syllables). Open syllables are those syllables which have no final consonant sound e.g tea, may, law. Closed syllables, on the other hand, are those syllables which end with a consonant sound e.g team, main, hole, zoom, .Lax vowels on the other hand, occur only in closed syllables when they are stressed or in monosyllabic words e.g him, met, hand, fun, put.

2.5.2 *The effect of suffixes on tense sounds*

Adding suffixes to a word has many effects on it. In addition to changing the meaning and part of speech, the effect occurs also on changing the features of a vowel from tense to lax vowel. As donna et al(1996:273) say, when adding suffixes like ity, ation, ic, ive, and these suffixes do not change the stress pattern, what happens is that the stressed vowel of the root will systematically change from tense to lax vowel in the derivative form as the following diagram shows:

Vowel shift		Base form- stressed tense vowel	Derivation form- stressed lax vowel
/ey/	/a/	State, sane	Static, sanity
/iy/	/'/	Serene, discrete	Serenity, discretion
/ay/	/i/	Cycle, divine	Cyclic, divinity
/ow/	/a/	Tone, verbose	Tonic, verbosity
/uw/	/^/	Assume, reduce	Assumption, reduction

It is important to mention that some words that have Greek suffixes and have tense vowels but there is no change in stress shift or pronunciation change, the reason for this, as the researchers notice, is that they usually end with the letter (t).

Section Three: Procedures

3.1 Test Construction

The researchers constructed a test about the following types of suffixes [-ty, -ic, -ive, -tion], distributed on both sections of the test of nearly the same number. As these suffixes are added, the pronunciation will be changed. The test consists of (30) items distributed into three sections. Section one and two consist of (8) items each, whereas section three consists of (14) items.

Section one and two test the recognition level and section three tests the production level of students. (See the Appendix 2).

3.2 Population and Sample Selection

The population of the present study is the third-year students at the Department of English, college of Education for women, University of Baghdad, during the academic year (2010-2011). The reason behind the selection of the third year students is that they have been introduced to the English vowels in their syllabus during their study in the first and second year levels. And because they have been introduced to suffixes as a way of changing one part of speech to another. Hence, the researchers want to see whether third-year college students are aware of the pronunciation change after adding suffixes to the words or not.

The sample of the study are (80) students distributed alphabetically into three sections (A,B,C). Fifteen students failed to attend the test; the total number of the sample is (65).

3.3 Test Validity

The test gives the concept of validity when it measures what it intended to measure (Madesn, 1983:178). In order to ensure the face validity of this test, it was exposes to jury (see Appendix 1) of experts to provide the researchers with their opinions in verifying the items of the test, checking its validity and suitability. The jurors agreed upon its validity and suitability.

3.4 Test Reliability

Reliability refers to the degree of consistency of the test scores measurement (Oller, 1979:4). One of the methods that can be used to find out test reliability is the split-half method, which requires scoring the odd-numbered items and the even-numbered items separately. Then, the correlation between scores on the odd and even numbered items is calculated. By using Pearson Correlation formula, the reliability coefficient of the test is computed to be (0.64). Using Spearman Brown's formula for re-correction the test, reliability correlation coefficient is found to be (0.78). This indicates that the test is reliable and acceptable.

Section four: Results, conclusions, Recommendation and suggestion

4.1 Result Analysis

In order to find out third-year college students are aware of the pronunciation change after adding suffixes to the words or not, the T-test formula for one sample is used. As shown in the table below, the calculated T-value is (1.2206), which is less than the tabulated value (2).

Table (1) (T-test statistics for the study scores in the test for one sample)

N	x	M	S.D	T-Value		Level Of Significance
				calculated	tabulated	
65	15.52	15	3.437	1.2206	2	0.05

Looking at table (2) one can see that the students have difficulty in recognizing that the pronunciation of the original word is changed after adding suffixes. This can be attributed as (James, 1998:171) suggested to intra-lingual errors. Intra-lingual errors refer to the complexities of the second language i.e. the influence of one's target language item upon another (Ibid :172) . And since there is some suffixes that do not have any effect on the root of the word, neither on their sound nor on their stress, the students have answered incorrectly.

Table2 (The students' responses by no.& percentage)

The suffix	Reco.	Percentage	Prod.	Percentage	All	percent
-ty	155	26.5%	36	8.4%	191	18.9%
-ive	140	23.9%	68	16.3%	208	20.6%
-ic	118	20.2%	129	30.4%	247	24.5%
-tion	171	29.2%	191	45.4%	362	35.9%

Corder (1981:105) says that guessing is one of the techniques that EFL learners use to overcome inappropriateness of their knowledge and this is what happens in many items like (4,7,9)

Looking at table (2) again, one can see that there is a discrepancy in student's answers whether the suffix is familiar to them or not. The most familiar suffix in English is (-tion) for this reason the percentage of the students' responses to this item is 35.7%, in comparison with the suffix (-ty) in which the percentage is 18.9%, concerning recognition and production level..

Table (2) shows that the students' responses at the recognition level are better than their responses at the production level.

4.2 Conclusions:

In the light of the findings of the study, the researchers' conclusions can be summed up as the following:

- 1- It is proved that the third-year college students are unaware of the pronunciation change after adding suffixes to words and this supports our hypothesis because by using the T-test formula, it is found that the calculated T-value is (1.2206), which is less than the tabulated value(2).
- 2- Third-year students are introduced with the English sound system in their first and second stages, but grammar is introduced in all four years of study. This makes EFL learners forget all about pronunciation.
- 3- There is lack of awareness by EFL learners that there is a relation between grammar and pronunciation.
- 4- English sound system is very difficult to master as the many differences between the two languages (English and Arabic) but dealing with suffixes and how they change the pronunciation of the word, the problem is even greater.

4.3 Recommendations:

On the basis of the findings arrived at, the following recommendations can be stated:

- 1- Third year students face difficulties in pronunciation change after adding suffixes to English words. Thus, they should be acquainted with these changes by practicing a lot using additional tasks at their classes.
- 2- EFL instructors are advised to attract EFL learners' attention that there is a relation between pronunciation and grammar, because they are taught separately.
- 3- Practice in pronunciation should be done for the four years of college. Third and fourth year-students need an intensive course mainly on pronunciation.

4.4 Suggestions for further studies:

In the light of the results obtained the following suggestions for further studies can be put forward:

- 1- A similar study may be conducted in other colleges for both sexes (males and females); and a study in other stages is needed.
- 2- A similar study can be conducted for other kinds of suffixes.
- 3- A similar study can be conducted to see the students' ability to identify the change in stress to the root after adding suffixes.

Bibliography:

- 1- Bloomfield, L (1933) Language. New York: Holt, Rinehart and Winston.
- 2- Booij, G (2001) Lexical Phonology and Morphology. Amsterdam University. The Netherland. Retrieved November 2010. From <http://www.ling>
- 3- Corder, S.pit (1981) Error Analysis and Inter-language. Oxford: Oxford University Press.
- 4- Donna et al (1996) Teaching Pronunciation: A reference book for teachers of English to speakers of other languages. Cambridge University Press .London.
- 5- Ebbers, Susan M.(2009) Vocabulary through morphemes: Suffixes ,prefixes and roots for intermediate grades. Retrieved January,11,2011. From <http://www.grin.com/e-book/>.
- 6- Gimson, A.C. (1980) An Introduction to the pronunciation of English . Edward Arnold. London.
- 7- <http://en.wiktionary.org/wiki/-tion>. Retrieved 27, January, 2011
- 8- James, (1998) Errors in Language Learning and Use: Exploring Error Analysis. London: Longman.

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- 9- Kelley, W (1998) Eight Derivational Suffixes In American English. Retrieved January, 28, 2010 from www.keomk.com
 - 10- McARTHUR, TOM. "[SUFFIX](#)." Concise Oxford Companion to the English Language. 1998. Retrieved January, 20, 2011 from <http://www.encyclopedia.com>
 - 11- Madesen, H.(1983). Techniques in Testing. Oxford: Oxford University press.
 - 12- Nordquist, R (2009) Common Suffixes in English. Retrieved December, 2010. from <http://www.About.com>
 - 13- Oller, J.W.(1979). Language Testing at School :A Pragmatic Approach. London: Longman Group LTD.
 - 14- Quirk et al (1985) A comprehensive Grammar of the English Language. Longman. London
 - 15- Rubba, Johanna (2004) An overview of the English morphological system. Retrieved December, 13, 2010 from {<http://www.capoly.edu/~jrubby>}
 - 16- *Szynalski, Tomasz* Why you should study English pronunciation . Retrieved February, 2, 2011 from <http://www.antimoon.com>

Appendix 1

The Jury

The jury members arranged alphabetically and according to their academic titles is:

- 1- Ass.Prof. Abdul-Razzaq Jabber (College of Education for Women, University of Baghdad)
- 2- Ass.Prof. Najat Al-Juboury (College of Education for Women, University of Baghdad)
- 3- Ass.Prof. Shatha Al-Saadi (College of Education for Women, University of Baghdad)
- 4- Ass.Prof. Layla Al- Haj (College of Education for Women, University of Baghdad)
- 5- Inst. Nawal Fadhil (College of Education for Women, University of Baghdad)

Appendix 2

The test

Q.1 Choose the most suitable alternative in each of the following pair of words:

1. The letter (a) in **liberal** is pronounced as /ð/ and

The letter (a) in **liberality** is pronounced as:

- a. /i/ b. /æ/ c. /e/ d. /ð/

2. The letter (u) in **produce** is pronounced as /u:/ and

The letter (u) in **production** is pronounced as:

- a. /o/ b. /ʌ/ c. /u/ d. /u:/

3. The letter (a) in **imitate** is pronounced as /ei/ and

The letter (a) in **imitation** is pronounced as:

- a. /ei/ b. /ai/ c. /i/ d. /ð/

4. The letter (a) in **manipulate** is pronounced as /ei/ and

The letter (a) in **manipulative** is pronounced as:

- a. /ei/ b. /ai/ c. /e/ d. /ð/

5. The letter (o) in **compose** is pronounced as /ðu/ and

The letter (o) in **composition** is pronounced as:

- a. /au/ b. /ðu/ c. /o/ d. /ð/

6. The letter (a) in **state** is pronounced as /ei/ and

The letter (a) in **static** is pronounced as:

- a. /ei/ b. /ai/ c. /a/ d. /e/

7. The letter (a) in **calculate** is pronounced as /ei/ and

The letter (a) in **calculation** is pronounced as:

- a. /ei/ b. /ai/ c. /i/ d. /ð/

8. The letter (e) in **Compete** is pronounced as /i:/ and

The letter (e) in **Competitive** is pronounced as:

- a. /i:/ b. /i/ c. /e/ d. /ð/

9. The letter (a) in **general** is pronounced as /ð/ and

The letter (a) in **generality** is pronounced as:

- a. /æ/ b. /e/ c. /ð/ d. /e/

10. The letter (u) in **attribute** is pronounced as /u:/ and

The letter (u) in **attributive** is pronounced as:

- a. /ðu/ b. /u/ c. /u:/ d. /o/

Q.2 Write (S) if the underlined letters are pronounced similarly, and (D) if they are pronounced differently:

1. Narrate – Narration
2. Transform-Transformation
3. Strategy-Strategic
4. Suppose-Supposition
5. Mime-Mimic
6. Collect-Collection
7. Intervene-Intervention
8. Equal - Equality
9. Meditate-Meditative
10. Converse- Conversation

Q.3 Transcribe the underlined letters in the following pair of words:

1. Contribute / /
 Contribution / /
2. Generate / /
 Generative / /
3. Stable / /
 Stability / /
4. Syllable / /
 ○ Syllabic / /
5. Pronunce / /
 Pronunciation / /
6. Alternate / /
 Alternative / /
7. Resign / /
 Resignation / /
8. Major / /
 Majority / /
9. Combine / /
 Combination / /
10. Suffocate / /
 Suffocation / /
11. Horrify / /
 Horrific / /

- 12. Nominate / /**
 Nomination / /
- 13. Compare / /**
 Comparative / /
- 14. Collide / /**
 Collision /
- 15. Fantasy / /**
 Fantastic / /
- 16. Assume / /**
 Assumaption / /
- 17. Cooperate / /**
 Cooperative