

Chapter One

Introduction

1.0 Overview:

English is taught as a foreign language throughout the University its instruction is wide spread in public schools, universities and private centers across the country. Usually it is taught by non-native speakers whose guidance may lead to certain difficulties in the pronunciation of English consonants and vowels.

Accordingly, it is the researcher's conviction that pronunciation is most important field of language, and regrettably it is one of the most neglected area and study in the quest for the acquisition of a foreign language. Therefore, this study will deal primarily with the speech problems as reflected by Sudan University students of English language.

These problems include individual sounds, words and phrases, that will be examined in this research not only will the research systematically analyze the aforementioned aspects including a study of errors and their sources, but it will also suggest ways of remedying the language differences.

It is hoped that this study will help the students at Sudan University acquire mastery of the phonetic sounds of English to replicate the tones that are actually produced by native speakers.

1-1 The Statement of the Problem:

The students of Sudan University of English language faculty of languages face particular difficulties in learning the sound system of L2. These problems arise from native language interference and other factors, which influence and characterize learners of second language.

Therefore, this study attempts to shed light on problems that Sudanese learners of English as the second language face, such pronunciation difficulties. It attempts to find solutions to these problems.

1-2. The objectives of the study:

This study is undertaken to achieve the following aims.

- To identify the problems Sudanese Arabic speaking learners encounter in learning the phonemes of English.
- To explore the mistakes and identify the possible cases and to suggest ways of overcoming them.
- To find a suitable remedial therapy for the specified difficulties.
- To enable the learners to pinpoint the difficult areas and predict problems before they happen.
- To determine which phonemes cause the most difficulty and lead to the largest number of errors.
- To help the learners to speak clearly and effectively and to be easily understood by non-native speakers.

- To encourage the students at Sudan University of science and technology to take responsibility for pronunciation changes by discovering personal errors, identifying the most important targets, practicing individually and slowly incorporating the newly learned pronunciation into everyday life.
- To promote self – confidence and increase students fluency when speaking English.

1-3 The research questions:

1. What are the types of the spoken errors of Sudan University of the science and technology college of languages? .
2. Which of these types have the greatest incidence of errors?
3. What are the possible causes of errors?

1-4 Hypotheses of the Study:

1. Students at Sudan University of science and technology collage of language find difficulty in pronouncing some English phonemes which do not exist in their native language.
- 1 Mother tongue interference is one of the factors that affect English foreign language students accuracy in comparison with students.
 - 2 Female students seem to have acquire and master English pronunciation skills with greater accuracy that their male counterparts.

1-5 The Significance of the Study:

This study derives its importance due to the inability of students of English to avoid certain errors in spoken English; this places the learner at Sudan University at a distinct disadvantage. Therefore, the researcher tasks are diagnosing the difficulties in order to reduce the errors of pronunciation.

1-6 The methodology of the study:

The population of this study consist the students of the Sudan University of science and technology collage of languages.

The sample of the study consists of 40 students. twenty males and twenty females at Sudan University of science and technology college of languages fourth years.

1-6-1 The data will be collected from the following:

The researcher will use the test and tape recording and as the means of his data.

1-7Outline of the Study:

This study falls into five chapters. Chapter one Introduces the preliminaries of the study objective, hypothesis and research questions. Chapter two explores the review of literature. Chapter three Present data analysis in light of methodology of the study. Chapter four explains and discusses the result of the test. Chapter five .Provides summary of the study, and respects the findings giving suggestion for further research.

The researcher fixes the bibliography at the end.

Chapter Two

Literature Review.

2.0. Introduction:

This study is an analysis of the pronunciation of Sudan University of Science and Technology fourth year students. The literature review to this study will be reviewed and summarized in this chapter.

3.1 Factors influencing pronunciation mastery:

Celce- Murcia, Brinton and Good Win, (1994) Gillette,(1994), Graham, (1994), and Pennington (1994), express an unorthodox view of the role of the following factors : age, amount and type of prior pronunciation instruction, aptitude, learners attitude and motivation and native language.

2.1.1 Aptitude:

Individual capacity to learn language has been debated:

1-Some researchers believe all learners have the same capacity to learn a second language, because they have learned a first language.

2-Others assert that the ability to recognize and internalize foreign sounds may be unequally developed indifferent learners.

2.1.2 Native language.

Most researchers agree that the learner's first language influences the pronunciation of the target language and is a significance factor in accounting for foreign accents. So, interference or native transfer from the first language is the target language. Therefore. This study is an analysis of the spoken English of Sudanese students.

The pronunciation of any one learner might be affected by a combination of those factors. The key is to be aware of their existence so that they may be considered in creating realistic and effective pronunciation good and development plans for the learner .Accordingly, this study on the other hand is an error analysis of the same category of students.

2.2 Phonology:

Phonology is the description of the systems and patterns of the sounds that occur in language. Peter Ladefoed,(1925:33) stated that:

It involves studying a language to determine its distinctive sounds, that is, those sounds that convey a different meaning.

Peter Roach,(2000:44) claims that:

"The relation among different phonemes when, in other words we study the abstract side of the sound of language.we are studying a related, but different subject that we call phonology.

2.3 The relationship between phonetics and phonology.

The relationship between phonetics and phonology has long been debated because both share a common interest in the sounds of all human language, and because both are often different in terms of concrete phonetic scales. One conception of the most crucial difference of features between phonology and phonetics is found in the values of phonological features. It is generally assumed that in phonology the value of features are unary binary whereas phonetics features are physically expressed as more than two values. Postal,(1968) stated that:" with regard to the relationship between phonetics and phonology , there have been largely three different positions. These are :

(1) A clear separation with an arbitrary mapping relation between them.(i.e., phonetic= phonology).

(2)-parallels with direct relation between them. (i.e., phonetics =phonology)

(3)-separation with a principled connection between them (i.e. phonetic=phonology).

2.4 The phoneme:

John Clark, (1968:391) claims that:

The concept of phoneme becomes important not only for its relevance to practical problems such as how to represent the pronunciation of dialects and language that had never been

transcribed before, but keystone of modern phonological theory. In a sense, the word 'phonemes, merely provided a technical term for a concept that was already known for example to Sanskrit scholars and the Icelandic grammarians.

2.5 Arabic and English sound compressions:

2.5.1 Vowels and consonants:

" so far, we have been using the consonant and vowel symbols mainly as ways of representing the contrasts that occur among words in English, but they can be thought of in a completely different way". (Peter Ladefoged,(1968:42).

2.5.2 English consonants:

The consonants are one of the two categories used to classify the segmental speech sounds.

Consonants can be defined in term of both phonetics and phonology. David Crystal,(1980:83) maintains that:

"Phonologically consonants are sounds made by a closure or narrowing in the vocal tract, while from a phonological point of view, they are units which function as the margins of syllables"

There are 24 consonantal phoneme are classified in the following table (3-1).

Table (3-1) the distinctive consonants of English.

	plosive	Affricate	fricative	nasal	approx
Bilabial	p .b			m	(w)
Labiodentals	t .d		f.v		
Dental			θ.ð		
Alveolar	t.d		s. z	n	l
Posto- alveolar					r
Palate- alveolar		tʃ.dʒ	ʃ.ʒ		
palatal					j
velar	k .g			ŋ	w
Glottal			h		

There are two categories as follows:

(1)-those articulations in which there is a complete closure or a stricture causing friction, both groups being typically associated with a noise component (obstruent's); in this class there is a distinctive opposition between voiced and voiceless types.

(2)- Articulation in which there is a partial closure or an unimpeded oral or nasal; such articulations typically voiced, and

frequently frictionless, i.e., without noise components, may share many phonetic characteristics with vowels.

From table (3-1) we can see that:

(a) Plosive and nasal phonemes fall into three contrastive groups as far as the place of articulation is concerned, i.e. Bilabial, alveolar and velar;

(b) Affricates, lateral and /r/ phonemes have an alveolar basis;

(c) the fricative has five areas of articulation, i.e. labiodentals, dental, alveolar, palato-alveolar and glottal.

2.5.2.1 Obstruent:

2.5.2.1.1 plosives:

Peter Roach, (2000:32) stated that :

"English language has six plosive consonants: p, t, k, b, d, g.

The glottal plosive /ʔ/ occurs frequently, but it is of less importance" Gimson, (2000:50) maintained that: plosive, or stop, consonant consists of three stages.

1- the closing stage during which the articulating organs move together in order to form the obstruction.

2. The compression stage, during which lung action compresses the air behind the closure.

3. The release stage, during which the organs forming the obstruction part rapidly allowing the compressed air to escape abruptly.

Plosive phonemes comprise three pairs: /p,b/; /t,d/; /k,g/.

The table (3-2) illustrates opposition in word initial, medial and final position.

Table (3-2) minimal opposition English plosives:

	/p/	/b/	/t/	/d/	/k/	/g/
Initial	Pole	Bowl	Toll	Dole	Coal	Goal
medial	Riper		Writer	Rider		
		Bitter	Bidder	Bicker	Bigger	
	Caper	Caber	eater			
		Rubber		Rudder		Rigger
	Lopping	Lobbing			Locking	Logging
final	rip	rib	write	rider	rick	rig

These oppositions may be realized by means of one or several of the following phonetic features:

1. Place of articulation- /p,b/, generally bilabial; /t,d/, generally alveolar; /k,g/, generally velar.
2. Force of articulation- /p,t,k/, tend to be pronounced with more muscular energy and stronger breath effort than /b,d,g/.

3. Aspiration- the voiceless series [p,t,k] when initial in an accented syllable, are usually accompanied by aspiration. Particular attention must be paid to the aspiration of [p,t,k] when these phonemes occur initially in accented syllables, the aspiration usual in /p/ is always greater than that for [t,k] When [p,t,k] are first differentiated from /b,d,g/ it is aspiration which is the main distinguishing.+

2.5.2.2 Affricates:

The term "affricate" denotes a concept which is primarily of the phonetic important. [tʃ] , [dʒ] . are the only two affricate phonemes in English , Peter Roach, (2000:54). From a functional or distribution point of view these compound sounds may be considered either as single or phonetic entities or as sequences of two phonemes. Gimson, (2000: 171).

The table (3-3) distribution of homorganic sequences of plosive plus fricative.

	Word-initial	Word final	Word-medial dose-knit	Word medial defund
/tʃ /	Chap	Patch	Butcher	Lightship
/dʒ /	Jam	Badge	Aged	
/tr /	Tram		Mattress	Foot
/dr /	dram		Tawdry	Handrail
/ ts /		Cats	Curtsey (?)	Out set
/ dz /		Roads	Posey (?)	
/ tθ /		Eighth		
/ dð /		width		

2.5.2.3 Fricatives:

Peter Ladefoged, (1925:65) stated that:

The fricatives of English vary less than the stop consonants, yet the major allophonic variations that do occur in many ways similar to those of the stops. Earlier we saw that when a vowel occurs before one of the voiceless stop /p,t,k/, it is shorter than it would be before one of the voiced stops /b,d,g/. The same kind of difference in vowel length occurs before voiceless and voiced fricatives. The vowel is shorter in the first word of each of the

pairs strife, strive [straɪf, straɪv]; teatg, teethe [tiθ, tið]; rice, rise, [raɪs, raɪz] ; mission, vision, [mɪʃn, viʒn] .

Stop and fricatives are the only English consonants that can be either voices or voiceless.

Table (3-4) illustrates oppositions, especially between members of the fricatives pair in word initial, word-medial, and word final position.

Table (3-4) fricatives in different word positions.

	initial	medial	final
f	Feel	Proofing	Leaf
v	Veal	Proving	Leave
θ	Thighs	Cathy	Wreath
ð	Thy	Worthy racer	Wreathe
s	Seal	racer	Peace
z	Zeal	Razor	Peas
ʃ	Sheet	Fission. Confucian	Niche
ʒ	gigolo	Vision, confusion	rouge
h	heat	behave	

Place of articulation /f.v / - labio-dental; / θ.ð /- dental; / s,z /

Alveolar; /ʃ.ʒ / palate-alveolar; /h /- glottal. Gimson,(2000:177).

2.5.2.4 Sounds:

2.5.2.4.1 Nasal:

J.D.o'connor,(1980:48) stated that:

There are three phonemes in English which are represented by nasal consonants /m,n, / . In all nasal consonants the soft plates lowered and at the sometime the mouth passage is blacked at some point, so that all the air is pushed out the nose. /m/and /n/. All language have consonants which are similar to /m/ and /n/ in English. The position of the speech organs for those sounds is shown in figures.

- 1.The soft palate is lowered for both /m/,and /n/,
2. For /m/ the mouth is blocked by closing the two lips, for /n/ by pressing the tip of the tongue against the alveolar ridge, and the sides of the tongue against, the side of palate.
- 3 Both sounds are voiced in English, as they are in other languages and the voiced air passes out through the nose.

2-5-2-4.2 Oral Approximants

For this group of phonemes the air stream escapes through a relatively narrow aperture in the mouth without friction, but with voice. (i) . Their distributional characteristics are very similar ways a consonants plus /l,r,w,j./ is one of the two

common types of two consonants clusters which occur syllable – initial in English. Gimson,(2000:200).

2.5.3 Vowels:

In our language we will have a vowel which is like the English /i:/ in see, and one which is like English .

/ʌ/ in sun, and almost certainly one which is like the English /e/ in get. J.D. o'connor,(1980:79) claims that:

There are three different vowels for the three words , bead, did, and bed. Be sure that the middle vowel is different and between the other two: one thing which will help you to distinguish, /i:/ from / ɪ / is that /i:/ is longer than /ɪ/ as well as different in the quality of the sounds. Vowels can also be defined in terms of both phonetics and phonology. Crystal, (1980:83) stated that :

"Phonologically vowels are defined as sounds articulated without a complete closure in the mouth of a degree of narrowing which would produce audible friction, and the air escapes over the center of the tongue. From a phonological point of view, they are units which function at the center of the syllables".

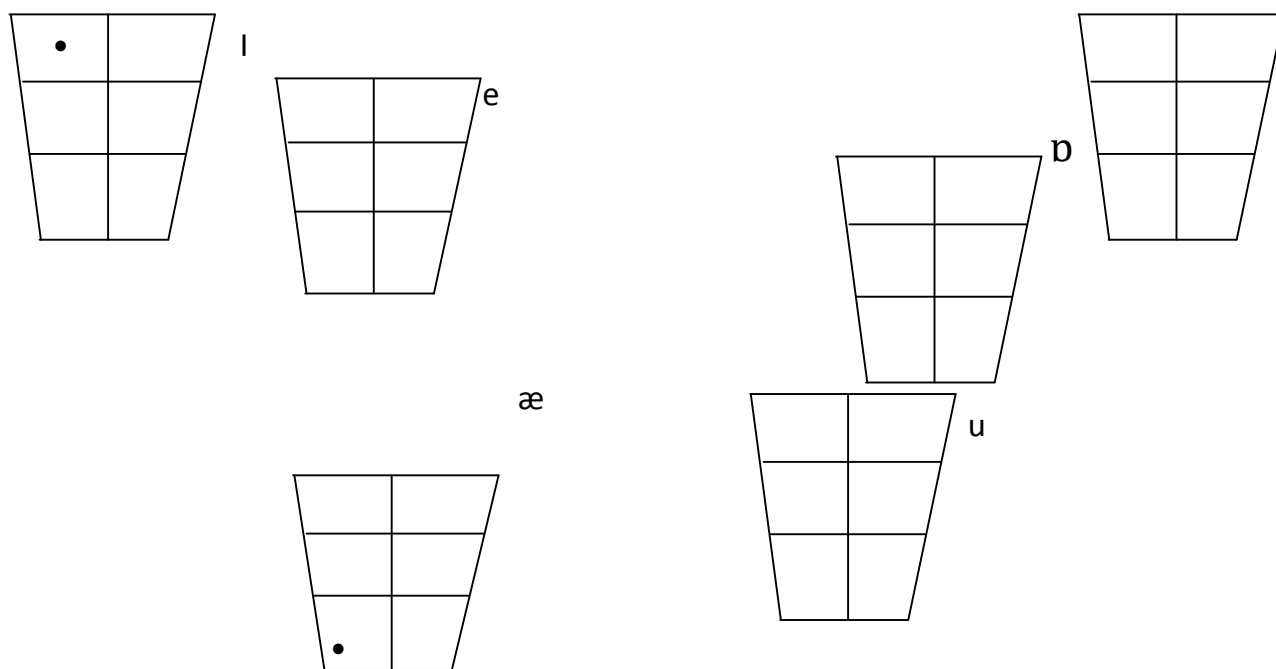
The most important difference between these categories (consonants and vowels) is not in how they are produced, but the way they are distributed. In particular English consonantal clusters which may lead to many difficulties in pronunciation

for Sudanese learners who tend to insert intrusive vowels which act as cluster breaker.

2-5-3-1. English short vowels:

English has larger number of vowel sounds; the first ones to be examined are short vowels. The symbols for these vowels are (i, e, æ, ɒ, ʊ, ʌ). vowels can have quite different lengths in different contexts.

Short vowels:

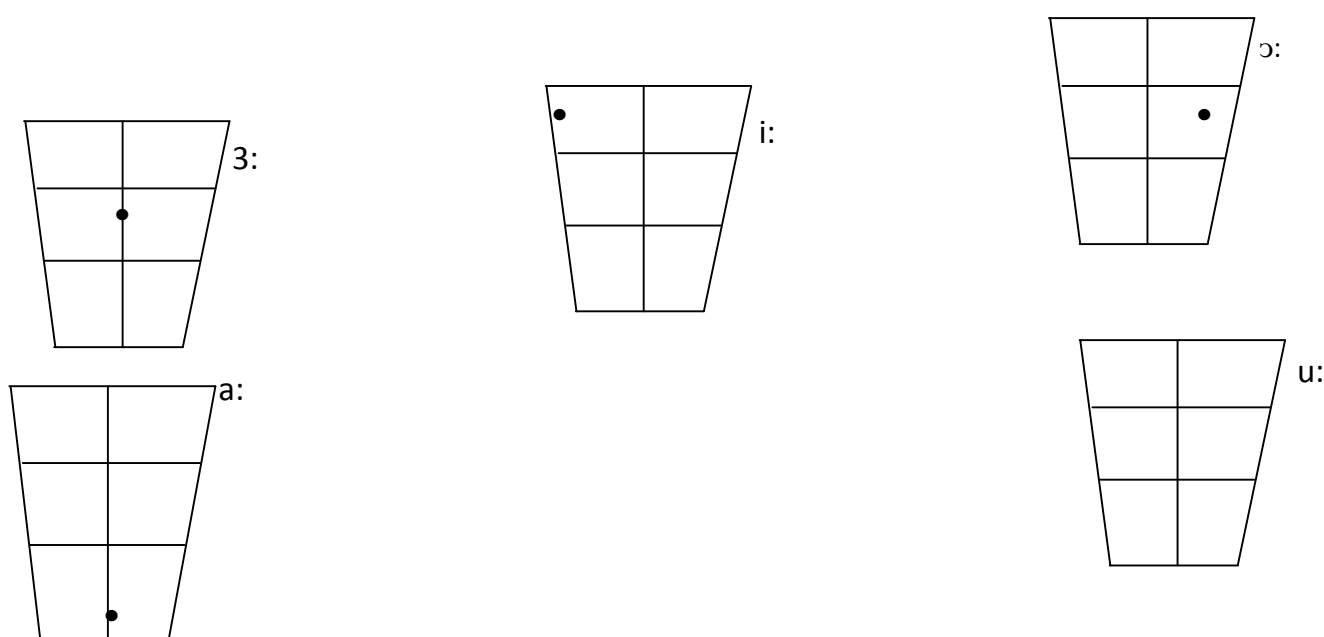


2-5-3-2 . English long vowels :

These vowels are longer, the symbols consist of one vowel symbol plus a length mark made of two dots: thus, we have :

/i:/, /ɜ:/, /a:/, /ɔ:/, /u:/ . it is important to remember that the length mark is used not because it is essential ,but because it helps learners to remember length difference, peter Roach, (2000:21).

Long vowels.



2-5-3-3. Diphthongs:

A diphthong is a glide from one vowel to another, and the whole glide acts like one of the long, simple vowels. So we have . bɪ: , da: , dɔ: ,and also ,beɪ ,bau ,bɔɪ ,deə , beə , buə , .The diphthongs of English are in three groups : those which end in / u /, / əu /, / au /, those which end in /ɪ/ ,/eɪ / ,/aɪ/ ,/ ɔɪ/, and [ə] ,/ ɪə , eə ,uə /

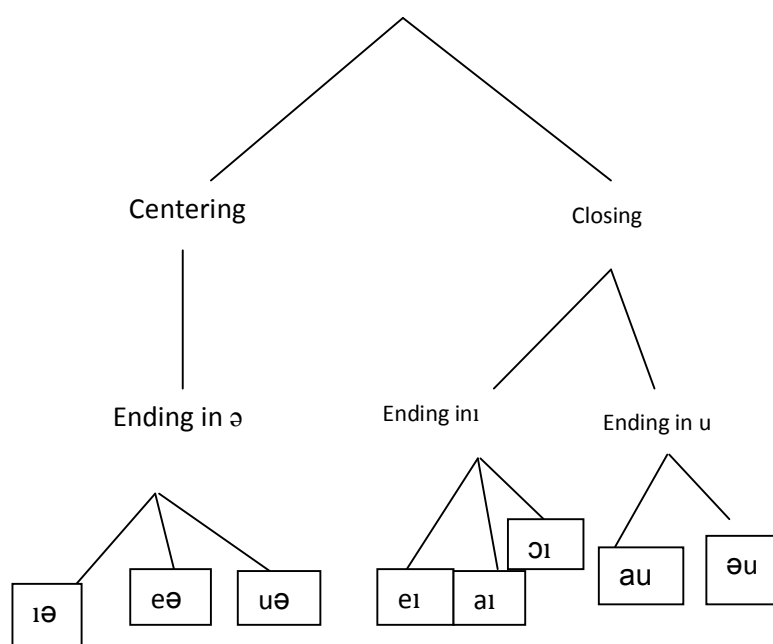
J. D. o'connor, (1980:84)

One of the most common pronunciation mistakes made by learners of English having "foreign " accent is the production of pure vowels when a diphthongs should be pronounced. Peter Roach ,(2000:21).

The total number of diphthongs is eight. The easiest way to remember them is in term of three groups divided as in Peter Roach diagram.

Figure (3-1) English diphthongs:

Diphthongs:



2-5-3-4. Triphthongs (diphthongs + glide):

Trip thongs are the most complex English sounds of the vowels type. They can be rather difficult to pronounce and very difficult to recognize. Peter Roach, (2000:24). " A trip thong is a glide from one vowel to another and then to a third e.g, (e+i+ə)

There are five trip thongs in English (eiə, did, ɔiə , əuə, and əuə). The reason behind the difficulties for the foreign learners is that extend of the vowel movement is very small, except in very careful pronunciations.

2-5-4. Arabic consonants:

The sound chart of the Arabic sound shown below represents the most common pronunciation of the contemporary standard Arabic spoken by the Arabs in different territories (Ramadan, 1985) cited in Abbas, S.A.(2000:37):

1-[d,d-ض] the contemporary standard Arabic [d] [ض] is the emphatic counter part of the [d], it also dento-alveolar, stop voiced, emphatic sound.

2-[t-ط] the contemporary Arabic [t] emphatic counter part of the [t] . it is dento-alveolar stop voice lee emphatic sounds.

3-[dʒ-ج] it is a palatal stop voice sound .

4. [q-ق] the first Arab scholars described the place of articulation of [q] as the back with tongue a part of the soft palate opposite toit.

5. [ʕ-ع] (سيبويه: 433-435) described / ʕ/ as pharyngeal affricate voiced sound.

6. [ʔ-ء] 516: [سيبويه] cited in Abbas, S.A.(2000:37)

Described [ʔ] as a glottal, stop, voiced sound.

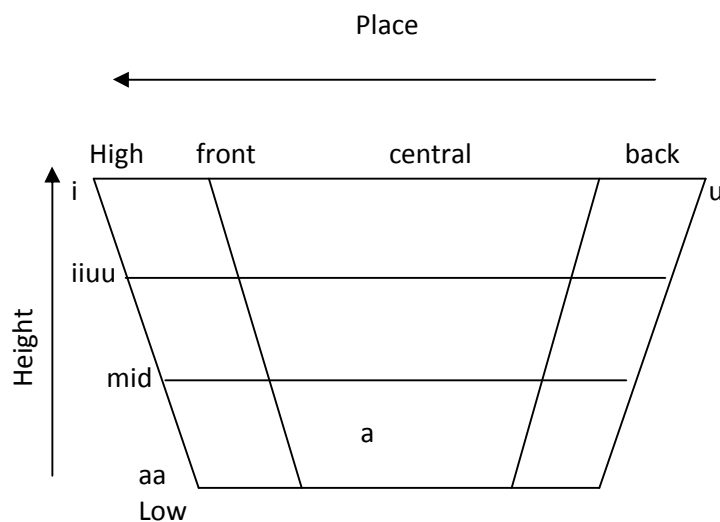
2.5.5 Arabic Vowels:

Arabic has six vowel phonemes: three short with their long counterpart.

Their description appears as following:

/i/	:front, high, tense, unrounded (short)
/ii/	:front, high, lax, rounded (short)
/u/	:back, high, tense rounded (short)
/uu/	:back, high, lax, rounded (long)
/a/	:central, low, unrounded (short)
/aa/	:central, low, unrounded (long)

Arabic Vowel Chart:



2.5.6 English Arabic Contrast:

The Arabic and English phonological system very extensive, not only in the range of sound used, but also in relative importance

of vowels and consonants in expressing meaning. We see clearly the need for comparing the Arabic and the English sound system as means of predicting and describing the pronunciation problems of Arabic speaker learning English. The main purpose of this study is to make a comparative phonological analysis between the sound system of the English and Arabic, to spot the areas of difficulty and investigate and identify the problem that confront and face Sudanese learners of English at Sudan University of science and technology collage of languages four year.

2.5.6.1. Consonants:

English has twenty-four consonants, Arabic has twenty eight. Those are set out in table (3-5). In learning the sound system of English we find some sounds that are physically similar to those of Arabic language, such as [b ,t ,d, k ,j,θ , ð ,s ,z ,s ,h ,m ,l ,n, and r]. They are also distributed, but, there is a slight differences between these phonemes and their counterparts in Arabic e. g, [t,d] are alveolar in English, but dental in Arabic [r] is flat in English, but trill in Arabic (Mohamed Elkhuli, (1989:22). Learning such phonemes occurs by simple transfer without any difficulties.

Peter Lado (1951).

On the other hand, we find sounds that are not part of the sound systems of the Arabic language such as /p/, /ŋ /, v/, /ʒ/,/dʒ/ and

/tf /, learning of these sounds occurs more slowly and more difficulty.

This situation creates certain problems for Sudanese Arabic learners, especially with those sounds that are absent in standard Arabic.

2.5.6.2. Influence of English spelling on pronunciation:

While there are similarities between Arabic and English writing systems, Arabic spelling within its own system is simple and virtually phonetic. Letters stand directly for their sounds. Arabic speakers attempt. Therefore, to pronounce English words using the same phonetic methodology. Add this the salience of consonants in Arabic and you get saver pronunciation problems caused by the influence of the written forms. English spelling is not a reliable guide to pronunciation because:

- 1 Some letters have more than one sound.
- 2 Sometimes letters are not pronounced at all.
- 3 The same sounds may be represented by different letters.
- 4 Sometimes syllables indicated by the spelling are not pronounced at all.

2.6 . Review of previous studies

This section about previous studies will be informed the research about the methods and techniques used by researchers who worked in the same filed. It will also provide information

concerning the issues of instrumentation, sampling and data analysis.

2.6.1.The first study:

This study was carried in (2010) by Emad Mohamed Alsaidat. The learners of English as foreign language to determine the types of pronunciations difficulties they encounter. The study was carried out in the University of Alhossein bin talal, Jordan. He came up with the results show that the major reason for effecting the processes of pronunciations is the mother tongue.

2.6.2 . The second study:

This study was carried in (2008) by Arlene Maria Yostanto, was conducted to find out the kinds of English phonological errors produces by English department students, particularly English consonant sounds. The study carried out in Petra Christian University. The results show that: the students produced thirty four kinds of phonological, and that the deviation occurred most frequently before, after, or in between vowels.

2.6.3 .the third study:

This study made in (2011) by: Dr Abbas Na, ama. This study shed light by giving a critical analysis of errors carried out in Damsucs University journal. This causes a major

problems for university students, interlingual and intralingual strategies.

The results of this study show variety of errors in pronouncing English consonants clusters for different factors :

The first factor is that : the effect of mother tongue, because of the native transfer. The second factor is that : the lack of practicing of listening aids by the Yemeni University students. The third factor is that: inadequate pronunciation of the University in structures. This will make students unaware of good pronunciation.

2.6.4. Summary.

This chapter provided the basic theoretical about phonological errors analysis of spoken English and it focused more precisely on, the subject of this study. It also reviewed some related previous studies and showed how they relate to present study.

Chapter three

Methodology

3.0 Introduction:

This chapter will explain the methodology of the study. In that, it will describe the methods and techniques adopted, the instrument, the population, the samples and procedures of data analysis.

1. Subject of the study.
2. Procedure and material.
3. Technique of collecting data and approaches to the discussion of the result.

3.1 The methodology.

This study is descriptive in nature. It will focus on the "what" of the problem in question. The study will attempt to investigate the different aspects of the problem and it will shed light on the area that need attention.

3.2. Subjects:

Forty students from Sudan University of Science and Technology fourth year (twenty males and twenty females have been chosen randomly during the academic year 2015-2016.

They are Sudanese native speakers of Arabic; all of them studied formal English for ten years. Three years at basic school, three years at secondary school and 4th years at University level.

The sample of the above mentioned subjects share some important aspects such as:

- 1 Age their average age is 22.
- 2 Mother tongue. All the subjects first language is Arabic.
- 3 The education background at the same.

3.2. Instruments and procedures:

3.2.1. Setting and Instruments:

The subjects' utterance and oral readings were tape-recorded. They were done in a language laboratory, which was very quiet and provided a suitable environment for such a task.

The task is carefully chosen to be appropriate to the abilities of the subject.

3.2.2. Materials:

Since this study is an attempt to investigate mispronunciation of spoken English, a test was made to diagnose the reason behind the errors.

Two types of materials were selected in order to achieve the objectives of the present study:

(1) Written test consist of reading of word list (a table with different position of phonemes).

(2) This part focused on Alveolar sounds by dental Arabic consonants.

(3) This section focuses on the differences between gender in pronunciations skills.

3.3. Objectivity, Reliability and Validity.

1. An objective test is one which will produce the same kind of the result if it marked by different people since the data of this research is recorded on tape, then the content will be consistent. The methods used for measuring the objectivity of this research was mark and check the result of the test twice at least. The researcher checked the result of the test on tape-recorded three times

2- **Reliability:** the test was developed through the following stages: (a) it was designed by the researcher in consultation with some teachers.

(b) It was then presented to the supervisor for approval.

2 **Validity:** the reliability of the test was calculated by excel.

3.4 Procedures for data analysis

The data collected through the tests will be tabulated and treated statistically by the excel programmer. The result in percentile from will be used to answer the relevant questions.

Chapter four

Analysis, Discussion and Results

4.0 Introduction:

This chapter reflects the results of analysis to answer the research questions and to test the hypotheses of the study.

The main objectives are to find out whether the students of Sudan University of Science and technology who study English as foreign language find any difficulties in English pronunciation.

It is also necessary to establish the effect of the mother tongue in pronouncing English phonemes.

The researcher should also assess whether the factor of sex have any affect in the process of English pronunciation.

To test the reliability of the hypotheses statistical analysis of the data collected was used.

4.1. Monitoring the Results:

This is particularly focused on the consonantal and vowel phonemes which are not found in the mother tongue. Such phonemes are put into graphs for each group. In these groups the vertical axis indicates the subject and their marks reflecting their

abilities and shortcoming of pronouncing these phonemes. The sounds are represented in the horizontal axis.

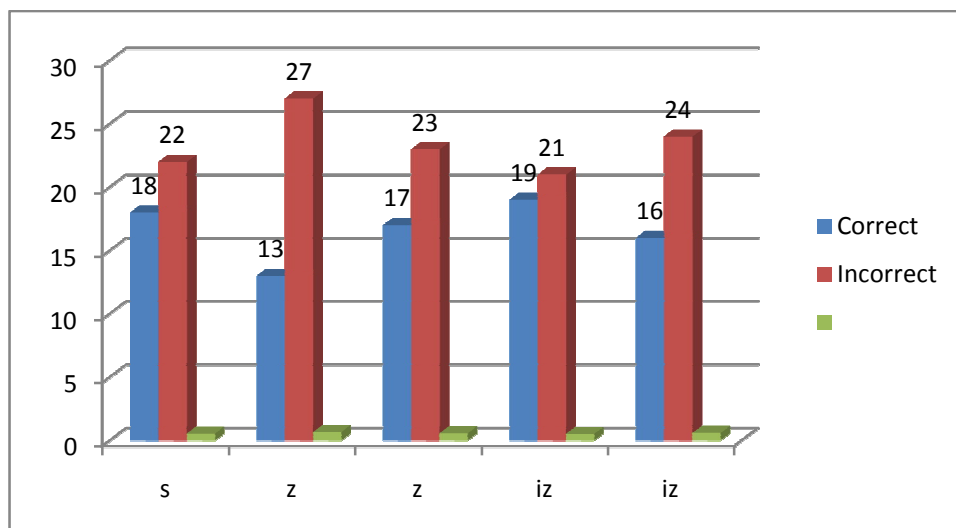
The analysis of the graphs will include the phonemes which are produced correctly and incorrectly and substitutions, the Sudanese learners use form their mother tongue.

The result concerning each hypothesis and assumption should display the means of point obtained in the test (spoken or written) including each part of the achievement test.

Table No (4-2): result of students capability in ending inflectional morphemes

The sound	No	The result		Percentage of errors
		Correct	Incorrect	
s	40	18	22	55%
z	40	13	27	67%
z	40	17	23	57.5%
iz	40	19	21	52.5%
iz	40	16	24	60%
Average				58.5%

Figure (4-1) inflectional morphemes capability



1- The results of the written test in table (4-1) indicate that Sudanese learners of Sudan university are mis pronounced the ending inflectional morphemes /s/, /z/, /iz/. The percentage of errors of the above mentioned phonemes are as follows.

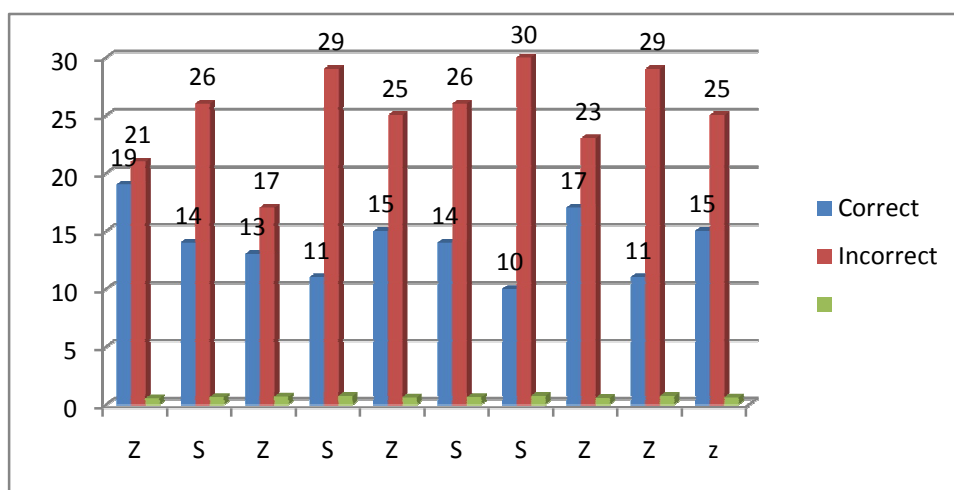
1- /s/ 55% , 2- /z/ 67%, 3- /z/57.5% 4- /iz/52.5% , 5- /iz/60%.

It was noticed that /s/, /z/, /iz/, are the most difficult inflectional morphemes. Because 58.5% out of 100 of the students pronounced incorrect according the hypothesis one it is accepted.

Table (4.2) the results of ending inflection morphemes

The sound	No	The result		Percentage
		Correct	Incorrect	
Z	40	19	21	52.5%
S	40	14	26	65%
Z	40	13	17	67.5%
S	40	11	29	72.5%
Z	40	15	25	62.5%
S	40	14	26	65%
S	40	10	30	75%
Z	40	17	23	57.5%
Z	40	11	29	72.5%
z	40	15	25	62.5%
Average				65.25%

Figure (4.2)inflectional morphemes capability

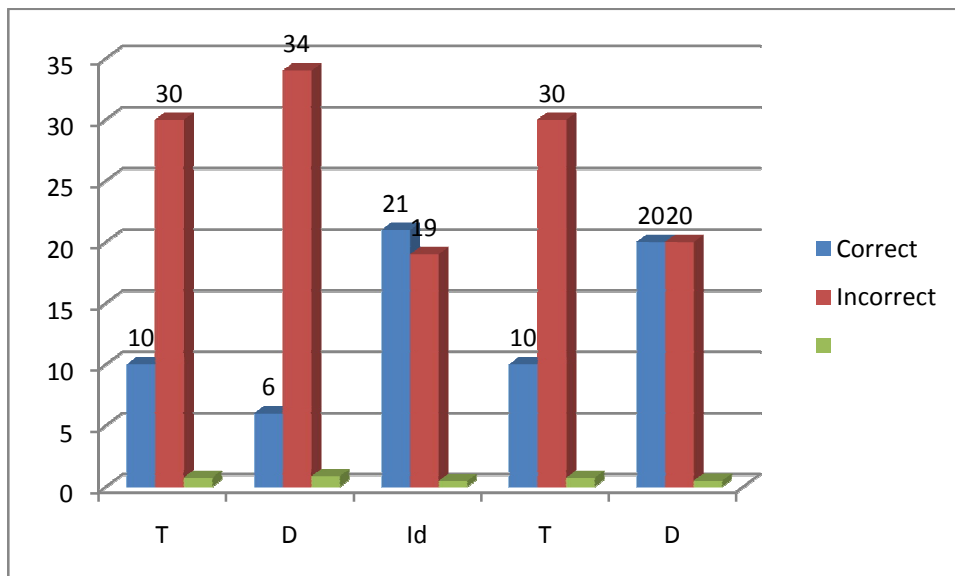


The results under the circumstances of the written test described in table (4-3) indicate that, the learners in Sudan University they suffering form the pronouncing the ending inflectional morphemes /s/, /z/. these errors form the average number of errors we notice that 62.25% of students were unable to produce the above mentioned phonemes. And found difficulty to produce such phonemes.

Table (4.3) results of test Alveolar sounds replaced by dental Arabic consonants.

The sound	No	The result		Percentage
		Correct	Incorrect	
t	40	10	30	75%
d	40	6	34	85%
id	40	21	19	47.5%
t	40	10	30	75%
d	40	20	20	50%
Average				63.3%

Figure (4-3) alveolar dental sound replacement



The result of the test in table (4.3) expressed that /t/, /d/,/id/ constitute difficulties for Sudanese learners. Most of students at Sudan University tended to pronounce these phonemes as dental in order to ease their production.

They follow the system of their mother tongue in producing such phonemes.

63.3 of the students at Sudan University were unable to produce /t/ and /d/ as alveolar /id/ also constitutes pronounced difficulty when, it is pronounced by Sudanese learners.

Therefore, the results obtained in table (4-4) confirm the second hypothesis that mother tongue interference is one of the main factors affect English pronunciation when spoken by Sudanese English foreign language learners.

Table (4.4) difference between male students and female students in pronouncing the correct sound of the words.

The sound of word	Case No	Group 1 male student		Percentage of errors	Case No	Group 2 female students		Percentage of errors
		Correct	Incorrect			Correct	Incorrect	
People	20	2	18	45%	20	6	14	70%
Knowledge	20	13	7	35%	20	14	6	30%
Pleasure	20	8	12	60%	20	9	11	55%
Society	20	7	13	65%	20	11	9	45%
Adverse	20	12	8	40%	20	11	9	45%
Documentation	20	6	14	70%	20	8	12	60%
Headache	20	6	14	70%	20	16	14	70%
Three	20	13	7	35%	20	13	9	45%
Certain	20	4	16	80%	20	5	15	75%
Leave	20	10	10	50%	20	10	10	50%
Average	20			55%				55%

Figure (4-4a) results of Male students

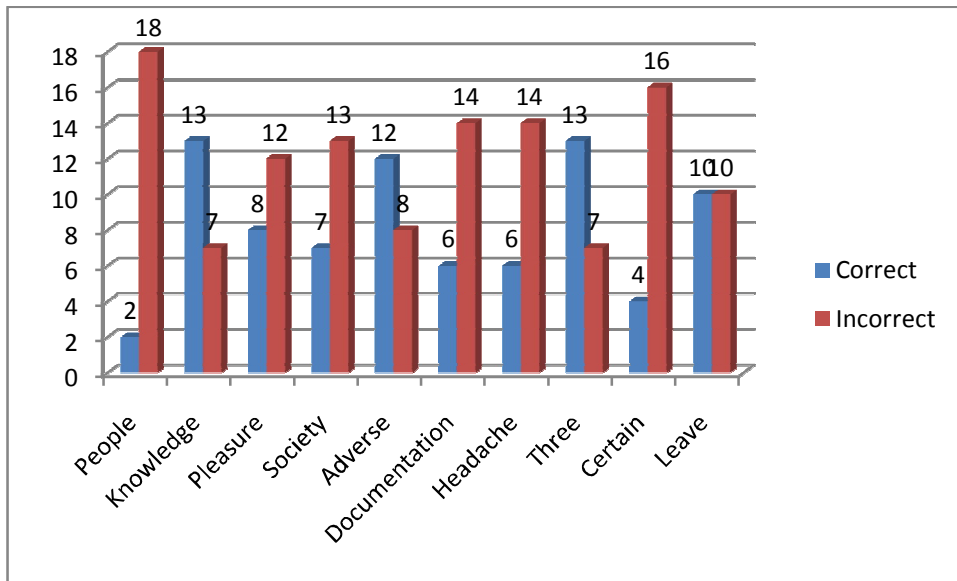


Figure (4-4b) results of female students

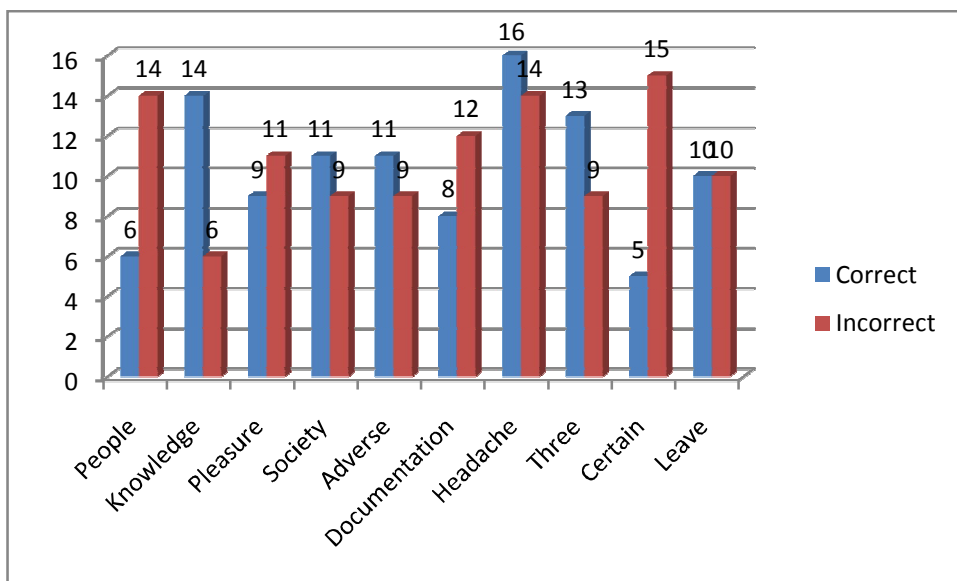


Table (4-4) difference between male students and female students in pronouncing the sound of the words.

The outcome of tape-recorded test in table (4-5) displays that there was no statistical significant differences between male and female students in pronouncing the words. / people/, knowledge/, pleasure/, /society /, adverse /, documentation/, /headache/, three /, / certain / and leave / which are non-existent in Arabic.

The average indicates that, 55% of male students were unable to produce the above mentioned words correctly, and 55% of female students found difficulty in pronouncing such words so that there are difficulty face the Sudanese learners of Sudan University of science and technology in pronouncing the words.

Therefore, the results attained in table (4-5) don't accept hypothesis three, according to these results, gender play no role in the pronunciation area.

The hypothesis says that "female students seemed to have acquired and mastered English pronunciation with greater according in contract to male student.

Chapter Five

Conclusions, Recommendations and Suggestions

5.0 Introduction:

As previously stated, the aim of this thesis is primarily more practical than theoretical in its examination of errors of pronunciation produced by Sudan University of science and technology faculty of languages students.

4.1 The Research Questions:

In this section the researcher tries to find final answers to the research posed, aiming to establish recognized trends or patterns form each of the questions as follows:

- 1- In answering to question, one there is a main factor of speech errors at Sudan University of science and technology: is the mother tongue interference.
- 2- The answer to question two, obtained by the research reveals that the role of the transferable of the mother tongue habits into the second language acquisition is a main factor behind the students, errors in pronunciation of English phonemes.

3- It has been noticed that the possible cause of pronunciation errors are due to the following :

- a. Sudanese teacher use the grammar methods throughout their teaching careers, which emphasize reading and writing rather than speech.
- b. The Sudanese learner's careers into the foreign language class all the sound and habits associated with the Sudanese Arabic language.

4- Errors can be easily solves if the teachers and learners follow these ways:

- a. All new materials should be presented and drilled orally first and then back to reading and writing.
- b. Students should listen to the new materials before they produced them orally.
- c. Pronunciation should be taught by well trained teachers.

Finally, correct and clear pronunciation is obviously of considerable importance in language learning.

This had led to the following summations:

1. The finding of the obtained results.
2. Recommendations.
3. Suggestion for further study.

5.2. Summary:

From the point of view of language acquisition the result obtained from the data related to the hypothesis are summarized in the following points:

1. It has been proved that Sudanese learners at Sudan University of the Science and Technology Faculty of languages find difficulty in pronouncing the sounds which are nonexistent phonemes in their language.
2. The phonemes of the mother tongue interference are one of the main factors that influence and affect English pronunciations.
3. It has been discovered that no statistical significance existing between male and female students at Sudan University in pronouncing English phonemes. Therefore, we can say that gender makes no significant difference in this area.
4. The English phonemes /t/ , /d/ and /id/ constitute difficulty to Sudanese learners of English, because the learners follow their mother tongue and pronounce this sounds as dental instead of alveolar.
5. The inflectional ending morphemes need special attention, because, the learners of English find difficulty producing them. The error of inflectional ending morphemes are mainly due to interlingual errors resulted form factors rather than mother tongue.

5.3. Suggestions:

It has been noticed from the personal point of view that:

1. Teachers with limited or not training on TEFL methodology find difficulty in teaching pronunciation.
2. In order to avoid some mistakes made by students the following suggestions are made:
 - a. Students should listen to new words before they produce them orally.
 - b. All new materials are preferably presented and taught orally first, and then reinforced with reading and writing.
 - c. To encourage students at Sudan University to take responsibility for their pronunciation changes by discovering their own errors, identifying their most important targets, practicing on their own, and slowly incorporation the newly learned pronunciation into everyday life.
 - d. Good pronunciation should be aimed at even when one is teaching other skills such as reading aloud.
 - e. In order to achieve success with Sudan University students, it is helpful for the teacher to be aware of the specific linguistic reasons for their difficulty in learning English phonological rules. A comparison of L1

- f. (Arabic) and L2 will show the similarities between two languages.

5.4. Recommendations:

The researcher believe that the following recommendations will help teachers and may be of use as a starting point in preparing material for students:

1. The researcher recommends that this study should be replicated on a large number of sounds.
2. Further research should be focused on English supra segmental phonemes.
3. A large study is needed to validate the result of this study.
4. Further research is needed to investigate the pronunciation errors committed by English foreign language teachers.

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