CHAPTER ONE

A GENERAL INTRODUCTION

1.0. Background of the Study

Any language has its own distinctive features. One of the most significant features is the way of pronunciation, because the production of sounds differs from one language to another.

English is known as stress-timed language, this means the duration between stressed syllables should approximately be regular, irrespect of the number of unstressed syllables between them. To accommodate this purpose; English words have significant difference between the way they are pronounced in isolation, compared with the way they are pronounced in context of connected speech. (Roach, 2009: 118).

In English; the phenomenon of sounds changing during continuous speech is called "Aspects of Connected Speech ". It happens in spoken language as a continuous sequence such as during normal conversation, this includes: Rhythm - Assimilation -Dissimilation - Elision or Deletion - Reduction - Liaison which includes; Linking or Sandhi /r/ and Itrusion - and Transition or Juncture. When native speakers speak, they produce a stream of speech with stops in complete ideas; during this stream, many sounds can be changed completely. The majority of MA students find many difficulties to apply these aspects in their spoken language, and they may mis-understand native speakers' speech, because the features of some sounds are absolutely changed.

The researcher noticed that many of MA students face difficulties in using aspects of connected speech in their spoken performance. Therefore; this investigation tries to study the nature of connected speech aspects, difficulties faced by MA students to apply these aspects in their oral language, the lacks of MA students that cause these difficulties, and the prominent solutions for these difficulties.

Statement of the Problem

Native speakers' speech runs into different changes with respect to sound features, a great deal of MA students find many difficulties to understand native speakers. Also, lack of applying aspects of connected speech can lead to strange speech that may sometimes be incomprehensible. The goal of this investigation is to study the Effectiveness of Applying Aspects of Connected Speech in English MA Students' Performance

Research Questions

This study is set up to answer the following questions:

1. To what extent are MA students efficient in applying assimilation?
2. To what extent are MA students able to apply elision properly?
3. How far do Linking and Intrusion can be used effectively by MA students?

Hypotheses of the Study

1. MA students do not apply aspects of assimilation.
2. MA students are not able to use elision effectively.
3. MA students are not able to apply Linking and Intrusion.

Objectives of the Study:

This study aims to:

1. Look into the degree of MA students' ability to apply assimilation.

2. Investigate MA students' ability to apply elision effectively.
3. Test the ability of MA students of applying Linking and Intrusion.

Significance of the Study

Speaking is an important feature of language, which enables MA students to express themselves and share their ideas clearly, and also understand others easily. The significance of this investigation relies on the importance of the spoken language, and the importance of using aspects of connected speech in this spoken language. Knowing these aspects helps MA students to develop their listening and speaking skills in order to become more understandable, with less foreign accent, and also understanding others easily.

Research Methodology

The researcher is going to use descriptive analytical methods to carry out the study. In this study; an extensive test is employed, in order to collect data, show the ability of MA students in applying aspects of connected speech. The data of this investigation will be collected through a recorded test designed by the researcher to reach the required results.

Limits of the Research

The researcher is going to investigate EFL learners' using of connected speech in their oral performance. The samples of this study will be the students of fourth class in English language department, college of languages at Sudan University of Science and Technology, and Students of fourth class in Department of English Language and Literature.

Abbreviations Used in this Study

No	Abbreviation	Expression
1	ACS	aspects of Connected speech
2	CS	Connected speech
3	CSP	Connected speech processes

CHAPTER TWO

LITERATURE REVIEW AND PREVIOUS STUDIES

2.0. Introduction

In this chapter, the researcher is going to review the related literature to the research topic and discuss it in details, discuss the existence of the problem theoretically and review the previous studies with in the same area.

2.1.Background

As EFL learner in the first stages, the most exited thing about English is that; written language differs significantly from spoken, these differences are one of the most problematic area in studying English. The students may be acquainted to the written language in the basic and secondary school stages, but they are supposed to have weak or even no relationship with spoken language. Thus, if an EFL learner wanted to know the nature of these differences bringing a passage of written language and compare it to the same passage in a record or video; he may discover many shocking differences because spoken language runs into a great deal of changes depending on the situation and context, these changes can even prevent understanding. These implications led the researcher to study the effectiveness of applying ACS in the performance of MA students.

In the past; scholars wanted to make speaking machine to produce speech from vocabulary stored in it, by linking words in a form of sentences. This technique was used for small type of messages such as talking clock messages. Although it had achieved its purpose, but from a phonological point of view; the produced speech of these machines differs significantly from that of human and it seem very impractical. Although mechanical

speech has run into a great deal of improvements through computer technologies; it still misses the features of natural human speech. In spite of inadequacy of mechanical speech but it has many important benefits in teaching and learning pronunciation. It is important to be aware of significant differences between human speech machine speech when we speak about CS. (Roach, 2009: 118).

English native speakers prefer fluency because it enables them to produce the utterance with less power (i.e. easy pronunciation of sounds and smooth movement from one articulator to another). As Underhill, 2005: 58 argued that rapid colloquial speech implied large degree of changes during speech chain and word pronunciation is almost different from their dictionary pronunciation when they uttered in such situation.

A great number of EFL learners find themselves in a difficult situation when they are trying to communicate with native speakers (i.e. to listen and to speak, with them). They lose a lot of detail about continuous string of speech and they ignore the processes happen in such type of speech. (Badawi, 2015) EFL learners' ignorance about CSPs can extremely oppose their communicative competence. The crucial question of present study is; why EFL learners are not able to deal with CS? Researcher is going to explore the answer of this question throughout this investigation.

This chapter is divided into three parts; every part is confined to a restricted section. In the first part; the researcher reviews the literature of CSAs, because it is actually the central part of this study. This part contains; supra – segmental features "as a major division in which CS is included", the nature of CS, and CSPs (Rhythm, Assimilation, Dissimilation, Elision, Linking and Intrusion, and Reduction). The second part is about the problems of EFL learners in using CSPs in the spoken

language, whereas the third part is devoted to survey the previous studies on the same field, in order to show ways of data collection, and their achieved results.

2.2.Literature Review

The following section will take the related literature and discuss its historical background.

2.2.1. Supra-segmental Features

Although vowels and consonants are segments from which the speech is constituted, normally we do not pronounce single segments; instead we produce them together in a form of syllable. There another level of spoken language ranked above the level of syllable, which is supra-segmental features. These features include; variation in stress, pitch and length. In spite of the fact that length variations are able to influence single segments as well as strong syllables, they are regarded as segmental features. (Ladefoged, 2010: 23).

Suprasegmental features are a term used in phonetics and phonology to refer to a vocal effect which extends over more than one sound segment in an utterance, such as a pitch, stress or juncture pattern. In its contrast with 'segmental', it is seen as one of two main classes into which phonological units can be divided. In American structuralist theories, suprasegmentals were analyzed as phonemes and sequences of such features as morphemes, but not all phonologists analyze these features in emic terms. Alternative terms are; plurisegmental, non-segmental and superfix. (Crystal, 2008: 466).

In English language; the stress is used to differentiate between noun and verb, for example; "an" insult and "to" insult, which syllable is more emphasized than the other (i.e. have stronger stress than the other), we

can detect that nouns can be stressed on the first syllable in contrast with verbs which can be stressed on the last syllable, so stress has a significant grammatical role. It can be used to contrast between information, such as the sentence "*I need the 'red pen not the black one*" the word red is more emphasized here. Stress is realized through; greater effort of muscles to produce much loudness, overdoing sound properties such as high and aspiration and producing the sound in high pitch these operations result in stronger stress. (Ladefoged and Johnson, 2010: 23).

Intonation is one of supra-segmental features; it is related to pitch sound in a sentence. Consider the sentences; "This is your father" exactly highest pitch occurs in the first syllable of the word father (the last word of the thought group), and lowest on the second one in the same word. If we change the previous statement into question to be "Is this your father" the pitch is changed to the opposite, because the second syllable of word father will be the stronger and have highest pitch, whereas the first one is going to be the lowest. Through intonation it is also available to change the meaning statement into a question without pronouncing the grammatical word order of the question. The sentence; "That is a cat" which is statement, can be changed into question by replacing rising intonation with falling one with an air of amazement. (Ibid: 24).

Another significant feature of supra – segmental -which related to variations in length- is called (ACS); this feature will be covered later in details as the main topic of this investigation.

The most significant feature of all supra – segmental is that they must be judged according to their context. The speaker can focus of one syllable more than another whether s/he shouting or speaking softly. Despite the fact that the children have a higher pitch than adults, but they can use

intonation patterns as them, so intonation patterns can convey information about speaker's sex, age, emotional statement and attitude toward the discussed topic. (Ibid: 24).

2.2.2. The Nature of Connected Speech

Speakers and listeners can easily recognize the separate words when they are uttered in isolation, but language is actually composed of stream of speech, this means; words are pronounced with few pauses between them, despite their spaces in the written language. The phenomenon of CS shows that there are many significant differences between the way words are pronounced in their citation form "i.e. word in isolation" and the way they pronounced in context "i.e. in CS". In its citation form; at least one syllable is fully stressed and there is no reduction of vowel quality or any other processes such as; simplification. In contrast with CS, which involve many changes in the sounds and consequently to the word. (Skandera and Burleigh, 2005:57).

According to (Crystal, 2008: 101); CS is a linguistic term used as a label for spoken language when it is examined in continuous speech such as normal conversations and utterances. It is the opposite of traditional linguistic investigation that studies words or phrases in isolation. It has many processes such as; Assimilation, Elision, Linking …etc.

Ladefoged and Johnson, 2011, 108/109, state that words in CS run into different emphasis, the result is changes happen to the word in context from its citation form. Although there are many useful views claims that phonetic reduction in conversational speech can be realized through carful phonetic transcription, but it is difficult to figure out sound pattern in conversational speech, such as the among phonetic symbol diversity,

duration counting, the width, and also frequency provides clear understanding to proceed.

A significant feature that distinguishes CS from citation form is the different degree of emphasis related to the words in continuous speech, these emphases according to the amount of information conveyed by the word in conversation, for example; the first mention of any word is emphasized than the second which is normally reduced. A relevant example of changes happen to the pronunciation of function words, these word are rarely emphasized, so their utterance is quite different that of citation form. Sometimes; function words found in a stressed position, so they are pronounced in their strong form. Such as the sentence; "*I want a pie and ice-cream*" this happened because of the role played by the function word. Also there are some function words with more than one weak form, when they are pronounced after alveolar consonants, for example; [kæt n dʊg] and [heə nd her], more than one weak form according to the context and speaking rate. (Ibid: 109).

Another phenomenon of Cs is that, the sound can be affected by adjacent one, so the sound [n] in the clause *on the*, is realized as [n̪] on the teeth or near them because of the influence of the following dental fricative [ð], but it is a very complicated issue for a nasal to become alveolar or dental. Using transcription provides one shape or another, but in fact there are continuum possibilities between the two realizations.

(William and etal, 2013: 316); assume that spoken language has an unusual characteristic that speakers are not even aware of, it is the movement of articulators to produce segments, interdecipline and contact with others, so the vocal tract configuration may be affected by more than

one segment, they call this characteristic; “co-articulation”. The quality of sound and as a result affects their perception.

Finally speaking on CS; the simplification rate is really according to the speed and the context of utterance. There are two different rates of pronunciation, the first one is slower and near to the pronunciation of a dictionary, which is more formal and called “Careful speech”. The other degree of pronunciation is called “Rapid speech”, which is less formal and is distinguished with its great simplifications and words are actually farther from dictionary pronunciation. (Underhill, 2005: 59).

2.2.3. Rhythm

According to (Roach, 2009: 181), the notion of rhythm involves some noticeable event at regular intervals of time. Rhythm refers to frequency of significant elements of speech “i.e. the strongest syllable” regular intervals of time. (Skandera and Burleigh, 2005: 87). The period of time between two stressed syllables is roughly the same, irrespect of the number of unstressed syllables between them, or even there is no unstressed syllable in between.

It is clear that English is one of stress-timed languages, such as Russian and Arabic. In such languages the stressed syllables tend to occur approximately at the same time duration, and the more unstressed syllables between them, the faster they pronounced to fit them into regular time span. In contrast with stress-timed languages, there is another group syllable-timed languages, in which the duration of each syllable tend to be the same, whether it is stressed or not; and the duration between the stressed syllables according to the unstressed whether short or long. The difference between stress-timed languages and syllable-timed languages is not accurated enough and it seems to exclude some facts and details about these type of languages, and it is probably fair to

say that “Some languages use one kind of rhythm intensively (i.e. stress-timed rhythm), but the two types of rhythm (i.e. stress-timed & syllable-timed rhythm) can be found in most languages”. (Ashby and Maidment, 2005).

As it was stated above; stress – timed rhythm include that stressed syllables tend to occur with regular intervals of time, regardless of number of unstressed syllable between them. So the sentence, (Roach, 2009: 118).

1 2 3 4 5

Walk down the bath to the end of the canal

The stressed syllables are marked by numbers, syllables number 1 &2 are not separated by unstressed syllable 2 &3 are separated by only one unstressed syllable, while 3 & 4 are separated by tow unstressed syllables, and 4 & 5 are separated by three unstressed syllables. The regularity existence of the stressed syllables is not fixed but it is just relative. (Roach, 2009: 118). Rhythm is strongly related to stress, because it can be recognized through the existence of stressed syllable in a Peace of spoken language.

In English there is a tendency to avoid stress too much closer, this causes stress in multi – syllabic word to be on one syllable in one sentence and on another syllable in other sentence, according to the context in which the word uttered (i.e. the stress is shifted from one syllable to another in order to preserve distance between the two stresses), such as in the example; *compact* [Kɒm'pæKt] the second syllable is stressed, but in the phrase; *compact dis*k ['KɒmpæKt'disK] the stress is shifted to the first syllable, to avoid the occurrence of two adjacent stresses. They said also it is quite wrong to assume the quality of intervals between stressed syllables, and also they regard regularity as a number of processes run

together to maintain rhythmicity. One of the processes is that; English speakers tend to minimize the diversity in length in words with only one stress, such as the vowel in the word *speed* [spi:d] is longer than the first in the word *speedy* [spi:dɪ] and the first vowel in the same word is actually longer than the first one in the word *speedily* [spi:dilɪ]. The regularity of intervals is achieved through; the reduction of vowels, the omission of other one in the weak syllable, and also through using of weak forms of functional words (e.g. and, for, of, the, etc.). Ladefoged and Johnson, 2010: 116-117-118. Frankly without using reduction and weak forms the regularity is impossible to be achieved. (Ibid: 23). To achieve rhythmic language; English speakers tend to reduce the intervals between stressed syllables and the degree of reduction may be according to the number of intervals if they are a lot they more reduced and vice versa.

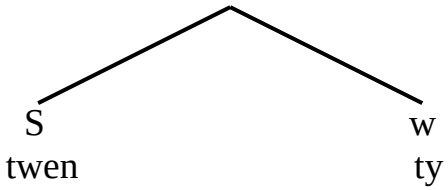
In the previous section it has been said that syllables are grouped into words. But word is semantic and grammatical unit, not phonological unit, the phonological unit above syllable is foot. Some linguists had developed a very important theory of English rhythm called (the theory of foot). English foot starts with stressed syllable and continuing up to but not include the next stressed syllable (McMahon, 2002: 124). So the previous example can be divided into feet as follows: Roach, 2009: 118

1	2	3	4 5
'walk	'down the	'bath to the	'end of the ca 'nal

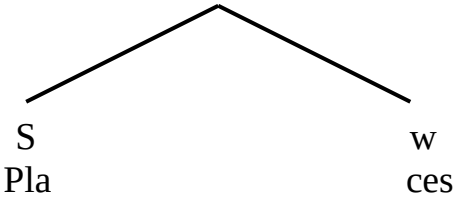
The intervals are affected by the number of syllables with in the stressed group, the time and number of vowels and consonants of each single syllable, and by different factors such as the differences of emphases put in each word. (Ladefoged & Johnson, 2010: 118).

Other theories of rhythm go beyond the foot to work in the fact that some feet are stronger than others, this can be realized through the diagram of

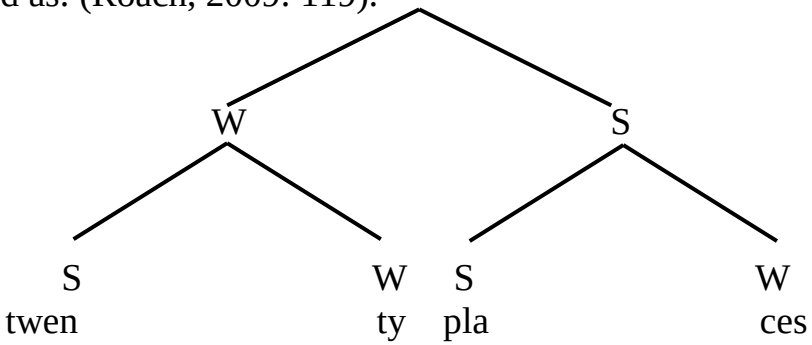
rhythmical structure, for example; the word twenty can be represented as: (Roach, 2009: 119).



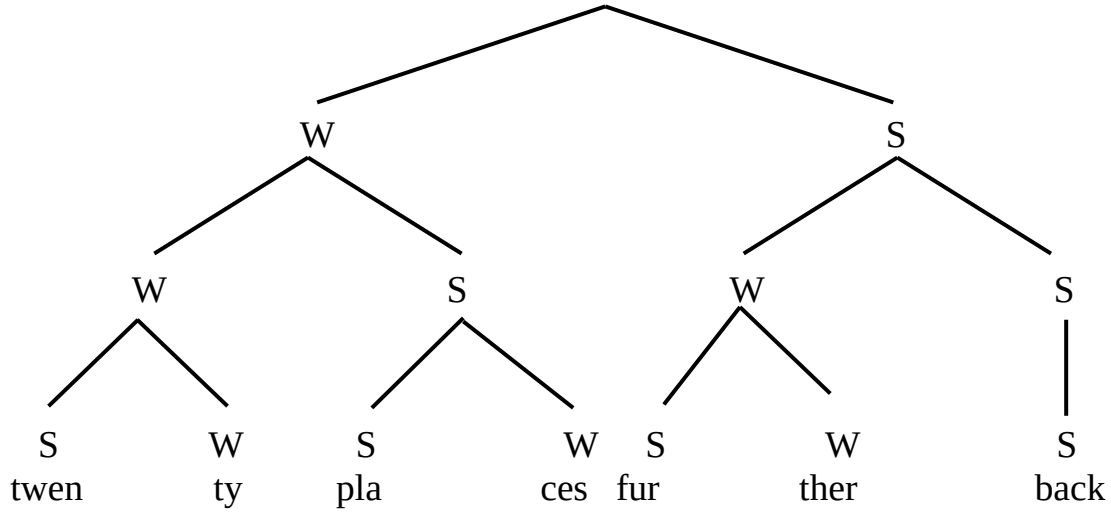
And the word *places* also: (Roach, 2009: 119).



If the two words are combined in one phrase to be *twenty places*, the word *places* has obviously stronger stress than *twenty*, it can be represented as: (Roach, 2009: 119).



When the above phrase is put in larger phrase, like; *twenty places further back*, the diagram is developed as follows: (Roach, 2009: 120).



The above analysis enables us to know the relationship between strong and weak syllables, and the variety of stress. The strength of any syllable

can be judged through counting the number of S symbol above it, the symbol W is omitted: (Roach, 2009: 119).

						S
		S		S		S
S		S		S		S
twen	ty	pla	ces	fur	ther	back

The metrical division is only valid for slow speech, but I daily speech many English speakers claim that right foot *places* is stronger than the left one *twenty* in the phrase *twenty places,* the foot *twenty* is stronger than the foot *places* in *twenty places further back.* When the speech in conversational style.

Eventually; according to (Roach 2009: 121), and also in spite of the regularity in English speech, there is no strong indication to the existence of truly stress-timed rhythm. Techniques of measuring the intervals of CS has not explored the expected regularity, and the same techniques also have been used in measuring differences between stress-timed languages and syllable- timed languages, again did not explore clear differences.

2.2.4. Assimilation

As it has been said that in stress-timed languages "such as English" sounds and syllables run into several modifications for the seek of time regularity, and also to make speech easier and faster. These processes are not only reduction and elision, but also exactly there are other processes, one of which is that whereby one sound segment *usually consonant* is affected by another neibouring sound with respect to one or more distinctive features. In other words; the articulation of one sound is affected by neibouring sound, so speech organ either lengthen the feature of preceding sound or adapt the feature of the following sound, this process is called (assimilation), from Latin root (Assimilatio) which

means; to make one thing like another. Skandera & Burleigh, 2005: 89. According to Crystal, 2008: 39, Assimilation is a phonological name used to indicate to the effect of one sound segment upon the articulation of a nearby sound, whether between word boundaries or within word.

Assimilation is not a distinction of careless speech but it a feature of any variety of spoken English. The degree of using assimilation depends -to a greater extent- on some specific features such as; speed of utterance, communicative context and social status, so it is more frequent in; informal speech, working class-accent than in slow speech, formal situation and upper class speech. (Skandera & Burleigh, 2005: 89).

It can be divided into local Assimilation, and long distance Assimilation. Local Assimilation happens between sounds in the same consonant cluster, while long distance assimilation happens between consonants across word boundaries. (De Lacy, 2007: 335). It is clear -as mentioned earlier- that assimilation can be found within the same word boundaries, but the second category is more frequent, such as in the phrase; *ten mice* pronounced [tem maɪs]. Assimilation within the same word normally found in the same consonant cluster such as *pigs* pronounced /pɪgz/, the plural morpheme realized as /z/, so it is lengthening the preceding sound /g/. Pronunciation of such assimilation is only the standard; sometimes it is difficult to describe it as feature of CS, because it occurs even if the word pronounced in isolation. (Skandera & Burleigh, 2005: 89/90).

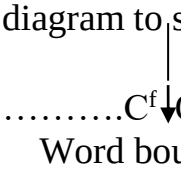
2.2.4.1. Types of assimilation

Assimilation can be analyzed through two major perspectives. The first one is *direction of influence* and the second is *type of influence*. According to the direction of influence assimilation is divided into three categories; Regressive assimilation, Progressive assimilation, and

coalescence assimilation. With respect to the type of influence; it is also divided into three significant categories; assimilation of place, assimilation of manner, assimilation of voicing, and these categories will be covered in the next section in details.

a. Direction of influence

Speaking of direction of assimilation; (Roach 2009:122), assume that if two words are related together, the first word ends in single final consonant will be called (C^f), the other begins with single initial consonant will be called (C^i). In accordance with this view, he proposed a diagram to show the influence as follows:



According to the direction of influence, assimilation has three categories as follows:

1. Regressive assimilation
2. Progressive assimilation
3. Coalescence assimilation

1. Regressive assimilation

If C^f is changed to become like C^i regressive assimilation is happen, this means C^i affected C^f and if C^i is changed to become like C^f, here progressive assimilation is happening, because C^f affects C^i, and if there is a mutual influence this is called coalescence assimilation, where n C^f is /t/ or /d/ and C^i is /j/ they will be shrunk together to form affricate /tʃ/ or /dʒ/. (Ibid).

Regressive assimilation is much more occurring across word boundaries. The most familiar case is that when a word ends in alveolar consonant sound, affected by initial consonant sound of neibouring word with non-alveolar place of articulation. This can be illustrated in the phrase *that car* pronounced [ðæk͡ kɑ:] the sound /t/ of *that* is pronounced further back to be /k/, and also *good boy* pronounced like [gʊb͡ bɔɪ], where the consonant /d/ at the end of *good* is articulated further for word and become /b/. If assimilation has the result of two identical sound of longer articulation of two, transcribed with small horizontal line to connect them [ðæk͡ k:]. Regressive assimilation within words is found in words such as; *width* in which the sound /d/ is changed into /t̪/ under the influence of voicing of the sound /θ/. (Skandera & Burleigh, 2005: 91).

2. Progressive assimilation

As was illustrated previously, assimilation can be found with in words, as well as across word boundaries; progressive assimilation occurs in the same position. Within words it can be rendered by; third person singular, progressive case, regular plural and regular past and past participle such as:

Pigs [pɪgz]

Goes [gəʊz]

Dentist's [dentɪstz]

Backed [bæKt]

The sound in above example is affected by the intensity of articulation or voicing of the preceding sound. (Skandera & Burleigh, 2005: 57).

Progressive assimilation across word boundaries is found in the phrase *shut your mouth*, in this situation sound /j/ of *your* substituted by [ʃ],and the whole sequence becomes like [ʃʌtʃəmaʊθ], it identical with preceding voicing and more like place and manner of articulation. The features of /j/ are obviously changed; it pronounced with greater pressure, narrow space between articulators and changed from lenis palatal approximant to fortis palate-alveolar fricative. An important thing about progressive assimilation across word boundaries is that it is not very common. (Ibid: 91).

3. Coalescence assimilation

The third category of assimilation according to the direction of influence is called coalescence assimilation. In this category; the involved sounds are reciprocally affected, those sounds are merged together to form one sound which is often affricate. In consonant classification; affricate is considered as one unit in spite of its two parts. In the example; *don't you* /dəʊn͡t juː/ where /t/ and /j/ are shrunk together to form /tʃ/ the result combination is [dəʊnt͡ʃuː]. Another example *could you* sound /d/ and /j/are combined together to form /dʒ/ pronounced like [kʊd͡ʒuː]. In this category the two words must transcribed without space in between. Within words; coalescence assimilation is found in words like; *Intuition* /t/ and /d/ are merged together in the form of /tʃ/ and the word becomes [ɪntʃuɪʃn] ,also in the word *dual* sounds /d/ and /j/ are merged together and became/dʒ/ the result is [dʒuːəl]. Some words, however, have historically coalescence assimilation regarded as normal pronunciation of the word, such as picture and soldier. Out of such situations, coalescence is considered as a feature of colloquial non-standard speech. Ibid: 91/92.

Previously, assimilation has been discussed from prescriptive of direction of influence, now it is going to be discussed from type of influence point of view. It has been divided into three categories; assimilation of place, assimilation of manner, and assimilation of voicing.

b. Type of influence

Assimilation is also categorized according to the type of influence into three categories;

1. The first type happens with respect to place of articulation, it is called assimilation of place.
2. The second one is assimilation regarding the manner of articulation and it is named assimilation of manner.
3. The last category is assimilation regarding the intensity of articulation or and called assimilation of intensity. (Skandera & Peter Burleigh, 2005: 92).

Note that assimilation of intensity is another label to assimilation of voicing, and it will be treated in the basis of this label.

1. Assimilation place

It is the most frequent category, found across word boundaries and typically regressive. (Skandera & Burleigh, 2005: 93), stated that; this kind is found When C^f is alveolar and Ci is not alveolar, this result in assimilation of place according to C^i features. This is clarified through the following table:

phrase	Phonetic transcription	Phonemic transcription	Assimilated sound	Assimilated to	Type of assimilation
that person	/ðæt pʒ:sn/	/ðæp͡p pʒ:sn/	t	p	bilabial
light blue	/laɪt blu:/	/laɪp͡ blu:/	t	p	bilabial
bright	braɪt kʌlə/	braɪk kʌlə/	t	p	velar
quite good	kwaɪt gʊd/	kwaɪk͡ gʊd/	t	p	velar
good boy	/gʊd bɔɪ/	/gʊb͡ bɔɪ/	d	b	bilabial
good girl	/gʊd g ʒ:l/	/gʊg͡ g ʒ:l/	d	g	velar
does she	/dʌz ʃi:/	/dʌʒ͡ ʃi:/	z	ʒ	Palato-alveolar
this year	/ðɪs jɪə/	/ðɪʃ͡ jɪə/	s	ʃ	Palato-alveolar

Consonants undergoing assimilation not disappeared, the time duration remains as that of two consonant cluster. The important feature of place assimilation is that the place of articulation has changed, not the voicing because voice differences at the end of words are important to indicate whether the assimilated sound is voiced or voiceless, i.e. to maintain contrast between the two voices. Another feature also if there is more than one alveolar consonant, and if C^f assimilates, they all will, such as:

Don’t go /dəʊnt gəʊ/ [dəʊŋk͡ gəʊ]

(Roach, 2009: 122).

2. Assimilation manner

This category has much less frequency than others, it is found in the most rapid speech or even informal one. In this type; the tendency is for regressive and manner is changed toward easier consonant which makes less obstruction of air flow. It is familiar enough to find plosive changed to fricative or nasal but final fricative or nasal cannot be changed into plosive. Progressive assimilation of manner is found when a word ends in plosive or nasal C^f followed by another one end in C^i /ð/, in such situation C^i becomes identical with $C^{f,}$ for example:

get them /get ðem/ [get̪ t̪em]

in the /ɪn ðə/ [ɪn̪ n̪ə]

Generally, manner assimilation tends to be regressive, also it is toward another consonant with wider open between articulators, “i.e. less air obstruction”. (Skandera & Burleigh, 2005: 93).

3. Assimilation of voicing

Assimilation of Voicing, according to (Roach 2009: 123), is found in restricted way in regressive direction across word beaneries. Skandera & Burleigh, 2005: 92, has opposed him by saying; it is more frequently regressive, but it can be progressive also. When there is a lenis consonant is generally devoiced, as in the example; *I have to* /aɪ hæv tə/becomes [aɪ hæf t͡ə]. The /v/ lenis i.e. voiced changed into /f/ under the influence of /t/ which forties or voiceless, this is typical example of regressive assimilation of voicing. Progressive assimilation of voicing can be clarified by the example; *shut your mouth* where the lenis approximant /j/ is changed into forties /ʃ/ under the influence of forties /t/, the statement is pronounced like; [ʃʌt ʃ͡əmaʊθ]. This category is not quite noticeable, because lenis in initial and final position are typically of full voiced. Voicing assimilation within words is typically found in regular plural, possessive or third person singular and regular form of past and past and past participle. Such as in the word *looked* in which the lenis /d/ is changed into forties /t/ under the influence of forties /k/, the statement is pronounced like; [lʊkt]; and the same for the word *eggs*. This kind of assimilation is only regressive.

2.2.5. Dissimilation (The Opposite of Assimilation)

In 5the previous section, we have exploring consonant assimilates another one in some special circumstances, also there is another different process in English CS, and it is called Dissimilation, it is the opposite of assimilation. (Skandera & Burleigh, 2005: 94 define dissimilation as a process by which one sound becomes less like another. Dissimilated phoneme losses one or more feature that share with other nearby phoneme, the result is two dissimilated sounds.

In English; the phoneme /p/ is a voiceless bilabial plosive, in the example; *peter piper picked a peck of pickled papers* in rapid speech some of these Dissimilated and become others, the statement is pronounced like; *peter piper picked a peck of fickled fafers,* the sound /f/ becomes less like *Ps* be changing the form plosive into fricative. The word *pilgrim* is from Latin root *peregrines,* the first /r/ dissimilated and changed into /l/. As states in *Ibid*, the purpose of dissimilation is to reach greater ease of pronunciation and clarity.

Dissimilation has the same characteristics of Assimilation, it can be regressive or progressive, within word or between words …, but the significant distinction is –as previously mentioned– one phoneme becomes less like another.

2.2.6. Elision

There are many processes supposed to be applied -according to context- in order to maintain the course of speech. One of these processes is called Elision, and it refers to deleting one or more sounds from the utterance and also there are finite grammatical elements “words” when they are found in their weak form, i.e. in non-prominent position. It was defined by (Crystal, 2008:166), as “a term used in phonetics and phonology to

refer to the omission of one sound in CS, it can affect vowels, consonants and complete syllable". (Roach 2009:124), stated that the sound disappears in certain circumstances and realized by zero, it is a feature of casual speech. He admitted that EFL learners have to be aware of it to understand native speakers' speech.

Just as other processes, the purpose of elision is to reach easier pronunciation and to maintain the rhythmicality of English. Although it is widespread in rapid speech, informal situations and among working class speakers; elision is not a feature of colloquial speech, it is a matter of making language easier "as mentioned before". It is difficult to consider elision influenced by an item in the same word, as an aspect of CS; but according to its role in rhythmicality it must be regarded as an aspect of CS, whether the influence within the same word or form neibouring word. (Skandera & Burleigh, 2005:94-95).

Description of elision can be done through two dimensions which are; the kind and the position of the sound omitted. Elision of grammatical word in their weak form which often results in contractions must be considered as a separate type and will be discussed later. According to the sound omitted there are three types; omission of consonants, of vowel and of entire syllable. Elision of consonants is often used as a means of simplification of a complex consonant cluster, may be in the same word or stretched to other words. Strictly the sound is plosive or fricative such as:

Old man [əʊl‿mæn]

Acts [æks]

Clothes [kləʊz]

Months [m^nz]

When /t/ and /d/ from the form of past tense; the pronunciation is neutral between the two, this can cause a kind of confusion for foreign learners, especially those are not qualified enough to extract the structure from situation, such as *looked back* in connected speech is pronounced [lʊk ‿bæk]. Another area of consonant elision is ordinal numbers such as /twelfθ/ pronounce [twelθ] without the affricate /f/, and also in the possessive case of ordinal numbers like *sixth's* the fricative /θ/ is elided, the resultant pronunciation is like [sɪks]. In large combination of consonant cluster such as *next please* where uttered like [neks ‿pli:z]. Another different kind of elision refers to historical background, in some words consonants omitted from the cluster permanently, but it is found in spelling such as; *wrong, lamb, and know.* (Ibid: 95).

A common example of elision, where affricate /f/ is omitted from the functional word *of* before consonants such as;

Lots of them [lɒts ‿ə ‿ðem]

Waste of money [weɪst ‿ə ‿m^nɪ]

These instances are very informal and even considered non-standard. (Roach, 2009: 125).

Elision of vowels is typically found in non-stressed syllable in a multi syllabic word, after or before the stressed syllable and mainly after voiceless plosive /p,t,k/. In these words; *potato*, *tonight*, *perhaps,* the underlined segments after fortis plosive, the remaining gap of vowel omission, is compensated with a puff or air called *Aspiration* and indicated to by small [^{h}] on the plosive's top. The process of compensating elision by aspiration result in reduction in the number of

syllables, for example the word *potato* can be pronounced with schwa such as /pə-teɪt-əʊ/ as a tri-syllabic word, after elision it becomes a disyllabic word like; [pʰteɪt-əʊ]. When the omitted vowel followed by /n,l,r/ as *tonight* the following vowel is changed into syllabic consonant which has greater duration of time than non-syllabic one and it uttered like; [tʰn̩aɪt], in this case the number of syllables remain as it is but the syllable division is removed /tə-naɪt/ becomes [th n̩-aɪt]. (Skandera & Burleigh, 2005:95-96). As vowel and consonant and entire syllable can be omitted when they are unstressed, basically after and before stressed syllable, and when it contain a consonant which is repeated in the following syllable as in the word *library* /laɪbrərɪ/, it is pronounced without the middle syllable [laɪbrɪ], and also *particularly* /pətɪkjələlɪ/ pronounced without the fourth syllable and becomes like [pə-tɪk-jə -lɪ], although the unstressed syllable is further, such as pronunciation is well establish nowadays even in phonetic transcription. (Ibid: 96).

According to the position of omitted sound, elision can be at the beginning, middle and end of the word at the beginning of word elision is typically known as *phaeresis* in words *knit* and *write.* When the elided initial segment is vowel usually occur in a stressed syllable of multi-syllabic word this process is known as *aphesis,* such as word *opossum* pronounced *–possum*, in some words the process of aphesis is so confused because the result is a new word with different meaning, s as; *alone* becomes *–lone, esquire* becomes *squire.* Another type of elision when an entire initial syllable is omitted and technically known as *free-clipping* such as *alligator, gator, telephone, phone.* (Ibid, P: 96-97). Omission of sound from the middle of word is called *syncopation;* generally, it refers to an omitted vowel from a weak syllable such as; *today* and *tonight.* But kit can also refer to consonant elision such as;

clothes and *twelfth* and *listen,* as well as omission of syllable from middle of word such as; *particularly.* It sometimes represented by apostrophe in spelling [tʰenaɪt] in order to show spoken language especially in poetry. Deleting sound from one of words is named *apocopation* such as when an entire syllable is omitted it is known as *back-clipping* like; hippopotamus and laboratory. A phaersis and apocopation can occur together and known as *fore-and-off-clipping* such as; influenza becomes *flu* Elizabeth becomes *Liz.*

Another prominent example of elision is the contraction of grammatical forms, which are used frequently in spoken language. As Roach 2009: 125, states that to consider contractions whether they are a feature of elision or not is not easy, but the way they represented in spelling make them differ than other types. The most common types are: (Roach 2009: 125-126).

- 'had', 'would': spelt'd, pronounced /d/ after vowels, [əd] after consonants.
- 'is', 'has': spelt's, pronounced [s] after fortis consonants, [z] after lenis consonants, except that after [s, z, ʃ, ʒ,tʃ, dʒ] 'is' is pronounced [ɪz] and 'has' is pronounced [z] in contracted form.
- 'will': spelt 'll, pronounced [l] (after vowels), [l̩] after consonants.
- 'have': spelt've, pronounced [v] after vowels, [əv] after consonants.
- 'not': spelt n't, pronounced [nt] after vowels, [n̩t] after consonants.
- 'are': spelt 're, pronounced [ə] after vowels, usually with some change in the preceding vowel (e.g. /'you' ju:/- 'you're' [jʊə]or [jɔ:], 'we' /wi:/ - 'we're' [weɪə], 'they' [/ðeɪ/ - 'they're' [ðeə].

2.2.7. Liaison

The term liaison means link in French language. It has been used differently by authors, but all of them agree that it refers to link between sounds or words. A very common example of liaison is when a word ends in consonant is linked to another one begins with a vowel in a stressed syllable, such as in phrase *not at all* which is transcribed in phonetic transcription as /nɒt-ə-tɔl/. Liaison has been defined, strictly, a linking two words by pronouncing word final consonant which is generally not articulated when the word is pronounced in isolation, this consonant is articulated only when it preceded be a vowel in the same word, and followed be initial vowel in another word. (Skandera & Burleigh, 2005:57).

A significant type of liaison where two vowels "i.e. not tow elements of a diphthong" belonging to different syllables or words are linked to together through insertion of another vowel "according to the end of the first one" for the sake of easy pronunciation, in such case; the articulatory gap between the two syllables or words is technically refer to as *hiatus*, the consequent vowels are said to be *inhiatus.*This category appears in words such as; *skiing*, *reassurance*, *play off*, *cooperative*, and in phrases such as; *who is*, *she is*, *silly and stupid*. The gap between sounds may be still as it is "i.e. without linking such as; *skiing*, *reassurance*, *play off*. On the other hand in *cooperation, to England, silly and stupid* may be removed be linking sounds in question through inserting semi-vowel as in; [sɪlɪʲənstu:pɪd] and [tuʷɪŋglænd] or through insertion of a glottal stop as in [kəʊʔɒpəreɪtɪve]. Symbol representing linking sound is usually appearing in small upper transcript joined to the preceding word. Ibid: 58.

Another instance of liaison which is found in many accents of English- as will be mentioned later- in rhotic accent is called linking /r/. The term is

referred to as between two words by articulating a generally un-articulated final /r/ which is finitely preceded be a vowel in the same word and followed by initial-word vowel in consecutive word. So words like far and for are not pronounced with /r/ suggested by spelling, normally they end in long vowels, transcribed as /fɑ:/ and /fɔ:/ but when these words are followed by another one begin with vowel such as in consequences; *far away, four eggs,* the sound is articulated and transcription became like; [fɑ:r‿əweɪ] and [fɔ:r‿egz]. In contrast with transcription of other types of liking, linking /r/ is transcribed in its normal position and size. (Ibid: 58).

The third type of liaison known as intrusive /r/. This term has been defined as linking two consequent vowels belonging to different words, or less common to different syllable of one word, by inserting /r/ sound which is not originally justified. There are the hiatus of consecutive as; *media event, Australia all out, drawing, visa application,* may be substituted by intrusive /r/ transcribed like;[mi:dɪaʳ‿vent], [əʊstreɪlɪaʳ‿ɔ:iaʊt], [drɔ:ʳɪŋg], [vi:zəʳ‿æplɪkeɪʃn]. The intrusive /r/ is superscripted in small size and on the top of previous word. (Ibid: 59).

The speaking linking and intrusion leads us to clarify two significant accents of English. The first one is non-rhotic accent /r/ sound is not articulated in the last of speaking or after a pause, in this type of accent word loses their final /r/ by historical transmission. Such accent is common in England and less common in US. The second type of accents is called Rhotic accents, in which /r/ sound is articulate whenever is suggested by spelling. It dominates in US and less used in UK.

2.2.8. Juncture

When words and phrases are pronounced in isolation; they could easily be recognized. However, spoken language consists from continuous string of speech with just few pauses between them. Some speaker and listener are often face difficulties to detect where word ends and another one starts, because it did not identify by phonetic or phonological feature. How they can distinguish an utterance like [naɪtreɪt] whether is *nitrate* or *night rate*, and also [əneɪm] is it *a name* or *an aim*. Such phenomenon is called Juncture.

According to (Crystal, 2008: 58), "juncture is a term used in phonology and phonetic boundary feature which may demarcate grammatical unit such as morpheme word or clause. In juncture we have to put into consideration the relationship between the sound and the preceding and following sounds. This has been illustrated through the utterance *myturn* in this utterance the relation between /aɪ/ and /t/, because there is no pause between the two words to indicate their boundary. English speaker do not mix and usually know the target word is *may turn* [maɪtʒ:n] and not *might rain* [maɪt‿ʒ:n] the crucial question is; how can we recognize the difference? The sound /t/ is completely aspirated in [tʒ: n] and do not when it is final of [maɪt], furthermore; the diphthong [aɪ] is shorter in [maɪt]. (Roach 2009: 126).

Juncture has been divided into open and close juncture if word in question is not preceded and followed by a pause, i.e. when word borders are uttered together, this typically internal open juncture, and when border is followed by a pause when the word in question found at end of speech, we speak about external open juncture. Close open juncture on the other side, refers to transition within word boundaries.

2.2.9. Reduction in English

In English there are some words, strictly, function words have two prominent realizations; one of which is called *strong form*, if the word pronounced in isolation or found in a stressed position. The second realization is called; *weak form*, in which vowel sound affected in both quality and may be quantity and reduced to shorter one "i.e. vowels can be short or long and vary in high and backness". Reduced vowels loss some of their possibilities and reduced to /I,ʊ,ə/. So vowel reduction in English supports a productive phonological regularity in the language. Here are some examples of differences of pronunciation of function words in isolation and in connected speech:

Word in	transcription	Word in context	transcription
At	æt	At home	ət ˈhəʊm
And	ænd	You and i	ˈJuːən ˈaɪ
She	ʃiː	Will she come	Wɪlʃɪˈkʌm
For	fɔː	For better or worse	fɔːr betər ɔːˈwɜːs
Are	ɑː	They are gone	ðeɪ ə ˈgʌn

The reduction of vowels in English is closely related with stress placement in words, this can be clarified by word class pairs "i.e. words have the same spelling form and different class" such as word *protest*; when it is used as a noun, it pronounced as; ['prəʊtest] with diphthong in the first syllable's center, the same diphthong /əʊ/ əʊ is reduced to /ə/ when it is pronounced as a verb, pronunciation becomes like [prə'test]. Another case of vowel reduction, when suffixes are attached to the word this cause stress shift from one syllable to another, and consequently vowel reduction. In the word *torrent* [tɒrənt] the center of the first syllable is /ɒ/ when we add suffix *al torrential* the stress is shifted to the

first syllable, and the first syllable's center is reduced to schwa [tərənʃəl]. (Laszlo, 2014: 25).

2.2.10. MA students Problems in applying Aspects of Connected Speech

CS is one of the aspects essential for successful communication, which includes effective auditory perception and speech production; and knowing its aspects can play the role of assistant delivering and receiving a communicative message. This thesis is devoted to investigate the effectiveness of applying ACS in the performance of MA students, as an essential part of communication.

MA students have intrinsic problems regarding using ACS; in other words, they cannot use these aspects in a way similar to that of native speakers, while some of them cannot use these aspects at all. There are some reasons beyond this problem such as; ACS are not integrated in in secondary school curriculum and in spite of its inclusion in the university syllabus, but teachers are not able deliver the content in a proper way. Another reason is lack or even absence of well-equipped laboratories (in some institutes); also the absence of activities has its impact on this problem.

If we take a closer look to the way of MA students' speech, we will discover that they speak arithmically; they cannot maintain the natural rhythm of English (according to the prominence of syllables) by over doing use of pauses. Another problem is that; MA students pronounce words as they are i.e. without necessary changes happen naturally in the course of speech. For instance, they cannot apply assimilation aspects, except those types happen as a result of mother tongue influence; also they do not use Elision effectively as a mean of maintaining language rhythmicality and the same thing for Linking, even when they pronounce

linking /r/. They pronounce as that of Arabic whereas they cannot imagine the Intrusive /r/.

Generally, applying ACS can make every one's speech natural and consequently understandable.

2.3. Previous Studies

In reviewing the historical background of CS, the researcher has found three relevant messages to the area, described as follows:

2.3.1. The first study

The first study published in 2015 at Sudan University of science and technology, prepared by; Mustafa Badawi Zain Elabdeen. This research entitled; “Problems Encountered by Non-Native Speakers in Understanding CS of English Native Speakers”. To collect data, Mustafa has followed a descriptive methodology through using a questionnaire with twelve statements distributed to 40 participants have different scientific degrees of English language.

Mustafa’s investigation has come about with findings such as; CS has great prominence in communicating with native speakers, the majority of non-native speakers lack of proper knowledge about CS, because of poor knowledge during their university study, and also they ignore using activities to improve their knowledge, also he finds that, a lot of non-native speakers have less awareness about the aspects of CS.

2.3.2. The second study

It was published in 2013at Nile Valley University, prepared by; Ekram Hasaballa. This investigation is about "Integrating Aspects of Connected Speech into Textbook for Sudanese Secondary students. The researcher has followed a descriptive method to collect the data using questionnaire

distributed for forty secondary teachers in Saudi Arabia and Khartoum state. Ekram's investigation had come up with result that English teachers used to avoid teaching reduced forms for various reasons such as; insufficiency of time in curriculum, inadequate materials and also they do not know the way of teaching these forms.

2.3.3. The third study

Another relevant study which closely related to this research is about "Aspects of connected speech: assessing students' progress after pronunciation training", wrote by: Petra Erbanova in 2014. This researcher treats analytic evaluative method; she prepared a questionnaire for teachers and another one for students. Her investigation resulted in: CS in English is still a problematic area for ELT, and also teachers prefer to teach pronunciation of citation forms "isolated vowels and words" more than teaching that of CS, another result is; the main cause of the problem is that teachers admitted their lack of theoretical background of ACS.

2.3.4. Conclusion of previous studies

In conclusion, the three studies agree with this study in some points and disagree in others. Mustafa's study agrees with the present study in the point that; the majority of EFL learners lack of knowledge of CS. The other results are concerned with pedagogical aspects of CS. The second study results are also concerned with teaching reduced forms, concentrating on teachers. Petra's study also concerned pedagogical side of the problem, but the point that CS is still a problematic is somehow accommodating with the present result.

CHAPTER THREE

METHODOLOGY OF THE STUDY

3.0. Introduction

This chapter consists of the basic information on the methodology used in this study. In this chapter, the researcher describes the population of the study and the way they are sampled, it also includes the instrument which is used for data collection, and the procedure of data collection including the methods applied to prove the validity and reliability of the instrument such as examination of instrument by the supervisor, refereeing and pilot study.

3.1. Methodology

A descriptive analytical approach is adopted throughout this study. The present study tries to describe the nature of the phenomenon and the problem, and present it as it is, and consequently highlight the area of weakness which needs more concentration. The information was gathered through direct oral test distributed personally be the researcher.

3.2. Population and Sampling

The present study relies on simple random sample of 50 participants; they are EFL learners (English as foreign Language learners) from patch 6 and 7 of MA students -who are about 160 learners- at Sudan University of Science and Technology (SUST), Collage of languages, Department of English language. The participants are from both gender with no intention to focus on one sex upon the other, and they were chosen to conduct an oral test through recordings.

The fifty respondents' age ranges from 24 to 30 and few of them above this range, and they are active in the field of English language. Before that, the researcher had selected a group of 10 MA students from both batches randomly, they had given the same test in different times of month, the result indicates that; this test is valid to be relied on, and can give real outcomes. The researcher preferred MA to Bachelor students for this reasons:

1. Firstly, connected speech is a high level of pronunciation, so it is a matter of competence and needs more experience about the language, this experience is more likely to be found with such level of students.
2. Secondly, MA students are more motivated and exposed to the language from different resources.
3. Lastly, the participants are studying English language for the twelfth year (in normal circumstances), and they educated under the same educational condition, curriculums and syllabi. Their mother tongue is Arabic, so the selected sample is homogeneous in educational level, linguistics back ground and pre-university educational period.

3.3. The Instrument of Data Collection

This study had used one tool as a device for gathering information which is the oral test. The test has been designed by the researcher whereas its purpose and instructions were provided verbally. It includes three parts, each part includes10 statements and is made up to test one hypothesis. The first part is designed to test the aspects of Assimilation, the second for Elision and the third for Linking and Intrusion. The researcher chooses these three aspects as they are the most prominent and frequent aspects among all. Furthermore, in the test designation; the researcher has

intended to repeat the kind of what is being tested to make sure of frequency as a method for authentic results. The statements of part one are repeated in special way, for instance, statements from 1 to 3 are devoted to bilabial assimilation (partial and complete; the other statements covered other types of assimilation while regressive and progressive had taken into consideration.

3.4. Pilot Study

A pilot study was made up to improve the test's quality before the distribution to the subjects of the study, who is homogeneous with the pilot study group.

The original test included three parts of statements (Assimilation, Elision, Linking and intrusion) this version given to 10 Learners from batch 6 and 7 of college of languages at Sudan University of Science and Technology, English department, and they have been selected randomly. During recording, the researcher notes that some statements need to be modified to become more satisfactory for the purpose. Another benefit from piloting is that the researcher becomes able to measure Validity and Reliability by emphasizing them as numbers as in the following table which showed that the tests is highly valid and reliable:

3.5. Validity

According to *Lyman 1998 and Coubrie 2004*, Validity means that the test gives the information that is useful for specific purposes and is equally able to measure the performance of all students, whatever their gender, race, language background. For validation purposes; the test has been examined first of all by the supervisor himself, and then by 5 specialists from Sudan University of Science and Technology (SUST). Two referees

are Associate professor, and the other three are PHD holders. Referee comments had been taken into consideration and they were helpful in finalizing the necessary changes in the instrument of data collection. Moreover; the test includes a variety of statements formulated in simple language and also in a form of statement (not only clauses) for the purpose of clarity and ease of understanding and verification.

3.6. Reliability

It means; to obtain the same results if the same instrument used more than one time under the same conditions. In other words, to what extent can the instrument can be relied upon to produce consistent outcomes if they used repeatedly over the time on the same person or if it used by two different investigators. So the test was tested for reliability and specifically for internal consistency. The recorded test which is made by MA students has displayed consistent responses. The data of respondents had treated confidently, and participant themselves were asked not to mention their name in the record to ensure their confidence.

Reliability Statistics

No of Items	Cronbach's Alpha coefficient of reliability	validity
Assimilation	0.762	0.87
Elision	0.60	0.77
Linking and intrusion	0.674	0.82
Whole test	0.843	0.92

3.7. Research Procedures

The survey was developed during a period of one month and half. The researcher collects the data through using of a test distributed personally

by the researcher to a number of 50 MA students at Sudan University of Science and Technology (SUST), Collage of languages, Department of English Language**.** Respondents were asked to make a recording test recorded by the researcher through using of smart phone and then converted its formulation into mp3 through specialized software application to fit another application used to purify records from impurities such as noise and background sound which can affect the rating and called (Adobe Audition version 10.0.2). After that the researcher had been using third software to check the record answers. This application is called (PRAAT 5353 win 64) used to assist the researcher to judge about some cases because they cannot be judged by just an ear. After that; the data was analyzed by Statistical Package for the Social Sciences (SPSS) programme to obtain the target results.

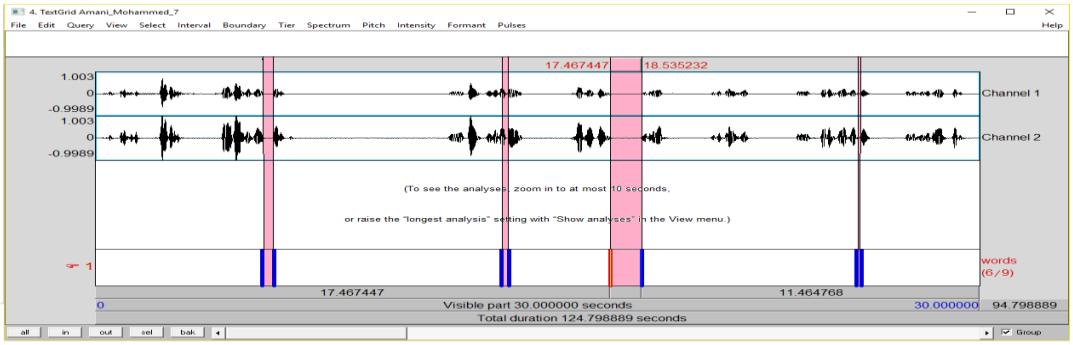
3.8. Problems Encountered by the Researcher

The researcher aimed to measure the duration of the test as whole and for each statement individually, this cannot be achieved without software, and it was the fourth problem, but the researcher had used PRAAT as efficient and available.

Another related problem is using a smart phone instead of computer in recording respondents' performance, but it is more effective with respect to concurrent circumstances (no empty classes, laboratories).

The third problem is related to learners' pronunciation. Some of them speak under the influence of mother tongue, some of them under that of the American accent, other have a tendency to follow the British accent, so the pronunciation of the underlined expressions was different, this caused some problems. For instance; in the phrase *that person* which implied converting /t/ of *that* into /p/ to form complete bilabial

assimilation [ðæp‿ pɜ:sn], they replace /t/ with glottal stop /ʔ/ pronouncing the expression like; [ðæʔ‿pɜ:sn], the same problem with the phrase *what you*; it is much more difficult to judge, here the researcher uses PRAAT as assistant and the duration is relatively same. Some of them hesitate in pronouncing the target expression, some of them make pauses between target expressions, and this obviously opposes the purpose of connecting word. The following graph shows a part of a learner's performance, the shadowed columns represent pauses between target expressions, and the flat lines represent pauses between statements.



CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.0. Introduction

The purpose of this study is to identify and determine exactly the effectiveness of applying aspects of connected speech in MA students' performance. In this chapter, the researcher is going to present data analysis and discuss results.

4.1. Using PRAAT Software in measuring the duration of Respondents' Performance

While the researcher wanted to come up with accurate results, he used PRAAT software to measure records' duration for the whole participants compared with 5 native speakers' records. As the literature proposed that; MA students are not able to use aspects of connected speech effectively. This claim was proved practically through the following table:

Table (4.1): Test performance of native speaker and samples

No	Part / Participant name	Duration/second			
		Part one	Part two	Part three	Whole test
1	Eithar Abd Allah	14.9	17.3	14.3	46.5
2	Mohammed Nour Yagoub	16.6	20.4	20.8	57.8
3	Crazy Girl	17.4	21.4	19.2	58
4	Yousuf Mohammed	17.3	22.2	21.9	61.4
5	Mohammed Mustafa	16.6	21.4	24.9	62.9
6	Babekir Osman	20.6	23.2	20	63.8
7	Babekir Osman	21.2	23.2	20	64.4
8	Fawzi Mahmoud Haroon	21.7	22.8	21.1	65.6
9	Ahmed Mohammed Tom	17.9	24.8	24	66.7
10	Maria Elamin	20.2	25.9	21	67.1
11	Khalaf Allah Mustafa	20.8	22.1	24.6	67.5
12	Abdurahmann Shareef	20.4	25.1	22.8	68.3
13	Native No1	19.6	20.7	21.2	61.5
14	Native No2	19.9	23.4	21.3	64.6
15	Native No3	20.4	25.3	23.2	65.9

16	Native No4	21.8	23.7	22.6	68.1
17	Native No5	21.2	25.3	27.2	69.7
18	Hani ElMahdi	20	25.8	24.2	70
19	Haneena Salih	22.2	25.5	22.5	70.2
20	Mohammed Mohammed	20.3	25.8	24.2	70.3
21	Dia Ahmed	19.7	26.5	24.5	70.7
22	Sara Mohammed Hamid	20.5	24.3	25.9	70.7
23	Mohammed Ahmed	20.8	22.7	27.7	71.2
24	Hassan Belkamin	18.9	27.1	26.6	72.6
25	Roaa Mohammed Ali	18.9	28.6	25.3	72.8
26	Reem Mohammed Ahmed	19.1	28.9	25.6	73.6
27	Faihaa Mohammed Ali	22.6	25.8	25.4	73.8
28	Romai Mahjoob	23.3	26.1	25	74.4
29	Maria Ibrahim	21.9	27	26	74.8
30	Mayada Mohammed	25.3	27.9	24	77.2
31	Marwa Abdurahmann	24.5	28.1	24.7	77.3
32	AlArgem	23.5	29.1	25.1	77.7
33	Najeeb Jomaa	22.1	30.3	25.5	77.9
34	Rofaida ElMahi	23.9	29.1	27.6	80.6
35	Mohammed Elzain	22.5	30.6	29.3	82.4
36	Adam Abdurahmann	22.5	29.7	32	84.2
37	Omer ElSiddig	25.3	32.5	29	86.8
38	Naser Eldin ElFaki	25.9	32.7	28.4	87
39	ElNazir Ali	25.2	32.8	30.5	88.5
40	Rogaiia Ahmed ElAwad	25.4	34.9	29.9	90.2
41	Abu Elgassim	25.6	35.4	31.4	92.4
42	Shaza Mubarek	29.3	34	29.2	92.5
43	Hajir Jamal	27.9	35	30.4	93.3
44	Abu Baker Mohammed	26.4	32.4	35.3	94.1
45	Wahbi Ismail	31.2	33.7	30.1	95
46	Israa Faisal	29.1	36.3	29.9	95.3
47	Zainab Ahmed	27.7	33.9	33.8	95.4
48	Yassin Osman	32.6	33.5	30.2	96.3
49	Malik Masoud Hamid	33.5	34.2	28.9	96.6
50	Mohammed Ahmed	28.3	37.6	32.1	98
51	Ajba Hussain Mohammed	32.3	35.9	33.5	98.7
52	Ali Ahmed Mohammed	32.3	35.9	33.5	98.7
53	Zainab Yousuf Elhaj	28.1	34.3	36.6	99
54	Haider Hassab Allah	27.5	38	35.1	100.6
55	Ali Adooma	29.7	37.8	36.2	103.7

This table contains the speaking duration of the whole respondents' performance compared with 5 native speakers' performance (i.e. the model), to provide another witness for the existence of research problem. The participants' performance is arranged according to the duration of records, from the fastest to slowest, as in the able. Another information about the table is that; the total counted duration is just for the thirty statements in the test, excluding the duration of pauses between parts. Also the shadowed area represents the performance of native speakers.

The significance of measuring speaking duration resides on making estimation for the speaking duration for MA students, comparing it with that of native speakers, for the purpose of maintaining rhythmicity of spoken language as a feature of CS. maintaining rhythmicity or stress timing can be achieved through different operations such as; elision changing sounds' qualities and so on (the other ACS).

It is obviously known that; speech rating differs from one speaker to another, thus, the researcher used records for five native speakers, with intention to collect them from different linguistic environments to cover different ratings.

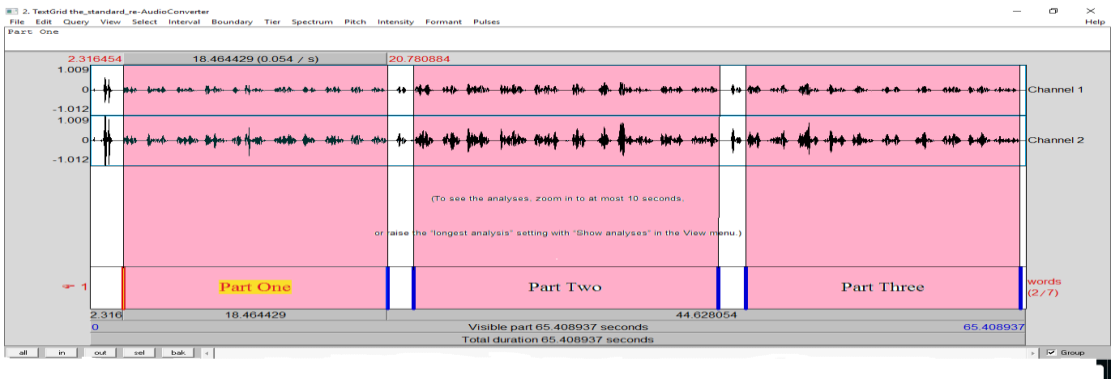
Native speakers' durations range from 61.5 to 69.7 seconds, hence, participants who need less than this duration (the first three ones) speak faster than native speakers. The reason behind that difference is; they tend to reduce the pauses between words and pronouncing them very quickly. While those who need the same duration (i.e. from 4 to 12) are passed in duration, with the possibility to include those 70 to 70.7 (i.e. from 18 to 22). Participants need from 71.2 to 77.9 are near to but not passed. But the other durations are far from the model and have real problem with rhythmicity, and consequently the other aspects. Such participants tend to exaggerate using pauses and fillers between syllables, moreover, they pronounce sounds as they are written. But occasionally, some

respondents have less problems with other aspects and major problems with rhythmicity, (i.e. pronounce the other aspects, but use pauses and fillers) and vice versa. The phenomenon of speaking speedily is less frequent than speaking slowly; this is clearly noticed in records.

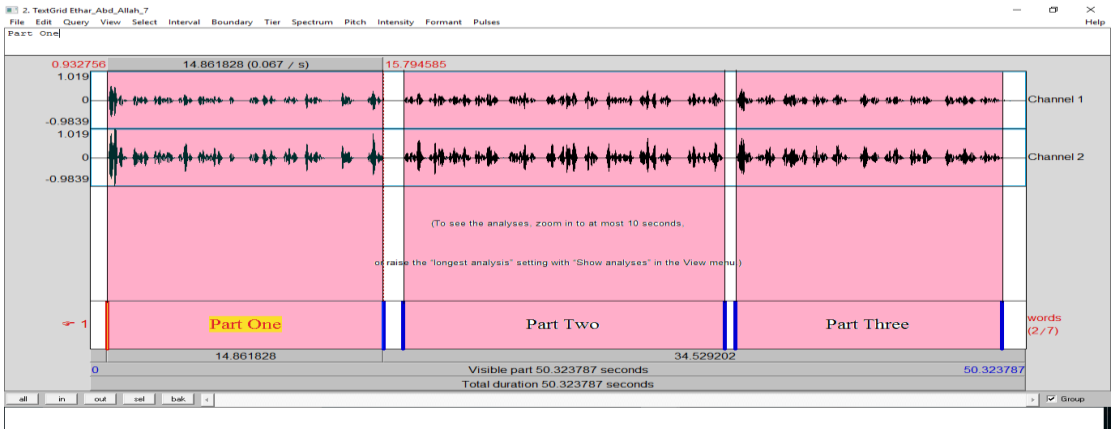
In spite of that; fast speaking is not a feature of fluency, but, generally, those who speak faster than native speakers and those who need the same duration approximately; are more fluent than those who speak slower, know more rules and speak alike. While those who speak slower are obviously show more mother tongue interference.

To sum up this discussion statistically, 6% of the research subjects need less duration than native speakers to read the test, 28% need the same duration; while 66% need more duration. It can be said that; MA students are not able to maintain the rhythmicity of spoken language in the same way as native speaker.

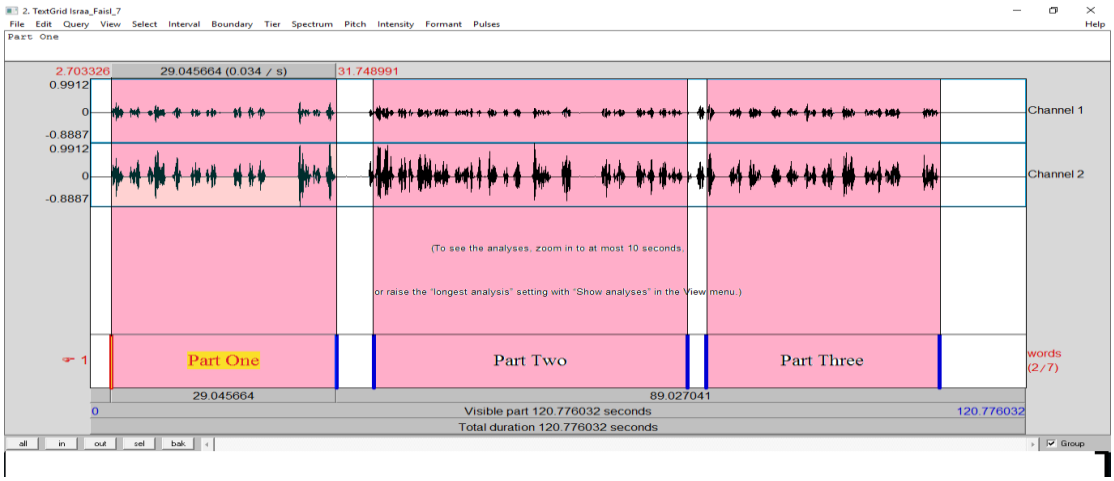
The following histograms represent the description of the recorded test through PRAAT as samples. The first one represents the description of a native speaker's performance (i.e. as a sample for model records), the second for a participant's performance called Eithar, which is a sample for those who speak faster than native speakers and the third for another participant's performance called Israa, as a sample for those who speak slower.



Histogram (4.1): Native speaker's performance



Histogram (4.2): Either's performance



Histogram (4.3): Issara's performance

While the table offers time duration for the Sample records, the histograms present the phonetic description for the same records. The dark shaded areas portray the phonemic description of the three parts, and the white columns characterize the duration between the parts, in addition to the duration of pronouncing the part number, which is excluded from the total duration appear in the bottom of histograms, thus the duration appear in the bottom of histograms is not recognized. The thick zigged lines represent the expressions, whereas the flat lines between zigged ones represent the pauses between statements. If someone looks to the histograms he will find that Eithar's performance contain shorter pauses and higher loudness -in some statements- than that of the native speaker; whereas, Israa's performance involves longer pauses and higher loudness

-which is illogical in most statements- than that of the native speaker. In spite of this explanation, but, however, speaking fast does not mean fluency; on the other side, slow speaking in not an evidence for a foreign accent.

4.2. Analysis

Part one: Assimilation

1. Question one: To what extent are MA students efficient in applying assimilation?

Table (4.2): Statements: 1, 2 3, and 4: Assimilation of place

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
1	Who is that person?	14	28	36	72	50
2	Tom is a good boy	2	4	48	96	50
3	Those are ten players.	33	66	17	34	50
4	It is quite good.	9	18	41	82	50

The table 4.2 shows the performance of statements 1, 2, 3 and 4. These statements are made up to test assimilation of place. In question number 1, the total percentage of students who attempt the right answer is (28%), in the second statement the percentage of the right answer is just (4%), but in the third statement it is (66%), and in the fourth statement is (18%). The first and second statements are total bilabial assimilation according to the C[i]. The performance in the first question reflects respondents' lack of knowledge about assimilation of place. Respondents know that; the word *good* -mention in the second statement- is a content word, so it must be pronounced as it is; this is the reason behind their weak performance. It is noticed that; the first statement's performance is better that of second, the main reason is; some respondents regard the word *that* as a functional word -despite it is a content word- thus respondents tend not to emphasize

it. The third statement is conducted to test partial bilabial assimilation. The result of this statement shows clearly respondents' mother tongue interference. In this expression, *ten players,* the /n/ sound of *ten* should be converted to /m/; this exactly happens in Arabic, namely in Qur'an recitation – Tajweed science, as in El-Sadig: 6 when a bare /n/ sound is followed by a /p/ sound; the /n/ sound is directly changed to /m/ sound. In the fourth statement -which tests velar assimilation- respondents assume the word *quite* as a degree for the following one *good,* and it has amount of meaning, thus both words must be pronounced without any modifications, this is directly reflected in their performance.

Table (4.3): Statements: 5 and 6: Manner assimilation

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
5	Please! Open from that side.	19	38	31	62	50
6	He is in the closed office.	20	40	30	60	50

Sentences 5 and 6 in table (4.3) are conducted to test assimilation of manner, sentence 5 for regressive, while 6 for progressive. The result of the investigation shows that; the total percentage of study subjects who achieve the right answer in the 5th statement is (38%), and the right answer's percentage in the 6th statement (40%); therefore, in assimilation of manner, there is a kind of consistency in respondents' performance. Speaking about manner assimilation, the majority of respondents do not know the rule of regressive manner assimilation. The reason behind weak performance in progressive manner assimilation is; study subjects know that the modification should happen to the functional word *the* must be in the vowel not in the consonant, in other words, it should be pronounced either in its strong form [ði:] or weak form [ðə] according to the context,

they do not know the context can also change the consonant /ð/ to become [n̪], in the 6th sentence - regressive manner assimilation.

Table (4.4): Statements: 7 and 8: Assimilation of voicing

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
7	I have to go.	49	98	1	2	50
8	Those are small pigs.	11	22	39	78	50

Table (4.4) includes voicing assimilation represented by 7th and 8th statements. Statement number 7 investigates regressive assimilation of voicing, and number 8 examines progressive voicing assimilation. In statement number 7, the study subjects' performance represents the highest degree among the whole test, because only one respondent has failed to achieve the correct pronunciation. The percentage of the right answers in the 7th statement was (98%); this can be interpreted as an influence of respondents' mother tongue. The sound /v/ as -Bite, V & Bite, M 2013: 10- say; is not found in Arabic language, when Arab learners are faced by /v/ consonant, they directly pronounce it identically with /f/. The study subjects' performance in the sentence number 8 represents (22%) for the right answers, this happens because of the respondents' weak knowledge about assimilation of manner, they have a tendency to invent an opposite assimilation rule by pronouncing regressive assimilation instead of progressive; in other words, they change the sound /g/ of the word *pigs* to /k/ to assimilates the following one /s/, the pronunciation becomes [pɪks] instead of the right pronunciation [pɪgz]. This makes MA students' accent sounds strange and changes the meaning. (Refer to the records). Speaking about the two statements collectively, there is no concordance in the performance of the

two statements, this is another proof of respondents' weak knowledge about assimilation of manner.

Table (4.5): Statements: 9 and 10: Coalescence assimilation

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
9	What you want?	30	60	20	40	50
10	Would you like fish?	22	44	28	56	50

Questions 9 and 10 found in table (4.5) represent Coalescence assimilation, which means mutual influence. The study subjects' performance, somehow, differs from question 9 to 10, as the percentage of the right attempts in question 9 represents (60%), and it indicates a good performance; whereas, in question 10 the right attempts represent (44%), so why is this difference although they represent one type? The answer of this question can be answered as follows; question 9 which implies changing /j/ of *you* to [ʃ], -the whole question should become [wʌt͡ʃu: wɒnt]- this expression is accustomed to respondents; therefore, they act rightly. While the performance in question 10 is attributed to the ignorance of rule. Speaking about the two questions, many of respondents did not switch on aspiration of the sound /t/, thus, there will be no coalescence assimilation, and consequently every one, approximately, pronounce the /t/ with aspiration is able to pronounce the expression as it is supposed to be. The degree of this assimilation comes according to degree of aspiration and the rate.

Table (4.6.): EFL learners' performance in spoken Assimilation

Statement No	Right		Wrong		Total
	Freq	Perc %	Freq	Perc %	
1	14	28	36	72	50
2	2	4	48	96	50
3	33	66	17	34	50
4	9	18	41	82	50
5	19	38	31	62	50
6	20	40	30	60	50
7	49	98	1	2	50
8	11	22	39	78	50
9	30	60	20	48	50
10	22	44	28	56	50
Grand Total	**209**	**40.18**	**291**	**50.90**	**500**

To answer the first research question, the data was analyzed collectively as shown in table 4.1. When all sounds are combined, the percentage of correct attempts ranged from 60 % to 98%, which means pass, for only three statements namely (3,7 and 9), all other statements' percentage are less than 50% with no sound being produced correctly by all respondents. As the researcher mentioned in chapter three: 38, the purpose of repeating the type of a tested kind is to verify to what extent is performance is consistent? Therefore; table 4.6 explains that; there is inconsistency in pronouncing assimilation of place -which is represented by sentences from 1 to 4- but the performance of manner assimilation represented by statements 5 and 6 is consistent. Statements 7 and 8 which test voicing assimilation are not compatible, while in coalescence assimilation represented by sentences 9 and 10 is, somehow, convergent. This proves that; most of MA students do not apply assimilation rules while speaking.

The literature suggested that MA students have great difficulty regarding using Assimilation in their spoken performance. The obtained results, and with respect to irrelevance between them support the first research hypothesis that MA students of English do indeed have difficulties regarding pronunciation of assimilation in the spoken language, as shown in Table 4.1.

Part Two: Elision

1. Question two: To what extent are MA students able to apply elision properly?

Table (4.7): Statements: 1, 2 and 3: Elision of alveolar sounds

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
1	We have reached Paris.	37	74	13	26	50
2	We stopped for lunch.	11	22	39	78	50
3	My father is an old man.	6	12	44	88	50

Statements: 1,2 & 3 included in table (4.7): are made up to test Elision of alveolar sounds, whether it is voiced or voiceless. Statements number 1 & 2 represent elision of alveolar voiceless sound, in which the study participants won (74%) and (22%) respectively; whereas, their degree in the 3rd statement -which tests elision of alveolar voiced sound- represents (12%) only. Respondents' high score in the 1st statement is not caused by their qualifications; rather it is caused by the fact that; pronouncing bilabial plosive sound after alveolar one is of a high degree of difficulty, because the two articulators are very different. For these reasons, the participants tend to pronounce the expression as it supposed to be. Respondents' lack of knowledge of this elision appears clearly in their performance of the 2nd sentence which is conducted to ensure the performance of the first one, and provided an inconsistent result. In this

sentence, only (22%) of study participants have achieve the correct pronunciation. The 3rd statement is made up to examine the same kind of elision with different voicing. Again, the lack of knowledge has great influence upon the performance, and the incompatibility is clearly noticed. Respondents assume the word *old* has a portion of meaning, therefore, it should not be changed, and they slightly click on /d/ sound instead of eliding it in order to be moderate between eliding and pronouncing it. Refer to records.

Table (4.8): Statement: 4: Elision of schwa sound

No	Statement	Right		Wrong		Total
		Freq	Perc	Fre	Perc	
4	I think we should call the	21	42	29	58	50

The sentence in table (4.8) is conducted to examine elision of /ə/ sound. As table (4.8) shows, the percentage are approximate. The number of the study subjects who got the right pronunciation reached (42%); while the number of those who did not get the right pronunciation is not far as it represents (42%). Also, the investigation result shows respondents' rule ignorance about eliding /ə/ sound.

Table (4.9): Statement: 5: Elision of /f/ sound

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
5	It is a complete waste of time.	0	0	50	100	50

Investigating elision of voiceless labiodental sound /f/ is represented by the sentence included in table (4.9). The result of the investigation shows that whole number of the study subjects have failed to get the correct pronunciation. The whole number of respondents is not able to get the correct pronunciation and this kind of elision represents the worst

performance among all. Respondent imagine the changes happen to the function words can only be in their centers.

Table (4.10): Statement: 6 & 7: contraction forms

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
6	We have got a car.	7	14	43	86	50
7	Is he coming?	11	22	39	78	50

Statements 6 and 7 are conducted to examine using of contraction forms, statement number 6 examines elision of /h/ &/æ/, the expression should be pronounced as [ɪz i: kΛmiŋ]; whereas, number 7 investigates elision of sound /h/. The result of the investigation shows a horrible inconsistent performance because quite few number of the study subjects achieve the correct pronunciation represent (14%) for the 6th statement, and (22%) for the 7th. This result attests on participants' low awareness.

Table (4.11): Statement: 8

No	Statement	Right		Wrong		Total
		Freq	Perc %	Fre	Perc %	
8	Sara prefers to eat fish and chips	29	58	21	42	50

Statement number 8 included in table (4.11) is made up to test elision of /ə/ or /ə, d/ sound accordingly with speaking rate. The result of the investigation shows a good indication about the performance, because the respondents who got the correct pronunciation represents (58%), but they have a tendency to make pauses in pronouncing the target expression, (i.e. pause between [n] of *and*), and the following sound, furthermore, most of them did not pronounce the word *and* as syllabic [n̩].

Table (4.12): Statement: 9 & 10: Elision of entire syllable

No	Statement	Right		Wrong		Total
		Freq	Perc %	Fre	Perc %	
9	I need that shirt particularly.	24	48	26	52	50
10	I bought this book from the library.	2	4	48	96	50

The two sentences included in table (2.14) are made up to test elision of entire syllable. Speaking about the two statements as whole, the respondents' performance is less than half and show incompatible results. Also, it is very difficult to pronounce this word (particularly) without elision, but respondents have tried as possible as they could to do so, this has reflected negatively on their performance (i.e. they pronounce it without elision. As it is mentioned before, respondents have made their efforts to pronounce the underlined expressions as they are -without any modifications- their tendency has appeared clearly in pronouncing the two words. The pronunciation of the word *library* without elision is less difficult than that of the word *particularly*, this is the main reason behind this irrelevance result.

Table (4.13) MA students' performance in spoken Elision

Statement No	**Right**		**Wrong**		**Total**
	Freq	**Perc %**	**Freq**	**Perc %**	
1	37	74	13	26	50
2	11	22	39	78	50
3	6	12	44	88	50
4	21	42	29	58	50
5	0	0	50	100	5
6	7	14	43	86	50
7	11	22	39	78	50
8	29	29	21	42	50
9	24	24	26	52	50
10	2	4	48	96	50
Grand Total	**148**	**20.96**	**352**	**70.04**	**500**

To answer the second research question the data was analyzed collectively as shown in Table 4.2. When all sounds are combined, the percentage of correct attempts ranged from 84 % to 74%, which means pass, for only two statements namely (11 and 18), all other statements' percentage are less than 50% with no sound being produced correctly by all of them. If the reader took a glimpse to the obtained results in part two -elision- s/he will find a clear incompatibility between the repeated statements conducted for one type. This witnesses that most of MA students do not apply elision during their speech.

The literature suggested that MA students have difficulty regarding using Elision properly. These results support that MA students of English do indeed have difficulties regarding using elision effectively in their spoken performance as shown in Table 4.2.

Part three: Linking and Intrusion

Question three: How far does Linking and Intrusion make difficulties for MA students?

Table (4.14): Statements: 1, 2 and 3: Linking vowel to vowel

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
1	Hello everyone.	27	54	23	46	50
2	The picture is so ugly	6	12	44	88	50
3	Shall we go over the exam?	8	16	42	84	50

Table (4.14) includes statements 2, 1and 3 which are made up to examine production of linking vowel to vowel by inserting /w/ sound. As the researcher mentioned in page (28,29), linking vowel to vowel can be either by inserting /w/ or /j/ according to the preceding sound; /w/ comes after rounded vowels and /j/ after spread ones. The result of the

investigation in these three sentences explores a very different performance from one sentence to another. The percentage of those respondents who got the correct pronunciation represents (54%), in the second one is (12%), and in the third one is (16%), the logical question here is; why is respondents' pronunciation in the first sentence is better than that of the second and third? The answer should be as follows; the performance of the first statement is attributed to the fact that sentence number one is one of the most common greetings in English, and respondents are accustomed to hear it whenever English is spoken. In the other statements, respondents are not able to link between the two words, and they pronounce them separately; thus, their performance of the first statement is not a permanent condition.

Table (4.15): Statements: 4, 5 and 6: Linking vowel to vowel

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
4	The body of the man	7	14	43	86	50
5	She arrives at six	11	22	39	78	50
6	The day after tomorrow	4	8	46	92	50

Table (4.15) involves sentences 4, 5 and 6 which are made up to examine linking vowel to vowel by inserting /j/ sound. The result of the investigation shows that; the percentage of the right answer in the three sentences is inconsistent as the first sentence represents (14%), the second one is (22%) and the third one is (8%). Again, the majority of respondents have made pauses between the two target words, and the result of these statements confirms our comments before about respondents' limited knowledge about linking rules.

Table (4.16): Statements: 4, 5 and 6: Linking /r/

No	Statement	Right		Wrong		Total
		Freq	Perc %	Freq	Perc %	
7	She has four apples	41	82	9	18	50
8	They had gone far away	41	82	9	18	50

Table (4.16) contains sentences 7 and 8 which are conducted to investigate pronouncing linking /r/ sound. It the only type among the whole test in which the respondents have got equal degrees, because the percentage of their performance in the both statements is (82%) for the correct right attempts. This performance is caused by mother tongue interference. As it is known, in Arabic the sound /r/ is pronounced whenever it found in all accents, not like English which is divided into (rhotic and non-rhotic) accents.

Table (4.17): Statements: 9 and 10: Intrusive /r/

No	Statement	Right		Wrong		Total
		Fr	Perc %	Fre	Perc %	
9	There needs to be law and order	0	0	50	100	50
10	An important media event	1	2	49	98	50

Sentences 9 and 10 in table (4.17) are conducted to examine coalescence assimilation. The result of the investigation shows a compatible results because the whole number of the study subjects have failed to achieve the correct pronunciation in the 9th statement (Intrusive /r/ between the two vowels of law & and) while in the 10th statement, only one participant has achieve the correct pronunciation. The researcher supposes that respondents cannot imagine that inserting a sound (which is not found in the expression) can make pronunciation easy.

Table (4.18): Statements: EFL learners' performance in spoken Linking & Intrusion

Statement No	Right		Wrong		Total
	Freq	Perc %	Freq	Perc %	
1	27	54	23	46	50
2	6	12	44	88	50
3	8	16	42	84	50
4	7	14	43	86	50
5	11	22	39	78	50
6	4	8	46	92	50
7	41	82	9	18	50
8	41	82	9	18	50
9	0	0	50	50	50
10	1	2	49	98	50
Grand Total	**146**	**20.92**	**354**	**60.58**	**500**

To answer the third research question the data was analyzed collectively as shown in table 4.3. The percentage of correct attempts ranged from 54 % to 82% for only three statements namely (1,7 and 8) which means pass, and all other statements' percentage are less than 50% with no sound being produced correctly by all respondents. Speaking about the performance of part three collectively, sentences (7, 8) and (9, 10) have shown a fixed performance, while the others not. This proves that most of MA students do not use linking and intrusion rules in their speech.

The literature suggested that MA students have difficulty in using Linking and Intrusion. These results support that MA students of English do indeed have difficulties regarding pronunciation of these particular sounds as shown in Table 4.3.

After counting all the correct instances of the studied sounds, it was evident that all participants faced pronunciation difficulties (with respect to CSAs) in each sound. These sounds are in the order of difficulty as follows:

Table (4.19): Statements: EFL learners' performance in the whole test

Instrument parts	Frequency	Percentage %	Sample
Assimilation	**146**	**40.18**	**50**
Elision	**148**	**20.96**	**50**
Linking & Intrusion	**209**	**20.92**	**50**

Table (4.19) involves the total result of investigation for the parts. The results of this study revealed that respondents performed differently from one part to another, in spite of the fact that this result is less than 50% (i.e. the degree of pass) for each one. As shown in the table; assimilation result represents (40.18%), elision result is (20.96), whereas linking and intrusion result is (20.92); it is clear -from the result- that; respondents' problems in using assimilation are less than that of the other two parts.

Finally, the statistics support the proposed hypothesis, explore MA students have great difficulties in applying aspects of connected speech while speaking. This agrees with Badawi, M, 2015: 43. He quoted; most non-native speakers have a problem regarding connected speech, this problem is caused by their lack of proper knowledge and ignoring practice and drills. This problem affects their pronunciation negatively while communicating with native speakers.

CHAPTER FIVE

CONCLUSIONS, RECOMMENDATIONS AND FURTHER SUGGESTION

5.0. Introduction

In this chapter, the researcher presents; conclusions, recommendations and suggestions for further studies.

5.1. Summary of the Results

In conclusion, the researcher is going to present the results of the study and show how they match the research hypotheses. The test has tested three aspects according to the hypothesis, which are; assimilation, elision and linking and intrusion. The obtained results as follows:

5.1.1. Assimilation

Assimilation is one of the important mean of connected speech, and it is frequently happening in spoken English. Therefore, it is likely to be a problematic area.

According to the analysis, students are not able to apply the assimilation of place in their performance, which is very different from one statement to another for both partial and complete assimilation. Although the subjects' performance is approximate in regressive and progressive, but their percentage is less than the accepted average, thus, their pronunciation is better than the pronunciation of place assimilation. When we compare the types of coalescence assimilation we find a consistency in pronunciation of the two statements.

Thus it is clear that MA students are not able to apply the aspects of assimilation, returning to their pronunciation. The results show that, 7 out of 10 are less than the accepted percentage, and 3 out of ten are higher

than that. Hence the overall average is declined and the first hypothesis is approved.

5.1.2. Elision

The second part of the test is about *elision* categories. In the elision of alveolar sound, there is no relevance in the pronunciation of the three statements, therefore MA students could not apply this type of elision. But the performance of elision of [ə] sound is better than that of [f] sound, and contraction forms. MA students achieve good result in pronouncing the elision of [d] sound of the word *and*, while their performance in the *elision of an entire syllable* is not consistent at all.

MA students' pronunciation of elision in general is apparently far from the accepted average; so there is only one statement higher than that average. Thus, the majority of MA students do not apply the aspects of elision during their speech, because of that, the second hypothesis is approved also.

5.1.3. Linking and Intrusion

The last part of the test deals with linking and intrusion, which is tested 4 categories. MA students are not able to apply the two types of *linking vowel to vowel either by inserting [u] sound or [ɪ] sound*, thus, their performance is inconsistent. But in pronouncing linking [r], MA students' performance is the most identical and stable one in the whole test. Hence, it is obviously apparent that, their pronunciation of linking [r] is better than that of intrusive [r], which has the lowest average.

MA students' pronunciation of linking and intrusion in general is far from the accepted average, and they do not apply linking and intrusion rules. This also approved the third hypothesis.

5.2. Recommendations

The researcher's recommendations are:

1. Phonetics and phonology courses are very important means of spoken language, thus they should be given a great attention by both; universities through designing insensitive syllabuses, and by teachers through presenting these syllabuses in a proper way, in addition to adequate methods of testing and examining leaners.
2. EFL learners should expose themselves to a permanent extensive practice of listening and speaking through using the available technology (e.g. smart phones), and also they should concentrate on studying phonology deeply to understand the nature of the spoken language by practicing it continuously, this will enable them to obtain better performance.

5.4. Suggestions for Further Studies

In accordance to the results and recommendations, the researcher suggests the following research titles to explore the other sides of the phenomenon:

1. Exploring problems of EFL learners in understanding native speakers' connected speech.
2. Investigating EFL learners' problems during communicating with native speakers.
3. Investigating teaching problems of connected speech aspects and their impact on EFL learners' oral performance.

4. Investigating similarities and differences between connected speech aspects of English and Tajweed science of Qura'an and their impact on EFL learners' spoken performance.

5.5. Summary

The present study which attempted to explore MA students' problems regarding applying aspects of connected speech was based on three main hypotheses. The first hypothesis was that; MA students do not apply aspects of assimilation. The second assumption was that; MA students are not able to use elision effectively. And the last was that; MA students are not able to apply Linking and Intrusion.

On the basis of these three hypotheses, the researcher conducted three questions; each one was confined to investigate its parallel hypothesis in order to explore the research problem.

REFERENCES

English references

- Roach, P. (2009) English Phonetics and Phonology. Fourth Edition. Cambridge. Cambridge University Press. Pages: 118 – 126.
- Underhill, A. (2005). Sound Foundations, Learning and teaching pronunciation. Oxford. Macmillan Education. Page: 59.
- Ladefoged, P. and Johnson, K. (2011). A Course in Phonetics. Sixth edition. Wadsworth. Wadsworth publishing. Pages: 23 – 108/109 – 116 – 118.
- Crystal, D. (2008). A Dictionary of linguistics and Phonetics. Sixth edition. Oxford. Blackwell Publishing Ltd. Pages: 39 – 58 – 101 – 166 – 393.
- Skandera, P. and Burleigh, P.(2005). A Manual of English Phonetics and Phonology. First edition. Dischingerweg. Narr Francke Attempto Verlag. Pages: 57– 59 / 89 - 97.
- William, J. and etal. (2013). The Hand Book of Phonetic Science. Second edition.
- Underhill, A. (2005). Sound Foundations, Learning and Teaching Pronunciation. Oxford. Macmillan Education. Page: 59.
- Ashby, M. and Maidment, J. (2005). Introducing Phonetic Science. First edition. Cambridge. Cambridge University Press. Page: 162.
- McMahon, A. (2002). An Introduction to English Phonology. First edition. Edinburgh. Edinburgh University Press Ltd. Page: 124.
- De Lacy, P. (2007). The Cambridge Hand Book of Phonology. First edition. Cambridge. Cambridge University Press. Page: 335.
- Laszlo, S. (2014). Put English Phonetic into practice. Page: 25.

- Bite, V & Bite, M (2013) The Criterion, Volume 4, Issue ıv, open access journal, Page: 10

المراجع العربية

- محمد الصادق قمحاوى ، البرهان فى تجويد القران ، بيروت ، المكتبة الثقافية بيروت ، صفحة 10.

APPENDIX

The Test

Sudan University of Science and Technology

Collage of graduate studies – Collage of linguistics

Questionnaire

The purpose of this Test is to obtain data about Connected Speech for fulfilling research of M.A degree. Connected Speech is a continuous stream of speech in normal conversation, which includes such aspects as; Assimilation, Elision, Linking, Intrusion …etc. It is phenomenon of combinatory articulatory in which words are not pronounced in isolation but run together. The researcher choses these three aspects because they are most prominent and influential.

Read the following statements loudly, paying attention to the underlined expressions:

Part one:

1. Who is <u>that person</u>?
2. Tom is a <u>good boy</u>?
3. Those are <u>ten players</u>.
4. It is <u>quite good</u>.
5. Please! Open from <u>that side</u>.
6. He is <u>in the</u> closed office.
7. I <u>have to</u> go.
8. Those are small <u>pigs</u>.
9. <u>What you</u> want?
10. <u>Would you</u> like fish?

Part two:

1. We have reached Paris.
2. We stopped for lunch.
3. My father is an old man.
4. I think we should call the police.
5. It is a complete waste of time.
6. We have got a car.
7. Is he coming?
8. Sara prefers to eat fish and chips.
9. I need that shirt particularly.
10. I bought this book from the library.

Part three:

1. Hello everyone.
2. The picture is so ugly.
3. Shall we go over the exam?
4. The body of the man.
5. She arrives at six.
6. The day after tomorrow.
7. She has four apples.
8. They had gone far away.
9. There needs to be law and order.
10. An important media event.

The researcher