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Effect of EFL Students' Knowledge of Connected Speech
Aspects on Understanding Native Speakers.

The Case of Third Year LMD Students at the Department of English, University of
Mohammed Seddik Ben Yahia, Jijel.

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Dedication 1

This work would not have been accomplished without the contributions and tolerance of many individuals who helped me and supported me during my educational journey:

I would like to dedicate this work to my beloved mother, who supported me and still does. Her wisdom and guidance lightened my path and gave me the strength to strive towards more success, for her I say thank you.

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ABSTRACT

Despite the prevalence of connected speech aspects in spoken English and the way they shape the native speech, there has been relatively little research on them in the field of English as a Foreign Language (EFL). This study, then, investigates the effect of connected speech aspects, namely assimilation, linking, elision, and weakening, on students' comprehension when listening to the natives. Additionally, the study aims to examine the extent to which these aspects can affect EFL students' comprehension of native speakers. English spontaneous speech, being different from the careful slow one, undergoes many sound changes under the influence of connected speech aspects. These phonological changes have increasingly become problematic when attempted to be perceived and recognized by English Algerian students leading them to encounter challenging difficulties in listening comprehension. In the practical part of this research, we have tackled this issue by conducting a listening test, which has been administered to ten 3rd year students (out of 210) at the Department of English, University of Mohammed Seddik Ben Yehya, Jijel. The test comprises three sections, all of which examine the students' comprehension ability in relation to their perception and knowledge of connected speech aspects. The findings of the test reveal that almost all students have failed to attain full comprehension of the considered stretches native of speech due to their misperception and lack of knowledge concerning these aspects, confirming our hypothesis stating that insufficient knowledge of connected speech aspects leads EFL learners to miscomprehend the message embodied in naturally flowing speech.

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LIST OF ABBREVIATIONS

C: Consonant.

CSAs: Connected Speech Aspects.

EFL: English as a Foreign Language.

ESL: English as a Second Language.

FL: Foreign Language.

L1: First Language.

L2: Second Language.

NNS: Non-Native Speakers.

NS: Native Speakers.

SL: Second Language.

TLS: Teaching-Learning Situations.

V: Vowel.

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GENERAL INTRODUCTION

1. Statement of the Problem

For a good mastery of language, EFL students need to focus their learning on the four basic skills of communication: Listening, speaking, reading, and writing. As with regard to our mother tongue, it is acquired first through listening, then speaking, and then we learn how to read and to write. Both listening and reading are traditionally called receptive skills, whereas speaking and writing are called productive skills. These four skills are equally important; however, within the teaching-learning situations, there is an obvious emphasis on the productive skills at the expense of the receptive ones, in particular listening skills.

The act of listening plays a crucial part in our daily life, and shapes the way we acquire language. According to Rost (2001), the main difference between more successful and less successful language learners lies in their ability to use listening skill as a means of acquisition. Nevertheless, this skill has been subjected to a state of neglect due to the growing misconception among academics that the productive skills are more communicative than the receptive skills (Davis, 2000). In consequence, EFL learners of English, including Algerians, encounter considerable difficulties that hinder their comprehension of the native speech. They often complain that they can manage to make sense of what teachers are saying inside classroom, but have serious challenges understanding the natives when they speak at normal speed.

Additionally, one major contributor to their lack of comprehension is the fact that most EFL learners are not familiar with listening to English in connected speech. Dalton and Seidlhofer (1994) assert that “the most serious problem second language learners [or EFL learner] have in this area [listening] are the comprehension problems caused by the blurring of word-boundaries” (116). In normal circumstances, natives do not speak slowly, or utter each

word separately; they rather speak rapidly and connect words together, changing the normal pronunciation of these words. As a result, students who learn English in academic settings and without having enough exposure to the natural use of the spoken language, find it extremely hard to understand the spontaneous native speech, which leads them to frustration and discouragement. Nevertheless, it is believed that once students possess a declarative knowledge about different aspects of connected speech, namely assimilation, linking, elision, weakening, they can convert it into an active procedural knowledge, which helps them to enhance their listening comprehension process (Dalton & Seidlhofer, 1994).

2. Aims of the Study

The present study inspects the correlation between 3rd year English language students' listening comprehension difficulties and the aspects of connected speech. It provides an exploration to the nature of listening process, and examines multiple CSAs, such as assimilation, linking, elision, and weakening. It investigates the effect of EFL learners' knowledge of connected speech on listening comprehension. The research findings serve as a basis to raise the concern about these aspects of language within the teaching-learning process, and to improve L2 listening comprehension through better pronunciation instruction.

3. Research Question

Now more than ever, teachers and learners of English alike are concerned with developing the quality of listening comprehension. EFL students often face considerable problems in listening to the natives most of them related to ACSs. Therefore, this piece of research addresses the following questions:

- 1- Do connected speech aspects (assimilation, linking, weakening, and elision) effect EFL students comprehension of the native speakers?

2- To which extent connected speech aspects can effect EFL students' listening comprehension of native speakers?

4. Hypothesis

In the light of the above listed research questions and the fact that third year students of English have been taught all the aspects of connected speech in second year (confirmed by Mrs. Zahia Bouchair and Mrs. Chadia Chioukh, both are teachers of phonetics and phonology at the Department of English language), we have formulated the following hypothesis:

Insufficient knowledge of connected speech aspects will lead EFL learners to miscomprehend the native speech.

6. Means of Research

In order to test our hypothesis, we have conducted a listening test in the language laboratory. The test consists of three sections, each of which serves a different purpose. The first section tests the students' ability to comprehend the native speech embodied in every audio track (eight tracks in total). In section two, we were interested to see whether they manage to perceive those words featuring connected speech phenomena. At last, section three examines their knowledge of CSAs, namely assimilation, linking, elision, and weakening. In each section, the students listen only once to each audio tracks, and then reply accordingly to every corresponding question on the sheet of papers provided.

7. Subjects

Within a population of Two-hundred third year Algerian students of English, ten subjects have been randomly selected from the Department of English, University of Mohammed Seddik Ben Yehya, Jijel. This sample of students meets all the requirements as test subjects of our study, because, as assumed earlier, they have been studying English for at least 8 years,

including 5 years collectively in middle and high schools. Additionally, they have been taught courses of phonetics and phonology at least for two years, during which they have been exposed to different classes dealing with the aforementioned aspects of connected speech.

8. Structure of the Study

This study is divided into three chapters. The first two chapters deal with the theoretical basis of the present research, while the third chapter is devoted to the practical part. As for chapter one, we address the nature and modes of listening, the different processing models we use in order to make sense of what we are listening to, and, finally, the importance of listening skills in foreign language learning. Chapter two reviews different aspects of connected speech (rhythm, weakening, assimilation, linking, and elision) and their impact on listening comprehension. In the third chapter, we deal with the analysis and interpretation of data collected from the listening test.

CHAPTER ONE: LISTENING COMPREHENSION

Introduction

This chapter discusses the notion of listening comprehension, the nature of listening, and its various definitions. Although the listening process seems natural and spontaneous, in fact, it is a complex process that assists developing the other language skills (speaking, reading, and writing). This chapter explores the different modes of listening that we apply on daily basis whenever we encounter different acoustic messages. It also provides a demonstration of the main language processing models as part of listening comprehension, i.e., how individuals perceive and process the language while listening. Finally, this chapter highlights the importance of listening in learning a second/foreign language, with an emphasis on the extent to which effective listening skills helps EFL learners improving their language competence.

1. Listening Comprehension

The notion of listening can be defined from different perspectives. A simple definition of this process can be found in Oxford dictionary; it defines the verb “to listen” as to pay attention to someone that you can hear. The free encyclopedia Wikipedia goes deeper “the conscious processing of the auditory stimuli that have been perceived through hearing”, meaning that the listener consciously processes the auditory message through his pre-acquired linguistic knowledge, or non-linguistic knowledge to interpret the received speech. Listening is an active psychological process where the listener constantly builds meaning from the spoken language “it is the psychological process of receiving, attending to constructing meaning from and responding to spoken and/or non-verbal message” (Tyagi, 2013, p. 1).

The listening process starts at a very early age in our lives. It is a primary means by which we acquire language, learn new information, interact, and cooperate with others. Perhaps the most obvious case, where the importance of the listening process is clearly shown, is when

children acquire their first language. The child only starts to produce the language after months of language exposure, for indeed, without reception of the language there will be no production of it. Furthermore, Listening does not only mean receiving information passively, rather it requires concentration and ability to process the incoming data to build meaning, as Steinburg argues, "Listening is, thus, a deliberate and active process which requires efforts and concentration." (1995, p. 70).

Unlike the other language skills, the role of listening is generally taken for granted in teaching-learning situations. Listening is often misunderstood as a passive skill, where the listener does not spend efforts to understand the message sent by the speaker and only perceives speech sounds and makes meaning of what he hears naturally.

More than any aspect of communication, the skill of listening is the least studied and most taken for granted. No matter how much teachers would like for listening skills to develop naturally, the development of skills in listening is not predictable nor guaranteed even though the spoken language surrounds the listener daily (Hunt, Wiseman, & Touzel, p. 79).

The above quote implies that, generally, there is a convention in our educational system that the need for developing the listening skills of learners is not a necessity. Hence, the whole process is often neglected, since it is regarded as effortless and natural. However, this view has begun to change increasingly in the past recent decades for various reasons and factors. Flowerdew and Lindsay (2005) note that early language teaching approaches did not emphasize the need for teaching listening skills; however, subsequent approaches provided varieties of techniques to enhance specific or general listening skills. Flowerdew and Lindsay go on explaining that, according to Field (1998), there are three main factors for this shift with regard to teaching listening skills. Firstly, there has been a change in perspective, prioritising the

listening skills over details of language content. Secondly, there has been a desire to relate the listening practices done in classroom to real life listening-situations. Thirdly, the importance of listening has become increasingly recognized.

The growing concern about the importance of listening comprehension in the learning process sets a more efficient role for listening as a skill. Currently, the act of listening is described as a complex activity that learners actively engage in by processing the input they listen to in order to construct meaning, rather than a situation where they receive input or information passively (Jacqueline & Terry, 2003). Thus, we can conclude that listening is considered as an active mental process through which individuals focus on an aural message to build meaning. It is an important skill when learning a foreign language because “it enables language learners to receive and interact with language input and facilitates the emergence of other language skills” (Vandergrift & Goh, 2012, p. 4). However, many students find it difficult to develop good listening skills when learning a new language, since the mastery of these skills takes efforts, time, and a lot of exposure to native conversations. As a result, EFL students encounter many obstacles and failure as they slowly develop their abilities towards more effective listening skills.

1.1. Listening vs Hearing

Although many individuals use both terms interchangeably, and while others consider them to complete one another, it is very important to draw specific distinction between hearing and listening. Downs (2008) clarifies this confusion as follows:

The word listening is defined as making an effort to hear something: to pay attention or heed. It is different from hearing, which is the psychological process of the ear absorbing sound waves and transferring them along neural pathways to parts of the brain. Hearing is necessary for listening, but listening

is much more than processing sound. Someone may hear very well but be a very poor listener (p. 1).

Following the distinction made by Downs, we can conclude that hearing is more about perceiving sounds through the ear. It does not require efforts or attention because it happens naturally. Majority of people are blessed since birth with this ability to perceive sounds, except for those who suffer from hearing problems. Listening, in the other hand, demands more efforts and consciousness during the process, because it surpasses the mere passive receiving of speech sounds and requires a process of meaning constriction and interpretations.

It is worth noting that listening is considered as a skill that can be developed and enhanced through practice and training, while hearing is considered as an ability that is of a complex nature and of a crucial importance for the listening process, "Hearing has critical social and survival value for organisms. Although seemingly effortless, the auditory system performs incredibly complex analyses on incoming sounds."(Juanjuan, p. 104).

1.2. Types of Listening

The reasons and objectives of the listening process we make vary widely in accordance with the purpose and nature of the acoustic input that we encounter in daily basis. Chion (1994) set three general types categorizing the listening process:

1. Causal Listening

Causal listening refers to instances when an individual uses the auditory input he receives in order to identify or seek knowledge about the source of the input. When the source of the sound is visual, the auditory input we receive serves as supporting information to confirm the identity of the source. In the other hand, when the subject is unseen, the sound we receive serves as the only input upon which we can make hypotheses for the identification of the source. An example can be made when someone hears a dog barking outside the door, he/she can identify

and confirm the presence of the animal without a need for visual contact, such instances are very common in daily life. Causal listening, as Chion puts it, is “not only the most common but also the most easily influenced and deceptive mode of listening” (1994, p. 26). Furthermore, Chion speculates that casual listening consists of several levels. For instance, it can be very precise, as when you identify a familiar person through his/her voice, or it can be general, as when we cannot identify precisely the source of the sound, yet we can categorize it (e.g., identifying the sound of a machine without knowing its specific type).

2. Semantic Listening

Semantic listening is more concerned with the process of decoding an acoustic message through a code system, or most likely through the language system, in order to perceive the intended meaning of the message. This type of listening functions in an extremely complex way, and has been the concern of many linguists for the past decades (Chion, 1994). It is worth noting that, when listening to speech, one is not strictly applying a semantic listening mode, but also employing a casual listening mode. We listen to identify and interpret the auditory message at once.

3. Reduced Listening

It is an operation where the sound is taken apart from its cause, its purpose, or its meaning, in order to be observed in respect to its traits and characteristics. In reduced listening, the sound is no longer a part of a bigger system (e.g., the language), and it does not serve as a medium for something else (e.g., communication), it is a mode where the sound is studied in isolation for the sake of the sound itself. Although the reasons and benefits of this mode of listening seem to be vague, Chion suggests, “Reduced listening has the enormous advantage of opening up our ears and shaping our power for listening.” (1994, p. 31). Thus, we can refer to this mode of

listening as a mean that allows learners, or scholars to know better and gain mastery of the mediums they constantly hear and use.

1.3. Active and Passive Listening

During the listening process, the learner applies two types of listening, passive listening and active listening. Metcalfe (2012) notes that in most cases listening is either active or passive. He describes active listening as “attentive and involves behavior” (p. 70), which implies that it requires efforts and attention. In active listening, the listener takes an active role in communication, applying his consciousness to constantly construct meaning from the speakers’ speech. In the other hand, he describes passive listening as “easy listening” (p. 70), which means that passive listening does not require much effort nor attention when listening to the speaker. Passive listening happens when the listener pays little heed to what is being said, and as Metcalfe continues to illustrate, passive listening “helps us to escape the pressure of everyday life” (p. 70), that is to say, the listener is physically present, but mentally absent. Therefore, we can summarize that although listening is an active process, there are times when the listener behaves passively. However, when learning a second or foreign language, EFL learners are strongly advised to be actively involved in the listening process because of its significant importance in developing the learner’s language competency.

1.4. Processing Spoken Language

Listening comprehension process involves both linguistic and non-linguistic knowledge. The linguistic knowledge includes knowledge about the language aspects such as syntax, semantics, phonology, pragmatics ...etc, whereas the non-linguistic knowledge includes scientific and logical knowledge, knowledge about specific contexts and general facts about the world ...etc. In this process, different types of the aural input can be processed through several ways. However, the main modes of listening processing are the bottom-up and top-down. Cook and Seidlhofer assert that “ Both L1 and L2 models of the listening process acknowledge that

listening has both top-down and bottom-up aspects”(1995, p. 353). The following is a demonstration of these two major language-processing modes.

1.4.1. Bottom-up Processing (Decoding)

In this mode, the process of comprehension is a consecutive stage process. It starts with decoding the aural input to its smallest constructs (phonemes), then proceeds to higher levels of processing such as syntax, semantics, and discourse level. Anderson and Lynch (1988) explain further this view:

We perceive speech by building up an interpretation in series of separate stages, beginning with the lowest level units (the phonemic segments of words, e.g. /b/, /o/, /g/) and gradually working up to the larger units such as the utterance, from which we then derive our interpretation of the speaker's meaning” (p. 22).

In this mode, the acoustic message is first decoded into phonemes in order to identify individual words. Then the listener proceeds to analyze at syntactic and semantic levels to construct a meaningful message from the speech. At last, he/she makes use of the discourse and pragmatic knowledge to make interpretations to arrive at the precise understanding of the message. Bottom-up processing is, then, viewed as a process of decoding, for the comprehension process starts with receiving the message, and then analyzed at successive levels of organization until the intended meaning is achieved. Moreover, the listener's lexical and grammatical competences provide a basis, through which incoming words are referred for meaning assignment (Richards, 1990). That is to say, the listener applies his/her linguistic knowledge during the comprehension process to interpret the meaning of the speaker.

The bottom-up processing mode is widely acknowledged; nevertheless, several disagreements have arisen to challenge this view. Anderson and Lynch (1988) affirm that the

assumptions of the bottom-up processing are incorrect, providing three arguments for its inadequacy in representing the way human beings process the incoming speech. First, “there is no simple one-to-one correspondence between segmented of the speech signals and the sound we perceive.”(p. 22). That is to say, at the phonetic level of the word, we do not perceive and combine each single phoneme in order to perceive the words of the speech. Secondly, “For many phonemes there are no unvarying distinctive characteristics that mark them off as absolutely different from all others. The context of the surrounding word affects the phoneme characteristics.”(p. 23). This argument is very noticeable in connected speech, where the pronunciation of the same phonemes of the same words varies in accordance to the surrounding linguistic context, an example can be made when we observe the traits of the vowel “a” in the conjunction word ‘and’: [ænd] which is [æ], a front, short vowel. This phoneme often changes its characteristic in connected speech into a mid-central vowel, the Schwa [ə]; hence, the conjunction word ‘and’, changes its pronunciation to [ənd]. This phenomenon (weakening) happens when the surrounding linguistic context effects the normal pronunciation of a word. Thirdly, “Even at the word level, as opposed to the level of the phoneme, when individual words are extracted from tape recordings of conversations and played for listeners to identify, only half of the words can be recognized in isolation. If the listeners hear them in their original context of utterance, they are readily identified” (p. 23). The latter argument suggests that the listener does not only depend on the aural message and his/her linguistic knowledge to identify the words, rather the context, in which these words are being pronounced, plays an important role in the recognition of the words of speech. This fact strongly contradicts the bottom-up assumption that we only start decoding the aural message to its smallest constructs (phonemes), and then we proceed to higher levels of analysis (syntax, semantics, and discourse level).

Considering the arguments set by Anderson and Lynch (1988), and depending on both experiment and daily life experiences, we can notice that we do not decode all types of speech

and proceed to analyze them in an identifiable sequence of organization; rather, we often use different levels of processing regardless of any organized pattern. We sometimes use our contextual or cultural knowledge to expect what the others are about to say. For example, if someone says 'I am very tired; I guess I will just go to my room to _____'. It is very likely that the missing word will be 'to sleep' or 'to rest', and we need only little acoustic data to confirm our hypothesis. For such reasons, the bottom-up process view has been repeatedly criticized.

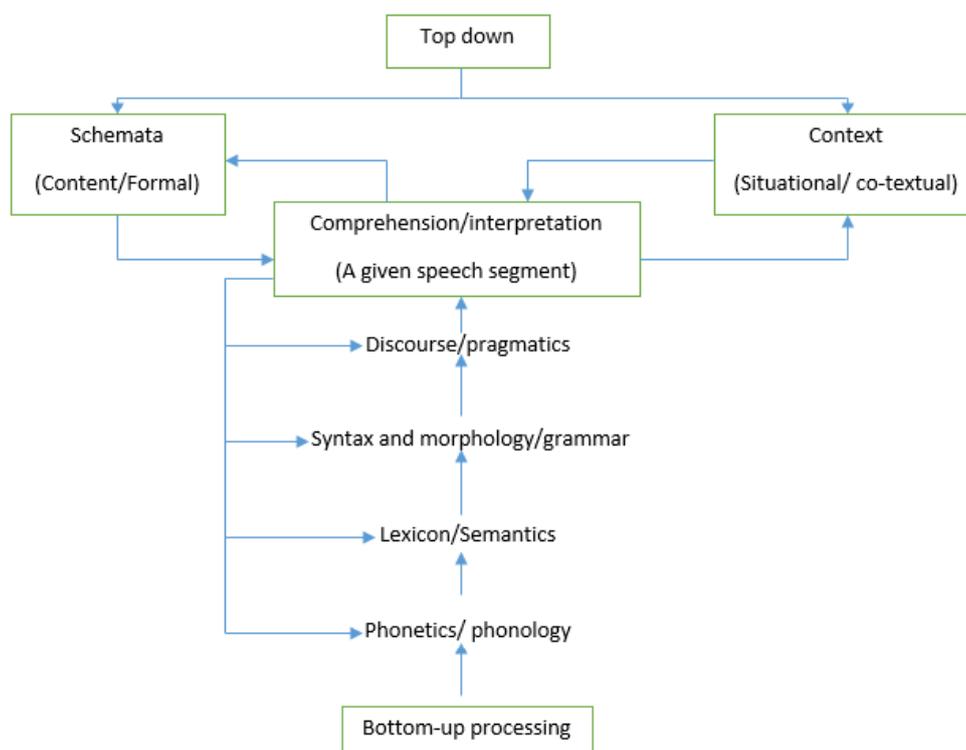
1.4.2. Top-down Processing

In contrast to the previous processing mode, top-down processing focuses on the comprehension of the message as a whole, rather than decoding the message into its simple segments. In this view, the listener uses his/her knowledge and experiences to guess, predict, or deduce the meaning of the perceived event or message (Pinker, 1994). According to Richards (1990), a top-down processing refers to "... the use of background knowledge in understanding the meaning of a message" (p. 51). Richards further explains that the term 'background knowledge' encompasses the knowledge about the topic of the discourse, a situational or contextual knowledge, or any form of knowledge that helps to interpret the message successfully. This knowledge is often referred to as 'schema' or 'schemata', which is a psychological term introduced first by the psychologist Jean Piaget in 1926, and generally describes a mental structure of a preformed idea about the world, which already exists in the mind. Richards also puts forward in regard to the use of schemata in the comprehension process "In applying this prior knowledge about people and events to a particular situation, comprehension proceeds from the top down. The actual discourse that is heard is used to confirm expectations and fill out the specific details." (p. 52). Hence, we can conclude that unlike bottom-up processing, the top-down processing view suggests that the various possessed

knowledge is not necessarily used in a specific fixed order, but rather it can be used in any given order, because we directly apply our knowledge about the topic to make sense of what we hear.

The popular assumption, for the few past decades, was that learners only need the top-down skills to improve their listening skills. However, not all EFL learners adopt such models in their listening comprehension. Many of EFL learners, who have a relatively high level of competence, still process speech using bottom-up strategies (Jenkins, 2000). Therefore, the key issue for an effective listening process may be the integration of both processing modes. The listener does not always decode the speech he/she listens to, nor always makes the right inferences about what the speaker is about to say. Currently, many scholars urge that the listener should apply both of listening processing modes. It is now generally acknowledged that the integration of both models is more effective in developing EFL learners listening comprehension (Cook, Barbara, 1995).

Figure 01: The Distinction between Top-down and Bottom-up Language Processing (adopted from Cook and Barbara, 1995).



1.5. Importance of Good Listening Skills in Foreign Language Learning

Whether inside or outside the classroom, most EFL students encounter the foreign speech extensively in their learning process. Listening is considered an important skill and a primary mean in learning a foreign language. However, it has been traditionally taken for granted and researched poorly in the related pedagogical fields. Anderson and Lynch (1988) point out this problematic situation, "There is relatively little research which provides a description of the listening skills of the foreign learners or the problems they experience in learning to listen to the L2." (p. 33). Hence, we can say that the lack of research about the nature of listening and the problems EFL students face when using this skill have contributed to the general neglect of listening skills development. Nevertheless, in the recent years, more concern and attention have been given to listening. It is now seen as a crucial step in the learning process and considered a primary channel through which the foreign language input can be accessed (Juan & Alicia, 2006, p. 30). This current emphasis on this skill is due to the nature of listening and its relation with the other skills. Wallace (1998) stresses that listening is not an isolated skill, and "... usually occurs with speaking" (p. 244). Currently, listening is widely acknowledged to improve speaking and serves as a perfect tool through which students learn the correct pronunciation of words. It also gives the learner the opportunity to examine and recognize the changes of sounds' features in naturally occurring speech. Therefore, it has become clear that effective listening skills will upgrade the learners' communicative competence and provide a better interaction with native speakers.

Conclusion

Concluding what we have discussed earlier, we can say that listening is a complex mental process by which human beings understand and communicate with each other. The development of this receptive skill is very important for EFL students, because it has the

enormous advantage of developing the other language skills. It serves as a medium to comprehend the native speech and as a motivating factor for students when they achieve successful comprehension of native speakers. The neglect of developing this skill reflects negatively on the EFL students' performance, and hinders their learning progress. Therefore, integrating strategies to develop this skill within the teaching-learning situations becomes a necessity that teachers and curriculum developers must seriously take into consideration.

CHAPTER TWO: ASPECTS OF CONNECTED SPEECH

Introduction

Chapter two will be divided into two sections. In section one, a comprehensive overview of the sound system of English Language will be introduced. Whereas in section two, we will be extensively dealing with different aspects of connected speech, along with their impact on listening comprehension.

2.1. Section One: The Sound System of English Language

English language is different from many other languages of the world; partly because its spoken words are mostly not compatible with letters of the written version (e.g., 'photo' is pronounced [fəʊtəʊ]). Such inconvenient disparity, in consequence, hinders the progress of EFL students to learn and master the pronunciation of this language. Particularly in non-English speaking countries, such as Algeria, where the present-day approaches focus a lot on teaching the properties of spoken form long after learning the written ones (Crystal, 1994). Such traditional practices are in contrast with the way we acquire our First Language (L1), when we first speak the language then master its written form. It is therefore necessary to tackle the issue of teaching English accordingly for fruitful outcomes and less disappointment within the teaching learning environment.

Phonology and Phonetics

Pronunciation can be approached in terms of two different perspectives: phonological and phonetic. Not so long ago, these two perspectives were treated as one branch of linguistics. However, by the end of the nineteenth century, linguists, such as Jan Baudouin, managed to understand the difference between phonology and phonetics.

2.1.1. Phonology

Phonology, as put by Yule, "... is essentially the description of the systems and patterns of speech sounds in a language." (2005, p. 43). In other words, phonology deals with how speech sounds are combined, organized, and convey meaning in a particular language.

2.1.2. Phonetics

Phonetics describes the physical characteristics of speech sounds of a language. It is concerned with how sounds are made by speech organs, transmitted through the air, and interpreted by the brain. Phonetics is divided into three branches.

A. Auditory Phonetics

This branch deals with the perception of speech sounds through the ear. That is, how the hearer's brain perceives and decodes speech (Trask, 2007).

B. Acoustic Phonetics

Acoustic phonetics examines examine the physical properties of speech sounds originated in the vocal tract. It deals with the sound waves and their transmission through the air from the speaker to the hearer (Crystal, 1994)

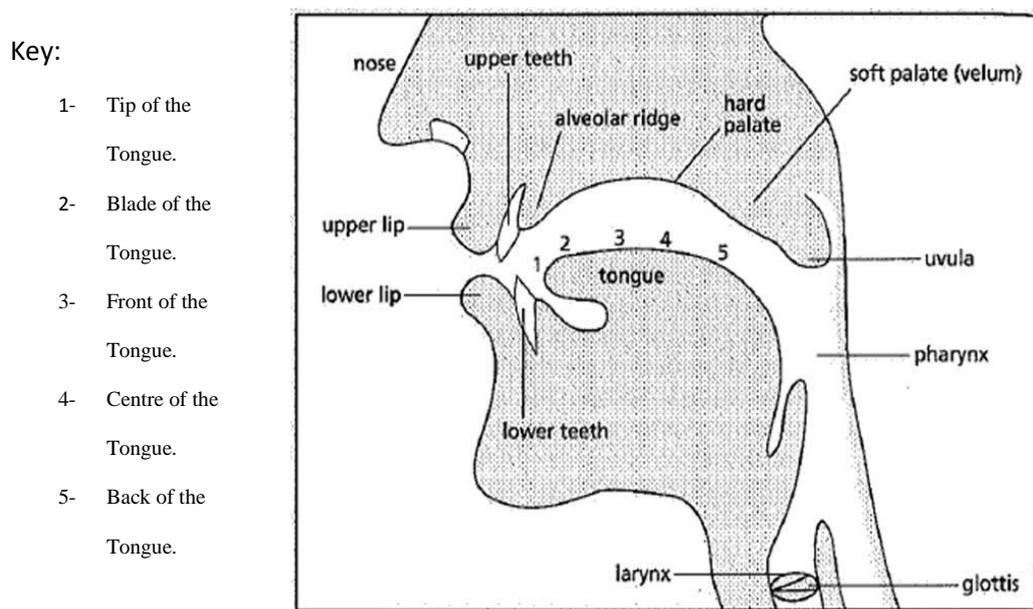
C. Articulatory Phonetics

This area of phonetics studies the production of speech sounds. In other words, it is merely concerned with how human beings use their vocal apparatus to produced speech sounds (Yule, 2005). Articulatory phonetics, our main interest in the following lines, comprises very significant issues, which are highly needed for EFL learners to master the English pronunciation.

2.3. Organs of Speech (Articulators)

Speech sounds originate when the air stream coming from the lungs undergoes different modifications as it goes in and out through different parts of the vocal tract: the larynx, the mouth, and the nose. Figure 1 below shows the location of speech organs involved in the production of English vowels and consonants (Crystal, 1994). Note the lungs are not represented:

Figure 2: The Organs of Speech (Adopted from Crystal, 1994).



2.4. Vowels and Consonants

Speech sounds can be divided into two main categories: vowels and consonants. This basic distinction depends on the fact that these two groups of sounds are radically produced in a different way, i.e. their vocal properties are distinct in nature and quality. While vowels are articulated when the flow of air passes almost freely through the mouth cavity, consonants are produced by means of an obstruction or closure somewhere in the vocal tract (Todd, 1995).

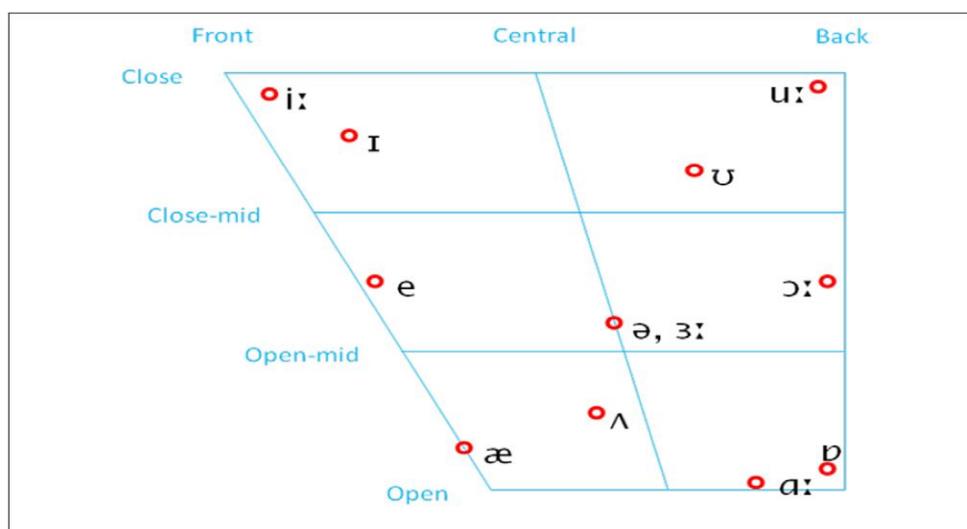
A. Vowels

A vowel, as defined by Yule (2005, p. 252), is “a sound produced through the vocal cords without constriction of the air flow in the mouth.” Conventionally, we can distinguish between various types of vowels in relation to which part of the tongue is involved and its position in the mouth, as well as the shape of the lips.

a. Pure Vowels (Monophthongs)

Monophthongs, as defined by Crystal (1994, p. 239), are “vowels with a single perceived auditory quality, made by a movement of the tongue towards one position in the mouth.” Figure 2 below shows the 12 English pure vowel sounds and their location with relation to the different shapes of tongue in the mouth cavity. Note: The mark [:] represents the long vowels.

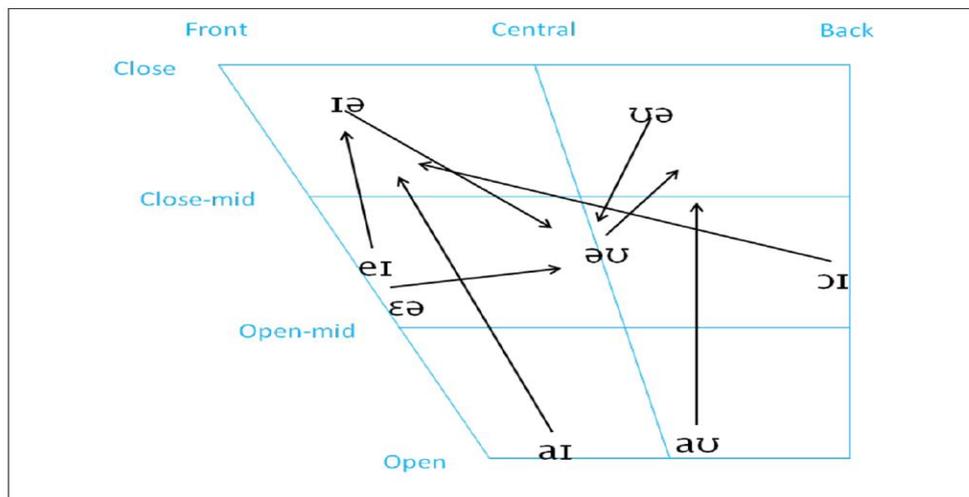
Figure 3: Vowels of English (Monophthongs). (Adopted from Nigel Musk).



b. Diphthongs

Diphthongs are combination between two vowel sounds. They start with a vowel sound and then move to another one (Jones, 2003). Typically, the diphthongs comprise a vowel plus the glides (semi-vowels) [j], [w], and the schwa [ə], as in the words ‘vain’ [veɪn]; ‘boat’ [bəʊt]; ‘wear’ [weə]. The figure 3 below demonstrates the eighth diphthongs of RP (Received Pronunciation). Note the arrows show the direction of the glide between two vowels.

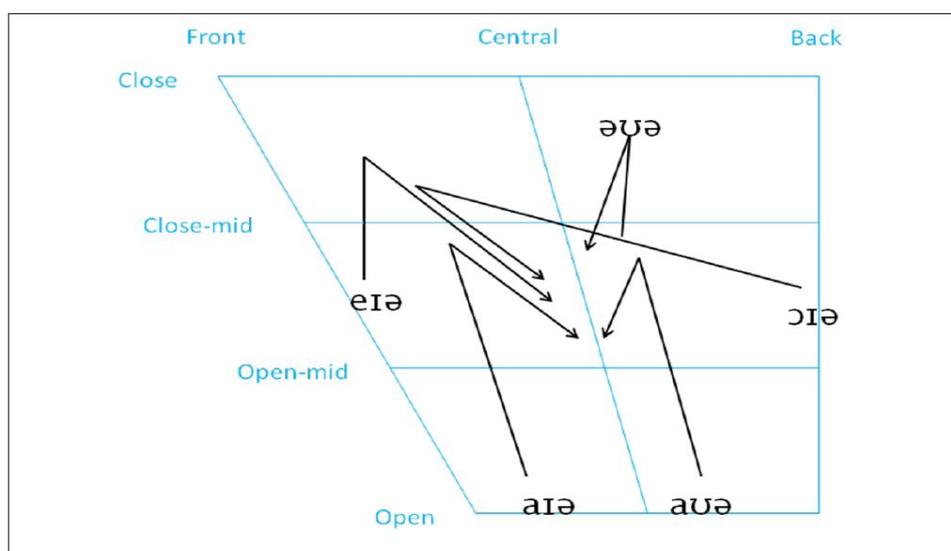
Figure 4: Diphthongs of English. (Adopted from Nigel Musk).



c. Triphthongs

Triphthongs are defined as the combination of three distinct vowel sounds, as in the words ‘power’ [paʊə]; ‘player’ [pleɪə]; ‘employer’ [ɪmplɔɪə] (Jones, 2003). See figure 4 below of the five triphthongs of RP. The arrows show the direction of the movements between the three vowels.

Figure 5: Triphthongs of English. (Adopted from Nigel Musk).



B. Consonants

Consonants are sounds produced when the air stream going in and out through the mouth or the nose cavity is obstructed- partially or completely, by the tongue and other parts of the mouth (Yule, 2005). In English, we can distinguish between consonants sounds in terms of three criterions: place of articulation, manner of articulation, and voicing.

a. Place of Articulation

Every consonant sound denotes a particular place of articulation. In the following lines, we are going to discuss seven places inside the mouth at which the airflow is obstructed to produce the English consonants (Todd, 1995). Note: each place of articulation is accordingly given an adjective (e.g., bilabial produced using the lips).

- 1- Bilabials.** These are sounds produced by using both the upper and lower lips. Examples of which are the initial sounds in the words 'boy' [bɔɪ]; 'mother' [mʌðə]; 'pen' [pen].
- 2- Labiodentals.** These are sounds formed when the lower lip and the upper teeth come together, as in the final sounds in the words 'safe' [seɪf]; 'cave' [keɪv].
- 3- Dentals.** Dental consonants involves the tip or the blade of the tongue touching the upper teeth, as in the initial sound in 'three' [θriː].
- 4- Alveolars.** An alveolar is formed when the front part of the tongue comes in contact the alveolar ridge. Try saying one of these alveolars [t,d,s,z,n], you will notice your front tongue touching that bony part just above your upper teeth.
- 5- Palatals. (Palato-alveolars):** These sounds are formed when the tip of the tongue touches or approximates to the hard palate in the roof of mouth (that part just after the alveolar ridge). Examples of palatals are the initial sounds in 'june' [dʒuːn]; 'child' [tʃaɪld]; 'year' [jɜː].

6- Velars. Velar sounds are made by raising the back of the tongue against the soft palate, as in [g], [k], and [ŋ].

7- Glottals. “A glottal consonant is produced by using the space between the vocal cords to make audible friction, as in [h], or a closure, as in the glottal stop (in some accents)” (Crystal, 1994).

b. Manner of Articulation

In the preceding lines, we have discussed where consonant sounds are articulated inside the vocal tract. Consonants also can be distinguished from one another in terms of how they are produced at their place of articulation. Indeed, they can be classified according to how the obstruction takes place in the vocal tract (Yule, 2005).

1- Stops (plosives). These are sounds formed when the airstream is stopped at some point in the mouth resulting in a pressure, which, once released suddenly, makes a plosive. English stops can be made by the lips, as in the bilabial plosives [b] and [p]; the tongue pressing against the alveolar ridge, as in alveolar plosives [t] and [d]; the back of the tongue touching the soft palate, as in the velar plosives [k] and [g] (Todd, 1987).

2- Fricatives. A fricative consonant is made when two organs of speech come so close together stopping the air stream briefly. Consequently, an incomplete closure with an audible friction can be heard, as when you approximate the tip of the tongue to the alveolar ridge and hear the fricatives [s] and [z] (Roach, 1991).

3- Affricates. Affricates involve a complete closure of airflow at some point in the mouth, and then followed by a slow release with friction (Todd, 1987). Hence, an affricate is a combination between a plosive and a fricative, as in the initial sounds in ‘child’ [tʃaɪld]; ‘judge’ [dʒʌdʒ].

- 4- **Nasals.** These are sound formed when the airstream is blocked at some point in the mouth, and with the soft palate lowered; the air escapes through the nose cavity. Examples of nasals are [m], [n] and [ŋ] (Crystal, 1994).
- 5- **Liquids.** Both [l], and [r] are liquids. The lateral liquid [l] is articulated due to a partial closure made by the blade of the tongue against the alveolar ridge. This action, in consequence, causes the flow of air to escape along the side of the tongue. The [r] sound, however, is formed when the tip of the tongue raised and curled back near the alveolar ridge (Yule, 2005).
- 6- **Glides.** The consonant sounds [w], and [j] in the words 'would' [wʊd] and 'you' [jʊ] are called glides (also called semi-vowels or approximates). These two sounds are made when the tongue moves or glides from one position to another in the mouth (Kelly, 2000).
- 7- **The flap.** In some English accents, such as General English (GA), the sound [t] and [d] often change to resemble [r], as when Americans say the middle sound in the word 'better' (it sounds like [berer]).the flap is a single tap made by the tip of the tongue against the alveolar ridge. It is conventionally represented by the symbol [D] or [r] (Crystal, 1994).

c. Voicing

Another distinction between consonants can be made in terms of voicing. Consonants [b] and [p], for example, share the same place and manner of articulation but differ in voicing. Voiced consonants are made when the vocal cords touch, or nearly touch each other, as the air stream passes through causing a vibration (Jones, 2003). This vibration can be felt physically if we place our finger on the top of our 'Adam's apple' while producing sounds like [z], [b], or [g]. Voiceless consonants, on the other hand, involve no obstruction to the airflow as it passes through the vocal cords.

The following table (1), suggested by Nigel Musk (p. 2), summarizes what we have already discussed in regard to consonants and their vocal characteristics:

Table 1: Classification of Consonants According to their Place, Manner of Articulation, And Voicing (Adopted from Nigel Musk).

	Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar (Post-alveolar)	Palatal	Velar	Glottal
Unvoiced (-V) Voiced (+V)	-V +V	-V +V	-V +V	-V +V	-V +V	-V +V	-V +V	-V +V
Stops (Plosives)	p b			t d			k g	ʔ ¹
Fricatives		f v	θ ð	s z	ʃ ʒ			h
Affricates					tʃ dʒ			
Nasals	m			n			ŋ	
Lateral (approximants)				l				
Approximants	w ²			r		j	w ²	

2.2. Section Two: Features of Connected Speech

In everyday spoken discourse, English words “run together”; they are not pronounced in an isolated fashion within the stream of speech. Connected speech, also commonly referred to as reduced speech, involves assimilation, elision, linking, and weakening. In authentic communication, there are no boundaries between words. “The stretch of speech is continuous; we stop and pause for breath from time to time [but] none of the units has clearly identifiable boundaries, some definite point in time where it begins and ends” (Halliday, 2004, p. 05). Furthermore, in speaking, words are sometimes swallowed or linked to make a new sound, which makes it difficult for a learner to understand and reproduce English native speech, and thus often left hopelessly to decode meaning from naturally occurring speech. It is certainly reasonable that students learn word pronunciation in isolation, and this is why teachers should also allocate some of the teaching time to teaching linking, correct stressing, rhythm or assimilation.

It is noteworthy to mention that features of connected speech are not exclusive to English language nor deemed as signs of sloppiness or laziness in speaking (Yule, 2006). In fact, all languages exhibit some types of reduced forms in spoken utterances. Clark (1995) argues that the primary function of connected speech processes is to promote the regularity of English rhythm by compressing syllables between stressed elements and facilitating their articulation so that regular running speech timing can be maintained. For example, certain closed-class words like prepositions, pronouns, and conjunctions are rarely stressed, but often appear in a weak form in these unstressed contexts. Consequently, they are ‘reduced’ in a variety of processes to preserve the rhythm of the language. Other researchers like Clarey and Dixon (1963) suggest that this phenomenon results from a simple law of effort- economy in which organs of speech, instead of taking a new position for each sound, tend to connect sounds

together for the sake of saving time and energy, and thus making speech a lot more easier and effortless.

2.2.1. Rhythm

When we speak about connected speech, we must give reference to the English speech rhythm because of its considerable importance in shaping the way natives speak. The English rhythm of speech, which is a stress-timed rhythm, markedly contributes to the phenomenon of connected speech “it is said to be the stress-timed rhythm of English which causes speakers to employ the features of connected speech.” (Jenkins, 2000, p. 149). The phenomenon of speech rhythm is hard to be precisely defined, for its characteristics are many, and each definition concerns one dimension in which rhythm can be noticed. However, it is generally known that rhythm refers to a repeated occurrence of a sound, beat, or movement during an identifiable regular period of time. According to Roach (1991), the notion of rhythm “involves some noticeable events happening at regular intervals of time; one can detect the rhythm of a heart-beat, of a flashing light or of a piece of music.” (p. 120). Following this definition, we can say that the notion of rhythm can be found in several different daily life situations and activities, but it is most related to language as well “the rhythm of a language is the reoccurrence of prominent elements of speech at what are perceived to be regular intervals of time” (Burleigh, 2011, p. 87). In language speech, including English, the presence of rhythm is clearly manifested. The English speech is considered rhythmical, which means that whether in prose or poetry, the rhythm of the speech is detectable.

A. Stress-Timed Rhythm and Syllabus-Timed Rhythm

The rhythm in which the speech flows is noticeable in all languages; however, the way people perceive this rhythm differs from one language to another. Corinne (1979) affirms that despite the fact that all languages have a characteristic rhythm, they can be categorized into two general types of speech rhythm, “syllable-timed” and “stressed-timed” (p. 86). These types of

rhythm differ in the way they shape the flow of speech, and thus, they are considered as a characteristic of, at least, one style of language speech. “The original claim for the difference between so-called ‘stress-timed’ and ‘syllable-timed’ languages is now thought by many phonologists to be too strong especially in relation to non-formal speech” (Jenkins, 2000, p. 43). This claim suggests that the difference between these types of rhythm is considerably too significant to be ignored, especially when the language is used spontaneously in daily life situations. Nevertheless, the difference can still be easily noticed whether in formal or in informal speech. Therefore, a distinction between the stress-timed and syllable-timed rhythm must be clarified.

Languages such as English, Russian, Swedish and Arabic have a Stress-timed rhythm. Roach (1991) demonstrates that “The stressed-timed rhythm theory states that the times from each stressed syllable to the next will tend to be the same, irrespective of the number of intervening unstressed syllables.” (p. 120). This definition by Roach implies that in normal speech, the stressed syllables within the sentence or utterance will tend to occur in regular times, regardless of the number of the unstressed syllables between them. For example, the time it takes to say, *the cat chases the mouse*, is approximately the same when saying, *the cat will be chasing the mouse*. The reason why the time of pronunciation is equal in both sentences, even though the second sentence has more syllables, is that both sentences include the same number of the stressed syllables. Thus, we can say that the time to pronounce any sentence depends on the number of its stressed syllable.

Languages such as French, Italian, and Spanish have a different rhythmical structure that is called syllable-timed rhythm. In this type of languages, both stressed and unstressed syllables occur in a regular time intervals, thus the time between each stressed syllable can be shorter or longer depending on the number of the unstressed syllables found in between (Roach, 1991). In this sense, Chun (2002) gives a definition of the syllable-timed rhythm: “... in syllable-timed

languages, in the other hand, syllables are roughly equal in length, so that the more syllables a sentence has, the longer it will be in duration.” (p. 171). Following this definition, it is clear that in syllable-timed languages, it does not matter the number of the stressed syllables in a sentence because each syllable, whether stressed or not stressed, takes the same time duration when speaking. Hence the longer the sentence is, the more time it takes to be pronounced, which is the opposite case of the stress-timed languages where the number of the stressed syllables plays the main role in shaping the rhythm of the speech.

Although the English language has a stressed-timed rhythm in nature, there are, however, certain instances when the speech is arhythmical (not rhythmical). This happens under the influence of the context where the speech takes place, as well as the purpose of the speech itself. Internal factors, such as anxiety, excitement, and hesitation, influence the general rhythms of the speech, and sometimes make it without a rhythm. Accordingly, Roach (1991) describes the stress-timed rhythm as a “characteristic of one style of speaking, not the English speech as whole” (p. 123), because, as Roach continues to explain, individuals always speak with different degrees of rhythmicality. Furthermore, Corinne (1979) states that David Abercrombie (1956) demonstrates how little children of the stress-timed languages, starts at first to speak in syllable-timed rhythm, then later, acquire the stress-timed feature. Abercrombie asserts, “There is some evidence that syllable-timed is a characteristic feature of the earliest speech of all language learners and that stress-timing, which appears a little later in the child’s language development, is an extra feature which has to be learnt.”(p.86). This claim, can be taken as an argument that EFL learners who do not speak in a stress-timed rhythm, will give the impression that they are foreigner. However, even at a relatively high level, it is noticeable that EFL learners’ speech is not always rhythmical, mainly because this aspect of the spoken language is extremely difficult to be mastered.

B. A Brief Overview to Aspects Related to Language Rhythm

The English rhythm can be explained in relation to two main notions: “syllables” and “stress.” These two notions contribute greatly to the occurrence of rhythm. In fact, both of which determine the flow of the speech and the rhythm through which the speech is produced.

a. Syllables

Syllables are parts of words; each word in English language is made up of a certain number of syllables. A word can be made of a single syllable like the word *go*, or it can be made of two or more syllables such the words *angry* and *magnificent*. Roach (1991) provides a description of these word parts from a phonetic point of view, “syllables are usually described as consisting of a center which has little or no obstruction of the airflow and which sounds are comparatively loud; before and after this center ... there will be a greater obstruction to airflow and/or less loud sound.” (p. 67). There are several ways to identify the number of syllables in a word: one way is through counting the vowel sounds. For instance, if a word consists of two vowel sounds (e.g., *hungry*), then it is a two-syllable word, whereas, if consisted of four, then it is a four-syllable word (e.g., *adorable*).

There are two types of syllables, “weak syllables,” and “strong syllables.” The major factor of labeling a syllable as strong or weak is stress. In comparison to strong syllables, which bear stress and contain full vowels, weak syllables are unstressed and contain short vowels (reduced vowels). Gelder and Morais (1995) demonstrate the relation between syllables, stress, and rhythm as follow “English is a stress language, and its rhythm is stress-based. Languages with stress rhythm have, in effect, two distinct syllable types; strong and weak. Strong syllable contain full vowels: weak syllables contain reduced vowels (in English often Shewa).” (p. 35). This supporting quote suggests that all strong syllables contain full vowels, meaning they are longer and more prominent than weak syllables that contain short syllables, which tend to be shorter and less prominent. In addition, it is noticeable that within a word we can find only one

strong syllable surrounded by weak syllables in case of two or more syllable words “In English, one syllable in the word is stressed more than the other syllables. That is, it is realized by a change in pitch with a greater vowel duration and intensity than the rest of the syllables” (Sardegna, p. 54).

b. Stress

As mentioned before, stress plays an important role in the English speech rhythm; it is the key element labeling a syllable as weak or strong. It influences and maintains speech rhythm, which, in return, contributes in the occurrence of the aspects of connected speech. Giegerich (1992) affirms, “Stress is instrumental in the maintenance of rhythm in connected speech” (p. 181). Word/lexical stress can be defined as a linguistic phenomenon that signifies a force in pronouncing certain syllables in the sentence. Roach (1991) defines word stress from two perspectives: production and perception. From the production viewpoint, it is noticeable that producing a stressed syllable takes more efforts and muscular energy from the speech apparatus responsible for the production of speech. While the perception viewpoint states that, all stressed syllables share one common characteristic: prominence. That is to say, a stressed syllable more prominent over the surrounding unstressed syllables, which means that the stressed syllable is louder and longer than the unstressed syllables, which gives the speech a specific rhythm as the pronunciation process proceeds from one stressed syllable to the next stressed syllable. However, it is worth noting that many EFL learners find the English word-stress a difficult aspect to learn because of its rule complexity. Dalton and Seidlhofer (1994) state that word stress is a difficult aspect for foreign learners to cope with because there are different factors that influence the word stress at different levels in different parts of vocabulary, which makes it appear “chaotic and without rules” (p. 39). Both words “chaotic” and “without rules” imply that it is difficult to always predict and determine the instances where the word stress will take place; therefore, it becomes a difficulty for EFL learners to pronounce the

English words correctly, especially when they acquire them in the first time. Likewise, it is only logical to say that the perception of words will be of the same difficulty. Sometimes, EFL learners miscomprehend the spoken English, because of the misperception of words because of many factors, including stress.

2.2.2. Strong and Weak Forms

In spontaneous speaking, native English speakers often speak rapidly and do not pronounce each word completely, because normal speech flows naturally and rhythmically. For EFL learners, it is very hard sometimes to recognize each word in the utterance since natives, seemingly, swallow the words as they speak, whereas in fact, they make changes in the pronunciation of certain words. This phenomenon happens due to both the quick pronunciation of words and the aspects of connected speech. Weak forms or weakening is one aspect of connected speech, and it concerns the closed category of function words or grammatical words, which includes pronouns, auxiliary verbs, conjunctions, prepositions...etc. "These are words that primarily fulfill a grammatical function but have little or no lexical meaning." (Skandera & Burleigh, 2011, p. 80). Following this definition, we can say that the main role of function words is not to convey the meaning, but only serve as linking lexicons between content words that bear the real meaning behind the message. Therefore, these functional words are not stressed and occur in non-prominent positions "... weak forms can occur only in non-prominent positions, i.e. they are always unstressed." (Skandera & Burleigh, 2011, p. 80). As the process of speaking proceeds, these function words undergo a process of change or reduction towards a weaker form where usually the central vowel changes into a weak vowel sound, or usually the schwa "Schwa is the typical and most common vowel found in weak forms, but not the only one ..." (Giegerich, p. 286). The schwa is a short mid-central vowel sound that is very frequent in English speech; its phonetic symbol is [ə], and it is associated with the weak form of the less prominent words in an utterance, that is to say the function words.

As we have discussed previously, the English speech rhythm is formed according to the stressed and unstressed syllables. The English language consists of content words and functional words. The content words are stressed because they convey the important information behind the aural message, while function words have a more grammatical role and usually not stressed as they bear little meaning and carry less information than content words. "In connected speech utterances, such words [function words] are typically not the focus of information (they are unstressed) and thus they are readily lend themselves to reduction" (Yavas, p. 90). For this reason, natives tend to focus and stress, in their speech, the content words, rather than the function words. Moreover, all function words have both strong forms and weak forms. Their strong form can be noticed when they are pronounced in isolation, such as the words *have* and *can* as [hæv] and [kæn]. Whereas, the weak form usually occurs when they are used as part of the whole utterance. When this happens, the function words change from being pronounced strongly to being pronounced weakly [həv] or [əv] and [kən]. Skandera and Burleigh (2011) give a very interesting definition of the strong forms and weak forms of functional words and clarify the difference between them as follow:

A strong form, then, is that pronunciation variant of a given word, which contains a strong vowel, and from which no sound have been omitted... strong forms, like strong syllables, can occur in both prominent and non-prominent position, i.e. they can be either stressed or unstressed. A weak form, in the other hand is a pronunciation variant which contains a weak vowel, or from which one or more sounds have been omitted... (p. 79).

It is remarkable to note that function words have more than one weak form; for example, the word *and*, which serves as a conjunction, has four weak forms ([ənd], [nd], [ən], and [n]). The use of one form instead of the other is totally related to the context in which the word occurs. The following is a table adopted from the book *A Course in Phonetics* by Ladefoged and

Johnson (2014), which includes a summary of the strong and weak forms of some common English function words, as well as illustrating examples:

Table 02: The Strong and Weak Forms of some Common English Functional Words (Adopted from: Ladefoged, and Keith Johnson 2014).

Word	Strong Form	Weak Form	Examples of weak forms
a	eɪ	ə	a cup: /ə 'kʌp/
and	ænd	ənd, nd, ən, n	you and me: /'ju ən 'mi/
as	æz	əz	as good as: / əz 'gʊd əz/
at	æt	ət	at home: /ət 'həʊm/
can	kæn	kən, kŋ	I can go: /aɪ kŋ 'gəʊ/
has	hæz	həz, əz, z, s	He is left: /hɪz 'lɜ:ft/
he	hi	ɪ, hɪ, i	Will he go? /wɪl ɪ go/
must	mʌst	məst, məs, ms	I must sell: /aɪ ms 'sel/
she	ʃi	ʃɪ	Did she go: /'dɪd ʃɪ 'gəʊ/
that	ðæt	ðət	He said that it did: /hɪ sɛd ðət ɪt 'dɪd/
to	tu	tʊ, tə	To Mexico: /tə 'meksɪkəʊ/
would	wʊd	wəd, əd, d	It would do: /ɪt əd 'du/

It is worth noting that there are instances where function words may occur in their strong form even when they are used in connected speech. Roach (1991) points out that the context plays an important role in featuring the function word as strong or weak form: “there are certain contexts where only the strong form is acceptable and others where the weak form is the normal pronunciation.” (p. 102-103) .Likewise, Roach continues to illustrate simple rules and cases where the strong form of the functional words is used in the utterance:

- a- When the function word is used at the end of the utterance. For example, ‘of’ has a weak form in the sentence ‘I am fond of chips’ [aɪm 'fɒnd əv 'tʃɪps], but has a strong form at the end of ‘chips are what I’m found of’ ['tʃɪps ə wɒt aɪm 'fɒnd ɒv].

Although this rule is applicable for function words, many of which never occur at the end of the sentence such as the words ‘the’ and ‘your’.

b- When a function word is being contrasted with another function word such as in the following sentence, where “from” and “to” are pronounced in their strong form:

- ‘The letter’s *from* him not *to* him’ = [ðə 'letə 'frɒm ɪm nɒt 'tu: ɪm].

A similar case can be found in co-ordinate use of prepositions:

- ‘A work *of* and *about* art’ = [ə wɜ:k 'ɒv ən 'əbaʊt a:t].

c- When emphasizing a functional word such as the word “must”, as in:

- ‘you *must* give me more water’ = [ju 'mʌst gɪv mi 'mɔ: 'wɔ:tə].

d- When you quote or cite a functional word:

- ‘You shouldn’t put “and” at the end of a sentence’ = [ju ʃʊdnt pʊt 'ænd ət ði 'end əv ə 'sentəns].

Weak forms are not an informal style of speech, rather it is the way the native speech flows. Whether in formal situations such as public speeches or formal conferences, the phenomenon of weak forms can still be noticed in the same way it is observable in everyday language and informal use of language. Furthermore, this phenomenon is sometimes misunderstood as the contraction forms of words, which is a different aspect of language. Contractions are shorter forms or versions of the original words where certain letters are omitted. It is usually represented with an apostrophe in the written form and usually associated with informal language use. Roach (1991) emphasizes the difference between weak forms and contractions, alluding that contractions are instances where certain words are “shortened so severely and so consistently that they are represented differently in informal writings” (p. 102).

2.2.2.1. Importance of Learning Weak Forms for EFL Learners

Learning the weak forms of the functional words and being aware of the way they are reduced in connected speech helps the EFL learners to improve their language use proficiency and enhance their listening comprehension of the native speech. Roach (1991) points out two main reasons for learning the weak forms, “firstly, most native speakers of English find an “all-

strong-form” pronunciation unnatural and foreign sounding, something that most learners would wish to avoid. Secondly, and more importantly, speakers who are not familiar with the use of weak forms are likely to have difficulty understanding speakers who do use weak forms ...”(p. 102). With that being stated, we can highlight the importance of learning the weak forms from two different perspectives. From a productive viewpoint, learning weak forms is very important in order to enhance the speaking skills and the fluency of EFL learners. Natives do not utter each word in its strong form. Although speaking in this manner would still convey the meaning, it would be considered unnatural and give the impression that the speaker is a foreigner. From a perceptive viewpoint, learning weak forms is important for improving the listening comprehension process of EFL learners. These weak forms, which include about forty forms, are very difficult to be recognized when they are used in connected speech. Furthermore, despite the sufficient grammatical and vocabulary knowledge, being uninformed regarding these weak forms and the way they are subjected to reduction in speech leads EFL learners to encounter challenges in listening comprehension. Yavas (2006) supports this view claiming that, “Learners who have no familiarities with these forms are likely to have difficulties understanding native speakers who use them regularly in connected speech. Thus, learners should be frequently reminded of this aspect of English phonology” (p. 90). Hence, the more EFL learners are familiar with these weak forms, the easier for them to understand the native speech; though it may be difficult for learners to produce and adhere to these forms when speaking, (even fluent bilinguals have issues applying all weak forms in connected speech).

Having sufficient knowledge of these forms and being extensively exposed to the native speech, where these forms are greatly used, helps EFL learners to develop their ability to recognize these forms with a great ease. In result, the listening process becomes less difficult and more effective.

2.2.3. Assimilation

Assimilation is a very significant aspect of natural speech, in the sense that sounds belonging to one word can cause changes in sounds belonging to neighboring sounds. “This term describes how sounds modify each other when they meet, usually across word boundaries” (Kelly 2000, p. 109). This phonological phenomenon is apparent when we realize that words pronounced in isolation form, their pronunciation differs in naturally occurring speech, in which words are joined together without clear boundaries. For instance, if we look at the phonemes involved in the words ‘ten’ and ‘boys’, we get [ten] and [bɔɪz]. However, if we place both words in a sentence *ten boys* and repeat it a few times over, we can notice that the [n] phoneme at the end of ‘ten’ does not sound like it does when it is said in isolation. The phoneme [n] is an alveolar formed when the tongue touches the alveolar ridge. In the above example, the tongue does not really reach the ideal place of articulation for the sound [n]. As stated before, native speakers try to be effortless in their speech, and thus, instead of making the tongue take that long journey to the alveolar ridge, they get their organs of speech (in this case the lips) ready to articulate the next sound [b]. Consequently, the [n] sound changes to the bilabial [m], and the sentence sounds like [tem boyz].

Assimilation is mostly observable when the speaking rate is fast, such as in informal contexts. However, in slow, formal speech, one could barely notice cases of sound change caused by assimilation. Roach argues, “Assimilation is something that varies in extent, according to speaking rate and style; it is more likely to be found in rapid, casual speech than in slow, careful speech. Sometimes the difference caused by assimilation is very noticeable, and sometimes it is very slight” (Wallace 1998, p. 124).

The most common assimilations occur with consonants, that is, when a word ends in a consonant and is immediately followed by a word that starting with a consonant.

2.2.3.1 Types of Assimilation Based on Direction

Assimilation always involves a transfer of phonological feature(s) between two neighboring sounds (for the sake of simplification, let us mark them as X and Y). Taking into account the direction of the process, we can notice three types of assimilation:

1. Progressive assimilation (X $\xrightarrow{\text{Influences}}$ Y)
 2. Regressive assimilation (X $\xleftarrow{\text{Influences}}$ Y)
 3. coalescent assimilation (X $\xleftrightarrow{\text{influence one another}}$ Y)
- give
birth
to
- Z**

A. Progressive Assimilation

Progressive assimilation occurs when the preceding phoneme (consonant or vowel) influences the following phoneme. This can occur in the case of plural suffix “s”, contraction suffix “s”, the possessive marker “s”, the present tense third person singular “s”, and the past tense suffix “d”. They are voiced when the preceding consonant is voiced (e.g. ‘dogs’ [dɔgz]) and voiceless when preceded by a voiceless consonant (e.g. ‘docks’ [dɒks]) (Cruttenden, 2008) (Table 3).

Table 3: Cases of Progressive Assimilation.

	voiced	voiceless
Plural Morpheme	Homes [həʊmz]	Book [bʊks]
Contraction	He's [hi:z] <u>Ali's</u> fine [aliz]	It's [its]
Possessive Marker	<u>Sam's</u> car. [sæmz]	Mark's [mɑ:ks]
Past Tense	moved [mu:vd]	picked [pɪkt]
Present tense 3rd person singular	He <u>smiles</u> [sm aɪlz] She plays [pleɪz]	It hurts [hɜ:ts] She works. [wɜ:ks]

B. Regressive Assimilation

As the name suggests, regressive assimilation occurs when a phoneme or the feature of a phoneme are influenced or modified by the phoneme that immediately follows (Forel & Puskás, 2005). For example, the words 'this' and 'shoe' are pronounced respectively in isolation form [ðɪs] and [ʃu:]. However, in connected speech, the sound [s] assimilates to [ʃ].

Regressive assimilation is also common within words, that is, it does not occur only between words boundaries (Jolayemi, 2010). To illustrate, the sound [n] becomes [ŋ] under the influence of the voiceless velar plosive [k]. This takes place in words such as bank [bæŋk], think [θɪŋk], sink [sɪŋk].

C. Coalescent Assimilation

This third type of assimilation occurs when the first and second sound in a sequence come together and mutually condition the creation of a third sound with features from both original sounds (Celce-Murcia et al, 2010). The most frequent example of coalescent assimilation is the **palatalization** that takes place with alveolar consonants [s, z, t, d, ts, dz] when followed by initial palatal glide [j]. For more illustration, see table 4 below of all examples of palatalization:

Table 4: Palatalization of Alveolar Consonants [s, z,t,d,ts,dz]

The first sound	The second sound	The emerging Sound	Examples
[s]	+ [j]	[ʃ]	I'm coming <u>this year</u> . [ðɪf jɜ:] Issue. [ɪʃu:]
[z]		[ʒ]	Measure, pleasure. [meʒə], [pleʒə] <u>Is your</u> brother a teacher? [ɪʒ jɔ:]
[t]		[tʃ]	Is <u>that your</u> car? [ðætʃ jɔ:] Statue. [stætʃu:]
[ts]		[tʃ]	He <u>hates your</u> brother. [heitʃ jɔ:] <u>Lets your</u> stuff away. [letʃ jɔ:]
[d]		[dʒ]	I <u>heard your</u> name. [hɜ:dʒ jɔ:] Could/should/did/ <u>would you</u> . [wədʒ jə]
[dz]		[dʒ]	He <u>needs your</u> help. [ni:dʒ jɔ:]

2.2.3.2. Types of Assimilation Based on Phonological Properties

Whether the assimilation is progressive, regressive, or coalescent, when sounds meet across word or morpheme boundaries, they usually change or adopt the feature(s) of one another. From a phonological point of view, it is noticeable that consonants differ greatly according to three criteria: Place of articulation, voicing, and manner of articulation (See appendix). Hence, considering those phonological differences, we can talk of three types of assimilation (Roach, 1991).

A. Assimilation of Place

Assimilation of place involves the movement of articulators from one place to another depending on the acoustic features of the surrounding sounds. This is by far the most frequent type of assimilation in English, and a wide variety of examples can be found, especially when the rate of speech is fast. Assimilation of place is most clearly observable with alveolar consonants: alveolar stops, alveolar fricatives (velarization and palatalization) (Roach, 1991).

a. Alveolar stops assimilation (labialization of alveolar stops)

The alveolar stops [t, d, n] tend to change their place of articulation to a position nearer to the place of the sound that follows. Alveolars [t, d, n] assimilate to the following bilabials [p, b, m] if followed by bilabial consonants [p, b, m] (Lecumberri & Maidment, 2000). For example, the sound [n] in 'in pain' may sound like [m]. Hence, one would hear [im peɪn]. For more cases of assimilation of alveolar stops, see table (05) below:

Table 5: Labialization of Alveolar Stops

Alveolar [t, d, n] + Bilabial [p, b, m] = [p, b, m]		
[t] becomes	[p]	that person : [ðæt pɜ:rsən] = [ðæp pɜ:rsən] right place : [raɪt pleɪs] = [raɪp pleɪs]
	[b]	fat boy : [fæt bɔɪ] = [fæb bɔɪ]
	[m]	let me : [let mi] = [lem mi]
[d] becomes	[p]	good person : [gʊd pɜ:rsən] = [gʊp pɜ:sən]
	[b]	bad girl: [bæd g ɜ:l] = [bæg g ɜ:l]
	[m]	sad moment : [sæd məʊmənt] = [sæm məʊmənt]
[n] becomes	[p]	
	[b]	ten boys : [ten bɔɪz] = [tem bɔɪz]
	[m]	in place : [ɪn pleɪs] = [ɪm pleɪs] thirteen men : [θɜ:tri:n men] = [θɜ:tri:m men]

b. Alveolar Stops Assimilation (Velarization of Alveolars)

Alveolars [t, d, n] may become velar stops [k, g, ŋ] respectively if they are followed by velars [k] or [g], as in: 'that car' [ðæk kɑː]; 'good girl' [gʊg g ɜ:l]; 'one cup' [wʌŋ kʌp] (Lecumberri & Maidment, 2000). See table 6 below for more examples.

Table 6: Velarization of Alveolars

Alveolar [t, d, n] + velar [k, g] = [k, g, ŋ]		
[t]	[k]	That case : [ðæt keɪs] = [ðæk keɪs]
[d]		Might go : [maɪt gəʊ] = [maɪk gəʊ]
[t]	[g]	Quite good : [kwaɪt gʊd] = [kwaɪk gʊd]
[d]		Sad girl : [sæd g ɜ:l] = [sæg g ɜ:l]
[n]	[ŋ]	She won't call : [ʃɪ wəʊnt kɔ:l] = [ʃɪ wəʊŋ kɔ:l] I can go : [aɪ kən gəʊ] = [aɪ kənŋ gəʊ] One cup : [wʌn kʌp] = [wʌŋ kʌp]

c. Alveolar Fricatives Assimilation (Palatalization of Alveolar Fricatives)

When the alveolar fricatives [s, z] are followed by a palatal glide [j], palate-alveolar fricative [ʃ], or palate-alveolar affricates [tʃ, dʒ], they tend to assimilate to the palate-alveolar fricatives [ʃ, ʒ, tʃ, dʒ] respectively (Davenport, 2010). To illustrate, 'this show' [ðɪs ʃəʊ] becomes [ðɪʃ ʃəʊ] while 'those years' [ðəʊz jɜ:z] becomes [ðəʊʒ jɜ:z]. For more clarification, see table (7) below:

Table 7: Palatalization of Alveolar Fricatives

[s] +	[j]	= [ʃ]	This year : [ðɪs j ɜ:] = [ðɪʃ j ɜ:]
	[ʃ]		This shop : [ðɪs ʃɑp / = /ðɪʃ ʃɑp]
	[tʃ]		This channel : [ðɪs tʃænəl] = [ðɪʃ tʃænəl]
	[dʒ]		This journey : [ðɪs dʒɜ:rnɪ] = [ðɪʃ dʒɜ:rnɪ]
[z] +	[j]	= [ʒ]	Those yellow cars: [ðəʊz jeləʊ kɑ:z] = [ðəʊ ʒ jeləʊ kɑ:z]
	[ʃ]		Is she? : [ɪz ʃɪ] = [ɪʒ ʃɪ]
	[tʃ]		Those chapters: [ðəʊz 'tʃæptəz] = [ðəʊʒ tʃæptəz]
			Those judges: [ðəʊz dʒʌdʒɪz] = [ðəʊʒ dʒʌdʒɪz]

B. Assimilation of Voice

In many languages of the world, including English, it is very perplexing to produce a consonant cluster with different variation in terms of voicing, that is, when one consonant is voiced while the other is voiceless. In particular, if the adjacent consonants are obstruents (fricatives or plosives) (Nathan, 2008). Assimilation of voice occurs when two consonants in a cluster has to agree in regard to voicing, be it voiceless or voiced; the second consonant has to agree in voicing with the preceding one (Fortson, 2005).

Roach (1991, p. 132) points out two forms regarding assimilation of voice: across word boundaries, and across morpheme boundaries.

a. Across Morpheme Boundaries

This kind of assimilation is very common in English across morpheme boundaries. It is observable mainly in noun plural suffix 's', the possessive suffix 's', and the singular present

tense suffix 's'. The voiceless Suffix's' in such cases changes to the voiced sound [z] after a voiced sound. Similarly, the [d] of the English regular past-tense suffix 'd' becomes [t] after a voiceless sound (Fromkin et al, 2011, p.287). For more illustration, see the following examples:

Dogs [dɒgz]: [s] becomes [z] to agree in voicing with [g].

Cats [kæts]: [s] is in agreement with the preceding voiceless [t], so it remains [s].

Smiles [smaɪlz]: [s] becomes [z] to agree in voicing with [l]

Speaks [spi:kz]: [s] is in agreement with the preceding voiceless [k], so it remains [s].

Table's leg [teɪblz]: [s] becomes [z] to agree in voicing with [l].

Mark's house [mɑ:ks]: [s] agrees in voicing with [k].

Called [kɔ:ld]: [d] agrees in voicing with [l].

Picked [pɪkt]: [d] becomes [t] to agree in voicing with [k].

Table 8: Alternation of [s].

[s] becomes		
[s] if preceded by	[z] if preceded by	[ɪz] if preceded by
A voiceless non-sibilant	A voiced non-sibilant	Sibilant
[p, t, k, f, θ]	[b, d, g, l, m, n, r, v, j]	[s, z, ʃ, ʒ, tʃ, dʒ]

Table 9: Alternations of [d].

[d] becomes		
[t] if preceded by	[d] if preceded by	[ɪd] if preceded by
The voiceless consonants	The voiced consonants	
[p, k, f, s, tʃ, ʃ]	[b, g, l, m, n, r, v, j, z, dʒ]	[t, d]

b. Assimilation of voice across word boundaries

Assimilation of this type is regressive, and only found in a limited way across word boundaries (Roach, 1991). It emerges exclusively when a voiced word final consonant is followed by a voiceless word initial consonant. One example is the assimilation of the voiced consonant [v] with the voiceless [t] in: 'have to' [hæv tə] = [hæf tə]. Similarly the voiced consonant [z] assimilates to the voiceless [s] under the influence of the following voiceless consonant [t] in 'has to' [hæz tə] = [hæs tə].

C. Assimilation of Manner

Assimilation of manner refers to two neighboring sounds becoming similar in their manner of articulation. Generally, examples of this case involve a change from a "stronger" consonant (typically one that is making a full obstruction to the flow of air) to a "weaker" or "easier" one (most likely one that makes less obstruction to the airflow) (Roach, 1991). Consider the following instance: 'get some'. In rapid speech, instead of the expected pronunciation [get səm], a native speaker may express it audibly as [ges səm]. Hence, replacing the alveolar plosive [t] in 'get' in order to become similar in manner of articulation with the consonant that follows, the alveolar fricative [s].

Unlike assimilation of place, assimilation of manner is much less observable, and usually found in very rapid speech, or very informal situation. It can be either progressive or regressive (Burleigh, 2011). In one particular instance, in regard to progressive assimilation of manner, there is a high tendency for a final plosive [t] or [d], when it is followed by a fricative [s] or nasal [n], to become fricative or nasal (e.g. 'that side' = [ðæs side]; 'good night' = [gʊn naɪt]). For regressive assimilation, one common case occurs when a word initial dental [ð] follows a plosive or nasal at the end of a preceding word, it is very common to find that the initial dental [ð] becomes plosive [d] or nasal [n] (e.g. 'read these' = [ri:d ði:z]; 'in the' = [ɪn ðə]) (Roach, 1991).

2.2.4. Linking

An easily recognizable feature of non-native English is its “choppy quality”, or as Roach (1991) puts it “mechanical speech” (p. 128); words are pronounced in isolation, that is, separately. In natural spoken English, usually when words meet within the same utterance, the final and the initial sounds (consonant or vowel) of the two neighboring words are blended together to make a smoother transition between words and utterances. The connection of two pairs or two groups of words together is conventionally referred to as *Linking* (Jull et.al, 2008). This can be exemplified when we consider the phrase ‘*again and again*’. If spoken at a natural speed, the former utterance - instead of the expected pronunciation [əgeɪn ənd əgeɪn], will sound as one word [əgeɪnənəgeɪn] (the sound [d] is dropped due to weakening).

When Native speakers of English connect words together, they usually adhere to the following rules:

A. Linking Vowel to Vowel (V+V): We distinguish between two types of vowel-to- vowel linking:

a. Linking [j]

When a word or syllable ends in [ɪ:], or a diphthong that finishes in [ɪ] ([eɪ, aɪ, ɔɪ]), and the word or syllable that comes after starts with a vowel, **the linking glide [j]** is often introduced in order to make the transition to the subsequent vowel easier, as in the followings (Celce-Murcia, 2010):

‘be able’ = [bɪ^jeɪbl]

‘see it’ = [si:^jɪt]

‘they are’ = [ðeɪ^jɑ:]

‘my own’ = [maɪ^jəʊn]

‘boy and’ = [bɔɪ^jənd]

b. Linking [w]

Similarly, when a word or syllable ends in [u:], or a diphthong that finishes in [ʊ] ([əʊ, aʊ]), native speakers often insert **the linking glide** [w] to ease the transition to a following vowel sound (Cook, 2000). See the examples below:

'do it' = [du: w ɪt]

'go on' = [gəʊ w ɒn]

'Are you in the kitchen?' = [ju: w ɪn]

'too easy' = [tu: w ɪ:zɪ]

'blue ink' = [blu: w ɪŋk]

c. Linking [r]

Unlike many rhotic varieties of English, RP speakers often do not pronounce the phoneme [r] in syllable-final position. However, the [r] is clearly articulated when it is at the edge of a word, and the next word begins with a vowel, (Roach, 1991). Consider these cases:

'far' = [fɑ:] but 'far away' = [fɑ:r əweɪ]

'brother' [brʌðə] but 'brother and sister' = [brʌðər ən]

'car' = [kɑ:] but 'car is' = [kɑ:r ɪz]

'nuclear weapons' = [nju:klɪə wɛpənz] (the [r] is not pronounced)

But

'nuclear energy' = [nju:klɪər ɛnədʒɪ] (the [r] is pronounced).

d. Intrusive [r]

In much similar way, When two vowels meet at the edges of two words (usually when the first sound is one of the following [ə, ɑ:, ɔɪ]), RP speakers often introduce the phoneme [r] in between in order make the transition easier, "even if there is no justification from the spelling" (Roach, 1991).

Although many claim that “intrusive r” is not a feature of RP, the well-known British linguist Peter Roach notes that it is “undoubtedly widespread” (1991, p. 128). See the following examples:

‘I saw it’ = [aɪ sɔːr ɪt]

‘Media event’ = [mɪːdɪər ɪvent]

‘Law and order’ = [lɔːr ən ɔːdə]

B. Linking Consonant to Vowel (C+V)

This is the most frequent type of linking in English language, and technically named *resyllabification*. When a word ends in a consonant and the next one begins with a vowel, Native speakers, very often, link the consonant to the vowel; the two words, when linked, seem to become one, as in the following examples:

‘Stand up’ = [stænd ʌp]

‘talk about’ = [tɔːk əbaʊt]

‘leave early’ = [liːv ɜːli]

Similarly, If a word ends in a **consonant cluster** (more than one consonant in a syllable), and the next word begins with a vowel, the consonant cluster and vowel are linked: the final consonant of the first word seems to become a part of the following word, as in:

‘left arm’ = [lef tɑːm]

‘called out’ = [kɔːl daʊt]

‘jump up’ = [dʒʌm pʌp]

Resyllabification may cause a listening problem for EFL’s learners as words and syllables intertwine in one another, as Roach exemplify (1991):

[rɪəl aɪz], is it ‘real eyes’ or ‘realize’?

[maɪ tɜːn], is it ‘might earn’ or ‘my turn’?

[faɪnd aʊt], is it ‘find out’ or ‘fine doubt’?

C. Linking Consonant to Consonant (C+C):

a. Linking Identical Consonants (Gemination)

When English native speakers link two words with the same consonants across word boundaries, they usually pronounce the consonant once, but make it a bit longer (Celce-Murcia, 2010). For example, in the sentence 'nice school'. The consonant "s" in both 'nice' and 'school' is articulated only once, but lengthened. In phonetic transcription, this phenomenon is given the length mark [:], which is also used to represent long vowels. For more examples, see table (10):

Table 10: Germination

[p] + [p] = [p]	Stop <u>p</u> ushing	[b] + [b] = [b:]	Bob <u>b</u> locked.
[t] + [t] = [t:]	Best <u>t</u> eam	[d] + [d] = [d:]	Bad <u>d</u> og
[k] + [k] = [k:]	Take <u>k</u> are	[g] + [g] = [g:]	Big <u>g</u> uy
[m] + [m] = [m:]	Handsome <u>m</u> an	[n] + [n] = [n:]	Even <u>n</u> ow
[f] + [f] = [f:]		[v] + [v] = [v:]	Five <u>v</u> ictims
[s] + [s] = [s:]	Nice <u>s</u> ummer	[z] + [z] = [z:]	Loves <u>z</u> oo.
[θ] + [θ] = [θ:]	<u>B</u> oth thieves	[ð] + [ð] = [ð:]	With <u>th</u> em
[l] + [l] = [l:]		[ʃ] + [ʃ] = [ʃ:]	I wish <u>sh</u> e

b. Linking Non-identical Consonants

This kind of linking occurs with plosive stop consonants [p,t,k,b,d,g] when they come in contact with a consonant (especially a stop) across word boundaries. Plosive (stop) consonants are produced with the air completely blocked for a while at the level of the mouth, and then released causing what sounds like a small explosion. Subsequently, the first stop is usually not released, and moves immediately to the place of articulation of the next consonant (Celce-Murcia 2010). For examples, 'lab test'; 'keep going'; 'big boy'.

2.2.5. Elision

Elision, also known as deletion or ellipsis, is a common speech simplification process whereby a sound (both consonant and vowel), and sometimes even a whole syllable, disappears or is not clearly articulated in certain contexts (Crystal 2003). Natives, generally, tend to employ the economy of efforts in their speech mainly because it is difficult to pronounce certain consonant sounds all together in some instances. For example, if we consider the word 'handsome', we can notice that it would take a lot of efforts to articulate, continuously, those three adjacent consonant sounds [n, d,c]. In such case, the [d] sound is omitted and the regular pronunciation would be like [hænsəm]. Similarly in 'tests', needless to say that the articulation of such word is perplexing, even for ENS, and that's why very often the final "s" is dropped.

Due to the confusing nature of elisions, many EFL's learners, especially those who are not yet competent with L2 listening, feel hopeless as they face numerous cases of deletion, and, most of the time, fail to decode the intended meaning from speech. Since that has been the case, becoming aware can solve the problem. Roach (1991) argues that foreign learners of English do not necessarily need to produce elisions in their speech. However, he adds: "... it is important for them to be aware that when native speakers of English talk to each other, quite a number of phonemes that the foreigner might expect to hear are not actually pronounced." (p. 113).

2.2.5.1. Types of Elisions

A. Elision of Vowels

As discussed earlier, vowels in unstressed syllables are often reduced to schwa [ə] or dropped out completely. Vowels are elided in the following contexts:

a. Loss of Unstressed Internal Vowel Following a Stressed Syllable (Syncope)

In multisyllabic words (e.g. 'interesting', 'camera', 'history') where a short, unstressed vowel, in particular [ə] and [ɪ], follows a stressed syllable, usually the unstressed vowel is omitted, as in the following examples:

Table11: Elision of Unstressed Vowels in Multi-Syllabic Words

Example	Slow speed	Normal speed
Interesting	[ɪnt[ə]restɪŋ]	[ɪntrestɪŋ]
Camera	['kæm[ə]rə]	[kæmrə]
Chocolate	[tʃɒk[ə]lət]	[tʃɒklət]
History	[hɪst[ə]rɪ]	[hɪstrɪ]

Note: the square brackets enclosing the vowel represent the elided vowel.

b. Loss of Unstressed Initial Vowels (Aphesis)

In informal, rapid speech, elision of vowels may happen word-initially in the following cases (Celce-Murcia, 2010, & Roach, 1991):

- When a word begins with a short, unstressed vowel (e.g. 'another' [ənʌðə] = [nʌðə]).
- When a short, unstressed vowel occurs between two voiceless stop consonants (e.g. 'potato' [pətetəʊ] = [ptetəʊ]).
- When a short, unstressed vowel in the first syllable occurs between the voiceless stop consonants [p,t,k], and the consonant [n] (e.g. 'tonight' [tənaɪt] = [tnaɪt]),
- When a short, unstressed vowel in the first syllable occurs between the voiceless stop consonants [p,t,k], and the consonant [l] (e.g. 'police' [pəlɪ:s] = [plɪ:s]),
- When a short, unstressed vowel in the first syllable occurs between the voiceless stop consonants [p,t,k], and the consonant [r] (e.g. 'correct' [kərekt] = [krekt]; 'garage' [gəra:ʒ] = [gra:ʒ]).

B. Elision of Consonants

a. Loss of Alveolar Stop Consonants

In a multisyllabic word, alveolar stops are generally elided when they occur in the middle of a cluster of three consonants, as in:

Han[d]some becomes [hænsəm]

Pos[t]pone becomes [pəʊspəʊsn]

Res[t]less becomes [resles]

Exac[t]ly becomes [ɪgzɑ:kli]

Alveolar stops [t], and [d] are generally elided also at word boundaries, that is, when they are preceded and followed by other consonants (especially a plosive) belonging to the following word. Here are some rules with examples (table 12) (Kelly, 2000):

Table 12: Elision of Alveolars [T, D] Across Word Boundaries

The rule	Example	Elision
[t] elided between [s] and [f]	'bes[t] friend'	[bes frend]
[t] elided between [p] and [f]	'stopp[ed] for '	[stɒp fɔ:]
[t] elided between [ks] and [d]	'nex[t] day'	[neks dei]
[t] elided between [s] and [p]	'mos[t] people'	[məʊs pi:pl]
[t] elided between [s] and [θ]	'firs[t] three'	[fɜ:s θri:]
[t] elided between [tʃ] and [p]	'reach[ed] Paris'	[ri:tʃ pæris]
[d] elided between [n] and [f]	'bann[ed] for'	[bæn fɔ:]
[d] elided between [v] and [st]	'carved statue'	[kɑ:v stætəs]
[k] elided between [n] and [g]	'than[k] God'	[θæŋ ɡɒd]

b. Simplification of Complex Consonant Clusters

Some consonant clusters take a considerable articulatory effort to pronounce, especially when they undergo more than two consonants with a radical difference in regard to their phonological properties (voicing, place, and manner of articulation). Consequently, Native speakers tend to drop one consonant to ease the articulation, usually the one in the middle, as Roach (1991) points out “in clusters of three plosives or two plosives plus a fricative, the middle plosive may disappear”(p. 127), see the examples below:

‘tex[t]s’ [teksts]	can be simplified into	[teks]
‘æc[t]s’ [ækts]	can be simplified into	[æks]
‘John <u>six</u> [th]’s son’	‘sixth’s’ can be simplified into	[sɪks]
‘as[k]ed’	can be simplified into	[ɑ:st]

C. Other Cases of Elisions

- Disappearing of [v] in the preposition ‘of’ before a consonant, as in the examples:

Lots o ^(f) <u>m</u> oney	[lɒts ə mɒni]
Waste o ^(f) <u>t</u> ime	[weɪst ə taɪm]
Bunch o ^(f) <u>r</u> oses	[bʌntʃ ə rəʊzɪz]

- Disappearing of initial [h] and [ð] in pronouns, as in the examples:

Ask ^(h) i <u>m</u>	[ɑ:sk ɪm]
Tell ^(h) e <u>r</u>	[tel ə]
Help ^(th) e <u>m</u>	[help əm]

- Disappearing of unstressed initial syllables as in the example:

^(Be) cause	[kɔ:z] or [kəz]
-----------------------	-----------------

2.2.6. Connected Speech and Listening Comprehension

Several studies have been conducted to investigate the impact of connected speech processes on listening comprehension (Brown, 1986; Henrichson, 1984; Ito, 2006). These studies show how reduced forms in connected speech can interfere and hinder the quality of listening comprehension. Henrichson (1984) examined the effect of CSAs on ESL' learners comprehension and came up with the conclusion that reduced forms in listening input would decrease the saliency of the words and therefore make comprehension more difficult for ESL learners. Results obtained from other studies supported Henrichson's hypothesis showing that both high and low proficiency level ESL learners had a poor performance on a test where the examinees were asked to write down the citation forms of the words in a sentence being said in reduced forms.

Similarly, Ito (2006) studied the relationship between CSAs and listening comprehension using a dictation test to examine different types of reduced forms and whether they cause a listening gap in comprehension or not. The results revealed that non-native speakers scored significantly lower on the dictation test indicating a misperception of the words involved. Her findings were similar to Henrichson (1984) and showed that reduce forms do interfere with listening perception (i.e., listening for accuracy) and comprehension (i.e., listening for content).

EFL learners' inability to decipher spontaneous speech may arise partly because native speakers do not pronounce English the way L2 learners are taught in the classroom where listening instruction has tended to emphasize the development of top-down listening processes over bottom-up processes (Field, 2003). However, in the few past decades, researchers have increasingly recognized the importance of bottom-up skills, including CSAs, for successful listening (Rost, 2006). In addition, L2 learners' listening skills are merely based on the adapted English speaking styles they experience inside EFL classrooms. In fact, most of the time, L2 learners are unaware of the differences between citation forms (i.e., words pronounced in

isolation) and the modifications in connected speech. Brown (1990) claims that when listening to authentic L2 materials, an L2 learner will hear:

An overall sound envelope with moments of greater and lesser prominence and will have to learn to make intelligent guesses, from all the clues available to him, about what the probable content of the message was and to revise this interpretation if necessary as one sentence follows another – . In short, he has to learn to listen like a native speaker (p. 4).

Although CSAs lead EFL students to miscomprehend, there are cases where some aspects do not impair the understanding of students. In fact, some CSAs have a clarifying role helping students to recognize the words involving the aspect. The study reported in the book entitled *The Acquisition of L2 Phonology*, provides supporting results for this claim. The experiment, used in the study, attempted to examine the ability of sixty EFL students (Polish students) to recognize some CSAs, namely the linking [r], the weak forms, and Yod-coalescence, in common expressions such as 'for a while', 'could catch you', 'told you',...etc. The findings of this experiment revealed that most students easily recognized the words involving the aspects, with positive results exceeding 80%. Furthermore, the linking [r] aspect was the most recognized with 92%; rarely causing any receptive problems (Arabski & Wojtaszek, 2011). The data obtained from this study lead us to conclude that the aspects of connected speech are not always problematic for the EFL students' comprehension; there are times when the students are familiar with the words involving the aspect, making it easier for them to recognize the changes caused under CSAs' influence.

Conclusion

Training students to produce correctly English vowels, consonants, and words in isolation is beneficial; however, it is not sufficient for a complete mastery of the speaking and listening skills. Connected Speech involves a wide variety of pronunciation features including what we

have already discussed in section two (assimilation, linking, elision...etc.). Unfortunately, Algerian students of English learn words in isolation but not in connected form. That explains their poor listening skills, and the fact that, often, they have hard time understanding what the native speakers are saying, especially in casual speech where the tendency to face such confusing features is very high. With that being said, a shift in perspective to teaching pronunciation and developing EFL's learners listening skills is needed. That is, a change from teaching them how to produce and perceive English words separately towards a more comprehensive view that embodies all (in isolation and connected forms).

CHAPTER THREE: FIELD WORK

Introduction

The purpose of the present chapter is to test the students' pre-acquired knowledge of connected speech aspects, and to find out to which extent they use this knowledge to comprehend the native speech. Additionally, the study aims to verify whether EFL learners' lack of knowledge regarding these aspects will negatively affect their listening comprehension, as we have hypothesized earlier. The study is composed of a listening test administered to a sample of 3rd students at the Department of English language, University of Mohammed Esseddik Ben Yehya, Jijel. The test comprises three sections, each of which investigates a specific ability and serves a specific purpose of the study. The first section assesses the students' comprehension; the second section evaluates the students' perception of CSAs, while the third section measures the students' knowledge of these aspects. The three sections are purposefully sequenced to avoid any unnecessary exposure of the students to the materials used.

3.1. Method

This study is quantitative in nature since we have solely relied on numerical data gathered from the listening test. The collected data have been classified in tables, and, then, converted into percentages in order to establish a correlation between listening comprehension and aspects of connected speech.

3.2. Subjects

The practical part of this study includes a randomly selected population sample consisting of ten Algerian, university-graduating students in the Department of English language, University of Mohammed Esseddik Ben Yehya, Jijel. All participants have been learning English for about eight years. In addition, they have all completed the course of English phonetics and phonology, as it was confirmed by Mrs. Bouchair Zahia and Chioukh Chadia,

the only teachers of phonetics and phonology at University during the year 2013-2014. All CSAs have been included in the course, namely assimilation, elision, linking and weakening,

3.3. Means of Research

3.3.1. Description of the Test

The only means used in this research is a listening test that comprises three sections intending to examine specific aspects of the students' competence in responding to English connected speech. The test is based on listening to eight audio tracks. Accordingly, each audio track has purposefully been selected to include one aspect of connected speech vitally necessary to understand the meaning in the track. All audio tracks involve aspects of weakening, assimilation, elision, and linking, with two audio tracks for each case. Furthermore, throughout the three sections of the test, the students have been asked to listen to the same track, and then answer the corresponding questions. The students should listen only once to the track provided, in order to authentically exemplify genuine situations of EFL learners being exposed to the native speech without having the chance of repetition. It is noteworthy that the language used in the audio tracks is Standard English, particularly the RP.

A. Section One: Comprehension of Connected Speech Aspects

The first section is structured to examine the students' comprehension as influenced by the aspects of connected native speech. This section is composed of eight comprehension questions (see appendix) following the students' listening to each provided audio track. The students have been allowed relatively unlimited time to answer each question, but without any second listening case. We note that the questions were purposefully designed to feature one aspect of connected speech with the correct answer requiring an understanding of the considered aspect, in particular.

B. Section Two: Perception of Connected Speech Aspects

The second section examines the students' perception of the same CSAs integrated in the previous section. This phase of the test is composed of eight scripts of the previously used audio tracks. The scripts include gaps, and the students are asked, after listening to the corresponding audio tracks, to fill in with the missing words that represent CSAs. It is worth noting that the audio tracks used in this section are the same as before with some shortening to concentrate only on the targeted aspects

C. Section Three: Knowledge of Connected Speech Aspects

The third section is designed to measure the students' knowledge of CSAs. As mentioned before, this sample of participants has been taught phonetics and phonology courses for two years with these aspects included. Hence, it is assumed that they are able to identify and read the phonological transcriptions. In this section of the test, eight full scripts are provided to the students, each of which includes highlighted words representing the previously targeted CSAs. The students are asked to listen to the corresponding audio track and then choose the right pronunciation of the highlighted words from the given options (*see appendix*). In this multiple-choice section, the options given to the students are written in phonologically transcribed English. Each script consists of four options with only one correct answer. The latter represents the exact pronunciation used by the native speaker featuring the changes caused by CSAs. Actually, the test aims at identifying the students' knowledge of these changes having occurred within the connected native speech.

3.4. Analysis of Results

3.4.1. Section One: Comprehension

In this section, the students listen to the audio track once and then answer the questions accordingly.

Question one: What would the speaker like from the chap in the “Evening Standard”?

Script one: *“At the fundamental mystery of life is that we’re only entitled to our own consciousness and there are all these things called other people. We’re all different, and I dislike prejudice against any particular group, and I hate it when I think people are being Islamophobic and they’re missing the point you know, and the point is to isolate the extremist and not to denigrate the religion. I hate all these stuff. A chap in the “Evening Standard” said I was a fat albino, well **I would like to know what he’s got against albinos.**”*

Correct answer: the speaker would like to know what the chap has got against albinos.

This question features weakening; the correct answer requires the correct perception and recognition of the aspect involved. The following table shows the scores obtained.

Table 13: Score on Comprehension Question One

Question One	Correct Answer	Incorrect Answer	No Answer
Scores	0	0	10
percentage	0%	0%	100%

Question Two: Which government the speaker’s great grandfather worked for?

Script Two: *“Lot of my ancestors came from all over the world in particular; I grow up thinking a lot about my Turkish great grandfather who was very mysterious, eccentric figure. He was a home secretary, an interior minister in the government of the **last sultan.**”*

Correct Answer: the speaker’s great grandfather worked for the government of the last sultan.

The correct answer of the second question requires a direct statement of the words involving the aspect of elision. As it is shown in the table below, all students answered incorrectly.

Table 14: Score on Comprehension Question Two

Question Two	Correct Answer	Incorrect Answer	No Answer
Scores	0	10	0
Percentage	0%	100%	0%

Question Three: What did the Turkish police fire at the protesters?

Script Three: *“Police in Turkey have fired **teargas and water cannon** at thousands of protestors in the western city Izmir during a one day national strike by trade unions in response to the country worst-ever mining accident.”*

Correct Answer: the Turkish police fired teargas and water cannon at the protestors.

This question involves a case of weakening; the following table shows the scores of the students.

Table 15: Score on Comprehension Question Three.

Question Three	Correct Answers	Incorrect Answers	No Answers
Scores	0	9	1
Percentage	0%	90%	10%

Question Four: What does the convention do for the UN?

Script Four: *“In a terse statement, the spokesman for the UN Secretary General Ban Ki-Moon said the damages claim was ‘not receivable’, under a convention **that grants the United Nations immunity for its actions.**”*

Correct Answer: the convention grants the United Nations immunity for its actions.

The fourth question features an assimilation case. From the table below, we can see that half of the students answered incorrectly, while the other half did not answer.

Table16: Score on Comprehension Question Four

Question Four	Correct Answer	Incorrect Answer	No Answer
Score	0	5	5
Percentage	0%	50%	50%

Question Five: What is it that has the potential to transform the economics of solar energy, according to Dr Jon Major?

Script Five: *“Dr. Jon Major, who led the research at Liverpool University, believes that the ensuing cost savings have the potential to transform the economics of solar energy.”*

Correct Answer: the ensuing cost savings have the potential to transform the economics of solar energy.

In this question, the students are required to state the words involving the targeted aspect of connected speech. The table below shows the scores obtained.

Table 17: Score on Comprehension Question Five

Question Five	Correct Answer	Incorrect Answer	No Answer
Scores	0	4	6
Percentage	0%	40%	60%

Question Six: Who has taken control of the ship Aze-Deen?

Script Six: *“The Italian coast guard has taken control of a ship carrying four hundred and fifty migrants, forty children among them. The ship Aze-Deen had been abandoned its crew. It’s the second incidents of its kind of the Italian coast this week.”*

Correct Answer: the Italian coast guard has taken control of the ship Aze-Deen.

The correct answer for this question includes the words involving a case of assimilation. The following table shows that nine students answered incorrectly, while one student did not answer.

Table 18: Score on Comprehension Question Six

Question Six	Correct Answer	Incorrect Answer	No Answer
Scores	0	9	1
Percentage	0%	90%	10%

Question Seven: What did the crew unload?

Script Seven: *“It wasn’t much of a homecoming: family and friends on the dockside. The crews waved back and then unloaded their **cargo of whale meat**. It could be the last one for some time from the waters off the Antarctic.”*

Correct Answer: the crew unload their cargo of whale meat.

The seventh question concerns a linking case; to answer correctly the students must directly state the words involving the targeted aspect. The following table shows that only one student has provided a correct answer.

Table 19: Score on Comprehension Question Seven

Question Seven	Correct Answer	Incorrect Answer	No Answers
Score	1	9	0
Percentage	10%	90 %	0%

Question Eight: What happened to the four men?

Script Eight: *“Hallo, four men are under arrest after tonight after armed police was called to a high school in Suffolk.”*

Correct Answer: The four men are under arrest.

This question involves linking. The following table shows the score of the students.

Table 20: Score on Comprehension Question Eight

Question Eight	Correct Answer	Incorrect Answer	No Answer
Score	8	2	0
Percentage	80%	20%	0%

1. Summary of the Results in Section One

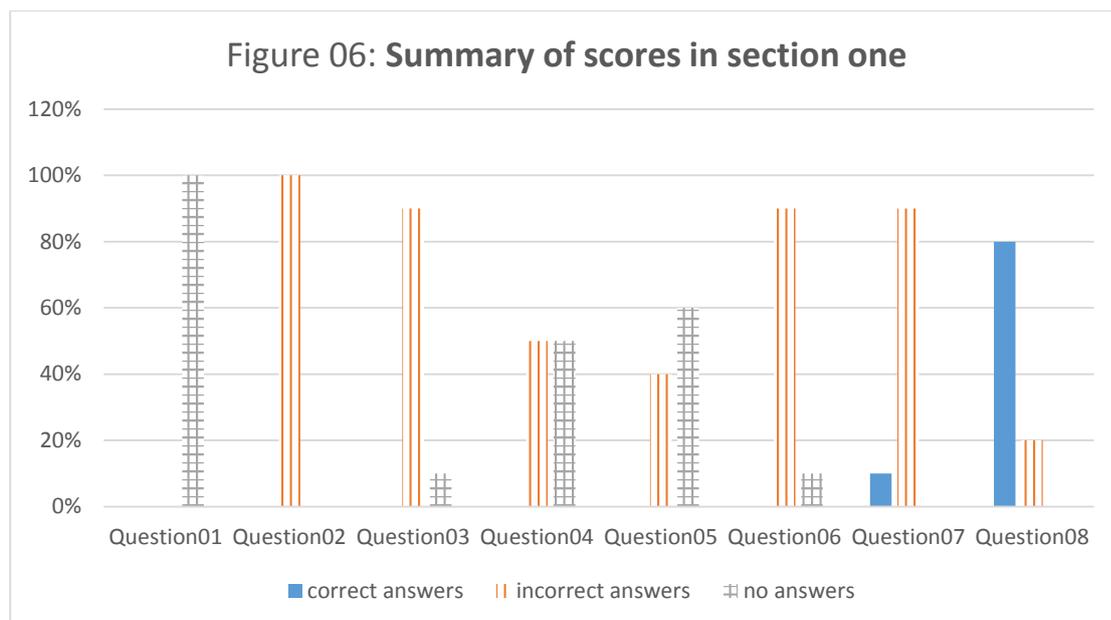
The following table includes a summary of the results obtained in the eight questions, as well as the total scoring and percentage of the correct answers, incorrect answers, and non-answered questions.

Table 21: Summary of Scores in Section One

Questions	Correct Answer		Incorrect Answer		No Answer	
	Score	Percentage	Score	Percentage	Score	Percentage
Question One	0	0%	0	0%	10	100%
Question Two	0	0%	10	100%	0	0%
Question Three	0	0%	9	90%	1	10%
Question Four	0	0%	5	50%	5	50%
Question Five	0	0%	4	40%	6	60%
Question Six	0	0%	9	90%	1	10%
Question Seven	1	10%	9	90%	0	0%
Question Eight	8	80%	2	20%	0	0%
Total	9	11.25%	48	60%	23	28.75%

Considering the results displayed in the table, we can notice that the total score and percentage vary throughout the different answers. The correct answers in the first section has a very low score with only nine correct answers out of eighty (11.25%), while the incorrect answers have the highest score with forty-eight incorrect answers out of eighty (60%). The non-answered questions also have a low score with twenty-three non-answered question (28.75%), but considerably higher than the correct answers' score.

The following graph provides a more clarifying demonstration of the results obtained in the first section, and the percentage distribution of the correct answers, incorrect answers, and non-answered according to each question. The percentages stated in the graph below can be converted into scores with a scale of every 1-student equal 10%.



2. Score Variation of Connected Speech Aspects in Section One

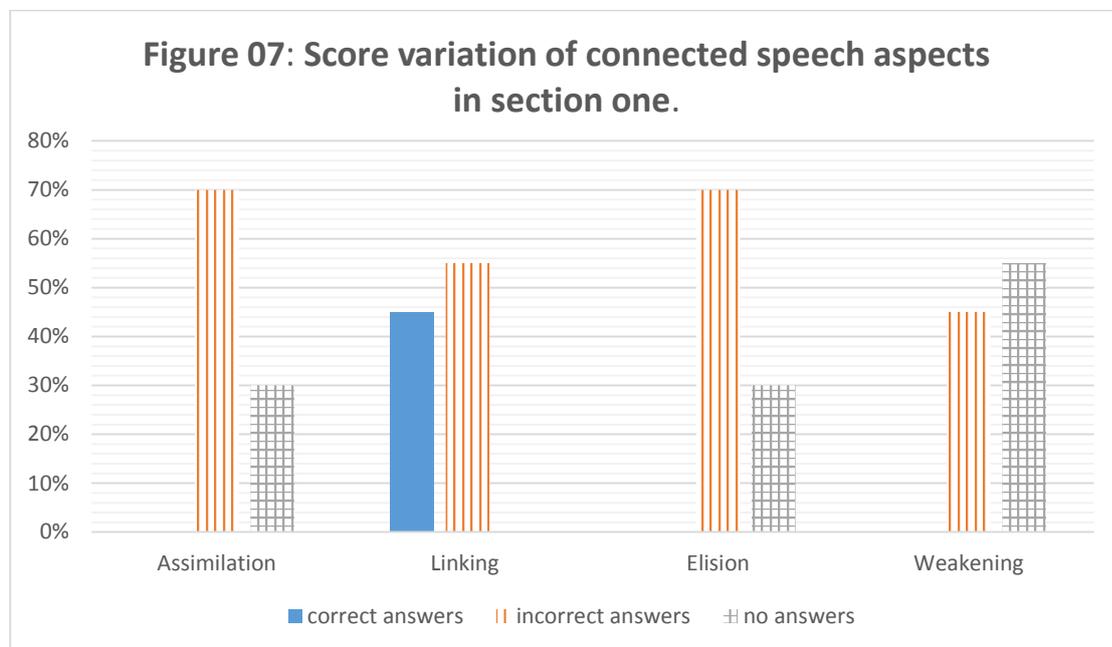
The table below shows the total score and percentage of each aspect of connected speech in the first section of the test.

Table22: Score Variation of Connected Speech Aspects in Section One

The Targeted Aspect	Correct Answers		Incorrect Answers		No Answer	
	Score	Percentage	Score	Percentage	Score	Percentage
Assimilation	0	0%	14	70%	6	30%
Linking	9	45%	11	55%	0	0%
Elision	0	0%	14	70%	6	30%
Weakening	0	0%	9	45%	11	55%

The table above reveals that weakening is the least answered, with eleven unanswered question out of twenty (55%) and nine incorrect answers (45%), while the score of both assimilation and elision is the same with fourteen incorrect answers (70%), and six non-answered question (30%). The aspect of linking is the only aspect that includes correct answers

with a score of nine correct answers (45%) and eleven incorrect answers (55%). The following graph clarifies the percentage differences between these aspects. The scores of each aspect can be read through this percentage figure with a scale of 10% equals 2 answers.



3.4.2 Section two: Perception of Connected Speech Aspects

In the second section, the students should listen to the corresponding audio track once and complete the script with the exact, missing words.

Script one: “A chap in the “*Evening Standard*” said I was a fat albino, well.....
 *Albinos.*”

Missing Words: I would like to know what he has against.

The gap in the first script represents the weak forms of the functional words “Would” [wəd], “to” [tə], and “He has” [ɪz]. . The following table tells that the majority of students have answered incorrectly (nine students) while one student has failed to provide any answer.

Table 23: Script One Completion Score

Script One	Correct Answers	Incorrect Answers	No Answers
Score	0	9	1
Percentage	0%	90%	10%

Script two: *“Lot of my ancestors came from all over the world. In particular, I grow up thinking a lot about my Turkish great grandfather who was very mysterious, eccentric figure. He was a Home Secretary, an interior minister in the government of the”*

Missing Words: Last Sultan.

The missing words represent a case of elision where the [t] sound in the first word is omitted. It can be read from the table below that all students (100%) have answered incorrectly.

Table 24: Script Two Completion Score

Script Two	Correct Answers	Incorrect Answers	No Answers
Score	0	10	0
Percentage	0%	100%	0%

Script Three: *“Police in Turkey have fired..... .. at thousands of protestors in the western city.”*

Missing Words: Teargas and water cannon.

In this script, the students have to write down the words that include a weak form of the functional word “and”, [ən]. The students’ scores are stated in the following table.

Table 25: The Score and Percentage of the Third Script

Script Three	Correct Answers	Incorrect Answers	No Answers
Score	0	10	0
Percentage	0%	100%	0%

Script four: *“In a terse statement, the spokesman for the UN Secretary General Ban Ki-Moon said the damages claim was ‘not receivable’, under a convention the United Nations immunity for its actions.”*

Missing Words: That grants.

The two missing words involve a regressive assimilation case, where the final [t] in the first word becomes a [k]. All students (100%) have answered incorrectly, as it is shown in the table below.

Table 26: Script Three Completion Score

Script04	Correct answers	Incorrect answers	No answers
Score	0	10	0
Percentage	0	100%	0%

Script five: *“Dr. Jon Major, who led the research at Liverpool University, believes that the ensuing have the potential to transform the economics of solar energy.”*

Missing Words: Cost savings.

The fifth script involves a case of elision, where the final [t] sound of the first word is dropped. The table below includes the students' score and percentage.

Table 27: Script Five Completion Score

Script Five	Correct Answers	Incorrect Answers	No Answers
Score	6	4	0
Percentage	60%	40%	0%

The table above shows that many students have answered correctly (six students 60%), while the other four students have provided wrong answers.

Script Six: *“The Italian has taken control of a ship carrying four hundred and fifty migrants, forty children among them.”*

Missing Words: Coast guard.

The words in the sixth script involve a case of coalescent assimilation, in which the final sound [t] of the first word and the initial sound [g] in the second word influence one another resulting in [k] sound. The table below indicates that only two students have answered correctly (20%), while most students have answered incorrectly (seven students 70%), and one student has provided no answer (10%).

Table 28: Script Six Completion Score

Script Six	Correct Answers	Incorrect Answers	No Answers.
Score	2	7	1
Percentage	20%	70%	10%

Script Seven: *“It wasn’t much of a homecoming: family and friends on the dockside, the crews waved back, and then, unloaded their ”*

Missing Words: Cargo of whale meat.

In this script, the missing words involve a linking case, precisely an intrusive [ʷ] between the first word and the functional word that comes after. Considering the table below, we can say that most students (nine students) have provided incorrect answers, while only one student has answered correctly.

Table 29: Script Seven Completion Score

Script Seven	Correct Answers	Incorrect Answers	No Answers
Score	1	9	0
Percentage	10%	90%	0%

Script eight: *“Hello, four men are tonight after armed police was called to a high school in Suffolk.”*

Missing Words: Under arrest

The missing words in the eighth script include a linking case (linking “r”). Reading the table below, we can see that the correct answers are above the average (70%), while the incorrect answers are only (30%).

Table 30: Script Eight Completion Score

Script Eight	Correct Answers	Incorrect Answers	No Answers
Score	7	3	0
Percentage	70%	30%	0%

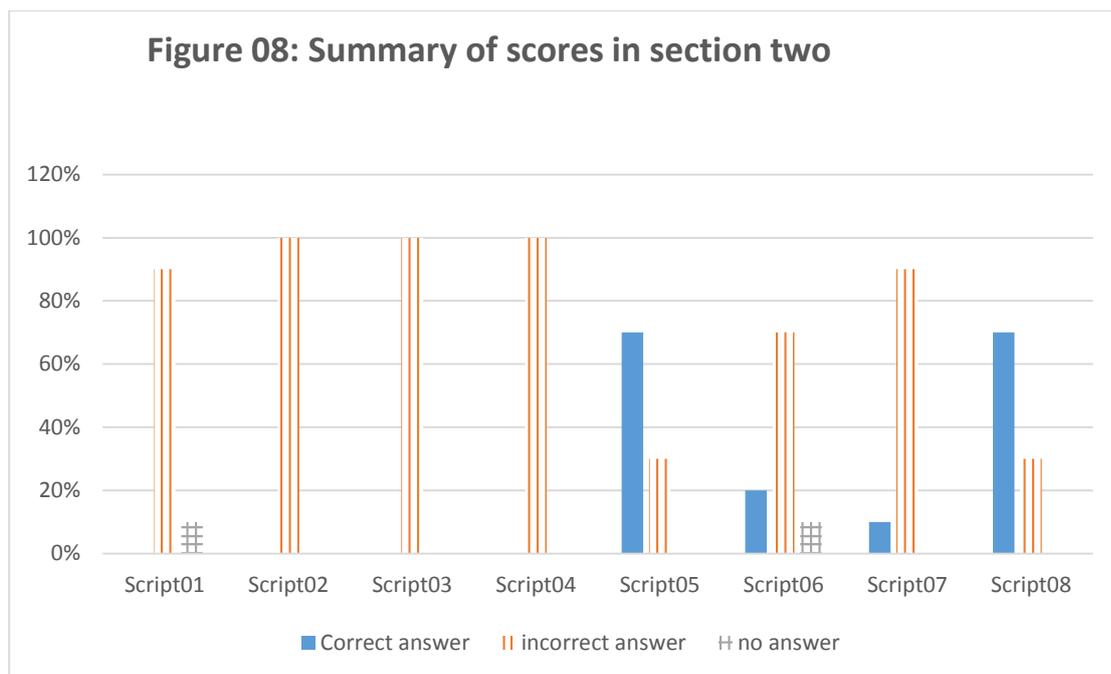
1. Summary of Scores in Section Two

The following table summarizes the results obtained in section two. It includes the score and percentage of the students in each script, as well as the total sums of these results.

Table 31: Summary of Scores in Section Two

Scripts	Correct Answers		Incorrect Answers		No Answers	
	Score	Percentage	Score	Percentage	Score	Percentage
Script One	0	0%	9	90%	1	10%
Script Two	0	0%	10	100%	0	0%
Script Three	0	0%	10	100%	0	0%
Script Four	0	0%	10	100%	0	0%
Script Five	7	70%	3	30%	0	0%
Script Six	2	20%	7	70%	1	10%
Script Seven	1	10%	9	90%	0	0%
Script Eight	7	70%	3	30%	0	0%
Total	17	21.25%	61	76.25%	2	2.5%

The table above shows the variation of the scores according to each script. The score of the incorrect answers is the highest with sixty-one incorrect answer out of eighty (76.25%), which indicate that most students failed to perceive CSAs in the second section, while the score of the correct answers is seventeen out of eighty(21.25%). The score of the non-answered is only two scripts (2.5%), which express the students' more willingness to answer the questions, unlike the first section. The figure below provides a more clarifying percentage distribution of the results of the second section.



2. Score Variation of Connected Speech Aspects in Section Two

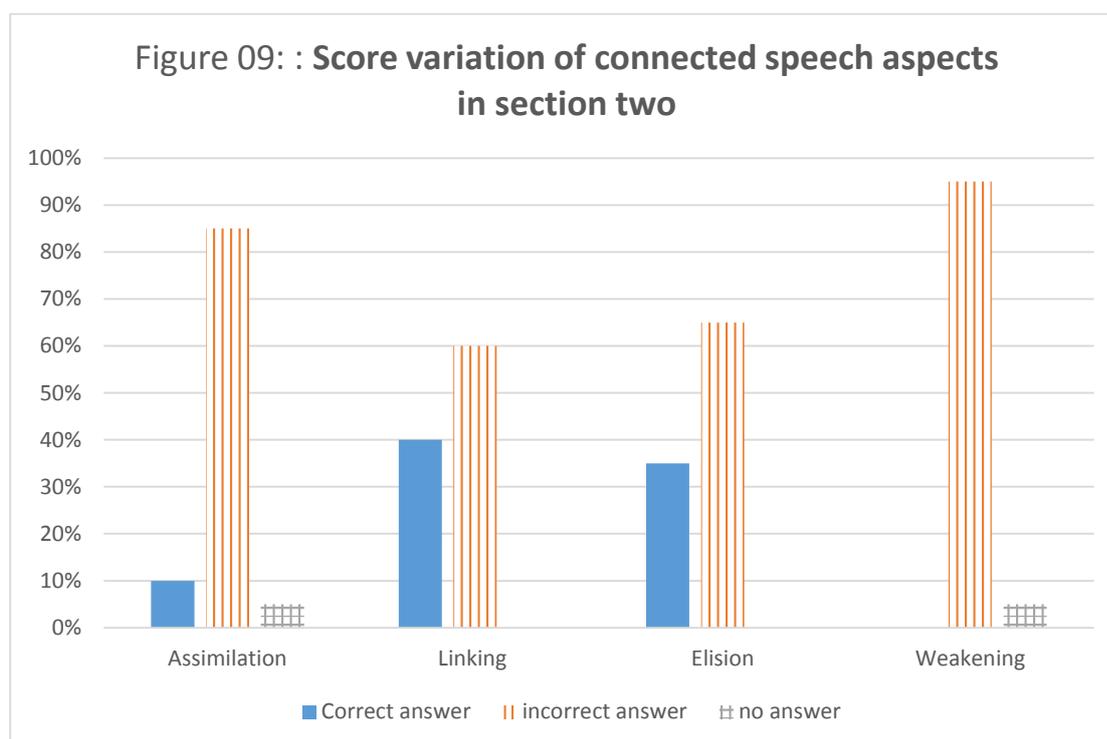
The following table demonstrates the categorization of scores and percentages obtained according to each aspect of connected speech.

Table 32: Score Variation of Connected Speech Aspects in Section Two

Aspects	Correct Answer		Incorrect Answer		No Answer	
	Score	Percentage	Score	Percentage	Score	Percentage
Assimilation	2	10%	17	85%	1	5%
Linking	8	40%	12	60%	0	0%
Elision	7	35%	13	65%	0	0%
Weakening	0	0%	19	95%	1	5%

The consideration of the table above reveals noticeable differences in the scores and percentages of each aspect of connected speech. The aspect of linking has received the highest score of correct answers with eight correct answers (40%) and thirteen incorrect answers (60%)

out of twenty; however, the score of elision is approximate to the score of linking with seven correct answers (35%) and thirteen incorrect answers (65%). The score of assimilation is considerably low: seventeen incorrect answers (85%), two correct answers (10%), and one non-answered script (5%). Moreover, the aspect of weakening is the least perceived without any correct answer: nineteen incorrect answers (95%), and one non-answered script. The figure below demonstrates the percentage of each of these aspects.



The figure shows that although the scores of the correct answers, incorrect answers, and non-answered items vary from one aspect to the other, the students have generally failed to perceive these aspects of connected speech.

3.4.3 Section Three: Recognition (Knowledge) of Connected Speech Aspects

For each audio track in this section, there is a script with highlighted words representing an aspect of connected speech. The students' task is to listen and then select among the suggested answers the one they consider the right pronunciation of the highlighted words during spontaneous speech.

Script One: *“A chap in the “Evening Standard” said I was a fat albino, well I would like to know what he’s got against albinos.”*

Suggested Answers:

a- [aɪ wəd laɪk tə nəʊ wɒt ɪz gɒt əɡenst] c- [aɪ wʊd laɪk tu nəʊ wɒt hɪz gɒt əɡenst]

b- [aɪ wʊd leɪk tʊ nəʊ wɒt hɪz gɒt əɡenst] d- [aɪ wʊd laɪk tʊ nəʊ wɒt hɪz gɒt əɡenst]

Correct Answer:

a- [aɪ wəd laɪk tə nəʊ wɒt ɪz gɒt əɡenst]

The weak form of the functional words “Would”, “to”, and “he has” are only included in the correct option (a). The results regarding this aspect are gathered in the table below:

Table 33: Score on Recognition (Knowledge) Question One

Question One	Correct Answer	Incorrect Answer	No Answer
Scores	4	6	0
Percentage	40%	60%	0%

Script Two: *“Lot of my ancestors came from all over the world. In particular, I grow up thinking a lot about my Turkish great grandfather who was very mysterious, eccentric figure. He was a home secretary, an interior minister in the government of the **Last Sultan.**”*

Suggested Answers:

a- [lʌst sʌltən] c- [lɑ:st sʌltən]

b- [lɑ:sʌltən] d- [lʌst sɑ:ltən]

Correct Answer:

b- [lɑ:sʌltən]

The correct answer bears the changes caused by elision (dropping the last [t] sound in the first word when it is amid two same consonants [s]). The two words, when connected together

as in natural speech, will sound as one word due to the elision. See table below for the corresponding results.

Table 34: Score on Recognition (Knowledge) Question Two

Q2	Correct answer	Incorrect answer	No answer
Scores	2	8	0
Percentage	20%	80%	0%

Script Three: “Police in Turkey have fired *tear gas and water cannon* at thousands of protestors in the western city...”

Suggested Answers:

- a- [tɪəgæs ænd wɔ:tə kænən] c- [tɪəgæz nd wɔ:tə kænən]
 b- [tɪəgæs ən wɔ:tə kænən] d- [tɪəgæs ənd wɔ:tə kænən]

Correct Answer:

- b- [tɪəgæs ən wɔ:tə kænən]

In the third script that features weakening, there are two options including the weak form of the functional word “and”: [ən], [nd]. However, the correct option is the one that contains the former form because it represents the exact weak form the speaker has used. Choosing the correct options shows knowledge of weakening, as well as the ability to distinguish the exact weak form of the functional word. The following table includes the obtained results.

Table 35: Score on Recognition (Knowledge) Question Three

Question Three	Correct Answer	Incorrect Answer	No Answer
Scores	6	4	0
Percentage	60%	40%	0%

Script Four: “In a terse statement, the spokesman for the UN Secretary General Ban Ki-Moon said the damages claim was ‘not receivable’, under a convention **that grants** the United Nations immunity for its actions.”

Suggested Answers:

- a- [ðæt grɑ:nts] c- [ðæk grɑ:nts]
 b- [ðæt grænts] d- [ðæt grɑ:nts]

Correct Answer:

- c- [ðæk grɑ:nts]

The correct answer represents the assimilation of the final [t] sound of the first word into a [k] sound. The table below shows that four students have recognized the sound change caused by assimilation.

Table 36: Score on Recognition (Knowledge) Question Four

Question Four	Correct Answer	Incorrect Answer	No Answer
Scores	4	6	0
Percentage	40%	60%	0%

Script Five: “Dr Jon Major, who led the research at Liverpool University, believes that the ensuing **cost savings** have the potential to transform the economics of solar energy.”

Suggested Answers:

- a- [kɒst seɪvɪŋz] c- [kɒseɪvɪŋz]
 b- [kɒst seɪvɪns] d- [kɒst səɪvɪns]

Correct Answer:

- a- [kɒseɪvɪŋz]

In question five, the correct option features the elision of the consonant sound [t] and connects the two words to sound as one. The following table shows the corresponding results.

Table 37: Score on Recognition (Knowledge) Question Five

Question Five	Correct Answer	Incorrect Answer	No Answer
Scores	3	7	0
Percentage	30%	70%	0%

Script Six: *“The Italian coast guard has taken control of a ship carrying four hundred and fifty migrants, forty children among them.”*

Suggested answers:

- a- [kəʊskɑ:d] c- [kəʊst gɑ:d]
 b- [kəʊst gɑ:rd] d- [kəʊsgɑ:rd]

Correct Answer:

- a- [kəʊskɑ:d]

The correct option manifests the new [k] sound that is produced because of the coalescent assimilation of the final [t] sound in the first word, and initial [g] sound in the following word. This kind of sound change leads the two words to sound as one. The table below displays the results gathered.

Table 38: Score on Recognition (Knowledge) Question Six

Question Six	Correct answer	Incorrect answer	No answer
Scores	3	7	0
percentage	30%	70%	0%

Script seven: “It wasn't much of a homecoming: family and friends on the dockside. The crews waved back and then unloaded their *cargo of whale meat*.”

Suggested answers:

- a- [kɑ:gəʊ w əv weɪl mi:t] c- [kɑ:gəw ðv weɪl mi:t]
 b- [kɑ:gəʊ ðv weɪl mi:t] d- [kɑ:gəʊ əv weɪl mi:t]

Correct answer:

- a- [kɑ:gəʊ w əv weɪl mi:t]

In this question, the correct option is the only one that has the linking case (intrusive [ʷ]); therefore, choosing the correct option shows recognition of the targeted aspect. As shown in table below, the majority of students have failed to identify the linking [ʷ].

Table 39: Score on Recognition (Knowledge) Question Seven

Question Seven	Correct Answer	Incorrect Answer	No Answer
Scores	1	9	0
Percentage	10%	90%	0%

Script Eight: “Hello, four men are under arrest tonight after armed police was called to a high school in Suffolk.”

Suggested answers:

- a- [ʌndə ərest] c- [ʌndərest]
 b- [ʌndər ʌrest] d- [ʌndər ərest]

Correct Answer:

- d- [ʌndər ərest].

The words 'under' and 'arrest' are linked together by joining the consonant [r] to the following vowel, the schwa [ə]. The table below shows the results obtained.

Table 40: Score on Recognition (Knowledge) Question Eight

Question Eight	Correct Answer	Incorrect Answer	No Answer
Scores	4	6	0
Percentage	40%	60%	0%

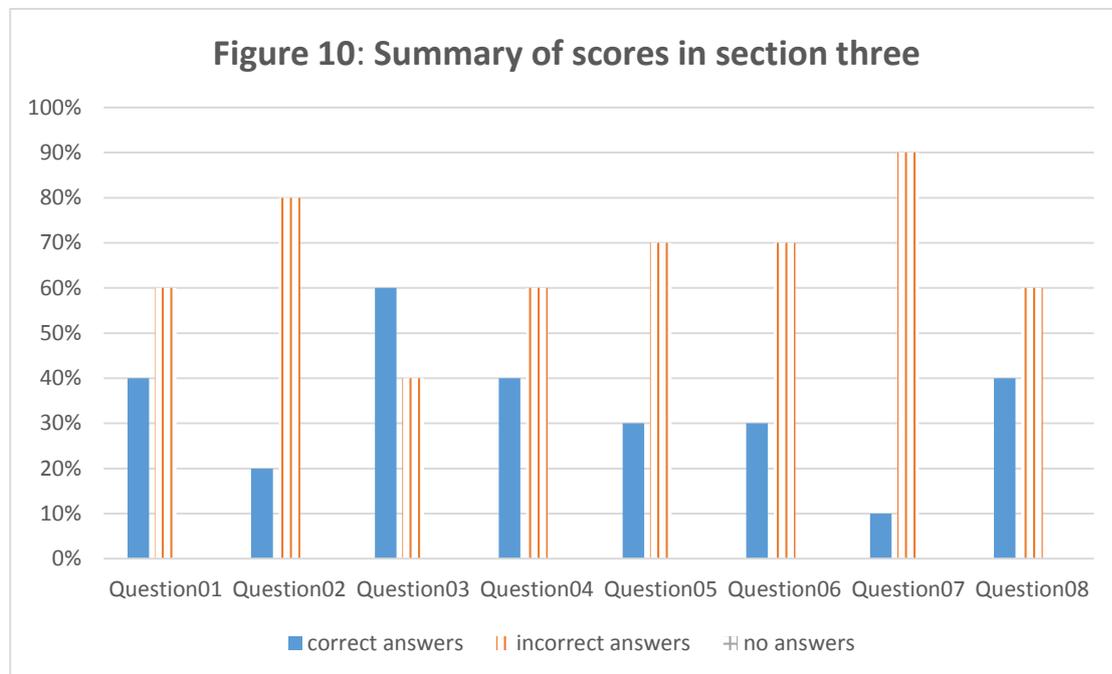
1. Summary of Scores in Section Three

The following table is a summary of all results gathered in this section , including the total scoring and percentage of the correct answers, incorrect answers, and non-answered.

Table 41: Summary of Scores in Section Three

Questions	Correct Answer		Incorrect Answer		No Answer	
	Score	Percentage	Score	Percentage	Score	Percentage
Question One	4	40%	6	60%	0	0%
Question Two	2	20%	8	80%	0	0%
Question Three	6	60%	4	40%	0	0%
Question Four	4	40%	6	60%	0	0%
Question Five	3	30%	7	70%	0	0%
Question Six	3	30%	7	70%	0	0%
Question Seven	1	10%	9	90%	0	0%
Question Eight	4	40%	6	60%	0	0%
Total	27	33.75%	53	66.25%	0	00%

The following graph clearly illustrates the global results gathered in section three for each question. The percentage of correct, incorrect, and non-answers is measured with a scale of: 1 score equals 10%.



2. Score Variation of Connected Speech Aspects in Section Three

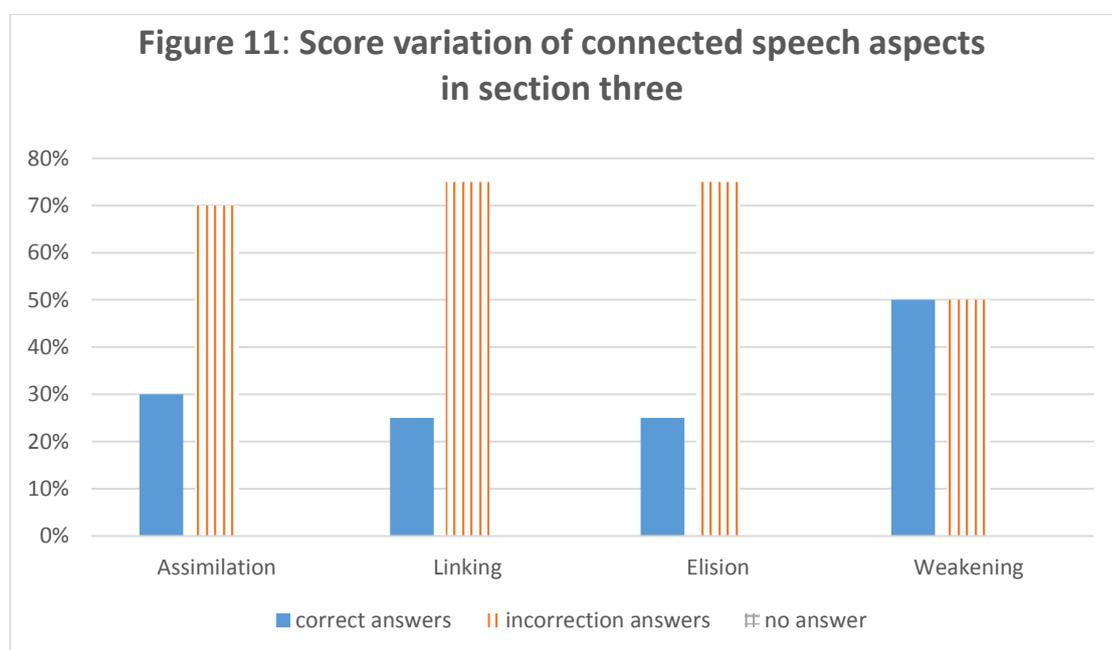
The following table demonstrates the total score and percentage of each aspect of connected speech in section three.

Table 42: Score Variation of Connected Speech Aspects in Section Three

Targeted ACS	Correct Answers		Incorrect Answers		No Answer	
	Score	Percentage	Score	Percentage	Score	Percentage
Assimilation	6	30%	14	70%	0	0%
Linking	5	25%	15	75%	0	0%
Elision	5	25%	15	75%	0	0%
Weakening	10	50%	10	50%	0	0%

As shown in the table above, weakening is the least problematic aspect of connected speech for the students to recognize, with an average score of 10 (50%) for correct answers and 10 (50%) for incorrect answers. However, the students have scored considerably lower in the other remaining ACSs: Assimilation (30% correct and 70% incorrect); linking (25% correct, and 75% incorrect); linking (25% correct, and 75% incorrect).

The following graph illustrates the global results for each aspect of connected speech reported in section three (10% represents two scores).



3.5. Interpretation of the Results

In what follows, the results will be interpreted according to the students' scores in the three sections. Students' answers are of varied success and failure depending on the inherent difficulty characterizing the considered aspects of connected speech.

3.5.1 Weakening: This aspect is present in two questions, the first question, and the third question.

Question 1: *What would the speaker like from the chap in the "Evening Standard"?*

All students have failed to provide any answers for the first question, conveying that there is a common miscomprehension regarding this aspect. As shown in table (23), in the second section, no correct answer is provided for the first script (nine incorrect answers and one non-answered script), which implies that all students have failed to perceive the words involving *weakening*; hence, they have failed to comprehend. Furthermore, considering the students' score in the third section (Knowledge), we can see that they have scored below the average (40%) displaying a lack of prerequisite knowledge, which resulted in miscomprehension (*see table: 33*). Concerning the four students who have correctly answered the corresponding knowledge questions, we can conclude that their knowledge alone has not been sufficient for the comprehension of this same aspect when used in rapid speech.

Question 3: *What did the Turkish police fire at the protesters?*

In this question including the weak form of the functional word 'and', the majority of students have answered incorrectly (90%), while one student provided no answer. The students' absence of comprehension can be explained in terms of their scores in Perception section, in which all students have misperceived the aspects concerned. Contrarily, the students in the third section managed to achieve a score above the average (60% actually have recognized this aspect). Therefore, we can reason that knowledge of CSAs alone is not always sufficient to comprehend the native speech. It is worthy to state that the answer (*teargas and water cannon*) has partially been perceived by three students (they have perceived the first noun 'teargas'). This partial perception of the first word and misperception of the weak form of the functional word that comes after indicates that the aspect of *weakening* has caused difficulty to the students

in comprehending the rest of the utterance. Thus, the knowledge these students possess is not sufficient to answer correctly the corresponding Comprehension question. Furthermore, in the third section, three students have selected the option that contains the wrong weak form of the functional word 'and', which implies that these students have failed to recognize the exact weak form the speaker has used.

The very few correct answers with regard to *weakening* in both questions indicate that these weak forms are hard to be perceived, and recognized. Hence, our students often face problems comprehending the native speech built on such weak forms. Moreover, the aspect of *weakening* is the least answered and correctly perceived (*see table 22, 32*), indicating that students are often clueless to provide any answer when this aspect is vital for comprehension.

3.5.2 Elision: This aspect is represented by the second and sixth question.

Question 2: *Which government the speaker's great grandfather worked for?*

In the second question, all students have miscomprehended the message embodied in the audio track. On assessing the students' perception in respect to this aspect, we find that all students have failed to perceive *elision* and, thus, miscomprehend the speech. On the other hand, the students have only partially scored (20%) in the corresponding question of the Knowledge section, indicating that they also miss the recognition of this aspect. Consequently, the students have shown miscomprehension due to both misperception and missing knowledge. In addition, the fact that two students have successfully recognized *elision* in the third section and yet miscomprehended proves that their knowledge alone is not sufficient for comprehension to take place.

Question 5: *What is it that has the potential to transform the economics of solar energy according to Dr. John Major?*

In the fifth question, four students have incorrectly answered, while six others have not provided any answer. The fact that no one has answered correctly proves that the aspect of *elision* has confused the students and hindered their comprehension. After analyzing the students' performance in Perception, we notice that their score is above the average, (60%), and yet, they fail to comprehend. However, the consideration of the students' score of knowledge shows that only (30%) have recognized the changes caused by this aspect, revealing an absence of the necessary knowledge, and so have they miscomprehended. Hence, we can conclude that, despite the correct perception of some students, comprehension has not occurred, implying that perception alone is not enough for comprehension.

It is noteworthy to mention that two students have shown both successful perception and recognition of this targeted aspect, although one has answered wrongly, while the other has not answered at all (in the first section). In this exceptional case, the reasons of miscomprehension may surpass the main factors of perception and recognition; the two students may have felt unconfident about their answers and so have preferred not to answer, or due to their lack of concentration during the first section of the test, hence answering incorrectly.

As a conclusion, we can say that the lack of correct answers in both questions are due to this confusing aspect of connected speech, *elision*, which often impedes the students comprehension. When analyzing the statistical tables (32, and 42) in the second and third section, we can see that the perception of *elision* as well as its recognition are below the average, respectively (35%) and (25%). Thus, we can say that factors behind students' miscomprehension are directly associated with perception and knowledge of this aspect.

3.5.3 Assimilation: This aspect is represented by the fourth and sixth question.

Question 4: *What does the convention do for the UN?*

The fourth question involves a case of *assimilation*. All students have miscomprehended, with five incorrect answers and five non-answered questions. The statistical table (26) in the second section reveals that all students misperceived this aspect. Although four of them (40%) have been able to recognize the aspect in the third section (*see table 36*), their knowledge alone, without the correct perception of the involved words, proves insufficient for comprehension.

Question 6: *Who has taken control of the ship Aze-Deen?*

As far as the results of the sixth question are concerned, all students have miscomprehended (nine have incorrectly answered, while one has abstained). The students' low score in this question can be explained by relating the corresponding results of Comprehension section to those of Perception, for which the majority of the students have also failed to perceive the aspect of *assimilation* (only 20% correct answers). Their performance in section three of the test is almost as low as in both Comprehension and Perception, with only 30% correct answers. As we can see, the scores are relatively similar in all sections, which means that insufficient knowledge of this aspect of connected speech as well as the wrong perception have led the students to miscomprehend.

Summarizing the scores of both questions, we can say that students have shown a lack of knowledge and incorrect perception of *assimilation*, resulting in miscomprehension. As it is shown in the statistical table 20 in the second section, the aspect of *assimilation* is critically misperceived (10%), while the statistical table 30 in the third section reveals that most students do not possess the required knowledge of this aspect (30%). These results can be taken as a proof that students indeed face difficulty in comprehension since this aspect plays an important role in understanding the native speech.

3.5.4 Linking: This aspect is represented by questions six and seven.

Question 7: *What did the crew unload?*

The results regarding this question show that the majority of students have failed to comprehend, yielding only one correct answer and nine incorrect ones. The scores in this section reveal that the words involving the targeted aspect, *linking*, are hard for the students to perceive, which is explained by the fact that only 10% of them have correctly perceived the aspect, whereas 90% have answered incorrectly. Furthermore, their performance in Knowledge section is as the same as in Comprehension and Perception: 10% correct answers, and 90% incorrect answers. With that being reported, it is evident that comprehension, perception, and knowledge of *linking* are all radically interrelated and consistent in the sense that the scores are identical in all sections proving again that the students' misperception and limited knowledge have resulted in miscomprehension.

Question 8: *What happened to the four men?*

Unlike the previously analysed questions, most of the students have successfully comprehended answering correctly the eighth question (eight students have answered correctly, while two have answered incorrectly). Their scores in Perception are similar to those in Comprehension with 70% correct answers, and 30% incorrect ones. However, in the third section, the scores are different, with only 40% of students providing correct answers. If we compare question eight's results in Comprehension to those in Knowledge, we can notice that half of the students who have shown a lack of knowledge about *linking* (students: 1, 4, 5, and 6) have actually managed to comprehend and perceive correctly this aspect. Consequently, we can conclude that in some cases, the correct perception of the aspect has proven sufficient to comprehend. These cases are mostly related to the linking [r] where the perception of this final

sound has a clarifying role helping EFL learners to comprehend, unlike other aspects of connected speech.

Considering the results obtained, we can notice that the variation of scores in both questions, where the students have shown a lack of comprehension, as in the first case (intrusive [w]), and sufficient comprehension in the second case (linking [r]), suggests that not all cases of *linking* are of the same difficulty. Furthermore, by reviewing the scores stated in the statistical tables (22, 32, and 42) of the three sections we can see that *linking* is the only comprehended aspect (45%) and mostly perceived (40%), despite the fact that it has been recognized by only (25%) of the students. This score variation leads us to state that *linking* is considerably easier to comprehend and perceive compared to other aspects of connected speech.

Conclusion

The overall performance of 3rd year students in the administered test demonstrates that they have faced serious difficulties in comprehending the natives when the aspects of connected speech are central for the comprehension process. Throughout the different sections of the test (Comprehension, Perception, Knowledge), the majority of participants have had low scores indicating their miscomprehension, misperception, and inadequate knowledge of these aspects. By review of the students' answers in the first section and the results stated in table 21, we can see that these students have miscomprehended almost all the aspects of connected speech (11.25%). In fact, they have been unable to provide any answers or have provided incorrect ones, which is a sign of their struggle to understand the message conveyed in the audio tracks. This miscomprehension is due to two main factors, perception, and knowledge; therefore, the students have been examined in respect to these factors in the subsequent sections of the test.

In the second section that investigates the perception skills, the students' overall performance reveals their incapacity to perceive correctly the aspects of connected speech, with

a score of 21.25% (*see table 31*). The low rate of correct perception suggests that these aspects are hard for the students to perceive. Hence, this inability has caused serious impairment in the comprehension process and led the students to answer incorrectly or provide no answers in the first section. Moreover, in the third section of the test, which explores the students' knowledge of CSAs, our subjects have scored a little higher than in previous sections. However, their score is considerably below the average 33.75% (*see table 41*), indicating an insufficiency in their knowledge, which failed them to recognize the changes caused by these aspects, and thus, miscomprehend the native speech in the audio tracks in the first section of the test.

Since the results uncover the incapability of students to answer correctly the different questions in the three sections of the test, our hypothesis that insufficient knowledge of connected speech aspects leads EFL learners to miscomprehend the natives has been confirmed. In addition, the practical part of our study sheds the light on another crucial factor in understanding the native speech, namely the importance of effective listening skills, i.e., the correct perception of the native speech. The findings of the test also entail that adequate listening skills and correct perception of the native speech lead to a better comprehension and may even compensate for a relative lack of knowledge in some cases of connected speech use.

General Conclusion

Listening, as an active complex process, serves as a medium to receive and retain information. It is an extensively used skill by EFL students when learning a new language, facilitating their progress in different language areas, and improving their other language skills. The fact that listening skills receives considerably lower pedagogical attention than the other language skills, negatively affects the students' overall mastery of their language use. The spoken English, being sometimes incompatible with the written form, bears many sound

changes under the influence of CSAs, including assimilation, linking, elision, and weakening. Therefore, an emphasis on teaching these sound changes must be introduced in our educational system.

Our study has attempted to examine the effect of these aspects on the students' comprehension of the native speech. Although CSAs are included in the Algerian curriculum of second year, and despite the fact that the students have been taught all these aspects, it is apparent that 3rd year English students still face enormous difficulties in terms of recognition and perception. One possible explanation for this deficiency is that these aspects have not been taught in a practical way that helps students to use their knowledge in order to successfully understand the natives. With that being speculated, we can open a list of suggestions that may help enhancing EFL learners' abilities concerning these important aspects of the spoken language:

Firstly, teachings these aspects should shift from being a theoretically introduced in phonological and phonetic courses, to being practically integrated in oral expression sessions as well. The oral expression laboratory will help, alongside the theoretical knowledge of the students, to provide a clarifying image over the spontaneous use of these aspects in natural speech. Secondly, teachers should focus their listening activities to sharpen the students' ability to perceive and decode correctly the chunks of the native speech, in order recognize the sound changes in spoken English. As a result, the students listening comprehension will increase, even if they do not possess sufficient vocabulary knowledge. Thirdly, we believe that teaching the students how to incorporate ACSs in their own speech will help them, in return, to recognize these aspects when listening to native speakers of English, and thus, enhancing their comprehension quality.

In light of the finding obtained in our study, sufficient knowledge of CSAs helps L2 learners to cope with their listening comprehension problems. However, it is worth noting that good listening skills also play equally an important role in the comprehension process. Likewise, we can notice that a good perception sometimes compensate for the students' lack of knowledge of CSAs, while in other times, sufficient knowledge compensate for their poor listening skills. Thus, we can establish a mutual relationship between good listening skills and sufficient knowledge of these aspects of connected speech. Overall, teaching EFL learners how to correctly perceive and recognize CSAs is one key element to develop their listening skills and to move forward with giant steps throughout their journey of mastering the English language.

Limitations of Research:

In the course of accomplishing this work, we have faced numerous difficulties and limitations. Firstly, the time constraints have not allowed us to further expand our study to include the teachers' own perspectives and insights on the process of teaching the aspects of connected speech and the way students react when learning these aspects. We supposedly decided to conduct the teachers' interview, but unfortunately, it has been canceled due to time pressure. The same inconvenient hindered us to include a wider sample of population from different Algerian Universities, so that we may absolutely generalize our findings on all Algerians students of English. Another inconvenient is the terrible lack of resources in the library of English Department, particularly those dealing with the literature review of connected speech aspects.

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Appendix

Students' test:

Faculty of Letters and Languages
Department of English
Master Studies in Language Science and TEFL
Test Administered to 3rd Year Sample Students

We would appreciate your help as to accept to respond to the following test for the requirements of our Master research. The test comprises three sections. Please, respond caringly to the instructions in each section after having listened to each audio track.

Section One:

- 1) What would the speaker like from the chap in the “Evening Standard”?

.....
.....

- 2) Which government the speaker’s great grandfather worked for?

.....
.....

- 3) What did the Turkish police fire at the protesters?

.....
.....

- 4) What does the convention do for the UN?

.....
.....

- 5) What is it that has the potential to transform the economics of solar energy, according to Dr. Jon Major?

.....
.....

6) Who has taken control of the ship Aze-Deen?

.....

.....

7) What did the crew unload?

.....

.....

8) What happened to the four men?

.....

Section Two: *Please, fill in the blanks in the scripts below with the missing words from the corresponding audio track you have listened to.*

- 1) A chap in the "Evening Standard" said I was a fat albino. Well, albinos."
- 2) "Lot of my ancestors came from all over the world. In particular, I grow up thinking a lot about my Turkish great grandfather who was very mysterious, eccentric figure. He was a Home Secretary, an interior minister in the government of the"
- 3) "Police in Turkey have fired at thousands of protestors in the western city..."
- 4) "In a terse statement, the spokesman for the UN Secretary General Ban Ki-Moon said the damages claim was 'not receivable', under a conventionthe United Nations immunity for its actions."
- 5) "Dr Jon Major, who led the research at Liverpool University, believes that the ensuing have the potential to transform the economics of solar energy."
- 6) "The Italian has taken control of a ship carrying four hundred and fifty migrants, forty children among them.
- 7) "It wasn't much of a homecoming: family and friends on the dockside, the crews waved back, and then, unloaded their"
- 8) "Hello, four men are..... tonight after armed police was called to a high school in Suffolk."

Section Three: Please, choose from the given options the one you consider the right pronunciation of the highlighted words during spontaneous speech.

- 1) “A chap in the “Evening Standard” said I was a fat albino, well **I would like to know what he’s got against** albinos.”
a) [aɪ wəd laɪk tə nəʊ wɒt ɪz gɒt əɡenst] c) [aɪ wʊd laɪk tu nəʊ wɒt hɪz gɒt əɡenst]
b) [aɪ wʊd leɪk tʊ nəʊ wɒt hɪz gɒt əɡenst] d) [aɪ wʊd laɪk tʊ nəʊ wɒt hɪz gɒt əɡens]
- 2) “Lot of my ancestors came from all over the world. In particular, I grow up thinking a lot about my Turkish great grandfather who was very mysterious, eccentric figure. He was a home secretary, an interior minister in the government of the **Last Sultan**.”
a) [lɑst sʌltən] c) [lɑ:st sʌltən]
b) [lɑ:sʌltən] d) [lɑst sɑ:ltən]
- 3) “Police in Turkey have fired **tear gas and water canon** at thousands of protestors in the western city...”
a) [tɪəgæs ænd wɔ:tə kænən] b) [tɪəgæz nd wɔ:tə kænən]
c) [tɪəgæs ən wɔ:tə kænən] d) [tɪəgæs and wɔ:tə kænən]
- 4) “In a terse statement, the spokesman for the UN Secretary General Ban Ki-Moon said the damages claim was ‘not receivable’, under a convention **that grants** the United Nations immunity for its actions.”
a) [ðæt grɑ:nts] c) [ðæk grɑ:nts]
b) [ðæt grænts] d) [ðæt grɑ:nts]
- 5) “Dr Jon Major, who led the research at Liverpool University, believes that the ensuing **cost savings** have the potential to transform the economics of solar energy.”
a) [kɒst seɪvɪŋz] c) [kɒseɪvɪŋz]
b) [kɒst seɪvɪns] d) [kɒst səɪvɪns]
- 6) The Italian **coast guard** has taken control of a ship carrying four hundred and fifty migrants, forty children among them.
a) [kəʊskɑ:d] c) [kəʊst gɑ:d]
b) [kəʊst gɑ:rd] d) [kəʊsgɑ:rd]
- 7) “It wasn’t much of a homecoming: family and friends on the dockside. The crews waved back and then unloaded their **cargo of whale meat**.”
a) [kɑ:gəʊ w əv weɪl mi:t] c) [kɑ:gəw ɒv weɪl mi:t]
b) [kɑ:gəʊ ɒv weɪl mi:t] d) [kɑ:gəʊ əv weɪl mi:t]

8) “Hello, four men are **under arrest** after tonight after armed police was called to a high school in Suffolk.

a) [ʌndə ərest]

c) [ʌndərest]

b) [ʌndər ʌrest]

d) [ʌndər ərest]

RESUME

Malgré la propagation des changements phonologiques que subit l'anglais comme langue parlée et la façon dont ils façonnent la langue native, les recherches dans le domaine d'apprentissage de cette langue n'ont pas attribué à ces changements la valeur méritée. Le nombre de ces recherches linguistiques qui entament ce sujet reste relativement faible par rapport aux autres sujets. Cette recherche a pour but d'investiguer l'effet de ces changements tel qu'une suppression d'un son ou son remplacement par un autresur la capacité de l'étudiant de comprendre ce qu'il entend et d'en saisir le sens. Ces changements phonologiques deviennent un grand défi devant les étudiants algériens d'anglais qui ne peuvent pas les apercevoir ou les reconnaître ce qui constitue pour eux un obstacle devant la bonne compréhension de la langue parlée. Dans la partie pratique de cette recherche, on a essayé de prouver cette hypothèse en réalisant une épreuve de compréhension auditive destinée aux étudiants de troisième année au département d'anglais à l'université de Jijel. Cette épreuve est divisée en trois sections, chaque section vise à examiner la capacité des étudiants à comprendre, saisir le sens et reconnaître ces changements phonologiques. Les résultats révèlent que la majorité des étudiants ont échoué à saisir le sens et qu'ils n'ont pas pu reconnaître les changements phonologiques, ce qui confirme notre hypothèse qu'une connaissance insuffisante résumant ces changements phonologiques influence sérieusement la compréhension auditive des étudiants d'anglais.

المخلص

بالرغم من أهمية التعديلات التي تخضع لها اللغة الإنجليزية المنطوقة من قبل مستعمليها المحليين وطريقة تشكيلها لخطاب اللغة الأم، إلا أن البحوث في مجال تعليم اللغة الإنجليزية لم تنصفها، حيث أن عدد البحوث المنشورة بخصوصها ضئيل مقارنة مع باقي المواضيع. ولهذا السبب تقوم هذه الدراسة على التحقيق في مدى تأثير هذه التعديلات الشفوية من ربط للكلام وحذف للأحرف وتبديل حرف مكان آخر... إلخ على قدرة المستمع المتعلم لهذه اللغة على استيعاب الكلام وفهمه واستخلاص المعنى المرجو منه. هذه التعديلات أصبحت تشكل عائقا عويصا على طلبة اللغة الإنجليزية في الجزائر بيد أنه صعب التعرف عليها وإدراكها أثناء الاستماع لها، وبالتالي فهي تخلق لهم تحديات وعراقيل تكون حاجزا لهم من أجل فهم المتحدثين المحليين لهذا اللغة. من أجل التحقق من فرضيتنا هذه قمنا في الجانب العملي لهذه الدراسة بإجراء اختبار سمعي موجه لطلبة الصف الثالث بكلية اللغة الإنجليزية في جامعة محمد الصديق بن يحيى، جيجل. يتجزأ الإخبار إلى ثلاث أقسام حيث حُصص كل قسم لمعرفة مدى قدرة الطلبة على الفهم، الإدراك والتعرف على مثل هذه التعديلات اللفظية على الكلام كما ينطقه ذو الأصول المحلية. أظهرت نتائج البحث أن جل الطلبة فشلوا في استيعاب المعنى بيد أنهم لم يستطيعوا إدراك والتعرف على هذه التعديلات اللفظية، وهذا ما يؤكد فرضيتنا سالفًا بأن عدم أو قلة الإلمام بهذا الجانب من الكلام الشفوي المترابط يخلق مشاكل فهم عويصة على طلبة اللغة الإنجليزية.