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Iraqi EFL University Learners' Performance in Key Phonetic Processes

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Abstract

This study aims at investigating Iraqi EFL university students' use of phonetic processes concerning their performance (recognition and production) of phonetic processes, that is to say, the research focuses on those learners' cognitive and productive abilities when using phonetic processes of English. As a consequence, one hundred 4th year students, as a representative sample, are subject to a questionnaire exclusively prepared for this purpose with the hope of discovering their performance in this concern. Since phonetic processes are a daunting challenge and insurmountable problem for all foreign learners, including Iraqi EFL learners, this research emphasizes the learners' performance (recognition and production) in this regard. Accordingly, the problem so far identified is to be discussed thoroughly and the findings of this work will be of use for foreign learners of English in general. The current research is first approached theoretically by drawing upon phonetic and phonological differences in conjunction with the key phonetic processes and discussing their peculiarities with respect to the way linguistic forms are pronounced. Later on, a test is conducted to detect the learners' abilities to use the phonetic processes when producing English forms. At last, the research terminates with an appendix containing the questionnaire that involves the questions designated for this end and arrived at some conclusions in this regard.

Introduction

1. Phonetics

Defined as the science that is concerned with the physical features of speech sounds, phonetics is interested in the description, classification and transcription of speech sounds (Crystal, 2003: 347). Controversy is brewing over the character of phonetics; some linguists regard it as an independent discipline while others attribute it to linguistics as one of its constituents. Closely related to other subjects, notably physiology and anatomy, phonetics is a universally linguistic branch. Its relationship to physiology and anatomy can be attested through the production of speech sounds and according to the place of articulation. One may come across

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departments in universalities that are called 'Linguistics Departments' and others as 'Linguistics and Phonetics Departments', a demonstration of dependence and independence of this discipline (ibid.). All in all, phonetics is viewed as the branch of linguistics that is preoccupied with the physical properties of speech sounds including assimilation, elision, epenthesis, metathesis and the like, which are the subject-matter of the current research that will be discussed in detail in the upcoming sections (Lyons, 1981: 67).

2. Phonetics and Phonology

Highly interested in natural features of speech sounds, phonetics concerns itself with the sound phenomenon that all languages share. As regards phonetic representation, the smallest units of phonetics are called phones, which have concrete occurrence each realized mostly auditorily via our ears. The phones are transcribed between two square brackets [ ], a representation that can carry other phonetic features such as nasalization and aspiration. Assimilation, for instance, is a process that takes place in English, Arabic, French and all other languages without exception. So do elision, metathesis, epenthesis, nasalization and epithesis. Dealing with phones, the smallest units of phonetics, these processes aim at changing the phonetic shapes of those phones in such a way that the new shape of the utterances guarantees an ease of articulation in rapid or casual speech (Fromkin, et al., 2007: 274).

Phonology, on the other hand, is preoccupied with the structure and function of speech sounds. Characterized as language-specific, phonology has nothing to do with the physical properties of speech sounds. Phonemes, which are the smallest units of phonology, are often placed between two slashes, e.g. /tʃ/, a transcription with has nothing to do with the phonetic features of a phoneme. It should be emphasized that it is the phoneme, which is an abstract sound entity, that is the smallest unit of phonology. The key difference between phoneme and phone is that the former is regarded as a meaning distinguishing abstract unit; while the latter is a non-distinguishing unit. That is to say, when we substitute a phoneme for another, we will obtain a different word with a new meaning as in 'fit' /fit/ and 'hit' /hit/, the second word is resultant when we substitute the phoneme /f/ for /h/. By contrast, the substitution of a phone for another phone, results in neither new word nor new meaning, for instance [w•ə"^{1}k^2] 'work 'and [w^{1}ə:•k^3] 'work' (a difference in only pronunciation). Consequently, the phonetic

processes so far raised do trigger new words (with new meanings) but are observed in order to facilitate pronouncing words, phrases and sentences (Lyons, 1981: 69-72). The assumption that the replacement of a phone by another phone yields no new word should be abandoned because in turns out that this tendency is untenable and does not work in some languages. In Arabic, for instance, the words (خالي) [xali] (empty/free) with light [lº] and (خالي) [xali] (uncle/granduncle) with dark [l•] are seen as a minimal pair and the phones in question spark a change in meaning (Al Jubouri, 2021: 9). However, this is an exception not the norm.

3. Phonetic Processes

Phonetic processes, it has pointed out , serve to make change in some phonetic features of phonemes; that this, change is not arbitrary but rule-governed. The phonological rules that held responsible for relating the phonemic representation to the phonetic representation (or output) should be a part of the speaker's competence (Fromkin, et al, 2007: 273).

The following processes are the key phonetic ones that are usually considered in this regard:

3.1 Assimilation

As a universal process, assimilation refers to the influence that one sound has on a neighbouring sound as far as pronunciation is concerned. That is to say, one sound segment copies the phonetic features of an adjacent sound such that the two sounds are pronounced alike for ease of articulation. Assimilation attracts interest of linguists right from the beginning and is regarded as a part of historical linguistics (Crystal, 2003: 38).

Abdul Hameed (1998: 90-1) upholds Crystal (2003)'s definition by affirming that assimilation is a phonetic process in which two sounds are positioned next to each other and consequently some properties of one segment are duplicated by the other segment. Regarding nasalization as a typical example of assimilation, she (ibid.) reports some words in which assimilation takes place as in: 'pin'[pĩn] where [i] becomes [ĩ], a nasalized vowel sound; 'pan' [pãn], where [a] changes into [ã], or any others where two neighbouring sounds that show identity in pronunciation; 'sit down' [sidaun], where [t] becomes [d] as influenced by the adjacent voiced consonant [d], 'newspaper' [nju:speipə], where [z] changes into [s] under the presence of the neighbouring voiceless consonant sound [p].

3.1.1 Types of Assimilation

According to Hamash and Al Jubouri (1982: 124-9), adjacent consonant sounds in casual speech are affected by one another to

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create fluctuation with regards to modification in voicing, place of articulation, or in both. This alternation may happen between words or within a word when one sound segment displays some sort of symmetry to a next speech sound. This process is referred to as 'assimilation'. They (ibid.) listed the following assimilation parameters:

3.1.1.1 Modification in Voicing

Phoneticians usually divide sounds into two types: voiceless and voiced. This taxonomy, stress specialists and practitioners in this concern, is not a sweeping phenomenon; that is to say there is a fine line of demarcations between voiceless and voiced sounds; [t], for instance, which is usually voiceless, is to be voiced when occurred inter-vocally as in the word 'latter' [la:də] in American English (Yavas, 2011: 64). The following utterances are further examples embodying this tendency.

(a). 'with thanks'

[wið Θaŋks] → [wiΘ Θaŋks], where [ð] (voiced) turns to [Θ] (voiceless)

(b). 'these socks'

[ði:z soks] → [ði:s soks], in which [z] (voiced) renders as [s] (voiceless)

(c). 'of course'

[əv ko:s] → [əf ko:s], where [v] (voiced) turns to [f] (voiceless)

(d). 'newspaper'

[nju:zpeipə] → [nju:speipə], in which [z] (voiced) becomes [s] (voiced)

(e). 'good time'

[gud taim] → [gut taim] where [d] (voiced] becomes [t] (voiceless)

(f). 'used to'

[ju:zd tu] → [ju:st tu], a word whose [z] (voiced) becomes [s] (voiceless) (ibid.).

3.1.1.2 Modification in Place of Articulation

It is admitted that articulators , in particular the tongue, places on the vocal tract. As a result, these articulators are forced to hit some other places that are, to an extent, akin to the original ones resulting in sounds having hybrid features of both the disappeared segment and the new segment formulated accordingly (Hamash and Al Jubouri, 1982: 124-5). The following operations are illustrative examples of assimilation by virtue of place of articulation:

a. [t] becomes [p] before the consonant sounds [p], [b], [m], as in

1. 'that place'

[ð at pleis] → [ðap pleis] where [t] (alveolar) becomes [p] (bilabial)

2. 'that boy'

[ðat boi] → [ðap boi] where [t] (alveolar) is changed into [p] (bilabial)

3. 'that man'

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[ðat man] → [ðap man] where [t] (alveolar) renders [p] (bilabial)

b. [t] becomes [k] before the consonant sounds [k] and [g], e.g.

1. 'that kind'

[ðat kaind] → [ðak kaind] in which[t] (alveolar) becomes [k] (velar)

2. 'that girl'

[ðat gə:l] → [ðak gə:l] where [t] (alveolar) amounts to[k] (velar)

c. [d] becomes [b] before the consonant sounds [p], [b], [m], as in

1. 'good piece'

[gud pi:s] → [gub pi:s] where [d] (alveolar) becomes [b] (bilabial)

2. 'good-bye'

[gudbai] → [gubbai] where [d] is duplicated to [b].

3. 'good man'

[gud man] → [gub man] where[d] (alveolar) changes into [b] (bilabial)

d. [d] becomes [g] before [k] and [g]. For example,

1. 'read quickly'

[ri:d kwikli] → [ri:g kwikli] where [d] (alveolar) is transformed into[g] (velar)

2. 'good girl'

[gud gə:l] → [gug gə:l] where [d] (alveolar) is becomes [g] (velar)

e. [n] becomes [m] before [p], [b], [m], as seen in the following forms:

1. 'ten points'

[ten points] → [tem points] where [n] (alveolar) becomes [m] (bilabial)

2. 'one boy'

[w^n boi] → [w^m boi], in which [n] (alveolar) turns into [m] (bilabial)

3. 'ten minutes'

[ten minits] → [tem minits] where[n] (alveolar) renders [m] (bilabial)

f. [n] becomes [ŋ] before [k], [g], e.g.

1. 'ten cats'

[ten kats] → [teŋ kats] where [n] (alveolar) becomes [ŋ] (velar)

2. 'one girl'

[w^n gə:l] → [w^ŋ gə:l] in which[n] (alveolar) changes into [ŋ] (velar)

g. [s] becomes [ʃ] before [ʃ], [j], as shown in the following expressions:

1. 'this shirt'

[ðis ʃə:t] → [ðiʃ ʃə:t] where [s] (alveolar) turns into [ʃ] (palato-alveolar)

2. 'this year'

[ðis jiə] → [ðiʃ jiə]

h. [z] becomes [ʒ] before [ʃ], [j]. This change can be realized in the following forms:

1. 'has she?'

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[hæz ʃi:] → [hæʒ ʃi:] where [s] (alveolar) becomes [ʃ] (palato-alveolar) and [z] (as an alveolar) turns into[ʒ] (palato-alveolar).

2. 'his young brother'

[hiz j^ŋ br^ðə] → [hiʒ j^ŋ br^ðə] → [z] (alveolar) changes into [ʒ] (palato-alveolar) (Hamash and Al Jubouri, 1982: 125-6)

3.1.1.3 Manner of Articulation

Less frequent is the assimilation that is accounted for by dint of manner of articulation. This process is mainly realized in casual speech where assimilation is identified as regressive one in which the change of manner is directed towards an easier consonant, i.e. one that triggers little obstruction of airflow in the air passage. Accordingly, a final stop turns to a fricative or a nasal as in 'that side' [ðæt said] → [ðæs said] and 'good night' [gud nait] → [gun nait] (Roach, 1983: 111-12). Carefully examined, fricative sounds or nasals, when found word-finally, are not amenable to be assimilated to a stop consonant sound. Progressive assimilation of manner occurs occasionally when a word beginning with [ð] preceded by another word whose initial sound is a stop or a nasal as is the case in the following words (the arrow means 'becomes').

a. 'in the' [in ðə] → [iṇ ṇə]

b. 'get them' [get ðəm] → [geţ ţəm]

c. 'read these' [ri:d ði:z] → [ri:ḍ ḍi:z]

It should be noted that the [ð] sound emerges without obvious friction noise (ibid: 112).

3.1.2 Assimilation: Various Approaches

Tackled from various perspectives, assimilation is an indispensible process without which conversations do not run smoothly. That is to say, lack of competence in assimilation triggers an impairment in communication because the messages sent by the speaker would be not intelligible at all. To confront such a challenge, phoneticians have proposed numerous approaches with the aim of construing and discussing the topic under scrutiny (Yule, 2010: 48-9).

Roach (2009: 101-111) contends that assimilation is associated with the speaking rate and style of the speaker and is concerned with consonants, stressing that there are two main types of assimilation that happen between words: regressive and progressive. The former is resultant whenever the final consonant of the first word turns to be like the initial sound of the second word while the latter is brought about whenever the initial sound of the second word becomes like the final sound of the first word as in 'would you?' [wudʒu:] where [d] becomes [dʒ] due to the influence of the following [j]. Regressive assimilation can be seen in 'that person'

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[ðæpə:sn] where [t] becomes [p], 'quite good' [kwaik gud] where [t] turns into [k],and 'those years' [ðouʒ jiəz] where [z] changes into [ʒ].

Closely related to assimilation is dissimilation which also aims at ease of articulation. Dissimilation occurs wherever two sounds with different properties are found next to each other as in the sound sequence [fΘ] in words such as 'fifth' [fifΘ] which should be rendered to [ft]. similarly, the sequence [sΘ] in 'sixth' [siksΘ] which is adjusted to [st] (Fromkin, et al, 2007: 277).

Regressive assimilation, in which a following sound yields a change in a preceding one, can be also realized in the rounding of the lips as in 'swim' [swim] due to the anticipation of the lip action needed for [w]. Progressive assimilation where a preceding sound segment brings about an alternation in a following one can also be perceived by the difference between the [s] in words such as 'cats' [kæts] and the [z] in words like 'dogs' [dogz], the difference between the final [t] in 'stopped' [stopt] and the final [d] in 'moved' [mu:vd]. That is so because the final [s]or [z], [t] or [d] depends on whether the preceding sound is voiced or not. A third type of assimilation is coalescence which occurs when two sounds in a sequence come together to yield a sound whose features are taken from both original sounds. For instance, the final alveolar stop [d] of 'could' [kud] and the first palatal [j] of 'you' [ju:] may combine to become a palatal affricate [dʒ] in a phrase like 'could you' [kudʒ u:]. This process is commonly referred to as palatalization (ibid.).

3.2 Epenthesis

Considered as a segment insertion rule, epenthesis, as depicted by Trask (2014: 78), means the addition of a segment into the middle of a word as when Old English 'amtig' became 'empty', or when 'prince' is pronounced like 'prints' [prints] or 'film' as 'fillum' [fil^m]. When the segment to be inserted is a vowel, we speak of 'anaptyxis' or 'svarabhakti'. Richards and Schmitt (2002: 182) argue that epenthesis is the addition of a vowel or consonant at the beginning of a word or between sounds. This process is frequent in language learning when the target language has different combinations of vowels or consonants that are different from those in the learner's first language. For example, Spanish learners of English always say [espi:] for the English word 'speak' [spi:k], because Spanish has no words beginning with the consonant cluster [sp-].

Rajimwale (2006: 85) affirms that epenthesis means an insertion process of a vowel in a word; Indian English, for example,

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displays this phenomenon. Accordingly, 'film' [film] is heard as [fil^m] in some regions, so is 'station' [steiʃn] is uttered as [s^teən] or [isteʃn].

Yule (2010: 231-2) supplements the idea concerning epenthesis by pointing out that epenthesis is a process by dint of which addition of a vowel taken place with a word as in 'amtig' → 'empty', 'spinel' → 'spindle', 'timr' → 'timber'. The insertion of [p] after the nasal [m] as in 'empty' [empti] can occur in some speakers' pronunciation of 'something' [s^mΘiŋ] as [s^mpΘiŋ]. In the same vein, vowel insertion is observable during the addition of (-ed) suffix to verbs ending with [t] or [d] as in 'wanted' [wontid] or [wo:ntid] and 'decided' [disaidid] or [disaidəd]. Similarly, the (-s) suffix which denotes plurality, possession and third person singular exhibits the same vowel insertion when attaching to words ending in a hissing sound ([s], [z], [ʃ], [tʃ], [dʒ], [ʒ]) as in 'boxes' [boksiz] or [boksəz]. The same holds true for, say, 'marshes', 'matches', 'manages', 'garages' and 'places'.

3.3 Metathesis

Simply defined, metathesis is a reversal in sequence between two neighbouring sound segments so that the sound [xy] will become [yx]. The verb 'ask' [æsk] is frequently pronounced as [æks] by speakers of some English dialects. The same holds true for 'pretty' which is mostly pronounced as [pə:rti] by cowboys rather than [priti] and the words 'bird', 'horse' and 'animal' are usually heard as [brid], [frsit], [hro:s], and [æminl] respectively. Interestingly enough, the word 'another' is thought of as a form that gets metathesized because it is sometimes realized as 'a nother' as in the expression "a whole nother thing" (Yule, 2010: 231).

Fromkin, et al (2007: 35) state that children's language is rich in this type of pronunciation, which would be adjusted later on when these babies grow up. English children usually say [æminl] for [æniml] 'animal' and [pə:rti] for [priti] 'pretty' causing the sound sequence AB to be BA. The following words alongside the original ones are examples of metathesis: [æks] → [æsk] (ask), [frist]→ [fə:st] (first), [kælibən] → [kænibəl] 'cannibal', [wɔps] → [wɔsp] 'wasp' (ibid.). In this vein, it is claimed that words which have [r] in its pronunciation are more susceptible to metathesis as in [brid] → [bə:d] (bird), [hro:s] → [ho:s] (horse). On the other hand, the sound sequence [mn] is occasionally subject to transposition as in 'animal' [ænimәl] which is usually uttered as [æminәl] and the same is applicable to the word 'enemy' [enimi] which is often pronounced as [emini].

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Metathesis is a universal process that is found in all languages and this is demonstrated by the performance errors speakers usually make in everyday communication. Iraqi-Arabic, particularly colloquial language, shows a good deal of metathesized forms, e.g. [kerheba] for [kehreba] 'electricity', [ʔli:m] for [leʔi:m] 'obstinuate', [pelænti] for [penælti] 'penalty', [fehi:h] for [hefi:f] 'hissing' "هسيس", etc. Yule (2010: 231) redirects the learners' attention to the fact that the reversal of position in metathesis can sometimes be found in non-neighbouring sounds. The Spanish word (palabra) is stemmed from the Latin word (parabola) via the reversal of [l] and [r] sound segments. By the same token, the words 'جواريب' [dʒwari:b] 'socks', (إلعب) [ʔlʔeb] 'play' and 'صدق ' [sudik] 'truth', for example, are pronounced by children as [dʒrawi:b], [ʔlbeʔ] and [sukid] respectively. The child's verbal behaviour in this concern is attested by Fromkin et al (2007: 127) who emphasize the children's metathesized pronunciation of 'animal' as 'aminal'. So many football fans usually say '* pelenty' [pelenti] instead of 'penalty' [penlti].

3.4 Elision

Following Abdul Hameed (1998: 91), elision is the process of deleting a certain sound which could be otherwise found in careful pronunciation of a word; [d] sound is rooted out from the pronunciation of words like 'and' [æn], 'handkerchief ' [hæŋkətʃif], 'handsome' [hænsəm], 'handshake' [hænʃeik] and 'friendship' [frenʃip], and [t] is absent in the pronunciation of 'aspect' [æspeks], 'mostly' [mousli] and 'he must be' [hi: m^s bi:]. Elision is not confined to deletion of consonants but it extends to vowel deletion as in 'cabinet' which is read as [kæbinət] or [kæbinit] → [kæbnit] with a deleted [i] after [b]. Crystal (2003: 232) is of the view that within polysyllable words, the vowels and consonants in unstressed syllables always drop in conversational speech with normal speed, e.g. 'camera' [kæmrə], 'probably' [probli] and 'February' [febri].

Concerning elision, Trask (2014: 76) confirms what the aforementioned linguists argue for by saying that it is concerned with disappearance of a sound segment from a word or expression as in 'fish and chips' [fiʃ ənd tʃips], which reads as [fiʃ 'n' tʃips] with the disappearance of [d]. Roach (1983: 113-5) describes elision as a zero realization of a phoneme. Native speakers, for example, say [pli:s] instead of [pəli:s] as evidence that elision, like assimilation, is a characteristic of rapid, casual speech. He (ibid.) holds that producing elision is not only necessary for foreign learners to master, but it is important

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for them to recognize that when native speakers of English talk to each other, there are some deleted phonemes the foreign learner is entitled to recall when producing the linguistic utterances and speeches. The following sections are the key processes that demonstrate elision in English.

3.4.1 Loss of weak vowel after [p], [t], [k]

Words such as 'potato', 'tomato', 'canary', 'perhaps', and 'today' with the vowel in the first syllable may be lost; the initial plosives are then aspirated and occupy the middle portion of the syllable, leading to these pronunciations: [pʰteitou], [tʰma:tou], [kʰneəri], [pʰhæps], [tʰdei] where ʰ indicates aspiration and phonetically transcribed by a raised aitch as illustrated in the example so far stated (Roach, 1983: 114).

3.4.2 Weak vowel + [n], [l], [r] becomes syllabic consonant

It is known that syllable has three elements: onset, nucleus and coda. Of these components, it is the nucleus, which is mostly represented by a vowel, that carries the burden of the syllable structure; that is to say, a syllable can be reduced to nucleus only. However, there are some vowels that cannot stand for nucleus, particularly schwa, and, in sequence, some consonants, notably [l], [r] and [n] supersede the weak vowel resulting in deletion of the vowel at hand. For example, the words 'tonight' [tn̩ait], 'police' [pl̩i:s] and 'correct' [kr̩ekt] are pronounced with the vowel deleted following the initial plosives (Roach, 1983: 115).

3.4.3 Avoidance of Complex Consonant Clusters

In order to guarantee smooth flow between words and to establish a normal and casual speech, the speaker should simplify the consonant cluster he or she can encounter by deleting some of these consonants inherent in a particular consonant cluster (Roach, 1984: 114)). English speakers, it is obvious, would not pronounce all the consonants between the last two words of the following utterance: 'George the Sixth's throne' [dʒo:dʒ ðə siksӨs Өroun].

However, this is not impossible to pronounce something like [siksӨs Өroun], but [siksroun] is a more possible pronunciation for the last two words in the aforesaid utterance. By the same token, consonant clusters consisting of three stops or two stops and a fricative recommends that the middle stop is liable to deletion, so that the following pronunciation is quite common: 'acts' [æks], 'looked back' [luk bæk], 'scripts' [skrips] (ibid.).

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3.4.4 Loss of Final [v] in 'of' [əv] before Consonant Sounds

The final [v] in (of) [ɔf] is observed to be dropped. This is attributed to simplification of consonant cluster and to ensure ease of articulation. For example, 'lots of them' [lots ə ðəm] and 'waste of money' [weist ə m^ni] show this process clearly. Such a practice is seen as a daunting challenge by non-native speakers and in sequence, foreign learners, including Iraqis, are supposed to master this language skill and overcoming this difficulty especially in the university stage of their learnability of the English language (Roach, 1983: 114).

3.5 Nasalization

It should be admitted that nasalization is a controversial issue because some scholars consider it as a part of assimilation while others evaluate it as an independent process. Yule (2010: 291) argues that nasalization is the pronunciation of a sound when the soft palate (the velum) is lowered to block the oral cavity, allowing the air to pass through the nose. In French and English, vowels preceding a nasal sound is nasalized as in 'room' [ru:̄m]], 'noon' [nu:̄n], 'song' [sō̄ŋ], etc. Nasalization is represented with a small mark (¯) as in [si:̄n] for 'seen' or 'scene. So there are two phones, [i:] and [i:̄] , used to recognize the single phoneme /i:/ which are considered as allophones of /i:/ in English. Put differently, the influence of nasalization on a vowel is tackled as allophonic variation since the nasalized variant does not evoke contrast in meaning. In French, however, the pronunciation [so] for the word 'seau' (pail) is in contrast with [sō̄] for the word 'son' (sound) and 'beau' [bo] (good-looking) is in opposition with the word 'bon' [bō̄] (good), causing a phonemic distinction (ibid.).

Finch (2000: 64) says that nasalization is concerned with pronouncing a vowel preceding a nasal consonant, [n, m, ŋ]. In these phonetic contexts, vowel sounds become nasalized, that is, some air is coming out of the nose, a claim that is backed by Rajimwale (2006: 153) when affirming that nasalization is a process in which one pronounces nasal sounds or nasalized vowels. In producing these sounds, the soft palate (the velum) is lowered to close off the oral passage and force the air-stream to come through the nasal cavity. In another case, the air is let to go into the oral and the nasal cavities altogether. For [m], the two lips momentarily into contact to form a closure, and allow the air to pass through the nose. By the same token, [n] presupposes that the tip of the tongue comes into contact with the back of the upper teeth to constitute a

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closure. Though the vocal tract is impeded at one point, the breath-stream passes through what is so called a secondary aperture that is made up of the nasal airway. Acoustically speaking, the physical conditions which assign the nasal quality to these sounds are sometimes called 'cul-de-sac resonance, a quality that mingle a relatively small cavity, the nasal resonator with a large cavity, the oropharyngeal cavity. All in all, nasals are regarded as resonants or continuants. Ladefoged (2006: 226), on his part, draws a distinction between nasals and nasalization arguing that nasals, unlike orals, demand raising the velum to block the oral cavity in their production forcing the air to go out of the nose. A regards vowels, which are all oral in normal conditions, require the closure of nasal cavity. Nonetheless, the nasal vowels need a closure for oral cavity to allow the air flow through the nose.

He (ibid.) re-affirms that consonants such as [m[, [n] and [ŋ] are nasals but not nasalized because in nasalized sounds some of the air goes through the nose and the rest of the air passes through the mouth. It is noteworthy that nasalized vs. non-nasalized contrast is not a universal property, but language-specific one. In some African languages, notably Yoruba, some consonants such as [w], [j], [l] may be nasalized when following nasalized vowels, the word for 'they' is [w̄ṍ], with the whole syllable being nasalized.

3.6 Epithesis

According to Stageberg (1981: 34), epithesis is described as an additional insertion of consonant to the word end, usually occurring after a final [n] or [s]. Alternatively termed as 'paragoge', which is basically a Greek word, this insertion is of rare occurrence as in the word of 'against', which is thought of to be historically derived from the word 'again'. It is noteworthy that the final addition of a vowel is a word coinage known as 'proparalepsis' as in 'Thanks muchly and Just call me happinessish!'. Another illustrative example is adopted from Shakespeare when he creates the word 'climature' in his masterpiece Hamlet by the addition of the word 'temparature' to 'climate'. By the same token, the insertion of a final stop is referred to as excrescence (Trask, 1996: 265). It is claimed that the English word 'sound' [saund] was written as 'soun' [saun] in Middle English. Here, the addition of [d] is due to the similarity in place of articulation between [d] and [n] where the tongue tip is in contact with the alveolar ridge. Put differently, when [n] is pronounced, the vocal cords abandon vibrating because the tongue is no longer in touch with

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the alveolar ridge. On the contrary, when the soft palate (the velum) is raised to close off the nasal cavity, the air pressure is formed behind the tongue and, in consequence, [d] is produced while the air releases. The word 'drown' [draun] is another example of this process where the sound [d] occurs finally especially in its non-standard version (ibid.). Likewise, the sound [t] appears sometimes in the words ending with [s] as in 'once' [wʌns] → [wʌnst] and 'across' [əkros] → [əkrost]. Such a process is justified on the ground that the tongue here is in contact with the alveolar ridge when the air is moving forwards and the release of air results in [t] when the tongue is lowered (ibid: 35).

4. Test

As an instrument to carry out the end of this study, the researcher randomly chooses 100 EFL college students as a test sample from the 4th year classes in the Department of English, College of Education for Human Sciences, Al Muthanna University on February, 28th, academic year 2021-2022). Simply defined, test is a device intended to measure a person's knowledge, ability or performance in a certain domain (Harrison, 1983: 17). Consequently, the students in question sat for a test sheet consisting of two parts: Part I is a recognition questionnaire comprising ten items with respect to terms peculiar to phonetic processes, while Part II, which represents the production aspect of the subjects at issue, also implies ten items concerning the terms that the learners in question are required to assign to the situations mentioned.

In the first part, the students is required to choose the correct response among four options while the second part demands the testee to write the term that matches the definition or explanation codified in the item. Each point is assigned two scores in order to arrive at more realistic and tangible result concerning the topic under discussion. Before the test in question is taken, the researcher devised the items and have them seen and checked by a host of experts majoring in linguistics including Dr. Fadhil Athab Al Jubouri (Asst. Professor in Linguistics), Dr. Aoda Kadhim Al Khafaji (Asst. Professor in Methodology of Teaching & Learning English), Dr. Munther Shakir Al Zaiyadi (Asst. Professor who is majoring in English Methodology), Dr. Hashim F. Aliwi (Asst. Professor in Linguistics) and others. The experts' notes and remarks are all taken into consideration and incorporated in the test design.

The researcher, with the aid of some of the teaching staff in the Department of English in

question, supervised the subjects while they were taking the test which lasted for one hour. Some clarifications in the mother tongue have been made so that the students could understand the questions written in the question form.

As far as the test at hand, it has made clear that the testees do well in recognition level, in particular as illustrated in table (1) below. In the first five items, the students gain very good marks, a remarkable achievement attributable to the fact that the first three items are associated with assimilation, a process which is, to very considerable extent, familiar to the learners at issue. Besides, the vast majority of those learners are fond of watching American films and serials where interaction is replete ,in assimilation by which the audience is greatly impressed and for which he/she opts.

5. Discussion and Analysis

The subjects in question sit for a test so that their linguistic abilities to manipulate the terms concerning phonetic processes are to be discovered tangibly. Revealing grave difficulties in their performance, the test results show the learners' feeble knowledge with regard to the way they pronounce English words or phrases that demand one process or another. In recognition level, items (1), (2) and (3), which are intended to measure assimilation, display considerable success (89.3%) in this concern because the learners at issue are accustomed to this phonetic behaviour from their tender years, i.e. they are trained to such an activity right from their study of English. By the same token, elision, tested in item (4), placed second (80%) in the testees' performance since Arabic, which is the learners' native language, abounds in this process and that is why its speakers face no problem in interpreting the linguistic forms that abide by elision. Metathesis, coded in item (6) is rated third in the learners' achievement (72%) regarding phonetic processes simply because this is a universal process in all of the world's languages, including Arabic, as Fromkin, et al (2007: 221) assert. On the other hand, nasalization, which is indicated by items (5) and (10), demonstrates the success of half the students involved. This is attributed to the fact that nasalization is a feature mostly peculiar to Black English, the variety spoken by African American people and most foreigners try to imitate their language so they make appeal to it. Put differently, most young people share black people in America their interests, especially music, sports, movies and the like. Being so, foreigners, including Iraqis, are inclined to speak Black English and they are in command of the African -American

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vernacular which zeros in on nasalization as Rajimwale (2006: 153) sustains. Finally, items (8) and (9), which are meant to express epenthesis, indicate a lack of knowledge on the behalf of the testees (47.5%), an indication of deficiency in this regard, which is associated with scarcity of such a process in the curriculum allotted for the students in question whose text-books are limited to some phonetic features at the expense of others. However, recognition part is not too problematic for the learners in question to constitute a real barrier. On the contrary, the testees obtain (67.7%) of their responses correct in this part of questions. As regard epithesis, coded in item (7), in the recognition part sees considerable success by Iraqi EFL learners, perhaps because of co-incidence. By contrast, the learners in question encounter a grave difficulty (10%) in handling this phonetic process due to the fact that this process is scarcely tackled in the text-books devoted to them everywhere. In only two or so paragraphs does Stageberg (1981: 34) draw upon this concept and that is why most learners are ignorant of this phonetic process as illustrated in the following table:

EFL Learners' Recognition Achievement in Phonetic Processes					
No.	Phonetic Processes	Items	Correct Responses	Percentage	Total Percentage
1.	Assimilation	1	94	94%	89.3%
		2	90	90%	
		3	84	84%	
2.	Epenthesis	8	50	50%	47.5%
		9	45	45%	
3.	Metathesis	6	72	72%	72%
4.	Elision	4	80	80%	80%
5.	Nasalization	5	75	75%	57.5%
		10	40	40%	
6.	Epithesis	7	60	60%	60%
Total		10	690	690%	406.3%
Average			69%	69%	67.7%

Table (1): Iraqi EFL Learners' Recognition in Phonetic Processes as Marked by Degrees (The Total Degree here is 100 Marks)

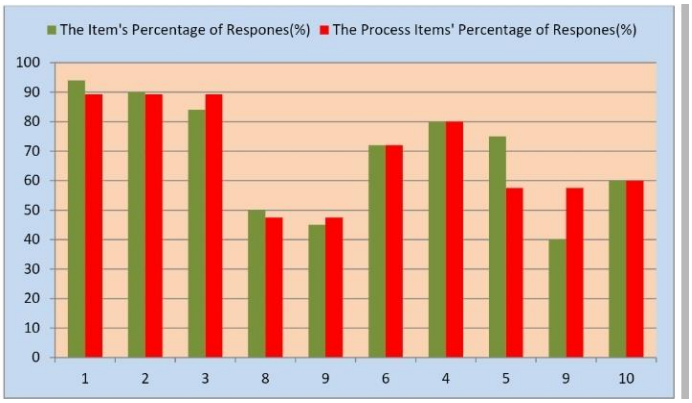

Figure (1): Iraqi EFL Learners' Recognition of Phonetic Process Terms

It has been proved that Iraqi EFL learners encounter a grave difficulty at the production level of phonetic processes. In fact, the picture is reversed in the production part where one finds severe defect in the learners' performance as illustrated in Table (1) and Figure (1) which are stated above. Assimilation phonetic

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process, tested in items (1), (3) and (7), sees a failure on the part of the testees where their performance stands only at (41.6%). Item (1) which is designated to check the term of assimilation itself, obtains only (35%) of the correct answers, a compelling evidence of the students' restrictive expressive abilities in the target language since they usually opt for short answers. By contrast, item (3), which stands at (50%), displays a performance better than item (1) because it demands a short answer, while item (7), which requires an expressive term naming the phonetic process of assimilation, also displays a deficiency on the behalf of students (40%) with little advance in comparison with item (1) as it is stated more clearly, a tendency which is highlighted by Aitchison (1999: 43). Epenthesis phonetic process, which is concluded in items (4) and (9), scores only (27.5%) of correct answers. The insertion of a sound in English is not a predictable feature for foreign learners. As such, failure occurs in this regard. Similarly, those learners are not concentrating on elision, which is codified in items (2) and (5). So frequent in their mother tongue, a feature that James (1980: 45) calls 'interference'.

The testees in question have encountered an insurmountable problem when they try come to handle epithesis, which is encoded in item (10), where their performance only stands at (10%) of correct answers. The reason for this falling, thinks the researcher, is that this phonetic process is not familiar for all learners and the students are not accustomed to learn it. Additionally, the process at issue is not extensively discussed in the text-books allotted for the students, though it is raised sporadically in some books on phonetics and phonology (ibid.).

In fact, this disappointed performance is associated with rare treatment of such a phonetic process in the text-books allotted for the learners in question. Additionally, the teaching staff, who is supposed to be highly qualified in their specification, do not touch upon this phonetic process because of their incompetence in this paradigm. Put differently, some Iraqi academic institutions, including Al Muthanna University, lack competent teachers and, in consequence, they resort to teachers who are poorly paid and of temporary presence, who are not thinking of their scientific advancement in their academic field. Item (6), which draws upon metathesis, represents a grave difficulty as is clear from their very poor achievement (20%). This is due to scarcity of this phonetic phenomenon in all languages; that is to say, Iraqi learners do not master such a process in Iraqi-Arabic and

Classical-Arabic, and if so how can they manipulate it in English language? This problematic issue is underscored by Games (1980: 44). The learners in question are likely to stigmatize the metathesized forms as illogical and unacceptable as Fromkin et al (2007: 200) say. The table below illustrates EFL learners' performance of the processes under study:

EFL Learners' Production Achievement in Phonetic Processes					
No.	Phonetic Processes	Items	Correct Responses	Percentage	Total Percentage
1.	Assimilation	1	35	35%	41.6%
		7	40	40%	
		3	50	50%	
2.	Epenthesis	9	30	30%	27.5%
		4	25	25%	
3.	Metathesis	6	20	20%	20%
4.	Elision	2	30	30%	32.5%
		5	35	35%	
5.	Nasalization	8	30	30%	30%
6.	Epithesis	10	10	10%	10%
Total		10	305	305%	166.5%
Average			30.5	30.5%	27.7%

Table (2): Iraqi EFL Learners' Production in Phonetic Processes as Marked by Degrees (The Total Degree for this Part is also 100 Marks)

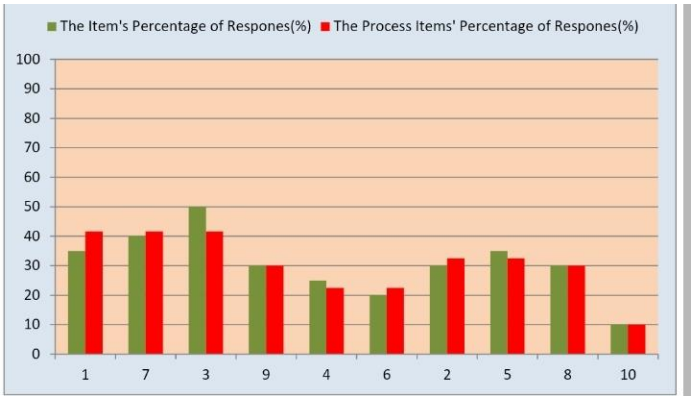

Figure (2): Iraqi EFL Learners' Production of Phonetic Process Terms

It is noteworthy that EFL learners' performance is disappointing in production part of the test as shown in Table (2) and illustrated in Figure (2) stated above. Frankly speaking, the learners' deteriorated performance in all linguistic features, particularly phonetics and phonology like phonetic processes, is connected with the educational policies followed in Iraqi educational institutions which are allowed to make short-term contacts with teaching staff whose scientific status is not so trustworthy, especially those who were studying abroad. By the same token, the electronic learning has a negative aspect upon the learners' scientific achievement nd their level for many reasons the key one of which is it is a new experience and hence, was a confusing practice for both the instructor and the learners. The internet and power cut in Iraq further worsen the pedagogical situation where the interaction and

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communication are impaired to a very considerable extent. Besides, the learner is not highly motivated by such a kind of learning and this confusion is linked to an unfair evaluation system, which is problematic in nature. The main disadvantage of this assessment lies in the fact that it is nearly free of verbal interaction and is wholly based on written form, a measure that minimizes, if not abolishes, the students' interaction and denies them the opportunity to engage in the phonetic processes which are badly needed in spoken English.

Conclusions

The mastery of phonetic processes in all languages is a real challenge. Phonetic processes in English is a problematic issue that can hinder foreign learners' achievement and evolution in English acquisition. As a result, the researcher finds it necessary to pinpoint these impediments in this regard. Consequently, this study comes up with the following conclusions:

1. Iraqi EFL learners perform better in recognition part (67.7%) than production one (27.76%).

2. Iraqi EFL learners perform well when they answer the questions related to assimilation in both recognition and production (89.3% and 41.6% respectively).

3. The questions concerning metathesis and epithesis are a challenge for Iraqi EFL learners. Consequently, the learners' performance in production is nearly handicapped in this area (20% and 10% respectively).

4. As regards elision, the majority of the examinees (80%) perform this process successfully in the recognition part while others encounter a grave difficulty (32.5%) in the production part, an indication of the incompetency in this respect.

5. Epenthesis phonetic process witnesses failure (27.5%) in the production part by the learners in question in comparison with EFL Iraqi learners' performance with regard to the recognition part concerning the results (47.5%) of the same process.

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Appendix

The Questionnaire Form

Part I (Recognition): Choose the right answer.

1. …….. is a phonetic process by which a given sound is affected by a neighbouring sound.

A. Assimilation B. Metathesis C. Elision D. Epenthesis

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2. The word (newspaper) is pronounced as [nju:speipə] with [s] not [z] due to assimilation on the basis of …….. .

A. place of Articulation B. voicing

C. manner of Articulation D. none of the alternatives above

3. The suffix (- ed) in the word (wanted) is pronounced similar to the one in …… .

A. relieved B. decided C. hoped

D. laughed

4. In rapid Arabic speech, the word (February) is heard as [febri], a phonetic process called …….. .

A. assimilation B. elision C. metathesis

D. epenthesis

5. Nasalization demands that the vowel in the word (room) is pronounced …….. .

A. [o] B. [u] C. [u:̃] D. [o:̃]

6. In Iraqi dialect, some people say [كرهباء] instead of [كهرباء], a phonetic phenomenon referred to as …… .

A. assimilation B. epenthesis C. metathesis

D. elision

7. The word (once) is occasionally pronounced [w^nst]. This process is termed as …….. .

A. metathesis B. epithesis C. assimilation

D. elision

8. In casual speech, we unconsciously say [s^mpϴiŋ] when pronouncing something; that is to say, we insert the sound [p], a phonetic process termed …… .

A. assimilation B. epenthesis C. metathesis

D. elision

9. Epenthesis is a process by which we can …….. a new sound segment.

A. delete B. substitute C. reverse

D. insert

10. In nasalized sound, …….. goes through the nose.

A. some of the air B. all of the air

C. none of the air D. none of the above alternatives

Part II (Production): Write the most suitable word in the blanks.

1. ……. refers to the influence that one sound exerted by the neighbouring sound by copying some of its phonetic features.

2. The expression [fiʃ n tʃips] with the absence of [d] in addition to the vowel in the word (and), a process which can be labeled …… .

3. The phonetic transcription of the noun phrase (that boy) is …….. .

4. Some English speakers pronounce the word (film) as [filum] instead of [film] by incorporating [u] before [m], a process that is phonetically called …… .

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الإدراكية و الإنتاجية عند استخدامهم لتلك العمليات الصوتية في اللغة الإنجليزية, و نتيجة لذلك فأن عيّنة الدراسة اخذت (100) طالبا كعيّنة للاستبيان الذي أنشا خصيصا لهذا الغرض على أمل اكتشاف اداؤهم في هذا الجانب. و لأن العمليات الصوتية تمثل تحديا صارخا و مشكلة مستعصية لجميع المتعلمين الاجانب الذين يدرسون اللغة الإنجليزية كلغة أجنبية و خصوصا المتعلمين العراقيين, فأن هذا البحث يؤكد على اداء اولئك المتعلمين (بجانبيه الإدراكي و الإنتاجي) و على هذا الاساس فأن المشكلة التي تم تحديدها فقد تمت مناقشتها من كل جانب و أن النتائج التي تم التوصل إليها في هذه الدراسة ستكون ذا فائدة لمتعلمي اللغة الإنجليزية الاجانب بشكل عام. لقد تمت المقاربة للدراسة الحالية بواسطة التطرق للفروقات بين المنهج الصوتي (الفونيمي) و المنهج الصوتي (الفوني) و الخوض في العمليات الصوتية الفونية عند إنتاج الصيغ اللغوية للغة الإنجليزية. و أخيرا تم التوصل إلى مجموعة من الاستنتاجات بهذا الشأن و ملحق عن الاسئلة التي تم توجيهها للطلبة الخاضعين للاختبار المذكور.

الكلمات المفتاحية: عمليات, الفونية, الفونيمية, الإداء, الإدراك, الإنتاج, المتعلمين, الصيغ.

5. The phonetic transcription of the word (police) is …… .

6. Some American English speakers pronounce the (first) as [frist] instead of [fə:st], a phenomenon referred to as …… .

7. …… is a phonetic process where two different sounds having different properties are juxtaposed as in the sequence [sϴ] as in the word (sixth) [siksϴ].

8. Nasalization is a phonetic process that demands …… of the soft palate (the velum) to let the air escape through the nose.

9. The insertion of [p] after the nasal [m] as in 'empty' [empti] can occur in some speakers' pronunciation. This phonetic process is called …… .

10. The word (across) is pronounced with [t] at the end as if it were (acrossed) [əkrost]. This phonetic process is called …… .

اداء المتعلمين العر اقيين الدراسين اللغة الإنجليزية كلغة أجنبية على المستوى الجامعي في العمليات الصوتية (الفوني)

م. يوسف طارش هلال العميه

جامعة المثنى/ كليّة التربية للعلوم الإنسانية

المستخلص

تهدف هذه الدراسة الى التقصي عن امكانية طلبة الجامعة العراقيين الدراسين اللغة الإنجليزية كلغة اجنبية في استخدام العمليات الصوتية فيما يخص اداؤهم المتمثل في ادراك و انتاج تلك العمليات. هذا يعني إن البحث يركز على قابليات الطلبة

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