Flapping as a Transitional Characteristic in the American English Utterance

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Abstract
This research investigates the process of flapping in American English pronunciation, flapping in American English occurs when /t/ or /d/ comes between a stressed and unstressed syllable. In this case, /t/ or /d/ considers as an alveolar flap [ɾ]. In many kinds of the English language, [ɾ] can be appeared as an allophone of rhotic [r], and this is recognized in intervocalic environment, and also in Scotland, the usage of [ɾ] is popular and differs in frequency according to the sociolinguistic and phonological situations. Flapping is also called as (Tapping, Alveolar flapping, Intervocalic flapping and /t/ voicing), flapping is one of the transitional characteristics in phonology, and it concludes a voiced alveolar flap segment, it is occurred in different kinds of the English language pronunciations, for example, North America, Australia and New Zealand. In flapping, the voiceless alveolar stop consonant /t/ is uttered as voiced alveolar flap [r], this phoneme is generated with shortened tapping of the alveolar ridge with tongue when it occurred between vowels. The flapping of /t/ and /d/ is a major characteristic in North American English, and many phonologists regard it as compulsory characteristic for the American People.

Keywords: Flapping, Transitional Characteristics, American English, Alveolar Flap, Nasalization, Ambisyllabicity

1. Introduction

The transitional characteristics in utterance interest in the articulatory movements of the vocal system, the transitional procedures contain (Flapping), Flapping is relevant to the effective articulator when the articulator approaches to the passive one. There are different characteristics concerning English flapping which are noticed by many linguists, one of these notices is mentioned by the flapping itself. **Klatt (1975: 699)** suggests that the voiced-voiceless pair shows various closure periods in identical intervocalic situations. The articulatory investigations have presented that the flapped segments /t/ and /d/ occur closely according to closure periods, and their assimilation is not integral.

English flapping is predominantly mentioned in the linguistic situations as a normal principle which generates allophones in clear phonological situations. **Akmajian et.al., (1984:134)** suggest that flapping is relevant with the intervocalic /t/ when the preceding vowel is stressed, linguists do not accept the cases in which flapping occurs or the phonemes that flapping intents.

During previous decades, many researches have discussed the phonological principles with regard to different phonetic/phonological connections with different phonological characteristics.Flapping in American English is considered as categorical phonological principle when /t/ or /d/ is changed to a flap before an unstressed vowel, and this principle is treated as facultative conditionand it is used in rapidand occasional conversations.

Modern linguistic researches try to explain the discretional situation of flapping by studying the appearance and the relationship of flap segments with the prosodic structures. Furthermore, linguists think that flapping is a standard style of phonetic and phonological modification.

2. Flapping in American English Pronunciation

The phonological principle of flapping refers to the variation of the intervocalic /t/ and /d/ to [ɾ], and in the making of flapping, the tip of the tongue approaches quickly upward and downward to generate a short connection with the alveolar ridge.

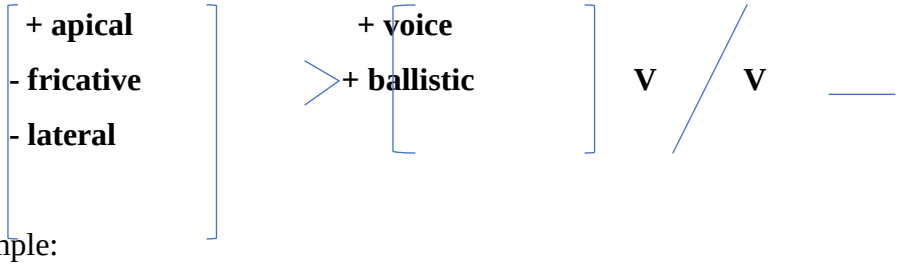
Scott and Cutler (1984: 451) state that the usage of flapping principle specifies homophonous utterances for words as in: (liter and reader) as in [liɾr], the flapping principle also

occurs in a word limitation, in this sense, the structure (met Ann) [met æn] will be uttered as [meɾæn]. The principle of palatalization uses the intervocalic /t/ and /d/ in the condition of the following /j/, in this condition /t/ will be appeared as /tʃ/ and /d/ as /ʤ/, palatalization is similar to flapping and palatalization also takes place in word limitations, for example:

- did you /dɪdju:/[dɪdʒju:]
- meet you /mi:tju:/ [mi:tʒju:]

The usage of these principles is not existed when the word limitation between the plosive and the following phoneme is an essential syntactic limitation.

Shockey's (1984) investigation on the American flapping has presented that the American flapping can be clarified in the following principle:



For example:

Sitting [ˈsɪɾɪŋ]

Padded [ˈpæɾɪd]

got a [ˈgɑɾ ə]

had any [ˈhæɾ ɛni]

to do [təɾu]

got to [ˈgəʊɾə]

This principle is appeared as compulsory in the pronunciation of American people. It is completely articulated /t/ or /d/ is recognized in the situations occurred when the speaker wants to mention with pronunciation how a word is uttered and to explain an inaccuracy. In fact, flapping includes complicated situations elements which are appointed with Shockey's (1984) investigation, the flapping of /t/, /d/ and /n/ can take place before /h/ or with the syllabic /l/ in sequences, and also in the types of stress structures. (**Shockey, 1984: 89**).

According to **Laver (1994: 145)** flapping is an aspectual procedure and it is physically distinguished by the rapidity of the vocalization, and it requires a dynamic articulator

approaching to a passive articulator, flapping is distinguished as a part of articulation used with stop segments and lateral resonant.

Flapping is an approach where a dental or an alveolar segment vocalization and it is replaced to [ɾ] vocalization. In American English, this style is used for [t] and [d] when they exist between vowels, flap segments are recognized in the spontaneous speech vocalization of words, i.e., butter, writer and waiter. Flapping is also existed in phrases, i.e., (I bought it) [aɪbɒɾɪt], the alveolar flap segment is commonly voiced. **(O'Grady et.al.,1997: 47).**

American flapping is considered as an absolute phonological principle when /t/ and /d/ change to flap before an unstressed syllable. This principle is regarded as discretionary case and it happens in informal conversations. Current phonetic investigations are aimed to expect the supposed possibility of flapping in analysing the appearance of the flapping and if it is identified with prosodic elements or not. Another assumption is that the flapping styles are conclusions of paradigm similarity limitations. The notion of paradigm similarity has been suggested as a part of the phonological fields. (**Riehl, 2003: 2753**).

Many phoneticians and phonologists consider flapping as a compulsory phonological feature for American according to natural situations when there is /t/ or /d/ come before a stressed syllable and come after unstressed syllable. American speakers can undoubtedly prove a reasonable intervocalic /t/ or /d/ in their normal speech. Some points for flapping of American English are:

1- It appears with a sonorant phonemes other than /l, m, ŋ/ and with some limitations for /n/.

2- it occurs before an unstressed vowel inside the words or it can be occurred before any vowel in the other side of the words' limitations.

3- It cannot occur in the initial positions of the words and at the beginning of stressed syllables. **(Shockey, 2003: 29-30).**

The appearance of flapping can be categorized to the social factors, **Kreidler (2004: 110)** suggests that the speaker is possibly has the sense that the non-flapped consonants are correct, and he utters distinguished consonants in different situations effectively.

According to **Lee (2004: 30)** flapping is a typical characteristic which identifies British English from different varieties of English. It is distinctly an extensive characteristic in North

America, the inexact position of flap may refer to the speaker when he does not pronounce the variety of English used in North America or he is a non-native speaker of the English language.

Flapping in American English is lenited shape of [t], [d] or [n] and it appears when one of these consonants comes intervocalically before unstressed syllables, for example, ladder and enter. Flapping is not appeared in initial word structure, as in: (top) or before a stressed syllable as in: (baton) or after a fricative segment as in: (pasta) and (after). Flapping takes place in word boundaries as in: (caught), (said it) and (paid her). **(Bauer, 2005: 31).**

Flapping may be inconstant relying on the phonological situations, regional and style influences. In addition, the intervocalic glottal segment is absolutely not occurred in word-medial position, so the glottal stop can come before /n/, as in (button) in American pronunciation or before /l/ as in (bottle). **(Trudgill and Hannah, 2008: 45).**

Gut (2009: 59) mentions that the alveolar stops /t/ and /d/ are generated with the tip of the tongue approaching the back of the teeth and in this case the segment has an interdental point of articulation, these segments are characterized as an alveolar tap [ɾ], and this phonological style is recognized as (Flapping) and sometimes is called (Tapping), flapping is found in words, i.e., letter [leɾr], writing [raɪɾɪŋ] and startle [staɾɾt], flapping is also used in phrases, such as : at all [əɾɔːɬ], eat up [ɪɾʌp].

The common application of flapping in American English differs from British English. The flap segment contains one flick of the tip of the tongue with the alveolar ridge, the flap segment is transcribed as [ɾ], and it is significant to realize that the flap segments do not come when the alveolar segment comes before the stressed syllable. **(Reetz and Jongman, 2009: 40-41).**

One of the most important features of American English is the common occurrence of the coronal flap [r] as a transformation of /t/ and /d/, and the foundations which take place because of the distributional popularization of the flap have guided the phoneticians and phonologists to notice the flapping development is founded on the syllable association, i.e., a coronal one syllable and the onset of the following syllable. The coronal plosive is recognized as a flap when it comes before a stressed vowel and followed by an unstressed vowel directly, as in: (Italy) [irali]. (**Goldsmith et.al., 2011: 191**).

In flapping, the alveolar stop /t/ or /d/ turn to alveolar flap, the flap sound is mentioned in IPA by the symbol [ɾ]. There are various opinions which are suggested to elucidate how properly the variation occurs from stop to flap, and it appears plausible to think that it is a state of articulatory reduction. In addition, the extended obstruction is relevant to the stop which is exchanged by a short approach of the tongue tip with the alveolar ridge. Realizing flapping as weakening procedure is not appeared as sufficient activity from an articulatory opinion, but it contains sense and meaning when it is implied in the contexts when it takes place in the English language. (**Romero and Riera, 2014: 104**).

Flapping in American English can be appeared as the segment created when the tip of the tongue softly approaches the roof of the mouth. Fapping is usually performed in two-syllable words, the first syllable is stressed and it ends with a vowel or /r/, and the second one starts with the letters (t), (tt), (d) and (dd) and followed by a vowel sound, for example:

- reading [ˈriːɾɪŋ]
- letter [ˈleɾər]
- party [ˈpɑːrɾi]
- city [ˈsɪɾi]

Flapping can be occurred in other words, such as:

- elevator [ˈelɪveɪɾər]
- alligator [ˈælɪgeɪɾər]
- comedy [ˈkɑːməɾi]
- president [ˈprezɪɾənt]

Flapping is also existed in two words, as in:

- a lot of [lɑːɾəf]
- said it [seɾɪt]
- it is [ɪɾɪz]
- did it [dɪɾɪt] **(Lems, 2019: 71-72).**

The articulatory procedure of flapping as a phoneme in which a compendious touch between the articulators created by approaching the effective articulator accidently to the position of the approaching and it touches the upper roof of the vocal system. Flapping is a clear characteristic in various dialects of North America and the existence or ambiguity of flapping in

words may be applied as criteria to discover and regulate the modification in articulation. **(Ekpenyong and Udoh, 2022:593).**

3. The Kinds of Flapping

Indeed, there are two different kinds of flapping. In the first kind of flapping, the articulator moves from its place and approaches to the stable one and coming back to its main place, this kind of flapping is known as (**Flick Flapping**) and it is transcribed as [ɾ].

The second kind of flapping, when the flapping articulator completes a quick activity from the beginning place to a specific ending place and approaching the stable articulator, this kind of flapping is called (**Retroflex flapping**), this kind appeared in many Indian and African languages, and it is transcribed as [ɽ], in the utterance of retroflex flapping [ɽ], the tongue tip is raised and sometimes slightly lowered. Another form of this kind is the (**Transient flapping**), in transient flapping, in this form the active articulator temporarily hits the stable articulator and it is identified as (labio-dental flap), and it is appeared in some West African language, i.e., Magri language. (**Catford, 1977: 129**).

4. Flapping and Nasalization

The flapping of the alveolar nasal segments /nt/ is mostly analysed from a phonological view for many years ago. **Kahn (1976: 58)** indicates that when /n/ comes before a flap, it cannot be a consonant and it nasalizes the vowel before it and it is omitted. According to Kahn's opinion, the pronunciation of (winter) becomes [wɪɾə]. Kahn's opinion can be summarized as:

/t/ ⟶ /d/ [Consonants] - [+ syllabic]
[- syllabic]

Zue and Laferriere (1979: 1045) refer that the important difference between the articulation of /t/ in post-nasal place. They suggest fully articulation, such as:

- minty [mɪntɪ]

Or can be deleted as:

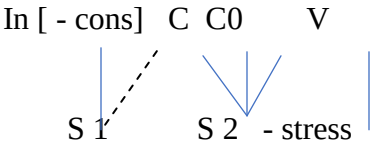
- pentagon [ˈpenə̹gʌn]

In **Jensen's (1993)** explanation, the nasalization does not occur immediately with the nasal segment, Jensen affirms that the preceding vowel will be nasalized first and followed by the omission of the nasal segment and then the flapping will occur.

Flapping influences on the alveolar nasal in the same situation, i.e., /t/ and /d/, this idea is propped with **Picard's (1997)** and **Vaux's (2000)** investigations, Vaux emphasize that the nasal /n/ can be regarded as a flap segment after the stressed vowels and this flap segment varies from the flapped stop segments. Picard also gives an example for the structure homophonous between (winter) and (winner) [wɪɾə] to explain an easy part of flapping activity exactly. **(Garai, 2023: 5-6)**.

5. Flapping and Ambisyllabicity

The appearance of the alveolar phonemes as flaps may be expected with pointing to the syllabic structure idea of ambisyllabicity, and it is mentioned as follows in word-medial consonants.



(Kahn, 1976: 55-56)

Selkirk's (1982) investigation of flapping unlike Kahn's (1976) investigation, Kahn classifies consonants as ambisyllabic and they are syllabified according to the coda which comes before the syllable, but Selkirk refers that the re-syllabified consonants act as they are fundamentally syllable finality, this is the characteristic of the syllable finality which regards to the flapping condition. (**Turk, 1992: 105**).

6. Conclusions

1- The flapping of /t/ and /d/ is an exemplary feature in American English and it has standard foundation in North American pronunciation and it is usually audible in the American conversations.

2- In north American speech, the intervocalic /t/ is generally regarded as a tap or flap repeatedly with voicing, because /t/ is considered as of the commonest salient features of the American English.

3- In different types of the American pronunciation, the vowel length does nor rely on the flap, but it also relies on the implicit voicing of the next /t/ or /d/.

4- Many linguists mentions that the flapping principle is omnipresent in North America pronunciation, the American native speaker uses flapping 100% of the intervocalic /t/.

5- Flapping does not occur in initial positions of words.

6- Flapping is regarded as a kind of assimilation because it modifies the non-continuant phoneme to a continuant one, and the assimilation in voicing takes part in the modification of the voiceless [t] to voiced [ɾ].

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