IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Cognitive and Phonetic realization of laterals

Suha Mahdi Hussein

Ph.D. Scholar at Gujarat University- College of Arts

Prof. Dr. Nilotpala Gandhi

Abstract

This paper attempts to make an account for a sound by describing it from the phonological point of view, on the one hand, and from the phonetic point of view, on the other hand. The paper sets out to draw borders between l- sound and the other sound contained in the English language system. It is necessary for the purposes of phonetics to be able to describe such a sound, in fact all the sounds, of a language depending on its features so that it can easily be put into a category and to find out whether it can be affected by the features of another category. L-sound belongs to the consonant category that can be voiced in context. The whole result clearly makes up certain guidelines for foreign learners to overcome the difficulty of pronunciation due to their lack of some phonetic and phonological knowledge and other minor related linguistic factors.

1.Introduction

This paper focuses on an important sound in the sound system of English language . Students of language are very interested in producing sounds in the right way. This research project deals with l-phoneme, an abstract unit that plays role in a functional contrast, and with l-allophones that play role in context. It is a linguistic unit that performs a certain function in communication. By using its allophones, the pronunciation would be more effective as they give the word the accurate phonetic form. But it is definitely insufficient to know the abstract facts about the phoneme unless learners know how to pronounce it correctly in speech . Thus, the pronunciation of this sound , in most cases , seems to be phonetically determined since it is determined. By contextually factors . But, it is sometimes phonetically determined and this will be shown later in the paper. However, Iraqi learners may mispronounce the sound and may not realize its allophones as the speak . As a result, they fail to cause an effect on hears. In other words, Iraqi learners need to understand the importance and purpose of pronunciation in communication (i.e. when the message is transmitted vocally through the air). The learners may clearly be influenced by their own culture and mother tongue, when trying to pronounce the sound. Phonological and phonetic knowledge about l-sound may help them to overcome this difficulty.

2-Articulatory features

As other consonant in English language, l-sound is consonant that has certain properties in common , which identify it in contrast to vowels. L- sound , like the other consonants sounds in the language is produced with an air-stream coming from lungs, moving outwards (O'conner,1973:25) .

It has certain articulatory features. Phoneticians make use of a classification based on the place and manner of classification . Let us find out now the way of interfering with air-stream and the organs that are involved in making the interference with the air-stream initiated by the lungs.

2-1 Place of articulation

This criterion is needed to know where in the vocal tract the lateral sound is made, and which vocal organs are involved in its articulation .

In almost all other consonants in the language, there is a central passage of the air-stream, i.e., they may entail contact of articulators at the sides of the vocal tract, through the centre of which the air-stream then escapes (Abercrombie, 1967:45). But for the production of l-sound, there is a complete closure between the centre of the mouth where contact is to be made along the centre (i.e. laterally). Thus, there is a lateral passage , not central (Crystal, 2003: 243) . from a phonetic point of view, l-sound is generally referred to as alveolar, sine it is articulated using the blade of tongue close the alveolar ridge (the gum)
(Crystal,2003:243)

Gimson (1980, 201) maintained that there a partial closure made by the tip of the tongue against the upper teeth ridge while the soft palate being in the its raised position blocking the nasal resonator. It can be also dental lateral when the sound occurs before /θ/ and /ð/ as in 'health' and 'them' (O'conner,1973:148). Furthermore, it becomes a post-alveolar lateral before a post-alveolar / r, tr, dr/ as in bell-rope, and it is indicated by the symbol (l̠) (Well and Colson , 1971:110) . Other common places for laterals are palatal, where there is a contact between the tongue front and the hard palatal lateral found in Italian in words like 'ogilo', and retroflex laterals are commonly found in Italian language (O'connor, 1973: 53)

l-sound is termed approximant because its articulators approach each other but do not get sufficiently close to each other to produce a complete consonant (Roach, 2007: 62) . This stricture may impede the air stream sufficiently to cause audible friction at the point of articulation. This approximation is called close approximation of articulators as in the' lan '. The open one is made when the air-stream pass without audible friction as in English 'lull' (Abercrombie, 1967: 45).

2.2 Manner of articulation

The English l-sound is referred to as a later constant (Laycock, 1972: 140). In other words, it can be said that 'lateral' is " a term used in the phonetic classification of consonant sounds on the basis of their manner of articulation(Crystal, 2003: 206) . Now, we need to know how the sound is articulated, at various locations in the vocal tract.

In a lateral constant, the message of air through the mouth cavity does not go in the usual way along the centre of the tongue (Roach, 2007: 61) ; instead, it is blocked along the median line (O'connor, 1973: 53). Thus, the air is forced to escape round the sides of the blockage (Wells and Closon, 1971: 26). The air is " free to pass over the sides of the tongue are not in contact with them (O'connor, 1973: 148). The air-stream is able to flow either through one or around both sides of the tongue (Gimson,1980: 199) . A lateral sound is called bi-lateral, if the air-stream escape round both sides of central obstruction, and it is termed un-lateral when the stream of air escape round one only of the central obstruction (Abercrombie, 1967: 50). The sound in English word 'lull' is of the former kind, and that in welish 'llan' is of the later. Since the term lateral suffices, it is preferable not to use these two terms because the difference between these two lateral sounds is small to the air (Abercrombie, 1967: 50)

The movement of the sides can be observed by making a comparison between the sound /l/ and /d/.In making them, we can feel how in each the articulation is made by the tongue tip against the alveolar ridge, while the soft palate stays up and the vocal cords vibrate. But there is a difference, which is that, for the lateral, the sides are down where the air is allowed to escape laterally. For the plosive, d , they are up, preventing the air-stream from escaping laterally (Well and Colson , 1971:66). It is also possible to see this movement by using a mirror with opening the lips while the lateral is being produced (Roach, 2007: 61)

3- Allophonic Variants of l- Sound

l-sound, like other phonemes in the language, is realized by different allophones , i.e., the similar variants or members of the same underlying unit (Crystal, 2003,: 347) . Now, it is needed to refer to the phonetic specification of the sound (phones) heard in speech. All phones of the same phonemes are different ,i.e., no two realizations of a phoneme are the same .The phonetic or allophonic variation of phoneme due to either to the context, i.e., the influence of the adjacent sounds, or the position of the phoneme in the word or syllable that affects its quality (Gimson, 1980: 52). In this way, l-allophones is specified.

3-1. Dark [l] allophones

The distribution of l is not limited. This means that it can occur initially, medially and finally. In the case of dark l , the sounds to be found before a pause as in eel /i:l/ or [i:ɬ] and before consonant, as in eelz . it never occurs before a vowel (Roach, 2007: 61). Here, the difference in quietly is related to position of the phoneme. It has been said earlier that the main articulation of l-sound is the tip[of the tongue against the teeth-ridge.

The allophones, with which we are concern real now, differs from the others in the position of the rest of tongue. The front is slightly hollowed and the back is raised towards the soft palate, giving a back vowel resonance (Gimson,1980: 202) . "it has a quality rather similar to[u] vowel " (Roach , 2007: 61) . all this means that this allophones has a primary and secondary articulation. Laycock (1972: 141) used the termed, which a phonetic one, velarized to show this modification as a secondary articulation. Velarized means that "the back of the tongue is raised towards the soft palate ".

The following figure introduced by Crystal (2003: 245) shows the shape of the tongue :

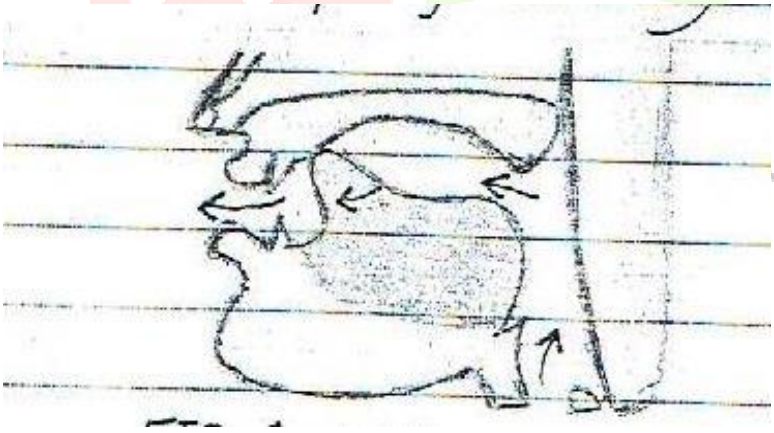


FIG.1 /l/ (dark [ɬ])

l-sound is called liquid . the actual point of contact of the tongue for [ɬ] is conditioned by the place of articulation of the following consonant. The lateral phoneme can be velarized dental [ɬ̪] (Lass, 1954: 22) . It has a dental contact (i.e. dentalized) caused by preceding /θ, ð/ sounds in words. If the allophones is followed by a nasal consonant, it is strongly nasalized, e.g., elm, kiln. In a word like 'already' , the contact for [ɬ] is to be past alveolar. The position of the lip for [ɬ] is effected by the nature of the adjacent vowel, and there is a tendency, with some speaker, to lip rounding. (Gimson, 1980: 202).

3-2 .Clear [l] allophones

This allophone occurs before a vowel and /j/ . It will never occur before consonant or before a pause . it can be found in word initial-level , let, in word medial-level, yellow, silly and in word final when it is followed by a vowel-feel it (Gimson,1980: 200F). here, the difference of quality of the phoneme l is related to the position in which it occurs like dark l, clear [l] has also primary articulation, similar to that of dark [ɬ] and secondary articulation, that makes it different from the other allophones of the phoneme l. As it is stated by O'connor (1973: 148) , the front of the tongue is raised towards the hard palate, giving a front vowel resonance to the consonant , it resembles an [i] vowel as in 'eel' /i:l/ or [i: ɬ] (Roach, 2007: 61) . This indicate that this allophones is nonvelarized (lass, 1989: 22) . Laycock (1972:141)makes use of the phonetic term ' palatalized to indicate the secondary articulation of this allophones, that means " the front of the tongue is raised towards the hard palate" . The following figure introduce by Crystal (2003: 245) indicates the tongue shape :

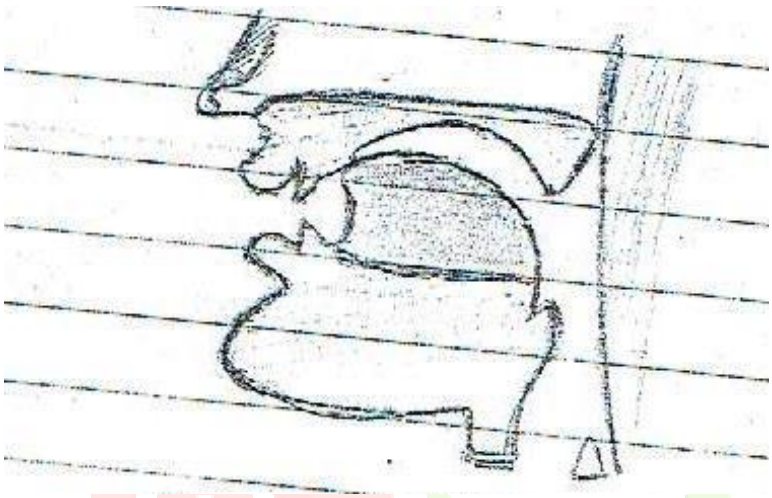


FIG2. /l/ (clear [l])

We conclude that the two allophones of l- sound, dark and clear, can be found initially, finally, with the tip of the tongue against the alveolar ridge and the air is allowed to escape laterally. But they differ in quality (or resonance or colour or timbre) because of the body of the tongue that has different positions . Both of them are voice . They are dissimilar, but not contrastive (phonemes) (wells and Colson, 1971: 82) . They are in complementary distribution. This term is used to refer to the strict separation of the places where these two allophones can occur. Dark [ɬ] will never be found in the place where clear [l] is to be found (Roach, 1007: 62). Like dark l , the place of articulation of clear l can be affected by that of the preceding consonant , e.g., it is dentalized before /θ, ð/ as in ' with love' . The position of the lip is also influenced by the adjacent vowels (Gison, 1980: 202) . Germen [l] is very clear in all position . for example, the German for milk milch, in which the symbol / ˡ / is used to denote this specially clear l (Wells and Closon, 1971:78) . Going in the opposite direction from a starting point of the alveolar ridge, we can make retroflex /l/ sound by curling the tip of the tongue backwards against the alveolar ridge , and the symbol / ɭ/is used to indicate this sound (Ibid: 88)

3-3. Devoiced [l̥] allophones

Some consonant require the vibration of the vocal cords . these are called voiced consonant ., and we have seen this phenomenon in the case of dark and clear allophones of the phoneme l . Others do not involve the vibration of the vocal cords which are called voiced, may lose a great deal of their vibration , so that they use to be called devoiced . this term will be used to refer to one of the allophones of l-phoneme. Before talking about devoiced l, lets know something about the phonetic process called aspiration . (Crystal (2003: 37) state that the plosive sound in a word as in 'pin' is released with no immediate voicing of the vowel . there is a period of voiceless escape of breath between them, called aspiration. Thus , the plosive p is aspirated [pʰ] .

Now , we talked about the dark and clear allophones from the phonological point of view. Gimson (1980: 200) says that in the case of the voiceless fricative allophone [l̥], we describe it in the terms of a purely phonetic standpoint. O'connor (1973: 148) indicates that the lateral articulation may have voice, and in this case, it is a form of aspiration. Wells and Closon (1971:76) say that devoiced [l̥] follows accented (aspirated /p,k/ and they introduce the words 'pay' and 'play to show the aspiration and the devoicing of /l/.

They make a comparison between them as, shown in the following figure:

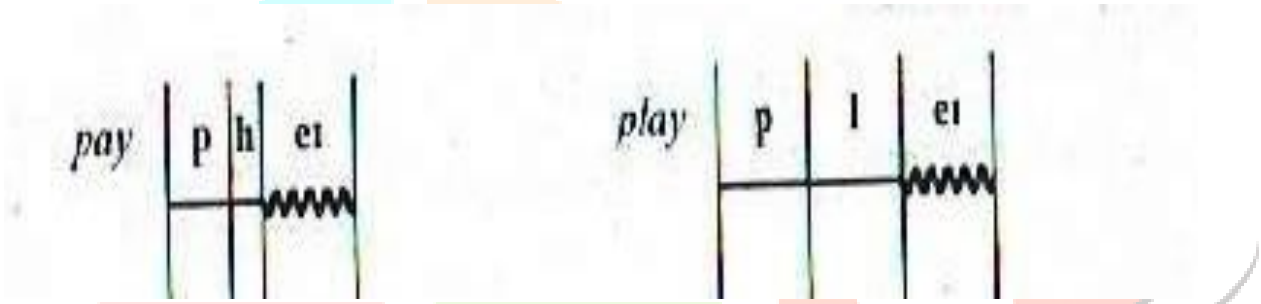


FIG.3aspiration and devoiced [l̥] allophone

In the word 'plot', it should be made clear the voiceless of /l/ in the pronunciation . if it is not done , such a word pronounce with fully voiced /l/, may be understood as blot (Gimson, 1980: 204). Ladefoged (2006: 195) made use of the word 'pleasure' , pronounced or transcribed as /pl̥eɛə/. He said most of [l̥] is "voiceless audible only by effect it has on the [p] burst and the aspiration noise" .

3.4 .Syllabic

Generally , a syllable is a sound segment that consist of a centre represented by a vowel surrounded, sometimes, by consonants, i.e., its peaks is a vowel. (Crystal,2003:246) . now, we are concerned with a type of syllable having no vowel. This syllable is called syllabic consonant consisting of l-sound as its peak instead of vowels. Crystal(Ibid, 245). Says that the vowel- like sound nature of l-sound allows it to be used with a syllable function. The allophones above is forward when l-sound is preceded by other consonants , where l-articulation is offered by the nature of articulation the preceding consonant which can be alveolear, as in 'bottle' [bɒtl̥] , or non-alveolar as in 'struggle' [strʌgl̥], so that it is allowed to be released laterally (Roach, 2007:86-87) Pike introduce the contoid syllable to refer to this 'phonetic' form of l-phoneme (Abercrombie, 1967:80) . Syllable l is preceded by a short vowel and one or more consonant, occurring in the form of 'le' or 'al' , or 'el', and it may be followed by a suffix beginning with a vowel as in 'bottling'
[bɒtl̥ɪŋ]. Compare codling (cod+ling) /kodlɪng/ and coddling (coddle+ing) /kodl̥ɪng/ the former contains non-syllabic, where the later contains a syllable l (Wells and Colson, 1971:22) .

3.5 Voiced l-sound

L -sound is spelt ll or I in words as in 'well' and 'pool' , and it is sometimes silent in post-vocalic places as in 'folk', 'chalk' . it has also a vowel-like natural (crystal, 2005: 245;261) . L-sound, like some other consonant as /w/ and /r/ is called vowel-like since it can be sounded without audible friction, i.e., it is called frictionless (ibid:242).

It should be known also that it is called approximant ,i.e., the articulators do not approach each other sufficiently as if it were a vowel (Abercrombie, 1967:45). Gimson (1980:202) says that the allophones of /l/ [ɬ], is omitted and realized as a "vowel (voiced) ". Ladefoged (2006:195;196) shows that 'a final lateral may have little or no central contact , making it not really a lateral but a back unrounded vowel. The same idea is expected by Roach ((Roach, 2007: 86) who says that this allophones is found in some accents especially London and Estuary English as in 'bottle' (botlʊ) . Wells and Colson (197:88) maintain that this allophones is used of the plosive /d/ sound in middle [midlʊ].

Some learners, foreign learners cannot differentiate between [l] and l[l] sounds. As a result , they are advised to practice pronouncing a vowel of [ɒ] type to overcome this habit (Gimson, 1980:204) .this fact shows the close nature between this vowel and this allophone of /l/.

4. Lateral approach and release

There are two types of polsion , generally, that may be oral or nasal. Oral plosion is of two types : central or lateral depending on the passage in the vocal track which is either lateral or central (Abercrombie, 1967:145) . Ladefoged (2006:,63) says that lateral plosion is "a phenomena similar to nasal plosion may take place when an alveolar stop [t] or [d] occurs before a homorganic lateral [l] as in little ."

We have talked about the difference between an alveolar lateral through making a reference to the sides of the tongue. .Crystal (2003: 260) says that plosive are release plosively, but with a lateral sound, they are released laterally. So, the sides of the tongue which are raised for the stop are released to allow the air to escape laterally (Roach, 2007 : 86) .

For example, the influence of a /d/ articulation by an /l/ articulation can be shown by taking the word 'badly' which is explained through the following figures introduced by Wells and Closon (1971:67) .

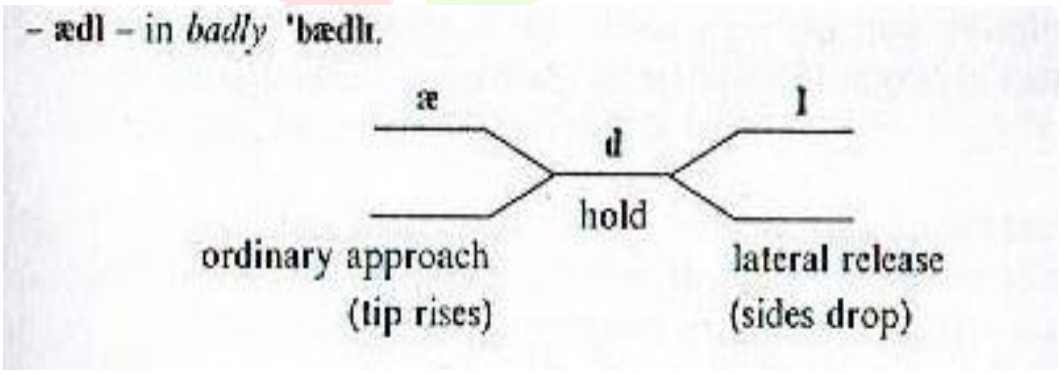
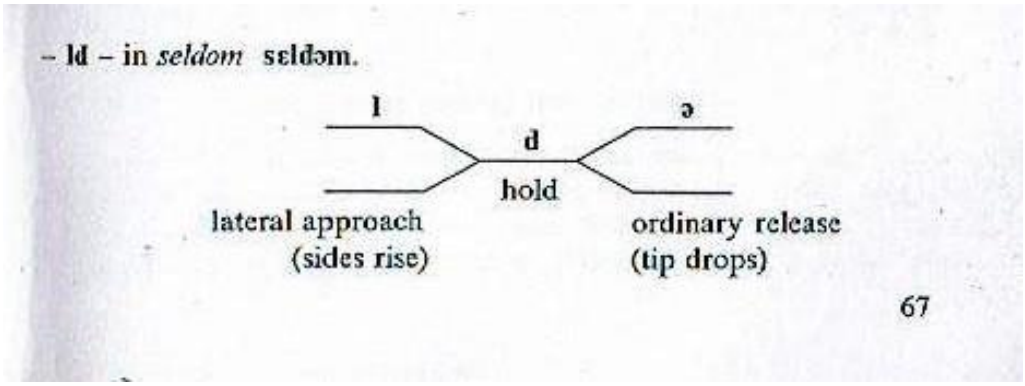


FIG4. Ordinary approach and lateral release

If /l/ release / d/ , a later approach, and an ordinary release instead of lateral release as in the following figure :

-ld- in seldom / seldom/



In phonetic transcription, it is necessary to give a specific indication of lateral plosion, so the sign /l̪/. (Aborcrombie, 1967:149) .

Conclusion

We have dialed in detail with l-sound and the various types of its allophones. This is necessary not only because of the interest the various cases present in themselves but also because a thorough knowledge of these possibilities help one to understand the phonological structure of English words at the present stage of their development. The development and change of the phonetic and phonetical structure of a sound in words is always a source of qualitive and quantitative development of the language . it represent a voiced alveolar lateral /l/ . with variation according to context. L-sound has certain features that identifying it in contrast to other consonant and vowels . from the phonological point of view , l-sound is a unit of the sound system occurring typically, at the edges of a syllable. It can also occur medially ,i.e., it is not limited in its distribution. Thus, the dark and clear allophones are said to be phonetically and phonologically determined according to their position in a vowel (i.e. after a vowel, or before a vowel and a pause) . from the phonetic point of view , it is articulated using the tongue close to the alveolar ridge but it also has a necessary articulation in certain allophones ; forming a partial closure and then the allophone is released laterally . it is a voiced lateral (i.e. requiring the vibration of the vocal cords, but in context and in certain words, it becomes a voiceless lateral .

In context, it is affected by surrounding sounds, and these sounds in turn may be affected by l-sound .

l-sound is also said to have a vowel-like nature since it can be sounded without audible friction like vowels. This characteristic allows it to be used with syllabic function. Finally, /l/ is often silent in words or replaced by a vowel .

Bibliography

Abercrombie, D. (1967). *Elements of General Phonetics. Edinburgh*: Edinburgh University Press.

Crystal, D. 2003. *A dictionary of linguistics and phonetics. 5th ed. London*: Blackwell

Gimson, A.C. 1980. *An introduction to the pronunciation of English*.

3 rd ed. London: Edward Arnold.

Ladefoged, P . (2006) . *A Course in Phonetics* . (5th ed). Thomson Wardsworth .

Laycock, Donald (1972) Towards a typology of ludlings, or play-language. Linguistic Communications 6: 61 - 113.

O'connor , J . D. (1973) . *Phonetics*. Great Britain : Hazell Watson &Viney Ltd.

Roach, P. 2007. *English phonetics and phonology*: a practical course. Cambridge: Cambridge University Press.

Wells, J.C. and Colson, G. 1971. *Practical phonetics*. London: Pitman.