



The Effect of Emphatic Consonants on Mosuli Arabic Vowels

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Abstract

The present study deals with emphatic consonants in Mosuli dialect and how these consonants affect the preceding and following vowels. It describes emphatic consonants which can be divided into two types: (1) primary emphatic consonants which are [t̤, s̤, ð] and (2) secondary emphatic consonants which are [l̤, m̤, r̤, b̤]. So twenty persons were needed for this study. Monosyllabic words (in Mosuli dialect) were presented to these persons. They were asked to read these words. Their pronunciation has been recorded and then analysed.

The study is divided into theoretical part and practical part. Theoretical part includes an introduction which gives a definition to the emphatic consonants, their types and some phoneticians who tackles them. It also includes the aims of the study, data collection and methodology. The practical part includes analysis and findings. Then comes the conclusion which sums up the results of the study.

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تأثير الحروف الساكنة المؤكدة على حروف العلة العربية الموصلية

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المستخلص

تعالج هذه الدراسة الأصوات الساكنة المفخمة في اللهجة الموصلية وكيف ان هذه الأصوات تؤثر على لفظ أصوات العلة التي تسبقها، وكذلك التي تليها. وتقوم الدراسة بوصف الأصوات الساكنة المفخمة والتي يمكن ان تقسم الى نوعين: أصوات ساكنة مفخمة أولية والتي تقع تحتها الأصوات (ظ-ص-ط)، واصوات ساكنة مفخمة ثانوية مثل (ب-ر-ل-م) وعلى هذا الأساس كانت الدراسة بحاجة الى عشرين شخصاً وعرضت كلمات ذات المقطع الواحد (من اللهجة الموصلية) على هؤلاء الأشخاص وطلب منهم قراءتها وقد سجلت طريقة لفظهم لها ثم قامت الدراسة بتحليل طريقة لفظ هذه الكلمات.

والجدير بالذكر ان هذه الدراسة قسمت الى قسمين، قسم نظري وآخر عملي ويتضمن القسم النظري مقدمة وتعريفاً للأصوات الساكنة المفخمة وانواعها، ومساهمات بعض من علماء الصوت الذين تعاملوا مع هذا الموضوع وتتضمن هذه الدراسة مجموعة من الأهداف مع طريقة جمع البيانات أما القسم العلمي فقد تضمن تحليلات ونتائج ثم الخاتمة التي تختصر اهم النتائج التي توصلت إليها الدراسة.

الكلمات المفتاحية: الحروف الساكنة المفخمة، اللهجة الموصلية، البلعومية، الحلقية، اللهوية.

Mosuli Arabic Consonants

[ʔ] as in	[ʔasad]	"lion"
[b] as in	[ba: b]	"door"
[p] as in	[parda]	"curtain"
[t] as in	[ti: n]	"fig"
[θ] as in	[θu: m]	"garlic"
[dʒ] as in	[dʒe: b]	"pocket"
[tʃ] as in	[tʃa: dir]	"car cover"
[h] as in	[ha: jīʔ]	"wall"
[x] as in	[xayʊ: f]	"lamp"
[d] as in	[do: lka]	"jug"
[ð] as in	[ði: b]	"wolf"
[r] as in	[raf]	"shelf"
[z] as in	[zaʕal]	"anger"
[s] as in	[samak]	"fish"
/ʃ/ as in	/ʃiʕ/	"hair"
[ʂ] as in	[ʂe: f]	"summer"
[ʧ] as in	[ʧi: n]	"clay"
/ð/ as in	/ðarif/	"envelope"
/ʕ/ as in	/ʕasal/	"honey"
[y] as in	[yura: b]	"raven"
[f] as in	[fa: riʕ]	"empty"
[q] as in	[qamav]	"moon"
[k] as in	[kahrab]	"electron"
[g] as in	[gara: dʒ]	"garage"
[l] as in	[laha: na]	"cabbage"
[m] as in	[maʕhad]	"institution"
[n] as in	[na: s]	"people"
[h] as in	[huda]	"a girl's name"
[w] as in	[walad]	"boy"
[j] as in	[jirsim]	"he draws"

Mosuli Arabic Vowels

[i:] as in	[ri: m]	"a girl's name"
[i] as in	[yiʕin]	"branch"
[e:] as in	[ʕe: n]	"eye"
[a:] as in	[ʕa: s]	"head"
[a] as in	[dammm]	"blood"
[o:] as in	[ʕto: h]	"roof"
[u] as in	[ruba]	"a girl's name"
[u:] as in	[bu: m]	"owel"

1-Introduction

Emphasis is a phonetic and phonemic feature of Semitic Languages such as Arabic and Modern Hebrew. It characterizes the articulation of consonants with a primary articulation in the dental or alveolar region and a secondary articulation in the back of the vocal tract "i.e., upper region of the pharynx". It defines consonants with a secondary articulation in the back of the vocal tract, while keeping their primary place of articulation. This results in a set of contrastive phonemes, one being "+ emphatic" and the other being "- emphatic". Both emphatic and plain "i.e., - emphatic" counterpart segments share the same place and manner of articulation, but differ in one feature which is emphatic or non-emphatic (1 Page 43 ; 2 Page 1).

In the Linguistics of Semantic Languages, the term emphatic consonant is used as a synonym of pharyngealized or velarized consonant, and also treated as uvularization by some scholars (3Page 190; 4 page 275, while Awaness (5 page 79-80) says that emphatic consonant is a synonym of pharyngealized rather than velarized. Arabic emphatic sounds have been of interest to many scholars such as Al-Ani (1970) (6), Zawaydeh and de Jong (2011) (7). Most of these studies have also examined Arabic dialects which in the colloquial Arabic register. Classical Arabic and dialectal Arabic have emphatic Consonants such as [ṣ , ṭ , ḍ and ḏ] (8 Page 1).

Alani (1970) (6 Page 44)) argues that there are more than four emphatic consonants in Arabic dialects and most dialects embody a larger number of emphatic consonants.

Arabic has thirty four phonemes consisting of three short vowels (li , a u/, three long vowels [i: , a: , u:] and twenty eight consonants (9 Page 814). Others like (Mohammed, 2020) (10 Page 5149) says that Arabic has 36 phonemes, six of which are vowels, two diphthongs and twenty-eight consonants. Arabic consonants can be divided into two groups emphatic and plain counterpart segments, share the same place and manner of articulation, but differ (+ emphatic) or (- emphatic) see (1 Page 43).

There are two types of emphatic consonants which are primary and secondary. Primary emphatic consonants are [ṭ , ḍ , ḏ , ṣ] that could spread emphasis over neighboring segments. Secondary emphatic consonants refer to segments that become emphatic in the context of a neighboring primary emphatic. Secondary emphatic consonants are [r , l , m , b] (1 page 44; 15 Page 48).

2. The Aims of the Study.

This paper sets out to achieve the following aims:

1. Describing the meaning of emphatic consonant in Arabic.
2. Knowing the number of emphatic consonants in Mosuli dialect^(*).
3. Identifying the types of emphatic consonants and how these consonants affect the preceding and the following vowels.

3. Data Collection and Methodology.

The data needed for this study been collected from the speech of twenty persons of the researcher's relatives, twelve of them are males and the other are females. Their dialect is Mosuli Arabic. We have collected a number of monosyllabic words (must have emphatic consonants) which are used by these persons.

We have analyzed these words. according to the emphatic consonants and how they affect the preceding and following vowels. We asked these persons to read the words and noticed their pronunciation carefully and transcribed their utterances phonemically. What is worth mentioning is that the consonant phonemic system of Mosuli Arabic has a set of thirty phonemes where most of them are found in Standard Arabic (16 page 265).

4. Analysis and Findings.

Emphatic consonants can be divided into primary and secondary.

4.1 Place of Primary Emphatic Consonants in one Syllable Words.

Primary emphatic consonants in Mosuli dialect are [ṣ , ṭ , ḏ]. They occur before and after a vowel.

4.1.1 Before a vowel.

4.1.1.1 Long Vowel.

Long vowels in Mosuli dialect are [i: , e: , a: , o: , u:]. Primary emphatic consonants occur before long vowel and change [a:] from back to front, like [ṣa: m] "he fasted"; [a:] in [ṣa: m] is back and it differs from [a:] in the word [sa: f] "row" which is front. This change is called progressive, that dark [a:] in [ṣa: m] changes to light [a:] in the word [sa: f] under the influence of the preceding consonant.

The same thing also happens with other primary emphatic consonants like [ṭa: l] "became long", [ṭa: f] "foamed" and [ṭa: x] "flew", [a:] is back after emphatic consonants and it is front /a: / after plain consonants as in /ta: b/ "repeated". This is also repeated in [ḏ] like [ḏa: q] "narrowed" and [ḏa: ʕ] "Lost" and it is equivalent /ḏa: b/ "melted".

As for [u:] and [o:] things take the same rules, that have been applied to the preceeding consonant. The words /ṣu: f/ "wool" and /ṭu: l/ length /u: / is back while it changes to front if it is preceeded by a plain consonant like /su: f/ "rows" and /tu: t/ "black berry" /o: / in /to: z/

(*) **Mosuli Dialect:** is among many dialects in Iraq, it is spoken in Northern Iraq, which differs from other dialects in many crucial respects: phonological, lexical and grammatical. It can be distinguished into Gilita, Gilit and Qilit (Sa'eed, 1998: 15 11; Sa'eed, 2006: 69f; 12 Ghanim, 2024 (13)and Al-Badawi, 2025),(14)

"dust" and /ʃo: m/ "fasting" differs from /o: / in /to: m/ "twin" and /so: q/ "market" because the vowel in the first pair is preceded by emphatic consonants.

While /i: / doesn't change when preceded by emphatic consonants like /ʃi: n/ "China" and the letter /si: n/, /ti: n/ "mud" and /ti: n/ "fig", /ði: f/ "add (imp.)" and /ði: b/ "wolf". The sound /e: / also doesn't change after emphatic consonants like /ʃe: f/ "summer", /te: x/ "bird" and /ðe: m/ "hardship and their equivalent /se: f/ "sword", /te: s/ "goat" and /ðe: l/ "fail".

4.1.1.2 Short Vowel.

After the emphatic consonants a short vowel /a/ becomes as /ʌ/ as in /ʃaf/ "class", /ʃah/ "true" /tax/ "touched", /taʃ/ "splashed" and /ðax/ "pumped". On the other hand, some of short vowels are pronounced lightly after plain consonants as in /sam/ "poison", /tal/ "hill" /ðal/ "humiliated" and /ðam/ "talked badly".

/i/ is a special case. It doesn't change after emphatic as well as plain consonants, as in /ʃid/ "block (imp.)", /tis/ "splash (imp.)" and /ðid/ "against". After plain consonants we have the same result as /sid/ "close (imp.)" and /sil/ "tuberculosis".

4.1.2 After a vowel.

4.1.2.1 Long vowel.

Primary emphatic consonants occur after long vowels and change /a: / from back to front as in /pa: ʃ/ "bus", /fa: ð/ "flooded" and /ʃa: t/ "burnt" and their equivalent before plain consonants /da: s/ "stepped on" and /ba: s/ "kissed".

What is worth mentioning is that all other long vowels except /a: / do not change in both cases /u: / for example doesn't change before emphatic and plain consonants as in /xu: ð/ "wade into the water (imp.)" and /xu: n/ "be insincere (imp.)". /o: / also doesn't change as in /qo: ʃ/ "arow" and /Oo: x/ "ox". Here are some examples of /i: / and /e: / which also don't change as in /si: t/ "a reputation" and /si: m/ "wire"; /e: / as in /be: ð/ "eggs" and /be: t/ "home".

4.1.2.2. Short vowel.

Short vowels before emphatic consonants, are of two cases: it sometimes, changes especially /a/ as in /bat/ "duck", while in /bas/ "enough"; it doesn't change because it is followed by plain consonant. In other cases, especially in /i/ it doesn't change as well. In /qiʃ/ "cut" for example, and /fik/ "unlight", /i/ remains as it is, whether it is followed by emphatic or plain. It means /a/ is changed when it occurs before emphatic consonants while /i/ is not.

4.2 Place of Secondary Emphatic Consonants in one Syllable Words.

Secondary emphatic consonants are /l̤, r̤, m̤, b̤/ they occur before and after a vowel. They affect the pronunciation of a vowel whether they come before or after it.

4.2.1 Before a vowel.

4.2.1.1 Long vowel.

Secondary emphatic consonants occur before long vowel and sometimes (not always) change /a: / from back to front as in /ma: j/ "water" and /ba: r/. While /ba: q/ "stool" and /ba: b/ "door" /a: / doesn't change after secondary emphatic consonants. Plain consonants, on other hand, do not affect the vowel as in /da: s/ "stepped on" and /na: j/ "flute"

While /i: /, /e: /, /u: / and /o: / are not affected in both cases as in /bi: x/ "well", /ri: f/ "countryside", /be: t/ "home", /me: z/ "table", /bu: q/ "trumpet", /mu: s/ "knife", /mo: z/ "banana" and /ro: b/ "robe". They are matched chronologically by the plain consonants which are not changed as well as in /qi: x/ "asphalt", /di: k/ "rooster", /se: t/ "dozen", /nu: m/ "lemon" and /so: q/ "market".

4.2.1.2 Short vowel

Secondary emphatic consonants occur before short vowel and the movement of tongue changes horizontally as in /rab/ "God" and /mag/ "mag". While in other cases, the same vowel doesn't change after secondary emphatic consonants as in /bag/ "bag" and /mal/ "bored". Their equivalent in plain consonants can be /faz/ "waked suddenly" and /tal/ "hill".

/i/ doesn't change in both cases as in /mix/ "bitter" and /ljm/ "gather (imp.)". Their equivalent in plain consonants do not change as well; as in /xiz/ "rice" and /qif/ "hay".

4.2.2 After a vowel.

4.2.2.1 Long Vowel.

When secondary emphatic consonants come after long vowels, these vowels don't change as in the case of plain consonants.

The following examples illustrates this case:

/ta: b/ "repented", /ða: b/ "melted", /xa: l̤/ "uncle", /na: m̤/ "slepped", /ði: b̤/ "wolf", /dʒi: b̤/ "bring something", /fi: l̤/ "elephant", /mi: l̤/ "light", /ri: m̤/ "a femal name", /te: l̤/ "wire", /xe: l̤/ "horses", /de: r̤/ "monastery" /xe: m̤/ "clouds", /dʒe: b̤/ "pocket", /ku: b̤/ "kup", /nu: m̤/ "lemon", /nu: r̤/ "a femal name", /tu: l̤/ "tulle fabric", /no: m̤/ "sleep (n.)", /ho: l̤/ "hall" and /go: l̤/ "goal" as /b̤, /l̤, /m̤ and /r̤/ are secondary emphatic consonants no change happens on the long vowels before them as its the case with plain consonants which the following examples illustrate /xa: f/ "feared", /na: s/ "people", /di: n/ "religion", /si: m/ "sim", /se: f/ "sword", /de: n/ "debt", /su: f/ "rows" and /xo: h̤/ "go (im.)".

4.2.2.2 Short Vowel.

The short vowels do not change in both cases (secondary emphatic and plain consonants) as it is in long vowels.

The following examples illustrate these cases:

[ħab] "sunflower seed", [mar] "passed by", [ta] "hill", [sam] "poison", [hib] "water jug"(*), [sir] "secret", [sil] "tuberculosis" and [Øim] "mouth" as [b, l, m and r] are secondary emphatic consonants no change happens on the short vowels before them as it is the case with plain consonants which the following examples illustrate [xas] "lettuce", /fak/ "jaw", /faz/ "waked suddenly", [his] "sound" and [ʕiz] "rice".

7. Conclusion

This stud sheds light on emphatic consonants and their effect the preceeded and followed vowels It has reached some findings. One of them is that [a:] is affected by emphatic consonants, especially when they are primary, more than other vowels. It is affected whether it comes before or after the primary emphatic consonants. It changes from light to dark. While if it is preceeded by secondary emphatic consonants, sometimes it is changed and sometimes not. But when it is followed by secondary emphatic consonants, it does not change at all.

Another vowels [o:] and [u:] do not change unless they come after primary emphatic consonants [e:] and [i:] don't change whether they come before or after emphatic consonants whether the latter primary or secondary.

As for short vowels [a], is the only vowel which is affected if it is preceded or followed by primary emphatic consonants. If it is preceded by secondary emphatic consonants, it changes sometimes and it doesn't change if it is followed by secondary emphatic consonants at all. [i], as it is found out in this study, doesn't change in all the mentioning case and /u/ which is rarely used in Mosuli dialect with the exception of some proper nouns.

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(*) A large pottery container for keeping the water cool.