The Sound System of Zubairi Arabic: A Phonological Sketch

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"Zubair can be regarded as being entirely outside the Mesopotamian area both geographically and from the point of view of dialect." (Ingham, 1997, p. 43)

INTRODUCTION

Occupied a remarkably geographical position on one of the most striking trade routes between South of Iraq and the Gulf states, Zubair has been for a long time an area of commercial importance. In the desert, some about 16 kilometers south-west of Basrah, there extends the town of Zubair, which is administratively considered the largest district in Basrah.

What characterizes Zubair is not only the strategic position, but also the variety Zubairi inhabitants speak (i.e. Zubairi Arabic). Zubairi Arabic[1] may be at first sight looked upon as a sub-dialect of southern Iraqi dialects[2]. However, certain divergences can be drawn between the varieties of southern Iraq and Zubairi Arabic, particularly on the ground of the phonological scene. Some phonological features, that are commonly manipulated in Iraqi dialects, have different aspects in Zubairi Arabic (sometimes they are "idiosyncratic" on the part of the latter dialect). For this reason, Zubairi Arabic reflects the

Abstract

The present paper sheds light on Zubairi phonology from a segmental standpoint. It covers five major issues: the consonantal system, the vowel system, phonontactics, geminate and syllable structure. As for the consonantal system, Zubairi Arabic has a relatively conservative consonantal inventory on functional and phonetic grounds. They are categorized into two main classes: obstruents and sonorants. The Zubairi vowel system includes 8 vowel phonemes whose distinctive function and length differences are greatly affected by some environments. In fact, Zubairi Arabic does not exploit all the possible combinations of its phonemes. Different phonotactic parameters can be set to permit that certain types of consonant clusters are subject to constraints initially and medially. In addition, Zubairi consonants can be generally subsumed under the process of lengthening, i.e. geminate. consonant geminate can either be word-medially or word-finally. Concerning syllable structure, Zubairi Arabic exhibits 10 syllabic patterns: /cv/, /cvv/, /ccvv/, /cvc/, /ccvc/, /cvcc/, /cvvc/, /ccvvc/and /ccvcc/.

Key words: Consonants; Vowels; Phonotactics; Consonant geminates; Syllable structures

northernmost limit of Arab Gulf varieties within Iraq as the speech of a major urban center. The affinity of this dialect to the Gulf speech and Arabia correlates with the traditional role played by Zubair as a "desert port" or center of contact between Arab Gulf states and Iraq. In other words, Zubairi speech is of a totally different type from the others. It unveils a considerable similarity to Kuwaiti speech[3], since they both spring from the same dialectal group, i. e. that of Eastern Arabian dialect.

The present paper is an endeavor to dig into the salient landmarks of Zubairi phonology from a segmental standpoint. It covers five major issues: the consonantal system, the vowel system, phonontactics, germination and syllable structure. Definitely each of these issues or topics is subdivided into further ones as far as the issue or the topic in question requires some kind of an elaboration. In a word, this study is data-oriented in that it seeks to present a descriptive analysis of the body of Zubairi data, i. e. proverbs, sayings and different vocabulary items. The proverbs and sayings are widely manipulated as a regular, daily spoken repertoire by Zubairi speakers. They represent the colloquial, casual expressions and lexical items of Zubairi speech. Moreover, Zubair is the author's hometown and he is more familiar with it. He also relies on his own intuition as a native speaker of this dialect, his own observations and listening to every day natural conversations and dialogues.

1. THE CONSONANTAL SYSTEM

Zubairi Arabic has a consonantal inventory of relative nature, which comprises 28 distinctive units on functional and phonetic grounds. Theses consonantal phonemes are tabulated (Table 1) (See below) in a way that one can have a scrutinizing look at them to see two general notes, which reflect the peculiarity of Zubairi consonantal phonemes. First, some consonants are enclosed by parentheses to indicate that they are sound segments whose articulation is specified in this dialect. Secondly, those which are non-parenthesized are consonants commonly uttered in this dialect and in other Arabic varieties.

1.1 Obstruents

One of the major categories of Zubairi consonants is obstruents. The term "obstruent" is an articulatory classification accounting for segments whose articulation involves a complete or partial closure of airflow at any point in the vocal tract. Obstruent consonants are thus articulated as having an obstruction of the air stream that produces a phonetic effect independent of voicing (Roca & Johnson, 1999; Davenport & Hannahs, 2005). Zubairi obstruents can be, as indicated in Table 1, distinguished from sonorants in that they are categorized into three subtypes: voiceless, voiced and emphatic. This categorization is usually unique not only in this variety, but also in Standard Arabic and even in Semitic Languages.

Table 1
Zubairi Distinctive Consonants

		Labial	Dental	Alveolar	Alveo-palatal	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	**Voiceless**		t				k			(ʔ)
	Voiced	b	d				(g)			
	Emphatic		t̠ d̠							
Fricative	**Voiceless**	f	θ	s	ʃ			x	ħ	h
	Voiced		ð	z				ɣ	ʕ	
	Emphatic			s̠						
Affricate	**Voiceless**				(ʧ)					
	Voiced				ʤ					
Liquid				l r						
Nasal		m		n						
Glide		w				j				

[3] Kuwaiti Arabic has appeared enlarging researchers' knowledge of an area which was little known previously. The main sources available are descriptions of émigré Imtairi and Dhafiiri tribes of Kuwait and Hafar al-Batin desert. The general picture is that there are basically two sub-dialects spoken in Kuwait: Dhafiiri (or northern) and Imtairi (or southern). The former is spoken in the north of Kuwait, i.e. Al-Muttla'a, Al-Jahra'a and so on, while the latter in the Kuwait city, Al-Ahmedi, Al-Wafra…etc. See Jonhston (1967).

1.1.1 Plosives

From a phonetic standpoint, the production of plosives is conditioned by the whole of the speech tract behind the closure forming a chamber sealed to the escape of air, which entails that the velum is held in its position in the compression phase and usually also during the closing phase. When the oral closure is released in the offset phase, the compressed air escapes to the atmosphere with a small audible explosion (Laver, 1994; Cruttenden, 2007).

Plosives in Zubairi Arabic are 8 in number: the voiceless plosives /t, k, (ʔ)/, the voiced plosives /b, d, (g)/ and the emphatic ones /t̪, d̪/. Some of these plosives do not behave like others; they, in some contexts, have unstable phonological status because of being highly subservient to certain phonological phenomena such as merger, substitution and deletion. Merger is considered a common type of phonological change. Two phonemes, which are formerly contrasted, cease to contrast (analogous terms include fusion and neutralization). Ordinarily, a merger produces a number of new homophones. For example, /dʒ/ and /j/ are merged to /j/: dʒimal/jimal "camel" or /d/ and /ð/ are merged to /d/: haaða/haada "this". Substitution refers to the process of replacing one segment by another at a particular place in words under certain conditions. This is sometimes attributed to a substitution frame within which a class of segments is possibly used (See examples below). Deletion (or elision) stands for the omission of sounds in a particular context. Most of segments are highly subsumed under the effect of deletion and sometimes whole syllables may be elided. Deletion may take place not as a result of the effect of the adjacent sounds in running speech, but individual words may lose some of their phonemes for the economy of effort and ease of pronunciation (See examples below).

(1) /d̪/:

The /d̪/ production merges into the production of the Arabic Standard /ð/. Both are in fact pronounced with the same quality, and this realization is commonly leveled to most of Eastern Arabia and Southern Iraqi varieties. In this connection, Anis (1971, p.55) remarks that "Iraqis and some Bedouins produce /ð/ with a somewhat similarity to the /d̪/ production." An example of this apparent juxtaposition is found in the following Zubairi proverb: afsad min lbeed̪ bilgeed̪ "how rotten eggs are in midsummer". Here, both beed̪ "eggs" and geed̪ "midsummer" are finally uttered /d̪/ in comparison with their Arabic Standard counterparts: bajð̪ and qajð̪.

(2) /g/:

Laborious attempts have been made by old and new Arab scholars to describe and classify /g/, since its description is extremely amalgamated with that of /q/. Thus, some old Arab scholars reported that the /g/ plosive came into being and was articulated by Bedouins to make the best compromise between /q/ and /k/ (Ibn-Jinni, 1955, p. 525).

In Zubairi Arabic, /g/ is substituted for /q/ in many words and this substitution is regularly governed by certain phonological rules:

(a) If /q/ is followed by one of /s̪, d̪, t̪, ħ, m, w/, it is replaced by /g/ regardless of adjacent vowels, for example: gis̪iir < qas̪iir "short", git̪iiʕa < qat̪iiʕa "rupture", gud̪a < qad̪a "finish", gaħat < qaħat "aridity", gum < qum "stand up", guwa < quwa "force".

(b) If /q/ is preceded or followed by /a/, /u/ or /i/ then it is replaced by /g/, for instance: ʕagil < ʕaqil "mind", θugul < θuqil "weight", gabul < qabil "before", gufaak < qafaak "your nape", ʔigrubaakum < ʔaqribaaʔukum "your relatives".

However, the /q/ replacement may extend in some examples to include not only /g/, but also /k/. This type of replacement is not accordingly subsumed under the aforesaid criteria, because it makes an exception, thus: katil < qatil "kill", awkaat < awqaat "times".

(3) /ʔ/:

Generally speaking, the term "glottal" refers to the glottis, which plays a vital role in phonation, but can also function as an articulator. If the vocal folds are brought together, glottal closure can be constituted. By holding them together with enough muscular action to overcome the sub-glottal pressure, the result is a glottal plosive. A glottal plosive is usually treated as individual sound segment in Arab and Arabic varieties. In other languages (e.g. English), it is not recognized as being part of the sound system even though it may occur prosodically or segmentally (Clark & Yallop, 2007; Ball & Rahilly, 1999).

Zubairi speakers tend not hear and articulate the glottal plosive and its occurrence in this dialect is not desirable, since it is counted as 'a catch in the throat'. That there is a tendency to get rid of such a sound can be accounted for in terms of two main phonological phenomena:

(a) Substitution:

The glottal plosive is commonly replaced by one of Zubairi long vowels in the following contexts: when medially, the glottal plosive disappears and is replaced by /aa/, /ii/ or /uu/, for example: raas < raʔs "head", ðiib < ðiʔb "wolf", ʃuum < ʃuʔm "misfortune". If finally and preceded by a consonant + /a/, the glottal plosive is replaced by /aa/ so that the word would be terminated with /aa/ instead of /aʔ/ as in Standard Arabic, for instance: garaa < qaraʔ "he read", tidafaa < tadafaʔ "he warmed up", xataa < xataʔ "mistake". However, if finally and preceded either by the diphthong /aj/ or the diphthong /aw/, the glottal plosive is replaced by doubling the second element of the two diphthongs to be as if they are geminated segments: saww < sawʔ "evil", ʃajj < ʃajʔ "thing".

(b) Deletion:

The glottal plosive is elided under the following distributional conditions: First, when preceded by /aa/, the glottal plosive is deleted in nouns like simaana <

samaaʔuna "our sky" as in 'ja simaana la tiṯiiħ' "O our sky, do not fall down" (this statement is usually said when condemning an action done forbiddingly) or in adjectives such as ħamraa < ħamraaʔ "red". Secondly, when preceded by the article 'l-', the glottal plosive disappears as in l-ahal < l-ʔahal "household", l-nsaan < l-ʔinsaan "human being", l-moor < l-ʔumoor "matters". In fact, the above-mentioned examples obviously illustrate that Zubairis, in their attempt to avoid using the /ʔ/ pronunciation, manipulate other word equivalents. They, for instance, say naʃid instead of nisʔal as in: ma naʃid ʔila ʕankum "we are asking about you".

1.1.2 Fricatives

During the production of a fricative, the active and passive articulators are brought close together, but not near enough to block totally the oral cavity. This close approximation of the articulators means that the air coming from the lungs has to squeeze through a narrow gap at high speed, creating turbulence, or local audible friction, which is heard as hissing for a voiceless fricative and buzzing for a voiced one (McMahon, 2002, p. 29).

So far mention has been made as to how certain phonological processes (e.g. substitution and deletion) are to be applied to the production and distribution of some Zubairi plosives. Similarly, fricatives can also be susceptible to these processes, particularly substitution, which seems not be apparently based on precisely formulated rules. Thus, two sound segments undergo the phenomenon of substitution, /q/ and /ɣ/ interchangeably.

Uttered in Standard Arabic, /q/ frequently occurs in most of the Holly Qur'an readings. Johnstone (1967, p. 20) purports that "/q/ is common enough in the speech of sophisticated speakers, but fairly rare in the speech of uneducated dialect speakers". Though considerably replaced by /g/ on Zubairi speakers' part, it is quite natural to find that /q/ may be put in the place of the /ɣ/ fricative in many examples: qurfa < ɣurfa "room", qazi < ɣazi "a proper noun", qaṣib < ɣaṣib "coercion". Nevertheless, in some few contexts, the reverse is also true, for instance: buɣʃa < buqʃa "envelope", ʔiɣlami < qalami "my pen". Here, Zubairi speakers seem to use these two sounds in free variation, and this, in turn, leads us to emphasize that this is one of the most frequently occurring phonological phenomena that links Zubairi Arabic with Kuwaiti one. So, words like taɣriir < taqriir "report" and ɣaraar < qaraar "decision" are heard by both Zubairi and Kuwaiti speakers.

1.1.3 Affricates

Unlike plosives, affricates are consonants in which the release of the constriction is modified in such a way as to produce a more prolonged period of friction after the release. They are an intermediate category between simple plosives and a sequence of a plosive and a fricative. It is not easy to say how much frication should be regarded as an automatic property of a release; some places of articulation seem to be accompanied by considerable frication (Ladefoged & Maddieson, 1996).

In previous sections, it has been stated that both substitution and deletion regularly involve the phonological behavior of some Zubairi consonants. On the same footing, Zubairi Affricates are highly affected by substitution to the extent that it becomes an inevitable landmark of the affricate production. Governed by certain precise rules, affrication is extended to reflect both /k/ and /q/.

(1) /tʃ/:

Substitution is the most noticeable property accompanied with the voiceless affricate /tʃ/. It occurs via applying the following rules to the distributional scene of this consonant:

(a) /tʃ/ is substituted for /k/ as being a nominal feminine suffix in such a Zubairi saying as: lbeet beetitʃ w lʕabi fii "the house is yours and you can do whatever you want". It is seen that in the word beetitʃ, /tʃ/ takes the place of /k/: beetitʃ < beetik, and there are many examples of this type: ubuutʃ "your father", uxuutʃ "your brother", etc..

(b) /tʃ/ is also substituted for /k/ in word-initially and without being conditioned by certain rules, for instance: tʃibiir < kabiir "big", tʃuwa < kuwa "to burn".

(c) /tʃ/ tends to be pronounced in few loan words originally borrowed from other oriental languages like Turkish and Persian, for example: tʃartʃaf "bed sheet", tʃula "a small cooker", tʃurbaaja "bed".

(2) /dʒ/:

The voiced affricate /dʒ/ is regularly substituted for /q/ according to the following phonological restraints:

(a) When followed by /i/ or /a/, /q/ is replaced by /dʒ/, for example: dʒidir < qidir "pot", dʒirba < qirba "canteen", dʒimiin < qamiin "meriting", dʒiliil < qaliil "a little", dʒiriib < qariib "near".

(b) When preceded by the sequence /j+a/, /q' is changed into /dʒ/, for instance: jadʒfii < jaqafii "he turns his back", jadʒbil < jaqbil "he comes".

(c) When preceded by the sequence /m+a/, /q/ is replaced by /dʒ/ as in madʒlii < maqlii "fried", madʒaam < maqaam "rank".

(d) If occurring within the environment of /s/ and /t/, /q/ is then changed into /dʒ/, for example: dʒasi < qasi "hard", dʒat < qat "clover".

1.2 Sonorants

In contrast to obstruents, sonorants are viewed as being sound segments whose phonetic contents are dominantly made up by the sound waves produced by its voicing, and they are typically characterized by periodic energy (Giegerich, 1992, p.20). It follows from this definition that obstruents, as stated previously, occur in voiced and voiceless variants, whereas sonorants are always voiced.

What is worthy of remark in Zubairi sonorant inventory is that there are two consonants accompanied

with a secondary articulation usually termed emphatic: [ɱ] and [ɫ]. The latter is considered as the commonest emphatic consonant in this dialect. Emphatic consonants are those which are "articulated in the pharyngeal or uvular regions of the vocal tract, or which have a co-articulation in those regions" (Crystal, 2002, p.135). Emphasis usually covers a string of adjacent segments and thus it is naturally recognized as a long component of word utterance. Emphatics involves a secondary articulation which means an articulation performed separately from and in addition to the primary articulation associated with a sound (Catford, 1977, p.188). According to Catford's definition, when there are two simultaneous articulations, an articulation in the pharynx is considered the secondary one. The secondary articulation is less constricted than the primary articulation; if the primary articulation is constricted to the degree of plosive, for instance, the secondary articulation can be constricted to the degree of fricative or frictionless continuant. If the primary articulation is to the degree of fricative, the secondary articulation must be wider (Laufer & Baer, 1988, p.39).

Emphatic [ɱ]:

In Standard Arabic, /m/ is not articulated with an emphatic aspect. Nevertheless, in Zubairi Arabic it is, comparatively speaking, an emphatic segment with a geminated flavor, particularly when occurred word-medially, preceded by /u/ and followed by /a/. For example, in such a Zubairi statement as ʕateenaah ma summa w ma rumma "we gave him whatever he wanted", both summa and rumma have emphatic [ɱ].

Emphatic [ɫ]:

The use of emphatic [ɫ] is often well-known in the Holy Quraan readings, and there are different approaches of pronouncing [ɫ] as being emphatic or non-emphatic regularly. Generally speaking, Zubairi emphatic [ɫ] is produced in the environment of some consonant like /t/, /x/ and /k/, for instance: taɫɫaag "divorce", xaɫɫ "vinegar", kiɫɫa "as a whole".

Besides, emphatic [ɫ] is, in some cases, found when being part of two final consonant clusters, for example in a sentence like jamiink tiɫdʒ w jasaark tiɫdʒ" you are absolutely free", the word tiɫdʒ "release or free" is terminated with two consonant clusters composed of emphatic [ɫ] and the affricate /dʒ/.
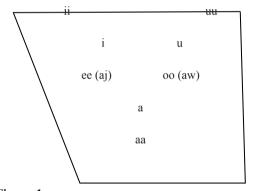
2. THE VOWEL SYSTEM

The essential articulatory difference between vowels and consonants resides in the fate of the airflow coming out of the lungs as it passes through the mouth. In consonantal sounds the airstream finds a radical constriction or even total blockage at some point along the central passage in the oral cavity. By contrast, when a vowel sound is pronounced, no such obstacle is present (Roca & Johnson,

1999, p. 115).

As for the vowel system of Zubairi Arabic, there are 8 vowel phonemes whose distinctive function and length differences are closely associated with some phonological contexts. These vowels can be diagramed on a vowel scale, which is known as the cardinal vowel diagram or quadrilateral (Figure 1) (See below). A general assessment of the Zubairi vowel qualities in terms of the vowel scale exhibits a more detailed table (Table 2) (See below). Pondering over these Zubairi vowel segments denotes that they underline certain phonetic realizations and draws considerably phonological mappings that, in some occasions, reflect how they behave idiosyncratically.

Table 2
Quality Classification of Zubairi Vowels

Symbol	Example	Quality
i	hid "leave"	centralized and raised /ee/
a	ham "grief"	central above /aa/
u	um "mother"	centralized and raised /oo/
ii	biir " well"	front, close, lowered /i/
ee	beet "house"	mid-front diphthongized
aa	raaħ "went"	central and fully open
oo	moot "death"	mid-back diphthongized
uu	θuum "garlic"	back, front, lowered /u/

Figure 1
Zubairi Distinctive Vowels

2.1 Short Vowels

/i/:

This vowel is front, opener than the long counterpart and centralized with somewhat retracted quality. It frequently occurs in the medial positions of Zubairi nouns and verbs, for instance: biʃt "cloak", bint "a girl", tis "go away", simt "I fasted". Sometimes, /i/ may have the function of reducing or shortening the long vowel /ii/ word-finally as in: bintti(ii) "my daughter", ʕajeeztti(ii) "you(f.)are not able", dareetti(ii) "did you know?".

/a/:

This vowel is centralized in its quality illustrating a type of 'fronting' in most contexts. It usually occurs in the contiguity of both emphatic and guttural consonants, for example: saɫʕa "bladness", xarab "it is spoiled", ʔabi "I want".

/u/:

This short vowel is back and centralized. It often appears in the initial syllables of verbs (mostly the present ones) and of some nominal expressions, thus: juruuħ "he goes", juguul "he says", ṯufaħ "brimming" ṣmuut "silence".

2.2 Long Vowels

/ii/:

It is a fully front and close vowel. No difference can be recognized as to how this vowel is articulated in both Zubairi Arabic and Standard Arabic. It always occurs word-medially and word-finally, for example: niʃiiṯ "active", wladii "my son".

/ee/:

It is a mid-front, centralized vowel whose length is derived from being produced as a 'doubling' sound. Sometimes it can be considered as a free variant of /ii/, especially in the feminine imperfect suffix (-iin) as in: takleen < takuleen "you eat". In Standard Arabic, /ee/ is usually diphthongized as /aj/ like: beet < bajt "house", ʃeeb < ʃajb "white hair", leet < lajt "I wish".

/aa/:

This vowel is described as slightly retracted, centralized sound. The line of demarcation between this long vowel and the short one is often sharp, since the former is said to be opener and longer than the latter. In some phonological environments, /aa/, in a sequence like /j+aa/ is substituted for that of /j+a/, particularly in most of present-tense verbs. For instance, in a statement such as ʕasa waṣlik jaaṣl bʕumrik "Perhaps maintaining your close relatives prolongs your life", the verb jaaṣlik is originally derived from the Standard one jaṣil "to reach". Similarly, in a sentence like zarʕil mjaniin jaagaah rabil ʕaalamiin "Fools' plants are preserved by the Lord", the Zubairi verb jaagaah, which begins with /j+aa/, means the Standard verb jaqiih whose onset is /j+a/.

/oo/:

It is classified as a mid-back long vowel in which its quantity shows that it is uttered with a 'doubling' aspect. Like /ee/, /oo/ is normally diphthongized in Standard Arabic as /aw/: ṣoom < ṣawm "fasting", loom < lawm "blame", moot < mawt "death".

uu/:

This long vowel is fully back and closer than the short counterpart. Like /ii/, the /uu/ pronunciation is similar in Zubairi Arabic and Standard Arabic: juṯuul "it becomes long", sumuuut "silence".

2.3 Vowel Quality and Emphatic Features

A reference has been made in (3.2.) to the phonetic nature of emphatic consonants in Zubairi Arabic. It has been observed that the phonetic quality of /i/ and /u/ correlates with features of emphatics and lip posture in the adjacent consonants. In terms of these features, the consonant segments fall into emphatic and non-emphatic ones, which, in turn, give the following three contexts for /i/ and

/u/:

(a) Between two emphatic consonants, /u/ tends to be labial as in: buṣal "onion" and fuṣal "cut".

(b) Between two non-emphatic consonants, especially before /w/, siwa is heard as suwa "together".

(c) Before a consonant with a neutral lip-position, /e/ is heard instead of /i/ as in sira/sera "queue" and xirza/xerza "jewel".

3. PHONOTACTICS

In general terms, phonotactics is referred to as statements of permitted strings of phonemes including clusters, sequences, distributional restrictions and admissible syllable patterns. It represents the way in which phonemes combine together in a particular language (Lass, 1984, p.21). It is assumed that the permitted phoneme sequences are considerably restricted and only a number of phoneme combinations in all possible ways occur. These restrictions vary greatly between languages in that it is possible to find languages or varieties with the same phonemes but differ in the manner these phonemes are joined together.

Zubairi Arabic does not exploit all of its possible phonemes. Different phonotactic parameters are set to permit that certain types of consonant clusters are subject to constraints initially, medially and finally. Zubairi Arabic contains clusters of two elements as the maximum limit within one word and clusters of three elements across word boundary.

3.1 Initial Consonant Clusters

Initially two consonant can be clustered in words that irregularly pluralized and patterned morphologically as 'fʕuul', for example: hduum "clothes", bjuut "houses", sfuuf "classes", tʃfuuf "gloves". Two consonant clusters are also identified initially in the following irregularly plural words of the 'fʕaal' pattern: tʃʕaab "heels", twaal "tall", kbaar "big", sɣaar "small", gṣaar "short", sjaam "fasting", sraax "cry". Another occurrence of two consonant clusters can be found in words of the 'fʕalaan' pattern as in: dwaraan "around", fwaraan "boiling", ʃhagaan "whoop".

In addition, a few words of 'fʕiil', 'fʕuula' and fʕila' patterns are of initial two consonant clusters, for instance: (a) the 'fʕiil' pattern: sxiif "thin", ʃʕiir "malt", sʕiid "a proper noun", (b) the 'fʕuula' pattern: ħmuuḏa "soar", bruuda "cold", ħruura "hot", mruura "bitter" and (c) the 'fʕila' pattern: ʃfiga "pity", ʕjila "hurry".

3.2 Medial Consonant Clusters

It is worth noting that the first syllable of a word in Zubairi Arabic may either begin with one or two consonants. Syllables other than the first always begin with only one consonant (see section 6). Accordingly, medial consonant clusters are of two types: clusters

which are formed across syllable boundaries and clusters that involve two words. The former type is usually of two consonantal elements, for example: kilma "a word", ðablaan "wilted", jiθni "to fold", zahgaan "disgusted", ijdaʕ "let it". The latter type consists either of two or three consonantal elements. Clusters of two elements occur in contexts where the first word ends with a single consonant and the next one begins with another consonant, for instance: hal beet "this house", ʃuuf ɣeeri "choose anyone else", laħam habir "lean meat", mam daah " too early", raħʕani "leave me". Clusters of three consonantal elements can be made up by two options: (a) the last consonant of a word and the first two consonants of another word as in: hduum gsaar "short clothes", daftar lmaħal "shop's account book", nʕaal xraaza "handy-made slipper", or (b) the last two consonants of one word and the first consonant of another word like: taʕʃ maʕaana "have a dinner with us", bang jidiid "a new bank".

3.3 Final Consonant Clusters

Generally, no word in Zubairi Arabic ends with a cluster of more than two consonants. Unlike Iraqi speakers, Zubairi ones tend to pronounce two consonants together in a form of combination. In fact, the different treatment of final consonant clusters can be regarded as one of phonological features that separates Iraqi Arabic and Zubairi Arabic, because in the former type, an anaptyctic vowel is introduced between the two consonants rather than clustering them. Examples of Zubairi two final consonant clusters are as follows: biʃt "cloak", ʃift " I saw", zibd "butter", ʃams "sun", galb "heart", tʃiðb "lying", wagt "time", riħt "I went", tʃalb "dog".

4. GEMINATE

Geminate is seen as an important feature many languages and dialects. It is lexically defined as the doubling of an originally single consonant or the doubling of a letter in orthography. On the phonetic ground, germination is accounted for in accordance with germinations of two identical articulations and prolongation of the articulatory posture (Cruttenden, 2007; Catford, 2002).

In Zubairi Arabic, geminate consonants may either be treated as one long or two short segments. El-Saaran (1951, p.162), in an effort to give a panoramic view of the behavior of consonantal germination, confirms that the term 'geminate' is applied to those consonants having a long duration and determined by certain phonetic contexts and every geminate consonants can be considered as being equivalent to two sounds in pronunciation; the first being "still" and the second "moving". Hence, it is convenient to interpret that an intervocalic geminate consonant, in terms of syllabification, should be split into two components: one is related to the first syllable and the other to the second syllable, i.e. it is of a CCV pattern.

From a distributional angle, Zubairi geminates can occur either word-medially as in tawwik "now", tidaffa "to be warm", ʔiʃʃuuf "do you see?", ħawwil "get down", baʃʃir "to say good news" or word-finally like tiss "go out", tinaħħ "clear the way", raħħ "leave", tuwagg "beware of", dʒill "lift". It is quite apparent that final geminates are possible, since the word is uttered with a paused form in which the pattern (CCV) is reduced to (CC).

5. SYLLABLE STRUCTURE

In spite of exerting concerted efforts to reach a straightforward definition of syllable, no general consensus has been set on clearly phonetic and phonological accounts of this concept. However, it has been stated that there are two types of theories attempting to define syllables. In the first place, some theories are postulated in terms of properties of sounds, such as sonority or prominence. Other theories account for a syllable in the light of being a unit operated in the organization of the sounds of an utterance (Ladefoged, 2006, p. 242).

In general sense, a syllable is the smallest possible unit of speech. Every utterance must contain at least one syllable. It is appropriate to look at speech as being composed of segments, but these segments can be observed only as aspects of syllables. At its most basic level, the typical syllable is made up of a vowel segment preceded and/or followed by zero or more consonantal segments. The vowel is known as the peak of the syllable. Any consonants preceding the peak are said to be in the syllable onset, and those following the peak constitute the syllable coda (Davenport & Hannahs, 2005, p. 74).

A distinction can be made in Zubairi Arabic between open and closed syllables on the one hand, and between short, medium and long syllables on the other. Zubairi word, as stated before, may begin with a single consonant like maasix "unsalted", dʒaabla "tomorrow night" or two consonants such as msalla "oratory". However, Zubairi Arabic tends to reveal extra syllabic patterns as a result of a remarkable modification on the part of phonemic distribution.

Zubairi Arabic exhibits ten syllabic patterns: /cv/ as in miʃa "he went", /cvv/ such as siida "forward", /ccvv/ as in ħmuuda "sourness", /cvc/ like masjid "mosque", /ccvc/ as in tʕammad "he did it purposely", /cvcc/ such as ʃams "the sun", /cvvc/ like maat "he died", /ccvvc/ as in sfuuf "classes", and /ccvcc/ like xdarr "green".

From a distributional viewpoint, the patterns like /cv/, /cvv/, /cvc/ and /cvvc/ occur in any word positions, for instance: /ħagar/ "degrade", /ʔigduba/ "hold him", /maalah/ "his own", /jilii/ "whom", /tamra/ "a date", /itmaqqat/ "to be relaxed", /θaagba/ "burned". On the other hand, whereas the patterns /cvcc/ and /cvvcc/ appear

word-finally as in /jiɣtarr/ "arrogant" and /murħaadd/ "toilet", syllables like /ccvc/, /ccvv/ and /ccvvc/ are of a word-initial occurrence, for example: /stashal/ "to make it easy", /ʕjeemi/ "Persian" and /dweeb/ "a type of insect".

Finally, the range of occurrence of the above Zubairi syllable structures shows that the first seven ones occur more frequently than the last three. The four open syllables represent the most frequent patterns in comparison with the closed ones. The pattern /ccvcc/ is not so familiar in this variety because it is often found in loan words.

CONCLUSIONS

It is apparent that Zubairi phonology is of a notably recognized system whose features comparatively distinguish and somewhat separate Zubairi Arabic from the parent, Standard Arabic, though descended from it. Both consonantal and vowel inventories are unique in that they are involved with integration of various phonological phenomena such as emerge, substitution and deletion. Zubairi geminate segments and phonotactic possibilities form a considerably phonological landmark in relation to their behavior, distribution and variation. They vary greatly as a result of their several occurrences within word-boundary and across word-boundary. Zubairi syllable structures are based on the contrastive components of which they are composed. These components can be mapped to provide a number of divergent patterns - a thing which seemingly characterizes this dialect.

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