

Collocability of Arabic Reduplicative Forms

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1. Introduction

Ease or difficulty of studying Arabic reduplicative forms is not unconnected with notions of *collocability*. i.e, the range of items with which each reduplicative form is most frequently associated, frequency of occurrence. The relative importance attached to each in spoken or written discourse or acceptability or non-acceptability of a collocation with reference to formal/ informal use of language has not yet been accounted for. For an adult native speaker of Arabic, it is fairly easy to call up words that are most frequently associated with a reduplicative form when needed for use. Yet, using a standard dictionary, one finds different information about *citation-form* of a reduplicative verb, its derivation and its *collocates*. Little is known about precisely how many reduplicative forms verbs are acquired unconsciously by children learning their mother tongue. Furthermore; there is scant knowledge about the crucial links with other types of knowledge related to historical, linguistic and social acceptability or non-acceptability of a reduplicative collocation. For example, in spoken Arabic one commonly hears /fakfak/ 'he loosened', /šam šam/ 'he sniffed', /ħak ħak/ 'he scratched', /fašfaš/ 'he released'. All these forms are not cited in Lisan Al-Arab, Maqayis Allughah, Al Mu'jam Al waSiit and Al-Ubab Al-Zaaxir. Also, many acceptable collocations as found in the test reported below turned out to be unacceptable as shown by educated adult Arabic speakers' responses. To find out how much reduplication is absorbed and acquired almost unconsciously, and to find out what informal pairs are considered acceptable or unacceptable in the formal use of language, a list of 123 reduplicative words was compiled and presented to fourteen undergraduate students studying a course of Semantics at Petra University. Responses were checked with reference to a three-point scale: acceptable, unacceptable and dubious by two professors of Arabic. The purpose was to pinpoint what collocations could be summoned from the mental lexicon and to compare the reduplicative forms produced with standard Arabic forms.

2. Reduplication in Arabic

The best classical Arabic reference book where a full account of reduplicative forms is given is perhaps Ibn Duraid's book *Jamharat allughah*: Beirut: Daar Saadir, 124-170. Under the title "Bilateral Verbs", Ben Durayd followed a system of listing possible verbs which could be derived from a bilateral root of compatible consonants. For each derivation, he then provided the **sense** of the repeated possible reduplicative form with examples. A reverse combination of compatible bilateral consonants was given to see possibilities of reduplicative formation. Though his work was a valuable contribution to the study of the meaning of reduplicative forms, it falls short of giving a satisfactory classification. Either in form or in function. For ease of reference and for pedagogic purposes, I have adopted semantic criteria for regrouping and classifying the reduplicative forms in Ibn Duraid's chapter. The system of classification is based on *semantic functions* i.e. what the repetition of the stem suggests: onomatopoeic kinesthetic, increase or decrease in size, motion, muscular effort, (See Appendix A)

1.2. The Notion of Collocation

The notion of collocation was first introduced by J.R. Firth (1957:197) as an approach to establish the meaning of word by means of the habitual company it keeps. Meaning by collocation does not involve the definition by means of

'shifted terms' Lyons (1977:612-13). In his discussion of "collocational level of analysis", he underlines the principle of "association a word acquires in its environment (*op. cit.*). The study of reduplicative forms and their collocates requires a new approach which stresses collocative meaning (Leech, 1974:26) i.e. meaning through association with other words. It is rather pointless to study reduplicative forms though '*sense*' or '*denotation*' because the meaning of a reduplicative word is not referable to the meaning of its individual parts. More appropriately, Arabic reduplicative forms need to be studied in terms of the "roots" (or lexemes) and their collocates (Mitchell, 1975). On formal grounds, however, Arabic reduplicative forms are recognized by the following features:

- (i) their prosodic template which consists of two short syllables of the pattern CVC-CVC (Cf. McCarthy and Prince 1990).
- (ii) a default vowel insertion rule, Applying the vowel insertion rule to the CVC_CVC skeleton produces consistently a nominal derivation of the pattern CVC-CVVC, e.g { θarθar) 'chattered' → (θarθaar) 'chattered' → (CVC-CVVC).
- (iii) The addition of the suffix -(ah) to the reduplicative word to form an abstract noun' (TanTan) 'fuzzed' → (Tan-Tan-ah) 'fuzziness'

2. Objectives of the Study:

The objectives of this study are the following:

- (i) to consider the type of input an adult native speaker of Arabic has been subjected to as far as reduplication is concerned
- (ii) to determine the ranges of collocates that reduplicative words exhibit in normal everyday speech
- (iii) to explore acceptability or non-acceptability of reduplicative collocations against standard educated usage
- (iv) shed light on differences between the mental lexicon of reduplicates and matching dictionary entries .

3. Procedure

The material of investigation consisted of 123 reduplicative lexical items which are non-randomly selected from (Ibn Duraid classical book Jamharat Allugha , Beirut: Daar Saadir). Recognizing Arabic reduplicative words is fairly easy. They are composed of two structurally identical morphemes (CVC_CVC). The first is a bilateral root consisting of a compatible pair of consonants; the second morpheme is a repetition of the stem or root. Repetition suggests intensification or augmentation of activity or an increase in size . The items were presented to two groups: the first group consists of 14 3rd year PU students following a course in Semantics; the second group consists of four professors of Arabic. The first group has been given the task of filling in the blank by a word or words with which they think the reduplicative form is most likely found to co-occur. The idea is to assess and evaluate their ability to collocate correctly Arabic reduplicative words. Students' responses have been itemized and given to the second group who checked collocations on a three point scale : *acceptable*, *unacceptable* or *dubious*.

Table 1 shows collocations ordered in terms of a rank of frequency and percentages of correct responses

Item No.	Acceptable	Unacceptable	Frequency	Percentage.
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Spoken vs. Written Codes:

Knowledge of collocation subsumes knowledge of what words are most likely to occur together. What collocations may seem appropriate, typical and acceptable in Arabic spoken discourse may turn out, when matched with written discourse equivalents, bizarre, inappropriate and unacceptable.. Much of the material presented to the two groups in the experiment conducted is extracted from everyday use of language; students' responses were therefore fluent and automatic. One of the problems that researchers encounter when investigating how subjects retrieve the appropriate collocation; whether the retrieval process goes through stored chunks that were acquired from a very early stage or through the stored input in the mental lexicon of the classical written code.. The acceptability/ non-acceptability test results give us clues about the gaps that exist between the dictionary sense of reduplicative vocabulary, on the one hand and the actual meaning by collocation that exists in the students' mental lexicon on the other. The following table illustrates the difference in meaning between classical (written) and spoken reduplicative words:

Acceptable Spoken

DabDab' ilʔašyaa? 'he packed things'

TafTaf ilqidr 'he filled the pot to the brim'

TalTal iDDayf " the guest popped in"

SamSam irraddʒul ʕala raʔyih' The was determoned'

fakfak ilʒihaaz ' he loosened the screws'

ħas ħas ʒild iTTifl 'he felt the cild' skin

The sets of collocations associated with each type of reduplicative words as attested in Ibn Duraid's Chapter are shown below:

I. Onomatopic:

Onomatopic reduplicative words collocate with lexical items suggesting sounds:

Word Form	Derivation by suffixation	Derivation by Vowel Insertion	Meaning Suggested (Classical)	Meaning Suggested (everyday use)
dabdab	dabdabah		horse hoof sound	
ħaf ħaf	ħaf ħaf-ah		birds wing sound	
θaʕθaʕ	θaʕθaʕ-ah		Dsisorganised speech	
ħamħam	ħamħam-ah		horse chuckle	
naħ naħ	naħ naħ-ah		cleared throat	
waħ waħ	waħ waħ-ah		shivered	
xarxar	xarxar-ah		breath turbulence	
xaš xaš	xaš xaš-ah		friction	
xaDxaD	xaDxaD-ah		rinsing	
dardar				

TaqTaq	TaqTaq-ah		rolling stones	
TanTan	TanTan-ah		mosquitoes/flies	
maḥ maḥ	maḥ maḥ-ah		scuffle	
baqbaq	baqbaq-ah	baqbaaq	chatter-box	
waḥ waḥ	waḥ waḥ-ah		noise	
waḥ waḥ	waḥ waḥ-ah		noise	
faqfaq	faqfaq-ah		eloquent speech	
walwal	Walwal-ah			
laqlaq	laqlaq-ah			
wakwak	wakwak-ah		pigeon cooing	
kahkah	Kahkah-ah			
hamham	hamham-ah		indistinct speech	
maʔmaʔ	maʔmaʔ-ah		sheep sound	
qaḥ qaḥ	qaḥ qaḥ-ah		weapons	
bahbah	bahbah-ah		ox's noise	
raqraq	raqraq-ah		water flow	
ʕam ʕam	ʕam ʕam-ah		unintelligible speech	

II. Kinesthetic:

The repetition serves to conjure up a certain feeling or impression in the mind which implies an emotive force or aesthetic effect:

Kinesthetic:	Derivation 1	Derivation2	Meaning Suggested (Classical)	
TabTab	TabTab-ah			
bahbah	bahbah-ah		oen's roar	
habhab	habhab-ah		speed,agility	stuttering
ḥasḥas	ḥasḥas-ah		roasted	
ḥaS ḥaS	ḥaS ḥaS-ah		emergence	
waswas	waswas-ah		the devil's gossip	
hashas	hashas			
qahqah	qahqah-ah		laughter	
ḫaḍḍḫaḍḍ	ḫaḍḍḫaḍḍ-ah		leaked	
SarSar	SarSar-ah		grasshopper's buzz	
raDraD	raDraD-ah		bruise	
ʕarʕar	ʕarʕar-ah		gargle	
qasqas				
nabnab	nabnab-ah		he-goat sound	

karkar	karkar-ah		giggle	
qarqar	qarqar-ah		giggle	
SalSal	SalSal-ah	SalSaal		

III. Size Increase/Decrease:

The repetition of the base serves the idea of an increase/decrease in size:

Size Increase/Decrease	Derivation 1	Derivation 2	Meaning
bañ bañ	bañ bañ-ah		comfort
bakbak	bakbak-ah	bakbaak	stubby
kabkab	Kabkab-ah	kabaakib	scattered
duxdux			
xuzxuz			
waxwax	waxwax-ah		
daŋdaŋ			
šaŋ šaŋ	šaŋ šaŋ-ah	šaŋ šaaŋ	tall
fašfaš	fašfaš-ah		
waSwaS	waSwaS-ah		peep
Daŋ Daŋ	Daŋ Daŋ		
faDfaD	faDfaD-ah	faDfaaD	wide
DakDak	DakDak-ah	DakDaak	stubby
waTwaT	waTwaT-ah		
ɖʒarɖʒar	ɖʒarɖʒar-ah	ɖʒaraadʒir	complaint
baɖʒ baɖʒ	baɖʒ baɖʒ-ah	baɖʒ baadʒ	plump
ħab ħab	ħab ħab-ah	ħab ħaab	stubby
baxbax	baxbax-ah		pretentious

IV. Motion:

The repetition of the base serves a means of intensifying the idea of an activity so that the action denoted by the verb becomes more dynamic:

Motion	Derivation 1	Derivation 2	Meaning

bazbaz	bazbaz-ah	bazbaaz	fidget
basbas	basbasa-h	basaabis	empty space
baSbaS	baSbaS-ah	baSaabiS	tail wiggle
ħat ħat	ħat ħat-ah		
tartar	tartar-ah		violent movement
taŋ taŋ	taŋ taŋ-ah		violent movement
taqtaq	Taqtaq-ah		
taltal	taltal-ah	talaatil 'crisis'	pushed
ɖʒaz ɖʒaz	ɖʒaz ɖʒaz-ah		wool ball
ɖʒal ɖʒal	ɖʒal ɖʒal-ah		moved, mixed
ħaT ħaT	ħaT ħaT-ah		hurry
ɖʒamɖʒam	ɖʒumɖʒum-ah		skull
ħaŋħaŋ	ħaŋħaŋ-ah		high speed
ħal ħal	ħal ħal-ah		loosened
ħašħaš	ħašħaš-ah		rush
ħaShaS	ħaShaS-ah		emerged
TaxTax	TaxTax-ah		
daqdaq	daqdaq-ah		fast running
daldal	Daldal-ah		nodding
hadhad			
rasras	rasras-ah		kneel
raSraS	filled slkots		
kaskas			
salsal	salsal-ah		connection
sasam	samsam-ah		
šal šal	šal šal-ah	šal šaal	scattered
waSwaS	waSwaS-ah	waSwaaS	peep
DafDAf			
qaDqaD	qaDqaD	qaDqaaD	breaking bones
haDhaD			
haThaT			
ʕað ʕað			
namnam			
ɣalɣal	ɣalɣal-ah		infiltration
laSlaS	laSlaS-ah		
kafkaf	Kafkaf-ah		wiped tears
qalqal	qalqal-ah		restless
qamqam	qamqam		
xalxal	xalxal-ah		stripped
kamkam	kamkam-ah		Cover with a garment
lamlam	lamlam-ah		collection
malmal	malmal-ah		movement
la?la?			
šaŋ šaŋ	šaŋ šaŋ-ah	šaŋ šaaŋ	tall

maSmaS	maSmaS-ah		sucked
naš naš	naš naš-ah		grilled meat movement
katkat	katkat-ah		walking in short steps
habhab	habhab-ah		agility
tahtaḥ	tahtaḥ-ah		
TaʔTaʔ			
waš waš	waš waš-ah		whisper

V. Turbulence:

The repetition of the stem is a sign of agitation, bewilderment and exasperation:

Turbulence	Derivation 1	Derivation 2		Meaning
ḏab ḏab	ḏab ḏab-ah		disturbance	frequency
balbal	balbal-ah			disturbance
ḥalḥal	ḥalḥal			
ḥaš ḥaš	ḥaš ḥaš=ah		movement	
xalxal	xalxal-ah		stripping off	
raḥ raḥ	raḥ raḥ-ah			
kalkal	kalkal-ah			
fašfaš	fašfaš-ah	fašfaaš		gown
SamSam	SamSam-ah			disturbance
maš maš	mašmaš-ah	mišmaaš		soaked
Saḥ Saḥ	Saḥ Saḥ-ah		disturbance	disturbance
hathat	hathat-ah			smashed

VI. Speech Defect:

Reduplication of the stem suggests ways of talking or speech defects:

Speech Defect	Derivation 1	Derivation 2	Meaning 1	Meaning 2
barbar	barbarah	barbaar	talkativeness	
baḡ baḡ	baḡ baḡ-ah	baḡ baaḡ	talked fast	
baqbaq	baqbaq-ah	baqbaaq	chatter-box	
ḡarḡar	ḡarḡara	ḡarḡaar	chatter-box	
taxtax	taxtax-ah	axtaax	heavy accent	
taḡtaḡ	taḡtaḡ-ah		muffle	
*taftaf				
tamtam	tamtamah	tamtaam	/t-/stutterer	
ḡaḡḡaḡ	ḡaḡḡaḡa		disorganized speech	
ḡam ḡam	ḡam ḡam-ah		horse sound	
xaš xaš	xaš xaš-ah			
laxlax	laxlax-ah			
xanxan	Xamxam-ah		nasalization	
dandan	dandan-ah			
TarDar	TarDar-ah			
Daḡ Daḡ	Daḡ Daḡ			
ḡaT ḡaT	ḡaT ḡaT		sound sequence	
ḡaT ḡaT	ḡaT ḡaT-ah		sizzle	
ḡan ḡan	ḡan ḡan-ah		indistinct speech	
ḡamḡam	ḡan ḡan-ah			
hamham	ḡamḡam-ah			
lahlah	Lahlah-ah			
halhal	Halhal-ah			
yalyal				
mahmah				
ta?ta?	ta?ta?-ah		/t/ stutter	/t/ stutter
maḡ maḡ	maḡ maḡ-ah		noise	noise
ḡamḡam	ḡamḡam-ah		pause	pause
kaškašh	Kaškašh-ah		use of/tš/	use of/tš/
bakbak	bakbak-ah		crowded	crowded

Collocational Range: (Accepted Standard Use; unattested forms are marked by *):

Reduplicate:

Lexical Range:

TanTan	buzzed	il-?uðun 'ear', il-TTabl 'drum, ilmusiiqa "music", il-Jaras 'the bell'
dandan		il-rajul 'the man', ilwalad 'the boy', il-Ŷuud 'the guitar', axii 'my brother'
damdam		il-ɗzurħ 'the wound', rabbuhum 'God'
DamDam		baaqat ilward 'bunch of fowers', al-rajul 'the man'
*DabDab		Unacceptable Form in Standard Use
taftaf	stutterd	al-TTifl, 'the chil', 'al-walad 'the boy'
TafTaf		al-maa? 'the water', al-nnahr, the river'
taltal	heaped	al-SSaħn 'the dish', il-ka?s 'the glass'
*TalTal		Unaccepted Form in Standard Use
tamtam	muttered	Ilwalad 'the boy', al-radɗul 'the man'
TamTam		Il-ħurah 'the ditch', il-Ŷaðm 'the bone'
*samsam		Iftaħ ya simsim
*SamSam		Ŷala ra?yih/ qaraarih 'insisted on'
katkat	dusted	il-ɣubaar 'the dust',
kafkaf	wiped	Al-ddumuuŶ 'the tears'
fakfak	loosened	Il-adawaat 'the instrumenst', al-azraar 'the buttons', alluŶbah 'the toy'
Šak Šak		Al-ddabaabis, 'the pins', al-θθawb 'the garment'
*has has		Ildɗild, il-?axbaar "unattested standard use
raSraS	squeezed	Il-hiɗɗaarah 'the stones', ilzeituun 'the olives'
xaŠxaš	rattled	illuŶbah 'the toy', ilxuŶxeešah 'the rattle', il-kiis, the 'bag'
rašraš	drizzled	ilmaTar 'the rain'. Il-maa? 'the water'
maTmat	delayed	il-?udɗrah 'the rent', al-dduyuun 'the debt'

Conclusion:

There seems to be a correlation between reduplicative verb forms and certain lexical items of particular semantic classes. The reduplicative verb has a fundamental role to play in determining the semantic reference of the whole expression.

This is manifested by the categories established in both Classical and Spoken ; the category, say *motion* subsumes association with certain expressed or unexpressed lexical items indicative of movement. It is therefore possible to make predictions about the range of collocations which could co-occur with each category.. Group I verbs (kinesthetic). have clusters of collocations as the following:

dabdab	dabdab ilxail 'horse trods'
ħaf ħaf	ħaf ħaf al-Tayr ' rustled with its wings'
θayθay	θayθay al radʒul
ħamħam	Hamham al-faras ' 'horse grunt'
naħ naħ	naħ naħ al-radʒul 'cleared throat'
waħ waħ	waħ waħ 'min albard 'shivered'
xarxar	xarxar alma? 'water splash'm
xaš xaš	xaš xaš al-ħaSaa' stone rattle'
xaDxaD	xaDxaD alma? fil?inaa? rinsed'
raqraq	rraq ak-maa? 'water flowing'
xanxan/m	xanxan/m al-radʒul ' nasalized'

Appendix A

Reduplicative Words Classified Semantically

onomatopoeic	kinesthetic	Size Increase	Motion	Turbulence	Place Name	Speech Defect
dabdab	TabTab	baḥ baḥ	bazbaz	Ḫab Ḫab	ʃar ʃar	barbar
ḥaf ḥaf	bahbah	bakbak	basbas	balbal	saksak	baʃ baʃ
ḪaʃḪaʃ	habhab	kabkab	baSbaS	ḪalḪal	sasan	baqbaq
ḥamḥam	ḥasḥas	duxdux	tahtah	ḥaš ḥaš	SaySay	nabnab
naḥ naḥ	ḥaS ḥaS	xuzxuz	ḥat ḥat	xalxal	DamDam	taxtax
waḥ waḥ	waswas	waxwax	tartar	raʃ raʃ	DulDul	taɣ taɣ
xarxar	hashas	daʃdaʃ	taʃ taʃ	kalkal	TafTaf	*taftaf
xaš xaš	qahqah	šaʃ šaʃ	taqtaq		ʃaf ʃaf	tamtam
xaDxaD	ḪadʒḪadʒ	fašfaš	taltal		ʃaq ʃaq	ḪaɣḪaɣ
dardar	SarSar	waSwaS	dʒaz dʒaz		ʃu ʃul l	ḥam ḥam
TaqTaq	raDraD	Daʃ Daʃ	dʒal dʒal		naʃ naʃ	xaš xaš
TanTan	ɣarɣar	faDfaD	ḥaT ḥaT		nuɣnuɣ	laxlax
maʃ maʃ	qasqas	DakDak	ḥaqḥaq		nafnaf	xamxam
waʃ waʃ		waTwaT	ḥal ḥal		qulqul	xanxan
jaʃ jaʃ			TaxTax		luʔliʔ	dandan
faqfaq			daqdaq			TarDar
wawal			daldal			Daɣ Daɣ
laqlaq			hadhad			ʃaT ʃaT
wakwak			Ḫar Ḫar			ɣaT ɣaT
kahkah			rasras			ʃan ʃan
hamham			raSraS			ɣamɣam
maʔmaʔ			kaskas			hamham
			salsal			lahlah
			sasam			halhal
			šal šal			yalyal
			waSwaS			mahmah
			DafDAf			Yaʔtaʔ
			qaDqaD			
			haDhaD			

			haThaT			
			ᶤaᶤ ᶤaᶤ			
			namnam			
			yalyal			
			kafkaf			
			qalqal			
			qamqam			
			kamkam			
			lamlam			
			malmal			
			La?la?			
			Ta?Ta?			