

SOME REMARKS ON THE SEMANTIC FUNCTION OF THE
REDUPLICATED QUADRILITERAL VERB
(STRUCTURE FA'FA'A)

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The purpose of this paper is to show some of the semantic features concerning verbs with reduplication. It is known that reduplication of syllables or even words is a widespread phenomenon in almost every language. In some languages, reduplication has grammatical functions. A practical example for this is Greek where the perfect stem is formed by reduplication of the first syllable¹. However, the main function of reduplication no doubt lies in the field of semantics. These semantic functions may not be obvious to the same extent at any time and in every language but in most cases they remain at least traceable.

A very detailed study of this phenomenon was presented by Harold Key in an article entitled "Some Semantic Functions of Reduplication in Various Languages". He succeeded in assigning the various functions of reduplication to different categories. In respect to verbs, he found thirteen categories, in respect to substantives nine, and in respect to adjectives three². His study encompasses also other word classes³, but these are not of interest for our purposes. It need not be mentioned that all the categories created by Key do not appear to the same extent in every language.

In Arabic the phenomenon of reduplication exists both with verbs and with nouns, i.e. substantives and adjectives. On the basis of the material as represented in the dictionaries of Hans Wehr (1985) and

¹ E.g. γράφω, perf. γέγραφα "to write".

² E.g. verbs: repetitive, intensive, distributive, continuative; substantives: customary or habitual, diminutive, augmentative; adjectives: pluralization, intensification.

³ Such as numerals, adverbs, and pronouns.

Adolf Wahrmund (1877) we assume the following distribution: 53% verbs, 35% substantives, 12% adjectives.

In the following, we shall only deal with the verbs which constitute at least more than half of the material. This restriction does not mean, however, that the nouns are not of interest. On the contrary, further investigation would be worthwhile also in this field. Hitherto we only possess a one hundred year-old study on animal names, written by the famous Theodor Nöldeke (1904:107-123 "Tiernamen mit Reduplikation").

In many books dealing with Arabic grammar and lexicography one can find the remark that reduplicated verbs – like all other quadrilaterals – play a very minor role in the lexic of the Arabic language. In contradiction to this we find 389 different roots with reduplication in the dictionary of Wahrmund, among them 324 verbs of the stem *fāʿfāʿa* and 112 verbs of the stem *tafāʿfaʿa*. This shows that more than half of the theoretically possible 756^4 roots do exist. According to Greenberg (1950) there are 3775 triradical roots, according to Boekels (1990) there are 2564 roots with four radicals, which makes a total of 6339 roots. Thus, the reduplicated roots constitute 6.1% of all Arabic roots. Consequently, it is inappropriate to speak of a minor role of these roots even if we take into account that there might be some obscure forms only encountered in dictionaries – but this is true for all other roots too. And the fact that Hans Wehr's *Dictionary of Modern Written Arabic* contains 137 roots of this kind is enough evidence to show that reduplication is a phenomenon not at all rare in the language of today. The same is attested by the situation as shown in the modern Arabic dialects where verbs of this category play an important role (cf. e.g. Kamil 1963; Iraqui-Sinaceur 1984-86).

We shall not discuss the origin and evolution of the roots in question. A detailed discussion of this subject cannot be given in this paper, because it would lead us again to the very difficult problem of biradical-

⁴ $756 = 28$ times 27 because each of the 28 characters of the alphabet can be combined with 27 others.

ism in the Semitic languages⁵ which is not my subject. As far as origin and evolution is concerned, we can refer to two recent studies: One article written by W. Fischer (1993) and the above mentioned dissertation written by K. Boekels. Both compared the reduplicated roots with trilateral roots showing the same or similar meanings. As mentioned at the beginning we are interested in one question only: Are there specific functions of reduplicated verbs in Arabic and, if so, which? To answer this question we have assigned all the verbs to six different categories:

1. Motions. Further divided into rhythmic and continuous or intensive motions.
2. Acoustic phenomena. Further divided into sounds produced by human beings and animals, as well as noises.
3. Optical effects.
4. Physical or mental qualities
5. Obviously denominal verbs.
6. "Neutral" verbs which do not belong to the above five categories.

We are fully aware of the fact that such a classification in categories remains subjective in some cases. Sometimes it is just a matter of personal approach to decide which class you assign words to. Take for instance *rafrafa* 'flap the wings' or *šaršara* 'sharpen, whet (a knife); fall in drops'. Both are at the same time an interpretation of "rhythmic motions" and of an "acoustic" perception.

The following list is the result of classifying all the 446 verbs into six categories:

- 1) Motion 280 (43%)
 - 129 continuous or intensive
 - e.g. *matmata* 'flow', *tahtaḥa* 'smash to pieces', *qasqasa* 'hurry', *zafzafa* 'rush, sweep along'
 - 151 rhythmic
 - e.g. *taza'za'a* 'wobble', *lahlaha* 'shake', *baṣbaṣa* 'wag (it's tail)', *hadhada* 'dandle (a child)'

⁵ On this subject see Voigt 1988.

- 2) Acoustics 191 (29%)
 119 produced by human beings
 e.g. *ta'ta'a* 'stammer', *ħarħara* 'snore', *barbara* 'babble', *fa'fa'a* 'stutter', *qabqaba* 'laugh boisterously'
 44 produced by animals
 e.g. *ħamħama* 'neigh', *zaqzaqa* 'chirp', *qarqara* 'coo (pigeon)',
ma'ma'a 'bleat (sheep)', *ħabħaba* 'bark'
 28 noises
 e.g. *taktaka* 'tick (clock)', *šalšala* 'clink; rattle', *taqtaqa* 'crackle',
qa'qa'a 'clatter; rattle', *kaškaša* 'rustle'
- 3) Optical effects 14 (2%)
 e.g. *ša'ša'a* 'beam, glitter', *taraqraqa* 'sparkle', *la'la'a* 'flash, glitter'
- 4) Physical or mental qualities 16 (2%)
 e.g. *dahdaħa* 'to be tired', *qabqaba* 'to be silly', *nasnasa* 'to be weak'
- 5) Denominal 18 (3%)
 e.g. *rasrasa* 'load (a rifle)' ← *rasāš* 'lead, bullets'
tazakzaka 'to arm' ← *zikka* 'arms, armour'
aš'aša 'settle down' ← *ušš* 'nest'
falfala 'to pepper' ← *fulful* 'pepper'
- 6) "Neutral" verbs which do not belong to the above five categories
 136 (21%)
 e.g. *tahṭaħa* 'to rot', *tasaksaka* 'to behave in a servile manner', *šafšafa*
 'to dry out', *kaškaša* 'to hold back (tears)', *laflafa* 'to wrap up'

A total of: 655 (100%)

The figure 655 vis-à-vis 446 verbs can be explained by the fact that there are many words with more than one meaning. These verbs were assigned to different categories.

The problem of onomatopoeia

It is known that onomatopoeic words do not only refer to sounds but also to rhythmic and continuous motions as well as to optical ef-

fects (cf. e.g. Gross 1988). Consequently, to a great extent the verbs in question can be labelled as onomatopoeics. In linguistics, onomatopoeia is a special problem afflicted with uncertainty and speculation. It will probably be impossible to solve this problem in a satisfactory way: The structure and the sounds of the languages are too different to permit a postulation at objective connections between the sounds produced by nature and their reproduction in the different languages. To show this, it is enough to quote the famous example of the cock crying *cock-a-doodledoo* in English, *kikeriki* in German, *cocorico* in French and *kūkū-kūk* in Arabic. Furthermore, the imagination of the researcher is not restricted in any way. If you want to hear that a given word imitates a sound of nature you can always find some good arguments to defend what you have heard. Moreover, the situation in Arabic is complicated because of the lack of one of the main characteristics of onomatopoeia in European languages, namely the vocalism. This seems to be the only field where interlingual factors are working. In most Indoeuropean languages, for instance, the vowel *i* is felt to be clear and positive, but *u* is felt to be dull and negative. In Arabic, this opposition is rarely used and especially in our case it never occurs, because no variation of the verb pattern is possible. The verb structure will always remain *fa^cfa^ca* in the perfect tense and *yufa^cfi^cu* in the present tense. This rigid pattern of the verb in Arabic explains the lack of another characteristic feature of onomatopoeia which is the occurrence of atypical sound sequences. In German, for instance, we find initial *tsh-* or *qui-*⁶ only in onomatopoeic words or in words borrowed from other languages.

Now, let us take a look at the widespread view that all the reduplicated roots are only extended forms of the geminated roots. In this context, we want to refer to a very interesting study undertaken by H. Wissmann in the fifties. On the basis of psycho-linguistic experiments he was able to show that all speakers tend to imitate repeated sounds by a reduplication of syllables (Wissmann 1954:178-193). I therefore venture to opine that it is incorrect to regard all verbs of this class as extended

⁶ E.g. *quietschen* "to squeal", *quieken* "to squeak".

geminated roots. Verbs such as *takka* 'to tick', *bassa* 'to call the camels', *rağğa* 'tremble', and *babba* 'snore' cannot be the original forms of *taktakka*, *basbasa*, *rağrağğa*, *bab**h**aba*, which have the same meanings respectively. Such a view would be totally incompatible with linguistic findings past and present. Therefore, I advocate the view that in the above mentioned cases the short forms were extracted from the longer ones.

Summing up we have seen that the biggest part, namely 72% of the verbs with reduplicated roots belong to only two categories: intensive, durative, and rhythmic motions and acoustic phenomena. And it is exactly these two categories which also form the main functions of onomatopoeic words. According to this we can suppose an onomatopoeic origin of most of these verbs. A statistical analysis has also shown that there are even some significant correlations between the phonetic shape and the meaning⁷. However, it has as yet to be proven by further studies whether these correlations are also significant for words outside of the small group of reduplicated verbs.

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⁷ A remarkable correlation exists for example between the laryngeals ' , *h*, and optical effects (60% of all the verbs of this category have one of these three phonemes as second radical).

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