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► **To cite this version:**

| Pablo Kirtchuk. Onomatopoeia in Hebrew. 2011. hal-00602819v2

**HAL Id: hal-00602819**

**<https://hal.science/hal-00602819v2>**

Preprint submitted on 8 Nov 2011 (v2), last revised 21 Aug 2013 (v4)

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## Onomatopoeia in Hebrew

Onomatopoeia is the well-known cross-linguistic phenomenon by which a linguistic element is phonetically inspired by the sound of the reality it conveys. Thus, in English *metal* is said to *clank*, with the latter word based on the actual sound, as it is (1) perceived by the speakers and (2) reproduced according to the constraints of English phonology. Tsur (2006: 246-7) provides the basic principles underlying onomatopoeia: “There is an open set of infinite noises in the world... Nevertheless, we tend to accept many instances of onomatopoeia as quite adequate phonetic equivalents of the natural noises... Behind the rigid categories of speech sounds one can discern some rich pre-categorial sound information that may resemble natural sounds in one way or other; and it is possible to acquire auditory strategies to switch back and forth between auditory and phonetic modes of listening; and second, certain natural noises have more common features with one speech sound than with some others.”

Were onomatopoeia characteristic only of the early stage of particularly old languages, we would expect to see it in Biblical Hebrew (BH) but not in Modern Hebrew; were it typical of child-language, we would expect it to have no significant influence on grammatical and lexical structures; were it to reflect only emotional, oral and spontaneous imitation of sounds found in trivial situations, we would expect it to be absent from grammar and from highly systematized, symbolic, context-independent communication in general. None of these expectations is fulfilled, however: just like intonation-prosody, deixis and iconicity, onomatopoeia too is found in all languages, moreover in their very grammar, and in all their diachronic stages, synchronic uses and stylistic registers, including those of Hebrew. Weinstock (1983) is an important study, though one generation later we no longer consider the biological origin of language as a taboo. It is a licit question, provided it is explored by scientifically accurate methods (Kirtchuk 1993; 2007; forthcoming). Moreover, onomatopoeia plays a key role in the discussion.

Darwin (1872) intuited that the origin of language is in pre-linguistic communication founded on prosodic and intonative

devices based to a large extent on the imitation of natural sounds (see more recently Maturana 1978). Fónagy (2000) shows the importance of emotional factors in the way language functions at its present stage. Bolinger (1949) shows the adequacy found in language, to some extent, between content and form, i.e., iconicity, whose best exponent is onomatopoeia, which is also its most straightforward one as it starts by displaying adequacy between two expressions of sheer form – extra-linguistic and intra-linguistic form. Language originated as the systematization of permanent communication in context, in which vocal emissions went along with deictic gestures, triggered and guided by desires and emotions and characterized by a high degree of onomatopoeia (Kirtchuk 1993; 2007; forthcoming). Those factors, including onomatopoeia, continue to permeate language as such – particular languages included – at their present stage too.

Hebrew displays onomatopoeia from its oldest layers to the present day (Horowitz 1960: 1-10; 220-228). Far from being an amusing mechanism with rather limited presence and influence, onomatopoeia affects the Hebrew lexicon and grammar deeply,

widely and consistently. In order to show it, a brief introduction to the theory of the root system in Hebrew and beyond is necessary.

The trilateral (or 3-P = three-phoneme) structure of the Semitic root conceived by the Arab grammarians and applied to Hebrew by Yehuda Hayyuj (10th century C.E.) levels all roots into a single pattern, at the cost of intellectual operations which necessitate a high degree of abstraction since they posit a third consonant when only two or even a single one are actually present. An opposite view, according to which Hebrew roots are bi-phonemic to begin with, has been suggested by Leibniz (1672-76 [1980]), Gesenius (1871 [1910]), König (1881-97), Halevy-Hurwitz (1913), Bergsträßer (1962), Diakonoff (1965), Ehret (1995) and Bohas (2000). Kirtchuk (2007; 2009; i.p.; forthcoming) shows the relevance of this view and enlarges its scope from diachrony to synchrony, from semantics to cognition and from particular languages to the language faculty. Indeed, a proper analysis of the alleged 3-P roots in Biblical Hebrew allows recasting them into 2-P groups whose number is reduced by a whole order, from  $10^3$  to  $10^2$ . Moreover, in this realm lexicon and phonology are linked, with certain phonemes or phonemic processes

frequently used to expand 2-P roots, modulate their basic meaning, and restrain their application to a particular context or field. These include: a) reduplication of the second phoneme, or of the two core phonemes; b) adjunction of a sonorant of the group /l, m, n, r/; c) adjunction of vowel length represented in some forms of the paradigm by /w, j/; and d) adjunction of an expressive ('guttural' = post-velar) consonant. As the bi-phonemic elements at the basis of many tri-phonemic expansions often reproduce a natural sound, they reflect onomatopoeia. It follows that the original root-bases included a perceived vowel or a sonorant implied by the very process of imitation which characterizes onomatopoeia. It is from the syllable so formed that the bi-phonemic element was abstracted (Lipiński 1997: 207-214). A corollary is that the Semitic – and indeed the Afro-Asiatic and even Indo-European roots – have the same structure, a point which enhances Greenberg (2000-2002).

Following is a sample of such bi-phonemic groups whose onomatopoeic basis, which probably contained a vowel or a sonorant, is easy to grasp – even if the Hebrew forms are not always those reconstructed for Proto-Semitic (Dolgopolsky 1999), Afro-

Asiatic, or an even more remote ancestor (Greenberg *op. cit.* and Dolgopolsky 2008). The examples derive mainly from Biblical Hebrew, though an occasional lexical item from post-biblical Hebrew is included as well. The general sense of the bi-phonemic root is given in bold. In some instances, a possible overall sense is added *in fine*. The focus is on verbs, though at times a noun is noted. For a more comprehensive study, see Kirtchuk (forthcoming).

b/p - z/s: sound made by a **swift movement** (cf. English *buzz*):

בוז *bzz* ‘spoil, plunder’, בזי *bzy* ‘despise’, בזו *bwz* ‘despise’ > בזבוז *bzbz* ‘misspend, throw away, dissipate’ (Tossefta Pe’a 4, 18) , פוז *pzz* ‘be agile, excited, חפז *hpz* ‘be in a hurry’, פחז *phz* ‘wanton, reckless’.

b/p - ḥ/ʿ/y : sound made by a **springing / boiling / inflating** fluid (cf. English *boil, bubble*):

בוע *bw<sup>ʿ</sup>* ‘boil, bubble’, בעבע *b<sup>ʿ</sup>b<sup>ʿ</sup>* ‘spring ; bubble while drowning’ (Yerushalmi Shabbat 14, b), נבע *nb<sup>ʿ</sup>* ‘spring’, בער *b<sup>ʿ</sup>r* ‘sound made by burning matter’, בעי *b<sup>ʿ</sup>y* ‘cause to swell or boil up’, פוח *pwh<sup>ʿ</sup>* ‘blow,

The following is a variant with an occlusive (post-)velar:

p/b - k/q: sound made by an **explosion** or a **violent movement outwards**, including a fluid (liquid or gas) stirring up, flowing, blowing, gurgling or whirling intermittently:

בכי *bky* ‘cry’, נִבֵּךְ \**nebeḵ* ‘spring’ (n.) (*hapax legomenon* in Job 38.16), פכי *pky* ‘trickle’, פֶּךָ *paḵ* ‘vial, flask’, הפך *hpḵ* ‘overturn, make into a shambles’, בַּקְבוּק *baqbūq* ‘flask, vessel’ (Modern Hebrew ‘bottle’), פוק *pwq* ‘bring outwards’, אֶפְיִק \**’apīq* ‘wadi, stream’, פקח *pqḥ* ‘open one’s eyes’, פכה *pkḥ* ‘become lucid, come out from inebriety’, פוג *pwg* ‘burst in fruit unripe as yet’ (Cant. 2, 12), Modern Hebrew ‘be out of validity’; פגה *pagga* (Mishnaic Hebrew) ‘a girl not nubile as yet’ ; פג *pag* (Modern Hebrew) ‘a premature newborn’.

p/b - ṣ: sound made by a **burst** / **breaking** of a solid (cf. English *burst*):



פצץ *pšš* ‘break’, פוץ *pwš* ‘disperse, scatter’, נפץ *nps* ‘shatter’, פצפץ *pšps* ‘break into pieces’ (Job 16, 12), פצה *pšh* ‘cause to break’, פצל *pšl* ‘peel, split’, פצר *pšr* ‘press’, פצע *pšc* ‘break, wound’, פצי *pšy* ‘open’, פצם *pšm* ‘split open’, בצע *bšc* ‘cut off, break off’, בצץ *bšš*, בצבץ *bšbš* ‘break out’, בצר *bšr* ‘lop off (grape clusters)’, בציר *bāšīr* ‘vintage, grape harvest’.

ṭ-p: sound made by a **dripping liquid** (cf. English *tap*):

נטף *ntp* ‘drip, flow, spill’, טפף *tp̄p* ‘drip’, טפטף *tp̄tp̄* ‘drip’, טפפה *tp̄pā* ‘drip’ (n.), טפף *tp̄p* ‘march (with a dripping cadence?)’ (*hapax legomenon* in Isa. 3.16), שטף *štp̄* ‘rinse, overflow, wash away’, שטף *štp̄* ‘overflow’ (n.) (*hapax legomenon* in Isa. 54.8, presumably a byform of the preceding root).

k/q/h - t/ṭ: sound made by **cutting or percuting** (cf. English *cut*):

כתת *ktt* ‘beat, crush’, כתש *ktš* ‘pound’, כתב *ktb* ‘incise (?) > ‘write’, לקט *lqt* ‘pick, glean’, קטב *qtb* ‘destroy’, קטל *qtl* ‘kill’, קטם *qtm* ‘lop off, cut away’, קטע *qtʿ* ‘lop off, cut away’, קטרף *qtṭp* ‘pluck’, חתת *htt* ‘break’,

ḥ/ḥ - m: sound made in **reaction or desire of sensual** (gustative, tactile, sexual, etc.) **pleasure** (cf. English *yum*, *mmm*, Fr. *miam*) and, by extension, the **blushing or glowing** associated to it, hence, also, **red color**:

חַמַּם *ḥmm* ‘be warm’, יְחַם *yḥm* ‘sexual heat’, חָמַד *ḥmd* ‘covet, desire’, חֶמֶשׁ *ḥomš* pubis (Sam. II 2, 23), חֹם *ḥūm* ‘auburn’, חָמַר *ḥmr* ‘be red’, חֲמַרְמַר *ḥmrmr* ‘redden with sorrow or dismay’, חָמַי *ḥmy* ‘heat or wrath, hence חָמַי *ḥmā* sun, חֲמַי *ḥemā* wrath’, חָמַל *ḥml* ‘take pity, have compassion’, רָחַם *rḥm* ‘show mercy’, רֶחֶם *reḥem* ‘womb’, נָחַם *nḥm* ‘condole, console’, חֲמַת *ḥemṯ* ‘wineskin (made of leather, often reddish, as the color of the wine itself)’.

Onomatopoetic verbs related to body actions include: לָקַק *lqq* ‘lick, lap (water)’, עָטַשׁ *ʿṯš* ‘sneeze’. The sound of advancing horses is expressed by the phrase דָּהָרוֹת דָּהָרוֹת *dahārōt dahārōt* (Judg. 5.22; see

Later stages of Hebrew display onomatopoeia in the roots inherited from BH (including most of the above), but they have also created their own onomatopoetic elements in the typical domains of animal expression, movement, and natural phenomena. They are often metaphorized to denote the expression of human emotions (as

*lqlq* 'lick' (Yerushalmi Shabbat 11, 3; expanded from לקק), *pkpk* 'trickle'  
 (Tossefta, Sukka 3, 3; expanded from *pky* 'id. '), *zmzm* 'buzz',  
*ptpt* 'chatter', רשרש *ršrš* 'rustle, rush (of paper, fabric or leaves)',  
 מלמל *mlml* 'mumble, murmur', סלסל *słsl* 'trill', דשדש *dšdš* 'stamp,  
 trample', כחכח *kḥkḥ* / כעכע *kʿkʿ* 'clear one's throat, produce a slight  
 cough', שקשק *šqšq* (variants : קשקש *qšqš* 'chatter', כשכש *kškš* 'wag the  
 tail', קרקש *krkš* 'clatter') 'clack, clatter' > 'tremble in fear', גרגר *grgr*  
 'gargle', קרקר *qrqr* 'cackle', געגע *gʿgʿ* 'quack', המהם *hmhm* 'coo, sigh,  
 grumble' (expanded from המי *hmy*, 'id.', cf. English *hum*), תקתק *tqtq*  
 'tickle' (NB : In Modern Hebrew ק q is always pronounced as כ k and  
 ט ṭ as ת t while ע ʿ and ח ḥ are pronounced as א ʾ and כ [x]  
 respectively by most speakers).

The resemblance of many of the Hebrew items to their English counterparts is striking, which corroborates their onomatopoeic origin.

As it can be seen, the verbs created on onomatopoeic roots typically are built on the patterns  $C_1C_2C_1C_2$ . Indeed, reduplication and onomatopoeia are often associated, although the scope of reduplication is much wider on iconic grounds: it may reflect repetition at the semantic or pragmatic level, and not only at the phonological level (for a comprehensive bibliography, see Magnus 1997-2006). It may even be one link between raw and proto-grammaticalized communication, as per the following statements: “Reduplication of the syllable in the [Hebrew] word "l<sup>e</sup>tsaftsef" relates it to the transition from the child's babbling stage to the [...] use of verbal signs” (Tsur *op.cit.*); “By the repetition of the same syllable children signal that their phonation is not babbling but a verbal message” (Jakobson and Waugh, 1979:196; see also Waugh 1993). Onomatopoeia in Hebrew is iconic, not only inasmuch as it reflects a direct link between sound and sound and then sound and meaning, but also inasmuch as it contains iteration, just like (often) nature.

One cannot refrain from claiming that onomatopoeia helps comprehend *Homo sapiens sapiens* not as a context-independent,

symbolic, arbitrary and rational species, but as one whose members are capable (as Jonathan Swift had it) of projecting themselves beyond immediate context, with access to reason and symbols, and yet who are, like the members of any other animal species, anchored in emotional, sensitive, iconic, context-dependent representations.

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