

Innovation of Verbs in Hebrew

Uzzi Ornan

Hebrew University of Jerusalem

Hebrew Linguistics

Technion, I.I.T. Haifa

Computer Science

Technion City, Haifa, 32000, Israel

ornanu@gmail.com, ornan@cs.technion.ac.il

Abstract

In modern time a lot of connections developed among various nations, and people became acquainted with several languages. New conceptions move from their origin in a certain language to another surrounding. Hebrew also adopted many new words from foreign origin, but there is a difficulty to adopt foreign verbs in Hebrew, since a Hebrew verb must be in a certain pattern. This short paper explains how a special device has developed in the Hebrew grammar to cope with this need.

1 Hebrew words in array

Most Hebrew words are arranged in a "root pattern array". Each line contains a root, which is a sequence of three or more consonants, and each column contains a pattern built as a sequence of vowels, sometimes accompanied by one consonant or two. Each pattern also contains three or four slots in which the consonants of the root should enter (**Figure 1**).

Thus a word appears in each square containing the consonants of the root interwoven into the pattern (**Figure 2**). There are several thousands roots, and 100 – 120 patterns of nouns but only seven patterns of verbs. Nouns may be of foreign origins, but verbs should be in the seven patterns only.

2 Empty squares for innovations

Many squares in the array are actually empty. They may become full if new words are needed to be introduced into the language. Usually it happens if a speaker does not find a word that expresses his/her idea. He/She chooses a proper root, and by looking for proper pattern, a new word is produced and from here it shifts into the dictionary (described in **Figure 2**).

3 Verbal and nominal expressions

Languages have both verbal and nominal expressions. Speakers sometimes need both. In order to express an idea which contains both a noun and a verb, it is possible to use a "general purpose" verb, which expresses a general meaning of doing, such as *do*, *make*, or *act* etc., and relate it to the noun. Here are some expressions in Hebrew: First, general purpose Hebrew verbs:

lip^ol= to act,
le-bacce^s=to perform,
la-^ssot= to do, to make.

And some examples of actual use:

la-^ssot ma`amaççim = to make efforts,
le-harim telepon = to pick up a telephone,
lišloah mibraq = to send a telegram,
la-^srok biqqur = to pay a visit.

4 Same root for both

It is very common that both the verbal and the nominal expressions be of the same root, such as:

liktab miktab = to write a letter
(root: *k't'b'*)
lsapper sippur = to tell a story
(root: *s'p'r'*).

Such use of expression is specially significant in Hebrew for a need to add an adjective to the noun while the real meaning is to add an adverbial description to the verb. E.g., by the nominal phrase "important decision" such as in Hebrew : *le-hahliṭ haḥlaṭa ḥašuba* (root: *ḥ 'l 'ṭ'*) = to decide an important decision. Here both noun and verb are of the same root. Sometimes the verbal expression itself includes the idea of the nominal expression, such as,

le-habriq = *lišloḥ mibraq* (to telegraph, or to send a telegram),
le-hištakker = *lištot le-šokra* (to drink up to toxication),
le-hitraggez = *le-habbi' rogez* (to express anger).

5 Foreign nouns need "squeezing"

But what about foreign nouns? Modern world offers a lot of contacts for speakers of various languages, and Hebrew also got a lot of foreign nouns from many languages. These nouns are not included in the array, and what is more important, they do not have roots, while Hebrew speakers are used to connect nouns and verbs, preferably through common roots. A special procedure developed in Hebrew grammar, which produces roots from foreign nouns. This procedure is "squeezing": We squeeze the noun and get its vowels out¹. What remain is its consonants only.

This sequence of consonants is considered to be used as a new root. The new root is put in a new line in the list of roots at the root-pattern array, and of course on the spot a lot of new empty squares appear along the line of the new root. Some of them are verbal patterns. Now one can choose a proper verbal pattern and here a new Hebrew verb appears.

¹ See, Ornan 1976 (in Hebrew), Ornan 1990 p. 88.

6 Root is sequence of consonants

For example, a new instrument is invented somewhere in a foreign country and has been brought to the Hebrew speakers together with its name: It is the telephone. We have mentioned it above in the first appearance in the idiom *le-harim telepon*, but sometimes after that we find another word which conveys the same meaning, i.e., *le-talpen* = to phone. This verb may appear of course in various verbal structures, such as

tilpanti = I phoned,
talpenu elay = please phone me, etc.

The verb appeared as a result of the squeezing process. From telephone we got the sequence of consonants *tlpn*. and that was enough to add a new line in the root lines of the root-pattern array. ([p] and [f] relate to the same phoneme /p/ even in Modern Hebrew.)

7 Squeezing is original procedure

This procedure of squeezing has been active even in ancient times. It can be seen in the Greek word which entered into Hebrew as well as to many languages – *basis*. We have a Hebrew verb based on the root *bss*, which was squeezed from *basis* in ancient time and is being used since Mishnaic Hebrew until modern time.

8 Squeezing in Hebrew increased

In Modern time squeezing seems to increase. Many new ideas appeared in the wide world, and Hebrew did not stay behind. Beside other ways of innovation of new words from wide world origin, we find a lot of new words, especially verbs, which have been coined by squeezing. See for example what happened to English words such as compilation, debug, format, fax, discuss, Pascal, Pasteur, Rentgen. They all passed through squeezing, even if some of them are not necessarily nouns. For example,

le-qampel = to compile (code),
le-dabbeg = to debug,
le-farmet = to format,
le-faqses = to send a fax note
le-dasqes = to discuss, to talk
le-fasqel = run a Pascal code,
le-faster = pasterize,
le-rantgen = to X-ray.

9 Squeezing of Hebrew words

Next development of the squeezing procedure is that it began to work also on Hebrew words. It happened whenever a speaker feels that the old root does not satisfy his/her needs. A good example is the noun *mispar* which exists in the root-pattern array, with the root *s'p'r'* and pattern *mi—a-*. Its meaning is "a number", and the verb *sapar* means "to count". Now what happens when you need to express the idea of giving numbers to a bunch of pages or names in a long queue. The verb *sapar* "count" is not proper. So the noun *mispar* has been squeezed and a new root, *m's'p'r'* appeared in a new line at the array, producing a new verb *le-masper* = to give numbers. Another example is *himhiz*. Its root *mħz* squeezed from *maħze* = stage play, a noun of root *ħ'z'y'* (The *m* is from the pattern). The procedure is so strong that even a sequence of two adjacent words may be squeezed such as "*ad ka'n*" which means "up to the present". This idiom was squeezed, and we got a new root: *ʿ'd'k'n'*, from which a verb as well as an adjective appeared:

le-ʿadken et ha-ħadašot = to update the news, or
ha-ti`ur lo` mʿudkan = the description is not uptodate.²

² The squeezing procedure suggestion explains the connection between verbs and their origin much easier and nicer than the efforts done by Outi Bat-El, 1994. She speaks about "extracting", which is the exact "squeezing" described in Ornan, 1976 and Ornan, 1990 (without mentioning them), but tries to adopt it to another theory based on four elements (by McCarthy 1981) which includes adding vowels in a separate procedure, without including any formative consonant to a pattern, while the suggested approach here is based on two elements (pattern and root) only, and we include patterns which may contain consonants. Some needed procedures for correcting

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various new roots are dealt with in Ornan, 2003 pp. 110-116.

pattern root	_a_a_	_i_e_	ma_e_	hit_a_e-	_a_	ta_u_a	hi_i_
psq	pasaq	pisseq	mapseq	hitpasseq	psaq	-	hipsiq
gmr	gamar	gimmer	-	-	gmar	-	-
ḥbr	ḥabar	ḥibber	maḥber	hiḥabber	-	taḥbura	-
ʿbd	ʿabad	ʿibbed	-	-	-	-	hiʿbid
prsm	-	pirsem	-	hitparsem	-	-	-
tlgrp	-	tilgrep	-	-	-	-	-

Figure 1: Part of Root-Pattern Array

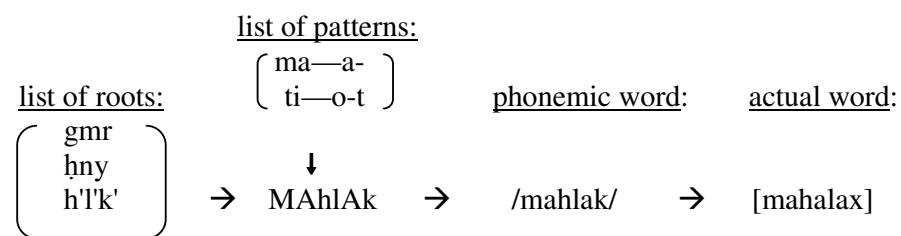


Figure 2: Illustrating part of the generating algorithm