Morphologically marked semelfactive aspect in Modern Hebrew:
Semitic marking of a Slavic aspect

Vera Agranovsky vera.agranovski@mail.huji.ac.il

Verbs with Quadriliteral Reduplicated Roots ($C_1C_2C_1C_2$) – previously proposed semantic characteristics
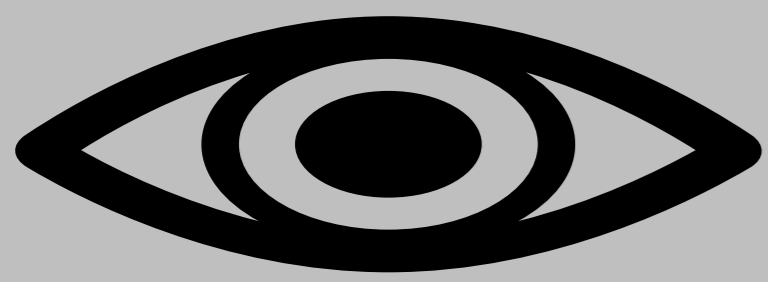
Verbs with $C_1C_2C_1C_2$ roots from all periods of Hebrew

Small group: 138 roots in all periods

BZBZ – *bizbez* (waste)

CMCM – *cimcem* (reduce)

BLBL – *bilbel* (confuse)

TKTK – *tiktek* (tick)

KLKL – *kilkel* (spoil)

DGDG – *digdeg* (tickle)

Previously proposed semantic characteristics:

- There is no clear common denominator, some of them - iteration, repetition. (Bat-El)

- Iteration, repetition, but this is only a subset of these verbs. (Schwarzwald)

- Internal pluractionality, but there are also exceptions – diminution, semelfactive verbs and others. (Greenberg)

The view from coinages and productivity
Verbs introduced in different periods of Hebrew

Verbs with $C_1C_2C_1C_2$ roots introduced in Modern Hebrew

39 roots introduced in Modern Hebrew

TKTK – *tiktek* (tick)

HDHD – *hidhed* (resonate, reverberate)

GXGX – *gixgex* (giggle)

HNHN – *hinhen* (nod)

KFKF – *kifkef* (slap repeatably)

DFDF – *difdef* (flip through pages)

RŠRŠ – *rišreš* (rustle)

CKCK – *cikcek* (click tongue)

L'L' – *li'le'* (gargle)

Claim:

← **Verbs with $C_1C_2C_1C_2$ roots**

have become the exclusive productive form for

Semelfactive verbs →

in Modern Hebrew.

Semelfactive verbs

Small group: I found 125 verbs

- denote extended events und **minimal event/s**

- have **natural atomic structure** (Rothstein)

$C_1C_2C_1C_2$ in Modern Hebrew	Grammatic behavior with modifiers	Events	Structure atomic events	English examples
tiktek (tick) - TKTK	The clock ticked for an hour.	extended event		cough, kick, knock, jump, skip, giggle
	The clock ticked once/twice/again and again.	extended event minimal event/s		

Compared to regular activity verbs:

- denote **only extended event**
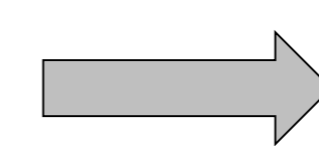
- have **non-atomic structure**

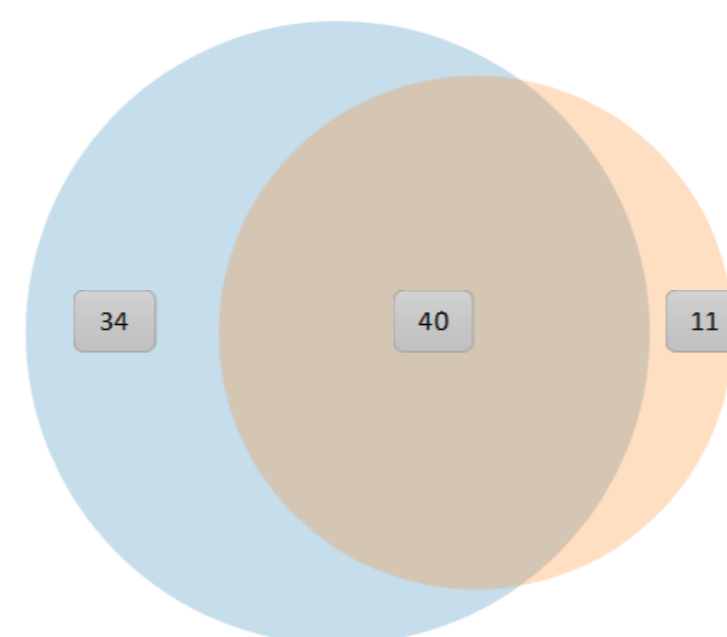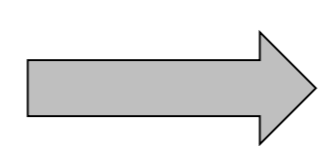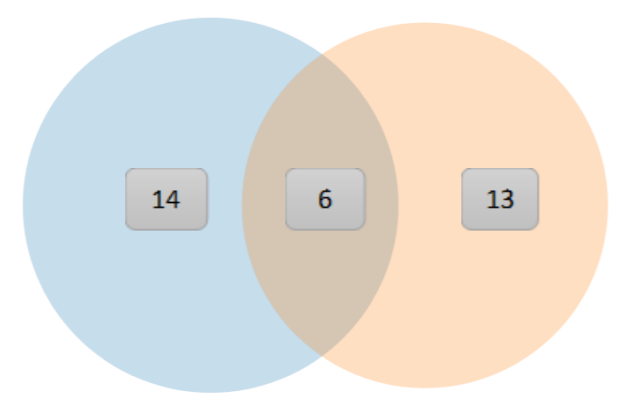| Other roots	Grammatic behavior with modifiers	Events	Structure non-atomic events	English examples
katav (write) - KTV	He wrote for an hour.	extended event		speak, write, sing, eat, travel, play
	He wrote for once/twice/again and again.	extended event		

Historical development – verbs introduced in each period
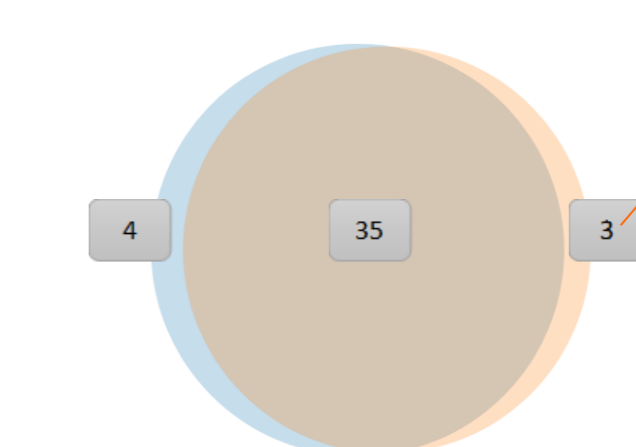
Sources:

Etymological dictionaries

The slang dictionary of Modern Hebrew

Lists of semelfactive verbs in English, Hungarian, Russian

$C_1C_2C_1C_2$ roots

Semelfactive

Rabbinic and Medieval Hebrew

Biblical Hebrew

14 | 6 | 13

34 | 40 | 11

Modern Hebrew

4 | 35 | 3

The exceptions are principled - they are all denominal verbs.

Verbs with $C_1C_2C_1C_2$ roots gradually have become the exclusive encoding for **Semelfactive verbs**.

Factors that influenced this process

Iconicity: Reduplication + Onomatopoeia in the single verb

tiktek (tk-tk)

zimzem (zm-zm)

xirxer (xr-xr)

cikcek (ck-ck)

himhem (hm-hm)

rišreš (rš-rš)

Special characteristics of Hebrew verb system.

1. 'well suited' for **reduplication**, which iconically represents repetition: $C_1C_2C_1C_2$.

2. 'ill suited' for **onomatopoeia**, which iconically represents a sound. Hebrew vowels are determined by template and inflection, so it can not consistently retain syllable patterns → the onomatopoeic effect is weakened:

zm → la**zum**, **zam**ti, ta**zum** / li**zmot**, **zami**ti, ti**zme** / le**zamzem**, **zimzam**ti

Verb system 'ill suited' to represent sounds → Representation of repetition is enhanced

Russian Influence in the Revival Period

1. Russian morphology highlights **Semelfactive pairs** → The speakers created a parallel category in Hebrew.

morgat' – blink (imperfective), extended event

morg**nut**' – blink once (perfective), single minimal event, by suffix *nu*.

2. Hebrew borrowed consonant base from Russian Semelfactive pairs, mostly onomatopoeic verbs.

Russian	Hebrew	Translation
bormotat'/**bor**motnut'	**bir**ber	babble (br-br)
gogotat'/**gogo**tnut'	**gi'ge'**	make noises ga-ga (duck)
hmykat'/**hm**yknut'	**him**hem	make noises gm-gm
harkat'/**har**knut'	**xir**xer	clear a throat, cough (xr-xr)
cykat'/**cyk**nut'	**cik**cek	click tongue (ck-ck)
cokat'/**cok**nut'	**cik**cek	make noises ck-ck (hills)
tikat'/**tik**nut'	**tik**tek	tick (tk-tk)
basit'	**bis**bes	speak in a low voice (bass)

Conclusion: In Modern Hebrew, verbs with Quadriliteral Reduplicated Roots have become the almost exclusive productive way for new Semelfactive verbs. The process began in the earlier periods of Hebrew probably because the Hebrew verb system allows iconic representation of repetition and because of the inclusion of onomatopoeia in this root pattern. It was increased by the influence of Russian substrate in the Revival Period of Modern Hebrew.

Selected references:

Bat-El, O. (2006) *Consonant identity and consonantal copy: The segmental and prosodic structure of Hebrew reduplication.* Linguistic Inquiry 37/2: 179 – 210. **Bat-El**, O. (2011) *Reduplication.* Encyclopedia of Hebrew Language and Linguistics 3 (ed. Khan Geoffrey), Brill **Comrie**, B. (1976) *Aspect.* Cambridge University Press. **Greenberg**, Y. (2010) *Event Internal Pluractionality in Modern Hebrew: A Semantic Analysis of One Verbal Reduplication Pattern*, Brill's Annual of Afroasiatic Languages and Linguistics 2, 119 – 164. **Rothstein**, S. (2008) *Two puzzles for a theory of lexical aspect: semelfactives and degree achivements*, Event Structures in Linguistic Form and Interpretation, Dölling J., Heyde-Zybatow T., Schäfer M., eds., Berlin: Mouton de Gruyter, 175–198. **Schwarzwald**, O. R. (2017) *New Verb Formations in Hebrew: Duplication and Addition of Initial*, Chelkat Lashon 50, 207 – 223 [In Hebrew]. **Smith**, C. S. (1997) *The Parameter of Aspect*, 2nd ed., Dordrecht: Kluwer.