# ENCYCLOPEDIA OF HEBREW LANGUAGE AND LINGUISTICS

Volume 3 P–Z

> General Editor Geoffrey Khan

Associate Editors
Shmuel Bolokzy
Steven E. Fassberg
Gary A. Rendsburg
Aaron D. Rubin
Ora R. Schwarzwald
Tamar Zewi



BRILL

LEIDEN • BOSTON
2013

## Table of Contents

#### VOLUME ONE

| Introduction List of Contributors Transcription Tables Articles A-F | vii<br>ix<br>xiii<br>I |
|---|------------------------|
| Volume Two  |                        |
| Transcription Tables  | vii<br>1               |
| Volume Three  |                        |
| Transcription Tables  | vii<br>1               |
| Volume Four   |                        |
| Transcription Tables  | vii<br>1               |

Hacohen, Gonen and Emanuel A. Schegloff. 2006. "On the preference for minimization in referring to persons: Evidence from Hebrew conversations". *Journal of Pragmatics* 38:1305–1312.

Henkin, Rony. 2003. "More on the task dependent redundancy in the Hebrew interlanguage of speakers of Arabic" (in Hebrew). Research papers in Hebrew linguistics, Hebrew literature and Jewish languages, ed. by Daniel Sivan and Pablo-Isaac Halevy-Kirtchuk, 151–175. Beer-Sheva: Ben-Gurion University of the Negev Press.

Joüon, Paul and Takamitsu Muraoka. 2006. A grammar of Biblical Hebrew. Revised English edition. Rome: Pontifical Biblical Institute.

Kutscher, Eduard Yechezkel. 1982. A history of the Hebrew language, ed. by Raphael Kutscher. Jerusalem: Magnes and Leiden: Brill.

Meir, Irit. 2005. "The vulnerability of gender marking in Modern Hebrew numerals". *Hebrew Linguistics* 55:31-42.

Muchnik, Malka. 2004. "Tel-Aviv 'Southerner' Hebrew dialect in *The Moon Goes Green in the Wadi*". *Helkat Lashon* 35:5–19. English abstract on p. i.

Muraoka, Takamitsu. 2005. "Linguistic notes on Moabite and Ancient Hebrew inscriptions". Samaritan, Hebrew and Aramaic studies presented to Professor Abraham Tal, ed. by Moshe Bar-Asher and Moshe Florentin, \*31-\*44. Jerusalem: Bialik.

Richard, Jack, et al. 1985. The Longman dictionary of applied linguistics. Essex: Longman.

Rosén, Haiim B. 1977. Contemporary Hebrew. The Hague / Paris: Mouton.

Sagi, Hana. 1999. "Redundant use of the negator 'lo'". *Helkat Lashon* 28:7–21. English abstract p. i.

Sarfattii, Gad Ben-Ami. 1977. "Erev pesaxim". Lěšonénu 41:21–28, 158. English version in Studies in Mishnaic Hebrew, ed. by Moshe Bar-Asher, 323–335. Jerusalem: Magnes, 1998.

Talshir, David. 1987. "The status of Late Biblical Hebrew between Biblical Hebrew and Mishnaic Hebrew". *Language Studies* 2–3, ed. by Moshe Bar-Asher, 161–172. Jerusalem: Hebrew University of Jerusalem.

YISHAI NEUMAN (State University of New York, Geneseo)

### Reduplication

Reduplicated words exhibit one or more identical segments in a designated position. Hebrew reduplication involves only consonants (e.g., mešorer 'poet', דפדף difdef 'to turn pages, leaf through a book'), though reduplication in other languages may involve both vowels and consonants (e.g., CVC in Agta: puspusa 'cats', kalkaldin 'goats'). Not every pair of identical consonants in a word is due to redu-

plication, since the process of reduplication is restricted by position. In Hebrew, a pair (or pairs) of identical consonants that constitutes reduplication appears at the right periphery of the word, without an intervening consonant. Thus, אורר sixrer 'to release, liberate', and בקבוק baqbuq 'bottle' are reduplicated but מפסל mimen 'to finance', שורש safsal 'bench', and שורש šóreš 'root' are not (see Schwarzwald 2004 for a general discussion on words with identical consonants).

337

#### I. STRUCTURAL RELATIONS

Many reduplicated words have a non-reduplicated counterpart (1a), which may be considered the base. A few reduplicated words have another morphologically related reduplicated form (1b), in which case it is not clear which is the base. Moreover, there are orphan reduplicated words, which do not have a synchronically related form (1c). These latter are considered reduplicated since they obey the constraints determining the structure of reduplicated forms (see below, \$4).

#### 2. THE PURPOSE OF REDUPLICATION

Reduplication is a word-formation process and, as such, it is not obligatory. This process is not obligatory for the derivation of a new word (the notion in question could be expressed just as well by a phrase). And even when a new word is derived, it is possible to employ word-formation processes other than reduplication. That is, reduplication is just one among a variety of strategies of word formation (others include affixation and ablaut) which can be optionally selected (see Gafos 1998 for a different view).

In some cases, reduplication can be attributed to prosodic restrictions. Reduplicated verbs like מוֹח צְּחִימׁח 'to heat' and קינו qinen 'to nest' are derived from their non-reduplicated counterparts מוֹח צָּמֹח 'hot' and ק קפח 'nest', respectively. In such cases, reduplication is due to the disyllabic structure enforced by the verbal patterns (binyanim), which is satisfied by the addition of a copied consonant. However, epenthesis, as in מַשׁ צֹפּׁׁׁׁ 'name' > שׁיים צֹיִּׁשׁׁׁׁ 'to name', is also a possible strategy of satisfying such prosodic requirements (→ Denominal Verbs).

338 REDUPLICATION

#### (1) Reduplicated words and their non-reduplicated counterparts

#### (1a) Reduplicated—Non-reduplicated

| חימם  | $\underline{x}imem$ | 'to heat'    | חם   | $\underline{x}am$ | 'hot'  |
|-------|---------------------|--------------|------|-------------------|--------|
| משורר | mešorer             | 'poet'       | שיר  | šir               | 'song' |
| כדרר  | kidrer              | 'to dribble' | כדור | kadur             | 'ball' |
| שמנמן | šmanman             | 'chubby'     | שמן  | šamen             | 'fat'  |
|       |                     |              |      |                   |        |

#### (1b) Reduplicated—reduplicated

| צלצל    | șilșel    | 'to ring'    | צליל  | şlil     | 'sound'     |
|---------|-----------|--------------|-------|----------|-------------|
| בלבל    | bilbel    | 'to confuse' | בלל   | balal    | 'to mix'    |
| צמרמורת | șmarmóret | 'shiver'     | מצמרר | meṣamrer | 'shivering' |

#### (1c) Orphan reduplicated

| קילל  | qilel   | 'to curse'  |
|-------|---------|-------------|
| זקיק  | zaqiq   | 'follicle'  |
| שרפרף | šrafraf | 'footstool' |

In other cases, reduplication conveys semantic properties, like diminutive in קמטוט qémeț 'wrinkle' > קמטוט qamțuț 'little wrinkle' or durative/repetitive in בדרר 'to dribble' (Ussishkin 1999; 2000; Tobin 2001). However, it is not the case that every instance of reduplication conveys these semantic properties (e.g., Tobin 2001) Teach 'spokesman' | Teach 'acting as a spokesman' is not durative/repetitive). Moreover, these semantic properties are found in other morphological structures (e.g., diminutive in degel) דגל dégel 'flag' > דגלון diglon 'little flag').

## 3. CONFIGURATIONS OF HEBREW REDUPLICATION

There are four structural configurations of reduplication in Hebrew, each distinguished by the number of identical pairs of consonants (one or two) and the number of different consonants (two or three) (see Tobin 2001 for a signoriented classification). While the configurations in (2a–c) are found in all major lexical categories, that in (2d) is restricted to nouns and adjectives.

The limited configurations in (2) are due to two types of restrictions, one general to all native Hebrew words and another specific to reduplication.

Reduplicated words, like non-reduplicated native ones, fit into verbal and nominal configurations (binyanim and mishqalim, respectively; → Binyanim; Mishqal), which limit the phonological shape of the word in terms of prosodic structure (number of syllables and syllable structures) and vocalic pattern. Some configurations have affixes. As shown in (3)below, reduplicated words fit into the same configurations as non-reduplicated words.

A restriction specific to reduplication is that the identical pairs of consonants must be at the right periphery of the word (e.g., אוֹ צִמּמְמֵּמְ 'to celebrate', ודדרד vradrad 'pinkish') and not at the left (אוֹר \* צַמַּמַמְּמַ, 'דורד' \* vravrad'). It should be noted that this restriction is not based on the existing lexicon of Hebrew alone, but also on the preference manifested in experimental studies on nonce-words (Berent and Shimron 1997).

# 4. THE GRAMMAR OF REDUPLICATION

Speakers of Hebrew can form a reduplicated word from a non-reduplicated one, as well as identify a word as reduplicated without a given base. These capacities can be accounted for in terms of constraints on the patterns of reduplication (Bat-El 2006).

REDUPLICATION 339

#### (2) Configurations of reduplication

|      | Configurations           | No. of         | No. of       |       |                     |              |
|------|--------------------------|----------------|--------------|-------|---------------------|--------------|
|      |                          | dentical pairs | different Cs |       |                     |              |
| (2a) | $CVC_iVC_i$              | I              | 2            | חביב  | $\underline{x}aviv$ | 'charming'   |
| (2b) | $CVCC_iVC_i$             | I              | 3            | שחרר  | ši <u>x</u> rer     | 'to release' |
| (2c) | $C_i V C_j C_i V C_j \\$ | 2              | 2            | גלגל  | galgal              | 'wheel'      |
| (2d) | $CC_iVC_jC_iVC_j$        | 2              | 3            | שרברב | šravrav             | 'plumber'    |

#### (3) Configurations shared by reduplicated and non-reduplicated words

| Configuration | Reduplicated |                     |                  | Non-reduplicated |               |              |
|---------------|--------------|---------------------|------------------|------------------|---------------|--------------|
| CaCaC         | גרר          | garar               | 'to drag'        | גדל              | gadal         | 'to grow'    |
| CiCeC         | חימם         | $\underline{x}imem$ | 'to heat'        | חיבק             | <u>x</u> ibeq | 'to hug'     |
| CiCCeC        | קלקל         | qilqel              | 'to spoil'       | דקלם             | diqlem        | 'to cite'    |
| hiCCiC        | הפליל        | hiflil              | 'to incriminate' | הכניס            | hixnis        | 'to put in'  |
| hitCaCeC      | התקרר        | hitqarer            | 'to get a cold'  | התלבש            | hitlabeš      | 'to dress'   |
| CaCiC         | קריר         | qarir               | 'chilly'         | שביר             | šavir         | 'fragile'    |
| CoCeC         | שודד         | šoded               | 'robber'         | שומר             | šomer         | 'guard'      |
| CaCCuC        | שבלול        | šablul              | 'snail'          | ילקוט            | yalquṭ        | 'school bag' |
| CaCCéCet      | דפדפת        | dafdéfet            | 'paper pad'      | כרטסת            | karțéset      | 'card index' |
| miCCaCa       | מכללה        | mixlala             | 'college'        | משטרה            | mišṭara       | 'police'     |

The first structural constraint on the patterns of reduplication states that *the stem is positioned* at the left periphery of the word (prefixes excluded). As psycholinguistic studies suggest, the left periphery (the beginning) of the word facilitates processing and word recognition, such that, the sooner the stem is identified, the quicker the recognition of the word (Bat-El 2002).

At the other end, the right periphery is perceptually salient, in particular when stress is final, as is usually the case in native Hebrew words (note that all reduplicated forms conform to native configurations). This is the motivation for another constraint, which states that the final consonant of the word corresponds to the final consonant of the stem. Note that reduplicated forms may undergo spirantization, resulting in non-identical corresponding consonants (e.g., שרבב 'sirbev' to prolong, insert in the wrong place'). Although spirantization is opaque in Modern Hebrew, speakers identify the correspondence between the two consonants (→ bgdkpt Consonants: Modern Hebrew).

These two constraints impose the structure  $\{[...C_i]_{Stem}...C_i\}_{Word}$  on reduplicated forms, where the stem is word-initial and the final consonant of the word corresponds (i.e., is identical) to the final consonant of the stem. The

prosodic structure of the word is determined by the configurations (see (3) above), which limit the size of the word to two syllables (excluding affixes) and the syllable structure to CV, CVC, and initial CCVC. Note that syllables with initial CC are possible only in word-initial position in nouns and adjectives (e.g., אמוחה בשמחה 'growth', קטנה 'growth', קטנה 'growth', קטנה 'small [fs.]'); verbs do not allow such syllables with the exception of denominal verbs derived from bases with initial cluster (e.g., שרנספר 'to transfer').

Given the above constraints, the prosodic structures CVCVC and CVCCVC provided by the configurations, can host only the existing pattern of reduplication:  $C_1VC_2VC_2$ ,  $C_1VC_2$   $C_3VC_3$ , and  $C_1VC_2C_1VC_2$ . Patterns such as \*{[C\_1VC\_2]VC\_1} are excluded (thus שורש šóreš 'root' is not reduplicated), since the consonant at the right edge of the word ( $C_1$ ) does not correspond to the consonant at the right edge of the stem. Similarly, patterns such as \*{ $C_1V[C_1VC_2]$ } are excluded (thus מימן mimen 'to finance' is not reduplicated) since the stem ([ $C_1VC_2$ ]) is not at the left edge of the word.

A constraint requiring *contiguity in the string* of *consonants* must also be assumed, in order to exclude patterns such as \*{[C<sub>1</sub>VC<sub>3</sub>]C<sub>2</sub>VC<sub>3</sub>} (thus ספסל safsal 'bench' is not reduplicated). This constraint is also relevant for the pattern

340 REFLEXIVE

 $C_1C_2VC_3C_2VC_3$ , explaining the absence of the pattern \*{ $[C_1C_2VC_3]C_1VC_3$ }, where the copied material ( $C_1VC_3$ ) is not contiguous.

#### 5. CONCLUSION

Hebrew reduplicated words, which conform to the structural restrictions imposed by the language's verbal and nominal configuration, have one or two pairs of identical consonants. The position of the identical consonants is restricted to the right periphery of the word, allowing the base stem to be aligned with the left edge. Words with identical consonants that do not obey the constraints on reduplication are not reduplicated, though they might have been reduplicated in earlier stages of the language. Speakers may resist words with identical consonants that do not obey the constraints on reduplication. This is evident by the word שפופרת šfoferet 'tube', which speakers often produce (and also spell) as שפורפרת šforferet. Interestingly, a search in the Bar-Ilan Responsa Project database (2010) reveals that the wrong form in the current stage of the language (i.e., *šforferet*) is documented (though rarely) in texts from the 11th century on, and might have originally been correct, if שפופרת šfoferet 'tube' is historically a reduplicated form of שופר šofar 'ram's horn' (i.e., šofar > šforferet > šfoferet). A similar historical development is found in Chaha (Banksira 2000), where C<sub>1</sub>VC<sub>1</sub>VC<sub>2</sub> forms are derived from C<sub>1</sub>VC<sub>2</sub>C<sub>1</sub>VC<sub>2</sub> via deletion of a non-final coda consonant.

#### REFERENCES

Banksira, Degif Petros. 2000. Sound mutations: The morphophonology of Chaha. Philadelphia / Amsterdam: John Benjamins.

Bat-El, Outi. 2002. "Semitic verb structure within a universal perspective". Language processing and acquisition in languages of Semitic, root-based, morphology, ed. by Joseph Shimron, 29–59. Amsterdam: John Benjamins.

—. 2006. "Consonant copying and consonant identity: The segmental and prosodic structure of Hebrew reduplication". Linguistic Inquiry 37:179-210.

Berent, Iris and Joseph Shimron. 1997. "The representation of Hebrew words: Evidence from the Obligatory Contour Principle". Cognition 64:39–72. Gafos, Diamandis. 1998. "Eliminating long-distance consonantal spreading". Natural Language and Linguistic Theory 16:223–278.

Schwarzwald (Rodrigue), Ora. 2004. "Some notes on consonant reduplication in Hebrew" (in Hebrew). Morashtenu Studies 2–3:251–265. Tobin, Yishai. 2001. "Trying to 'make sense' out of phonological reduplication in Hebrew", *Proceedings of LP*'2000, ed. by Bohumil Palek and Osamu Fujimura, 227–260. Prague: Karolinum.

Ussishkin, Adam. 1999. "The inadequacy of the consonantal root: Modern Hebrew denominal verbs and output-output correspondence". *Phonology* 16:401–442.

—. 2000. "The emergence of fixed prosody".

PhD dissertation, University of California Santa Clara.

OUTI BAT-EL (Tel-Aviv University)

#### Reflexive

#### I. DEFINITIONS AND SCOPE

A reflexive verb denotes a verb or construction where the subject and the object refer to the same entity or set of entities. These two roles are often referred to as 'agent' and 'patient', but unlike in prototypical agent-patient relationships a reflexive verb does not necessarily involve a change of state (→ Agent; Patient), and thus manifests an intermediate degree of transitivity. A reflexive pronoun, likewise, typically denotes a referent that is identical to that of the Actor (the subject noun phrase), but generally has the syntactic function of an object. A reflexive verb, like a passive verb, can only be used to refer to a situation in which there is an agent, while a verb in the middle-voice is unmarked with respect to the presence of an agent, and thus may often be used in Hebrew to refer to the same situation as the passive or reflexive. There are, however, also reflexivepatient-subject constructions, i.e., constructions in which a transitive verb has a patient as its subject and a reflexive pronoun as its object, e.g., זו השקעה שמצדיקה את עצמה zo hašqa'a še-masdiga 'et 'asmah 'It is an investment that justifies itself'.

Reflexivization of the sort found in Semitic languages, as opposed to that found in Romance languages, is generally viewed as clause-bound and sensitive to the semantics of the verb. As opposed to the situation in Romance languages, it can be the input to nominalization, e.g., it can be the input to nominalization, e.g., ti can be the input to nominalization, e.g., it can be the input to nominalization, e.g., it can be the input to nominalization, e.g., it can be the input to nominalization tihye hitraxasut ba-yam 'There will be bathing.REF in the sea'. In generative studies (Reinhart and Siloni 2005; Siloni 2008), there is a view that takes reflexivization