Table of Contents

**Volume One**

Introduction ........................................................................................................................ vii
List of Contributors ....................................................................................................... ix
Transcription Tables ..................................................................................................... xiii
Articles A-F ..................................................................................................................... 1

**Volume Two**

Transcription Tables ..................................................................................................... vii
Articles G-O ................................................................................................................... 1

**Volume Three**

Transcription Tables ..................................................................................................... vii
Articles P-Z ..................................................................................................................... 1

**Volume Four**

Transcription Tables ..................................................................................................... vii
Index .............................................................................................................................. 1
2. Verb Patterns (binyanim)

The seven standard verb patterns are listed in Table 1 with their traditional names (the third-masculine-singular perfect/past form of p-‘l ‘do’), their basic template (C₃ refers to each consonant’s position in the root; Modern Hebrew lacks the gemination of patterns 3, 4, and 7, indicated by parentheses), and an example (Biblical and Modern Hebrew third-masculine-singular perfect/past form) with gloss.

This system of patterns exhibits both irregularities and regularities appropriate to its dual function: the patterns can form different verbs from the same root (irregular), but may also alter the argument structure (valency) of existing verbs (regular) (Arad 2005:116). The patterns do not all perform these functions equally: (a) patterns 1, 3, and 5 form verbs from roots; (b) patterns 2 and 7 may form verbs from roots, or may express the passive of verbs in patterns 1 and 3, respectively (e.g., 1 and 2 in Table 1; (c) Patterns 4 and 6 may, as a rule, only be used to create passives of verbs in patterns 3 and 5, respectively (Arad 2005); (d) other valency alternations encoded by the system include causative (1 לָבַשׁ ‘wear’ > 5 לָבַשׁת ‘clothe someone’), reflexive (5 לָבַשׁת ‘clothe someone’ > 7 לָבַשׁת וַתָּלְבָּשׁ ‘clothe oneself’), and reciprocal (3 נִשְׂאָק ‘kiss’ > 7 נִשְׂאָק וַתַּחְבִּית ‘kiss one another’) (Glinert 1989:462). For the complexities of the verbal pattern system in the creation of the many neologisms in Modern Hebrew, see Bolozky (2007:293–95) and Schwarzwald (1996, 2001:31–33).

The following variations and shifts may be noted. Of the pattern p’al has two variants associated with stative verbs: C₃aC₃,C₃(e.g., לָבַשׁ ‘was/grew old’) and C₃aC₃,oC₃(e.g., בַּגְדֶה ‘was/grew small’). In Modern Hebrew these patterns are infrequent; verbs with these patterns are usually leveled in the past tense to the unmarked C₃aC₃,aC₃ pattern (Schwarzwald 2001:32). The ‘weak’(middle-glide or geminate) verbs usually exhibit variant patterns for pi’el, p’al, and hitpael: C₃,oC₃,C₃; C₃,oC₃,aC₃; and hitpC₃,oC₃,C₃, respectively. However, they are sometimes ‘regularized’: cf. קונָנָנָנ (Prov. 9.8) versus כּוֹנֵן (Mishna Berackot 2.1) ‘set up’. A passive counterpart to p’al occurs infrequently in Biblical Hebrew: C₃,uC₃,C₃,aC₃,
the passives of Exod. 3.2). More frequently the first and second root consonants in the entire Modern Hebrew necessitates a vowel between gemination of the middle consonant (absent in Biblical Hebrew, respectively): Exod. 22.5). In post-biblical Hebrew the passive patterns recede from use, and a new passive develops; however, the older patterns periodically reappear, in imitation of the biblical style, as in the writings of medieval paytanim (Sáenz-Badillos 1993: 157, 191, 210, 223).

3. Conjugations

In the Hebrew verb system TAM distinctions take the form of syllable and vowel alternations integrated into the different patterns. The two basic syllabic structures are CVC(C)/VC (parenthesis indicates optional gemination) and -VCCVC, which requires a consonantal prefix. The template structures for the conjugations are given in Table 2 with Biblical Hebrew vowel transliteration (for the Modern Hebrew equivalents the diacritics should be removed) (see Schwarzwald 1996, 2001:32). The + sign indicates affixation; parentheses indicate an optional affix.

The first syllabic structure, CVC(C)/VC, is typical of patterns 3, 4, and 7, in which the gemination of the middle consonant (absent in Modern Hebrew) necessitates a vowel between the first and second root consonants in the entire conjugation; the second structure, -VCCVC, is typical of patterns 5 and 6. The same template is common to the participle/present and imperfective/future of patterns 3–5 with the following differences: the participle/present forms have an m- preformative instead of the agreement affix of the imperfective/present; in Biblical Hebrew the a vowel is ‘long’ in the participle/present (following the nominal pattern of vowels), and short in the imperfect/present (see examples). This difference has been neutralized in Modern Hebrew.

Below are some examples (Biblical and Modern Hebrew, respectively):

<table>
<thead>
<tr>
<th>Pattern (binyan)</th>
<th>Perfective/Past</th>
<th>Participle/Present</th>
<th>Imperfective/Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Pa’al (or Qal)</td>
<td>C₃CaC(+),</td>
<td>C₀CaC(+),</td>
<td>+CC₀C(+)/+CCaC(+)</td>
</tr>
<tr>
<td>2 Nif’al</td>
<td>niC₃CaC(+),</td>
<td>niCCaC(+),</td>
<td>+iCCaC(+)</td>
</tr>
<tr>
<td>3 P’el</td>
<td>CuCCaC(+),</td>
<td>+aCCaC(+)</td>
<td></td>
</tr>
<tr>
<td>4 Pu’al</td>
<td>hiCCaC(+),</td>
<td>+aCCaC(+),</td>
<td></td>
</tr>
<tr>
<td>5 Hitpa’el</td>
<td>+itCCaC(+)</td>
<td>+iCCaC(+)</td>
<td></td>
</tr>
<tr>
<td>6 Hup’al/Hof’al</td>
<td></td>
<td>+iCCaC(+)</td>
<td></td>
</tr>
<tr>
<td>7 Hitpa’el</td>
<td></td>
<td>+iCCaC(+)</td>
<td></td>
</tr>
</tbody>
</table>

(e.g., בִּקְל ‘akkāl ‘it was (not) being consumed’, Exod. 3.2). More frequently the nif’al serves as the passive of pa’algal (e.g., בִּגְדָה ‘wore’ bēqēkāl ‘and is consumed’, Exod. 22.5). In post-biblical Hebrew the passive patterns recede from use, and a new passive develops; however, the older patterns periodically reappear, in imitation of the biblical style, as in the writings of medieval paytanim (Sáenz-Badillos 1993:157, 191, 210, 223).
maslik, יָשְׁלִיק mašlix ‘(is) throwing’; imperfective/future (third-masculine singular) יָשִלֵיק yašlik, יָשַלֵיק yašlix ‘will/should throw’.

All three conjugations of patterns 6 and 7 have the same template, with a lengthened a vowel in the participle/present, and a preformative: b- for the perfective/past, m- for the participle/present, and agreement affixes for the imperfective/present.

Below are some examples (Biblical and Modern Hebrew, respectively):

1. **Pa’al (or Qal):** perfective/past (third-masculine singular) יִשָּמֵר, רְשָׁמֵר šāmar, רְשָׁמֵר ‘(is) being kept’; participle/present (masculine singular) יִשָּמר, רְשָׁמר šomēr, רְשָׁמר ‘(is) keeping’; imperfective/future (third-masculine singular) יִשָּׁמְר, רְשָׁשָׁמְר ‘will/should keep’.

2. **Nif’al: **perfective/past (third-masculine singular) יִשָּׁמֵר, רְשָׁמֵר nišmar, רְשָׁמֵר ‘(is) being kept’; participle/present (masculine singular) יִשָּׁמְר, רְשָׁשָׁמְר nišmar, רְשָׁשָׁמְר ‘(is) being kept’; imperfective/future (third-masculine singular) יִשָּׁשָּמְר, רְשָׁשָׁשָׁמְר yiššāmēr, רְשָׁשָׁשָׁמְר ‘will/should be kept’.

The conjugations are also distinguished by their respective agreement marking, as illustrated in Table 3 (given with Biblical Hebrew vocalization and transliteration; Modern Hebrew transcription is the same without diacritics, except where noted): the perfective/past has person-gender-number agreement suffixes; the

<table>
<thead>
<tr>
<th>Perfective/Past</th>
<th>Imperfective/Future</th>
<th>Participle/Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 s</td>
<td>תי -</td>
<td>-א</td>
</tr>
<tr>
<td>2 ms</td>
<td>-ל-תא</td>
<td>-ת</td>
</tr>
<tr>
<td>2 fs</td>
<td>י -</td>
<td>-י -ת</td>
</tr>
<tr>
<td>3 ms</td>
<td>ל -</td>
<td>-י -ת</td>
</tr>
<tr>
<td>3 fs</td>
<td>ומ -א</td>
<td>-ת</td>
</tr>
<tr>
<td>1 pl</td>
<td>מ -</td>
<td>-מ</td>
</tr>
<tr>
<td>2 mpl</td>
<td>נמ -טימ -טימ</td>
<td>-ט</td>
</tr>
<tr>
<td>2 fpl</td>
<td>נמ -טימ -טימ</td>
<td>-ט</td>
</tr>
<tr>
<td>3 mpl</td>
<td>י -</td>
<td>-י -ת</td>
</tr>
<tr>
<td>3 fpl</td>
<td>י -</td>
<td>-י -ת</td>
</tr>
</tbody>
</table>

Table 3. Agreement features (nis. = nis max or ‘construct state’).
imperfect/future has person-gender-number agreement prefixes and discontinuous (prefix and suffix) affixes; and the participle/present uses noun gender-number agreement suffixes.

In all periods Hebrew also has imperative and infinitive conjugations (except in the passive patterns 4 and 6), which are morphologically based on the imperfect/future conjugation with an altered prefix: patterns 1, 3, and 7 lack the prefix (with a vowel to break up the initial consonant cluster in pattern 1); patterns 2 and 5 replace the prefix consonant with ַה. The imperative uses the same agreement suffixes (only) as the imperfective/future conjugation, while the infinitive lacks any agreement affixes.

Examples:

**Imperatives:** 2 ms, 2fs, 2mpl (the 2fpl, ending in ה- -נָא, is rare, the masculine being used for both genders since post-Biblical Hebrew)

1. **Pa’al (or Qal):** רכש שָׁמֹר/smar, שִׁמְרֵה simrer, רכש simra/simru
2. **Nif’il:** מְסֻמֶּר/messomer, מְסֻמֶּרֶה messomer, מְסֻמָּר/מְסֻמָּרֶה messam/sammam, מְסֻמֶּרֶה sima/simma
3. **P’el:** ובש’appar/sapar, ובש’appar/appar
4. **Hitp’el:** נָה תְשִׁלְלו Parkway, נָה תְשִׁלְלוֹ Parkway, נָה תְשִׁלְלוֹ Parkway, נָה תְשִׁלְלֵה Parkway

**Infinitive (with ל/ל ‘to’):**

1. **Pa’al (or Qal):** רכש לִשְׁמֹר/lisomer
2. **Nif’il:** לִבְשִׁמֶר/labsamer, לִבְשִׁמֶר/לִבְשִׁמֶרֶה labsam/labsemer, לִבְשִׁמֶר/לִבְשִׁמֶרֶה labsam/labsemer
3. **P’el:** בַּשְׂפֶר/basparr/saparr
4. **Hitp’el:** בַּשָּׁפֶר Parkway, בַּשָּׁפֶר Parkway, בַּשָּׁפֶר Parkway, בַּשָּׁפֶר Parkway

**4. Historical Shifts in the System of Conjugations**

The TAM system of conjugations has undergone a number of significant historical shifts, which are summarized below in three successive stages: Ancient (including Biblical), Rabbinic, and Modern Hebrew (→ Tense; Aspect).

**Ancient Hebrew (including Biblical)**

In the earliest documented Hebrew texts the two main finite, **realis** (indicative) conjugations expressed the opposition of perfective versus imperfective aspect, as illustrated in the following examples (see Cook 2001, 2006):

...التה אלוהים הדיב יוהו elohenu YHWH our God spoke to us (Deut. 1.6).

Alongside each of these forms there are more restricted, but overlapping constructions. The past narrative conjugation derives from an older West Semitic past. Rare in (non-literary) epigraphic texts (e.g., verb יבש ylwh ‘and they flowed’ [Silosam Tunnel 1. 4]), it is the most frequently used form in Biblical Hebrew, where it expresses the main story line in narrative discourse in contrast to the perfective/past form (see Cook 2004):

...way-yeqam and he saddled his donkey, and he took two of his servants with him and Isaac his son, and he split the wood for the burnt offering, and he rose up and went to the place which God had instructed him’ (Gen. 22.3).

Apart from the distinctive form of the enclitic conjunction, which has become fused with it, the conjugation is inflected like the imperfective/future form, with a few exceptions in the case of verbs with a middle or final glide in their root and in the Hif’il pattern, which exhibit a ‘shortened’ form compared with the imperfective/future in those forms without an inflectional suffix (cf. יָגוּם way-yagom with יָגוּם yagam; hif’il יָשָׁק way-yashkem with יָשָׁק yashq).

In Biblical Hebrew the predicatively constructed participle is widely used to express past progressive, general present, and expected
future meanings, alongside the imperfective/future conjugation.

The presence of an overt copula with the participle is rare in Biblical Hebrew (see further Cook 2008).

Ancient Hebrew had a more complex system of irrealis verbal expressions than later stages of the language. First, it featured a directive/volitive system that included the imperative and jussive (all persons). Alongside the imperative, which cannot be negated (in all stages of the language), the jussive was used for negative directives and wishes with the ‘irrealis negative’ ̀א (cf. א, which negates both realis and irrealis expressions). The jussive of the second and third persons shares the same ‘shortening’ pattern as the past narrative, and is thus otherwise inflected like the imperfective/future conjugation (cf. past narrative לֹא מַה־תְּבַקֵּשׁ, imperfective/future מַה־תְּבַקֵּשׁ, and jussive מַה־תְּבַקֵּשׁ). The first-person jussive, traditionally called the cohortative, is frequently ‘lengthened’ by a -ך suffix (cf. 1pl imperfective/future נֵלְכָה nêlêk and 1pl cohortative נֵלְכָה nêlêk).

Second, the perfective/past and imperfective/future forms expressed both realis and irrealis mood, which was distinguished by a word-order pattern shared by the directive/volitive system: expressions of the realis mood have subject-verb word order, whereas irrealis expressions have verb-subject word order:

This mood-based word order distinction is often obscured in Biblical Hebrew by the frequent lack of overt subjects and the syntactic feature of ‘triggered inversion’ following most grammatical words and pragmatically fronted elements (see Holmstedt 2009). The irrealis perfective/past appears frequently with the enclitic conjunction (see above example, Exod. 31.16), which gave rise to the traditional view that the conjunction was fused to the form as part of the conjunction, analogously with the past narrative. By contrast, triggered inversion is a likely explanation for the consistent verb-subject word order of the past narrative, brought about by the peculiar morphology of the enclitic conjunction with gemination (often explained as the remnants of a grammatical word).

Finally, Ancient Hebrew had an adverbial infinitive, traditionally called the ‘absolute’ infinitive, alongside the infinitive found in all stages of the language. This ‘absolute’ infinitive has the following forms: pa'al (or qal): שָׁמְרָה; nip'al: נִלֹחַ; nip'al: נִלֹחַ; plural: pa'al: סַפֵּר; nip'al: סַפֵּר; nip'al: סַפֵּר (rare in pa'al, hof'al, and bitpa'al). This adverbial infinitive fills both nominal (e.g., חַיֵּין וּוֹא־בָּרֵנ וּוֹא־בָּרֵנ וּוֹא־בָּרֵנ ‘and after drinking’ 1 Sam. 1.9) and verbal roles (e.g., בְּרִית מַה יָדַע יֵדַע יֵדַע יֵדַע ‘remember the sabbath day’ Exod. 20.8), though its most frequent function is adverbial (e.g., וִיהי נֵלְכָה נֵלְכָה נֵלְכָה ‘he went eating as he went’ Judg. 14.9). As an adverbial it frequently appears with a finite verb of the same root to express modality (e.g., תֹּם תֹּם תֹּם תֹּם תֹּם תֹּם ‘you will surely die’ Gen. 2.7).

Rabbinic Hebrew

The system of conjugations gradually shifted from aspect- to tense-prominent oppositions, a process which was nearly complete by the Rabbinic period. This shift had a number of effects, one being the decline of the stative pattern and the interaction of statives with the perfective/past conjugation: Biblical ידַע ידַע ידַע ידַע ידַע ידַע ‘he knows’—‘he knew’ versus Rabbinic ידַע ידַע ידַע ידַע ידַע ידַע ‘he knew’. The loss of the present-state interpretation indicates that this conjugation expressed the past tense in Rabbinic Hebrew (see Bybee, Perkins, and Pagliuca 1994:92). A related outcome was that the irrealis functions of the perfective/past as well as the older liter-
ary past narrative conjugation had become obsolete by the same period.

The predicative participle is used more in Rabbinic Hebrew than in earlier periods, and appears more frequently with an overt (copula) tense marking, e.g., יומין יושב hanayin yoshim ‘we were sitting’ (Babylonian Talmud Yevamot 106b). The imperfective/ future, in turn, was largely restricted to irrealis mood and subordinate clauses, while a new periphrastic construction for future realis expressions developed: השה יושב ﺏِنَانِ هٰوَر ‘the ten tribes will not return’ (Mishna Sanhedrin 10.3). Finally, the distinctive Biblical Hebrew jussive (‘short’) and cohortative (‘long’) directive-volitive forms are absent in Rabbinic Hebrew, so that the ‘irrealis’ negative particle לא ‘al ‘not’ appears regularly with imperfective/future forms: ולא לפני תרבו we-al tarbe (Mishna ‘Avot 1.5; cf. Biblical Hebrew jussive וְלָא לפני we-al tareb).

Modern Hebrew

The Modern Hebrew system of conjugations is predominantly tense based, exhibiting a three-way opposition between past, present (participle), and future. Modern Hebrew uses several periphrastic tense and modal constructions. The imperative conjugation is used for commands with some frequently used (weak) verbs; otherwise, the future is usually employed for directive and volitive expressions (see Bolzozky 1979). In both the future and imperative, the masculine plural forms are frequently used for both genders (see Schwarzwald 2001:39).

The compound past, consisting of a past form of היה haya ‘to be’ plus the present (also the participle) form, expresses the past habitual and irrealis (e.g., הוא היה אמרת המדה hu haya ‘omer tamid ‘he would always say...’), though not the past progressive, for which the simple past form is used, e.g., הוא כן נמצזי התוכן he kal nachoq ‘When I entered the room, he was writing’.'There are two periphrastic relative future constructions, consisting of będzie amad le- or będzie halax le- in an appropriate tense plus the infinitive: he-rachvet ha-rakevet 'amdal ‘omedet limsa’ be-’od șa’a ‘the train was/is going to leave in an hour’; he-dineh _lineno ‘ata bolex lehabig lo ‘Are you going to tell him?’ (Glinert 1989:124). Various modal verbs combine with the infinitive to express modalities, includingodium yaxol ‘can’ and zarad  ‘must’ (e.g., otros halox / zarad  ‘must’ / ‘we should’).

References


Verb Phrase

In the Generative Grammar framework (first introduced in Chomsky 1957), a phrase is a syntactic unit composed of at least one constituent defining its type. A phrase may consist only of that constituent, which is considered to be its head, or include other constituents as well.