# 9 Ancient Hebrew 

Richard C. Steiner

This chapter is dedicated to my esteemed teacher, Professor Henry M. Hoenigswald. (For the system of transliteration employed in this chapter see note p. 172)

Ancient Hebrew was the language of the Israelite tribes who, at the beginning of the first millennium BCE, established a united kingdom in the land formerly known as Canaan. After the reigns of David and his son, Solomon, the united kingdom split into the northern kingdom of Israel and the southern kingdom of Judah, the latter remaining loyal to the Davidic dynasty in Jerusalem, the former being ruled by a series of dynasties until its destruction by the Assyrians in 722 BCE.

The Babylonians conquered Judah in 586 bce, exiling its people and razing the Temple that Solomon had built in Jerusalem. The Persians, who made Judah a province of their empire, allowed Jewish exiles to return and rebuild the Temple. The Hellenistic period saw the rise of an independent Judean state under the Hasmonean dynasty. The Romans brought an end to this independence, appointing Herod as their governor. Two revolts against the Romans had disastrous results. The first ended in the destruction of the Second Temple in 70 ce . The second, led by Bar-Kokhba in 132-135 ce, emptied Judea of its Jewish inhabitants; those who were not killed or deported fled to Galilee in the north.

The two great bodies of literature in ancient Hebrew, composed during the period when it was a living language, are biblical literature and tannaitic (early Rabbinic) literature, including the code of Jewish law known as the Mishnah and legal commentaries to the Pentateuch such as the Mekhilta, the Sifra and the Sifre. (All of the citations from tannaitic literature in this chapter are from reliable vocalized manuscripts; they may disagree with standard editions and dictionaries.) The oldest dated manuscripts of these works are from the ninth century CE, but almost all of the biblical books are represented among the fragmentary scrolls from the Dead Sea (Qumran), believed to date from around the first century bCE. Among the Dead Sea Scrolls are also Hebrew versions of apocryphal books such as Jubilees (previously known from translations into Greek, Ethiopic, etc.), as well as Hebrew works authored by the Qumran sectarians themselves. There are also hundreds of inscriptions written by native speakers, ranging in time from $c$. 1200 BCE to 132-135 CE (Bar-Kokhba letters). The Canaanite glosses written in cuneiform script in the Akkadian letters found at El-Amarna, Egypt, are from pre-

Israelite Canaan (fourteenth century BCE), but they are so similar to Hebrew that they are regularly cited as evidence for Proto-Hebrew.

The language of the Hebrew Bible is by no means monolithic. There is enough variation to justify distinguishing Standard Biblical Hebrew (SBH; before 500 все) from Late Biblical Hebrew (LBH; after 500 все) and both of these from the archaic poetic dialect. The relative clause, for example, is introduced in SBH by 'ăšär 'that', but there is also an unrelated and more archaic dialectal counterpart $\check{s} a+>\check{s} \ddot{a}+$ which becomes increasingly common in LBH; in the poetic dialect, these conjunctions are sometimes replaced by the archaic $z u^{w}$, and asyndetic relative clauses are common.

Mishnaic (or Middle) Hebrew (MH) used to be viewed as an artificial scholastic jargon, but the prevalent view today is that MH was a colloquial idiom spoken until c. 200 CE and that it was descended from an older colloquial idiom (hereafter: Pre-MH) spoken in the biblical period. According to this view, LBH is a purely literary language whose non-SBH features come from Pre-MH.

MH frequently exhibits the culmination of developments begun in SBH and continued in LBH. Thus, the word ' $e^{y} k \alpha^{\circ}{ }^{h}$ 'how' in the archaic poetic dialect changes to ' $e^{y} \underline{k}$ in SBH, then to $h e^{y} \underline{k}$ in LBH and finally to $h e^{y)} a \underline{k} \underline{x}$ in MH. Similarly, the perfective $\neq$ habitual opposition could be expressed in Proto-Northwest Semitic only in the past tense. In SBH, we find a new habitual future, in LBH, a new habitual infinitive, and in MH, a new habitual imperative (see p. 158).

On the other hand, MH $t \breve{a} \bar{p} i^{y} l: a^{h} z o^{w}$ 'this prayer' (Berakhot 4:2), with its $t$-less and article-less demonstrative adjective reminiscent of Phoenician, is actually more archaic than its SBH counterpart, hat: $\breve{a p} i^{y} l: a^{h}$ haz:o ${ }^{\prime} t{ }^{\prime}$ (2 Sam. 7:27). The same goes for the MH relative conjunction $\check{s} \ddot{a}+$ in comparison with SBH ' $\breve{a} s{ }^{s} a ̈ r ~$ (see above and Relative Clauses, p. 171). The biblical evidence shows that the absence of the article is characteristic of the archaic poetic dialect (see above) and that $z o^{h} / z o^{w}$ and $\check{s} \ddot{a}+$ were features of Pre-MH and of the northern dialect(s) of Hebrew. Clearly, MH is not a direct lineal descendant of SBH.

The literature of the Qumran sectarians, despite its being preserved in ancient copies, is, in some ways, a more problematic source for reconstructing the history of Hebrew in ancient times. Most scholars believe that the language of this literature owes more to imitation of the Bible than to the Hebrew vernacular of the period.

Other aspects of the sociolinguistic interplay of dialects (regional and social) and languages in Palestine are reflected in various biblical and Talmudic passages: Judg. 12:5-6, Isa. 36:11-13, Neh. 13:23-24, Bava Kamma 82b-83a, 'Avodah Zarah 58b, Hullin 137b, and Pal. Talm. Berakhot 4d, Megilla 71b.

Information about regional dialects can also be gleaned from inscriptions and biblical compositions whose geographic origin is known. It has been shown that the Hebrew of the northern kingdom, unlike that of the southern kingdom, differed from SBH in important respects, at least partly as a result of Phoenician influence. Some "northernisms" (e.g., šä+ and $z o o^{h} / z o^{w}$ discussed above) are standard features of Pre-MH (especially in Ecclesiastes and Song of Songs) and MH; others
(e.g., šat 'year' and unconditional monophthongization of $a y$ and $a w$ ) are not.

## Orthography and Phonology

## Consonants: Phonology

Hebrew exhibits both the loss of old consonants and the creation of new ones. Seven of the Proto-Semitic fricatives were lost by merger at various times: the interdentals $\underline{t}(>\check{s})$, and $\underline{d}(>z) t(>s)$, the laterals $\ddagger(>s)$ and $\psi(>s)$, and the uvulars $h(>h)$ and $\gamma\left(>{ }^{\prime}\right)$. In return, seven new consonantal phones were created. An emphatic $\dot{p}$ was created to render the unaspirated $p$ of Iranian and Greek, and six fricatives $\underline{b}, \bar{g}, \underline{d}, \underline{k}, \bar{p}, \underline{t}[\mathrm{v} \gamma \mathrm{\gamma} \mathrm{f} \mathrm{f} \theta]$ were created as a result of the assimilation of non-emphatic, ungeminated stops to preceding vowels.

These opposing developments did not exactly cancel each other out. Although four of the seven lost fricatives were restored, the old fricatives were phonemes while the new fricatives were all allophones of stops, conditioned by a preceding vowel, at least in the beginning. (Eventually most of them were phonologized via secondary split, when some of the conditioning vowels were deleted.)

In addition, the language was left with a large concentration of labial phones: [ $p \mathrm{~b} \dot{\mathrm{p}} \mathrm{f} v \mathrm{wm} \mathrm{m}$ ]. Three of these phones were redistributed by a merger of /w/with /b/, which seems to be attested already in the vulgar spelling of the Copper Scroll. In the Samaritan reading tradition, where the merger was unconditional, the merger product originally had three allophones, distributed roughly as follows: [w] after $/ \mathrm{u} /,[\mathrm{v}]$ after other vowels, and [b] elsewhere. In the Tiberian tradition, the merger was more restricted, but there too $w$ retained its original bilabial realization only after $u$, as in the name $P w h$, read [puw:å] by the Tiberians and [fuw:a] by the Samaritans.

At the other end of the articulatory tract, in the pharynx and the larynx, there was a gradual reduction in the inventory for some speakers. By the tannaitic period, the Hellenized inhabitants of Beisan, Haifa, and Tivon had merged /h/with $/ \mathrm{h} /$ and / / with / $/ /$. The mergers seem to have gone further among the Qumran sectarians and the Samaritans, but Jerome's descriptions and Arabic renderings of Hebrew toponyms (including Haifa and Tivon!) show that the loss of these consonants was far from universal.

## Vowels: Phonology

Proto-Semitic /i:/ and /u:/ were retained unchanged throughout the history of He brew, but /a:/ became raised and rounded by the fourteenth century BCE in all or most environments. The evidence of the Tiberian reading tradition (see pp. 1489) suggests that there were two raised and rounded allophones of /a:/, which in one instance yielded doublets: $k a n: o$ ' $=k a n: a^{a}$ 'zealous'.

Eventually, the inherited short vowels also developed allophones as did the upgliding diphthongs: [å:] and [ $\ddot{a}]$ from $/ \mathrm{a} / ;[\mathrm{o}:],[\mathrm{o}]$ and [à] from $/ \mathrm{u} / ;[\mathrm{e}:],[\mathrm{e}]$, and [ä] from $/ \mathrm{i} /$; $[\mathrm{o}:]$ from $/ \mathrm{aw} / ;[\mathrm{e}:]$ and [ä:] from /ay/. The merger of some of these allo-
phones resulted in a completely reorganized system in which the number of contrastive qualities was doubled and the role of quantity was greatly reduced.

Long [ i :] and [ $\mathrm{u}:$ ] are in complementary distribution with [ y ] and ]w], respectively, and alternate with them, e.g., [kăli:] 'vessel' ~ [kälyăká] 'your vessel', [pí:hu:] ~ [pi:w] 'his mouth', [śáku:] 'lookout point' ~ [śäkwí:] 'rooster', [yištaḥăwắ:] 'he will prostrate himself' ~ [way:ištáhu:] 'and he prostrated himself'. It is, thus, possible that the semivowels should be viewed as allophones of vowels rather than consonantal phonemes.

## Consonants: Orthography

The Israelites adopted unchanged a twenty-two-sign version of the alphabet current in their area, even though they had preserved more than twenty-two of the twenty-nine Proto-Semitic consonants (see p. 147). Consequently, they were forced to use some signs with more than one value.

Only one instance of such polyphony survived long enough to be recorded by the Masoretes (see Vowels, below): $ש \check{s}$ representing both $/ \tilde{s} /$ and $/ \bar{s} /$, the latter probably realized [1] until it merged with /s/. Thus, škwr was read [ša:kú:r] < [šaku:r] when it had the meaning 'intoxicated', but [så:kú:r] < [łaku:r] with the meaning 'hired'.

Recently, there has been confirmation of an old theory positing two additional instances which survived only until the Hellenistic period: $\pi h$ representing both $/ h /$ and $/ h /$; $y$ ' representing both $/ / /$ and $/ \gamma /$. Thus, $h r y m$, read [ho:rí:m] by the Masoretes, originally had two realizations: one with initial [h] corresponding to the meaning 'nobles, freemen' and the other with initial [h] corresponding to the meanings 'holes' and 'Hurrians' (see p. 147).

The polyphony of the letters bgdkpt recorded by the Masoretes has a different origin (see p. 147).

## Vowels: Orthography

Another type of polyphony is that of $h, w$, and $y$. These three letters represented vowels as well as consonants, but only in a rudimentary, ambiguous fashion, since their use as vowel letters (matres lectionis 'reading aids') was not consistent in all positions, and the number of vowel phonemes was, in most periods, no less than six. Thus, ancient Hebrew had a highly homographic spelling which left much to the reader's imagination.

Such a situation was intolerable in the case of the Bible. Small wonder, then, that the Talmud contains many references to an accepted biblical reading tradition, mastery of which was essential for one who aspired to be a reader in the synagogue.

There were, in fact, a number of accepted reading traditions in use at the time in Palestine and Babylonia. They were reduced to writing in the post-Talmudic period by various schools of traditionists, called "Masoretes," through the insertion of "points" into the received consonantal text. The same signs were used to record reading traditions of MH . Reliable manuscripts show that there were many
differences between the reading traditions of MH and of BH - differences which have been partially obliterated in our modern printed editions.

The differences among the Masoretic reading traditions are, for the most part, differences of dialect rather than meaning. The Tiberian and Babylonian systems (each with several subsystems) distinguish seven and six contrasting vowel qualities, respectively, while the various Palestinian systems and subsystems distinguish five, six, or seven.

## Stress, Length, and Shewa: Orthography and Phonology

The primary stress is normally marked by one of the Masoretic accent signs; secondary stress is frequently marked by the $g a^{c} y a$ sign. Both of them lengthen vowels - hence the name $g a^{\prime} y a$ 'lowing, mooing' given by the Tiberians and the alternative names used by later grammarians: mät $\ddot{a} \bar{g}$ 'bridle' and ma‘ămi'd 'restrainer'. The position of the primary stress - ultimate or penultimate - is contrastive, at least in BH, serving, for example, to distinguish the II $w$ sg. f. perfect from both its participial and its IIIy sg. m. counterparts (e.g., šáb $\underline{a} a^{h} \neq s \check{a} a \underline{b} a^{\prime} h$ 'she returned $\neq$ returning; he captured'). The corresponding contrast between the II $w$ and III $y$ plural perfects (e.g., šábu $u^{w} \neq$ šåb $u^{w}$ 'they returned $\neq$ they captured', attested together in 1 Kings 8:48) seems to have been in the process of breaking down due to an increased tendency to stress the final syllable. In sg. 1c. and sg. 2 m . forms of the perfect, the position of the stress is a tense marker (e.g., måsáhtå $\neq$ $u^{w}$ måsahtá 'you anointed $\neq$ and you shall anoint' attested together in Exod. 40: 15; see p. 156).

Outside of closed unstressed syllables, which excluded long vowels, Ancient Hebrew had a contrast between long and short vowels. However, between the tannaitic period and the time of the Masoretes, short vowels in stressed syllables lengthened, erasing the contrast in those syllables. Thus, while Hebrew was still a spoken language, the $o$ of infinitival yåkó ( ${ }^{w} l l$ 'be able' was long, while the $o$ of sg. 3 m . perfect yåkól 'he was able' was short, like the ancestor of å in yăkåltä́m. In the Pre-Tiberian reading tradition, the $o$ of sg . 3 m . perfect yåkól lengthened, splitting off from the ancestor of $\mathfrak{a}$ in yǎkàltä́m and merging with the long $o$ of infinitival yåkówl.

As a result of this change, length became to a large extent conditioned by stress. Outside of open unstressed syllables (where a length contrast survived), there was a simple rule: stressed vowels are long and unstressed vowels are short.

Non-systematic representation of vowel length through the use of matres lectionis (see p. 148) developed in SBH. These vowel letters are used to mark not only etymologically long vowels but also stressed vowels in pre-pausal position. In the Tiberian reading tradition, such vowels were probably no longer than other stressed vowels, but morphophonemic alternations show that a length difference had once existed, e.g. tiškab $\sim$ tiškåb < *tiškab ~*tiškäb, yŏšal:ah ~ yăšal:eah < *yišal:eh ~*yišal:ēh.

Consonant length (like vowel length) was phonemic in Proto-Hebrew, but it was not represented in the biblical period, not even in an unsystematic way. Thus,
the spelling 'rwmym was used for both members of the minimal pair Job 5:12 [ căru:mi:m] $\neq$ Job $22: 6$ ['ărum:i:m] 'crafty (pl. m.) $\neq$ naked (pl. m.)'. And the spelling ntnw was used for both [nåtan:u:] 'we gave' and [nåtănu:] 'they gave', even though the long $n$ of the former results from the coalescing of the final $n$ of the stem and initial $n$ of the suffix ([nåtan+nu:]). It was only in MH that representation of consonant length began to appear, and even then, only in cases like [nåtan+nu:] and [kårat+ti:], where a morpheme boundary was spanned. Thus, the citation of 2 Chron. 14:10 in the Mekhilta has nš $n n w$ for Masoretic $n s ̌ n w=$ [niš'an+nu:] 'we have relied'.

Most of the Proto-Hebrew minimal pairs are no longer valid for the Tiberian system. Many of the new pairs are problematic in some way, since a difference in consonant length normally entails some other difference - in vowel length, secondary stress, or type of shewa (see below). There is a kind of vicious circle involved in phonemicizing the words [yig:ǔ'ú:] $\neq\left[y \grave{i}: \bar{g}^{\text {‘ú }}:\right] \neq[y i \bar{g}$ 'ú:] 'they will touch $\neq$ they will be weary $\neq$ they will moo': any pair one selects will differ in two or more features.

The fact remains, however, that the Masoretes considered consonant length important enough to create a sign for it ("strong" dagesh). Two minimal pairs noted
 above) and Lev. 7:30 tǎbi ${ }^{y>} \ddot{a}^{y} n a^{h} \neq \mathrm{Lev}$. . 6:14 tă $b i^{y} \ddot{a} n: a^{h}$ 'they (f.) shall bring $\neq$ you/she shall bring it'. Although Arabic transcriptions suggest that, in the first pair, the vowel preceding the lengthened consonant was shorter than the vowel preceding its unlengthened counterpart, the Masoretes clearly considered this difference to be secondary, unworthy of being represented.

The same goes for a pair like [hizkú:] $\neq$ [hiz:ăkú:] 'be strong $\neq$ they strengthened': the Masoretes use the same sign (whose name, shewa, comes from the word for 'nothingness') to represent the absence of a vowel following [ z ] in the first word that they use to represent the [ă] following [z:] in the second, thereby suggesting that [足] (together with its positional variants: [ $\mathbf{1}],[\breve{\mathrm{u}}],[\check{\mathrm{e}}]$, and [ o$]$ ) is an allophone of $\emptyset$. (Later grammarians use the terms "quiescent" for shewa realized as $\emptyset$ and "mobile" for vocalic shewa.)

It is certainly true that [ă] (with its positional variants) is completely predictable in some environments: those where it is needed to break up a consonant cluster. In other environments, matters are far more complicated. For one subset of nouns, the most reliable sources seem to describe a form of metrical conditioning requiring that the secondary accent be separated from the primary accent by two syllables, one of them containing [ă], e.g., [hà:măhal:é:k] $\neq$ [hà:mhal:ăkí:m] 'the walker $\neq$ the walkers'. But this is, at best, just a tendency, for there are also free variants like [hà:mdab:ărí:m] / [hà:mădab:ărí:m] 'the speakers' (the former in Exod. 6:27 and the latter in 2 Chron. 33:18 according to Aaron ben Asher; vice versa according to other Masoretic sources).

Such complex conditioning and free variation was completely eliminated by the increasingly schematic rules for the realization of the shewa sign promulgated by later grammarians. According to one of those rules, a shewa preceded by a long
vowel and a single consonant must have a vocalic realization (a zero realization would create an extra-heavy syllable); the closest counterpart to this in a masoretic treatise is a tendency rather than a categorical rule, and is largely restricted to shewa preceded by an $r$. Despite these differences, the Masoretes seem to agree with the later grammarians on the basic point: the vocalic realizations of shewa do not contrast with $\emptyset$.

## Morphophonemic Alternations

The Tiberian reading tradition has an unusually large number of alternations, most involving vowels (usually the historically short ones) or semivowels. The great majority are - or were originally - conditioned by differences in stress, syllable structure, and/or the proximity of a laryngeal ( $/ \mathrm{P}$ h h $/ /$ ). A sample of some of the most common alternations among vowels other than shewa are shown below. The main stress is marked by 'in context and by "in (pre-)pause. Forms without either sign are proclitic.

| $\begin{aligned} & \text { /i/ } \\ & \text { lib:+íy } \end{aligned}$ | $\begin{aligned} & \text { /e/ } \\ & \text { léb } \end{aligned}$ | $\begin{aligned} & \text { /a/ } \\ & \text { labb } \end{aligned}$ | (a) | /å/ | /0/ | /u/ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| *tว̆Šibắy ${ }^{\text {na }}{ }^{\text {h }}$ | tåsébna ${ }^{\text {h }}$ |  |  |  |  |  |
|  | teléd | wat:éläd | teládnå ${ }^{\text {h }}$ |  |  |  |
|  | yăšal:êah |  | yǒšal:áh |  |  |  |
|  | to mêr |  | to' már |  |  |  |
|  |  | wat:ơ'mär | wat:o ma̋r |  |  |  |
|  |  | 'ähád | 'ahád |  |  |  |
|  |  | 'ấräṣ | 'arss $\mathrm{i}^{\text {y }}$ | $\bigcirc$ aräs |  |  |
|  |  |  | 'åmár | 'âmẳr |  |  |
|  |  |  | dă $\underline{\text { arar }}$ +kắm | $\begin{gathered} \text { dăbår+ắm } \\ \text { kăl } \end{gathered}$ | kól | kul:+ắm |
|  |  |  |  |  | måto ${ }^{\text {w }}$ k |  |
|  |  |  |  |  | tassóbna ${ }^{\text {h }}$ | tžšubaby ${ }^{\text {y }}$ n ${ }^{\text {gh }}$ |

Alternations of the above vowels with shewa result from two opposite processes: reduction and epenthesis. Thus, the alternation of $\mathfrak{a}$ in mălå $\mathrm{ki}^{y} m$ 'kings' with quiescent shewa in malke $e^{y}<*^{*}$ malakay 'kings of' (note the spirantized $\underline{k}$ ) is a product of reduction, while the alternation of the second $\ddot{a}$ in mäläk $<$ *malk 'king' with quiescent shewa in malki ${ }^{y}$ 'my king' (note the unspirantized $k$ ) reflects epenthesis.

Reduction affected short vowels in certain kinds of unstressed open syllables, turning them into shewa. The most sonorous of the short vowels, $a$, was the most resistant to reduction. It survived in pretonic open syllables where it was later lengthened to $\bar{a}>\dot{a}$ (e.g., *šanatu 'year' $>*$ šān $\bar{a}>$ šănåh $)$ except in the construct state (e.g., šănat 'year of'; see p. 153); as a rule, it did not survive in propretonic ones (e.g., šănåto "'his year'). Short $i$ sometimes behaves like $a$, surviving in open pretonic syllables (e.g., *šinatu 'sleep' > šenå ${ }^{h}$ ), except in the construct state (e.g., Jer. 51:39 šănat 'sleep of' homonymous with Jer. 48:44 šănat 'year of'). At other times, it is reduced in open pretonic syllables (e.g., *nāšibāt $>$ Sifre Devarim

40 no ${ }^{\text {w's }}$ ă $\underline{b} o^{w} \underline{t}$ 'blowing', contrasting with Ezek. $38: 12$ no w̌̌ăbot settled').
Epenthesis affected word-final consonant clusters, breaking them up through the insertion of $\ddot{a}$ (segol, hence the term "segolation"), $a$ (in the vicinity of $h, h$ or ${ }^{`}$ ) or $i$ (in the vicinity of $y$ ). It occurred both in nouns (e.g., rägäl < *ragl'foot', $n a^{‘} a l<{ }^{n} n a^{`} l$ 'shoe') and verbs (e.g., way:ägäl < *way:agl 'and he exiled', wan:a'al < *wan:a'l'and we went up'). Qumran Hebrew and the Tiberian Massorah preserve evidence of a different, no doubt earlier, rule of epenthesis in the construct form of nouns (see p. 153).

## Morphology and Morphosyntax

## Nouns and Adjectives

## Gender and Number

Masculine singular nouns and adjectives are unmarked. Feminine singular nouns and adjectives usually take one of two endings: $+\dot{a}^{h}$ or $+\underline{t}$ ( $>+\ddot{a} / a \underline{t}$ if the stem ends in a consonant). In BH, the allomorph $+\dot{a}^{h}$ is often in free variation with $+\underline{t}$ (e.g.,



Masculine plural nouns and adjectives take the ending $+i^{y} m$ ( $>+i^{y} n$ in MH), feminine plurals, the ending $+o^{\omega} \underline{t}$. Apart from a few tree names, noun stems with the underlying form CVCC+ ("segolates") change in the plural to CVCåC $+(\rightarrow$ $\mathrm{C} \check{\mathrm{C}} \dot{a} \mathrm{C}+$ by reduction; see p. 151), a very archaic alternation of which only traces remain in the other Semitic languages. Interchange of $+i^{y} m$ and $+\delta^{w} \underline{t}$ is common, but not their total absence. Probably the only true plurals without a suffix among the nouns are sso' $n$ and båkår - the suppletive, suffixless plurals of śä́a 'sheep/goat' and $\check{s}{ }^{\text {wh}} r$ ' $o x$ ', respectively. Semitists use the term "collective" to describe these nouns and mass nouns, as well as true collectives.

Dual number is restricted to a small set of nouns, mainly those denoting units of measurement and counting; it is not found with adjectives (or pronouns or verbs). When used with nouns denoting paired body parts, the dual ending + ayim is structurally a plural ending, for it does not contrast with the regular plural endings and it cooccurs with numerals greater than 1 . This "pseudo-dual" remained unchanged in MH, while the true dual was partially replaced by the word for 2 (cf. already 2 Sam. 1:1 yåmi'm šănåyim 'two days' instead of yowmayim).

## Definiteness

Definiteness is expressed by the definite article $h a+$, which is prefixed to nouns and adjectives. A more precise transliteration would be $h a \mathrm{C}$ :, for this morpheme has three (unstable) components: (1) the consonant $h$; (2) the vowel $a$; and (3) lengthening of the following consonant (the initial consonant of the word). The third component, which is discontinuous with the first two, is not found with the consonants ' ${ }^{〔}, h, h, r$, due to a sound change. In such cases, the second compo-
nent may undergo compensatory lengthening. The first component is normally elided following the prefixes $b \check{a}+$ 'in', $k a \check{+}+$ 'like' and lă + 'to' (but not me + 'from' or wă + 'and'). For example, when bă + is added to hab:ayit 'the house', the result is $b+a b: a y i t$. In the Bar-Kokhba letters, the accusative marker 'et (see below) has been reduced to a prefix which produces the same elision, e.g., $t s l^{{ }^{-}}$ $h z w^{\prime}$ <'ät-has:äla‘ haz:o 'this selac' (alongside 't hštrr hz' 'this document'), tšbt $h z w<$ 'ät-has::ab:åt haz:o 'this Sabbath'.

Indefiniteness is usually expressed by the absence of the definite article, but occasionally 'ähåd 'one' serves as an indefinite article with nouns.

## Case and State

The Proto-Semitic case system has broken down in BH, largely as a result of sound change. The old accusative ending * $+a$ is gone, leaving only a few frozen relics behind; its functional heir, the preposition 'et $\sim$ 'ät-, normally governs only definite objects, and even with them it is not obligatory. Also gone is the old genitive ending ${ }^{*}+i$, used in Pre-Hebrew to mark the second (attributive) constituent of noun phrases like šämän zayit 'olive oil', zeyt šämän 'oil olive', 'eṣ pări' 'fruit tree', pări ${ }^{y}$ ' $e s$ 'tree fruit'.

In Hebrew, it is the first constituent (the head) of these phrases which sets them apart. That constituent, said to be in the "construct state," undergoes a number of distinctive modifications. Two of them are illustrated by Exod. 38:21 ham:iškån, miškan häredut 'the Tabernacle, the Tabemacle of the Pact', where the $\dot{a}$ in the closed final syllable of ham:iškån is replaced by $a$ in miškan, and the definite article is omitted (see p. 161). Another two are illustrated by Exod. 22:4 biśde ${ }^{h}$ 'aher 'in another's field', where the $a ̊$ of $s \mathfrak{a} a \underline{a} \ddot{a}^{h}$ has been reduced to $\check{\partial}$ (p. 151) and then deleted entirely, and word-final $\ddot{a}^{h}$ has been replaced by $e^{h}$; contrast Ruth 2:8 bös'sida ${ }^{h}$ ' $a h e r$ 'in another field'. Finally, in Gen. 44:14 be ${ }^{y}$ tàh yowsep '(and Judah came) to Joseph's house', the word for 'house' has [ay] contracted to [e:] (written $e^{y}$ ) and lacks the definite article, in contrast to Gen. 43:26 hab:ayt $a^{h}$ ' (and Joseph came) to the house'. In cases where the head does not change in the construct state and the genitive noun is indefinite, ambiguity may arise. Thus, the Mekhilta feels the need to prove that Exod. $21: 2^{\text {‘ }} \ddot{a} \underline{b} \underline{a} \underline{d} \underline{\text { ‘ }} \mathbf{i b r} \mathrm{b}^{y}$ means 'a Hebrew slave' rather than 'a Hebrew's slave'.

The sg. f. ending $+\tilde{a}^{h}$ has the allomorph $+a \underline{a} t$ in the construct state; the pl. m. ending $+i^{\prime} m$ has the allomorph $+\hat{e}^{y}$, imported from the pseudo-dual, instead of the historically expected $+i^{y}$. Thus, the construct of šåni ${ }^{y} m$ 'years' is šăne ${ }^{y}$ ' years of', the same as the construct of šănayim 'two'.

## Pronouns

There are three major sets of pronouns: "nominative" independent pronouns, "accusative" pronouns attached to verbs, and "genitive" pronouns attached to prepositions and nouns. The attached pronouns have one set of allomorphs beginning with a vowel for stems ending in a consonant and another set beginning with a consonant for stems ending in a vowel, e.g, Esther $2: 7{ }^{\text {د }} \mathfrak{a} b i^{y}+h a ̊ ~ w \breve{a}$ ' im: $+a ̊ h$ 'her
father and her mother' and Jer. 29:5 = 29:28 piry+ån $\sim$ pri ${ }^{y}+h a ̈ n ~ ' t h e i r ~(f) ~ f r u i t ' . ~ .$.
The same pronouns were originally used with plural nouns, e.g., băney $+h a ̈ m$ 'their sons' (stem ending in a vowel, like priy $+h a ̈ n$ ) and băno ${ }^{\text {w }} \underline{t}+a ̊ m$ 'their daughters' (stem ending in a consonant, like piry $+a ̊ n$ ), but at an early period $+e^{y}+h a ̈ m$ was reanalyzed as a single morpheme - a suffix to be used with any plural noun and new forms like $b \check{\circ} n o^{w} \underline{t}+e^{y} h a ̈ m$ were created. The variation between $+o^{w} \underline{t}+a ̊ m$ and $+o^{w} \underline{t}+e^{y} h a ̈ m$ was lexically conditioned. In Jeremiah's time, böno ${ }^{w} \underline{t}+a ̉ m$ was obsolete, but ' $a \mathfrak{b} \underline{\underline{w}}{ }^{\text {w }} \underline{t}+a \mathrm{a} m$ 'their fathers' was still the normal form, ' $\breve{a} \underline{b} o^{w} \underline{t}+e^{y} h a ̈ m$ replacing it only occasionally (e.g., Jer. 9:15 $\sim 19: 4$, in the same expression).

In SBH, a few of the independent pronouns have long allomorphs ending in $\dot{a}^{h}$ alongside short allomorphs, e.g., hem ~hem: $a^{h}$ 'they'. In Qumran Hebrew more of the independent pronouns and a few of the suffixed ones have the long allomorphs, and in the Samaritan reading tradition these forms predominate. In Qumran Hebrew, the original conditioning of the allomorphs $+m \sim+m a{ }^{\circ}$ 'them' has been partially preserved: the long suffix $+m a ̊$ is never attached to a verb ending in (long) $u$ or $i$.

## Numerals and Quantifiers

The word for 1 is an adjective; it occasionally appears in the plural, e.g., Gen. 11:1
 als above 1 are nouns, as are the quantifiers kol ~ kål- 'all' (lit. 'totality') and $m \check{o r} a t$ 'a bit'. Like those quantifiers, they normally precede the counted noun in BH and MH. However, harbe ' a lot' normally follows the quantified noun in BH and MH , and behaves more like an adjective. With rare exceptions, the three quantifiers do not agree with their nouns, while many numerals (3-10, 13-19, 23-29, etc.) exhibit a kind of reverse agreement (polarity), taking a feminine ending with masculine counted nouns (e.g., šăloš+á ${ }^{h} b a ̊ n i^{y} m$ 'three sons') and vice versa (e.g., šåloš bånow $\underline{t}$ 'three daughters').

Counted nouns normally stand in apposition to the numeral, but there are exceptions. In all periods, the numerals $2-10$ normally form a genitive phrase with the word for 'days' (e.g., šălošät yåmi'm 'three days'), with definite nouns (e.g.,
 with other numerals (šăloš me'o 't ' 300 ', šălošät ' 'ălåpì 'm ' 3,000 '). With most nouns, it is definiteness which determines the state of the numeral which precedes
 $h a+k: \partial \check{b} \underline{a} a{ }^{s} i^{y} m$ 'the seven sheep' (also: 'seven of the sheep'; cf. Exod. 26:9, Num. 35:14).

Ordinals exist only for $1-10$; beyond that, cardinal numbers are used in one of four constructions. For 'the Xth year', the Bible has (1) šănat ha+X šåná ${ }^{h}$; (2) šŏnat ha $X$; (3) šănat $X$; (4) $X$ šånåh; only (3) is found in the Mishnah. Construction (4) also has the meaning ' X years'; the two meanings are found side by side in Gen. 14:4.

## Conjunctions, Prepositions, Postpositions, and Adverbial Endings

The underlying form of the coordinating conjunction is normally $w a ̆+$. When prefixed to a word whose initial consonant is a labial or is followed by $\check{\partial}$, it has the allomorph $u^{w}+$ in the Tiberian reading tradition. In binomials like šåmayim $w a^{\prime}$ åräs 'heaven and earth', the underlying form is wå+.

The most primitive prepositions are $b \check{\partial}+$ 'in', $k \check{\partial}+$ 'like', and $l \check{l}+$ 'to'. When prefixed to nouns, their underlying vowel is $\check{\partial}$, but with suffixed pronouns, it is $\dot{a}$. With $k a ̊+$, unlike $b a ̊+$ and $l a ̊+$, the particle $m o^{w}+\left(\sim m o^{w} \underline{t}\right.$ in MH$)$ is normally inserted before the suffixed pronoun. In the poetic dialect, that particle may be added to any of these three prepositions before nouns. Most of the longer prepositions can be seen to be derived from nouns in the construct state.

BH has a postposition $+\dot{a}^{h}$ 'to', which alternates with the prepositions $l a ̆+$ and 'äl, e.g. $h \dot{a}^{r} a y n \dot{a}^{h} \sim$ ' $\ddot{a} l-h a^{r} \subset a y i n ~ ' t o ~ t h e ~ s p r i n g ' ~ f o u n d ~ s i d e ~ b y ~ s i d e ~ i n ~ G e n . ~ 24 . ~$ Eventually, it became a meaningless ossified relic, used in forms like la/ă+hu ws ${ }^{w}$ 'to the outside' (LBH, Qumran Hebrew) and even $m e+h u^{w} s a^{h}$ 'from the outside' (MH).

Another ending which could be viewed as a postposition is $+a \pi m$, generally equivalent to $b \check{\partial}+$ and used to form adverbs, e.g., 'åmn+åm 'really' < 'omän 'truth', hin:+åm 'gratis' < hen 'favor', yo "m+åm 'by day' < yo "m 'day'. For the most part there is no specific affix or pattern for adverbs. For the adverbial use of verbs, see below.

## Verbs

Verbs do a great deal of work in BH. The finite verbs inflect for number, gender and person, and thus contain their own pronominal subjects. Moreover, verbs are frequently used to express concepts which English expresses with adjectives ("be old," "be big," "be strong," etc.) and adverbs ("greatly," "well," "increasingly," "really").

## The Root

Lexical morphemes composed solely of consonants can be isolated in members of virtually all syntactic categories, but only in the verb are these "roots" free to "interdigitate" with a large number of contrasting "patterns."

The verbal root is usually triconsonantal, occasionally quadriconsonantal, rarely quinqueconsonantal. Synchronically biconsonantal roots like $l-d$ and $b-n$ (see below) occur chiefly as allomorphs of triconsonantal ones. The sg. 3m. imperfect verbs in Table 9.1, p. 156, once assigned to the roots $\check{s}-b$ and $s-b$, are analyzed today as representing five distinct triconsonantal roots. The three positions within the triliteral root are numbered I, II, and III; thus, a I $n$ root is a root with $n$ in the first position.

From a diachronic point of view, the biconsonantal allomorphs are probably relics of a very ancient stage in which biconsonantal verbs were fairly common. Viewed in this light, most, if not all, of the verbs in Table 9.1, p. 156 are seen to be originally biconsonantal verbs which were "triconsonantalized" through the

Table 9.1 Roots with "weak" radical

| Verb | Meaning | Root | Class |
| :---: | :---: | :---: | :---: |
| yis: 6 b | blow (wind) | n-š-b | In |
| yaš: $i^{\text {y }}$ b | cause to blow | n -ş-b | In |
| yešéb | sit, dwell | y-š-b | I $y$ |
|  | cause to sit/dwell | y-š-b | Iy |
| yǎsúw ${ }^{\text {b }}$ | return | š-w-b | $\mathrm{II} w$ |
| yåsis b ${ }^{\text {b }}$ | cause to return | š-w-b | II $w$ |
| yišbă ${ }^{\text {h }}$ | capture | š-b-y | IIIy |
| yåsób/yis:ób | go around | s-b-b | II= III |
| yåséb | cause to go around | s-b-b | $\mathrm{II}=\mathrm{III}$ |

addition of a semi-vowel or consonant length. It is not uncommon to find alternation between two triconsonantalizations of a single biconsonantal original, e.g., $y$ -$g-r \sim g-w-r$ 'be afraid' and $t-w-b \sim y-t-b$ 'be good' (both Perfect $\sim$ Imperfect). The spread of triconsonantalization continued in the historical period via analogy, e.g., BH bån+åh/åm > MH bănåy+åh/åm 'he built it/them' and BH yim:ad > MH yim:åded 'it may be measured'.

## Tense and Aspect

BH has six paradigms with temporal and/or aspectual value, listed below together with conventional sg. 1c. examples from the root $k-t-b$ 'write':

A Perfect: kåtábti ${ }^{y}$ 'I wrote, I (now) write' (penultimate stress)
B Imperfect: ' $a \underline{k} k t o \underline{b}$ 'I will write, I used to write, I (habitually) write'
C Perfect + waw consecutive/conversive: wŏkåtabtily 'and I shall write' (final stress; see p. 149)
D Imperfect + waw consecutive/conversive: wá’ äktób 'and I wrote'
E Participle: kotéb 'writing' (also: 'writer')
F Participle + auxiliary: (wă)håyí $i^{y} \underline{t} i^{y} /(w a ̊)^{\prime} \ddot{a} h y \tilde{a}^{h} k o t e^{b} \underline{~ '(a n d) ~ I ~ u s e d ~ t o ~ / ~ w i l l ~}$ (habitually) write'

E is etymologically and morphologically nominal; accordingly, it inflects only for number and gender. The others inflect for person, as well.

The "converted" forms C and D are very common in BH, but they function mainly as markers of formal style. They are virtually nonexistent in MH. They both contain the conjunction 'and'; accordingly, they are restricted to clauseinitial position. In that position, C alternates with B , and D alternates with A .

In an utterance whose first verb is $B$, the subsequent verbs may be either $B$ or, if clause initial, C. Jer. 49:22 hin: $e^{h}$ kan:äs̆är ya‘ăläa ${ }^{h}$ wăyid ${ }^{\circ} \ddot{a}^{h}$ wăyip̄roś kănåp̄ā $a^{y} w$ 'behold, like an eagle, he flies up and soars and spreads his wings' is a B-B-B se-
 soars and spreads his wings' in Jer. 48:40 is a B-C sequence. Similarly, in an utterance whose first verb is $A$, the subsequent verbs may be either $A$ or, if clause
initial, D. Thus the phrase ‘åru" $m r \dot{a}^{\text {’ }}$ åh rå` ${ }^{\circ}{ }^{h}$ wystr/wănistår 'the shrewd man saw trouble and hid' in Prov. 22:3 is written as an A-D sequence (wystr = way:is:åter) but read as an A-A sequence (cf. also Jer. 7:30-31 vs. 32:34-35). Once a verb from paradigm $C$ or $D$ is selected, all subsequent verbs will normally be from the same paradigm, until the sequence is broken by the introduction of a non-clause-initial verb (see p. 166).

According to some scholars, paradigms A-D have temporal meaning in SBH; according to others, aspectual meaning. The question has been debated furiously and inconclusively for more than a century.

The examples below show that collocations of A and B may be used to express the past/future distinction, irrespective of the event/habit/state distinction, while the process/event distinction is expressed by collocating A and B not with each other but with E. Although A, B, and E have a bewildering variety of uses, these particular uses seem to be at the core of the system.

## Expressing Distinctions of Tense and Aspect in Biblical Hebrew



| Future |  | Process |  | Event |
| :---: | :---: | :---: | :---: | :---: |
|  |  | E |  | B |
|  |  | mădab:ärät šåm | `im ham:äläk wa`ăni ${ }^{\nu}$ | 'abob |
|  | 'you | be speaking the | with the king, and I | will come' | (1 Kings 1:14; cf. also 1 Sam. 10:5 and Isa. 65:24)

Past
 'and she was still speaking with the king, and Nathan ... came' (1 Kings 1:22; cf. also Jud. 13:9 and Job 1:13-19)

When one considers the full range of uses of these paradigms in SBH , it becomes clear that A and B need to be described in terms of both tense and aspect.

Only for E is it possible to give a simple description, namely, imperfective aspect.
The complexity of the tense/aspect system is due, in part, to the fact that it was constantly in flux. E and F gradually took on the functions of B , in the following order:

1 progressive: complete replacement already in SBH except in present tense questions; without exception in LBH;
2 habitual: partial replacement in BH completed in MH;
3 future: large-scale replacement in MH outside of subordinate clauses;
4 modal: partial replacement in MH.
At the same time, E took on two of the functions of A: perfective present (including the performative) and present of transitive statives.

One result of this expansionism was that E lost its aspectual value and became a tense (present in LBH (?), nonpast in MH). Moreover, thanks to the spread of F, Hebrew developed the ability to distinguish habitual aspect in the future (rare in SBH, common in Qumran Hebrew and MH), the infinitive (rare in LBH, common in MH ), and the imperative (MH).

## Mood

The BH imperfect distinguishes, in part of its paradigm, a volitive mood (representing diachronically the conflation of the Proto-West Semitic subjunctive, imperative and jussive) from the indicative mood, e.g., 'åmúw $\underline{t}+\dot{a}^{\circ h}$ let me die', $m u^{\prime} \underline{t}$ 'die!', yåmót 'let him die'; 'å̌̌isi $\underline{b}+a ̊ h ' l e t ~ m e ~ b r i n g ~ b a c k ', ~ h a ̊ s e ́ e ́ b ~ ~ h a ̊ s ̌ i ́ ~ b ~ b ~+a ́ a ' ~ ' b r i n g ~$ back!', 'al-tåšéb$/ t t a ́ s ̌ a ̈ b \underline{b}$ 'do not turn back'. In the first person, singular and plural, the volitive is expressed by the $+\dot{a}^{h}$ (cohortative) ending, which can be used with all verbs except, normally, those ending in a vowel (IIIy and III’ verbs). In the third person singular, $m$. and $f$., the volitive has a distinct (jussive) form in only three categories of verbs: hip̄‘il (see p. 159), III y, and IIw, y kal. There was also an energic mood with some kind of emphatic force, e.g. yăkab:ăd $+a ̊ n+n i^{y}$ the does honor me'.

This distinction did not survive very long. Already in SBH, the volitive forms are sometimes replaced by their indicative counterparts. In Qumran Hebrew, the breakdown of the system is virtually complete; the old volitive forms are still in use, but they no longer have their old meaning. In MH, cohortative forms are virtually nonexistent, and jussive forms are uncommon and largely restricted to certain literary genres. Thus, Deut. 13:7 nelăk $a^{\circ}{ }^{h} w a ̆ n a^{\prime} a b \underline{b} \ddot{a}^{h}{ }^{h}$ let us go and worship' is paraphrased as nele $\underline{k}$ wăna ${ }^{〔} a b \underline{b} o^{w} \underline{d}$ in Sanhedrin 7:10. However, the ability to distinguish volitive future from indicative future has been regained through a restructuring of the tense system.

## Binyan

Hebrew, like the other Semitic languages, has an elaborate system of morphological patterns (Medieval and Modern Hebrew binyanim 'buildings, verbal stems
or derivational classes') used, for the most part, to derive verbs from other, more basic, verbs. Thus, one root can generate a number of morphologically distinct verbs referring to related activities. In the case of human reproduction, the root $y$ -$l-d$ yields a verb yålad 'give birth' usually referring to the role of the mother, a second verb ho ${ }^{\text {w }}$ liyd 'sire' referring to the role of the father, a third verb no "lad 'be born' referring to the role of the baby, and a fourth verb yil:ed 'deliver' referring to the role of the midwife. A fifth verb hityal:ed refers to declaring oneself to be someone's offspring.

The meaning of a given binyan cannot be stated in absolute terms, but only relative to a more basic binyan. Hence, it makes no sense to ask for the meaning of the most basic binyan (kal), nor does it make sense to attempt to relate the meaning of a specific "derived" verb to the meaning of its binyan in cases where a basic counterpart is not attested.

Despite many irregularities and nuances, perhaps produced by semantic change, the relationships in the table below are fairly typical for BH : hitpacel is often and $p u^{\prime} a l$ is always the reflexive-reciprocal and medio-passive, respectively, of $p i^{〔} e l$, which, in turn, is frequently a causative of $k a l$; and $h u \bar{p}^{`} a l$ is always the medio-passive of $h i \bar{p}^{-} i l$, which itself frequently functions as a second causative of kal . $N i \bar{p}^{<} a l$, although normally the medio-passive or reflexive of kal , sometimes interchanges with hitpa'el.

Table 9.2 Biblical Hebrew binyanim

|  |  | Perfect | Imperfect | Participle |
| :---: | :---: | :---: | :---: | :---: |
| Kal | 'be(come) holy/taboo' | kådáš | yikdás |  |
| Nip̄ 'al | 'reveal oneself as holy' | nikdás | yik:ådéš | nikdáš |
| $\mathrm{Pi}^{\text {cel }}$ | 'sanctify/purify' | kid:áš | yăkad:éš | măkad:és |
| Pu‘al | 'be sanctified/purified' | kud:áš | yăkud:áš | măkud:ăs |
| Hip̄ il | 'consecrate/devote' | hikdî's | yakdí's ${ }^{\text {c }}$ | makdî ${ }^{\text {Y }}$ \% |
| Hup̄ ${ }^{\text {al }}$ | 'be consecrated/devoted' | hukdaš | yukdás | mukdăs |
| Hitpa'el | 'sanctify/purify oneself/ reveal oneself as holy' | hitkkad:és | yithad:és | mitkad:éš |

The MH chart for $k$ - $d$-š would be much the same except in $n i \bar{p}^{`} a l, p u^{`} a l$, and hitpa‘el. Nī̄‘al is no longer attested with this verb, no doubt because that binyan is no longer used for reflexives. The $p u^{\prime}$ al perfect and imperfect have ceased to exist for virtually all verbs in MH, their function as medio-passive of the pi' el perfect and imperfect being taken over by the hitpa'el perfect and imperfect (the former altered in form to nitkad:aš, with preformative $n+$, by analogy with the $n i \bar{p}^{‘} a l$ ). Concomitantly, the rare ingressive use of the $p u^{\text {}} a l$ participle has been transferred to the hitparel participle (which in the case of $k$ - $d$-š has retained its initial $m+$ but in other verbs has preformative $n+$ ). As a result, the picel participle has two medio-passive counterparts in MH: the stative $p u^{〔} a l$ participle and the ingressive hitpa‘el participle. Hitpa‘el continues to function as a reflexive, as well.

Valence: Increase and Decrease
Most of the above relationships correspond to oppositions of valence. Pi'el and $h i \bar{p}^{-} c l$, when functioning as causatives, add an argument to the verb, while $n i \bar{p}^{〔} a l$, $p u^{〔} a l$, $h u \bar{p} ‘ a l$, and $h i t p a ` e l$, functioning as medio-passives, reflexives or reciprocals, subtract an argument, as shown below:

| Binyanim | Root | Valences | Example |
| :---: | :---: | :---: | :---: |
| Kal, Nī́p ${ }^{\text {a }}$ l | $r-{ }^{\text {- }}$ | 2, 1 | Jer. 17:14 rŏpå ${ }^{\text {' }}$ eni ${ }^{y} Y$. wă' eråpé 'heal me, O Lord, that I may be healed' (cf. Jer. 31:3) |
| Hitpa`el, Pi¢el & \(\underline{k}-d-s\) & 1,2 & 2 Chron. 29: 5 hitkad:ăšu w wa̋kad:ăsu \({ }^{w}\) ’ät-be't \(Y\). 'sanctify yourselves and sanctify the House of the Lord' (cf. Lev. 14:11) \\ \hline Pi'el, Pu'al & \(b-r-k\) & 2,1 &  yăborak \(b e^{y} \underline{\underline{t}}\) ' \(a \underline{b} d \check{a} k \underline{a} a ̊\) 'and bless your servant's house ... may your servant's house be blessed' \\ \hline \(H i \bar{p} ¢{ }^{\text {cil }}\), \(H u \bar{p}^{`} a l\) | $b-w^{\prime}$ | 3,2 | Gen. 43:17-18 way:åbe hå’ $i^{y}{ }^{y}>{ }^{\prime}$ ät-hå’ănåsi $i^{y} m$ $b e^{y} \underline{t} a^{h} y o^{\text {w }} \operatorname{sep} \ldots h u^{w} \underline{b} \check{z}^{\prime} u^{w} b e^{y} \underline{t} y o^{w} \operatorname{sep}{ }^{\text {' }}$ 'and the man brought the men to Joseph's house ... they were brought to Joseph's house' |
| Pi`el, Kal | $t-h-r$ | 2, 1 | Ezek. 24:13 ṭiharti'k wălo' tåhart 'I purified you, but you would not be purified' (cf. 2 Kings 7:4) |
| Hip̌ ${ }^{\text {cli }}$, Kal | $\check{s}-w-b$ | 2,1 |  back that I may come back' (cf. 2 Sam. 15:20, 2 Kings 7:4, and Jer. 11:18) |

In BH, valence decrease can take place with rearrangement of the remaining arguments (type 1) or without it (type 2). The process which derives medio-passive verbs normally deletes the subject of their active counterparts rather than allowing it to remain in a prepositional phrase - hence the medieval Hebrew description of medio-passive verbs as "those whose agent is not mentioned." Type 1 mediopassives advance the original direct object by making the derived verb agree with it and deleting the accusative marker 'et, while type 2 medio-passive verbs are impersonal (i.e., invariably sg. 3 m . and subjectless) and are used with 'et, e.g., Num. 26:53-55 tehålek hå’åräs ... yehålek 'ät-hå’åräs 'the land shall be divided ... the land shall be divided'. Intermediate types, with partial advancement, exist as well. With oblique objects, type 2 is the norm (as in Arabic), e.g., Ezek. 10:13 lå+häm $k o^{w} r a a^{\circ}$ 'they were referred to (lit. to them it was called)', 16:34 'ahărayi+k $l o$ ' $z u^{w} n: a^{h}$ 'you were not sought after (lit. after you it was not whored)', Song 8:8 yădub:ar-bä+h 'she shall be spoken for (lit. it shall be spoken about her)'. In MH, type 2 has virtually disappeared, although there is at least one example of it in reliable manuscripts: Pesahim 7:7 šä+n:izrak 'äd dåmo ${ }^{w}$ 'whose blood was sprinkled' (cf. also Sanhedrin 7:5 and Kelim 7:3 in the Naples edition of the Mishna).

Change of binyan and change of valence do not always coincide. There is a
whole class of verbs (intransitive statives) which either have the same valence in $h i \bar{p}^{〔} i l$ that they have in $k a l$ or else have two meanings in $h i \bar{p} \subset i l$ - one with valence increase and one without it, e.g., hikri'b 'come near (= karab); bring near', hib'i $i^{y}$ 's 'stink ( $=b \dot{a}^{’} a \check{s}$ ); cause to stink'. Conversely, intransitive pi‘el verbs have a causative in the same binyan, e.g., BH miher 'hurry (intrans. and trans.)', MH kil:ah 'gush, cause to gush', me'en 'refuse, instruct to refuse'. There are also a few kal verbs of this type, e.g., BH-MH rå ${ }^{\circ} \dot{a}^{h}$ 'pasture (trans. and intrans.)' and BH råhas 'take a bath (= MH råhass), wash (part of the body = MH hirhi'ss)'. And BH nåtan 'give' and śåm 'put' function as suppletive causatives of håyå 'be' without change of binyan.

## Denominatives

Verbs derived from triconsonantal nouns may occur in any binyan, and sometimes occur in several unrelated binyanim. Thus, we have $\mathrm{BH}-\mathrm{MH}$ hišri ${ }^{y}$ 's 'become rooted' contrasting with BH-MH šeraš ‘uproot' and MH hitli ${ }^{\text {y }}{ }^{\text {c 'become wormy' (= }}$ BH way:årum to ${ }^{\text {w }} \mathrm{la}^{\subset} i^{y} m$ 'and it became infested with worms') contrasting with MH til:a' 'de-worm'. In these examples, the $h i \bar{p}{ }^{c} i l$ denominatives are intransitive stative verbs, while the $p^{〔} e l$ ones are transitive privative verbs, reminiscent of English "skin a cat" and "worm a dog."

Triconsonantal denominative verbs normally have the same morphology as other verbs, but the MH stative $h \bar{p}^{-}$'il meaning 'become poor', derived from 'åni ${ }^{\text {y }}$ 'poor (man)', is irregular: imperfect $y a^{\prime} n i^{y}$, perfect $h \ddot{a}^{\prime} n i^{y}$, participle $m a^{\prime} n i^{y}$. The expected ya‘ănäas was avoided, apparently to prevent confusion with kal ya'ăn $\ddot{a}^{h}$ 'he will answer'.

Quadriconsonantal denominatives cannot be accommodated in most binyanim. In LBH and MH, the problem was solved through a modification of $p i^{c} e l, p u^{c} a l$ and hitpa^el/nitpa‘al - a modification used earlier for reduplicated quadriconsonantals like $k-l-k-l$. Thus, in LBH we find the participles mŏturgåm 'translated' and măkurbål 'bemantled', derived from quadriconsonantal Aramaic nouns for 'translator, dragoman' and 'mantle', respectively. These participles have the pattern $m \partial \check{ } \mathrm{C} u \mathrm{CC} \dot{a} \mathrm{C}$, which differs from the $m \partial{ }^{\mathrm{C}} u \mathrm{C}: a \circ \mathrm{C}$ pattern of the $p u^{\prime} a l$ participle only in that the doubled medial radical has been shortened to make room for an additional consonant.

## Syntax

## Modification of Nouns

Nouns may be modified attributively by adjectives, quantifiers, nouns (genitive and appositive), pronouns (possessive and demonstrative), prepositional phrases, or clauses (see p. 171).

Nominal attributes of the genitive type are distinguished from adjectival ones in three ways: they put their heads in the construct state (see p. 153), e.g., 'äre ${ }^{y}$ mibșår 'fortress cities' (contrast 'åri'm bŏṣurow $\underline{t}$ fortified cities'), they do not
agree with their heads, and they normally prevent their heads from taking a definite article, e.g., ‘åre $h a+m: i \underline{b} s \underset{a}{ }{ }^{y}$ 'the fortress cities' (contrast hä+‘åri'm $h a+b:$ :̣suro ${ }^{w} \underline{t}$ 'the fortified cities').

The distinction between the two types of attributes is often blurred. Thus, in ad-
 article, a feature which becomes common in MH, while in the genitive construction $h a+\check{s}: a^{〔} a r ~ h a+d: a ̊ r o{ }^{w} m$ 'the south gate' (Ezek. 40:28), the head has the definite article. In adjectival mal' $\mathfrak{a k e} e^{y} \mathrm{rä}^{〔} i^{y} m$ 'evil emissaries' (Ps. 78:49) the head is in the construct state. In Deut. 25:15 'äbün šălemă ${ }^{h}$ wåsädääk 'a full and righteous weight', an adjective is conjoined with an abstract genitive noun, no doubt on the analogy of interchanges like Ps. 9:5 šo ${ }^{w} \bar{p} e t$ ṣäd $d a ̈ k$ 'judge of righteousness' with Ps. 7:12 šo "pet sad: $i^{y} k$ 'righteous judge'. There is also a tendency to make the genitive noun agree in number with its head (see below).

In true compounds like 'äre ${ }^{y} h a+m: i \underline{b} s \underline{a} r$ and Deut. 13:4, 6 hor ${ }^{w}$ )lem $h a+h{ }^{\text {ă }} l o{ }^{*} m$, the definite counterpart of Deut. 13:2 holem hălo ${ }^{w} m$ 'a dream dreamer', the definite article prefixed to the genitive noun serves to make the entire phrase definite. With other genitive phrases, especially possessive ones, a definite article prefixed to the genitive noun belongs to it alone, and there is no way to mark the definiteness of the head. Thus, mal'ak hå+'älohi'm has the same form whether it means 'an angel of God' (Judg. 13:6, etc.) or 'the angel of God' (Judg. 13:9, etc.), and $k \check{n} n a \bar{p} h a+k: \partial r^{\prime} u^{w} \underline{b}$ has the same form whether it means 'a wing of the cherub' ( 1 Kings $6: 27$ ) or 'the wing of the cherub' ( 1 Kings $6: 24$ ).

The rule which places the definite article on the genitive noun of compounds produces bizarre results when it is applied to gentilic nouns derived from compound names (of places, tribes, or clans). The toponym be't-' el/beyt' el 'Bethel', literally 'house of God', is treated in SBH as a genitive construction - even after it is converted to a gentilic through the addition of $+i^{y}$. Thus, $b e^{y} \underline{t} h a \dot{a}+{ }^{\prime} \breve{a} l+i^{y}$ 'the Bethelite', the definite form of * $b e^{y} t \underline{t}^{\prime} \check{a} l+i^{y}$, is split in the middle by the definite article, as if it meant 'house of the godly'. Small wonder that, in the later period, Bar-Kokhba calls the people of En-Gedi (lit. 'kid spring') $h^{\text {c }} n g d y n$ rather than 'yn-hgdyyn.

In SBH, the plural ending is normally attached only to the head of the genitive phrase, but a second plural ending is sometimes attached to the genitive noun. This redundant plural ending, which becomes increasingly common in LBH and MH , is used with both mass nouns (even those which are otherwise unattested with a plural ending, e.g., Isa. 42:22 bagat: $+e^{y} \underline{k} \check{a} l \dot{a}^{\prime}+i^{y} m$ 'houses of detention', Bava Batra 10:4 šŏṭär $+e^{y}$, $\breve{a r i}{ }^{y}$ siy:+o ${ }^{w} \underline{t}$ 'contracts of tenantship', Sifra Nedava 8:2 $b a ̊ t:+e^{y} d \check{a}$ så $n+i^{y} n$ 'receptacles for fatty ash') and count nouns (even when ambiguity is created, e.g., Deut. 1:15 sár $+e^{y}$ ’ălå $\bar{p}+i^{y} m$ 'chiefs of a thousand').

The process which creates the genitive construction is iterative and a number of long chains are attested, e.g., Lev. 13:59, 2 Kings 18:24, Isa. 21:17, 28:1, 2 Chr.
 [ $b e^{y} \underline{t}-h \stackrel{\circ}{a}^{\circ}$ älohi ${ }^{y} m$ ]] '[men of valor of] [[the work of the service of] [the House of God]]', the constituent phrases are easily recognizable because they are frequently
attested in the Bible. In the end product, all nouns but the last are in the construct


All nouns in the chain but the last normally dispense with the definite article. In 2 Kings 23:17, we find two exceptions in a single sentence quoting the people of
 $h a+m: i z b a h b e^{y} \underline{t}-{ }^{-} e l$ 'the altar of Bethel'. This may be a syntactic allusion to Gen. 31:13 hå+'el be't-'el 'the God of Bethel'.

A process which serves some of the same functions as the one which creates genitive phrases and which sometimes alternates with it is the insertion of the preposition lă+ 'to, belonging to' (e.g., 2 Kings 5:9, Ruth 2:3), usually preceded by relative ' $\breve{a} \breve{s} a ̈ r / s \not a \ddot{a}+$. This circumlocution permits the use of the definite article with the head noun, e.g., Gen. 29:9 haṣ:o'n' 'ăs̆är lă+'åbab ${ }^{\text {y }}$ hå 'the flocks which belong(ed) to her father' (also 31:19) vs. Gen. 37:12 so'n' 'ăbi'häm 'their father's flocks'.

In some contexts, circumlocution of the genitive construction with ('ăšär/šä+) lŏ+ is more than just a stylistic option. In MH, it is obligatory for the second genitive construction in constructions of the form "A of B ..., but (that) of C ..." (e.g., Berakhot $4: 1$, Sanhedrin 10:5), "... A of B; also (that) of C" (e.g., Tevul Yom 1:1, 2), and "A of B is more ... than (that) of C" (e.g., Terumot 5:9), where the second occurrence of $A$ is deleted by a gapping transformation.

In all periods, circumlocution is obligatory when the noun phrase to be modified contains a conjunction, e.g., Gen. 40:5 ham:ašk $\ddot{a}^{h}$ wăhå $o \bar{p}^{h}{ }^{h}$ ) ăs̆är lămäläk mişrayim 'the butler and the baker of the king of Egypt' instead of *maške ${ }^{h}$ $w \breve{a} ’ o \bar{p} e^{h}$ mäläk mişrayim, 2 Kings 11:10, Benei Hezir tomb inscription $k b r$ whnpš $\check{s}{ }^{\prime} l^{\prime}$ 'zr '(the) tomb and the monument of Eleazar', Copper Scroll III, 2-3 kly ksp wzhb šldm' 'vessels of [silver and gold] of terumah', Pe'ah 4:9, Shevi'it 1:4, Terumot 11:4. The genitive construction may be used only if the coordinate noun phrase is first broken up, e.g., Gen. 40:1 maške ${ }^{h}$ mäläk miṣrayim wŏhå' op̄äa 'the butler of the king of Egypt and the baker', Deut. 22:15 ' $\breve{a} b i^{y} h a n: a^{〔} \breve{a} r a^{h} w{ }^{h}$ 'im: $a^{\circ} h$ 'the girl's father and her mother', Sanhedrin 11:1, Menahot 7:4. The genitive constituent, on the other hand, is often a coordinate noun phrase, e.g., Exod. 32:2, Lev. 13:59, Num. 20:5, Deut. 8:8, Josh. 6:19, Terumot 11:4, Hagigah 1:8.

In MH, the phrase $\check{a} \ddot{a}+l: \check{a}+$ 'that belongs to' has been reanalyzed as a single morpheme: a new preposition šäl with the meaning 'of'. This is evident in the phrase shhyw šl hgw'yn 'which belonged to the gentiles' (Bar-Kokhba letters), for the first half of a bimorphemic $\check{s}+l+$ would be redundant following $\check{s}+h y w$ and the second half would elide the [h] of the definite article (see pp. 152-153) and be written as part of the next word, without a space. Chains with more than one occurrence of šäl are attested, e.g., Kelim 12:3, 6, Zavim 4:2 (bis), Bet She'arim inscriptions (cited below).

Suffixed pronouns, unlike genitive nouns, are normally possessive. Thus $b e^{y^{\prime}} \underline{+}+$ $o^{w}$ 'his/its house' can be equivalent to $b e^{y} \underline{t} h \dot{a}^{\circ} i{ }^{y}{ }^{y}$ ' 'the man's house' but not to $b e^{y} \underline{t}$ hak:ayiṣ 'the summer house'. Another difference is that the suffixed pronoun cannot normally serve as the head of another genitive noun or any other non-
appositive modifier. Nouns modified by suffixed pronouns, like those modified by genitive nouns, do not normally retain their definite article, unless the pronoun is
 'ăăär lă+kå vs. Gen. 13:8 róä̈ka 'your shepherds'.

The tendency of these pronouns to be attached to the last noun of a genitive construction often conflicts with the syntactic bracketing required by the sense, e.g., Prov. 24:31 [gädär ${ }_{1}$ 'ăbån $n_{2}$ ] $a^{\circ}{ }^{y} w_{3}$ ] 'his ${ }_{3}$ stone $_{2}$ fence $_{1}$ ', Prov. 10:15, 18:11 [kiryat ${ }_{1}$ ' $\left.u z:_{2}\right]\left[o^{w}{ }_{3}\right]$ 'his mighty $_{2}$ city $_{1}$ ' (contrast the purely poetic Ps. 71:7 $m a h s_{1}+i^{\prime}{ }_{2}{ }^{-} o z_{3}$ ' $\mathrm{my}_{2}$ mighty $_{3}$ refuge $_{1}$ '), Yoma 5:1, Nega'im 12:5. The conflict is sometimes resolved through the use of a circumlocution, e.g., Gen. 44:2 găbi $i^{y_{c} i^{y}}$ gд̈bi $i^{y} a^{\text {c }}$ hak:äsäp̄ 'my silver goblet (lit. my goblet, the silver goblet)', 2 Kings 25:30; Exod. 35:16 mikbar han:ăḥos̆ăt ' ăšär-lo 'its copper grating (lit. the copper grating that belongs to it)', Lev. 9:8, Judg. 3:20.

The first constituent of the genitive construction may take a suffixed pronoun referring to the second constituent. In MH, where this anticipatory pronoun is common, its referent must be governed by šäl, e.g., Sanhedrin 8:5 mi ${ }^{y} t a ̊ t+a ̊ n$ sül:årăšå $i^{\text {y }} n$ 'the death (of them,) of the wicked', Bet She'arim inscriptions 'rwn+nšlšlwšt bny+w šlrby ywdn bn+w šlrby my'šh 'the ossuary (of them,) of the three sons (of him,) of Rabbi Judan, the son (of him,) of Rabbi My'šh'. In BH, where it is rare, its referent is (with one exception, in Song 3:7) not governed by a preposition, e.g., Ezek. 42:14 bŏb̆o' + åm hak:ohăni ${ }^{y} m$ 'upon the entering of (them,) the priests'.

## Modification of Verbal Nouns and Adjectives

Verbal nouns can also be modified by genitive nouns, which may be underlying subjects or objects; in 2 Sam. 1:26, 'ahăbat nåši' ${ }^{y}$ 'love of women' is ambiguous. Adjectives, too, may be used in the genitive construction, whether they function as nouns (e.g., 2 Kings $10: 6$ gădole ${ }^{y} h \ddot{a}^{<} i^{y} r$ 'the grandees of the city') or not (e.g., Gen. 41:2 yăpo ${ }^{w} \underline{t}$ mar $^{3} \ddot{a}^{h}$ 'beautiful of appearance', Ezek. 17:7 gŏdo ${ }^{w} l$ kănåpayim 'great of wing', Gittin 9:8). Here too, the definite article which logically belongs to the whole phrase is attached to the genitive noun (see pp. 161-2). Thus, when
 nouns, they become y̆ăpot ham:ar’ ${ }^{\prime}{ }^{h}$ (Gen. 41:4) and gădo ${ }^{w^{\prime} l}$ hak:ănåp̄ayim (Ezek. 17:3), literally 'beautiful of the appearance' and 'great of the wing'.

The comparative degree of adjectives is expressed by means of an adverbial phrase introduced by the preposition min/miC: 'from, away from', e.g., Judg. 14:18 måto "k mid:ăbaš 'sweet beyond honey', Niddah 2:7. In MH, this adverbial may be strengthened by placing the word $y o$ "ter 'more' before it (not before the adjective, as in Modern Hebrew).

The superlative, too, is expressed syntactically, e.g., Song 1:8 hay:åpa $\dot{a}^{h}$ ban:åši ${ }^{y} m$ 'the fair(est) among women', Deut. 28:54. In MH and sometimes in BH , the relative conjunction is inserted before the preposition, e.g., 2 Sam. 7:9, Pesaḥim 9:8 hay:åpäa $\ddot{a}^{h}$ suä+b:åhän 'the fair(est) among them'.

## Word Order

## Within the Noun Phrase

Attributive modifiers (with the exception of some quantifiers; see p. 154) follow their heads in a fairly predictable order: (1) genitive nouns; (2) possessive pronoun; (3) adjectives; (4) demonstrative pronoun/adjective; (5) relative clauses. In LBH, (3) and (4) may be reversed, e.g., 2 Chron. 1:10, Esther 9:29.

Put differently, adjectives and relative clauses may not separate the immediate constituents of a genitive phrase; they must follow the last genitive noun or pronoun. Thus, both the wide scope modifier of 1 Kings 6:24 kăna $\ddot{p}_{\mathrm{f}}$. hak:ăru" $\underline{b}_{\mathrm{m}}$. $h a s ̌: e n i{ }^{y_{t}}$. 'the second ${ }_{\mathrm{f} \text {. }}$ wing $_{\mathrm{f} \text {. }}$ of the cherub $\mathrm{m}_{\mathrm{i}}$ ' and the narrow scope modifier of 1 Kings 6:27 $u^{w} k n a \bar{p}_{\mathrm{f}}$. hak: $\check{\partial} r u^{w} \underline{b}_{\mathrm{m}}$. haš:eni ${ }_{\mathrm{m}}^{\dot{y}}$. 'and a wing $\mathrm{f}_{\mathrm{f}}$. of the second $\mathrm{m}_{\mathrm{m}}$. cherub $_{\mathrm{m}}$.' come after the word for 'cherub'. However, adjectives which are inside the genitive noun phrase and, thus, do not separate it from its head are permitted,

 or daughter or his Hebrew manservant or maidservant'.

When both wide and narrow scope modifiers are present, the latter come first (as in Arabic), e.g., Deut. 5:24, 21:6, 28:58, 31:16 ['älohe ${ }^{y}$ nekar] [hå’åräṣ] ['ăs̆är hu ${ }^{w \prime}$ bă’ šåm: $a^{h}$ ] [băkirbo ${ }^{w}$ ] '[the alien gods]_-[of the land] [which they are about to enter]-[in their midst]' ('in their midst' modifies 'the alien gods'!), Ps. 86:2.

With some genitive types, the phrase-final placement of adjectives managed to survive the transition to circumlocution with šäl. Thus, some of the MH counterparts of Esther 8:15 'ătärä̈t zåhåb gădo wlá ${ }^{h}$ 'a large crown (made) of gold' (genitive of material) exhibit the old order, with the adjective at the end: Rosh Hashanah 2:3 kălo wnso w $\underline{t}$ šăl: $a^{\text {' }}$ äräz 'ărruk: $i^{y} m$ 'long poles of cedar', Nega'im 14:1. Others have the adjective after the first noun: Tamid 3:6, Kelim 25:7 ‘ăre ${ }^{\text {' } b} \dot{a}^{h} g$ g$\partial \underline{d o}{ }^{w} l \dot{a}^{h}$ säll:å' es 'a large kneading-trough of wood'. This order is found already in Ezek. 40:40 hak:åtep̄ hå' ahäraüt 'ăšär lă' ulåm haš: $a^{\text {' ar }}$ 'the other side of the gate's vestibule'.

## Within the Non-verbal Clause

In BH (and sometimes in MH too), predicative adjectives come before their subject in verbless clauses, except in those beginning with wŏ+ (circumstantial, concessive, and parenthetical clauses, e.g., Gen. 13:13, 18:11, 29:17, Yevamot 13:1) or the presentatives hin: $e^{h} /$ hălo'. Thus, in asking Jacob for lentils Esau says $k i^{y}$ 'åyep ' 'anok $k i$ 'for I am famished' (Gen. 25:30) with the adjective first, but in the previous verse (25:29) the account of Esau returning home uses a circumstantial clause with the adjective second: way:åbo' 'eśåw min-haś:ådäan wă+hu" 'åyep 'and Esau came in from the field famished (lit. and he was famished)'.

When the predicate adjective is modified by an adverbial, the predicate is often split, with the adjective preceding the subject and the adverbial following, e.g., Gen. 3:6, 12:14, Deut. 7:17, Josh. 9:22, 1 Sam. 29:9, Avot 4:17. This order seems
to be very ancient, since it is also reflected in the morphology of the stative perfect. Thus, 1 Sam. 15:17 kåton 'at: $\dot{a}^{h} b \breve{\partial}^{〔} e^{y} n \ddot{a}^{y} k a^{\prime}$ 'small are you in your (own) eyes' would have had the same order and meaning had it been expressed by a stative verb in the perfect: $k a ̊ t o n+t a ̊ b \breve{z}^{\prime} e^{y} n a a^{y} k \underline{a} a ̊$ (not attested, but see Gen. 32:11).

## Within the Verbal Clause

BH verbal sentences are basically VSO, but there are numerous exceptions. Verbal circumstantial and concessive clauses, like the non-verbal ones discussed on p. 165, begin with the conjunction wă+ followed by the subject (e.g., Gen. 18:13, 24:31).

Other exceptions involve focused elements, which are moved to the beginning
 $u^{w b}$ bišmo ${ }^{\text {w }}$ tiš:åbear 'it is the Lord your God that you shall revere, and Him that you shall worship, and His name that you shall swear by', 13:5. When the focused element is the subject of the verb, a redundant independent pronoun may be inserted
 wătap:ว̆k̈äm ... hem: $\dot{a}^{h}$ yåbo $o^{\prime} u^{w}$ šam: $a^{h}$ ( $\ldots$ you will not come there) Joshua ... he will come there ... and your children ... they will come there', Kiddushin 3:7.

Similar devices are used to signal contrast between two clauses. In some cases, the inversion or independent pronoun is found only in the second of the two clauses, e.g., Gen. 12:12 wăhårăğ $u^{w}$ ’otit $i^{y}$ wă'ot tak yăhay: $u^{w}$ 'and they shall kill me, but you, they will let live' (contrast Num. 22:33), Gen. 33:16-17, Exod.
 nized his brothers but they did not recognize him'. In other cases, the first clause
 restored to my post, and him, he hanged' (contrast Gen. 40:21-22), Gen. 34:21, Deut. 23:21, 1 Kings 12:11, Judg. 14:16, Ezek. 33:25, Jon. 4:10-11 (for the last three, see p. 167). Sometimes, the inverted second clause exhibits the topic-comment construction, e.g., Exod. 9:20-21, 2 Chron. 10:16-17; see p. 168.

## Agreement

Verbs and predicate adjectives agree with their subjects in number and gender; attributive adjectives agree with their heads in definiteness as well. Demonstrative adjectives, being inherently definite, differ from most other attributive adjectives in discriminating between two kinds of definite heads: those with the definite article and those with a suffixed pronoun. Demonstratives take a redundant definite article with the former type but not with the latter, e.g., had:ăbåri $i^{y} m h^{\circ}{ }^{`} e l::^{h}$ 'these words' vs. dăbåray 'el:ä 'these words of mine'.

In all periods, collectives may take either singular or plural concord, but in LBH and MH the plural prevails. In SBH, there is much variation, even within a single verse or adjacent verses, e.g., Josh. 6:20, Judg. 9:36-37; attributive adjectives are consistently singular even when other modifiers are plural, e.g., Num. 14:35, Judg. 2:10, 2 Sam. 13:34 'am-rab holăki'm'a large crowd was (lit. were) coming'. For the non-agreement of passive verbs, see p. 160.

In BH , the rules of agreement often depend on the word order, i.e., on whether the verb comes before the subject or not. This is the case with coordinate noun phrases (compound subjects). In the book of Esther, the phrase ham:äläk wăhåmån 'the King and Haman' appears five times as a subject, four times following a singular verb and once preceding a plural verb. There is no categorical rule requiring a verb preceding a compound subject to be singular, but when it is, it agrees in gender with the closer conjunct, e.g, Esther 9:29, 31, Gen. 33:7, Shabbat 11:6, and Sanhedrin 1:6.

The clearest evidence of the influence of word order on agreement in BH comes from the many cases where we find singular verbs preceding the subject and plural verbs following it (in a subsequent clause). This is found with compound subjects (e.g., Gen. 9:23, 14:8, 21:32, 24:50, 61, 31:14, $33: 7$ [bis], 34:20, 44:14, Num. 12:1-2, 1 Sam. 27:8) and with collectives (e.g., Exod. 1:20, 4:31, 17:2 [contrast 17:3], 20:14, 32:1, 31, 33:10, Lev. 9:24, Josh. 6:20, 1 Kings 18:39).

Modifiers of genitive phrases occasionally exhibit the force of attraction, agreeing with the adjacent genitive noun instead of its head, e.g., Exod. 26:26 (contrast 26:27), Josh. 7:21, 1 Sam. 2:4, 2 Kings 1:13 sar hămiš: $i^{y} m$ šălišì'm 'a third captain of fifty'.

## Interrogation, Affirmation, and Negation

Yes-no questions are introduced by hă+~Ø, e.g., 1 Kings 2:13 hăšålo "m bo'äkå 'do you come in peace?' vs. 1 Sam. $16: 4$ šålom bo ${ }^{\text {w' }}$ äkå 'you come in peace?'. Omission of the particle is especially common in astonished rhetorical questions which follow from a premise, e.g., Judg. 11:23, 14:16 hin: $e^{h} l \breve{l}^{\prime} a^{a} b i^{y} u^{w} l^{\prime} i m: i^{y} l o^{\prime}$ hig:adti ${ }^{y}$ wălåk 'ag:i $\underline{d}^{y}$ ' 'my father and my mother I haven't told and you I should tell?!', 1 Sam. 25:10-11, 2 Sam. 11:11, 2 Kings 19:11, Jer. 25:29, 45:4-5, 49:12, Ezek. 18:11-13, 33:25, Jon. 4:11 vs. Num. 32:6 and Ezek. 20:30-31. Such questions serve as the apodosis of a fortiori arguments, substituting for assertions introduced by ' $a \bar{p} k i^{y}$ 'all the more so'.

Hebrew originally had no word for 'yes'; MH $h i^{y} n$ 'yes' is an Aramaic loanword, while in Gen. 30:34 hen is an Aramaism in the mouth of an Aramean. Affirmative answers to yes-no questions consist of a restatement of the question in positive terms with change of person (first to second and vice versa) but not of word order. The answer is often simplified through deletion of all but its first word; thus, the affirmative reply to hayda'täm 'ät-låbån bän-nåho ${ }^{w} r$ 'do you know Laban son of Nahor?' (Gen. 29:5) is just yåd ${ }^{\circ}$ ' $n u^{w}$ 'we know' (not 'we know him') and the answer to hăko ${ }^{w} l \check{\partial k} k{ }^{\circ} z \ddot{a}^{h}$ 'is that your voice, (my son David)?' ( $1 \mathrm{Sam} .26: 17$ ) is $k o^{w} l i^{y}$ 'my voice, (my lord king)'.

Answers to other types of questions follow the word order of the question, in which the questioned element comes first, e.g., Gen. 37:15-16, Josh. 9:8-9, Judg. 15:10, 1 Sam. 28:11, 13, 2 Sam. 1:3, Jer. 1:11, Yadayim 4:4.

In all periods, the most common negation is $l o^{\prime}$. In addition, there are a number of specialized negations, including ' $e^{y} n$ for verbless clauses, ' al for volitives, BH bilti ${ }^{y}$ for infinitives (see p. 170), BH täräm 'not yet' (normally takes the imper-
fect, regardless of the tense), MH lă $a^{\prime}$ 'not so' (in 'im lă w' 'otherwise') and MH negative polarity words like $k{ }^{\prime} l l^{w} m$ 'anything' and $m e^{\text {‘ }} 0$ " låm 'ever (in the past)'.

The scope of $l 0^{\prime}$ is highly variable in BH. We find it negating single words, e.g., Deut. 32:21 lo'-'el ... lo'-‘åm 'a non-god ... a non-folk', Jer. 5:7. We also find it negating compound and complex sentences with a scope so wide that it is difficult to reproduce in normal English, e.g., Gen. 31:27 låm:å ${ }^{h} \ldots l o^{\prime}$-[hig:adtå $l: i^{y}$
 me (you were leaving) and so I sent you off with festive music]', Lev. 10:17
 'why did (it) not (happen that) [you ate the sin offering in the sacred area because it is most holy]?', 2 Sam. 18:11, 19:22, Jer. 20:17.

Scope ambiguity of the negation is common. The phrase $l o^{3} y u^{w}$ mat $X k i^{y} \ldots$, which occurs in 2 Sam. 19:22 with wide scope $l o$ ' ('it is not the case that [ X shall be put to death because ...]'), occurs in 1 Sam. 11:13 and Lev. 19:20 with narrow scope 10 ' ('X shall not be put to death, because ...') (cf. also Gen. 31:27 vs. Ps. 81:12-13). Word order can sometimes be used to disambiguate. Thus, the semantic difference between Ps. 9:19 lo' lånäsah yiš:åkah 'not forever will he be forgotten' and Ps. 119:93 lă‘o "låm lo'-'äškaḥ 'forever will I not forget $=\mathrm{I}$ will never forget' is made clear by word order, but not the semantic difference between Ps. 74:19 'al-tiškah lånäṣah 'do not forget forever' and Ps. $15: 5$ lo' yim:o "w lǎ owlåm 'he will never be shaken'. In MH, there is no ambiguity: $l 0^{\prime}$. . . lă‘ $0^{w} l a ̊ m$ always means 'never'.

## Conjunction

## Coordination

The boundary between coordination and subordination in BH is not as sharp as in English. Semantic relations which are normally made explicit through subordination are occasionally expressed less precisely in BH by coordination, e.g. Gen. 44:22 wơ‘ $a \mathfrak{z} z a \underline{b}{ }^{\text {' }} \mathfrak{a} t \underline{-}^{\text {' }} \mathfrak{a} b i^{y} w$ waimet 'he will leave his father and he will die' (entailment; contrast 1 Chron. $28: 9$ wゝ̆'im ta‘azbän: $u^{w}$ 'and if you leave him'), Exod. 10:13 hab:okär håyå ${ }^{h}$ wăru ${ }^{w}$ ah hak:ảdi $i^{y} m$ nås $a^{\prime}$ ' 'ät-hå' arbäa 'morning came and the east wind brought the locusts' (simultaneity; contrast Exod. 19:16 bihyot hab:okär 'as morning came').

The ubiquitous $w \check{\partial}+$ is normally considered the main coordinating conjunction, but it is not restricted to that role. In all periods, it frequently serves to connect a main clause to a previous subordinate clause (e.g., the waw apodosis in Lev. 6:21 and Soṭah 8:1) and a comment to its topic (e.g., Jer. 6:19 wŏto ${ }^{\text {w }}$ råt $i^{y}$ way:im ${ }^{2}$ ăsu ${ }^{w}$ $\underline{b} a ̊ h$ 'and as for my Torah, they rejected it', Shabbat 16:6). And in all periods, it is used regularly to connect subordinate clauses of one type (circumstantial) to the main clauses which they modify (see Circumstantial Clauses, p. 169). If it is used less commonly to introduce subordinate clauses of other types, that is only because they have their own, more specific, conjunctions which pre-empt it. But when for some reason those other conjunctions are not used, it is always on hand
to fill the void, e.g., Gen. 11:4 (instead of relative ' 'ăšär), Gen. 42:10 (instead of adversative $k i^{y}$; cf. 42:12), and Gen. 47:6 (instead of complementizing $k i^{y}$ ). Finally and most remarkable of all, BH wŏ+ is not uncommon at the beginning of utterances or even whole books.

## Subordination

## Circumstantial Clauses

In all periods, a clause may serve as a temporal adverbial even though it contains no word meaning 'while' but simply wă+ or nothing at all (e.g., Exod. 22:13). In such a clause, the subject, if definite, will come first, whether the predicate is a perfect (e.g., Gen. 24:31), an active participle (e.g., Gen. 18:1, Bava Meși‘a 4:10), a stative participle/adjective (e.g., Gen. 18:12, Gitttin 8:2, Yevamot 13:1), or a prepositional phrase (e.g., Lev. 7:20, Jer. 2:37, Ketubbot 12:3, Giț̣in 8:1).

## Conditional Clauses

The most common conditional particle in all periods is 'im 'if'. Others include BH $l u^{w}>\mathrm{MH}{ }^{\prime} i^{y} l: u^{w}$ (counterfactual), $\mathrm{BH} l u^{w} l e^{\prime} / l u^{w} l e^{y}>\mathrm{MH}{ }^{\prime} i^{y} l: u^{w} l e^{y}$ (negative counterfactual), and MH ' $a \bar{p} i^{y} l: u^{w}$ 'even if'.

Omission of the apodosis is permissible in contexts which allow the hearer to reconstruct it. When the speaker lays out two antithetical alternatives in conditional form, the apodosis of the first conditional may be omitted if it is the one preferred by the speaker and requires no further action, e.g., Gen. 4:7, Exod. 32:32 'im-tiś: $a^{a}$ hat forgive their sin; but if not, erase me from Your book which You have written', 1 Sam. 12:14-15, Makkot 1:1 (cf. also Dan. 3:15). In all of these cases, the apodosis of the first conditional is to be understood as $t o^{\text {w }} \underline{b}$ 'well and good' and/or a volitive formed from the verb of the protasis, as in Ruth 3:13 'im-yi ${ }^{\prime}$ 'alek to wh yi $\bar{g}^{\prime} a{ }^{\circ} l$
 redeem; but if he does not want to redeem for you, I will redeem for you myself'.

## Complement Clauses

Complement clauses occur commonly as subjects of equational sentences and as objects of verbs and prepositions, but only rarely as subjects of verbs (except for those modified by the adverbial $b{ }^{\prime}{ }^{\prime} e^{y} n e^{y} X$ 'in the eyes of $X$ '). Finite and nonfinite types coexist in all periods, with the latter becoming relatively less frequent in MH.

As subjects of equational sentences and objects of prepositions, the finite and non-finite types are in free variation (cf. Gen. 27:44-45 'ad ' 'ăšär-tåšu" $\underline{b}$ hămat
 the turning back of your brother's anger from you', where the two are in apposition) or complementary distribution (see below). However, lipne 'before' takes only non-finite complements in all periods, while BH bд̆+ṭäräm 'before (lit. when not yet)' usually takes finite complements. Verbs, too, generally select one type
or the other.
When a compound or complex noun sentence with two finite verbs is transformed into the complement of a preposition, and the first verb turns into an infinitive, the second verb normally remains finite in BH , even though it is also governed by the preposition. It continues to bear the same relationship to the infinitive that it did to the finite verb, whether it be consecutive (e.g., Gen. 39:18 $k a h a ̆ i^{y} m i^{y} k o^{w} l i^{y} w a^{2} \ddot{a} k r a^{\prime}$ ' $w h e n ~ I ~ r a i s e d ~[l i t . ~ u p o n ~ m y ~ r a i s i n g] ~ m y ~ v o i c e ~ a n d ~ c r i e d ~$ out'; cf. 39:15 hări'moti $i^{y} k o^{\prime \prime} l i^{y}$ wå'äkrå 'I raised my voice and cried out'), cir-
 ' $i t: a ̊ n u^{w}$ 'upon my coming to your servant, my father, the boy not being with us';
 father, the boy not being with me'), adversative (e.g., Exod. 12:27 bănågpo " 'ätmisrayim wă' $\ddot{t} \underline{t}$-båt: $e^{y} n u^{w}$ hiṣ: $i^{y} l$ ' when he smote [lit. at the time of his smiting] the Egyptians but saved our houses [lit. our houses he saved]' [note the inverted word order], 1 Sam. 24:11 [12]) or repetitive (e.g., Ezek. 13:8; contrast Ezek. 25:6).

BH grammars do not distinguish those non-finite usages that correspond to the English verbal noun from those that correspond to the English infinitive, calling them all infinitives. The complementizer lå/ă+ (etymologically, but not syntactically, identical to the preposition $l \dot{a} / \partial{ }^{+}+$'to, for') is not considered an adequate basis for distinguishing, since, in most of the environments which permit it, it is only
 of a roof is better ...' with $25: 24 ~ t o{ }^{\text {w }} \underline{b}$ šäbüt $\underline{\underline{\prime}}$ 'al-pin: $a \underline{t}$-gåg 'dwelling on the corner of a roof is better ...' and Deut. 22:19 with Deut. 22:29).

The MH situation is quite different, a sharp distinction having developed between two types of non-finite complements: an infinitive and another type reminiscent of the English verbal noun. The latter, frequently on the patterns $\mathrm{C} \check{\partial} \mathrm{C} i^{y} \mathrm{C} \dot{a}^{h}$ (in kal ) and $\mathrm{CiC}: u^{w} l$ (in $\mathrm{pi}^{c} e l$ ), is more noun-like than the former, appearing already in the Bible with the definite article and even the plural ending. The infinitive is the direct descendant of the old BH infinitive with the complementizer lålă+. That complementizer has become obligatory and inseparable: $\mathrm{BH} m i+b: o^{w}$ $>$ MH $m i+l: a ̊ b o^{w \nu}$ ( $p r e v e n t / r e f r a i n / d e l a y$ ) from/in coming', BH lă+bilti ${ }^{y}$ (ăśso ${ }^{w} \underline{t}$ 'to not do' > MH (šä+ $)$ l:o' la'ăśso $\underline{\underline{t}}$ 'not to do'.

The use of the infinitive rather than a finite complement in the imperfect was optional with some matrix verbs (contrast Demai $6: 8$ with Ketubbot $6: 2$, below, and Yevamot $9: 3$ with 13: 12) and obligatory with others; either way, it created a good deal of alternation between the infinitive and the imperfect, which, in turn, led to morphological contamination of the former by the latter. Thus, BH laat $\underline{t} e \underline{t}\rangle$ MH $l i^{y} t: e n$ 'to give', due to alternations like Makkot $1: 1$ ro ${ }^{w} s \underline{a} \ddot{a}^{h} l i^{y} t: e n$ 'wants to give' ~ Avot 5:13 ro ${ }^{w}$ ṣä ${ }^{h}$ s̆ä+y:it:en 'wants that he give'. Similarly, BH le+'mor > MH $l o^{\text {w }}$ mar 'to say', due to alternations like Demai 6:8 yåko ${ }^{\text {w }} \mathrm{l} \mathrm{hu}^{w} l o{ }^{w}$ mar 'he is able to say' $\sim$ Ketubbot $6: 2$ yåkowl hu w" sä+y:o'mar 'he is able that he say'.

Relative Clauses
In the fullest case relative clauses have a head, a relative conjunction (not a pronoun) and a so-called "resumptive" pronoun, e.g., Gen. 9:3 kål-rämäśs ăšär hu"hay 'every mobile thing such that it is alive', Deut. 18:21, 22 had:åbår 'ăs̆är lo'$\underline{d i b}: \check{\partial r} r^{w} Y$. 'the thing such that the Lord did not say it', Gen. 28:13, Kil'ayim 5:1, Pe'ah 2:7.

Under certain conditions, one or more of these may be omitted. When the nouns ' ${ }^{y}{ }^{Y}$ s 'person', dåbår 'thing', and måko ${ }^{w} m$ 'place' serve as the head, they may be omitted, leaving behind any preposition which governed them and/or the word kol
 'it:o 'and every person such that there was found with him ... and every [person] such that there was found with him ...', Num. 31:23 kål-dåbår 'ăšär-yåbo' bå’eš ... wŏkol 'ăs̆är lo'-yåbo' bå’eš ... 'every thing such that it withstands fire ... and every [thing] such that it does not withstand fire ...', Ruth 1:16, Berakhot 6:7, Yevamot 2:3.

Resumptive pronouns which function as subject or object of the relative clause are commonly omitted in all periods, yielding the gap type of relative clause. This can create syntactic ambiguity. Thus, 2 Kings 19:12 hag:o wim 'ăs̆är šihătaw 'ăbo "tay 'the nations that my ancestors destroyed' can also mean 'the nations that destroyed my ancestors', since the use of the direct object marker is not obligatory (see p. 153).

Resumptive pronouns attached to nouns (e.g., the possessive pronoun in Deut. 28:49 go w'y 'ăšär lo' $0^{\prime}$ tišmá lăšono w' a nation such that you do not understand its language', Ketubbot 4:3) may not be omitted, but resumptive pronouns attached to prepositions are occasionally omitted, especially in biblical poetry. When this occurs, the stranded preposition is normally omitted as well, e.g., Deut. 28:27, 35 šăḥi ${ }^{y} n \ldots$ '.. 'ăs̆är lo' $-\underline{t} u^{\prime \prime} k a l$ lăheråpe' 'an inflammation such that you will not be able to recover [from it]', Isa. 51:1 su ${ }^{{ }^{w}} r$ huṣ:abtäm ... mak:äbät $\underline{\underline{t}}$ bo ${ }^{w} r$ nuk:artäm 'the rock [such that] you were hewn [from it] ... the quarry [such that] you were dug [from it]', Terumot 1:2. In rare instances, we find the stranded preposition moved out of a headless relative clause and placed in front of 'ăšär, e.g., Gen.
 gods (will not live) $=$ the person such that you find your gods with him (will not live) vs. Gen. 44:9 'ăs̆är yim:åse' ’it:o "[the person] such that it is found with him (will die)', Num. 22:6, Ezek. 23:40.

Asyndesis with a finite verbal predicate is common in biblical poetry, especially when the antecedent of the relative clause is indefinite, e.g., Jer. 5:15 go ${ }^{w}$ y $l o^{\prime}$ $\underline{t}$ teda' lăšono wălo' tišma' ma'sydab:er 'a nation [such that] you do not know its language and you do not understand what they are saying' (contrast Deut. 28:49, above). It is far less common in biblical prose and non-existent in the Mishnah. In the linguistically modernized version of Isaiah found at Qumran many of the asyndetic relative clauses of the Masoretic version have been eliminated through the activity of MH-speaking scribes who found them difficult to understand.

Hebrew has considerable flexibility in forming relative clauses. It allows types
whose English counterparts are ungrammatical, e.g., Exod. 33:1, Josh. 13:21-22

 ites such that [Moses smote him and the Midianite chiefs ... and the Israelites slew Balaam son of Beor]', 1 Sam. 25:11 'ănåši $i^{y} m^{\prime}$ 'ăšär lo' yåda‘ $t i^{y)} e^{y} m i z: \ddot{a}^{h} h e m: a^{h}$ 'men such that I know not where they are from'.

It also allows relative clauses to contain multiple resumptive pronouns, e.g.
 such that its rocks are iron and from its hills you shall hew copper', 11:6, Avot 3:17, and - with asyndesis - Jer. 5:15 (see above). Sometimes the first of these pronouns will be omitted but not the second, yielding a hybrid of the gap and pronoun retention types, e.g., Gen. 26:18, Deut. 4:46-47, Jer. 28:3, Ezra 1:7.

BH permits the formation of relative clauses with two different antecedents, as long as they are immediate constituents of the same genitive noun phrase, e.g., Gen. 24:24 bän-milkå ${ }^{h}$ ’ $\mathfrak{a}$ šär yålăd $\dot{a}^{h}$ 'the son of Milkah such that she bore [him]',

 thophel gave [it]), Gen. 45:27, Exod. 5:14, Deut. 5:24, 1 Kings 15:30, 2 Kings 17:22, Ps. 107:2.

In addition, BH does not require the resumptive pronoun to be in the 3rd person. In syndetic relative clauses modifying the nominal predicate of a 1st or 2nd person pronoun, the resumptive pronoun is normally in the same person, e.g., Judg. 13:11
 to the woman?' The same is true of syndetic relative clauses modifying a vocative noun but not asyndetic ones; contrast Isa. 41:8 with 44:1.

Finally, it is worth noting that biblical style has no aversion to sentences crammed full of relative clauses. Deut. 11:2-7, with its ten relative clauses embedded at four different levels within a complement clause embedded at a fifth level, is probably about as close as one can come to infinite recursion in the real world.

## Notes

Our italicized transliteration of the Masoretic pointing is based on the views of the Masoretes themselves rather than those of later theoreticians like Joseph Kimbi.
 choice of Swedish $\dot{a}$ and $\ddot{a}$ to represent, and $\forall$ is based, in part, on parallels in the historical development of these vowels.) We indicate quantity in $\check{\partial},{ }_{y 1}, \check{a}_{,-1} \check{a}$, and r: $\stackrel{\check{a}}{ }$, but the superscript letter in'. $i^{y}$, etc. does not represent length. Whenever a letter is left unpointed in the Masoretic text of the Bible (mainly $\left.\mathcal{X}^{\prime}, ~, ~ M, ~\right\urcorner ~ w$, and , $y$, but in several instances $\boldsymbol{y} s$ and $\boldsymbol{ש} \check{s}$ ), we indicate that fact using superscript signs: ', ${ }^{h}$, ${ }^{w}$, and ${ }^{y}$. The Masoretes viewed all such letters as quiescent, unlike Kimhi, who considered some of them to be markers of vowel length.

## Acknowledgments

I am deeply indebted to Professors Moshe Bar-Asher, Joshua Blau, Bernard Comrie, W. Randall Garr, and Robert Hetzron for their encouragement and their repeated attempts to improve this chapter, which has been expanded from my 'Hebrew, Ancient' entry in International Encyclopedia of Linguistics (ed. William Bright, New York, 1992), vol. 2, pp. 110-18, published by Oxford University Press. The English renderings of many biblical excerpts are adapted from the translation of The Jewish Publication Society.

## Further Reading

Azar, Moshe. 1995. The Syntax of Mishnaic Hebrew. Jerusalem: Academy of the Hebrew Language. (In Hebrew.)
Ben-Hayyim, Zeev. 1977. The Literary and Oral Tradition of Hebrew and Aramaic Amongst the Samaritans, vol. 5: Grammar of the Pentateuch. Jerusalem: Academy of the Hebrew Language. (In Hebrew.)
Bergsträsser, Gotthelf. 1918-1929. Hebräische Grammatik. 2 vols. Leipzig: Vogel.
Blau, Joshua. 1972. Phonology and Morphology. Tel Aviv: Hakibbutz Hameuchad. (In Hebrew.)
Davidson, A. B. 1901. Hebrew Syntax. Edinburgh: T. \& T. Clark.
Garr, W. Randall. 1985. Dialect Geography of Syria-Palestine, 1000-586 B.C.E. Philadelphia: University of Pennsylvania Press.
Gesenius, Wilhelm, Emil Kautzsch, and A. E. Cowley. 1910. Gesenius' Hebrew Grammar. Oxford: Clarendon Press.
Haneman, Gideon. 1980. A Morphology of Mishnaic Hebrew According to the Tradition of the Parma Manuscript. Tel Aviv: Tel-Aviv University. (In Hebrew.)
Joüon, Paul, and T. Muraoka. 1991. A Grammar of Biblical Hebrew. Rome: Pontificium Institutum Biblicum.
Kutscher, Eduard Yechezkel. 1982. A History of the Hebrew Language. Jerusalem: Magnes.
Lambert, Mayer. 1946. Traité de grammaire hébraïque. Paris: Presses Universitaires de France.
Malone, Joseph L. 1993. Tiberian Hebrew Phonology. Winona Lake, Ind.: Eisenbrauns.
Qimron, Elisha. 1986. The Hebrew of the Dead Sea Scrolls. Atlanta, Ga.: Scholars Press.
Ridzewski, Beate. 1992. Neuhebräische Grammatik auf Grund der ältesten Handschriften und Inschriften. Frankfurt am Main: Peter Lang.
Segal, Moses H. 1927. A Grammar of Mishnaic Hebrew. Oxford: Clarendon Press.
Yeivin, Israel. 1985. The Hebrew Language Tradition as Reflected in the Babylonian Vocalization. 2 vols. Jerusalem: Academy of the Hebrew Language. (In Hebrew.)

# THE SEMITIC LANGUAGES 

EDITED BY<br>Robert Hetzron

LONDON AND NEW YORK

