

created a new adult culture of interest in education throughout the broader American middle class, particularly in the areas of religion and spirituality. The College, together with the local Jewish Federation, created *Me'ah* in 1994, to meet this need. The program features a curriculum-based two-year program of academically taught adult Jewish learning, bridging the gap between classical Jewish texts, history and ideas, and the cognitive and affective needs of adults. Today the program reaches dozens of communities throughout Boston, New York, and elsewhere in America, with an enrollment in the thousands.

In its most recent phase it has truly become a national institution, recruiting students literally from around the globe, who may also study from around the globe via the Internet and the college's online offerings, including an M.A. degree.

Hebrew College represents the twin modern dynamics of building and subverting in Jewish cultural life. It maintains Jewish life while it changes it, incorporating the modern tensions between ethnicity and religion. It accepts classical notions of what constitutes Jewish culture, for example biblical and rabbinic texts, even as it experiments with new genres such as modern Hebrew literature that serve to expand our notion of the Jewish cultural canon. In recent years this has taken on programmatic form as the college embraced rabbinic and cantorial training, and moved – albeit transdenominationally – to a greater degree of openness to trends in contemporary spiritual life such as neo-mysticism.

Similarly, the College embodies interesting structural tensions of being Jewish in America. It espouses the virtue of Jewish community, and sees itself as among the vanguard of institutions training Jewish leaders, albeit in an American context much more comfortable with individualism and liberalism. Its physical place, situated alongside of the Andover Newton Theological School, the oldest Protestant seminary in America, symbolizes the college's increasing receptivity to participating in the larger American realm of higher religious education. It remains both communally based as well as academically elitist, striving to maintain the standards American Jews associate with academic excellence. Nowhere is this more in emphasis than in the college's commitment to adult learning, which attempts to bridge the distance between the folk and the elite as bulwarks of contemporary Jewish life.

[David Benjamin Starr (2nd ed.)]

HEBREW GRAMMAR.

The following entry is divided into two sections: (i) an Introduction for the non-specialist and (ii) a detailed survey.

(I) HEBREW GRAMMAR: AN INTRODUCTION

There are four main phases in the history of the Hebrew language: the biblical or classical, the post-biblical or neo-classical and rabbinic (which includes medieval scholarly writings and continued until the latter part of the 19th century), and the modern. In biblical times Hebrew was a living, spoken

language but, from the centuries immediately preceding the Christian era, it ceased to be the vernacular. Nevertheless, biblical Hebrew persisted as the language of the Scriptures and as a model for compositions of a devotional nature. Because it was transmitted from one generation to the next, over many centuries, as a written language which found oral expression only in pious recital, its structure became artificially fixed.

It is remarkable, however, that the basic structure of the language has remained constant throughout all its stages of development. In the post-biblical and modern phases there was a progressive accretion in vocabulary by the creation of new words in accordance with the inherent laws of the language and by borrowing. Yet, divergencies in grammar were, for the most part, not fundamental, but peripheral. Thus a general introduction to the Hebrew language would best be served by confining it to the biblical phase and, where relevant, by pointing out divergencies which appeared in the later stages. The scheme of biblical Hebrew grammar is derived from the literature of the Hebrew Bible, known as Masoretic (from *מסורה* (*massorâ*) “tradition”).

Understanding the Patterns of Biblical Hebrew Grammar

An understanding of the patterns of biblical Hebrew grammar, as opposed to the mechanical learning of a catalogue of seemingly irrational rules, may be achieved by recognizing that the formulation of these rules rests on three main principles:

1. the adoption of agreed conventional signs in writing to represent the spoken word, as it was traditionally transmitted and articulated;
2. deliberate adjustments in spelling, in conformity with any spontaneous modification in the articulation of the spoken word, due to natural fluctuations caused by inflection;
3. statements, in concise but adequate terms, of forms of Hebrew thinking, as expressed in speech.

The aim of this article is not to present a comprehensive scheme of Hebrew grammar, but to demonstrate that there is a rationality underlying it. To achieve this end, items of grammar will be selected to illustrate how the above three principles are translated into formal Hebrew grammar. Occasional analogies from other languages will be cited to show that, in other languages also, elements of grammar reflect articulated speech and thought processes.

The Hebrew alphabet consists of consonants only. The reader of a Hebrew consonantal text – if he was proficient in the language – automatically supplied the appropriate vowels, as determined by the context. Anyone familiar with English would know automatically whether the context of a sentence requires him to read the consonantal word r-d as “red,” “rid,” or “rod.” Similarly, anyone who knows Hebrew well would immediately recognize from the context whether *אם* (*ʾm*) is to be read as *אם* (*ʾim*, “if”) or *אם* (*ʾēm*, “a mother”), or whether *דבר* (*dbr*) is to be read *דָּבָר* (*dābār*, “a word”), *דֶּבֶר* (*deber*, “a plague”), *דִּבְּרַת* (*dibbēr*, “he spoke”), or *דִּבֵּר* (*dobēr*, “speaking”).

When Hebrew ceased to be a spoken language, the uninitiated were unable to supply the relevant vowels to a conso-

nantal text. It was realized that some apparatus had to be devised to indicate vowel-sounds as aids to reading. There were two stages in the development of such an apparatus. The first was the employment of the weak letters ה, ו, י (*h, w, y*) to serve also as vowel indicators. ו (*w*) represented both the o and u sounds, so that מות (*mwt*) could be read as either מֹות (*môt*, “death of”) or מוֹות (*mût*, “dying”). י (*y*) indicated both the i and e sounds; מי (*my*) could be read as either מִי (*mî*, “who?”) or מֵי (*mê*, “waters of”). The terminal silent ה (*h*) generally indicated the a vowel-sound, but sometimes also the e sound, so that מה (*mh*) could be read as either מָה (*mâ*) or מֶה (*meh*), both meaning “what.” This device was employed in the texts of the so-called Dead Sea Scrolls and is maintained even today in modern Hebrew writing.

Though this system reduced the area of possible error, it was clearly unsatisfactory, because it was not exact. In the eighth century C.E. the Tiberian system of vowel-points was devised to represent all the vowel-sounds, as traditionally held. This apparatus was generally adopted and is still in use.

Among Jews of European origin, the influence of their vernaculars on the articulation of Hebrew consonants led to the coalescing of several pairs of consonants. א and ע are both silent, כ and ק are both pronounced as the same *k* sound, ב and ו are both articulated as *v*, ס, ש, and also ת among Ashkenazi Jews are pronounced as *s*, while in Israel the ת and ת are both pronounced as *t*. However, it should be realized that, in biblical times, each Hebrew consonant had its own particular phonetic value, as is still the case among Oriental Jews in the recital of their sacred Hebrew texts. In ancient Israel there was a clear difference in sound between, for example, the word אם (*im*, “if”), and עם (*im*, “with”), the latter being articulated with a back-throated guttural sound. Similarly one could distinguish between אתה (*attâ*, “you,” masc. sing.) and עתה (*attâ*, “now”). There was a clear distinction in sound between the words כל (*kôl*, “all”) and קול (*kôl*, “a voice”), for the latter was articulated as a distinctive back-throated *k*.

The operation of the three above principles in the formulation of rules of Hebrew grammar can now be dealt with.

1a. When a vowelless letter stands at the beginning or in the middle of a word, the convention is to place two dots, vertically arranged (:), under it, as שְׁמוּאֵל (*šmû’êl*, “Samuel”) and יִשְׁחָק (*yīṣḥāk*, “Isaac”). This sign is known as שְׁוָא (*šwā*, probably meaning “speed”), which for convenience is spelled *shewa*. It indicates that the letter under which it appears has no full vowel. It was found that, when articulating a syllable beginning with a vowelless letter, a quick, vowel-like sound was involuntarily induced (something like the quick *e* in the word “because”). The *shewa* under such a letter is known as *vocal* and is represented in transcription by a diminutive *e*; thus the first example is transcribed *šemû’êl*. At the end of a syllable in the middle of a word, as in יִשְׁחָק (*yīṣḥāk*), the *shewa* under the vowelless letter is a silent (“quiescent”) one.

The peculiarity of speech indicated by the vocal *shewa* suggests that the ancient Israelite could not articulate a word beginning with two consonants without involuntarily giving

the first (i.e., the vowelless) letter a quick vowel-like sound. He would have pronounced the word *black* as *belack*. This peculiarity is shared by the Arabs, who would pronounce this word as either *balack* or *iblack*. In modern Hebrew, however, owing to the influence of European languages, there is no difficulty in articulating a word beginning with two consonants. The first example would be articulated as *shmuel*.

b. In the Hebrew alphabet there are six letters which under certain conditions are pronounced hard (*b, g, d, k, p, t*) and, in other situations, are pronounced soft (*b, g, d, k, p, t*). When such a letter is hard in speech, the convention in writing is to place a dot in it, called by grammarians דָּגֶשׁ (*dageš*, “piercing”) *lene*, or *light dageš* (בּ, גּ, דּ, כּ, פּ, תּ). When such a letter is soft in the spoken word, it is left without any dot in it (ב, ג, ד, כ, פ, ת).

To the question as to when these letters are pronounced hard and when soft, the answer may be given that it seems that the vocal organs of the ancient Israelites were so conditioned that, when one of these letters began a syllable, and no vowel immediately preceded, they pronounced it hard, as פָּרַשׁ (*pāraš*, “he spread”) and יָסַפֵּר (*yis/pōr*, “he will count”). It follows, then, that when one of these letters was at the end of a syllable, as יִפְרֹשׁ (*yīp/rōš*, “he will spread”), or in the middle of a syllable, as בִּכְלֹל (*bēkōl*), or at the beginning of a syllable but with a vowel immediately preceding, as סָפַר (*sā/par*, “he counted”), the letter was pronounced soft. When the word פָּרָה (*pārâ*, “cow”), whose initial letter is hard, receives the prefixed conjunction, it becomes וּפָרָה (*ûpārâ*, “a cow”); the speaker automatically softens the letter after the vowel sound. In modern Hebrew, however, this rule is not always observed in fluent speech.

c. If a letter in the middle of a word is doubled in articulation, the convention is to write a single letter only, but with a dot in it. The word for “thief” is גָּנֵב and represents the spoken גָּנֵב (*gannāb*). This dot, indicating a doubled letter, is known as *dageš forte*, or *strong dageš*, to distinguish it from the other *dageš*, the light one, which indicates the hard letter, as the גּ in this example. However, the six letters (*b, g, d, k, p, t*), when hard, may be doubled in the middle of a word, as שָׁבַת, representing שָׁבַת (*šabbāt*), in which case the *dageš* is theoretically both *lene* and *forte*. It should be noted here that the guttural letters (א, ה, ח, ע), by their very nature of being either weak (inaudible) or throat letters, cannot be doubled in articulation, so that, in writing, they do not receive a *dageš forte*. Strangely enough, this also applies to the letter ר (*r*).

The doubling of a letter is by no means arbitrary; it is usually due to some natural phenomenon in speech. In anticipation an English composite word may be quoted, derived from Latin, with the negative prefix *in-*. The combination *illegal* is articulated *illegal* and actually spelt phonetically. This is exactly what happens in Hebrew. When, for example, the two words מִן (*min*, “from”) and שָׁם (*šām*, “there”) are spoken together in the natural flow of speech, they become a composite word. The combination מִן־שָׁם (*minšām*) is articulated as מִשְׁשָׁם (*miššām*) but written מִן־שָׁם, with the *dageš forte* in-

dicating the double letter. This phenomenon of speech is described in the following rule of grammar: “When a vowelless 1 (*n*) stands between two vowelised consonants, it is assimilated to the consonant immediately after it, giving rise to the doubling of the latter.”

2. In many English words the spelling has not kept pace with changes in pronunciation. The word *daughter* is pronounced *dauter*, but the persistence of the medial *gh* in the spelling suggests that originally it must have been articulated with a guttural-like sound, as in the parent German word *tochter*. The American spelling of some words shows an arrested attempt towards writing words phonetically: *plough* is spelled *plow* and though is sometimes written as *tho*, but the trend did not develop consistently. In Hebrew, however, every modification in the articulation of words, usually due to the effect of inflection or the presence of a peculiar letter, is faithfully reproduced in writing by corresponding adjustments in spelling.

a. The first example is the two-syllabled word דָּבָר (*dābār*, “word, matter, thing”), which begins with an open syllable (i.e., one ending in a vowel) and has the stress on the second syllable. The plural is formed by attaching the ending יִם (–*īm*) and the stress moves on to this new syllable at the end. The speaker, hurrying on to the stressed syllable at the end, quite naturally elides the vowel ָ (ā) in the first (open) syllable. It becomes דְּבָרִים (*deḇārīm*), and not דַּבְרִים (*dāḇārīm*); the first syllable, now vowelless, is written with the vocal *shewa*. The modification in articulation is paralleled by the corresponding adjustment in the spelling. (An analogy of this phenomenon in speech is the English word *médecine*, which, with an accession at the end and the moving forward of the stress, becomes *medicinal* – almost *mdicinal*.)

b. The next example introduces a characteristic usage in Hebrew. In an expression such as “(the) word of Moses,” דָּבָר (*dābār*, “word”) and מֹשֶׁה (*mōšeh*, “Moses”) are so closely associated that they become one compound idea; in fluent speech they are virtually one composite word and the stress is mainly on the second half of the composite word. The effect is similar to that in the example just quoted. That is, דָּבָר (*dābār*) has received an accession at the end and the stress has moved forward, so that the vowel in the first (open) syllable is elided and a secondary effect is that the vowel in the second (closed) syllable is shortened. The combination is pronounced דְּבַר־מֹשֶׁה (*deḇar-mōšeh*) and written as such. The first noun is so dependent upon the second one that it is said to be in the construct state. This natural shortening of the vowel in the closed syllable of a word in the construct state is seen also in the combination of יָד (*yād*, “hand”) with מֹשֶׁה (*mōšeh*) in the expression “(the) hand of Moses” – יַד־מֹשֶׁה (*yad-mōšeh*).

c. It was noted earlier that a vowelless 1 (*n*) between two vowelised consonants is assimilated to the following letter which, in consequence, is doubled and that, in writing, this doubling is represented by a *dages forte* – מִנְשָׁם (*minšām*) becoming מִשְׁשָׁם (*miššām*). When, however, the letter following

the vowelless 1 (*n*) is a guttural (א, ה, ח, ע) or ך which cannot be doubled in articulation, a natural adjustment is made. When the phrase “from a man” – מִן אָדָם (*min ’ādām*) – becomes a composite word in the flow of speech (hypothetically מִנְאָדָם, *min’ādām*), the vowelless 1 (*n*) is assimilated, but the following letter cannot be doubled. The resultant form מִיָּאָדָם (*mi’ādām*) leaves the first syllable open, i.e., ending in a vowel. Since the natural tendency was to pronounce an open syllable with a long vowel (unless that syllable was stressed, in which case the effect was the same), the short vowel (*i*) in the first syllable is automatically prolonged by the speaker to ...(*ē*) and the combination becomes מֵיָּאָדָם (*mē’ādām*), the spelling being adjusted to conform with the modification in speech.

d. The following example of a rule of grammar appears superficially to be irrational and yet, on examination, it reflects a normal fluctuation in speech which is represented phonetically by the written word. The possessives are expressed by particles suffixed to the noun as “a house is old,” “my house is old.” The feminine singular noun, such as תּוֹרָה (*tôrâ*, “Torah”) with a suffix (“my Torah”) becomes תּוֹרָתִי (*tôrâtî*). How can one account for the apparent insertion of the letter ת (*t*) before the suffix? Arabic provides the perfect analogy.

In classical (literary) Arabic, nouns have three case endings. The feminine singular noun “city” is *madīnatun* (nominative), *madīnatin* (genitive), and *madīnatan* (accusative). In colloquial Arabic, however, the case-endings are dropped, leaving the form *madīnat* for all cases, but it is actually pronounced *madīna* (or *medīna*). The final *t* is not articulated (like the tendency in America to pronounce the word *breakfast* as *breakfas*). However, when this *t* is in the middle of a word and it has a vowel, as with a possessive suffix attached (“my city” being *madīnatî*) it is, of course, clearly articulated.

Scholars have pointed to the same phenomenon appearing in the transition from pre-biblical to biblical Hebrew. There are indications that, originally, Hebrew nouns had case-endings, like Arabic: the word for Torah was *tôrātu* (nom.), *tôrâtî* (gen.), and *tôrāta* (acc.). The case-endings were dropped and the resultant form תּוֹרָת (*tôrāt*) was pronounced תּוֹרָה (*tôrâ*) and spelled that way. As with Arabic, it was the final ת (*t*) which was not articulated but, when it is medial with a vowel, it is, of course, clearly articulated – “my Torah” could only be תּוֹרָתִי (*tôrâtî*). Because the final ת (*t*) was not articulated, it was dropped in spelling; when it is medial and audible, it is present in the spelling.

The tendency to drop a final *t* sound is present in other languages. In Ireland the well-known surname *McGrath* is actually pronounced *McGra*. The French say *il est* (“he is”) pronounced *il-ē* but as a question it is *est-il?* (“is he?” – pronounced *ēt-il*), the medial vowelised *t* being quite naturally articulated. More striking still, and akin to the situation in Hebrew, is the French *il a* (“he has”), which, as a question, is *a-t-il?* (“has he?”), with the medial vowelised *t* articulated and reappearing in the spelling.

3. In biblical Hebrew the main idea of an expression is stated first and it is then qualified, limited in application or

modified by what immediately follows. “My word” is, in Hebrew thinking, something like “word, mine” – דְּבָרִי (*debārī*), the main idea being “word,” which is first expressed and then limited to “mine” by the following particle ם (i). “A big house” is, in the Hebrew order of thought, “a house (the main idea), a big (one)” (qualifying it) – בַּיִת גָּדוֹל (*bayit gādōl*). It follows logically that the phrase “the big house” is, in Hebrew thinking, “the house, the big (one)” – הַבַּיִת הַגָּדוֹל (*habbayit haggādōl*) and “my big house” will be “house, mine, the big (one)” – בֵּיתִי הַגָּדוֹל (*bēṭī haggādōl*). The rule which is then enunciated is “the adjective follows the noun it qualifies (and agrees with it in gender and number), and if the noun is specific (as indicated by the definite article or the possessive suffix) the adjective following the noun has the definite article.” In the same pattern of thought the adverb follows the noun it modifies; “exceedingly good” is “good, exceedingly” – טוֹב מְאֹד (*tōb me’ōd*).

THE VERB. In the structure of the Hebrew verbal system one again detects characteristic thought processes. Whereas medieval and modern Hebrew adopted the European concept of past, present, and future tenses, in biblical Hebrew no such notion was formulated. Instead acts or states of being were viewed as either completed or incompleted. The completed state, referring to something finished or done, generally corresponds to the notion of the past tense but, with certain verbs, it may indicate a European present tense. The form זָכַרְתָּ (*zākartā*) could mean “you remembered” but, since the basic sense is “our state of remembering is completed,” it could imply “you remember.” The incompleted state, indicating something not yet finished or not yet done, generally refers to the future but with a few verbs it could imply a continuing present. תִּזְכֹּר (*tizkōr*) could mean “you will remember” but, since the basic notion is “our state of remembering is incompleted,” i.e., it is still going on, the derived sense could be “you keep on remembering,” that is “you are mindful of.” Unhappily, grammarians have adopted the terms perfect and imperfect – as used for Latin and Greek conjugations of verbs – but these do not accurately represent the biblical Hebrew concept.

It is to be noted that in the completed state, it is the act or state of being which is regarded as the main idea. Thus the verbal element is expressed first and is limited or applied to the person (in the example given the particle ת – (*tā*) for אַתָּה – ‘attā, “you,” masc. sing.) which immediately follows. In the incompleted state, however, what seems to be more prominent in the mind of the speaker is the person who is about to do, or is in the process of doing, something. Thus the element representing the person (in the example the ת, *t*) is stated first and the verbal element follows.

The Western notion of the present tense is represented in Hebrew by the participle, e.g., זֹכֵר (*zōkēr*, “remembering”), preceded by the appropriate personal pronoun. “You remember” is, in Hebrew, אַתָּה זֹכֵר (*attā zōkēr*). Since the Hebrew participle is virtually a verbal adjective, the thought underlying that expression is “you (are) a remembering (person).”

There are seven forms in the Hebrew verbal system. The first may be regarded as basic and the other six as derived forms, as in the following scheme:

I. **SIMPLE ACTIVE:** שָׁבַר (*šābar*, “he broke”). This is the completed state. It has also the incompleted state, participle, imperative, etc., and all these are conjugated with persons, numbers, and genders.

II. **SIMPLE PASSIVE,** but, with some verbs, the passive has also something of a reflexive effect. Its form is נִשְׁבַּר (*nišbar*), meaning “he (or “it”) was broken.” However, from the simple active רָאָה (*rā’ā*, “he saw”) the derived form of this category נִרְאָה (*nir’ā*) means “he was seen,” but this produces the extended sense “he showed himself,” that is, “he appeared.”

III. **INTENSIVE ACTIVE.** Derived from the simple active שָׁבַר (*šābar*, “he broke”) is the intensive form שִׁבְּבַר (*šibbēr*) (with the middle root-letter doubled to express intensity) and the derived sense is “he smashed,” “he shattered.” It will be realized that a derived form in this category must produce a new idea by extension, so that only such verbs which lend themselves to such an extension, by which a new idea is derived, can be included in it.

IV. **INTENSIVE PASSIVE.** This is simply the passive of III and its form is שֻׁבַּר (*šubbar*, “he (or “it”) was smashed/shattered.”

V. **CAUSATIVE ACTIVE.** The notion of *causative* is present in a few English verbs. “To seat” is the causative of “to sit” and “to fell” is the causative of “to fall.” Since only a limited number of simple active verbs can be extended with a causative effect which produces a new idea, the verb גָּדַל (*gādal*, “he was great”) is selected, of which the derived causative is הִגְדִּיל (*higdīl*, “he caused to be great,” i.e., “he enlarged”). Of the verb רָאָה (*rā’ā*, “he saw”) the derived causative is הִרְאָה (*her’ā*, “he caused to see,” “he let one see,” “he showed”). Of the (weak) verb בָּא (*bā*, “he came”) the derived causative הִבִּיא (*hēbī*, “he caused to come”) produces the sense “he brought.”

VI. **CAUSATIVE PASSIVE.** This is the passive of V and its form is הֻגְדַּל (*hogdal*), meaning “he (or “it”) was made great,” i.e., was enlarged.

VII. **REFLEXIVE.** Again, for the sake of clarity, another verb is taken as the parent of this derived form. From the simple active נָשָׂא (*nāšā*, “he lifted up,” “he raised up”), the derived reflexive is הִתְנַשֵּׂא (*hitnassē*, “he raised himself up”) and this, in turn, produces the sense “he boasted.”

The terminology devised by the early Jewish grammarians to designate the above seven verbal forms has been universally accepted. They firstly considered the simple active to be קָל (*kal*, “light”), while the other six were said to be כְּבִדִּים (*keḇēdīm*, “heavy”), since each one of them received additional letters or syllables. These six *heavy* forms were subdivided into the following categories. Taking as their basis the verb פָּעַל (*pā’al*, “he did”), they designated the simple passive as נִפְעַל (*nip’al*), i.e., a “was done” form. The intensive active was called פִּעַל (*pī’el*), i.e., a “did intensively” form and its passive פֻּעַל (*pu’al*) i.e., “was done intensively” form. The causative was designated הִפְעִיל (*hip’il*), i.e., a “caused (one)

to do” form and its passive a הִפְעַל (*hop‘ēl*), i.e., a “was caused to be done” form. The reflexive became the הִתְפַּעֵל (*hitpa‘ēl*), i.e., a “did to oneself” form. Though this system may appear to be clumsy and cumbersome, its adoption as the standard, universal terminology has avoided the multiplicity of terminologies in different languages.

THE WEAK VERB. Hebrew has very few examples of irregular verbs, in which a complete conjugation is made up of two different roots. One such example is the verb שָׁתָה (*šātā*, “he drank”), of which the derived causative form, with the meaning “he caused to drink,” “he gave to drink,” “he watered, irrigated,” is not הִשְׁתָּה (*hištā*) but הִשְׁקָה (*hiškā*), from a different root, namely שָׁקָה (*šāḳā*). There are, however, many verbs which, because of a peculiar letter in the stem, diverge from the normal or regular and these are known as *weak*. The reader will now be familiar with the categories of peculiar letters which bring about modifications in the articulated word. Examples of these as they affect the verb are given below:

a. The letter נ (*n*). The incompletable state of the normal verb שָׁמַר (*šamar*, “he kept, watched”) is יִשְׁמֹר (*yišmōr*, “he will keep, watch”). However, of the verb נָטַר (*nāṭar*) (which has the same meaning) the incompletable state is not יִנטֹר (*yintōr*), for the medial, vowelless נ (*n*) standing between two vowelised consonants is assimilated to the next letter, which is thereby doubled, so that the resultant form of this word is יִטְטֹר (*yittōr*) – a divergence from the normal.

b. Guttural letters (א, ה, ח, ע) and ר. It was noted above that the characteristic of the *pi‘ēl* (intensive) form is the doubling of the middle root-letter, as שִׁבְּרָה (*šibbēr*, “he smashed”). When this medial letter is a guttural or ר, which cannot be doubled in articulation, the preceding vowel is prolonged. “He glorified” is not פָּאָר (*pi‘ēr*) but פָּאֵר (*pē‘ēr*), “he refused” is not מָאָן (*mi‘ēn*) but מָאֵן (*mē‘ēn*), thus producing a deviation from the normal. (Note: This always happens with the weak gutturals א and ע. With the harsh guttural ה and ח, no doubling takes place but, because of their harsh nature, the preceding vowel seems to merge with the letter (נָחַם – *niḥam*, “he comforted”) and so the prolongation of that vowel is arrested.)

c. The weak letters (א, ה, ו, י). Taking again as the standard the verb שָׁמַר (*šamar*, “he kept”), one with a medial weak letter ו (*w*) will deviate from the normal in the following way. “He arose,” which one might have expected to be קָוַם (*kāwam*) deteriorates into קָם (*kām*); the weak ו melts into the vowel-sounds in which it is placed. The spelling is adjusted to the modified form. A verbal root with a terminal silent א also induces a deviation from the normal. “He found” is not מָצָא (*māšā*), for the terminal א is silent, so that, in actual sound, the syllable is open, i.e., ending in a vowel. Since the open syllable was usually pronounced with a long vowel, the speaker automatically prolonged it and the resultant form became מָצָאָ (*māšā’*).

In this instance also the early Jewish grammarians devised a rather cumbersome terminology to denote categories of weak verbs, which has been universally adopted. It was

based on the word פִּעַל (*pō‘al*) which was their term for “verb.” If the first root-letter was weak, they referred to it as the פ (*pe*) of the root, the second root-letter as the ע (*ayin*) of the verb and the third root-letter as its ל (*lamed*). For example, the verb נָטַר (*nāṭar*) was designated as a פִּנֵּן (*pe nun*), i.e., initial נ, verb; the verb פָּאָר (*pē‘ēr*) was described as an אֵעֵל (*ayin ‘alep*), i.e., medial guttural, verb; the verb קָם (*kām*), whose root-letters are קוּם, was designated as an וֵעֵל (*ayin waw*), i.e., medial ו, verb; the verb מָצָא (*māšā*) became known as a אֵלֵל (*lamed alep*), i.e., terminal א, verb.

The structure of Hebrew grammar, of which a partial sketch has been given here, has not changed appreciably through the centuries, from biblical times to the present day. It manifests itself even in the highly evolved spoken and written Hebrew of contemporary Israel. The realization that Hebrew grammar reflects natural phenomena in speech and characteristic forms of thought leads to an understanding and appreciation of the genius of the language.

For a different view of Hebrew morphology in general and of the verbal system in particular, see U. Ornan, *Ha-Millah ha-Aḥaronah – Mangelon ha-Zurah shel ha-Millah ha-Ivrit* (2003).

[Jacob Weingreen]

(II) HEBREW GRAMMAR: DETAILED SURVEY

PHONOLOGY

Introduction

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2. WRITING AND SPELLING

Phonology and Morphophonology

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Introduction

1. DEFINITION OF TOPIC. The Hebrew language is very old; but even in the oldest portions of the Bible, written more than three thousand years ago, it is a fully formed literary vehicle. No language, however, can remain unchanged over so long a period. Hebrew was subject to change, though for almost half its existence it was preserved only in writing, as a literary language. Nevertheless, an intelligent Hebrew speaker, of

the level of an Israeli high school graduate, can read and understand literature written in Hebrew from the very earliest times to the most modern. Furthermore he will find in the Hebrew language of each of the periods many elements actively used in modern speech. Many highly civilized societies from time to time rewrite the literary products of past generations to make them more comprehensible to the modern reader, sometimes wholly translating, at others, merely replacing the obsolete by more modern terms. By contrast, Hebrew literature such as the Bible, Mishnah, Midrashim, medieval poetry, etc., are today taught in schools in their original form, and may be read by the community at large. Hebrew thus appears to have maintained its original uniformity; yet linguistic analysis reveals that this uniformity is in fact limited and in part imaginary. The relative uniformity of Hebrew results primarily from two factors: the graphic representation of the language, and its morphology. Hebrew today is written, as it was in the past, in an alphabet in which all the letters represent consonants. Although several of these letters may, in specific circumstances, also indicate vowels (and in modern times even more so than in the past), this does not alter the general character of Hebrew writing, in which only a part of the total sounds are fully expressed: the part represented consists of those sounds which are naturally more stable and not given to radical change, while those sounds given more naturally to change are not represented by the writing. The employment of vowel points to express these sounds is very limited, and even nowadays does not determine the form of the written Hebrew word. This retention of the relatively constant element, and elimination of the element given to change, are great aids in understanding the written Hebrew word regardless of its date of origin. However, the factor primarily responsible for the uniformity of the language is Hebrew morphology. In the accepted vocalization of the Bible, the morphology of biblical Hebrew was fashioned in accordance with one tradition, the Tiberian. This tradition was not only accepted as the norm, but in the eyes of many even became sanctified. The morphology of biblical Hebrew in the Tiberian tradition determines the nature of the grammar of written Hebrew in general, and even new elements, whether taken from other periods or traditions of the language, or originally foreign elements, are adjusted to comply with the regulations of Hebrew morphology. In contrast to the relative stability of morphology and writing, the meaning and the function of grammatical forms and vocabulary and pronunciation have been variable. The particular pronunciation reflected by the accepted vocalization tradition of the Bible (even now mandatory for a vocalized word), is still heard today, but not all of its details are together represented in any one tradition. Closest to the pronunciation of the original vocalizers is that of the Yemenite and Babylonian communities (cf. below, Table 3: Consonants as Pronounced by Various Communities). The grammatical description given below refers to the language as it is written in modern times; a description of the various periods of the Hebrew language is given in the entry *Hebrew Language; and the distinctive

traits of the various living traditions are discussed in the article *Pronunciations of Hebrew.

2. WRITING AND SPELLING. Hebrew is written in two sets of symbols, letters and vowel points; the first is, of course, mandatory, while the latter is reserved, primarily for the areas of education, poetry, prayer books and, to a limited extent, publications intended to reach a very wide audience. The basic alphabet consists of 22 letters; to these one must add five (ך, ם, ן, ף, ץ) used in final word position only, another seven (ב, ג, ד, ז, פ, ת, ש/שׁ), whose individual pronunciation is re-

Table 1:
The Letters

	A	B	C
א	ʾ (?)	ʾ	ʾ*
ב	b	b	b
בּ	b̥ (bh)	v	v
ג	g	g	g
גּ	ḡ (gh)	ḡ	g
ד	d	d	d
דּ	d̥ (dh)	d̥	d
ה	h	h	h
ו	w	w	w
ז	z	z	z
ח	ħ	ħ	ħ
ט	ṭ	ṭ	t
י	y	y	y
כ	k	k	k
כּ	k̥ (kh)	k̥	kh
ל	l	l	l
מ	m	m	m
נ	n	n	n
ס	s	s	s
ע	ʿ (?)	ʿ	ʿ*
פ	p	p	p
פּ	f ; p̥	f	f
צ	ṣ	z	z
ק	k̥ ; q	q	q
ר	r	r	r
שׁ	š (sh)	š	sh
שׂ	ś	ś	s
ת	t	t	t
תּ	t̥ (th)	t̥	t
ג׳	—	ǧ	ǧ
ד׳	—	ǰ	ǰ
צ׳	—	č	č

* Generally this Hebrew letter is not represented and the sign is used only in special circumstances.

Punctuation¹

	A ²	B	C
Hireq	i	i	i
Šere	e (ə)	é	é
Segol	ae (ä, ę)	e	e
Pathaḥ	a	a	a
Qameš (long)	ā ā	a	a
Qameš (short)	ā; o (o, ɔ)	o	o
Holem	o	o	o
Qibbuš	u	u	u
Šureq	u	u	u
Šewa ³	e	e	e
Ḥaṭef Segol	ae	ě	e
Ḥaṭef Pathaḥ	a	ǎ	a
Ḥaṭef Qameš	o	ǒ	o
Dageš as דגש ⁴	mm	mm	mm

- Some of the vowel signs are accompanied by letters (*matres lectionis*) which are not part of the system of vocalization e.g., ך, ם, ן, ף, ץ.
- In A the length (or absence of it) in the vowels is represented in accordance with linguistic considerations.
- The term *šewa* indicates both a reduced vowel and the absence of any vowel after the consonant; in the latter case it is not transliterated.
- The *dageš* is also a double valued sign. In the letters כ, פ, ט, צ, ך, ם, ן, ף, ץ it indicates a different phonetic character and not necessarily gemination. Whether these letters, when pointed with *dageš*, also indicate geminated consonants depends on syllable structure; thus the correct transliteration of כ – by b or by bb – for example demands a knowledge of Hebrew grammar. The *dageš* is placed in the letter ה at the end of a word when the letter is pronounced consonantal h, and does not indicate gemination. In accordance with its function the *dageš* is variously called *forte* (for gemination), *lene*, and *mappiq*. Similarly a dot above ש indicates a pronunciation difference between š and ś.

flected only in vocalized writing, and three (׳ג, ׳ו, ׳ז) used in words of foreign origin only. All but four of the letters represent consonants only, while ך, ה, ו, and ץ are used at times to indicate the presence of specific vowels. These letters, when not representing consonants, are called *matres lectionis*. Of the 13 vocalization signs, 12 are intended to represent vowels, and one represents changes in consonants. The various systems used to transliterate Hebrew into Roman script generally reflect two different approaches. The first transliterates the Hebrew alphabet into graphemes of the particular language in accordance with the spelling conventions of that language. This gives rise to a plethora of conventions according to the languages concerned. The other system attempts to transliterate Hebrew so that the letters and vowels will be perfectly or nearly perfectly represented. This system demands the addition of diacritic signs to the Roman alphabet. Table 1: Hebrew Letters and Punctuation is a synoptic table of three methods of transliteration.

The “A” system is used largely in linguistics or when an early Hebrew text is being transliterated. “B” and “C” were established by the Academy for Hebrew Language in 1957 in order to represent living Hebrew. “B” is used in catalogs, title pages, and maps. The sole difference between “B” and “A” is in the letters ב and צ where “B” represents the official modern pronunciation; this is also true with regard to the long *qameš*

which is not differentiated from the *pathaḥ*. “C,” on the other hand, intended for popular use, as in road and street signs, eliminates most of the diacritic signs, and simplifies the vocalization. The appearance of the unvocalized Hebrew word is likely to be different from the vocalized word even in its letters. This is due to the tendency to add *matres lectionis* in non-vocalized writing, in positions where they would be unacceptable in vocalized writing. For this reason it is also called “full spelling.”

Phonology and Morphophonology

3. CONSONANTS. Table 2: Point and Way of Articulation summarizes the inventory of consonants in modern Hebrew, but they are not all at once present in any one of the varied pronunciation systems. The consonants are listed in accord with their general phonetic value, though some have more than one realization (ב, ל, ר). This variety is of a wider scale in Hebrew than in most other languages because the speakers of Hebrew are of diverse language backgrounds, and this background is apparent even in the generation whose mother tongue is Hebrew and who are, themselves, monolingual. The range of differences within each consonant is not represented in the table. Those consonants in squares are part of the Tiberian pronunciation (see *Masorah), and are therefore represented in modern writing; they are, however, normally not differentiated in the general or official pronunciation. They can still be heard in liturgy and worship (on ש see below) in some communities, and even in the speech of the older generation. The consonants in circles are not pronounced by a large part of the general populace and have been assimilated to ב, ל, ר. Their independence is maintained in the language in so far as their influence is felt in inflection and declension of words. Those consonants in dotted squares can be heard at times in originally Hebrew words in special situations, or in careless speech, as *hežbon* (חשבון), but are not independent except in words of foreign origin, as in *žargòn* (jargon), *žurnal* (journal); they do not determine the character of the Hebrew language in any area of grammar. Therefore, they will be referred to as “foreign,” as distinct from “inherited.”

If the foreign consonants and those which appear in squares are subtracted, it will be found that the total of inherited consonants in official modern Hebrew is 25, and the incidence of three, circled in the table, is very limited. In other words, the total varies between 22 and 25. This state of affairs changes in regard to the inventory of the consonantal phonemes. The phoneme, by definition, is that unit which only in distinction to another in the same position, performs the function of distinguishing between two words. The phoneme can be of more than one sound (ideally this is always the case), and all these sounds are related to each other as allophones (= variants). Not everyone is agreed as to the number of phonemes in the language, a problem which exists not only in Hebrew. It depends on how we evaluate sounds in foreign words, personal names, or rare words. For example, פ, פ hardly ever occur in identical surroundings in Hebrew; where the one is

Table 2: Point and Way of Articulation

Point of Articulation	Way of Articulation										
	Plosive		Nasal	Lateral	Rolled	Affricate		Fricative		Semi-Vowel	
	Unvoiced	Voiced		Voiced		Unvoiced	Voiced	Unvoiced	Voiced		
bilabial	p פ	b ב	m מ							Ⓜ	4
labiodental								f פ	v ב		2
interdental								t(θ) ת	d(ð) ד		2
dental (tongue tip and upper teeth)	t ת	d ד	n נ	l ל	r ר	z צ (ts,c)		s ס	z ז		(8)6
alveolar (tongue tip or blade and teeth ridge)			n נ	l ל		ʦ צ	ʤ ג	ʃ ש	ʒ ז		4(6)
alveolo-palatal (tongue blade and teeth ridge)								ʃ ש			1
velarized alveolar (tongue blade and back, and teeth ridge)	ʈ ט							ʂ ש			2
palatal										y י	1
velar	k כ	g ג						k(χ) כ	g(ɣ) ג		4
uvular	q ק										1
pharyngeal								ħ ח	ʕ ע		2
glottal	ʔ א							h ה			2
	6	3	2	1	1	2	1	9	6	2	33

found the other is not (as ופנים/פנים and not ופנים/פנים); they are, therefore, allophones of the same phoneme. When, on certain rare occasions each sound may be heard in the same environment, there will be no difference in the meanings of the words. Generally, one of the forms of the word is considered incorrect in proper speech, as קצצה opposed to קצצה. However, if foreign words are considered, the difference between p and f proves to be distinctive as in the words פונקציה (*punkcyā* = puncture) opposed to פונקציה (*funkcyā* = function). To the extent to which such words enter the language of less educated persons there is more likely to be created a split between the p (פ) and f (פ), and each is liable to appear in the same conditions. With regard to the written language, these rare phenomena are to be ignored, and the count will include 22 consonantal phonemes of the 25 consonants mentioned above, since פּ פּ פּ are allophones of פּ פּ פּ and together are three phonemes. The consonantal phonemes can be divided into nine groups in accordance with their point of articulation:

bilabials	פ, ב, מ	4
dental	ז, ס, ר, ל, נ, ד, ת	8
alveolar	ש	1
velarized alveolar	ט	1
palatal	י	1
velar	כ, ג	2
uvular	ק	1
pharyngeal	ח, ע	2
glottal	ה, א	2 (= 22)

A pronunciation different from the one described above would show some slight differences in the localization of the phonemes. Ignoring the “foreign” consonants, the difference between the consonants in Hebrew and those (estimated) in proto-Semitic is in the number of fricative and affricative sounds only. Some of these sounds originate in Hebrew and did not exist in proto-Semitic (labio and dental fricatives), some palatals existed but were phonemes in proto-Semitic, while they are allophones in Hebrew (as כ). Similarly, all those proto-Semitic consonants which have disappeared from Hebrew are fricatives and were assimilated to other Hebrew fricatives, while in Aramaic, for example, the proto-Semitic fricatives were assimilated to the plosives (דכר in proto-Semitic became זכר in Hebrew and דכר in Aramaic). There are three types of articulation which determine phonemic contrasts in the consonants: voice, emphasis, and nasality. The voiced/unvoiced distinction has five pairs: ב, ג, ד, ז, פ, opposed to ח, ט, כ, ת, פ; the emphatic/non-emphatic pairs are ט, ק opposed to ת, כ; and nasality affects six consonants: ב, פ (together an archiphoneme) opposed to מ; and נ (dental and not alveolar), ת opposed to ד. Voice and nasality are phonetic qualities, whereas emphasis does not denote a clearly defined common phonetic quality of the relevant phonemes. The most that can be said is that these sounds are produced partially with the back portion of the mouth. The plosive/fricative quality which in our arrangement does not determine the phonematicity of ב, ג, פ, is the determining difference between א and ה. There

are those who are of the opinion that **ṣ** is a voiced consonant, but this results from a desire to produce a symmetrical phonological scheme and has no foundation in actual articulation. Only if it is assumed that the **ṣ** is voiced (as in Arabic) is the difference between **ṣ** and **ṣ̣** not one of plosive/fricative, but one of voice. The determining features do not necessarily have to rule all consonantal oppositions; for example, voice is a determining quality in ten (or at the most twelve) sounds only, and there are voiced consonants (**ḥ**, **ḡ**, **ḡ**) which do not have unvoiced pairs, and unvoiced consonants (**ṭ**, **ḳ**, **ṣ**, **ṣ̣**) which do not have voiced pairs.

4. CONSONANTS AS PRONOUNCED BY VARIOUS COMMUNITIES. The official, model, most careful pronunciation of Hebrew, used, for example, by radio announcers, especially in reading selections from the Bible (and sometimes called "Semitic," or "Eastern"), is the result of a mixture of different systems of pronunciation used for generations in the various communities. This mixture is not precisely the result hoped for by those who were instrumental in the rejuvenation of Hebrew speech; generally, it can be said that, of those sounds which were distinctive to only one community, more were omitted from the official and general pronunciations than were accepted. The consonants of the official pronunciation are reviewed in the section entitled Consonants above according to their general phonetic value; therefore, it will be instructive to review synoptically the consonants as they were articulated in the past in the different Jewish communities (still occasionally used in prayer and liturgy), from which the sounds of modern Hebrew were extracted. Such a review will indicate what shades of pronunciation are likely to be heard, primarily in the speech of the older generation in official Hebrew.

Table 3: Hebrew Consonants indicates that some consonants were retained in all pronunciations while others were lost or assimilated to other similar sounds. If we arrange them next to the 29 consonants of the vocalizers of the Bible, the following picture emerges: 11 stable consonants (א, ב, ג, ד, ה, ו, ז, ח, ט, י, כ, ל, מ, נ, פ, צ, ק) are preserved in all traditions (nine, if we omit ט which developed in a unique manner in the Samaritan tradition); eight consonants א, ג, ה, ו, ט, י, ש, ז are retained by most of the pronunciations and changed in a few; and ten consonants ב, ד, ת, י, ח, ט, ע, צ, ק, נ are changed in most of the pronunciations. It emerges that differences in pronunciation are mainly in two groups: five consonants א, ב, ע, צ, ק which are “semitic” (gutturals and emphatics) and five others ב, ד, ת, י, נ; of which at least four ב, ד, ת, נ; tend to lose their fricativeness.

5. בגדכפ"ת. As already pointed out, in the official language only ב, ג, פ are pronounced in two ways – hard and soft (spirantized) – but in vocalized spelling כ, ד, ת are similar to them in every way. The distribution of hard and soft allophones is not given to simple phonologic definition, and there are exceptions in both directions. However, since the distribution of the soft allophone is greater than the hard one, finding it in positions which contradict the rules is not a radical de-

viation. On the other hand, a hard allophone where it would be expected to find the soft constitutes a clear exception and, in proper modern speech, is even less common than in biblical Hebrew. The following are the rules for their distribution:

A) The hard consonant always appears when (1) there is gemination, as שְׁבֶּת, סִכֶּה, סִכֶּה, סִפֵּר and (2) even when ungeminated, if it is not preceded directly by a vowel, as: בִּית, מִסְפָּר, פֶּה, מִכְתָּב, כֶּסֶף; הַשְּׁבֶּתָה, בֵּית.

B) The spirantized consonant appears (1) when ungeminated and preceded directly by a vowel, as: שֹׁבֵת, סִיכָה, סוֹפֵר; (2) when it is the second part of a cluster in one syllable, either at the beginning or the middle but not at the end of the word, as עֲזוּבוֹת (= עֲזוּבוֹנוֹת), מִרְ-קְבוּתִי, רֶ-קֶה, צִירְפֶּת, כֶּפֶר, קָבִישׁ, דָּבֵשׁ. Opposed to these are: שֶׁבֶן, יָבֵן (rare forms likely to appear in poetry) שְׁמֶרֶת, וָרֵד and (3) when it is the second part of a cluster which divides into two syllables (opposed to rule A 2) in the following morphological types:

(i) *Nouns*: (a) In the plural forms of nouns of the type מַלְכוּת, אֶסְפִּיָּה, דְּרָכֵיהֶם, מַלְכֵי as: פְּעֻלֹת, פְּעֻלֵּי (construct) בְּרִכּוֹתֵי, בְּרִכּוֹתֵיהֶם, בְּרִכּוֹתֵיכֶם, בְּרִכּוֹתֵיהֶם. (b) In declension of פְּעֻלָּה forms even in the singular, as: עֲרִיבַת, דָּגְרַתוֹ. (c) In the declension of פְּעֻלָּה forms in singular and plural even in those words where the *šere* is not retained, as: חֲשֵׁכַת, חֲנִפִּי. (d) In פְּעֻלָּן and derived forms, as: צִרְכּוֹת, עֲגִבְנֵיהֶן, חֲנִפָּן; the same is true for פְּעֻלְתָּן forms, where the spirant is expressed in writing only, as: עֲצִיבּוֹת, מַלְכוּת, עֲצִיבּוֹתָן, עֲצִיבּוֹתָן. (e) In פְּעֻלּוֹת forms, such as מַלְכוּת, עֲצִיבּוֹת, עֲצִיבּוֹתָן. (ii) *Verbs*: (f) In the conjugation of the infinitive *qal*, as: בְּתִבֵּי, בְּתִבֵּי. (g) In the conjugation of the imperative *qal*, as: בְּתִבֵּה, בְּתִבֵּי, בְּתִבֵּי.

Generally: (h) In all forms of verbs and nouns when the syllable preceding בגדכפ"ת is closed in declension, as: נֶאֱסְרוּ - יָאֶסְפוּ, יֵעָרְבוּ - יֵעָרְבוּ, מַעֲרֹכוֹת - מַעֲרֹכָה, מֵאָרְבֵי - מֵאָרֶב, (i) In all forms of words after a closed syllable to which is prefixed one of the servile letters בוכ"ל with the exception of the *qal* infinitive with ל, as: לֵזְבוּב, לֵלְלָבוּב, בִּסְפֹר, בִּזְבוּב, וּנְפֹל, as: לֵזְבוּב, לֵלְלָבוּב, לִסְפֹר, לִשְׂכַב, וּנְכַב, וּלְבַנָּה, בְּנִיפָל, בִּלְבָבוּב, Two exceptions worthy of note due to their frequency in the language are: שְׂתִי, and the second person fem. perfect ending ת - as in לִקְחָתָּהּ, in which a hard ת is retained contrary to the above rules.

Note: The distribution of the plosive and spiranted allophones of **בגדכפ** is quite complicated, but can be ordered in accordance with the above rules with regard to the official language and the speech of intellectuals. In other social strata, and in the speech of children, these rules are not maintained, however; at times the plosive allophone dominates and at times the spirant (for example: **תַּפֵּס** by analogy to the perfect **תָּפַס** **כָּפַס** from the imperfect **יִתְפֹּס**). A further weakening of these rules is due to the foreign words in Hebrew which contain a p or f which is not in accordance with the aforementioned rules (cf. section on Consonants above).

6. **אֵהָחֵע**. These consonants are similar in that (1) they cannot be geminated; (2) they do not usually close a syllable;

Table 3: Hebrew Consonants as Pronounced by Various Communities

	IRANIAN				Babylonian	Yemenite	Moroccan	Sephardi	Portuguese	ITALIAN			ASHKENAZI			SAMARITAN	
	Persia	Western Persia	"Little" Persia	Bukhara						Dagestan (Mountains)	South	Central	North-east	North-west	Lithuania		Poland
א	ʔ, -	ʔ, -	ʔ, -	ʔ, -	ʔ	ʔ	ʔ	ʔ	ʔ	-	-	-	-	ʔ, -	ʔ, (h), -	ʔ, -	ʔ, -
ב	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b, (p)	b
בּ	v, (β), w	v, (β), w	v, (β), w	v, (β), w	v, (β), b	w, b	b, v	b	b	v	v, (b)	v	v, (w)	v	v	v	b, (f)
ג	g	g	g	g	ğ	g	g	g	g	g	g	g	g	g	g	g	g
גּ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	g; ɣ	ɣ	ɣ	g	g	g	g	g	g	g	g
ד	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d, t	d
דּ	d	d	d	d	d, (ð)	d	d, ð	d	d	d	d	d	d	d	d	d, t	d
ה	h	h	h	h	h	h	h, ʔ	h	h	-	-	-	-	h	h	h	ʔ, -
הּ	v, (β), w	v, (β), w	v, (β), w	v, (β), w	w	w	w, v	w	w	v	v, (w)	v, w	v, w	v	v	v	w, b
ו	z	z	z	z	z	z	z	z	z	dz	dz	z	z	z	z	z	z
וּ	h	h	h	h	h	h	h, ɣ	ɣ, (θ)	ɣ, (θ)	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ʔ, ɣ, -, -
ז	t	t	t	t	t	t	t, t	t	t	t	t	t	t	t	t	t	t
זּ	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y
כ	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k
כּ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	ɣ	k
ל	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l	l
לּ	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
נ	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
נּ	s	s	s	s	s	s	s	s	s	s	s, (z)	s	s	s, s, (š)	s	s	s
ס	ʔ, -	ʔ, -	ʔ, -	ʔ, -	ʔ	ʔ	ʔ, ʔ	ʔ, ʔ	ʔ, ʔ	ʔ	ʔ	ʔ	ʔ	ʔ, ʔ, y	ʔ, y	ʔ	ʔ, ʔ, -, -
סּ	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	f, (bb)
פ	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f
פּ	s	s	s	s	s	s	s, c	c	c	c	c	c, (s)	c, (s)	c	c	c	s
ק	G, (k), B	G, (k)	G	G, (k), B	q	q	q, k	q, k	k	k	k	k	k	k	k	k	q, (ʔ)
קּ	r	r	r	r	r	r	r	r	r	r	r	r	r	r, ɣ	r, ɣ	r, ɣ	r
ר	š	š	š	š	š	š	š	š	š	s, (ž), (š)	s, (ž)	s, (š)	s, (š)	s, š, (š)	š, š	š	š
רּ	s	s	s	s	s	s	s	s	s	s	s	s	s	s, š, (š)	s	s	š
ש	t	t	t	t	t	t, (c)	t	t	t	t	t	t	t	t	t	t	t
שּׁ	t	t	t	t	θ	c, t	t, θ	θ	θ	d	d	d	d	s, š, (š)	s	s	t

Notes: (1) Research into the various traditional pronunciations is still far from able to present all the information clearly tabulated; in fact it is only just beginning. Therefore, the table contains only those sounds described in the scientific literature, and it must be noted that the quality of these descriptions is not uniform, nor do they all attain the same level of precision. Still the table reflects the situation generally. It should be noted that the term "Sephardi" does not represent a homogeneous community but one spread over Europe and Asia. This accounts for the high number of variants. (2) The horizontal line next to 'alef, heh, het, ayin, indicates that this consonant is not pronounced at all; when this line appears with a consonant it indicates that in certain environments it is not articulated, or that part of the community does not pronounce this consonant. (3) A consonant in parentheses is a less common variant or is limited to certain instances (as f, bb in the Samaritan tradition). (4) The consonants are listed in accordance with the rules of the International Phonetic Association. (5) For further details of pronunciation of the various communities see "Pronunciations of Hebrew."

(3) they generally influence the vowel which precedes them either in quality, or by creating a vowel similar to that with which the syllable is or should have been, closed; (4) they are vocalized with *hatefs* when they are not in syllable final position as: (1 and 3) **בָּאָר** (בֶּאֱרָ) instead of **בֶּאֱאָר**; **מְטָהָר** instead of **מְטָהָר** (2, 3, and 4); **נָאָדָר** instead of **נָאָדָר**; **נָחָמָד** instead of **נָחָמָד**; **מְעַבְרָה** opposed to **מִשְׁטָרָה**; **רוּחַ** instead of **רוּחַ**; **רִיחַ** instead of **רִיחַ**; **נָצַח** opposed to **נָסַךְ**; **מַעֲלִית** opposed to **מַעֲלִית**; **מְרִבִּית** opposed to **פְּעֻלָּה**; **קָדְשׁוֹ**. As a result of these qualities, they are classified under the heading of 'gutturals,' a name which has been accepted even though it does not accurately describe all of them from the point of view of their articulation.

~~3.~~

In modern speech, this consonant never closes a syllable. Still, there are some who, in certain words such as מִאֲפָלְהָ, נֶאֱדָר, נֶאֱדַיִם, are careful to close the syllable with the א because they are so vocalized in the Bible, a fact which is also exploited in writing poetry. On the other hand, (1) א always disappears at the end of a word, as מֵצָא, צָא, מֵלֵא, מְבוּא, גִּשׁוּא, חָטָא, שָׂוֹא, יִרְאָה, שָׂוֹא, חָטָא, גִּשׁוּא, מְבוּא, מֵלֵא, צָא, מֵצָא (compare וַיִּשְׁקֶן, וַיִּנְדֶּן); (2) within the word it sometimes disappears, and at other times receives a *ḥatef* vowel. This situation is not the result of precise phonological conditioning, but differs in different morphological situations, as תִּתְּנֵה, בּוֹאֲכֶם, מֵצֵאֲכֶם, תִּבְאוּנָה, לְאַלוּהֵים, מֵצֵאתִי, תִּתְּנֵה, בּוֹאֲכֶם, תִּבְאוּ, etc.; (3) unlike the biblical norm the א rarely disappears between a *šewa* and a vowel, but in several forms this is always the case: רִאשִׁים (from רִאשֵׁים), מֵאֻתִּים opposed to מֵאֻת. (When not pronounced it sometimes does not appear in the written word, and this is the rule in the imperfect of פֿ"א verbs in first person singular, as: אֶמְרָ from אָמַר, אֶמְרוּ from אָמַרְתִּי). In the Bible this elision is more common.

7.

(1) Feature number (3) of א is the rule with respect to ה: (a) when used as the definite article and coming after ב, כ, ל. For example: בְּדֵבֶר, בְּדֵבֶר, לְדֵבֶר (but !הֵדֶבֶר);

(b) In the imperfect and participial forms of *hif'el* and *huf'al*, as מושב, נודע, מפקיד, מפקיד, מהפקיד, מהפקיד, כהודיע, מהושב, but in the infinitive the ה is retained: להודיע, להפקיד, etc. It is also retained in a number of personal names, as: יהונתן alongside יונתן, יהורם alongside יורם, יהודה alongside ידה.

Note: Some generations ago there was a tendency to retain the definite article and forms like **להדבר, כהדבר** were common. Today this is maintained in the words **להבא כהיום**, but the form **כיום** is also used.

(2) The η tends to be assimilated to the preceding consonant when it is part of a pronomial suffix $-\eta$, $-\eta\eta$; שְׁמִרְתָּהוּ (rare form שְׁמִרְתָּהוּ), שְׁמִרְתָּהוּ (rare form שְׁמִרְתָּהוּ), שְׁמִרְתָּהוּ (rare form שְׁמִרְתָּהוּ).

(3) It tends to be elided in the pronominal suffix הו after י- as פיו, אביו, שְׁמֵרְתִּי, (the rare forms פִּיהוּ, אָבִיהוּ, שְׁמֵרְתִּיהוּ, etc., are found mainly in poetry) and almost always is elided after -: שְׁמֹרְ (from שְׁמֹרְהוּ).

π.

Even in pronunciations in which there is no difference between this consonant and the spiranted כ, it maintains its independence in that it acts as a guttural and not as one of the **בגדכפ**. It does not become a כ and prefers those vowels preferred by gutturals, as: **נִצַּח** opposed to **נִסַּךְ** (only uneducated speakers, if they pronounce the כ as a ח are likely to equate them, for example saying **סוּמַכַּת** instead of **סוּמַכֶּת** and vice versa).

у.

Even in the pronunciation which identifies this sound with the **א**, the **ע** is kept separate in different phonetic contexts. In this way it is similar to that pronunciation which maintains the **ע** as an independent sound. For example, it tends to be pronounced with the furtive *pathah* (נוסע) opposed to (נושא) and often demands a vowel different from the vowel used for **א** as: יעבר opposed to יאסף, and לעבר opposed to לאבד. This independence is further realized in various morphological situations.

7. OTHER CONSONANTS. ן followed directly by another consonant is usually assimilated to it; only the ן which is part of the root is not usually assimilated to ץ אהח"ע; in some roots and other forms this is also the case (perfect נפל, imperfect פל; perfect נהג, imperfect נהג; perfect גידן, imperfect גידן; perfect געור, imperfect געור; infinitive לפל but לנגע, etc.).

צ pronounced as z (= c) is a compound sound and can be heard in speech when ס and ת are contiguous, as, for example, in בית-ספר (a common spelling mistake among children is !ביתצר). It still acts in Hebrew as one sound (monophonemic), and it is impossible to demonstrate oppositions in meaning which depend on the opposition (z/ts); the fact that z can be only one of the elements of a root is itself proof of this assumption.

שצסז.

The clusters **תס, תש, טצ, דז** where the **ת** (ד or ט) is the **t** of the *hitpa'el*, are impossible and the order is reversed to **סט, שז, צט, דז**. Also rare are the clusters **תס** etc., when the **ת** (or ד or ט) are elements of the root. In fact, in the words or forms derived from these roots a vowel usually appears between them – **תשש, תסס**. However, since the Middle Ages these combinations have appeared in a few words where the **t** is part of the root, as **מתסיס, התשיר**.

Note: It is possible to prove that the ש was an independent sound in biblical times and was so considered by the vocalizers of the Bible. Still, here and there, there are examples of the merging of this consonant with the ס in the Bible as in כעש alongside כעס, and in rabbinic Hebrew many of the words and roots with ש in the Bible appear with ס, as: סִיחָה instead of: שִׁיחָה etc. Hundreds of years have passed since ש ceased to exist as an independent sound and became ס in all Jewish pronunciations and ש in the Samaritan pronunciation. Only the spelling recognizes the differences between ש and ס, and in certain instances this is an aid in differentiating homonyms, as: שָׁר = rule / סָר = rebel, שָׂר = hired / סָר = closed, סְמִיכָה = diploma / שְׁמִיכָה = a blanket. The medieval *paytanim* used to

put a word beginning with **ש** between **ל** and **ע** in their acrostics even though the biblical poets put it together with **ש** (Psalms 118); similarly there were lexicographers in the Middle Ages who placed words beginning with **ש** with those beginning with **ס** that is, according to their pronunciation rather than their graphic form.

ר"י.

These two sounds (if the **ל** is pronounced bilabially) are to be classified as being between a consonant and a vowel, also in their function in the language. Unlike other consonants, they interchange with vowels in specific instances and they are geminated like consonants. The **ל** at the beginning of a word or as the first element in a root was rare and was generally replaced by **ר**; thus even in modern Hebrew there are very few words which begin with **ל**. [In the pronunciations of most of the communities which contain the spiranted **ב**, there is a tendency to pronounce the **ב** and **ל** identically, the **ב** at times being pronounced as a **ל** (bilabially) and vice versa. But even in this case only the **ל** retains the above relationship to the vowels, never geminated into a **ב**. Only in the Samaritan pronunciation did the **ל** become a **ב** in most positions, after the soft **ב** was entirely lost.]

8. GEMINATION AND CLUSTERS. Besides the gemination of a consonant caused, in Hebrew as in other languages, by the occasional immediate sequence of that consonant namely when a root consonant comes into contact with an affixed formative (for example **לְתַנּוּ** > **תַּנּוּ** > **כָּרַתְתָּ**, **כָּרַתְתָּ** > **כָּרַתְתָּ**, **הִתְתַּמֵּם** > **הִתְתַּמֵּם**), gemination is very common in Hebrew and serves to create nominal and verbal forms. Some call a geminated consonant in Hebrew a "long consonant" parallel to a "long vowel," but this comparison is justified neither by the phonetic process which takes place (the syllable boundary is within the consonant; a difference is felt, for example, between lengthened **ז** in **תִּזְכְּרוּ** and the regular geminated pronunciation of the **ז** in **תִּזְכְּרוּ**), nor by the function in the language which it fulfills.

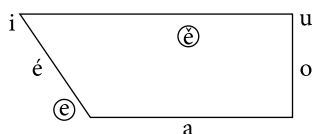
(1) Every form which has a geminated consonant, can have that consonant replaced by a cluster of two consonants but never by one alone, and thus **פָּקַדְתָּ**, **פָּרַגְתָּ**, **פָּלַלְתָּ** are all of the same verbal type, and **דִּין** and **פָּרַגְתָּ** are considered to be of the same nominal type; (2) A cluster of two consonants at times becomes a geminated consonant, and the two forms may even exist side by side (**לָפַל**, **לָפַלְתָּ**). (3) A geminated consonant may split into a cluster of two consonants (common in Aramaic, rare in Hebrew), and in some of the words which have a two consonant cluster in Hebrew today there was originally a geminated consonant, as: **גִּלְמוּד** (from **גִּלְמוּד**), **שָׁרְבִיט** (from **שָׁרְבִיט**). (4) The limitations regarding the vowel before the last consonant in the syllable, are also in force for the vowels which precede a geminated consonant. Therefore, a geminated consonant functions just like a cluster of different consonants, being more limited only in that it cannot come at the end of the word (compare **צָל** < **צָלְתָּ**) opposed to **נָפַטְתָּ**, **כָּרַתְתָּ** < **כָּרַתְתָּ**), opposed to **שָׁמַרְתָּ**). At the beginning of a word a geminated consonant can be found only when the first consonant is not

part of the root but a formative element, as: **תִּתְּנֶנָּה**, **מִמֶּנָּה** (see below); or when the word comes after the interrogative **מָה** (**מָה־זֶּה**), thus constituting a phonetic unit (in the Bible this is common in various combinations of words and vowels). In addition to geminated consonants, there are times in modern Hebrew, especially in the speech of young girls, when, as an expression of emotion, a consonant is lengthened, as **yof-f-f-fi** (**יוֹפִי**), but this has no grammatical function.

There is a tendency to eliminate gemination, especially when the geminated consonant is vocalized with a *šewa*; and thus the gemination is usually eliminated in **י** with *šewa* and in the **מ** of the participle after the definite article, as **הַמְסַבּוֹת** (= they are causing; but **הַמְסַבּוֹת** (= parties)). However, this tendency is overruled by morphological considerations (**הַמְסַפְּרִים** and not **הַמְסַפְּרִים**; but in the Bible **הַמְבַקְּשִׁים**). The tendency to eliminate becomes the rule when the consonant involved is either **אֶחָד־עָר** or the spiranted allophones of **בִּגְד־כֶּפֶת** which are never geminated. In other words, five phonemes cannot be geminated. (In the Samaritan pronunciation the **ר** is geminated just as any other consonant, and this was also the case in the Hebrew of Septuagint times.) Many Hebrew speakers today do not commonly geminate consonants in their speech, but they maintain those conditions which derive from gemination and determine the form of the word, as the hard **פ** in **סָפַר** (a barber) and the spirant **סָפַר** (counted) etc. According to the rule, a cluster of more than two consonants is impossible in Hebrew. A cluster at the beginning of a syllable is realized generally by a *šewa* inserted between them. Clusters of more than two consonants are found only in international words used in Hebrew, for example **סְטְרַאטֶגְיָה** (alongside **אֶסְטְרַאטֶגְיָה**). In the middle of a word a cluster of three consonants is conceivable. This is especially true when the first element in the cluster is a geminated consonant as, **שָׁמַרְתָּ** (< **שָׁמַרְתָּ**), **שָׁמַרְתָּ** (< **שָׁמַרְתָּ**), which is usually articulated with the addition of a *šewa* between the geminated consonant and the one following it. In "inherited" words a cluster at the end of a word is possible if it ends in a plosive (for example **יָכַן**, **יָכַן**, **יָכַן**, but **יָכַן**). In international words this rule does not always apply (**סוֹצְיָאֵלִיזְם**, **פִּילִם**), but modern pronunciation tends to insert a *šewa* in such cases.

9. VOWELS. There is no essential difference between the two types of sounds – vowel and consonant – the difference being rather one of degree; in fact, the semi-vowels **ו** and **י** are proof that it is possible to pass from one category to the other. The consonants are classified above according to three criteria: point of articulation, method of articulation (open or closed), and the action of the vocal chords (voiced or unvoiced). Since the vowels are all voiced and articulated in the open position, we are left only with the criterion of point of articulation, that is, the relative closeness of the organs of articulation to each other. In articulating the vowels, actual contact is not conceivable; the basis for classification is, therefore, the movement of the tongue and the working of the lips (the traditional Hebrew names for the vowels, *pathah*, *qames*, etc., are an attempt to

describe the opening of the mouth and the activity of the lips). Following the direction in which the tongue is raised during the articulation of the vowels, we may divide them into “front,” “central,” and “back.” Generally, a rounding of the lips is an accompanying feature of back vowels, and spreading the lips an accompanying feature of front vowels, but rounding and spreading of the lips are possible in all the types of vowels. The section on consonants above mentioned the great variety of consonants heard from the Hebrew speaker and the reasons for them. The vowels, by their very nature, are even more variegated. For the consonants it is at least possible to establish ideal standards for official speech, but there are no set standards applicable to the vowels. There have been no studies to date which can supply information as to the exact phonetic makeup of the vowels in modern Hebrew, but this deficiency does not prevent a phonemic description, since the variations in the vowels are not distinctive and do not affect the meanings of words. Therefore, it will be sufficient to classify the vowels generally into: front: *i*, *é*, *e*, represented in writing by \neg *hireq*, \neg *šere*, \neg *segol*, and \neg *hatef segol*; central: *a*, represented by \neg *pathah*, \neg *qameš* (*gadol*), and \neg *hatef pathah*, and *ě*, represented by the *šewa*; back: *o* represented by \neg *holem*, \neg *qameš qatan*, and \neg *hatef qameš*, and *u* represented by \neg *šureq* and \neg *qibbuš*. By using average measurements the relationship among the vowels can be graphically described in the following way:



Since only the general values of the vowels have been mentioned, it emerges that the number of vowels is close to the number of vowel phonemes, which are all the above, save the two circled, i.e., the *segol* and the *šewa*. Regarding the phonemic value of a sound there are likely to be differences of opinion (see section 3, Consonants, above), and the doubts which might be raised about this classification will, therefore, be discussed in sections 12 and 13, on The Phonological Status of the Vowels and The *Šewa* and *Ḥatefs*, below. Many Hebrew speakers do not differentiate between *e* and *é*, and even those who do differentiate do not always apply the *šere* and the *segol* respectively where demanded by the rules of vocalization. Even among those who do differentiate, there are some who articulate the *šere* almost as a diphthong *ey*. Note that *ḥatefs* differ phonetically from the *šewa*, and do not represent independent qualities but are identical to full vowels.

10. VOWEL QUANTITY. In the common pronunciation the vowels are not differentiated as to length, only the *šewa* being of shorter duration than the other vowels. Experimental methods have proved that the vowel in an accented syllable is slightly longer than the vowel in an unaccented syllable, but this difference is not discernible by the ear, since no seman-

tic difference depends on a vowel length. (In English, by contrast, this is a distinguishing feature, cf. [it] (it), opposed to [i:t] (eat).) In fact it may be said that the vowels in Hebrew are isochrons (of equal length). However, since there is long standing tradition in Hebrew of dividing the vowels into “long” (lit. big) and “short” (lit. small), an aspect which is also relevant to the rules of punctuation, this division will now be considered. The differentiation originated in an attempt to divide the vowels according to length (compare O-mega and O-mikron in Greek), that is: long and short. The Spanish grammarians of the Middle Ages felt that the *qameš* (pronounced “a”), the *šere*, *holem*, *šureq*, and full *hireq* (with *yod*) were long vowels, while the *pathah*, *segol*, *qameš* (pronounced “o”), *qibbuš* and *hireq* (without *yod*) were short vowels. They considered that there were five qualities of vowels (a, i, e, o, u) and that these were either long or short. This division is a reflection of the “Sephardi” pronunciation, but it must be recognized that in that pronunciation the accent also caused a lengthening of the vowel, and so the “short” vowels in accented syllables were long (for example \neg is pronounced with a long vowel even though it is a *segol*; the same is true for the *pathah* of \neg). The opposite is true for “long” vowels which are next to the accented syllable and are pronounced short (an exact description was given by R. Joseph Kimḥi in the 12th century). In the 19th century, which was interested in comparative historical study, this principle of division was accepted by Hebrew linguistics with one change: the symbol representing a vowel (excluding the *šewa* and *ḥatefs*) represents only quality, and that quality can be either long or short. The length is not determined by the symbol or by its place in the word (contrary to Kimḥi, above), but rather in accordance with comparative grammar. As a result of these considerations long vowels are those which generally remained unchanged in the declension of the word, while those which change are either short or lengthened in special phonetic conditions. Thus, for example, the *šere* of \neg (dead) is always long while that of \neg (tooth) is short (except for biblical pausal forms); similarly, the *holem* of \neg is always long, while that in \neg is short (except in pausal forms). This differentiation between originally long vowels and secondarily lengthened vowels gave rise to a threefold distinction: “long” vowels (that is originally long), “middle” (that is lengthened), and “short.” However, the term “middle” never achieved wide acceptance. This division, unlike that proposed by Kimḥi, is not rooted in any real tradition of Hebrew pronunciation, but is entirely based on theoretical considerations, which assume a Hebrew pronunciation among the Masoretes, when they determined the vocalization of the Bible. Early evidence, such as Greek transliterations and well-based considerations, tends to justify the assumption that in early Hebrew there was a difference in the length of vowels, and that the behavior of the vowels as it appears in the vocalization of the Bible reflects the ancient division as to length. There is, however, no proof that these differences of length existed at the time of the vocalization of the text. In any case the vowel signs are indicative of seven qualities only (excluding the *šewa* and *ḥatefs*).

Phonematic investigation does not indicate any semantic differences dependent on vowel length. Such proofs as חול (*hōl*) = sand opposed to חל (*hōl*) = secular or profane, or עד (*ēd*) = witness, opposed to עד (*ēd*) = a piece of cloth, are misleading, since according to the traditional division the vowels are “long” in both pairs of words and the assumption that the vocalizers differentiated is completely unproven. According to the traditional pronunciation two pairs of homonyms can be seen, each of which arose in specific situations. The difference between the vocalization of official Hebrew today and that which is the assumed basis of the rules of vocalization – which are obligatory even today – lies not (at least from the phonemic point of view) in quantity, but in the change of quality of several vowels. Though it is claimed that Hebrew vowels are isochronic phonemes, this does not mean that in Hebrew speech all *a* vowels, for example, are of the same length in all situations. But on the other hand, the difference between מן (*min*) = from, and מין (*mīn*) = type, does not indicate that the vowel system is to be divided into long and short. The truth is that confronting such pairs is artificial since the two words differ in their syntax and linguistic position.

11. VOWELS AS PART OF THE SYLLABLE. From the discussion above it is clear that a description of vowel distribution should be on two levels: (1) the vowels as pronounced today; (2) the use of the vowel signs. In describing the written language it is impossible to ignore the distribution of the vowel signs, since it is not only an important part of Hebrew spelling, but helps to understand the morphophonemic relationships. Table 4: Syllables reflects the distribution of the vowels which are listed according to type of syllable and place of accent in the word.

12. THE PHONOLOGICAL STATUS OF THE VOWELS. From the above it is clear that there are altogether five phonemic vowels – *i*, *e*, *a*, *o*, *u*. This can be ascertained from a consideration of the possible oppositions, ten in all ($\frac{5 \times (5-1)}{2}$). We also see that all possible oppositions are utilized only in (a) open syllable, whether accented or not and in (b) closed accented syllable; in an (c) unaccented closed syllable many oppositions neutralized, as the examples below will show.

In syllables of the types (a) and (b) *i* is defined by its opposition:

- 1) to *é* in נִיר/נִי; שְׁכִינָה/שְׁכִינָה;
 - 2) to *a* in דִּין/דִּין; רִיק/רִיק; פִּעֵל/פִּעֵל; שִׁירָה/שִׁירָה; רַחֵם/רַחֵם;
 - 3) to *o* in שִׁיר/שִׁיר; בְּכִירָה/שִׁיר;
 - 4) to *u* in צִיר/צִיר; אֲמִירָה/צִיר; גִּחְמוּ/גִּחְמוּ; אֲמִירָה/צִיר;
- é* is defined by its opposition to *i* (see above);
- 5) to *a* in גֵּר/גֵּר; עֵד/עֵד; צִדָּה/צִדָּה;
 - 6) to *o* in קֶץ/קֶץ; כְּבוֹד/כְּבוֹד; גְּדוּלָה/גְּדוּלָה;
 - 7) to *u* in גֵּר/גֵּר; שְׁכִינָה/שְׁכִינָה;
- a* is defined by its oppositions to *i* and *é* (see above);
- 8) to *o* in שִׁיר/שִׁיר; אֲמִירָה/שִׁיר; אֲמִירָה/שִׁיר;
 - 9) to *u* in שִׁיר/שִׁיר; אֲמִירָה/שִׁיר;
- o* is defined by its opposition to *i*, *é*, *a* (see above);

Table 4: Hebrew Syllables

vowel	open syllable		closed syllable	
	Accented	Non-Accented	Accented	Non-Accented
i – hireq	שִׁמּוֹ; חֲנִינִי; רַבִּי	רַחֵם, כִּישׁוּר; אֲבִירֹת; קֹרְמִי	מִן, מִן; –; תְּבַשִּׁיל	גְּבִרְתִּי, שְׁמִחָה; אֲוִיבָד; –
é – šere	שִׁפּוֹ; הִוְצֵאנִי; הַקִּנָּה	עֲנֵב, מִיטָב; מִקְהֵלָה; –	אֵלָה; הֶסְבּוֹ; לֵב, לֵיל, מִסָּב	–; –; –
e – segol	מָלַח; סוֹסֶיךָ; מִרְעָה	נֶאֱמָרוּ, יִחְזַק; –; דָּשָׂא, הָגָה	נֶגְבָה; –; אֲמֵת, בְּרִנָּל	נִגְדוֹ; מִקְלָכֶם; קִדָּשׁ
a – and	pataḥ נָחַל; qameṣ שְׁמִירָנִי; שִׁמְךָ, מִלְכָּה	נָחַל, יַעֲבֹדוּ; מִשְׁמֵרוֹ; –	גָּג, שְׁמֹר, יַעֲבֹדוּ; הוֹדֹדְנוּ; עוֹלָם, דּוֹנָג	מִלְכּוֹ; הוֹדֹדְתָם; רִיחַ, בְּחֵל
o – and	ḥolem קִדָּשׁ; נִדְוָנוּ; qameṣ פֹּה, מִלְכּוֹ; qatan	קוֹנָה, גֵּרֶשׁ, קוֹנָה; אֲרִצּוֹתֵיהֶם; –	תְּשׁוּבָנָה, צִהָרִים; קִטְנִיתִי; אָדָם, כְּבוֹד	קִרְבָּנָם, קִמְנָה; קִתְנִיתָם; –
šureq	קִדְמוֹ; תִּקְדְמוֹ; qibbuṣ בְּנוֹ	רַחֵם, סוּגָר; מִלְבוּשִׁים; אֲחוֹ	–; –; יִלְקוּט, מִלְבוּשׁ	וִילְקוּתָם, חִלְצָה; מִשְׁכָּרְתוֹ; –
šewa	–;	אֲנִיָּה, חֲמוּר, גְּבוּל;	–;	–;
and	–;	נוֹחֲלִים, שׁוֹמְרִים;	–;	–;
ḥatefs	–	–	–	–

* Accented syllables are marked by a single quote. Notes to Table 4:

- (1) The examples show the vowels (a) in an opening syllable, (b) in a medial syllable (c) in the word final syllable; between each type there is a semicolon. Although there is no real difference between the first two categories, examples are cited for the sake of completeness. This enables us to see whether a certain vowel cannot appear in one of the syllables of the word, which situation is indicated by a dash.
- (2) In each type examples are given for orthographical reasons. A comma is placed between them. This gives us a view of the distribution of the vowel signs. It may be concluded that each of the six vowels, except for *é*, can appear in all positions of the word. *é* alone does not appear in a closed unaccented syllable. The *šewa*, is – phonemically – the realization of a cluster, but from the phonetic point of view it is a syllable peak, and appears only in an unaccented syllable. The *ḥatefs* are to be classed with the *šewa*, and even those who pronounce the *ḥatefs* as full vowels do not produce any change in the above distribution picture. However, if the uses of the vowel signs and their relationship to the vowels which they represent are investigated, it will be seen that, unlike the vowels themselves, their use is limited and conditioned by the type of syllable in which they appear, and the rule is as follows: (1) *šere*, *ḥolem*, *qameṣ gadol*, and *šureq* do not appear in unaccented closed syllables; (2) *qameṣ qatan* and *qibbuṣ* do not appear in closed or open accented syllables. This shows that there is a connection between the distribution of vowel signs and accentuation. This relationship cannot be explained if only the accepted Hebrew pronunciation is considered; but must be seen against the phonetic values of the signs in the pronunciation of the Tiberian vocalizers. Similarly there is apparently a relationship between the type of syllable and the use of the full vowel signs (with 1 and 2), cf. the use of the *ḥolem* without a 1 in קִטְנִיתִי. This relationship is also not comprehensible given the modern pronunciation, but only on the basis of Hebrew pronunciation in the ancient past, when two important factors were in force: quantitative differences of vowels and a tendency to express that quantitative difference in the writing, as, for example, עוֹלָם opposed to אֲמִירָה. This presents one of the greatest problems in teaching proper vocalization, for without the clear presentation of the historic background it is, of necessity, a mechanical process.

10) to u in שוק/שוק; אָמור/אָמור;

u is defined by its oppositions to the other vowels (see above).

In syllables of type (c) only the following oppositions are found:

i (1) to *a* in דָּבַר/דִּבֶּר; (2) to *o* as הִפְקְדוֹ/הִפְקְדוֹ; (3) to *u* in חִיבְנוֹ/חִיבְנוֹ; *a* opposed to *i* (see above); (4) to *o* in עֲצָמוֹ/עֲצָמוֹ; (5) to *u* as חָפָה/חָפָה; חָקֵשׁ/חָקֵשׁ. It will be seen, therefore, that *é* is not opposed to any vowel in this position and that *o/u* are not opposed; however, variants like אָמַן/אָמַן and הִפְקֵד/הִפְקֵד are found in Hebrew. In fact, most of the oppositions are derived from the conjugations of the verb, where *o/u* indicates the passive and *a/i* the active forms, and even in this area the oppositions are limited. This is the result of a process in ancient Hebrew, during which oppositions of short vowels in closed syllables were eliminated; and when the use of the internal passive in post-biblical Hebrew was minimized the scope of these oppositions was, automatically, greatly reduced.

In the above description the *e* (*segol*) was not included in the phonemes although there are cases where a difference of meaning between a pair of words is reflected in the relationship between the *segol* and some other vowel, as: אָרָאָה/אַרָאָה; עָרַב/עֵרַב; לָחֵם/לֶחֶם (= solder). Though the *segol* is a very common vowel, such cases are quite rare and we can not therefore assume the opposition *segol* to another vowel in the structure of the language. It is correct to see the *segol* as an allophone of the *sere*. If the forms אָרָאָה/אַרָאָה through the whole of their paradigms, are investigated, it will be seen that the opposition in all conjugated forms is *a/i*, as, for example תָּרָאָה/תֵּרָאָה; only in the first person singular is this *i* represented by a *segol*, since the *i* does not appear after an *alef* in a closed syllable (when not geminated). The *é* should have taken the place of the *i* but *é* cannot appear in an unaccented closed syllable. This complimentary relationship between *é* and *e* is common in all forms of the conjugation and declension of ל"י roots, as: מִקְנֶה/מִקְנָה (construct state); מִקְנִי/מִקְנָה (possible in construct state); בָּן/בֵּן (construct); and others. On the other hand *e* is found at times in the same environment as *é* in נָדָר/נֵדָר; נָצַח/נֵצַח; יָתַר/יֵתַר; שָׁכַל/שֵׁכַל; בָּהֵן/בֵּהֵן; פָּתַח/פֵּתַח and others without any distinction. It may, therefore, be concluded that at times *e* is a conditioned allophone which becomes mandatory in certain environments, and at times – under different conditions – it is (in very limited scope), an optional allophone (cf. N.S. Trubetzkoy, *Grundzuege der Phonologie*, p. 46, regarding *d/t*). Examples such as עָרַב (evening)/עֵרַב (wasp) which both contain the phoneme *é* should be considered homonyms as are their plural forms עֲרִיבִים and as is עָרַב (pleasant/guarantor) etc. (The fact that the *segol* appears only with the *ס* and is a conditioned vowel, and not independent, is also seen clearly in the forms אָעֵלָה/אַעֵלָה; the *segol* does not appear in the rest of the *qal* paradigm, as תָּעֵלָה/תֵּעֵלָה, but all the forms save the first remain homonymous.)

Note: Although in modern Hebrew the *segol* must be considered to be an allophone of the *sere*, it is possible to prove

that in ancient Hebrew the *segol* is a reflex, in all cases, of an original *a* and was an allophone of *a*.

13. THE ŠEWA AND ĤATEFS. A) The grapheme known as the *šewa* (ְ) represents two independent phonetic values: the absence of a vowel, and a very short vowel, which can be described as central and vague. In grammatical terminology the former is called *šewa quiescens* (שווא נח) and the latter *šewa mobile* (שווא נע). Only the second type interests us in our study of the behavior of the language. Indeed this term, *šewa*, has become accepted in general linguistics as describing a vowel of this quality. In Hebrew the *šewa* cannot rightfully be listed with the phonemes, since no difference in meaning depends on the *šewa* (the same applies to *ḥatefs*). The *šewa* must be regarded as a conditioned vowel which appears in clusters of consonants, whether, historically, the *šewa* comes in place of a full vowel (גְּדוֹל < גְּדוֹל) or the absence of a vowel (מְעַבֵּר < מְעַבֵּר). Therefore, phonetic differences such as פְּסוּל < פְּסוּל or זְרוּעַ < זְרוּעַ have the following phonologic makeup: /pasul:/, /psul/, /zaroʕ:/, /zroʕ/. In Hebrew the *šewa* is never accented and is always found between two consonants.

B) Since there is one grapheme, the *šewa*, for two values, the grammarians established rules indicating when the *šewa* was to be pronounced as mobile (נע); however, the pronunciation of the vocalizers who instituted the *šewa* sign differs from the Sephardic pronunciation, whose rules are accepted in the pronunciation of official Hebrew today. In common speech, different groups of speakers pronounce the *šewa* differently, or do not sound it at all. The following are the rules for educated speech: the *šewa* is pronounced (a) at the beginning of a word (גבול, בְּדִיל, קֶהָן); (b) when it is the second of two *šewas* (יִשְׁמְרוּ); c) when it comes with a *dagešed* consonant (יְפֹלוּ); d) after a vowel in an open syllable (יִירָאוּ, שִׁירָם). Since the ability to distinguish the length of vowels has been largely lost, only a trained ear can determine which is an open syllable followed by a consonant plus *šewa* mobile, and which a syllable closed by the first of a cluster of consonants. Only when the cluster consists of a geminated consonant is the difference clear: סָבְרוּ, גָּדְלוּ are at times pronounced (*sav-ru*) (*gad-lu*), but not סִבְבוּ, גָּלְלוּ (*savēvu*) (*ga-lēlu*). This differentiation was passed by analogy to words like קָלְלוּ, קָלְלוּ, whose first syllable is – historically – closed. In this way a differentiation developed between רִנַּת and רִנְנַת which was apparently unknown to early Hebrew, where both were pronounced simply (*rin-nat*); only in certain prosodic situations could רִנְנַת be pronounced (*ri-nēnat*).

c) There are those who, in addition to the two types of *šewa* mentioned, find in Hebrew a third type which they call *šewa* medium בִּינוּי or מְרַחֵף. This is a *šewa* which comes after a “small” vowel (see above Vowel Quantity): (1) if the following consonant is a spirantized בַּגְדָכֶפֶת as מְלִכִּי, מְרַבֵּד (see section on בַּגְדָכֶפֶת above); (2) with an originally geminated consonant, as אֱלִים (compare singular אֵלם, הַמְקִימִים (sing. הַמְקִים); (3) with the first consonant of a cluster as רִנַּת (see above). This *šewa* medium is not a separate phonetic entity, but in types (1)

and (2) the *šewa* is quiescent, that is, it does not represent any vowel in pronunciation, and in type (3) may be pronounced as a *šewa* mobile, as pointed out above. Phonetically there is no such thing as a *šewa* medium which is between the quiescent and mobile; it is a fiction created to explain certain phonetic developments which are not uniform. There are some grammarians (Bergstraesser and others) who tend to see in the *šewa* medium an independent historical entity, i.e., a *šewa quiescens* where once there was a vowel, while others see in it an independent phoneme (Birkeland, p. 55). However, a sound which is not an independent part of the order of sounds (since it is either *quiescens* or *mobile*) cannot be considered a phoneme. It must be remembered that both the *šewa* and *hatefs*, as well as the absence of any vowel, are likely to appear in Hebrew in a position where once there was a vowel (שְׁמִירוֹ, in pause שְׁמִירוֹ, in pause, שְׁמִירוֹ, or where there was no vowel at all נִיעָרוֹ opposed to נִשְׁמֵרוֹ, נִעָפוֹ, נִכְעָסוֹ but נִנְעָרוֹ).

d) In the official language the grapheme *šewa* reflects one sound (ë) in all phonetic situations where it is pronounced. In ancient Hebrew this sound varied between ä and ě, and tended to assume the sound of the neighboring vowels. This fact is reflected in personal names which have been transmitted in their Greek or Latin pronunciations as: סְדוֹם *Sodom*, שְׁלֹמֹה *Solomon*, נְתַנְאֵל *Nathanael*, גְּדֵרָה *Gedera*. In the pronunciation of the vocalizers the *šewa* was generally ä (this caused it to be interchanged with the *ḥatef-pataḥ*), and it changed, according to ancient rules, toward the sound of the neighboring vowel when the *šewa* is next to אהח"ע. This feature can still be heard in the pronunciations of several communities where כְּמוֹ and נְקִיָּה are pronounced *kāmo*, *nāqīyya* and not *kĕmo*, *nĕqīyya*. The different nuances of the *šewa* in official Hebrew are the *ḥatefs* (if pronounced quickly), and these sounds are interrelated with the consonants א, ה, ח, and ע; only rarely is a *ḥatef* found with a different consonant, as צְפָרִים, כְּתָנוּת, גְּמִי. In the Hebrew of the vocalizers the *šewa* and *ḥatef-pataḥ* represented one quality; in the official pronunciation today the *šewa* and *ḥatef-segol* are equal, the latter with a guttural.

As opposed to what has been said above, on the relationship between the *šewa* and the *ḥaṭeṭs*, it is possible to claim, that semantic differences are dependent on the *ḥaṭeṭs*, unlike the *šewa*, and as a result the *ḥaṭeṭs* are phonemes. The differences are of the type אָנִי, חֲדָשִׁים/חֲדָשִׁים, עָלִי/עָלִי, חֲלִי/חֲלִי. However, as pointed out above regarding the *segol* (in section 12, The Phonological Status of the Vowels, above), it may be said that the *ḥaṭeṭs* are reflexes of the *šewa* – the result of a cluster of consonants – while the choice as to which nuance of the *šewa* is used in a particular instance depends, to a great extent (at least with regard to the *ḥaṭeṭ-qames*), on the quality of the full vowel found in the same position in other forms of the word; thus חֲדָשִׁים follows חֲדָשׁ and חֲדָשִׁים follows חֲדָשׁ. The oppositions of the *ḥaṭeṭs* are only apparent; the real oppositions being between the full vowels; there is thus the possibility of *ḥaṭeṭ* interchanges within the very same word, as in שְׁבִלִים – שְׁבִלִים, דְּמִי – דְּמִי, אֲמָרְכֶם – אֲמָרְכֶם, אֲכָלְךָ – אֲכָלְךָ.

Note: Diachronically, and also from the phonologic synchronic point of view, the furtive *pathaḥ* must be considered the same as a *ḥatef* which is pronounced *before* the guttural. However, unlike the *ḥatef*, the furtive *pathaḥ* is always pronounced as a full *a* vowel.

14. THE ACCENT. The accent in Hebrew falls on one of the last two syllables of the word. On the ultimate syllable it is called מלרע (*milra'*) and on the penultimate מלעיל (*mil'el*). It is impossible to determine clear phonological rules for each type of accentuation since the situation in Hebrew is the result of a complicated development, not all of which is clear today. One may say that in Hebrew the ultimate accentuation is dominant, while the penultimate is found:

A) in the noun:

1) in segolate forms, i.e., when preceding the final consonant there is

a) a *segol* (תִּלְבַּשׁת, מִסְפֶּרֶת, כְּתַבְתָּ, שׁוֹמֵרֶת, כְּתַל, סִפֵּר, מִלֵּךְ);

b) a *pathah* – if the last consonant is ה, ח, or ע (קֶבֶע, מֶלַח, גֶּבֶה, תִּמְהָ) or if the consonant before the last is א, ה, ח, or ע (נֶעַל, נֶחַל, רֶהֱב, שֶׁהֶם, תֹּאֲרָ);

c) *hireq* if the consonant before the last is י (ליל, בֵּית). In all of these forms the common feature is that the unaccented vowel is lost in declension. To this category belong also those nouns ending in an open syllable with *segol*, *hiriq*, or *šureq*, which when declined place a consonant for this vowel, as אָחוּ-אָחוּ, יָפִי-יָפִי, דֶּשָׁא-דֶּשָׁא; this is also the case for the demonstrative אֵלֶּה;

2) nouns (and other words) to which are suffixed locative ה־ or the dual ending ים־ (מִצְרַיִם, שְׁמָה; מִסְפָּרִים, מִים; מִלֵּילָה, הַמָּה, הַזֶּה = הוּא);

3) nouns (and other words) to which are suffixed the possessive pronouns: מִשְׁהוּ, עֵינַיִךְ, סוּסֶיךָ – הוּא, יָדְךָ, הֵן – נוֹ (סוּסֶיךָ); אֲבִיהָ, אוֹתָנוּ, אֲחֵינוּ, מִלְכֵנוּ, חֻזְקָה, אֲבִיהָ (אוֹתָנוּ); similarly מִמּוֹ-, which today is only found in poetry (בְּתִימוֹ, עֲלִימוֹ).

B) in the verb:

4) in the perfect: before the suffixes נו- , ת- , תי- (השכמנו , שברת , שמרתי);

5) in the imperative and the imperfect: before **נָה**–**(תשׁוּבָנָה, שׁוּבָנָה)**;

6) in addition to those instances mentioned in (4) and (5): in *hif'il* of all forms, excluding ל"י forms, and in ע"ו"י and ע"ע forms in *qal* and *nif'al*, and in ע"ע forms even in *huf'al*, in forms ending הָהֻ, יָהֻ, וָהֻ – הגידה, הגידו, קמו, באי, טובו, יסבו, (ה)וסבו);

7) in verbs with suffixed object **נוֹ-, נָה-, הָ-, נוּ-, הוּ-, גִּי-**
(יִמְצְאוּנוּ, יִשְׁמְרוּנָה, יִשְׁמְרוּהָ, יִאֲכַלְנוּ, יִאֲכַלְהוּ, קָנְהוּ, יִאֲחֲזֻנִי, שְׁמַרְנִי).

c) in certain forms which today appear only in poetry, such as the pausal forms (שָׁמְרוּ, אָנְכִי, אָנִי) or the inversive tenses (וַיִּתֵּן, וַיִּשָּׂם, וַיִּקֶּם).

There are exceptions to the above rules: the accent is on the penultimate in the third person fem. sing. perfect with pronominal suffixes *שְׁמַרְתָּ, שְׁמַרְתָּם, אֶהְבֶּתָּ, אֶהְבֶּתָּם*, the accent is on the ultima in the inversive perfect tense *וְשָׁמַרְתָּ, וְשָׁמַרְתָּם*.

If for the moment the segolate nouns and the forms appearing in inverted tenses are excluded, it may be concluded

that the penultimate accent appears in Hebrew only when the word ends in an open syllable; this, to a certain degree, reflects the early division of ultimate and penultimate accents in Hebrew.

In the Bible the accent is given to change from penultimate to ultimate (as in עֹרִי in Judg. 5:2) and especially from ultimate to penultimate in word groups, but there are no cases of enclisis, only proclisis. In modern Hebrew, however, enclitic forms are common not only in speech but also in poetry; as opposed to אָמַרְלִי, בּוֹא־נָא, שְׁמַע־נָא we find אָמַרְלִי, בּוֹא־נָא, שְׁמַע־נָא; however, this is not considered the norm. Proclitic forms are common in construct. In speech there are certain tendencies to penultimate accentuation which differ from the rules given here, but they are not considered correct (as שְׁמַעְתֶּם). The accentuation of foreign and borrowed words and personal names must be considered separately. The rules of accentuation in the original languages have affected the accentuation of the borrowed words, so that at times even syllables before the penultimate are accented. In personal names the emotional factor cannot be ignored, and feelings such as love and indulgence affect the accentuation. However, the standard which is demanded by the Academy for Hebrew Language and used in broadcasting is the ultimate accentuation, and so the norm is אוֹנִיבֶרְסִיטֶה and not אוֹנִיבֶרְסִיטֶה or אוֹנִיבֶרְסִיטֶה, and similarly רֶחֶל and not רָחֵל. On the other hand, foreign words with Hebrew suffixes are usually accented in keeping with the norm, as אוֹנִיבֶרְסִיטֶאוֹת. The tendency to penultimate accentuation is found in the pronunciations of many communities, and in Samaritan Hebrew has become the rule.

Accentuation has phonemic value in Hebrew, since it is a distinguishing feature between certain pairs of words – בָּנוּ (in us) / בָּנוּ (they built), בָּאָה (she is coming) / בָּאָה (she came), קוֹמִי (imp. fem. sing.) / קוֹמִי (infinitive with pron. suf.). Hebrew accentuation is “stress” type (dynamic accent) and by its nature is likely to affect the vocalization. In fact it causes changes in the vowels of a word depending on their nearness to the accent (see section 16. Interchange and Elision of Vowels, below).

15. THE DIPHTHONGS. The diphthong is – by definition – the combination of two vowels within one syllable. The diphthong is created when the point of articulation glides from place to place within the one breath. More precisely it is a combination of a series of vowels, but it is sufficient to indicate the extreme vowels, i.e., the opening and the concluding (or the intended conclusion). Thus instead of the sign *a...e...i*, the sign *ai* (or *ay*, *ai*) is used. By its very nature one of the parts of the diphthong is primary, and the other secondary, or accompanying. If the diphthong begins with the accompanying element it is called rising (as *ua*); if it ends with this element it is called falling (*au*).

In Hebrew grammar, combinations such as יוֹ, יוֹי, יוֹי, יוֹי, יוֹי are called diphthongs. However, in Hebrew it is the falling diphthongs that are of significance because of the morphologi-

cal changes they cause. The use of the term diphthong in Hebrew is therefore limited to cases of a vowel with “semi-vowel,” *y* or *y* (see section 7. Other Consonants, above). A combination of two vowels in one syllable, whether caused by the splitting of one vowel into two (as in the frequent pronunciation of the *šere*, *ey*), or by the proximity of a certain vowel to ה, ח, or ע (furtive *pathah*) – which is realized phonetically by being split into two syllables – concerns Hebrew grammar only as far as establishing the phonetic facts. In fact the term diphthong does not accurately describe the combination of a vowel and *y* in the regular pronunciation of modern Hebrew, where it is a combination of a full consonant (*v*) and vowel. However, this combination can be regarded as a diphthong because in the pronunciation of some communities it is actually articulated as such, and because it interchanges morpho-phonemically with vowels, unlike the combination of vowel plus spiranted *h* which is phonetically its equal. In the interchanges the early history of this combination is still apparent. (The fate of the early *aw*, *ew*, etc., in modern Hebrew is similar to that of the same diphthongs in late Greek.) From the point of view of function it is clear that the Hebrew diphthongs are syllables with a consonant; not a phoneme in the precise meaning of the word, but a bi-phonematic element. The only interchange within the provenance of the rising diphthong is the וי"ו החיבור (*waw copulative*) becoming *u* before a cluster of consonants and before ב, ו, מ, and פ as וישמי but וישמי, ונתן but ונתן, וילך but וילך, ויגד but ויגד. In all other changes of vowel the *waw copulative* acts in the same way as the consonants ב, ו, and ל. The total of diphthongs is eight, that is *y* with *i, e, a, u*, and *y* with *i, a, o, u*. The falling diphthongs which are always maintained and do not interchange are *iw*, *ew*, *uw* (אחי, עורי, אחי); *oy*, *uy* (גלוי, גלוי) while the other diphthongs are replaced in the paradigm of the word by vowels, or are split into two syllables. Even though there are no absolute rules, there is great consistency, especially with regard to the diphthongs *aw*, *ay*. The main points are as follows:

A) *iy*. *iy* is used only when the accompanying element is geminated, as עבריה, עבריה, עבריה. The combination *iyyi* is at times interchanged with *i* as צים = צים = עבריה = עבריה.

i appears in all other situations, such as: בירושלים, בירושלים, בירושלים (in poetry there is sometimes to be found ליהודים, ליהודים, ליהודים). The morphological variant יֵה – (feminine ending) / יֵה – is connected with this phenomenon.

B) *aw*. *aw* is found (a) within the word (1) when the accompanying element is geminated, and (2) in the syllable preceding the *heh locale*; and (b) at the end of a word when it concludes that word.

o is found within the word in an unaccented syllable; as far as this rule is concerned “within the word” includes the end of the word in construct, provided that the syllable is closed.

awe is found at the end of a word, when, after the diphthong that should rightfully appear, there is a consonant and an accented syllable, that is always in the absolute state.

Note: “End of the word” includes monosyllabic words. Examples for the interchange *awe/aw/o* are: מות/מות/מות, מות/מות/מות.

עָנוּ, סֵתִיו; צוֹצוּהָ, כְּגוֹז/גּוֹנו/גָּזוּן; חֲצָרְמוֹתֵי/חֲצָרְמוֹתָהּ/חֲצָרְמוֹת; מְוֹת
בְּנֵי.

c) *ay*. *ay* is found (a) within the word (1) when the accompanying element is geminated, and (2) in the syllable preceding the *heh locale*, and (b) at the end of a word when the syllable ends with it and is not a construct form.

é is found within the word in an unaccented syllable (and here “within the word” includes the end of the word in construct forms); *e* is found in the same positions as *é*, and in place of it before the pronomial suffixes ךְ-, ה־; *ayi* comes at the end of a word, when, after the diphthong that should be there, there is a consonant and the syllable is accented. Examples for the interchange *ayi/ay/é/e* are סוסיך/סוסים, סוסינו/סוסיכם, סוסיך/סוסיך-די/-ילל-/לילה-/ייל; ממים׳מיי-/המימה׳ ביות - בייתו/הבייתה׳בית ;סוסייה די-דיו׳די קתי . Exceptions to the above rules are found in both directions, and in modern Hebrew more so than in the past. The important exceptions are the following:

The diphthong is found (a) where gemination has disappeared (see 8. Gemination and Clusters) as: וַיֵּחַי (see וַיְחַי), הָהָדִים; (b) in words where the accompanying element is felt to be essential for maintaining the paradigmatic connection, as in שְׁנֶזֶה, עוֹלָה (which are connected etymologically to שָׁן, רוּחַ), מְיֻמִּינִים, הַיֶּשֶׁר (but מוֹרִידִים from מוֹרִיד!). A vowel is at times found alongside a split diphthong, as: לֵיל alongside לֵאֵל, אֵין alongside אֵין, אֶון alongside אֶון (with a semantic difference), צֵיים alongside עֵיים, עֵבְרִים alongside עֵבְרִים. Today the tendency (apparently also in other areas) is to exploit the phonetic variants ים – יים – for semantic distinctions. Comparative grammar teaches that in various words which today have a vowel, there was originally a diphthong (for example סוף, יום) and in several instances this fact is reflected in the plural forms, as שְׂוֹרִים from שוֹר, שְׂוֹקִים from שוֹק, דְּוִידים from דוד (also דְּוִידִים from לוֹחִים, לוֹחִת alongside לוֹחִת). At times – completely exceptional – a vowel other than the ones listed in the rules above interchanges with a diphthong; for example *i* in the already archaic form, in the Bible, עֵירָה (ass; Gen. 49:11) and in the common word עֵיר (town), where not only the archaic plural עֵירוֹם (Judg. 10:4) hints at an original diphthong, but even the derivative word עֵירָה (small town) (through עֵירוֹת) retains this connection; *e* is found alongside é in גֵּיא.

Generally it can be said:

1) finding a vowel in a position where a diphthong is expected is part of a general tendency of early Hebrew, and in many words and forms there is no remnant of this original diphthong;

2) finding a diphthong in a position where a vowel is expected is an increasing tendency of later and modern Hebrew, due to the morphological considerations stated above, and thus there is to be heard not only שמִימָה but also שְׁמִימִי (not considered a literary form), דִּיקָא, כִּינֹן, דִּיקָסָה (and cf. Bilal in *Ha-Berékah*; גִּוְיִי גִוְיִים). Variants such as עֹלָה/עוֹלָה (cf. Job. 5:16; עוֹלָתָה/עֹלָתָה Ps. 92:16) שוֹעַ/שָׁוַע (Isa. 22:5) are not produced in modern Hebrew.

The expansion of the diphthong and even its splitting into two syllables occurs in late Hebrew even more than in mod-

ern official speech: it is found in medieval Mss. and in modern Samaritan Hebrew. The special relationship between the diphthong and vowel affects the spirantization of the בגדכפ"ת (see section 5. בגדכפ"ת above) when near a diphthong. Within the word the diphthong usually acts as a vowel and causes the spirantization of בגדכפ"ת, as in מוֹתָה, בֵּיתָה, הִיבּוֹל, הִימָמָה, שְׁלוֹתִי.

Examining the diphthong and its interchanges, we learn that:

a) *ay*, *aw* display almost (cf. above *aw* (a) 2: *ay* (a) 2) identical traits: this is not the case in, for example, biblical Aramaic and later Jewish Aramaic, where *ay* is still found without gemination, whereas *aw* is always interchanged with a vowel. In an effort to limit the occurrences of the diphthong (which is common in Canaanite) by interchanging it with a vowel, Samaritan Hebrew went much further than classical Hebrew (although there are parallels in Jewish traditions); the original *aw* diphthong has disappeared completely while the *ay* diphthong appears only rarely;

b) the type of syllable – open or closed – and the place of accentuation affect the diphthongs and their interchanges. Still, it is impossible to establish pure phonological criteria for the above rules, since the phonological rules which governed biblical Hebrew with great regularity have long ceased to operate with respect to the quantity of the vowels and the structure of the syllable, and a new situation has developed in which the morphological factor has become dominant. This new situation, reflected in the vocalization of the Bible, continues to spread. Mention should be made not only of interchanges of the diphthong but to all vowel changes, to be discussed below, and accentuation discussed above. In these it is possible to discern morphophonemic phenomena and in fact morphophonemics plays an important role in Hebrew grammar. This may explain the large number of exceptions to phonological rules, especially in matters of the vowel system. These exceptions can be grouped into morphological rules (cf. above *aw* b); *ay* b); cf. also section 5. בגדכפ' above and the *Historical Note* in section 16 on Interchange and Elision of Vowels, below).

The dominance of morphological principles over phonological is one of the features of a literary language which continues to be used many generations after certain phonological rules have ceased to be operative and are exchanged for other rules.

16. INTERCHANGE AND ELISION OF VOWELS. In the light of the above-mentioned assumptions that vowel quantity is not a distinguishing feature in Hebrew (see section 10. Vowel Quantity, above), and that almost any vowel quality can appear in every type of syllable (see section 11. Vowels as Part of the Syllable, above), the fact that a given vowel is maintained in all the forms of a paradigm but interchanged with another vowel in a different paradigm is rather surprising. This is a complicated aspect of Hebrew grammar which cannot be understood without resort to its historical background. Con-

sideration will be given first to the phenomena themselves, excluding those interchanges caused by א, ה, ת, and ע (see section 6. אהח"ע above).

A) Interchange of Vowel with Vowel.

1) \acute{e} is interchanged

(a) with *i*, as עֲנִי-/עָנֵב, יְקַלְנִי/יָקֵל, מְגַנֵּם/מְגֵן, מְסַבִּים/מְסַב, הֵנֵם/הֵן, קֵנִים/קֵן, לְבוֹ/לֵב, סִפְרִי/סֵפֶר

(b) with *e*, as בָּן/בֵּן (construct), מְקַלֵּד/מְקַלֵּל, יִתְנַד/יִתֵּן, יוֹצֵר/יוֹצֵרֵם/יוֹצֵר, and in biblical forms used today only in poetry, as: וְיִלְךְ/וְיִלְךָ; וְיִקְהֵם/וְיִקְהָם;

(c) with *a*, as: קֶן/תְּשׁוּמָה/תְּשׁוּמָה (construct), קֶן/תְּשׁוּמָה (construct), קֶן/תְּשׁוּמָה (construct). But: *é* is retained in תְּשׁוּמָה/תְּשׁוּמָה (construct), תְּשׁוּמָה/תְּשׁוּמָה (construct). *é* is retained alongside *e* as: קֶן/תְּשׁוּמָה/תְּשׁוּמָה (construct), קֶן/תְּשׁוּמָה/תְּשׁוּמָה (construct), קֶן/תְּשׁוּמָה/תְּשׁוּמָה (construct). *i* is not interchanged in: קֶן/תְּשׁוּמָה/תְּשׁוּמָה (construct), קֶן/תְּשׁוּמָה/תְּשׁוּמָה (construct), קֶן/תְּשׁוּמָה/תְּשׁוּמָה (construct).

2) e is interchanged

(a) with *i*, as in כְּרַמְלוֹ/כְּרָמֶל פִּיּוֹת/פֵּה, יִפְהִיָּה/יִפְהֶה גִּזְנוֹ/גִּזְנֻה בְּרוֹלִם/בְּרוֹל, כְּבִשָּׁה/כְּבוֹשׁ צִדְקָה/צִדְקָה;

(b) with *a*, as in שומרתנו/שומרת, מלכנו/מלך; in biblical forms such as: ויאמר/ויאמר (pasal), וילך/וילך;

(c) with *e*, as in: קוֹנֶה/קוֹנֶהוּ, שְׂדֵה/שְׂדֵהוּ, יִקְנֶה/יִקְנֶהוּ.

3) *a* is interchanged with *i*, as in: ספֿים/סך, מֿסים/מס, but maintained in עֿמים/עם, חֿגי/חג, גֿתים/גת, פֿתה/פת, גֿלות/גל, גֿגות/גג.

There are forms where both possibilities exist: e.g., סִנְסָנִים, זִלְזִלִים, but even in modern Hebrew סִנְסָנִי is also found, and the same is true for גִּלְגִּלִּים, גִּלְגִּלִּי and גִּלְגִּלִּים.

[illegible]

5) *u* is interchanged with *o*, as in: קום, תִּקְמֶנָּה, וְיָקֻם/יָקֻמוּ (infinitive).

B) Elision of Vowels.

Here we refer both to *šewa quiescens*, which is phonetically a zero vowel, and to the *šewa mobile*, which is a zero vowel from the phonemic aspect, but realized as an ě vowel in a cluster of consonants. In fact the distribution of the *šewas* depends solely on the type of syllable, and each can replace the other.

בְּמֶ־מִסְכָּבִים/מִסְכָּבִים לְסִפְרִים, סִפְרִים/סִפְרִים 1) é / šewa as in: כֶּסֶף; מִקְדָּחוֹ/מִקְדָּח; נִבְלָתוֹ/נִבְלָה; חֲבֵרִי/חֲבֵר; עֲנִיבִים/עֲנִיב; סִבִּים/סִבִּים; חֲפִצִּי/חֲפִץ; הִיכָלוֹת/הִיכָל; (יִתְנוּ=) יִתְנוּ/יָתֵן; יוֹצְרוֹ/יוֹצֵר; אוֹת/כֶּסֶף; בְּרַכְתֶּם/בְּרַכָּה; מִקְדָּחוֹ/מִקְדָּח; לְשִׁמְחִי, שִׁמְחִי/שִׁמְחִי

2) *e / šewa*, as in: יוֹצְרוֹת/יוֹצֵרֶת; לִמְ-לֵכִים, מִלְ-כִּים/מִלֵּךְ.

3) *a / šewa*, as in: לֹדְקֵי, זִקְנִים וְזָקָן; דְּבִרְיָהֶם, דְּבִרֵּי / דְּבַר; שְׁמִי / שְׁמַח; וְזִקְנִיכֶם, בְּרִפְתָּ / בְּרָחָה, דְּבִשְׁוֹ / דְּבִשׁ; כֶּתֶב־בִּי / כֶּתֶב; שְׁמִי / שְׁמַח; וְזִקְנִיכֶם, חֲטָאֵיהֶם : חֲרָשִׁי / חָרָשׁ; and others but: לִלְבָּשׁ / לְבָשׁ; בְּרִכּוֹתֵיהֶם, חֲטָאִים and others.

4) *o* / *šewa*: קָדֶקֶד / קָדֶקֶדִים / שְׁבָלִים / שְׁבָלִים (= שְׁבָלִים);
 יֶשְׁמְרוּ, יֶשְׁמְרוּם / יֶשְׁמְרוּם / מַחְלָקוֹת / מַחְלָקָה; (= צְפִירִים) / צְפִירִים
 מִשְׁכָּנוֹת / מִשְׁכָּנָה; כְּתוּבוֹתֵיהֶם, כְּתוּבוֹת / כְּתָבָה but יֶזְכֶּה / יֶזְכֶּה
 and many others; some people retain the *o* even in the nouns
 שְׁבָלֶה, צְפִירֶה and מַחְלָקָה.

The phenomena listed above present a many-faceted and complicated picture of vowel changes. The main points are as follows:

A) The vowels *e*, *a*, *o* in an open syllable or in an accented closed syllable tend to be interchanged or elided when the word is declined (the same is true when the word serves as the basis for a derivation; as סִפְרוֹן (סִפֵּרוֹן)). However, in a closed unaccented syllable, they are always retained in all declensions and conjugations of the word: (N.B. In this regard the imperfect verbal forms are independent “words,” and we are not to treat their vowels in connection with the perfect).

b) In *e* vowels the phenomena is limited to that morphological type called "segolate nouns." Since *e* is an allophone of /é/ (see sections 2. Writing and Spelling; 12. The Phonological Status of the Vowels, above), the interchange *e* / é is not of the type under discussion, and in fact its conditions and results are different from the other changes. Phonemically, there are no *e* interchanges, but these are part of é changes. The interchanges of *u* vowels are common only in a few forms and this vowel is not elided. In fact the historic basis for this change differs from that of the other vowel changes, and the only factor they have in common is that of accent.

c) The conditions for the interchange of *e*, *a*, *o*, and their elisions are clear: the place of the accent and the structure of the syllable. When an accented closed syllable becomes unaccented the above vowels tend to interchange; in an open syllable whose accent has been removed the vowel tends to be elided.

d) With regard to elision the noun acts differently from the verb, while the verb itself acts differently according to whether or not it has a pronomial suffix. A verb without pronomial suffixes elides the vowel next to the accent; a noun elides the vowel penultimate to the accent, the verb with suffixes acts at times like the noun (especially in the *qal* perfect) and at times like a verb without suffixes.

For example, in the verb (without suffixes): $\dot{s}a\overset{1}{m}a\overset{2}{r}$, $\overset{3}{s}a\overset{2}{m}a\overset{1}{r}$; $ya\overset{2}{s}e\overset{1}{n}$, $ya\overset{3}{s}e\overset{2}{n}$; $y\overset{1}{i}smor$, $y\overset{2}{i}sm\overset{1}{e}r$; $y\overset{1}{i}sa\overset{2}{n}$, $y\overset{3}{i}se\overset{1}{n}$; $y\overset{1}{i}tten$, $y\overset{3}{i}tt\overset{2}{e}n$; with suffixes: $y\overset{3}{i}sm\overset{2}{e}r\overset{1}{e}ni$; $y\overset{1}{i}tt\overset{2}{e}n\overset{3}{e}nnu$;

In the noun: *lěvav*, *lěvavi*, *bilvavi*; *běli vivotěkem*; *zaqan*;
zěqēni, *lizqeno*;

In the verb with suffixes $\overset{2}{\text{šamar}}$, $\overset{3}{\text{šmarani}}$, $\overset{2}{\text{ušmaro}}$; $\overset{4}{\text{šakal}}$
(in pause $\overset{2}{\text{šaké'ah}}$), $\overset{4}{\text{šekéhu}}$; $\overset{2}{\text{vilbaš}}$, $\overset{2}{\text{vilbašeni}}$;

E) As regards the very consistency of elision, the verb differs from the noun, and the behavior of the *o*, *é*, vowels differ from that of the *a* vowel.

1) In a verb without suffixes the elision is consistent;

2) In the noun, *é* and *o* tend to be maintained while *a* tends to be elided.

3) In the verb with suffixes *e* and *o* are elided while in the same position *a* is maintained as: *yišmor*: *yišměréni*, *yittén* *yittěnéni*: but *ylbaš*, *ylbašéni*.

f) Although the phonetic conditions – accentuation and syllable structure – are determining factors, it is impossible to classify – phonologically – all the various vowel changes without involving the morphological factor. In fact, it is only possible to depict the vowel system by listing the various morpho-

logical types in which one or the other situation occurs. Even within the morphological types there are variations which confuse the Hebrew speakers. As far as the official language is concerned, the Academy for Hebrew Language determines what is correct in each type.

G) *Historical Note*: This complicated situation, full of phonological inconsistencies, is the result of the change which took place in early Hebrew when there were still quantitative differences in vowels (see section Vowel Quantity). When quantity ceased to be free and phonemic – that is, when the language no longer accepted short vowels in open syllables – it lengthened or elided such vowels (depending on their relationship to the accent). In this way there developed either long syllables (that is, consonant plus long vowel, or consonant plus short vowel plus consonant) or syllables with *šewa* (or *ḥatefs*). As a result, in the paradigm of a given word which contained an original short vowel there were forms with long vowels (that is the vowel was lengthened because of the accent and this in turn caused a change in quality) alongside forms with short vowels (in a closed syllable), or elided vowels. At the same time, there are words with original long vowels which are maintained in all the declensions of the word, for example:

- 1) עֵדָה (= assembly): *‘ēdā* (<‘īdat): *‘ādāti*: *‘ēdot*: *‘ādōtēkā*:
עֵדָה (= feminine witness): *‘ēdā*: *‘ēdāti*: *‘ēdōt*: *‘ēdōtēkā*;
- 2) גִּבּוֹר: *gibbōr* (<*gibbār*): *gibbōrēkem*: *gibbōrīm*: צִפּוֹר
šippor (<*šippur*): *šippurkem*: *šippōrīm*.

Since a short vowel in Hebrew has become mechanically lengthened or elided by the stress, the basis for interchange and elision of originally short vowels has been lost. As a result of reciprocal influences, originally short vowels have begun to act as long vowels and vice versa. *é* and *o* were originally both long and short, and as long vowels played a key role in maintaining what were originally short vowels in declension and conjugation (compare וַעַת, לָדַת, צָפָה, צָפָה, etc.). *a*, which was originally a short vowel (the original long vowel was *ō*), affected originally long *ā* which in certain instances (as in the words קָרָן, קָרָב) did not become *ō*, and so was later elided in positions where other *a* vowels would normally be elided; therefore, one can find קָרָבִי, קָרָבִי, etc. Beginning in mishnaic Hebrew, many words entered Hebrew from Aramaic with what was originally a long *ā*, and these maintained the *ā* in their declension; in this manner the relative symmetry of biblical Hebrew, which maintained *ā* only in few morphological types, was disturbed. Another factor disturbed the vowel *šewa* relationship: the existence of vowels (originally short) in syllables that became open after the cancellation of gemination (see section on Gemination and Clusters above) in all the declensions of the word. So, for example, פָּרָשׁ (<פָּרָשׁ) meaning “horseman,” caused פָּרָשׁ meaning “horse” (II Sam. 1:6, Ez. 27:14) to retain the *a* vowel after the פ, and not elide it in the manner that the *a* vowel was elided after the ל of גָּמַל. The verb (without suffixes) in Hebrew is less given to change than the noun and to a greater extent reflects the early relationships (and not only in this regard). The noun, however, is

subject to the influence of analogy; there are thus, from the phonologic point of view, many more contradictions in the paradigm of the noun. The great confusion with regard to interchanges made it necessary for the Academy for the Hebrew Language to establish the rules for maintaining or eliding a vowel. The Academy based these rules on morphological and semantic principles, i.e., principles which are at variance with precise phonetic processes.

17. INTERCHANGES DUE TO SOUND COMBINATIONS. In addition to the changes already discussed, there are changes in Hebrew caused by the chance sequence of sounds in the word. The natural tendency of the speaker is to conserve effort in his speech, and to try to minimize sharp changes in the use of one or the other of the organs of speech. In fact, speech is full of the assimilation of one sound to the other. Only when this assimilation is particularly sharp is the change felt. Since the consonants are more stable than the vowels, they tend to change less; cf. the changes due to assimilation, e.g., the ל to the neighboring consonant, the exchange of ת with ט or ד when close to צ or פ (see section 7. Other Consonants, above). At other times, a sequence of similar sounds demands a greater effort from the speaker and he tends to dissimilate them, as: displacement of ו by י in the plural form עֲרִיּוֹת (from עֲרִיָה, but עֲרִיָה!) or י by א in עֲרִיבִיָּים alongside עֲרִיבִיָּים (but there is no עֲרִיבִיָּים!) or הֶגְיִים alongside הֶגְיִים. Many variants in Hebrew comparable to הֶגְיִים/הֶגְיָה are occasionally used to distinguish differences of meaning, as הֶגְיָה/הֶגְיָה, הֶגְיָה/הֶגְיָה. In this class of variants is the plural ending -וֹת/-וֹת found commonly in loan words from the period of mishnaic Hebrew. Another type of change, called metathesis, is found in Hebrew in words like שְׁלֵמָה/שְׁלֵמָה, כְּשֶׁבַע/כְּשֶׁבַע. More common are the vowel changes due to environment. This causes the *šewa*/*ḥatef* change after א, ה, ח, ע; *a* is preferred over *é* in שְׁמַח (opposed to שְׁמֵר) and over *i* in יַעֲמֹד opposed to יִשְׁמֹר, אֶשְׁמֹר against יִשְׁמֹר (but אֶשְׁמֹר is found alongside אֶשְׁמֹר). Medieval manuscripts contain many more changes than are common in the official language, and some of the common forms in modern Hebrew can be explained as a result of this practice. So the common plural of מַסְבִּים is מַסְבִּים, but the plural מַסְבִּים (מַסְבִּים) is simply a variant of מַסְבִּים, which assumed one of the meanings of the word. Among the changes whose origin is the desire to dissimilate the following are noteworthy:

1) A change which is active to a certain extent and noticeable in modern Hebrew: – *u* or *o* in a syllable next to a syllable with *u* or *o* is interchanged with *i* or *é*. This is found not so much in the inflection of words as in the derived forms. In inflection: נִכְחַו from נִכְחַ; in derived forms רִאשׁוֹן, תִּיכוֹן, חִיצוֹן from רִאשׁ, תוֹךְ, חוּץ, and חִלּוּנִי instead of חִלּוּנִי (from חל); in this way the *i* of שְׁלֵטוֹן can be understood as opposed to שְׁלֵטוֹן; similarly in all *paʿul* participles with the suffix -וֹת – the *u* tends to be changed to *i*, פְּעִילִיּוֹת; in a combination of words לֹא לֹא לֹא.

2) The exchange of *a* by *e* is found in the definite article (also in the word מֶה), given certain conditions in the word;

this change is not properly maintained in the spoken language.

MORPHOLOGY

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Introduction

1. DEFINITION OF THE SUBJECT. There is considerable disagreement as to which linguistic features are to be included in the area of morphology. Generally, semiticists have commonly included the discussion of parts of speech and the changes which they undergo as a result of their declension, as well as word-formation, in discussions of morphology. This is usually from the "form" aspect alone, without entering into investigations of the uses of these forms in speech. This latter problem is included in the study of syntax. The exceptions to this rule are Gesenius' Hebrew Grammar (29th edition) which was written by Bergsträsser (incomplete) and the Mishnaic Grammar by M.Z. Segal, which include the functions of the forms in their discussion of morphology. Another problem is, what is to be included in the term "form": a part of a word which does not have an independent existence? A word? A combination of words with a specific meaning or a particular structure (compound)? Or a feature such as the word order in the sentence which in some languages is morphological? Those who take morphology in its simplest, most straightforward meaning, include the linguistic form and exclude meaning, and distin-

guish between Lexical Morphology and Syntactic Morphology on the one hand, and, parallel to these, between Lexical Semantics and Syntactic Semantics, on the other hand (cf. S. Ullman, *Principles of Semantics* (1957), 33ff.). The preceding statement has not discussed all the methods of systematization but has merely alluded to the wide gulf which separates the different systems. The following description includes in the term "form": a form which is not in itself an independent word; an independent word; and to a limited extent the unit which supersedes a single word, if it is a lexical unit. This discussion of the structure of a linguistic form also includes its functions in the expression.

2. THE ROOT AND THE STEM (גזירה). A study of series of Hebrew words which are related semantically, such as:

אָמַר; שְׁמוֹרִים, שְׁמוֹרָה, מִשְׁמֶרֶת, מִשְׁמָר, שְׁמִירָה, שׁוֹמֵר, שָׁמַר, שָׁמַר, שָׁמַר, etc., and

פָּקַד, פָּקֵד, פָּקֵדוֹן, תִּפְקִיד, מִפְקָדָה, פָּקַד, פָּקֵד, פָּקֵדוֹן, פָּקֵד, פָּקֵד, etc., will immediately demonstrate that there are a number of consonants in each of the words, which contain the common semantic element (even if only in a general way) and a number of vowels or vowels plus consonants which serve to qualify the meaning which is common to the entire family, to the particular, specific meanings of the various words or forms. The group of consonants found in each word of the above examples (a) שָׁמַר (b) פָּקַד is called the root while the rest is called the formative (see section Phonology: 4. Consonants as Pronounced by Various Communities above). In Hebrew as in the other Semitic languages the root is always made up of a group of consonants. This is not the case in English, for example (and other Indo-European languages), where the roots also include vowels, as: "cut," "boy," "love." Only in certain cases are there those who call the consonants common to a group of words the root, as: s-ng, in the words, song, sing, sung, while others will choose one of these words and refer to it as the root, the other forms which differ from it being called the derivatives of that root. Clearly, the Hebrew root is only the abstract basis of a family of words used in the language, and does not denote the origin from which these words are derived, as it is hard to assume any level of the language in which the speaker was able to pronounce consonants alone as words. However, the fact that it is an abstraction is not to say that it is a grammatical fiction and merely a technical tool for the analysis of linguistic forms; it is in fact a living reality, an integral part of the structure of the language, which every Hebrew speaker feels. The root is not simply a prehistoric residual or an inherited element but a reality which is continually being produced in the language, and to a certain extent modern Hebrew suffers from a hypertrophy of root production. The reality of the root in Hebrew is seen from the modern roots דוּחַ, טֵלֶפֶן, אֶכְלָס, נִטְרָל which are derived from the abbreviation דו"ח (דִּין וְחֶשְׁבֹּן) through the verb דִּוָּח, and from the words "telephone," אֶכְלָס ("population"), and "neutral," by eliding the vowels. This is done even though the vowels in these foreign words are an intrinsic part of the word, without

which they would not retain the meaning they have as a Hebrew root. In slang and children's talk new roots are formed more easily – whether from Hebrew words such as **צברה** in the word **מצברה** from the phrase **מצב רוח**, or from foreign words such as **בלף** from bluff. However, only a small number of these words enter more educated speech. This is adequate proof of the reality and vitality of this phenomenon.

The norm for a root is three consonants, and this is in any event the minimum needed for formation of a verb. Hebrew, however, still recognizes roots of one consonant (especially in particles and pronouns) such as **י** (in the words **זה**, **זו**, **זו**), **פ** (in the words **פה**, **פה**), **כ** (in the word **כה**); two letter roots, such as: **יד**, **בן**, **עץ**, **אב**, **חם**, **אב**, **עץ**, **בן**, but these are doubtless vestiges from an ancient period, when Hebrew had not yet separated from other Semitic languages. However, this is no longer a productive method for producing new roots in Hebrew. The standardization of the root to three consonants took place in the proto-Semitic period. Hebrew also contains a number of roots with four or more consonants. In the earlier stages of the language they are few, but today they have been greatly expanded, as for example **תפקד** from the noun **תפקיד**, which is in turn derived from **פקד**, or **מספר** from **מספר** originally from **ספר**. The verb, however, needs a minimum of three consonants and whenever a verb is created, a root (at least of three consonants) is implied, even from a one-consonant root like **זהי** (in **זהה**, **זהה**) from **י**, or from a two-consonant root like **אחי** (in **אחה**, **אחה**) from **אח**, **דמם** (in **דמים**, **דמים**) from **דם**. There is still no conclusive proof whether **עו"י** (see section 23. Paradigm of Mute Forms, below) verbs and **ע"ע** verbs are derived primarily from original two-consonant roots or from three-consonant roots one of whose consonants is elided under specific phonetic situations (cf. Biblical Hebrew). However, it is important to note that structurally in the historical period these verbs are integrated into the three consonantal root system and follow its rules, so that verbs of the form **קם**, **דן** in the perfect, generate nouns and other forms like **קיום**, **דין**. Theoretically, in all words which can be analyzed to a root, all the consonants of the root are present. These consonants of the root usually appear in all the forms, but as a result of phonetic processes, some of which took place in the earliest stage of Hebrew, there are cases where one (and occasionally even two) of the root consonants was weakened and does not appear in all of the derived forms of the root. For example, as a result of the tendency of the *nun* to be assimilated to the following consonant (cf. section Phonology: 7. Other Consonants) one finds forms such as **יפל**, **מפלח**, from **נפל**, and as a result of the elimination of the diphthong (see section Phonology: 15. Diphthongs) we find in Hebrew **בנה** from the root **בני** against **בנין**, **בניא** and others. In systematization of the Hebrew forms, and in categorizing the words grammatically, one must consider this feature which affects the external forms of words without necessarily weakening its association with the other forms and words derived from the same root. In accordance with the structure, it is customary to divide the Hebrew roots into two main groups (stems) called Strong Verbs and Weak (Hollow) Verbs. The three con-

sonants **פעל** are used as the symbol of the root and in accord with the place of elision the weak verbs are divided into the following stems: **פ"א** (that is, the weakening takes place in the first consonant of the root and is the consonant *alef*, and similarly) **פ"ו**, **פ"נ**, **פ"י**, **ע"ו**, **ע"י**, **ל"א**, **ל"י** (usually called **ל"ה** because of the spelling of the perfect form like **קנה**). A separate category is assigned to the roots with duplication or the **ע"ע** which stand between the strong and weak verbs.

3. THE "BASIC ELEMENT." There are, however, a considerable number of Hebrew words – excluding verbs – in which morphological analysis does not yield a root in the form described above but a combination of consonants and vowels, whether (a) the word is an independent form (a "free" form, as in the Indo-European root discussed above) or (b) it does not appear as an independent form (a "bound" form) or (c) it is a loan word or (d) it is an old inherited part of the language. Thus a group of related words such as **פנקסן**, **פנקסני**, **פנקסניו**, **פנקסניו**, does not yield a Hebrew root **פנקס**, just as the words **טלפון**, **טלפוני**, **טלפוניו**, although there is a Hebrew root **טלפן**, cannot be derived from that root since the formatives *é-é-o*, *é-é-o-ay* do not exist in Hebrew. In both these groups of words the "elements" **פנקס** and **טלפון**, being independent words in the language, are not susceptible to further morphological analysis. The same is true for original Hebrew words such as **מחירון** and **אצבעוני**, which semantically have no connection to **צבע**, and **מחר**, but retain their connection to **אצבע**, **מחר** which are independent words. This phenomenon is especially noticeable in those cases where the "elements" do not serve, or, because of their makeup, are unable to serve, as independent words, such as **מדיניות** (the independent word is **מדינה**), **צורני** (the independent word is **צורה**), **ירושלמי** (the word is **ירושלים**), **רשימון** (the word is **רשימה** and not **רשים**), **תברואן** (the word is **תברואה**), **בקשנת** (the word is **בקשה**: familiar usage). A "basic element" of this type is parallel to a root insofar as the derived forms and their semantic content are directly related to it and not its root, even if it can be analyzed further into a root. For the concept "basic element" which we have introduced into the morphological analysis of Hebrew we use, in Hebrew, the term **נטע** (plant) which is found in a grammatical text of the Middle Ages.

Note: Attention should be paid to the difference between the concepts "basic element" as used here and "base" which is used by some scholars in morphological analysis. They refer to a specific form of a noun or verb which is itself a combination of a root plus pattern. It is the base to which other morphemes or suffixes are added, thus **שמר** is the base of **שמרתי** etc. or **כלב** is the base for **כלבו**, **כלבם**, **כלבון**. The base is an historical genetic concept (cf. Brockelman, *Grundriss*, 1, 287; Bauer & Leander, 246). The term "basic element," however, refers to a structure parallel to the root and of the same level, in that it cannot be further analyzed without losing its semantic relation to the word which is based upon it.

In biblical Hebrew the formation basic element + formative was rare and found mainly in nouns with the ending

י־ (denoting belonging in the widest sense; cf. section 9. Suffixes); in modern Hebrew this formation is much more common, and in fact it was already in wider use in tannaitic Hebrew, with the adaptation of many foreign words. At times, when there is no clear-cut morphological analysis as with רְשִׁימוֹן, or as with words such as קָרְבָּן, סֶלֶחַן, אֶמְדָּן there is some doubt as to which type of formation it is. Words like קָרְבָּן can be analyzed *qorb+an* or *QRB+o..an* (QoRBan). In such instances one must fall back on semantic analysis. If there is a semantic connection between the word and the root, and this formative is found in the Hebrew language and forms are built up in this way – then one is dealing with a root, but if there is no semantic connection with the root or such a morpheme is not known in the language (cf. above טִלְפוֹן) then this form is the result of a “basic element” plus a formative. So רִגְזָן is easily analyzed: a root plus the morpheme *a.an.*, while מְרִיגָן (in children’s language) must be analyzed as a basic element (מְרִיגִיז) plus the formative *an*, for if this were not the case the causative quality, which is not expressed in the root but in the *hifil* formative included in the “basic element” which is the *hifil* participle, would be lost.

4. THE FORMATIVE AND THE MORPHEME. The formative is that element – a phoneme or group of phonemes – with which a word is created, whether from a root or a “basic element.” In Hebrew morphology it is possible to speak of two types of formatives: one which is combined with the root and in Hebrew linguistics is traditionally called the *משקל* (pattern); and one added to the “basic element” and is either a prefix or a suffix. The formative called *משקל* is always an infix, because it comes within the root, but can also be a prefix and infix at one and the same time as in: *mišMaR*, or an infix and a suffix as: *KišRon*; or a prefix, infix and suffix as with *mišBezet*. This formant is always discontinuous while the one which comes with the “basic element” is always continuous. The group of patterns which make up one verbal paradigm is called a conjugation (בְּנִיךְ) as: *šaMarti*, *šaMaRta*, *šaMaR*. (In the early days of Hebrew linguistics in the Middle Ages the terms *משקל* and *בנין* were used interchangeably.) In the common spoken language there is also a “minus formative” discernible, where a word is developed by removing a part of the word which serves the basis of the derivation (this is called a back-formation), as the elision of the י־ in the words *אנטיפאטי*, *פסיכי*: resulting in *אנטיפאט*, *פסיך*. In this way a differentiation is achieved between the description of the quality (adjective) and its subject (substantive). Literary language includes non-accentuation (the accentuation which has phonemic value in Hebrew, cf. Phonology: 14. The Accent) of one of the elements of a compound and so a difference is achieved between the preposition *על יד* and *על יד* when both words are given their full meaning. Formations such as *מגדל אור* < *מגדלור*, *יכול אני* < *יכולני* (in this last word the plural *מגדלורים* as against *מגדלי אור* is proof for that formation) come into being by eliding part of the compound. In the section on “Basic Element” it was stated that the “basic element” could be a word in itself used in Hebrew or some-

thing different or less than a word. In the formation of “basic element” plus formative, attention should be paid to the third category, where the formative plays a special role. While Hebrew can absorb foreign words easily, Hebrew grammar does not absorb elements which are foreign to its structure. It has already been seen that it is impossible to form a Hebrew verb from a foreign word if a root is not abstracted from its consonants (cf. טִלְפֵּן). Similarly, Hebrew has difficulty in absorbing words which are adjectives or adverbs without first giving them a Hebrew form. This is not the case with other nouns. Words like *טנק*, *ריאליזם*, *אידיאליזם*, *אידיאליסט*, *כלור*, *בנק* and many others were assimilated into Hebrew without any serious attempt to exchange them for Hebrew innovations. This is not the case with words such as *banker*, *chloric*, *realistic*, *psychic*, and *clerical*; if they appear in Hebrew whether in their English, French, German, or other form, they remain foreign. In order to derive Hebrew forms two methods are used: either the Hebrew formative is added to the foreign word like *קלריקלי* (*clerical+i*), etc., or the corresponding foreign formative is exchanged for a Hebrew one, like: *בנקאי* (אי in place of -er), *כלורי* (י־ in place of -ic), *טרגיקון* (*Tragik + er*), *היסטוריון* (*histor + ion*), etc. In each instance the grammatical element which determines the category of the word in the original language is replaced by a Hebrew element. Were it not for this process the word could not be assimilated into Hebrew, and would certainly not be able to serve as the basis for other derived forms. A similar situation is the addition of the feminine ending ה־ to words which are borrowed from a language in which they are feminine even though they do not have a special feminine ending or are not used as the feminine at all. The Hebrew feminine form lends to the borrowed word a Hebrew form which makes its declension simpler, as *אוניברסיטה* (plural *אוניברסיטאות*), *פונימה* (phoneme). A special function of the Hebrew formative is, therefore, to adapt foreign words to a Hebrew form. This type of formation has not yet been thoroughly investigated, nor has it been described.

Unlike the roots and “basic elements” which develop in modern times, the formatives (not only the pattern formatives) are mostly inherited from earlier times and fixed. They change as to their function and semantic value, which at times differ in modern Hebrew from what they were in biblical or earlier Hebrew. Still, it cannot be said absolutely that no new formatives are being created in Hebrew. The history of different languages shows that formatives generally originate from independent words whose meaning has become blurred as a result of the wide use of a particular compound, or by transferring an element from a word which already exists in the language (the so-called metanalysis). Thus in post-biblical and modern Hebrew the compound *היה + participle* is used to express continuous (durative) and repeated (iterative) action, and so there is a difference between *הוא היה אומר* and *הוא אמר*.

In biblical Hebrew *היה*, even when found in a similar syntactical frame, is not the formative element (auxiliary word)

it is in modern Hebrew. Still, even in modern Hebrew *היה* has not become fixed as a formative only in the strict sense. However, in literary Arabic, for example, of the compound *sawfa yaḥruḡu* (סופו לצאת) in rabbinic Hebrew, “He will go out”) only *sa* remains from the first word (*sayāḥruḡu*) and this becomes the formative for expressing the future. Spoken Arabic knows of other such formatives. An investigation of modern Hebrew is likely to reveal several other candidates for new formatives, one of which is *ש* with the imperfect verbal form to express desire: *יֵלֵךְ* = *נָא* = *שִׁילֵךְ*. In the literary language this formative developed from a certain syntactic combination. By analogy a new formative was created in modern Hebrew (probably as a result of a sarcastic expression), *טרון* – from the word *תיאטרון*, and it serves to refer to a place where performances are presented, as: *זירהטרון* (circus), *צ’יזבאטרון* (a satirical theater), and *בובהטרון* (puppet theater). In literary Hebrew *נֶת* – is used as a diminutive form (as *קטנטנות*). This is a new formative. Some centuries ago *ונית* – was used (cf. *נְעֻוֹנִית*, *עֵלְמוֹנִית*, *אֲדוֹנִית* (fem. counterpart of *אֲדוֹן*) or *חֵיצוֹנִית* (fem. of *חֵיצוֹן*). The attempts to reestablish the *šafel* (שָׁפֵל, שָׁכַפַּל, שָׁכַנַּע), which in ancient Hebrew had no position and certainly no fixed function (words of this form are always borrowed), are all parts of this process. To summarize: not even the area of the formative is completely closed to new addition or limited to its original complement. The root, “basic element,” and formative are the three components to which the Hebrew word can be analyzed, and each, individually, is the minimal meaningful morphologic unit which cannot be divided further and which has semantic content, in other words: morphemes.

Note: Some modern linguists use the term morpheme as the basis of their morphologic analysis of the Hebrew language and do not see any need for the term formative. But even they cannot ignore the traditional concept, the root, completely (nor do they eliminate the concept of pattern); instead they speak of a root morpheme. But it seems that in a language such as Hebrew, where the root is a vital and living element (see section 2. The Root and the Stem), one must relate to the fundamental difference between the abstract “root” and the “formative,” which is the element that generates a real word, a noteworthy stage in any morphologic analysis, even though both elements are similar in that they are minimal units – morphemes. The morpheme is a concept in morphology which includes inflection and derivation, while the formative is reserved for the process of derivation. Inflection is generally an automatic process, depending on the type of word (noun, verb, etc.); derivation is always a new process.

5. PARTS OF SPEECH. The elements discussed above combine to make words. It is common to sort the words into categories called “parts of speech.” Traditionally, Hebrew grammar differentiates (as did Aristotle) between three types only: noun, verb, participle. However, for several generations, under the influence of the grammar of various European languages, the division into nine parts of speech has become part of Hebrew

grammar. There is no area of modern linguistics where the differences between scholars are more pronounced than in the division into parts of speech. It has been correctly claimed that the criterion for the accepted division is not consistent; at times it is the form and at times the content, or a mixture of the two. The logical demand to categorize the words based on differences in form leads to the conclusion: “every language has its own scheme. Everything depends on the formal demarcations which it recognizes” (E. Sapir, *Language*, 1949, 119). It must be admitted that it is not easy to fulfill this prerequisite. In our opinion it is better to analyze Hebrew in accordance with the traditional division into three parts of speech since it is thus possible to include the formal criterion more precisely. A sharp distinction exists between the noun and the verb. The verbal nouns, the participle, and the infinitive belong morphologically to the category of nouns, although syntactically there are features common to them and the verb. Regarding particles, there is not always a sharp distinction between them and the noun; some are inflected like the noun (*יָדָךְ* like *עֵינֶיךָ*) or have other qualities which are like the noun, while only the conjunctions and the interjections are entirely different from the noun and the verb. But there are particles (prepositions) which can, in accord with their morphological behavior, be classified as “nouns” (*בֵּין*, *אֵין*, *אֵין־אֵין*, *אֵין־אֵין־אֵין*). Also from a syntactical point of view the only clear division is between the noun and the verb (a “verbal sentence” has a verb as a predicate; a “nominal sentence” has a noun or particle as a predicate). The division into nine parts of speech confuses, since it confounds meaning (substantive, adjective, number) with the criterion of form and does not necessarily follow from an analysis of Hebrew speech.

Noun Formation

PATTERNS. To the problem of how many patterns there are in Hebrew and what they are, there is apparently a simple answer; if the word is analyzed to its root then the pattern is left after eliding the root consonants. But, surprisingly enough, there is a great divergence between what is commonly presented in the grammars and scientific literature (particularly that not written in Hebrew during the last generations) and the practical grammars (especially those written in Hebrew) based on the long internal Jewish tradition. Suffice it to point out that a standard work such as Bauer and Leander’s Hebrew Grammar lists about 80 patterns for the noun while the “traditional” count (since David *Kimḥi) is about 290. It is not in the nature of the language observed that the difference between these two systems lies, since few new patterns have been added to biblical Hebrew. The critical difference is the method of observation. The traditional method depends on a descriptive approach, in which each form is considered to be another pattern, while the accepted scientific system is based on a historical-diachronic approach, in which are classified together all nouns even if they appear in different forms if they were the same in the early (sometimes even prehistoric) stages of the language; that is, the criteria come from outside

the linguistic stage being described. Following are some examples of different types of classification.

- a) The nouns: מֶלֶךְ, מַלְכָּה, תֵּשׁ, נַחַל, גִּדִּי, עֵיר, לֵיל, לָיִל, אֹדֶם, גְּדוּל, רְחוּק, כְּבוֹד, שְׁלוֹם
- "Traditional" system "Scientific" system
1. מֶלֶךְ pat: פֶּעַל
2. תֵּשׁ pat: לֵיל
3. לֵיל pat: לָיִל
4. עֵיר pat: פֶּיל
5. גִּדִּי pat: פֶּעי
6. נַחַל pat: פַּל
- b) The nouns: שְׁלוֹם, כְּבוֹד, רְחוּק, גְּדוּל, אֹדֶם, עֵבֶת, אֱ(1)וֹ, עֲשׂוֹק, קִרְוֹ, כְּתָב, קִרְוֹ, עֲשׂוֹק are classified:
- "Traditional" system "Scientific" system
1. pattern: All nouns till קרב, כתב, כבוד, שלום (but some point to the differences in declension)
2. elimination of the qamesh, etc., maintaining the qamesh etc., c) gemination of the 3rd radical אדם.
1. qatāl:
2. qatul: a) גבה, עבת, אדם
b) רחוק, גדול
3. qatūl (?) qatāl (?):
עשוק, קרוז.
- c) The nouns: רְחוּק, קִנּוּא, רְחוּק, שְׁכוּר, גְּבוּר, צֶפֶר, קִנּוּא, קִשֶׁת, אֵיל, רֶבֶב, אֵיל are classified:
- "Traditional" system "Scientific" system
1. רְחוּק pat: קִנּוּא
2. גְּבוּר pat: שְׁכוּר
3. קִנּוּא pat: אֵיל
- (Another less acceptable division in the scientific system:
qattāl: רְחוּק, קִנּוּא
qattal: שְׁכוּר
quṭtul: אֵיל)

A further difference: the nouns with the addition ה־ as: גִּנָּה , נְחִמָּה , אֵילָה are independent patterns in the “traditional” system, *qatl*, *qattāl*, *qattal* in the “scientific” grammar. The examples show that none of the methods is entirely consistent. Traditional grammar does not distinguish between מֶלֶךְ with two *segols* and נָחַל with two *pathahs* and מִלַּח with a *pathah* and a *segol*, while historical grammar is at times confused about the original form, and forced to establish patterns such as קֶטִיל , קֶטוּל (with *šewa!*). The criteria upon which we should base the different patterns in Hebrew from a descriptive structural point of view, will be given below with examples.

Note: In confronting the “traditional” and “scientific” methods of classification two typical forms of classification have been used, but it should be remembered that in each there are differences (especially in the “traditional”) which affect the final count of patterns. While David Kimḥi (12th cent.) counted 290 patterns, Jonah ibn Janāḥ (11th cent.) counted about 80 (if one eliminates about 60 which are patterns of personal names). He already classified diverse forms such as ארץ, עיר, ערים, פת, נד, under the same pattern.

7. PRINCIPLES OF PATTERN ANALYSIS. It is clear from the above that the "scientific" methods describe the way the Hebrew word was created from its proto-semitic form and are essentially interested in prehistory and not the historical reality. On the other hand, the "traditional" system is found to describe the external appearance of the noun, even if that appearance is unique among the forms which make up the paradigm of that noun, and due entirely to chance as a result of the coincidence of certain sounds in the word. For example, **מֶלֶךְ, נָחַל, בֵּית** have two syllables in these forms only, while in other forms of the declension of the singular, the base is of one syllable: **מֶלֶךְ-ךָ, נָחַל-ךָ, בֵּית-ךָ** as in the nouns **עַם, לֵיל, יוֹם**. The analysis of patterns must be done on two levels: first the nouns must be analyzed as they appear: that is the root and the formative element must be distinguished; then the common features in appearance must be investigated in relation to the structure of the root ("stem") and each group will yield its pattern. Just as every group of words with a basic common meaning will yield a "root," so too from a group having common formation features the "pattern" will emerge. On both levels of the analysis the process is only descriptive and refers to the language in the given circumstances. It may be said that the relationship of the "appearance" to the "pattern" is as the phone to the phoneme or the morph to the morpheme. In the process of the analysis the following rules will be carefully considered:

1) The need to distinguish between nouns derived from roots by patterns and nouns derived from a basic element + formative. For example: כְּרִטְסֵן, לְהַטּוֹס, though there is a root כְּרִטְס (note: כְּרִטְסָה), להט is to be analyzed כְּרִטְס + הַטּוֹס, להטוט + הַטּוֹס as סמרטוט = סמרטוט + טוֹט (see section 3. The Basic Element). These are not of concern here. One must be especially wary of nouns ending in the feminine as: אֵילָה: יָבֵשָׁה, אֵילָה is to be analyzed אֵיל + הַיָּבֵשָׁה, however, יבשה is to be analyzed יבש + א..a-a.

2) Pattern formations are (primarily) the result of the relationship between the consonants of the root and the vowels and consonants which are not part of the root. The relationships between the root consonants themselves, such as the hollowness of certain roots (see the section: 2. The Root and the Stem) or the repetition of one or two of the consonants, do not affect the concept of pattern, nor the declensions which are connected to the structure. Pattern is an abstraction and the appearance of the word is its realization. This principle is not properly reflected even in scientific grammar books where the patterns *qattil* and *qatli*, for example, are separated as are others, although from the point of view of the number of root consonants there is no difference between them (see Phonology: 8. Gemination and Clusters) nor is there a difference in the way they are declined. Repetition of a root consonant can have an expressive function, but is not a matter of the pattern. From this point of view, *רַכְכַּת*, *בְּרִיטָה*, *טַטְטָה*, *דַּפְדַּף* (= *רכבת*), *רִכְבָּה*, *סִדור* (= *סדר*), *סִבּוּב* (= *סבב*), *גִּדּוּד* (= *גידוד*), and *פֶּרֶס* (= *פריס*), *דִּין* (= *דין*) and *אֵלֶם* (= *אללם*),

3) As a result of vowel interchanges (cf. Phonology: 15. The Diphtongs; 16. Interchange and Elision of Vowels) a dif-

ferentiation must be made between those changes which affect the meaning of a word and those conditioned changes which do not. For example the vowels which follow the formative מ in the nouns מְזִמּוֹר, מְעִצּוֹר, מְזַבְּחָה, מְזַמְּרִים do not indicate a pattern change (although they produce different appearances!) whereas the three respective vowels after the צ in מְעַצֵּר, מְעַצֵּר, מְעַצֵּר determine three different patterns. The same is true for the vowels of the formative in מְפַקֵּד, מְפַקֵּד, מְפַקֵּד or in מְעַמֵּד, מְעַמֵּד, מְעַמֵּד which determine different patterns, while the change מְעַמֵּד: מְעַמֵּד does not determine different patterns.

4) As to the “appearance” one must consider its connection to the root, and in all the declensions of the noun in a specific paradigm, a form may be picked out and established as representative of the pattern, as long as the form chosen serves to clarify the others in accord with the rules of the language. The linguist is liable to discover that in Hebrew very often the declined form and not the dictionary form (“*casus rectus*” or absolute form) is the one which is most representative of the pattern. This is a result of certain developments in the language which caused change in the absolute form of the word. So from *qullo*, *qullot*, the form *qol* (lightness, easiness) could easily be understood according to the rules of vowel interchange (see section Phonology: 16. Interchange and Elision of Vowels) but not the opposite (the absolute *qull* is not possible!); there is, indeed, the homonym *qol* (voice) in the absolute which declines as *qolo*, *qolot*. Clearly one appearance (as *qol*) is liable to produce more than one pattern and vice versa. At times this method of analysis is likely to agree (although without intention) with the historical method, but very often it will yield different results. If the decision that *qull* is of the *qutl* pattern is in agreement with the historical position, the decision that *qol* is not of the *qatl* pattern (*qawl* in Arabic) or the *qal* pattern (*qāla* in Aramaic, and so in the Silwan inscription) but of the *qol* pattern, is opposed to the accepted historical point of view. Any agreement with the historical position is indicative of the fact that here and there the early state is still reflected in the modern makeup of the language.

5) From the above (4) it is clear that the patterns as they are determined by the structure of modern Hebrew must be arrived at not from the vocalized forms but from the pronunciation which does not recognize quantitative differences, recognizing instead a total of five vowel phonemes (see section Phonology: 12. The Phonological Status of the Vowels).

8. DETERMINING THE PATTERNS. In accord with the above principles the various stages in determining the patterns of the noun can be described: Example 1: (1) מְלִיךָ, (2) מְלִיכָה, (3) מְלִיכִים, (4) מְלִיכֹת, (5) מְלִיכִים, (6) מְלִיכִים, (7) מְלִיכִים, (8) מְלִיכִים, (9) מְלִיכִים, (10) מְלִיכִים, (11) מְלִיכִים, (12) מְלִיכִים, (13) מְלִיכִים, (14) מְלִיכִים, (15) מְלִיכִים, (16) מְלִיכִים, (17) מְלִיכִים, (18) מְלִיכִים, (19) מְלִיכִים, (20) מְלִיכִים, (21) מְלִיכִים. In almost all of them the three root-consonants are immediately recognizable, and in some of them when they are declined in singular or plural (מְלִיכִים, מְלִיכִים, מְלִיכִים). In many there is an obvious connection with other nouns (מְלִיכִים, מְלִיכִים, etc.), or to a verb

(מְלִיכִים, מְלִיכִים) – indicating that these forms are derived from roots and not from a basic element. They can be divided, based on appearance, as follows:

- מְלִיכִים: 1, 2, 3, 5, 7, 8, 16, 17
- מְלִיכִים: 4, 6
- מְלִיכִים: 9, 10
- מְלִיכִים: 15, 18, 19
- מְלִיכִים: 11
- מְלִיכִים (or מְלִיכִים): 12
- מְלִיכִים: 20, 21
- מְלִיכִים: 13, 14

In all there are at least eight different appearances (some differentiate between מְלִיכִים and מְלִיכִים [לִיכִים]). Checking the structure of the roots (= “stems”) we find five types: (a) strong (1–8), (b) מְלִיכִים (11, 12, 18, 19, 20, 21), (c) מְלִיכִים (15, 16), (d) מְלִיכִים (13, 14, 17), (e) מְלִיכִים (9, 10). Since the types of consonants in the roots do not determine the pattern (cf. principle 2) it is fundamentally possible for all the words to be variations of one pattern, if it can be shown that with regard to the vocalizations attached to the root (the formative) there is no difference between them. In accordance with the declension of the following (a) מְלִיכִים, מְלִיכִים, מְלִיכִים, etc. (b) מְלִיכִים, מְלִיכִים, מְלִיכִים, etc. (c) מְלִיכִים, מְלִיכִים, מְלִיכִים, etc. (d) מְלִיכִים, מְלִיכִים, מְלִיכִים, etc. (e) מְלִיכִים, מְלִיכִים, מְלִיכִים, etc. the diachronic approach is likely to distinguish two patterns *qutl* and *qatl*, and, based generally on comparative reasoning, these nouns will be included in one of the two patterns, especially recognizable in the מְלִיכִים stems since some of the nouns have a diphthong and others a simple vowel (cf. section on Phonology: 15. The Diphtongs). On the other hand, the descriptive grammar of Hebrew in its historical setting will abstract from these forms three patterns:

- a) *pi/a'l* 1–17, (20?)
- b) *pel* 18, 19
- c) *pol* 21, (20?)

Since for many generations (a fact which is already evident in the vocalization of the Bible) the form מְלִיכִים is declined with an *i* after the first root-consonant, while *a* appears only if the first or second root-consonant is מְלִיכִים, and in a number of ancient words (as מְלִיכִים), therefore the interchange *a/i* is conditioned and this pattern may be called *pa'l* or *pi'l*; both have been absorbed in historical Hebrew to one pattern. On the other hand the ancient group which included 11, 18, 19, has been broken up and there is no longer any similarity in their behavior; this leads to the need for a *pel* pattern; the same is true for 12, and 20 is more properly placed in (a) because of its plural מְלִיכִים.

Example II: (1) מְשִׁמֵּר, (2) מְשִׁמֵּר, (3) מְשִׁמֵּר, (4) מְשִׁמֵּר, (5) מְשִׁמֵּר, (6) מְשִׁמֵּר, (7) מְשִׁמֵּר, (8) מְשִׁמֵּר, (9) מְשִׁמֵּר, (10) מְשִׁמֵּר, (11) מְשִׁמֵּר, (12) מְשִׁמֵּר, (13) מְשִׁמֵּר, (14) מְשִׁמֵּר, (15) מְשִׁמֵּר.

They are commonly divided into:

- מְשִׁמֵּר: 1, 2, 3, 10
- מְשִׁמֵּר: 11, 12
- מְשִׁמֵּר: 4, 5, 15
- מְשִׁמֵּר: 6
- מְשִׁמֵּר: 7
- מְשִׁמֵּר: 8, 9

which includes שעלב (תעלב in Arabic) = fox. ג־: the name אבישג, in use even today as opposed to אבישי, the ג is considered to be a formative element regardless of its origin. חיה: מאפליה, מרחביה, כנופיה; also to be analyzed in this way אספקלריה (from *specularium*), as there is the basic element אספקלר עברן: the basic element עבר, connected with the noun ספל, ערפל, פרמל: ל. (cf. the noun, ירושלמי, no 3). ערקל (the biblical word סף is found in poetry, as Bialik's סף דמעה וריקם: -ם. גבעול, (basic element עָרַס) פְּתָאוּם, סָלָעַם, תָּנוּם, אָמָנָם, רִיקָם: -ם. גבעול, and in personal names like זבולון, בָּרוּךְ, נָנֶשׁ, יִשְׂרוּן, צָפָן: ן-מְרִים (this analysis is arrived at from comparative grammar).

קדומנית, קדורני: The new words: אֲחֻרָּנִית, קְדֻרָּנִית: -נִית(ת)
 have been created analogically. -ת: Primarily in personal names (including those recently created) such as רֵנָּת, יוֹנָת, אֶסְנָת, בִּשְׁמָת (שָׁנָה = שְׁנָת) and מִנָּת (= מָנָה) can be so analyzed. This suffix is also found in place names: נֶצְרֶת, דּוּבְרֶת, שְׁמֶרֶת, תַּה־. Originally this is the so-called “he locale” suffix which is added to nouns with feminine endings, but when this function disappeared (as in the noun לִילָה לֵיל = ליל) it became a suffix which is used particularly in poetic language (יְשׁוּעָה = יְשׁוּעָה, עֲזָרָה = עֲזָרָה) and others.

Common suffixes:

a) Vowels:

ה־: Common feminine suffix in declension, and used to indicate: (1) collectives such as גִּזְלָה, “all those exiled,” דָּגָהּ = “all the fish.” As to the nouns חֲסִים: חֲסָהּ, שְׂקָמִים: שְׂקָמָהּ, etc. the plural always indicates the collective, while the form with the ה־ suffix indicates the collectives or one of the items in it, according to context; (2) an artificial as opposed to the natural limb מַצְחָהּ, בִּטְנָהּ.

י: also called the “relation suffix,” since it relates the noun with this suffix to another by attributing to the new noun some quality of the noun serving as its “basic element.” יְרוּשָׁלַיִם = of Jerusalem, רַגְלִי = on foot, יְמִינִי = on the right side, ראשִׁי of the head (in the concrete and borrowed senses; see above, section 4. The Formative and the Morpheme).

b) Vowels and consonants:

⁂(א): It may be that this was originally two suffixes which were consolidated. One, which is used in personal names such as יִנְאִי (< יוֹחֲנָן > זְכַאי, etc., and one parallel in function to יָ (and used in Aramaic parallel to Hebrew יָ). Usually it indicates a professional such as חֲקֵלְאִי, חֲשִׁמְלִי, עֲתוּנָי. (This form should not be confused with the לִי verbal form זְכַאי, “innocent” derived from the root זָכַי in the פֻּעַל pattern; the name זְכַאי is אִי + זָכַי (רִיָּה)!)

וְיָנִי-): Its modern use is preeminent (1) to create diminutives: דְּבִנּוֹן, דְּבִנּוֹן, סְפָלוֹן; (2) to indicate publications which appear at regular intervals such as עֵתוֹן, שָׁבוּעוֹן, יָרֵחוֹ, שָׁנָתוֹ, and lists of similar items such as מִלּוֹן, שִׁירֹן, חֲדָרֹן, תִּקְוָנוֹן. But there are other nouns derived in this way and the formative fulfills other functions. The combination וְיָנִי- becomes וְיָנִי- in words like צִמְחוֹנִי, צִמְחוֹנִי.

⌈-: Used primarily for abstraction (see above in this section).

ות: Common suffix for feminine plural used (1) adver-

bially רבות, ישירות, and (2) for collective and abstract nouns such as: מפורסמות, מסכמות.

יָה־, יָה־: Combinations of the relation suffix יָה־ and the feminine suffix, are used (1) for diminutive: כְּפִית, יָדִית, מְצִיָּה, עֲוִיָּה; (2) a workshop or gathering place: סִנְדֻלָּיָה, כְּרִיכָה, פְּנִימִיָּה, פְּגָסָה; (3) a collection of things: מְצִיָּה, תְּקִלִּיטָה, סִפְרָה.

ים, ים: Originally the plural suffix, they are used (1) with adverbs (plus the preposition) such as למישורין, למישורין; (2) for abstract nouns such as נעורים, נעורים.

יָ: Today mainly used to indicate the subject of an action as לְהוֹטוֹט, תְּכַסֵּס, רָפָתָן (see above section 3. “The Basic Element”).

תָּ: Functions as תָּ and originates in nouns which end in תָּ as גֹּאוֹתָן (conceited) and through metanalysis תָּ as opposed to תָּ became more expressive: רָעֵבָתָּ a very hungry person, כֹּרְסָתָּ = one having a large stomach.

רָ: Loaned from Latin *-arius* and is found in original Hebrew words such as נַחְתוּמָר, סְמִמְטוּסָר, עוֹגְגָר, serves the same function as ךָּ.

נָתַן: For diminution (see section 4. The Formative and the Morpheme).

The above survey indicates that the suffixes, like the noun patterns, are morphemes, every one of which has more than one semantic function, and at times these functions are quite dissimilar and it is difficult to find a logical connection between them (cf. for example *ḡi-*). The reason is that Hebrew is a very old language and in the course of time the formatives changed their functions, or new functions were added to them, without eliminating the words which were derived from them when their prime function was different.

10. PREFIXES AND COMPOUNDS. Words formed by the addition of prefixes ("secondary derivatives") as are common in Indo-European languages such as the English print, offprint, reprint, imprint and come, income, outcome, overcome, become, are unknown in Hebrew, which expresses these different notions by different noun patterns or by compounding words, or by different roots, as in (1) מַשְׁכָּב, הַדְפָּסָה, חוּזָרָה, תְּדַפִּיּוֹס, דְּפוּס (1); (2) הַיְעִשְׁתוּ or הָיוּ, הַתְּגַבְּרוּ, הוּצָאָה, הִכְנָסָה, בּוֹא (2). Nevertheless, there are already compounds in biblical Hebrew which might be taken to be a prefix + a "basic element" when the prefix is a word of negation, as in: לֹא-אֵלִים, לֹא-אֶרֶץ (Deut. 32:21), אֵל-מוֹת (Prov. 12:28): no-god, no-nation, no-death.

This is in fact the common way for analyzing compounds in modern Hebrew not only of the **אי־צדק** (injustice), **אי־שימוש** (disuse) type but also **בין־לאומי** (international), **חד־צדדי** (unilateral, one-sided), **חד־שיח** (monologue), **דו־שיח** (dialogue), **על־אנושי** (super-human), **תת־עורי** (hypodermic), **אי־סופי** (infinite), **בתר־מקראי** (post-biblical), **קדם־מקצועי** (prevocational), **חוץ־לשוני** (extra-lingual), and others. It is true that these and similar compounds were developed under the influence of Indo-European equivalents and indeed a deliberate attempt was made to achieve Hebrew equivalents for idioms which are basically technical terms. Such compounds gradually became assimilated into the common language and generated com-

pounds like חד־סטרי (one-way) and חד־פעמי (unique) which are not entirely parallel to the English forms (but compare the German *einmalig* = unique). The fact that such foreign words are analyzed as including prefixes, cannot dictate that the Hebrew analysis be done in the same way; that must be done in accordance with the manner in which these words are integrated into the Hebrew system. It will be demonstrated that there is really no difference between this form and the existing compounds in Hebrew. A compound of two or more words which become one indivisible word, so that at times the original elements are no longer recognizable, is almost unknown in classical Hebrew; of this form are the early words (מה שהוא < משהו) plural of משהוין, (כל מה) כלום, בלימה, בליעל and the modern words מְגִדְלוֹר, רמזור, דחפור, כדורגל; in slang and affected speech compounds such as ארחי־פריטורה (טורה) "a student parade from the school of architecture," are formed.

There are, however, many combinations of more than one word in Hebrew, which due to their wide use have become fixed formally with fixed semantic values; they can be called compounds. The compound is usually the necessary condition and the first step toward merging the separate elements into one word. Various types and levels of construction can be differentiated:

1) Where one is in construct state; two nouns are joined, the first ("*nomen regens*") is qualified by the second ("*nomen rectum*"). This is the reverse of the situation in Indo-European languages: for example מלאכת־יד = hand-work, the same order is common in a compound of a noun and its adjective מלאכה קשה = hard work. The opposite order is possible, as in English, if the first part is a noun of quantity or vague, and therefore of wider meaning than the second part, which limits scope of the first word, as in: שלש קלשון (1 Sam. 13:21) – trident, משנה כסף (Gen. 43:12; but Gen. 43:15) = double money, דרום אפריקה South Africa, צפון אמריקה North America (but קוטב הצפון = North Pole). There is no clear formal criterion to establish when a combination is a regular construct or when it is a fixed compound; the semantic content may help but it is not an absolute criterion. Still it may be pointed out that deviation from the normative grammatical rule which demands that the article be placed before the second word (*nomen rectum*) (הבית ספר and not בית הספר) does, to some degree, indicate that the combination is felt to be a fixed compound, and so we find הבר מצוה, התל אביבי, (in the Bible השולחן ערוך, הבית יוסף, (בית הלחמי) (שבע העשרה) and never השבע עשרה) and is also the case for names of books such as טובמאודים (the grade "Excellent") = טוב מאד plural. There are, however, some compounds, such as ברנש plur.

ברנשים (בר אוז < plur. ברנשים, fem. ברנשה, which reveal this formation principle. There is, therefore, no absolute formal differentiation between a fixed compound and the construct state of two nouns.

2) Where the form of the compound is two words joined by *waw* and at times even without it, as in: מושא ומתן, דין וחשבון, (יום יומי) יום יום. This last is the rule in the second decade (11–19) of the numerals as שבעה ועשר (but שבעה עשר or (!עשרים ושבעה). Regarding this type there is a syntactic test which indicates if it is a compound: if the adjective and the predicate are in the singular: דין וחשבון מקיף. Already in the medieval Hebrew grammars we find עמם מסורה (segol =) שלש נקודות.

3) Another type is the compound of noun with an adjective as קרן־הקיימת, לבד(ה)גם, יום טוב, לשון (ה)רע. Here a possible formal test is the use of the article with the second word only.

In short, there is in Hebrew a basis for compound words becoming fixed lexical units, but the limits of the construction are not sharp. It is not difficult, therefore, to include in this category the formation which some see as second derivatives: such as בין לאומי. Since the two qualities which are commonly used to distinguish it from a compound, (a) the order in agreement with English and (b) the definite article being placed normally before the first term as הדו־תנועה (the "deviate" form due to hyper-correction דו־התנועה is also heard!), are not unique to this formation at all. It must also be noted that while in English most of the prefixes are not independent words the situation in Hebrew is the opposite. Only very few elements, foreign or loan words like ארנטי, ארנטי, do not function as independent words. The fact that most of the compounds have the relation suffix י־, that is, they are used as adjectives, is a statistical fact, but is not grammatically meaningful, since forms which do not serve as adjectives such as תת־לשון (hypoglossus), תת־תזונה (undernutrition), are also found, though not as frequently.

In the discussion of compounds two types should not be excluded: (1) the derivation of words from commonly used abbreviations, עכומי (עובד כוכבים ומזלות) עכו"ם; (לא היו דברים מעולם) להד"ם; (סכין כף ומזלג) = להדמי (a word used in poetry); this form is especially common in military jargon, and mention need only be made that this was how the word סמל (sergeant) was created (= סגן מחוז למניין), and many names of weapons, as תולר (= תותח ללא רתע); and (2) blending two elements taken from two different words and making one word out of them, as in דחפור (דחף + חפר) מדחן (פלוגי + אלמוגי) פלמני (= מוד + חנייה) and זוט (זוט + זעיר) זוטיר.

11. THE DECLENSION OF THE NOUN. *Gender*. In nouns as in most pronouns and most of the verbal forms there are two genders, masculine and feminine, but only the feminine is normally marked. This mark in the singular establishes the gender whereas the feminine or masculine plural marks are not decisive. There are a number of nouns both for feminine

forms of living things and inanimate objects which are feminine although they do not have the usual grammatical symbol and there are also nouns which are grammatically bisexual.

The feminine endings are

- 1) הַ- as טובה (masc. טוב), מלכה (masc. מלך), פקידה (masc. פקיד); שומרה (masc. שומר), יולדה;
- 2) ת־, as גְּבִירַתְּ (<גְּבִירַתְּ but used as fem. of גְּבִיר, not of גְּבִיר); נוסעת (masc. נוסע), שומרת (masc. שומר);
- 3) ת־ as טְבִיחִית (masc. טֵבַח), עֲתוּנֹאִית (masc. עֲתוּנָאִי);
- 4) ו־, the abstracting formative (see no. 9) which also implies the feminine mark;
- 5) It is common for the ending including ת to signify the feminine and at times ת as a root consonant is so taken by the speaker, thus שבת, פת (the root is פתת and the pattern is *pi/a'l*) are feminine, and on the other hand the ending ו־ is not considered, especially in medieval Hebrew, a feminine mark.

All these suffixes are derived under different conditions from the primitive ending *-at* which still exist in the inflected forms. There are feminine nouns which do not have a feminine suffix such as *דָּר*, *עֵין*, *אֶצְבַּע*, *בָּאָר*, *גֶּפֶן*, *הָרֵץ*, *אֵם*, *עוֹ*, *רָחֵל*, *אֶתוֹן*, *שֵׁן*, and especially geographical names like *יְרוּשָׁלַיִם*, *תֵּל-אָבִיב*, *בְּנֵי-בְרַק*, *מִצְרַיִם*, *לִוְדוֹן*. There are even nouns which are used both as masculine and feminine like *דָּרָךְ*, *לֶשֶׁן*, *שֶׁמֶשׁ*, *כּוֹס*. In the course of time some nouns changed gender; an example is *שָׁדָה* which is masculine in biblical Hebrew and (commonly) today, but is feminine in tannaitic Hebrew. In some nouns which do not have a feminine ending there are even today ambivalences regarding the gender: the word *שָׁלַד* is feminine in literary language and masculine in the spoken, while the opposite is true regarding *גֶּרֶב*. Feminine nouns with no feminine symbol are a reflection of the division in the very early (prehistoric) period of Hebrew, when the criterion of sex was not the determining factor which was a different scale of values, probably one with many grades.

Number. There are three numbers: singular, dual, and plural, but the dual is found only in nouns. Only the dual and plural are marked by special suffixes indicating their number. The suffixes are:

ִיְ- (יָיְ-) for plural: generally used with nouns without the feminine suffix such as מלכים (sing. מלך, נופים (sing. נוף) but it is sometimes also found in nouns with the feminine ending such as: שְׁנִים (sing. שְׁנָה), תְּאֵנִים (sing. תְּאֵנָה), שְׁעוֹרִים (sing. שְׁעוֹרָה). The suffix יָיְ, very common in talmudic and rabbinic literature, is also found elsewhere, but is uncommon in simple language. In that literature the suffix יָיְ appears with nouns that have a feminine ending such as שְׁמִיטָיִן (sing. שְׁמִיטָה) more so than in present-day literature.

אות, -וֹת) for plural: is used generally with names that have a feminine ending but is also found with masculine nouns (and so used is considered florid) and so there is not only מַלְכוּת (sing. מַלְכָּה, *מלכות*) but also קוֹלוֹת (sing. קוֹל, *קולות*), אֲבוֹת (sing. אָב, *אבות*), חוֹבוֹת, which only the context can

indicate if it is the plural of **חובה** or of **חוב**. It should be noted that many nouns can be made plural in two ways, such as **מדרשות**, **מדרשים**. At times homonyms are differentiated by their plural forms as **עצמים** (substance), **עצמות** (bones). The suffixes **אות** (יֹת־) have been used since tannaitic times and are common in words dating from then. However, they are also used in new words (by analogy or to simplify the declension) and so we find not only the old words **פרפראות** (sing. **פרפרת**, **פרפרת**) **מקואות** (sing. **מקוה**), **תיאטרות** (sing. **תיאטרון**), **אוניברסיטאות** (sing. **אוניברסיטה**) but also the new **גמלות** (sing. **גמלה**), **פקולטאות** (sing. **פקולטה**).

יָדַיְם, שְׁפָתַיְם, כַּנְפַיְם originally indicated duality, as in יָדַיְם but those nouns which have this suffix maintain it even for the ordinary plural such as אַרְבַּע יָדַיְם, שֵׁשׁ כַּנְפַיְם. However, the function of this suffix to indicate the dual exclusively is retained in several nouns as we see from שְׁלֹשׁ שָׁנִים/שְׁנַתַיְם, אַרְבַּע פַּעֲמִים/פַּעֲמַיְם, חֲמִשָּׁה שָׁבוּעוֹת/שָׁבוּעַיְם. Similarly there is a difference between גִּלְגָּלִים (a tool) and גִּלְגָּלַיְם, as there is between אוֹפְנִים (an apparatus) and אוֹפְנַיְם, among others. This suffix is very productive in technical nomenclature. Basically the suffix יָם is added to the singular noun (in its inflected form) as שְׁנַתַיְם: שָׁנָה, רִגְלַיְם: רִגְלָה, but at times it is added to the plural form of the noun as in דְּרוֹרוֹתַיְם: דּוֹר.

In addition to the numbers mentioned above, there is in Hebrew a list of collective nouns and abstract nouns which appear with all of the suffixes mentioned but do not have a singular form (*pluralia tantum*), such as קדושים, בתולים, נעורים (the singular קדוש has a different meaning), גירושין (sing. גירוש has a different meaning), מפססמות, כלולות, פיפיות, מים, שמים.

State. Every noun can appear in one of three states: absolute, construct, and with pronominal suffixes. Everything stated above regarding the gender and number refers to the absolute state. From the morphologic point of view the absolute includes nouns with a preposition or article (לְהַמָּח, הַיּוֹם) since these only affect their syntax and not their form (their vocalism is not influenced). When the noun is in the construct or has pronominal suffixes its form usually changes; the feminine ending הַ- changes to תַּ- and יָ- (יָ) to יָ- (יָ) to יָ- (the plural and dual are the same). Only a relatively small number of nouns do not change in declension (that is when in construct or with pronominal suffixes) while the majority change in accordance with the rules for vowel changes (See Phonology, 15. The Diphthongs and 16. The Interchange and Elision of Vowels). There is no fixed system in the grammar books to arrange the different ways of declining the nouns into a set number of classes as is the case for Greek or Latin. But at least 11 declensions can be identified and some scholars determine 14. A description of their qualities has no place in this review but belongs in a grammar.

Often the form of the noun in construct is the same as its form with pronominal suffixes as in **דָּבָרְכֶם, דְּבַרְהֵנִי** but at times it is the same as the absolute form as in **שְׂמֹרֶתְךָ, שְׂמֹרֶתִי**. The pronoun which is added to the noun

expresses the concept of ownership – in its widest sense – relative to the subject of the pronoun. The form of the pronoun differs when in the singular, the plural, or the dual. This feature is not logical since the subject of the pronoun does not change if the noun is plural. It is the result of internal phonetic development and metanalysis (part of the noun in masculine plural is merged together with the pronoun), and is not paralleled in classical Arabic or in ancient Aramaic (in later Aramaic a similar situation developed); in biblical Hebrew there are still remnants of the early situation (אַבוֹתֵיהֶם = אֲבוֹתָם). Following is the list of pronouns with examples of the declension of the noun קוֹל.

Pronominal Suffix

Singular Noun

יְ-	my voice	קוֹלִי	1 st Person Sing.
ךְ-	your voice	קוֹלְךָ	2 nd Person Sing. Masc.
ךְ-	your voice	קוֹלְךָ	2 nd Person Sing. Fem.
וְ-	his voice	קוֹלוֹ	3 rd Person Sing. Masc.
הּ-	her voice	קוֹלָהּ	3 rd Person Sing. Fem.
וְ-	our voice	קוֹלֵנוּ	1 st Person Plural
כֶּם-	your voice	קוֹלְכֶם	2 nd Person Plural Masc.
כֶּן-	your voice	קוֹלְכֶן	2 nd Person Plural Fem.
הֶם-	their voice	קוֹלָם	3 rd Person Plural Masc.
הֶן-	their voice	קוֹלָן	3 rd Person Plural Fem.

Plural Noun

יְ-	my voices	קולותי	1 st Person Sing.
יָךְ-	your voices	קולותיך	2 nd Person Sing. Masc.
יָךְ-	your voices	קולותיך	2 nd Person Sing. Fem.
יוֹ-	his voices	קולותיו	3 rd Person Sing. Masc.
הָ-	her voices	קולותיה	3 rd Person Sing. Fem.
ינוּ-	our voices	קולותינו	1 st Person Plural
יָכֶם-	your voices	קולותיכם	2 nd Person Plural Masc.
יָכֶן-	your voices	קולותיכן	2 nd Person Plural Fem.
יָהֶם-	their voices	קולותיהם	3 rd Person Plural Masc.
יָהֶן-	their voices	קולותיהן	3 rd Person Plural Fem.

These are the standard forms of the pronouns, but in poetry and in flowery style in general there are several variations found, especially in biblical Hebrew. The above pronouns are used also with the prepositions such as **על, מן, את, עם**; some with the pronominal suffixes usual for the singular nouns (as **אתו, עמי**) and some with those used for the plural noun (as **תחתיו, עלי**). It should be noted that in prepositions **לְ** as opposed to **לַ** in nouns is found (**לְךָ, עִמָּךְ**) and **לְ** in place of **לַ**; this latter being also used in the noun **כל** to form **כלנו**.

Besides this, the synthetic, method for indicating possession, there exists an analytic method, by the use of the word **של**. Expressions such as **קולם, קולם, הקול שלי, הקול שלהם**, are of equal value. For this reason there are those who call **של** a "separated pronoun." Actually, however, this is a syntactic method, since **של** originates (already in the earliest stages of the language) from the relative clause in which the relative particle is attached to the preposition. Thus the expres-

sion **הקול שלי** is to be analyzed as “the voice which I have” exactly the same as **הקול שצועק** “the voice which is crying,” and in certain instances the preposition **ב** fills the same function as the preposition **ל**, for example = **הפחד שבי** = **הפחד שלי**, **פחדי**, but the compound... **של**, since it is so common, became one word parallel to a pronoun and competed with the pronoun successfully in common speech and in those cases where there is a morphological difficulty in declining the noun (as in foreign words or words with the definite article, which cannot be joined to a pronoun) and personal names or where there is a semantic difficulty. Fundamentally, the preference for one way over the other is a matter of style and not of grammar.

12. PRONOUNS. *Personal Pronouns.* When the person is not expressed through pronouns which are attached to the noun (see section 11. Declension of Nouns) or the verbs (see section 20. Inflection of Objective Pronouns), they are independent words whose forms are as follows:

Singular		Plural
אני, אנכי	1 st Person	אנחנו, אנו
אתה	2 nd Person Masc.	אתם
את	2 nd Person Fem.	אתן
הוא	3 rd Person Masc.	הם, המה
היא	3 rd Person Fem.	הן, הנה

There are also several variations in form and usage in the ancient language which are no longer used. The first person singular **אֲנֹכִי** whose use declined and completely disappeared by the end of the biblical period, is now found in modern Hebrew not only in poetry but also in general use, for emphasis. The pronouns **הִנֵּה** and **הִמָּה** are considered archaic forms, and are only used in poetic writing. These personal pronouns are used only as subjects in the sentence; the pronominal object is expressed by the pronominal element suffixed to the verb or the preposition, or to the word **אוֹת** (absolute **אֹת**) as **אוֹתָם**, **אוֹתָי**. It should be noted that the double forms for first person in singular and plural, is a distinctive feature of Hebrew among the other Semitic languages, and only in Ugaritic is there a duplication in the first person singular pronoun.

Demonstrative Pronouns. These pronouns are used to indicate something before the speaker, whether close-by or far off (deictic use), or something which has already been mentioned in the discussion (anaphorically). Today the distinction between the near and far demonstrative is more precise than it was in the ancient language. For that which is near, זה (masc.), זאת, זו (fem.) = this (sing.) and הללו, אלו, אלה (poetry also אל(ה)) = these (pl.); for that which is far: ההוא (masc.), ההיא (fem.), הַלֵּזָה (masc.), הַלֵּזָה (masc. and fem.), הַלֵּזָה (fem.) = that (sing.), והם (masc.) והן (fem.) = those (pl.). אותה, אותו, אותם, אותו can be substituted for the above but also express intense identification, “that same.” The fact that in the past there was no differentiation between near

and far, is seen from expressions like *זה לזה* and *ומזה* (not: *זה להוא*, *ומהוא*). In certain instances the demonstrative force of the definite article has been maintained, as in *היום* and in literary style it is used more frequently not only in these fixed forms. The use of the definite article in a direct address as: *הדוד!* is basically demonstrative. The third person singular pronoun is used as a demonstrative in expressions such as *הוא שאמרתי*: “that is what I said” and *היא שעמדה לאבותינו*: “it is that which stood for our fathers.” When compounded with the interrogative pronoun like *מה זה*, *מי זה*, or such words as *מה זה* the demonstrative force of the pronoun is weakened and it becomes an element of the emphasis.

Interrogative Pronouns. *מי* = “who,” *מה* = “what,” are not declinable, nor are *איזה*, *איזו*, *אלו* (*אי*) = “which.” There is a variation of *מה* the use of which is subject to the same rules as the definite article, but which is found unconditionally with the interrogative pronoun *במה*. *איזה* is actually the demonstrative, with the addition of the interrogative *אי*, found also in the words *איפה*, *איכן* (= *היכן*). In plural the forms *אי אלה*, *אי אלו* were shortened for phonetic reasons to *אילו* and became identical to the demonstrative. Due to ambiguity the singular forms *איזה* and *איזו* are also commonly used in the plural (*איזה אנשים היו שם*) and it should be noted that the demonstrative element *זה* which can come to strengthen the interrogative *מי* as stated above, appears in tannaitic literature also with *איזה* as: *אי זה? איזו זה?* and this is positive evidence for the crystallization of the compound *איזה* (which appears in the Bible as two words, and in which *זה* is used to strengthen the interrogative *אי*), into the interrogative pronoun.

Indefinite Pronouns. Except for the words *פלוגי* (פלוגית) = “somebody” and *מאומה*, *כלום* = “nothing, something,” there are no special words in Hebrew to express indefiniteness, and the interrogative words are used for that purpose as in *מי לחיים*, *מי למות* = “some for life – some for death,” *דבר-מה* = “something” and especially in relative expressions such as *עשה מי שעשה* = “somebody did it.” The words *איש*, *אדם* (*בן*) are also used to indicate the indefinite as is the pronoun *אתה*. (The indefiniteness of the subject is often indicated by use of the plural verb without a pronoun, as in: *בעבר עשו את הדבר כך וכך היום עושים בדרך אחרת* = “in the past they used to do it so; nowadays they do it differently.”)

Relative Pronouns. The relative in as far as it is expressed syndetically (cf. Syntax) is made up of *אשר* or *ש* plus the pronoun (generally the personal pronoun) but in certain syntactic situations the pronoun is not explicitly stated: *האיש שהוא יושב* (= *האיש שיושב*), “the man who is sitting,” *המקום שהייתי בו* (= *המקום שהייתי*), “the place in which I was.” In verbal sentences the relative is *ש*, *אשר*, while in nominal sentences the definite article has that function, as in *האיש היושב* = *האיש אשר יושב* (in biblical Hebrew the demonstrative is also used in this way (cf. Job 19:19) as is the definite article before the verb as in *ההרימו* (Ezra 8:25). A relative pronoun

can be a subject or an object and come directly after a preposition as: *את שראה* “whom he saw,” *לשכמותו* = “to one such as him,” *לשעבר* = “in the past,” *על ידי שנתן* = “by his having given,” but generally the use of correlatives is preferred, as: *על ידי העובדה שנתן*, *על ידי כך שנתן*, *לאיש כמותו*, *את מי שראה*. Sophisticated style prefers to forego the use of the modern correlatives such as *עובדה* and *כך*.

Reflexive and Reciprocal Pronouns. Reflexivity can be expressed synthetically, by verbal conjugations or analytically; since the tannaitic period the analytic method is preferred over the synthetic. In this construction the possessive pronoun suffixed to the prepositions is used, *עשיתי דבר זה בי ולא בו* = “I did it to myself and not to him”; *הוא ניסה את הנסיון עליו ולא על חברו* = “he experimented on himself and not on his friend,” or suffixed to certain nouns such as the limbs of the body, *ראש* = “his blood is on his head”; “it’s his own fault”), *הוא גופו אמר לי* = “he looks after himself”; *גוף*, *נפש* = “he himself said to me”) and others especially with the noun *עצם* = “he deliberately destroyed himself” – suicide), *בא בעצמו* (“he himself came”), etc. The noun *איל*, as in *מאליהם*, *מאליו*, is also used in this way. From this last noun Aramaic produced the word *ממילא*, which was borrowed in Hebrew, and is a word whose sole purpose is to express reflexivity.

In early Hebrew reciprocity was also expressed synthetically, as *נדברו* = “they spoke with each other,” *התראו* = “they saw each other,” *שניהם מצטרפים* = “they join each other,” but in the post-biblical period this method was abandoned and reciprocity was expressed analytically by repeating the demonstrative, as *זה לזה*, *זה עם זה*, or by expressions like, *איש... רעהו*, *איש... אחותה*, e.g., *דברו זה עם זה*, *דברו איש אל רעהו*, etc.

This review of the various pronouns indicates that this part of speech in Hebrew has unique aspects not only from the formal point of view (one and two consonant roots; no differentiation of gender and number as in *מי* and *איזה*) but also in function, i.e., the lack of clear demarcation between demonstratives, relatives, interrogatives, and indefinitives. In other words even in modern Hebrew the early situation is clearly reflected; one pronoun can be used freely for all the above functions. The differentiation of function (which is not new) is the result of a long process and can be compared to the exchange, in Hebrew, of paratactic structures, common in ancient Hebrew, for hypotactic structures using well-defined conjunctions for different purposes.

13. PARTICLES. In this category are to be classified all those words which are not nouns or verbs and whose common function is to indicate grammatical relationships. There are the following types:

Prepositions. Prepositions, which appear only with nouns, such as *ב* (in), *ל* (to), *על* (on), *מן* (from), *על-פי* (by).

Adverbs. Adverbs such as *מאוד*, *במאוד* (very), *חנם* (gratis), *אמנם* (certainly), *לא* (not), *בעקיפין* (indirectly), *ישירות* (directly).

(The term adverb, however, does not accurately describe the situation in a language like Hebrew since this type of word can qualify a noun as well, גדול מאוד = “very big,” גבור מאוד = “very strong,” or זה אמנם שלחן = “this (is) surely a table.”)

Conjunctions. Conjunctions which join words and sentences such as ו, אף, גם, and those which join only sentences like אם, כי, עד (ש), בשביל ש..., מפני ש..., etc. The examples indicate that different layers are immediately recognizable. Primary words (i.e., whose origin is not obvious) such as: בוכ'ל which exist as proclitics, לא, אם; words whose origin is obvious, such as חנם (< חן), בעקיפין, and words which are derived from sentences, such as כיצד, whose original form כדאיזה צד is still found, יען (shortened imperfect form from יענה). Synchronically, two kinds can be recognized: (a) those which formally behave like nouns – having suffixed pronouns (בי, לו, פי) – and those which do not behave like nouns or verbs, and (b) those which are syntactically nouns and can serve as the predicate of a nominal sentence, such as דבר זה כיצד? ראונו פה and those which are unable to be used in this way (conjunctions). The above examples indicate how easy it is to form prepositions in Hebrew, and in fact the development in this area is great (many examples being influenced by foreign constructions), as in: ... (older: בגלל, בזכות, בהתאם ל...), (older: לפי), (older: עם ש...), which are considered less elegant than the older forms. Actually every noun can be used as an adverb, the criterion for the noun being not morphological but its syntactic use. In the sentence דבר זה בשוגג עשה ראונו (‘‘Reuben did this thing unwittingly’’), the word בשוגג can mean ‘‘as an unwitting person,’’ but in דבר זה בשוגג עשה שרה (‘‘Sarah did this thing unwittingly’’), it must be an adverb because there is no accord in gender between שוגג and שרה. So, too עשה בידוע as opposed to עשה בידועים. The limited ability of the language to express adverbs as a special formal category is compensated by the syntactic devices mentioned as well as others.

14. NUMERALS. The numeral in Hebrew is a unique phenomenon and extremely complicated, both morphologically and syntactically. In part there are parallels in the other Semitic languages, and it is presumably a common residue from proto-Semitic. The numerals are expressed in Hebrew (a) by words which indicate units אחד (1), שנים (2), שלוש (3), ארבע (4), חמש (5), שש (6), שבע (7), שמונה (8), תשע (9), עשר (10); (b) by the suffix ים – which is added to the numerals תשע-שלוש (30 = שלשים, 90 = תשעים) and עשר (20 = עשרים) and; (c) by the words 100 = מאה, 1000 = אלף, 10,000 = רבוא (archaic form and rarely used today). These basic words are compounded in different ways and from them are derived the various forms for particular use. There are different forms for the cardinal numerals, ordinal numerals, and fractions, but the ordinals and fractions exist only for the first ten, and must be expressed syntactically for the rest of the numerals.

Cardinal Numbers. There are two forms, the masculine: אחד, שנים, שלוש, ארבע..., and the feminine: אחת (ת), שתי, שלוש, ארבע...

..., but it is exceedingly strange that in Hebrew, as in Semitic languages in general (for a discussion see Robert Hetzron, *Journal of Semitic Studies*, 12 (1967), 180 ff.), there is no syntactic agreement between the cardinals (and any derived numerals) from 3–10 and their referents; the masculine numeral is used as an adjective or predicate for a feminine noun and the feminine numeral for a masculine noun; as in שלוש בנות (or בנים שלושה), שלשה בנים (or בנות שלש). When the object counted is not referred to, the masculine or feminine numerals can be used. The numerals 1–10, 100, 1000 have both absolute and construct forms, but are used with the counted object in either form, not according to any grammatical rule, as in: שלושה אנשים, שלושה אנשים עשרה, שלושה אנשים, שלושה אנשים, שלושה אנשים אלפים. The feminine construct form is also commonly used in the first decade for feminine nouns as in שלושת נשים, which is always the case with pronouns, and so not only שלשתם but also שלשתן (not, שלשן!). Pronominal suffixes are not used with the numerals 11–99; only in the early literature do we find חמשיהם (11 Kings 1:14). On the other hand, pronominal suffixes are used for 100 and 1000 as in במאתנו, במאתנו (‘‘in our century’’) as is the dual and plural. For the second decade of numerals two constructions are used; construct in the feminine numeral as שלוש עשרה, and the connection of the two terms without the *waw* in the masculine numeral as שלושה עשר (cf. no. 10). Note, too, that the second part of the numeral in the second decade has a different form than it has in the first decade, thus: עשר (not עשר) masc., עשרה (not עשרה) fem. For 20–90 the connection with *waw* is common today as: עשרים ושלושה with the ten first followed by the unit but also the reverse order שלשה ועשרים which was common in different periods, and is not very uncommon in literature. However, in the second decade such a construction is considered exceptional (cf. Ez. 45:12 חמשה עשר, it is the rule in the Aramaic of Elephantine), just as the compound by construct in the masculine numeral עשר אֶלֶף (Judg. 8:10) or עשר אֶלֶף (Judg. 20:25) would be considered exceptional today.

Numerals from 2–10 demand plural nouns only (חמישה איש for example, is considered to be incorrect), from ten upward the noun can be either singular or plural (שלושים איש) and it should be noted that the Academy of the Hebrew Language has suggested that the plural be used to prevent mistakes in the first decade as mentioned above. Combinations of numbers above 100 can be made in different forms (in addition to the possibility of a different order for the tens and units as pointed out above). 3755 can be שלוש אלפים ושבע מאות וחמשים וחמישה or שלוש אלפים שבע מאות וחמשים וחמישה. The last seems to be the most common. It should be noted that a number like 3715 is rendered generally שלוש אלפים שבע מאות וחמשים וחמישה so that the 1 is in the last possible place in the compound.

Ordinal Numbers. There are two types: masculine and feminine. From 3–10 its form appears to be derived from a ba-

sic element whose pattern is *pa'il*, as שלישי, רביעי, חמישית, etc. For 1 both the numeral ראשון (from ראש) and אחד serve. The fact that the number “one” has an ordinal form which is not connected etymologically to the cardinals is common to other Semitic languages. From 11 on the ordinal does not have an independent form and the cardinal fulfills that function also: השנה השלוש עשרה, הבית העשרים וחמישה. The common use of the singular of the ordinal (from the third ten and up) הבית העשרים וחמישי (as in Arabic) is considered incorrect. Ordinality can also be syntactically expressed, by using the cardinal as a *nomen rectum* in the construct state: השנה העשרים וחמש = שנת עשרים וחמש, שנה חמישית = שנת חמש. Just as in the construct the numeral is always the *nomen rectum* so when it is an adjective it also comes after the noun, as, האיש השלישי and not the opposite.

Fractions. For ½ the noun חצי is usually used. But, מחצית, מחצית, are also used; for ⅓, ¼, ⅕ on, the feminine ordinal form חמישית, רביעית, שלישית is used, but שלישי or רבע (also רבע), חמש are also possible. From ⅙ to ⅒ only the form with ית- is used. Note that while the suffixes ית-, יה- are elsewhere similar in origin and function (cf. section 9. Suffixes), in the numerals there is a differentiation: עשירית = ⅒, עשיריה = group of ten, חמישית = ⅕, חמישיה = a group of 5.

Multiples. Multiples are often expressed by שבעתיים = ×7 (not 7×2).

Distributives. Expressed by repeating the number as in שנים שנים.

In summation it may be said that there is nothing in Hebrew morphology to compare with the numeral for different forms and types of usages and syntax, and that the numeral best reflects the special nature of Hebrew morphology which includes, side by side, the very old with the new. “The uniqueness of Hebrew in our day and the source of its problems is that nothing in it has died and so there exist – and are in use – different chronological layers side by side, not on top of one another as in languages with a historic continuity” (Z. Ben-Hayyim, “An Ancient Language in a New Reality,” *Lešonenu La'am*, Jerusalem, 1953, 43–44).

[Zeev Ben-Hayyim]

Verb Formation

15. WHAT IS TO BE CLASSED AS THE VERB. The verb, a part of speech easily identifiable according to all theories and in all languages (including, of course, Hebrew), can be characterized from three points of view: semantically, the verb denotes an action or a change of state or the existence of a state; morphologically, it is usually accompanied by an indication of its grammatical subject, whether as a separate word or as an affix or as both; and syntactically, it functions as the main part of the predicate (see Syntax).

Forms of the Hebrew verb that never (or only sometimes) include an explicit reference to the subject, such as the infinitives and the verbal noun, are considered borderline cases between verb and noun. There are two extreme views on what is

to be included in the paradigm of a Hebrew verb. According to one view, the paradigm comprises only such forms as distinguish persons and tenses, and hence each בִּנְיָן (“conjugation”) is taken to be a separate verb. For others, however, the paradigm of the verb includes also the conjugations, which are regarded as belonging to one verb if they have a common root. There are also some who treat two or more of the conjugations (but not all) as part of the same paradigm, for example פָּעַל – פָּעַל – הִתְפַּעֵל or פָּעַל – נִפְעַל. The best English translation for בִּנְיָן would be “verb pattern,” not “conjugation.” The latter term is however kept in the following, since it is commonly used in English works dealing with Hebrew morphology.

16. THE CONJUGATIONS. The verb paradigms are treated almost identically in all accounts, whether traditional or modern, scholarly or pedagogic. There is unanimity on the existence of seven principal conjugations, to which most verbs are related, and also of certain other patterns that have only rare and partial exemplification.

The most acceptable names for the conjugations are based on the form of the third person singular masculine past of a regular root, i.e., of a root having all its consonants in all forms of the paradigm. From the very beginning of Hebrew grammar in the Middle Ages the root פִּעַל has been used for this purpose, under the influence of Arabic grammar. Accordingly, the names of the conjugations are פָּעַל, הִפְעִיל, הִתְפַּעֵל, נִפְעַל, וּפְעַל, פָּעַל (or הִפְעִיל). However, because of the peculiarity of the consonant פ in Hebrew (see Phonology 6), this root has disadvantages which do not apply to the corresponding root in Arabic:

(1) פ cannot be doubled and therefore the names of the conjugations פָּעַל, הִפְעִיל, הִתְפַּעֵל lack the principal formal characteristics of these conjugations, namely, the doubling of the middle radical, e.g., ב in דָּבַר (*dibber*), ל in שָׁלַח (*šallah*), ג in הִתְרַגֵּל (*hitraggel*).

(2) When the פ is the first in a consonantal cluster, it is separated from the following consonant by a semi-vowel הֶטֶף (see above, §13), i.e., ā, ē, or ō. This type of vowel is not found, however, in corresponding verbs that do not have פ in that position. Contrast דָּרְשׁוּ (*darēšu*) with פָּעַלוּ (*pa'alu*), גָּדִי (*gēdi*) with אָדִי (*ādi*).

(3) The פ generally does not close a non-final syllable. When it does according to its pattern, it must be followed by a הֶטֶף. Contrast שִׁמְרִי (*šimri*) with גֹּאֲרִי (*ga'ari*).

(4) The פ sometimes causes changes in preceding vowels, as in the last example (see below §22).

In the 19th century, scholars began to look for another root that would serve to denote the conjugations and decided on קָטַל. This root has two advantages:

(1) none of its consonants has any peculiarities; and
(2) it is found (sometimes in certain variations) in almost all Semitic languages. On the other hand, Hebrew grammarians have pointed out that this root had a serious disadvantage from the educational point of view: its meaning (“to kill”) is unpleasant.

Recently, it has been recognized that it is in fact possible to use the root פ'ע'ל, provided that it is transcribed phonemically without reference to the phonetic properties of the ע. For this purpose, we have repeated (i.e., doubled) the consonant in the Hebrew representation as well as in the transcription. The names of the seven conjugations, according to this approach are: *pa'al* (פָּעַל), *nip'al* (נִפְעַל), *pi'el* (פִּיעֵל), *pu'al* (פּוּעַל), *hitpa'el* (הִתְפַּעֵל), *hip'il* (הִפְעִיל), *hup'al* (הֻפְעַל). Since the transcription in Latin symbols is phonemic and not phonetic, the פ is always symbolized by /p/, even when phonetically it has the value [f]; likewise there is no need to distinguish between פָּתַח and קָמֶץ, both being symbolized by /a/.

Other names have been proposed for the conjugations, which identify them semantically (see below), in particular קָל ("light") and כָּבֵד ("heavy"). Originally, these names covered all seven conjugations: קָל for פָּעַל and נִפְעַל; כָּבֵד for פִּיעֵל, פּוּעַל, and הִתְפַּעֵל; נֹסֵף ("supplemented heavy") or גּוֹרֵם ("causative") for הִפְעִיל and הֻפְעַל. However, the original application was later forgotten. In popular usage and in most textbooks, קָל alone has been retained, but it is restricted to the פָּעַל conjugation. Occasionally, הַבְנֵן הַגּוֹרֵם ("the causative conjugation") is used for הִפְעִיל and הַבְנֵן הַכָּבֵד ("the heavy conjugation") for פִּיעֵל. The decision whether or not conjugations with a common root are to be treated as part of the same verb has great practical significance, not only grammatically but also lexicographically. Dictionaries of modern Hebrew list nouns according to their initial consonants, disregarding whether the consonants are radicals or not, so that, e.g., מְקַרָּא appears under מ and תְּלַבֶּשֶׁת under ת. However, many follow the practice of dictionaries of biblical Hebrew in listing verbs, regardless of conjugation, according to the first radical, e.g., הִלְבִּישׁ under ל next to לָבַשׁ, and נָכַנס under כ, next to כָּנַס, and sometimes, in the same way, even verbs without a corresponding form in פָּעַל, e.g., הִתְכַּוֵּן under כ, because of its root כ'ו'נ'. Some modern popular dictionaries, on the other hand, enter the form of the third person masculine singular past for each conjugation, e.g., הִתְרוֹמַם under ה and נָכַנס under נ, thus following (though probably unconsciously) the view that verbs from the same root in different conjugations are to be treated as independent verbs. (For the advantages of this view for grammar and semantics, see below.)

17. A CONSIDERATION OF EARLIER VIEWS ON THE RELATIONSHIP BETWEEN THE CONJUGATIONS. Those adopting the view (traditional for all Semitic languages) that conjugations of verbs from the same root constitute one paradigm must consider the semantic relationship between the various conjugations. In the extreme formulation of this view, every conjugation is said to have a particular meaning in relation to the "basic form" of the verb, the form פָּעַל. An attempt along these lines has been made, in particular, for biblical Hebrew (see Biblical Hebrew 9). It has resulted in the fabrication of imaginary forms that do not appear in the Bible, and also in the neglect of some forms that do, for example, the נִפְעַל conjugation.

A similar, though less extreme, position is generally taken in textbooks. These also treat the פָּעַל conjugation as the basic form, said to be semantically "simple," but they attempt to establish a semantic relationship for each root between the פָּעַל conjugation and other conjugations, it being assumed that each of these makes some addition to the basic meaning of the פָּעַל. The principal additional meanings, expressed synthetically by a change in the form of the verb, are said to be passive, reflexive, reciprocal, strengthening, durative, iterative, causative, change in state, declarative, and deprivative. Thus, for example, the נִפְעַל is said to express the passive when the active agent is found with the פָּעַל, e.g., שָׁבַר ("he broke") – נִשְׁבַּר ("it was broken") or הִפְעִיל, e.g., הִרְגִּיעַ ("he soothed") – נִרְגַּע ("he was soothed"); reflexive, e.g., נָשָׂא ("he took care of himself") or reciprocal, e.g., נִדְבָּרוּ ("they spoke to one another"). The פִּיעֵל is said to express the strengthening, e.g., שָׁבַר ("he broke") – שָׁבַר ("he smashed"); the durative, e.g., רָקַד ("he danced") – רָקַד ("he danced for a long time"); repetitive, e.g., קָבַר ("he buried") – קָבַר ("he buried many"); causative, e.g., לָמַד ("he learned") – לָמַד ("he taught"); or deprivative, e.g., שָׁרַשׁ ("he uprooted"). The פּוּעַל is said to be the passive equivalent of verbs with the same root in פָּעַל. The הִתְפַּעֵל is explained as denoting the reflexive, e.g., הִתְרַחֵץ ("he washed himself"); reciprocal, e.g., הִתְלַחֲשׁוּ ("they whispered to each other"); passive chiefly when the active is in the פָּעַל, e.g., בָּשַׁל ("he cooked") – הִתְבַּשַּׁל ("it was cooked"); or strengthening, e.g., הִתְנַשֵּׁם ("he breathed strongly"). The הִפְעִיל is said to denote the causative, chiefly when the active is in the פָּעַל, e.g., מָלַךְ ("he reigned") – הִמְלִיךְ ("he made [him] a king"), and consequently changes the verb from intransitive to transitive, e.g., יָשַׁב ("he sat") – הוֹשִׁיב ("he caused to sit," "he set"), or from untransitive to ditransitive, e.g., אָכַל ("he ate") – הִאָּכִיל ("he fed"); a change of state, e.g., הִעֲשִׂיר ("he became rich"), especially a change of color, e.g., הִלְבִּין ("it became white"); or declarative, e.g., צָדִיק ("righteous") – הִצְדִּיק ("he declared as righteous," "he justified"). The הֻפְעַל is considered the passive equivalent of the הִפְעִיל. In addition, some verbs with a "simple" meaning like that of the פָּעַל appear in other conjugations, e.g., נָכַנס ("he entered"), רָחַף ("he hovered"), הִתְנַגֵּד ("he opposed"), הִמָּתֵן ("he waited").

However, this view of the semantic relationships of the conjugations, with the פָּעַל taken as the basic conjugation, does not sufficiently fit the facts. Even a partial examination of Hebrew verbs shows that, except for פָּעַל and הִפְעִיל (which almost always have a predictable relationship with פָּעַל and הִפְעִיל respectively), we cannot automatically predict the meaning of a root in one conjugation from that of the same root in another conjugation. Though there are many instances of predictable semantic relationships between the conjugations, like those given above, in many instances verbs of the same root have no relationship at all or have an unpredictable relationship, e.g., דִּבֶּר ("he spoke") – הִדְבִּיר ("he subdued"); מָהַר ("he bought a wife") – מָהַר ("he hastened"); גָּצַר ("he gathered grapes") – נִבְצַר ("it was withheld") – בָּצַר ("he fortified"); סָפַר ("he counted") – סָפַר ("he told") – הִסְתַּפֵּר ("he had his hair

cut"); סָפַק ("he supplied") – הִסְפִּיק ("he made enough") – הִסְתַּפֵּק ("he had sufficient"); הֵאֱמִין ("he believed") – הִתְאָמֵן ("he trained himself"). It may well be that at an early period of the language, the conjugations constituted a paradigm of predictable semantic relationships similar to the paradigm of changes of person and tense within a conjugation, but as a consequence of the development of meanings of verbs throughout the history of the language, the conjugations cannot now be recognized as belonging to one paradigm.

Similarly, there was once a fixed semantic relationship between nouns of different patterns belonging to the same root. Indeed, even in contemporary Hebrew there are such relationships, e.g., between nouns denoting people with particular occupation such as סַפֵּר ("barber") and the corresponding noun for the place of work, מִסְפָּרָה ("barber shop"). In general, new nouns have been formed in recent times on the appropriate patterns, e.g., קִטְיָה ("season for picking fruit growing on trees") and תְּלִישׁ ("season for picking fruit growing on low bushes") for the seasons of agricultural work; מְרְפָּאָה ("clinic") and מִכְבֵּסָה ("laundry") for places of work. Nevertheless, each noun is treated as an entirely independent noun; the semantic relationship between nouns of the same root has not resulted in their being considered one noun with various patterns.

18. THE EXTENT TO WHICH A PREDICTABLE RELATIONSHIP EXISTS BETWEEN THE CONJUGATIONS. Two forms have predictable relations when they fulfill two conditions: (1) if one of them exists, it follows that the other exists too; (2) when the meaning of one of them is known, the meaning of the other one is self-explanatory. Only forms having predictable relationships with other forms can be considered as belonging to the same paradigm, since only these can be freely used by a speaker though he has never heard them before and are unambiguous to the hearer though he has never encountered them before. For example, within one conjugation there are predictable relationships between forms varying only in person or tense, such as שְׁמַרְתִּי – שְׁמַרְתָּ – שְׁמַרְתֶּם – שְׁמַרְתִּים. Similarly, the relationships between verbs in פָּעַל and הִפְעִיל and verbs of the same root in פָּעַל and הִפְעִיל, respectively, are virtually predictable. There is not complete predictability because some intransitive verbs in פָּעַל, e.g., טָיַל ("he went for a walk") and רָחַף ("he hovered"), and in הִפְעִיל, e.g., הִסְמִיק ("he became red") and הִחְלִיד ("he [it] became rusty") either do not have corresponding forms in פָּעַל or הִפְעִיל or, if they do, these do not express a passive meaning.

Predictable relationships between פָּעַל and נִפְעַל (with respect either to the existence of one form if the other exists or to the stipulated semantic relationship) apply only to some verbs. Thus, there is no corresponding form in the other conjugation for יָרַד ("he descended"), נִבְהַל ("he was alarmed"), or נִשְׁבַּע ("he swore"), and a predictable active-passive relationship is lacking between יָשַׁב ("he sat") – נִשְׁבַּח ("it was inhabited"); כָּנַס ("he assembled") – נִכְנַס ("he entered"); יָשָׁן ("he slept") – נִשְׁחַל ("he was old"). Even less predictable are the relationships

between פָּעַל and פָּעַל. It is impossible to know whether the change from פָּעַל to פָּעַל will entail strengthening, lengthening, repetition, causation, or some other meaning, which might be completely different from that of פָּעַל, e.g., שָׁחַק ("he played") – שָׁחַק ("he laughed"), חָנַךְ ("he educated") – חָנַךְ ("he inaugurated"), בָּשַׁל ("he cooked") – בָּשַׁל ("it ripened"). Moreover, there are many verbs in פָּעַל that have no corresponding forms in פָּעַל, e.g., טָיַל ("he went for a walk"), נָנַב ("he routed the rear"), חִדֵּשׁ ("he renewed"), חִיךְ ("he smiled"), צִוָּה ("he commanded").

Similarly, it is impossible to be confident that the הִפְעִיל will express the causative of the פָּעַל, since many verbs in הִפְעִיל do not have any semantic connection with the same root in the פָּעַל, or have an unpredictable relationship, e.g., יָרַק ("he spat") – הוֹרִיק ("it became green"); סָרַט ("he scratched") – הִסְרִיט ("he filmed"); רָצָה ("he wanted") – הִרְצָה ("he lectured"). Furthermore, there are some verbs in הִפְעִיל whose passive is in נִפְעַל as well as in הִפְעִיל (occasionally with some difference in nuance), e.g., הִתְרַחַץ ("he deterred") – נִתְרַחַץ ("he published"), and these somewhat disturb the predictability in relationship between הִפְעִיל and הִפְעִיל.

There is certainly no predictable relationship between פָּעַל and הִתְפַּעֵל. Not only are there two large categories of semantic relationships, exemplified, on the one hand, by רָחַץ ("he washed") – הִתְרַחַץ ("he washed himself"), and on the other, by כָּתַב ("he wrote") – הִתְכַּתֵּב ("he had a correspondence with [someone]"), but there are also many verbs appearing in only one of these conjugations, e.g., גָּזַל ("he robbed") and הִתְקַרַּר ("he caught a cold"), or which have independent meanings in the two conjugations, e.g., סָפַר ("he counted") – הִסְתַּפֵּר ("he had his hair cut"). The semantic relationships between other conjugations, such as פָּעַל – הִתְפַּעֵל or פָּעַל – הִפְעִיל are also unpredictable in similar respects.

An awareness of this situation requires a consideration of the conjugations not as an inflection of one verb but as a set of different verb patterns related by derivation. The relationships between פָּעַל and פָּעַל and between הִפְעִיל and הִפְעִיל may perhaps be an exception to this generalization.

19. THE INFLECTION OF THE VERB. The inflection of a verb includes all forms of the verb that vary in pronominal subject or object, e.g., יִשְׁמַר ("he will guard") – יִשְׁמְרוּ ("he will guard him"), gender, number, tense, and modality. In traditional literary language, modal differences are chiefly expressed synthetically in the verb itself by certain additions to the normal forms, e.g., אֶשְׁמַר – אֶשְׁמְרָה, but sometimes auxiliary verbs have this function (see Syntax). Differences in tense include not only the distinctions between past, present, and future, but also forms having a modal character, e.g., the imperative, and those that lack a time distinction, e.g., the construct infinitive, the absolute infinitive, and the action noun. These last three can be used in nonverbal functions as well as the present form which can also function as a noun in all respects. The affixed pronominal forms, which by their characteristics and by their place in the verb determine not only the

subject and object but also the tense, are the inflectional morphemes, and are attached to the basic form, the inflectional base. The relationship between the inflectional base and the inflectional morphemes is similar to that between basic element and formative (see above 3. The Basic Element; 4. The Formative and the Morpheme), except that the combination of the latter results in a new word with a separate entry in the dictionary, since it is a derivational process and lacks the completely predictable semantic relationship of an inflectional process. In the *הִפְעֵל*, *הִפְעַל*, and *הִפְעִל* conjugations, the same base serves for all the tenses, but in the other conjugations different bases are used, as can be seen in the table below. The existence of more than one inflectional base in a paradigm is not unique to the conjugations: there are some noun patterns with the same feature.

Inflectional Bases in the Conjugations. (In phonemic transcription, in which *šewa* is not marked; see Phonology: 13. The *Šewa* and *Ḥatefs*.) (See Table: Hebrew Grammar 1.)

The same inflectional morphemes are used for the same tense in the various bases, though between base and affixed morpheme there may develop sometimes transitional phones and other phonetic phenomena that can be described precisely in a few rules. The inflectional morphemes of past and imperative are suffixes, while those of future are prefixes, except that in the second and third person plural, and in the second person feminine singular there are also suffixes identical with those of the imperative. The inflectional morphemes of the participle are those for gender and number in nouns (see 11. The Declension of the Nouns) and do not vary with change of person. In addition, the forms of the participle in all the conjugations except *הִפְעֵל* and *הִפְעַל* are prefixed by the morpheme *m* (sometimes a vowel is inserted after the *m*, see below). The inflectional morphemes of the construct infinitive resemble the inflectional morphemes of nouns (see above 11. The Declension of the Nouns). Every verb which can be followed by an object (usually only a direct object) can take, after the inflectional morphemes already mentioned, an additional inflectional morpheme, the objective pronoun (for details, see below 21. Inflections of Weak Verbs).

Table: Hebrew Grammar 1

	Past	Participle	Future	Imp.	Inf.
<i>Pa'al</i>	<i>šamár</i>	<i>šómér</i>		<i>šmór</i>	<i>šmór</i>
		<i>lebéš</i>		<i>lbáš</i>	
<i>Nip'al</i>		<i>nišmár</i>		<i>hiššamér</i>	
<i>Pi'el</i>	<i>dibbér</i>			<i>dabbér</i>	
<i>Pu'al</i>		<i>dubbár</i>			
<i>Hitpa'el</i>			<i>hitgabbér</i>		
<i>Hip'il</i>	<i>hiṭṭíl</i>		<i>haṭṭíl</i>		
<i>Hup'al</i>		<i>huḥlāt</i>			

Note: The following changes affect the inflectional base of the *הִפְעֵל*:

- (1) When the first radical is *š*, *ṣ*, *š*, *ṣ*, or *ṣ* it precedes the *t* (see Phonology 6, 17). This change is optional if the first radical is *ṣ* or *ṣ*.
- (2) The *t* is changed to *d* after *ṣ* and *ṣ*, and to *ṭ* after *ṣ* and *ṣ*.

The following are the affixed pronominal inflectional morphemes denoting the subject:

To the inflectional base (= -) of the Past

Singular:	1 st Person	Common	- <i>ti</i>
	2 nd Person	Masculine	- <i>ta</i>
		Feminine	- <i>t</i>
	3 rd Person	Masculine	- <i>ø</i>
		Feminine	- <i>a</i>
Plural:	1 st Person	Common	- <i>nu</i>
	2 nd Person	Masculine	- <i>tem</i>
		Feminine	- <i>ten</i>
	3 rd Person	Common	- <i>u</i>

To the inflectional base (= -) of the Future

Singular:	1 st Person	Common	' -
	2 nd Person	Masculine	<i>t</i> -
		Feminine	<i>t</i> - <i>i</i>
	3 rd Person	Masculine	<i>y</i> -
		Feminine	<i>t</i> -
Plural:	1 st Person	Common	<i>n</i> -
	2 nd Person	Masculine	<i>t</i> - <i>u</i>
		Feminine	*(<i>t</i> - <i>na</i>)
	3 rd Person	Masculine	<i>y</i> - <i>u</i>
		Feminine	*(<i>t</i> - <i>na</i>)

To the inflectional base (= -) of the Imperative

Singular:	2 nd Person	Masculine	- <i>ø</i>
		Feminine	- <i>i</i>
Plural:	2 nd Person	Masculine	- <i>u</i>
		Feminine	- *(<i>na</i>)

*The masculine forms of the same person are usually used instead of these. The form given in parentheses is the prevailing one in biblical Hebrew, but nowadays it is considered a possible variant only. To some extent, especially in the colloquial language, the masculine form of the second person plural in the past is also used for feminine. See also note 8 of the following section.

20. CHANGES IN THE BASE. The following rules describe the principal changes affecting the form of the verb when the inflectional morpheme is affixed to the base:

(A) Prefix.

(1) *h* at the beginning of the base is omitted after future and participle prefixes (but not when *ב*, *נ*, or *ל* come before the construct infinitive).

t + *hiššamér* → *tiššamér* → *tiššamer*

y + *haṭṭíl* → *yathíl*

but *l* + *hitgabbér* → *lhitgabbér*

(2) When by adding a consonant before a base, the result is a form with a cluster of three consonants at the beginning, a vowel (generally *i*) is inserted between the first two consonants, namely between the prefix and the first conso-

nant of the base. (This is a general rule which applies to the future and infinitive of *pa'al*, as well as to many other forms, e.g., below 7).

n + šmór → nšmór → nišmór

(3) After the prefix ^ʔ, the vowel *e* instead of *i* is used in rule 2 and when a preceding *h* is omitted (rule 1). See also the beginning of 22. Inflections of Weak Verbs.

^ʔ + *šmór* → ^ʔ*šmór* → ^ʔ*ešmór*

^ʔ + *hitgabbér* → ^ʔ*hitgabbér* → ^ʔ*itgabbér* → ^ʔ*etgabbér*

There are a few exceptions, chiefly in biblical Hebrew, where *i* follows the prefix ^ʔ.

(B) Suffix.

(4) The vowel before the last consonant of the past base, whether *é* or *í*, changes to *á* before any suffix beginning with a consonant.

dibbér + ti → dibbárti; hitḥíl + ta → hitḥálta

(5) When the suffix is a vowel, the vowels *é*, *ó*, and *á* before the last consonant of the base generally remain only in forms used in classical Hebrew, especially at the end of a sentence. ("Pausal forms.")

huggáš + a → huggáša

hadál + i → hadáli

šamár + u → šamáru

However, they disappear (become *šewa*) in the regular form of the verb, when the accent is on the syllable of the suffix.

šamár + á → šamrá (or *šam^{ra}*)

dibbér + u → dibbrú (= *dibb^{ru}*)

See below for some uses of pausal forms in contemporary Hebrew. However, the vowel *i* does not disappear:

hitḥíl → hitḥílu

(6) The vowel *í* in the imperative and future base of הפעיל changes to *é* before the suffix *-na*.

t + hatḥíl + na → tatḥél^{na}

And in the imperative before the suffix *ø*, *í* changes to *é*: *hatḥíl + ø → hatḥél*

(7) If through the disappearance of *é*, *ó*, or *á* (according to 5) a cluster of three consonants is created at the beginning of the word, a vowel is inserted between the first two (as in 2). When the third consonant is *b*, *k*, *p* – it is realized as the corresponding fricative variant, i.e., *v*, *x*, *f*.

šmór + i → šmóri → šmri → šimrí (imperative of הפעל),

and similarly with construct infinitive, e.g.,

l + šmór + ó → l + šmró → l + šomró → lšomró.

(8) The vowels *a* and *e* in an open syllable before the accent disappear when the accent moves to the end of the bases:

labéš + im → labešim → lbešim

šamár + tém → šamartém → šmartém

In colloquial language, the suffix *-tem* is unaccented. It is used for both masculine and feminine. Since the accent does not shift, *a* and *e* do not disappear:

šamár + tem → šamártem (col.)

(9) The vowel *é* in the last syllable of the participle base (except for the base *labéš*) disappears when a suffix beginning with a vowel is attached to the base. (Such a suffix attached

to a participle, which is a nominal suffix, is always accented. But see the next rule.)

mdabbér + im → mdabbrim

šomér + á → šomrá

(10) If the suffix *-t* (but not *-át*) is attached to the participle base as the feminine inflectional morpheme, the result is a form ending in two consonants, which is treated like the segholates (see above 6).

nišmár + t → nišmárt → nišméret

mdabbér + t → mdabbért → mdabbéret

Notes:

(1) The attachment of the suffix *ø* to the base usually does not affect the form of the base, except for phonetic changes, e.g., the change of קמץ to פתח in the last syllable of the base (but see rule 6, above).

šamár (= שמר) + *ø* → *šamár* (= שמר).

(2) The theoretical form of the base is also the form that is realized at the end of a sentence. In general, the "pausal forms" of all the persons are the forms from which it is possible to produce the regular forms by the rules of inflection detailed above. It should be further noted that some "pausal forms" are sometimes used in ordinary speech, and not necessarily at the ends of sentences, e.g., הנהיגה לא הוכנה כראוי, הבו לנו.

21. THE INFLECTION OF OBJECTIVE PRONOUNS. (1) For the objective inflection the forms of the verb containing the subjective pronoun serve as the inflectional base (see 19, 20). The inflectional morphemes denoting objective pronouns are as follows:

Singular:	1 st Person	Common	<i>ni</i>
	2 nd Person	Masculine	<i>ka</i>
		Feminine	<i>k</i>
	3 rd Person	Masculine	<i>hu, w, o</i>
		Feminine	<i>ha, h</i>
Plural:	1 st Person	Common	<i>nu</i>
	2 nd Person	Masculine	<i>kém</i>
		Feminine	<i>kén</i>
	3 rd Person	Masculine	<i>m</i>
		Feminine	<i>n</i>

These inflectional morphemes are, in the main, attached to all the bases of the verb, but there is not always free variation in the inflectional morphemes of the third person singular, the choice of which sometimes depends on the nature of the base. Thus, the morphemes *h* and *o* are not affixed to the base *šamárti*, and others like it. The inflectional morphemes affixed to participle bases are generally the possessive inflectional morphemes of the noun (see above, 11).

(2) Changes in the Base. These inflectional morphemes generally cause changes in the vowels of the base, because the accent of the base usually moves forward when the inflectional morpheme is attached. As a result of the movement of the accent, vowels disappear, mainly according to regular phonetic principles (see Phonology 16).

šamárti + kém → šmartikém

(see above 20, rule 8.)

šamáru + ni → *šmarúní*

tišmóri + m → *tišmrím*

(the base vowels *á*, *ó* disappear, see above 20. Changes in the Base, paragraph no. 5.)

A striking change in the past form ending in *tém* or *tén* is the change of this suffix to *tú* when this form serves as the base for the objective inflection.

šmartém + ni → *šmartún*

(3) Transitional Phones. In several bases transitional phones are created between the base and the inflectional morpheme:

(1) The vowel *i* is added to the base of the second person feminine singular past:

šamárt + hu → *šmartíhu*

šamárt + nu → *šmartínu*

(2) *t* is added to the base of the third person feminine singular past with shift of accent:

šamára + ni → *šmarátini*

šamára + kém → *šmaratkém*

(3) The vowel *á* is added to the base of the third person masculine singular past:

šamár + nu → *šmaránu*

šamár + m → *šmáram*

But before the morpheme *k* (second person feminine singular) the inserted vowel is *é*:

šamár + k → *šmarék*

(4) The vowel *é* is added to the future bases ending in a consonant:

tišmór + ni → *tišmréni*

yilbaš + m → *yilbašém*

The vowel *á* of the future and imperative base of *lbáš* pattern does not disappear, unlike *é* and *ó* in other future and imperative bases. (See Phonology 16:2, 4.) Contrast future bases ending in a vowel, e.g.,

tišmóri + ni → *tišmríni*

yišmóru + m → *yišmrúm*

yilbášu + n → *yilbašún*

The transitional vowel *á* (and sometimes *é*) is affixed to the infinitive base:

lišmór + ni → *lišmoréni* (cf. 20.2)

laqáḥat + m → *laqáḥtám*

22. INFLECTIONS OF WEAK VERBS. This concept is first discussed above in 2 (end), where it is stated that because of a phonetic characteristic of one of the radicals it may sometimes happen that two realizations of the same pattern may be different. The simplest change is that resulting from the peculiar phonetic characteristics of the gutturals *א*, *ה*, *ח*, and *ע* (see Phonology 6, Morphology 16). Their presence sometimes necessitates a vowel not found in the corresponding form without a guttural, e.g.,

yišmór/yaḥboṭ; yilbaš/yeḥdal

In these cases, the high vowel *i* is replaced by a lower vowel, *e* or *a*, next to a guttural. (See also rule 3 in 20.) In ad-

dition, between a non-final guttural and the following consonant a vowel *חטף* is sometimes inserted, usually corresponding to the preceding vowel, e.g., *yaḥámol*, *yeḥzaq*, *yo'omad*, but also *mu'amad*. In the case of *ה*, *ח*, and *ע* if as the third radical it ends the word, and there is no vowel *a* preceding it, then a preceding *a* is inserted, e.g., *nizzéah*, *yaškiah*. With respect to *א* in this situation, see below 24.4. The impossibility of doubling the gutturals and *ר* (Phonology 8, Morphology 16) causes changes in preceding vowels when doubling is required in corresponding forms. The changes are from short vowels to long vowels, and are known in grammar as "compensation for the *dageš*." Sometimes, the change is expressed merely orthographically, e.g., in the pattern *ydabber*:

יפאר, יפרש instead of *יפֿרש, יפֿאר*

but sometimes it is also audible in modern pronunciation, e.g., in the pattern *mdubbar*:

מיער, מיער instead of *מֿיער, מֿיער*

פרש, תאר instead of *פֿרש, תֿאר*

Apart from the gutturals and *ר*, there are two characteristics that cause changes in the forms:

(1) Assimilation, when one consonant completely assimilates another consonant, usually regressive assimilation.

‡yinpól → *yippól*; *‡yilqah* → *yiqqah*

(2) Elision, when one of the radicals is *א*, *י*, or *ו*:

qar'ú, but *qrátém*

yašanta, but *tišán* (*‡ tiyšán*)

šaléw, but *šalíti*

The conditions for these changes are that, for assimilation, the assimilated consonant be at the end of a non-final syllable, and for elision, the elided consonant be at the end of any syllable. (See below, in this connection, forms of verbs with identical second and third radicals, e.g., *נסב, סב*.)

23. PARADIGMS OF ASSIMILATED FORMS. Typical of paradigms of assimilated forms is the presence of duplication of consonants in the middle of the verb. These paradigms are more often known as paradigms of defective verbs. This term derives from a study of the written language, since in the Hebrew script duplication is indicated by only one letter (with a point, "*dageš forte*," inserted in it). As a result, when a consonant is assimilated to its neighbor, one letter is missing from the script, that of the assimilated consonant. The term *assimilated* derives from a study of the phonetic characteristics of the language and an observation of the phonetic processes of assimilation as the principal characteristic typifying the membership of the root in this paradigm. However, there are a few instances in these paradigms of omission of a consonant and not its assimilation.

1. Defective *פ"נ* and Defective *פ"י* (Better: assimilated *נ"פ* and assimilated *י"פ*). The paradigm of this type with most roots is known as defective *נ"פ* (see Phonology 7), which comprises roots whose first radical is *נ*. This *נ* is assimilated to the second consonant of the root in certain circumstances, e.g.,

‡ yinpól (*//yišmor*) → *yippól*

‡ ninžal (*//nišmar*) → *nizžal*

As stated at the end of 22, this assimilation occurs only when the assimilated consonant comes at the end of a non-final syllable. Most roots with **נ** as the first radical belong to this paradigm, but not all: sometimes the **נ** appears even when the condition exists for its assimilation. This is so when the second radical is a guttural, e.g., *yinham*, *yan'im*. (There are only two or three roots where the **נ** is assimilated to a guttural in some forms.) And it is so in a sizeable number of other roots, e.g., *yanzihu*, *yinbor*, especially in verbs or forms that have been coined in recent times. It is worth pointing out that the facility for assimilating the **נ** has become a means of distinguishing between different meanings, e.g., *yanbiṭ* ("will cause to bud") versus *yabbiṭ* ("will look"), *yangid* ("will put contradictory items") versus *yaggid* ("will tell"), including meanings of verbal nouns, e.g., *hangada* versus *haggada*, *hankara* ("alienation") versus *hakkara* ("consciousness"). The root **נִקְחַ** is generally included in this paradigm because of the assimilation of its first radical, even though it is **ל** and not **נ**.

A parallel paradigm is that of defective **פֿ**, which comprises roots whose first radical **פֿ** assimilates to the second. There are only six or seven roots in this paradigm, e.g., *yazb* (*yazzib*, *hizzib*), *yzq* (*nizdaq*, *nizzoq*). The bases of verbs that are defective **פֿ** and **פֿ** hardly differ from those of regular paradigms, which are detailed in 20, and the same changes of base occur, which are included in those rules. The exception is that the imperative bases in **פֿעַל** (*lbaš*, *šmor*) tend in the **פֿנִי** and **פֿי** paradigms to lose the first radical without any substitution, e.g., *pol* (for *npol*), *ga'* (for *nga'*). In these imperative forms there is therefore a true loss and not an assimilation (see Biblical Hebrew 10). With the root **נָתַן** the last **נ** is assimilated to the following consonants in cases like *natánti* → *nattáti* and in **נָתַתְּ**. This last form is to be understood as a development of a feminine infinitive, in which *t* is added to the radicals. Other infinitives like this occur mainly in biblical Hebrew, e.g., **נָתַתְּ**, **נָתַתְּ**. This construction as an infinitive is not productive nowadays, and most instances that are still used belong to the **פֿנִי** or **פֿי** paradigms, e.g., **נָתַתְּ**, **נָתַתְּ**. A similar process has occurred with the biblical form **נָתַתְּ** for the root **נָתַתְּ**, which must be understood as *laladt* → *lallat* → *lalat*.

2. Verbs with duplicated second radical or geminates are usually included among the defective paradigms. This can be justified not because in certain forms one letter is written symbolizing both the second and third radicals, e.g., **סָבַב**, but because in other cases the last radical is entirely omitted, e.g., **סָבַב**, **נָסַב**. But two points must be made clear: (a) In the inflections of roots in this paradigm, assimilation does not take place, since the two neighboring consonants written with gemination are identical; there is nothing unique in their being symbolized by one letter, since all gemination is symbolized in Hebrew script by one letter. Gemination is similarly symbolized by one letter in words like *natánnu* (**נָתַנּוּ**), *karátti* (**כָּרַתְּ**). (b) The omission of the third radical in forms like **סָבַב**, **נָסַב** is only a realization rule, a phonetic rule, and does not convey anything about the theoretical structure of the word. The omission occurs, therefore, on the final level of the lan-

guage, since there is a general rule in Hebrew that gemination of consonants does not occur at the end of a word, one consonant alone remaining instead. A theoretical form like *sabb* changes, therefore, to *sab* without any assimilation, just as with words like **לָבַד**, **דָּבַד**, **חָקַק**, in all of which gemination occurs with the last radical when it appears in the middle of the word, e.g., **לָבַדְתִּי**, **דָּבַדְתִּי**, **חָקַקְתִּי**. (See Table: Hebrew Grammar 2.)

Table: Hebrew Grammar 2

	Past Participle	Future Imp. Inf.
<i>Pa'al</i>	<i>sább</i>	<i>sóbb</i> <i>qáll</i>
<i>Nip'al</i>	<i>nasább</i>	<i>hissább</i>
<i>Pi'el</i>		<i>sobéb</i>
<i>Pu'al</i>	<i>sobáb</i>	
<i>Hitpa'el</i>		<i>hitsobéb</i>
<i>Hip'il</i>	<i>hesébb</i>	<i>hasébb</i>
<i>Hup'al</i>	<i>husább</i>	

The regular inflectional morphemes (19) are attached also to the bases of this paradigm, and rules 1, 3–5, 8–10 set out in 20 apply also to these bases, e.g.,

- t* + *hitsobéb* → *thistobeb* → *tistobeb* (20.1)
- '* + *hitsobéb* → *'estobeb* (20.3)
- sobéb* + *ti* → *sobábt* (20.4)
- sobáb* + *u* → *sobábu* (pausal form) → *sobábu* (20.5)
- nasább* + *á* → *nasabbá* → *nsabbá* (20.8)
- m* + *sobéb* + *ím* = *msobébím* (20.9)
- m* + *sobéb* + *t* → *msobébt* → *msobébet* (20.10)

The principal phenomena that are peculiar to the rules for affixation of inflectional morphemes to bases of geminates are as follows:

Prefixed Morpheme: (1) a transitional vowel appears between the prefixed morpheme and the future bases of **פֿעַל** if the accent is on the base. Before the base *sobb* the transitional vowel is *a*, while before the *qall* it is *e*:

- y* + *sobb* → *y* + *a* + *sobb* → *yasóbb* → *yasób*
- y* + *sobb* + *u* → *y* + *a* + *sobb* + *u* → *yasóbbu*
- y* + *qáll* + *u* → *y* + *e* + *qáll* + *u* → *yeqállu*

The same applies when **ל** is affixed to the infinitive base:

- l* + *sobb* → *lasóbb* → *lasób*

Suffixed Morpheme: (2) when a suffix beginning with a consonant is attached to a base ending with gemination, the transitional vowel *o* is generally inserted between them, with *e* instead of *o* preceding – *na*:

- sább* + *ti* + *sább* + *ó* + *ti* → *sabbótii*
- sább* + *tém* → *sább* + *o* + *tém* → *sabbotém*
- hissább* + *na* → *hissább* + *é* + *na* → *hissabbéna*

(3) However, there are forms lacking this transitional vowel which lose the gemination of the base before a suffix beginning with a consonant, as if it was at the end of the word:

- hissább* + *na* → *hissábna* = [*hissávna*]
- hussább* + *ta* → *husábta* = [*husávta*]
- hesébb* + *nu* → *hesábnnu* = [*hesávnu*]

(4) The vowel *e* before gemination of the base is changed to *i*, and *o* to *u* when the accent is after the gemination:

sóbb + na → *sóbb + é + na* → *subbéná*

m + hesébb + im → *mesébbím* → *msibbím*

(5) As usual with a consonant cluster whose first consonant is *h*, a half-vowel appears in this situation:

hasébb + nu → *hasébb + ó + nu* → *hsibbónu* → [hāsib-bónu]

24. PARADIGMS OF MUTE FORMS. The term “mute” refers to the phonetic process occurring to various inflectional forms in which the consonants א, ל and י of the root cease to be pronounced, becoming mute. (With respect to ה, see below.) Subclassification of these paradigms is based on the identity of the mute consonant and on its place in the root: mute א פ; mute י פ; mute ע פ; mute א ל; mute י ל. There are very few instances of mute י פ and mute י ל; these are therefore usually not treated separately, but are included under mute י פ and mute י ל respectively.

1. Mute א פ. There are only five roots in this paradigm. א is mute chiefly in future forms of פֿעל, e.g., יֹאכֵל, יֹאכֵד, יֹאפֵה. There are a few instances of other forms with mute א, e.g., נֹאחֻז. The vowel *o* appears in a syllable in which א is mute.

2. Mute י פ. This paradigm comprises two subclasses, distinguished by the vowel of the syllable in which י is muted: הִירִיק, e.g., יִינֵק, יִינֵק, or הִירִיק, e.g., יִשֵּׁב, יִדֵּעַ. This latter subclass is assigned by many grammarians to defective פֿי paradigm, chiefly because the letter י is not written in many of the forms. It is true that in the inflectional base of future, imperative, and infinitive of פֿעל the first radical is omitted (see below in the table of bases in this paradigm: *red*). However, the defective paradigms are characterized not by omissions, but by the assimilation of a consonant to its neighbor, and in this paradigm there is no such assimilation (compare above, 23:1). Consequently, this subclass belongs to the mute paradigms. Historically, only forms with הִירִיק as vowel of prefix give convincing proof of an original י as first radical, while those with הִירֵה suggest an original ל. The difference is not apparent in the future forms of פֿעל, but it is very clear in the הִפְעִיל, הִינִיק, הִינִיק as opposed to הִוִּיד, הִוִּיב. The vowel *o* following the ה is the result of monophthongization of *aw*, the original forms probably being *hawrid*, *hawšib* (see Phonology 15), while הִינִיק, הִינִיק result from the monophthongization of *hayniq*, *hayšir*. (Evidence of this is also to be found in forms like מִיִּשְׁרִים, מִיִּשְׁרִים, where monophthongization has not taken place.)

Inflectional Bases of Mute פֿי Paradigm. The bases of פֿעל, פֿעל, and הִתְפַּעֵל are identical to those of regular verbs, see 19. (See Table: Hebrew Grammar 3.) The rules for inflection given in 20 apply to all inflections in this paradigm. Special attention should be paid to the following:

(1) The first radical י is mute when by rule 20.2 it is preceded by the vowel *i*:

Table: Hebrew Grammar 3

	Past	Participle	Future	Imperative	Infinitive
<i>Pa'al</i>	<i>yarad</i>	<i>yoréd</i>	<i>réd</i>		<i>redt</i>
		<i>yašen</i>	<i>yšan</i>		<i>yšon</i>
<i>Nip'al</i>	<i>nolád</i>			<i>hiwwaléd</i>	
<i>Hip'al</i>			<i>holíd</i>		
			<i>heniq</i>		
<i>Hup'al</i>		<i>hurád</i>			

t + yšan → *tiyšan* → *tišan* (rule 20.3 does not apply);

(2) Before the base for future, imperative, and infinitive of פֿעל *red*, the transitional vowel *e* is inserted:

t + red → *t + e + red* → *teréd*

(3) The infinitive base of פֿעל given in parentheses follows a development characteristic of the segholates, e.g., *redt* → *rédet*, and the transitional vowel *a* is inserted before it and after the prefix *l*, e.g., *l + redt* → *l + a + redt* → *larédet* (when the infinitive is in the construct state, no transitional vowel is inserted).

3. Mute י פ. The distinction between ע פ and י פ is evident only in the inflectional base for the future, imperative, and infinitive of פֿעל, exemplified by *qum* in ע פ and *šir* in י פ.

Since this description is restricted to contemporary Hebrew, there is no discussion of the difficult problem, still disputed, as to whether the roots of this paradigm were originally bilateral and at a later stage ל or י developed between the two consonants, or whether they were originally trilateral and subsequently the middle consonant, ל or י, was muted (see Biblical Hebrew 10, Morphology 2). For our purpose it is sufficient to point out that the name of this paradigm is based on the second possibility. On the other hand, there is evidence of the formation of regular trilateral roots (19) through the development into a consonant of a medial ל or י e.g., תִּנֶּה from תוֹךְ, בִּיֵּן from בִּיֵּן. However, it should be mentioned that most of the creations are in פֿעל (as in the above examples) or in פֿעל and הִתְפַּעֵל (e.g., הִתְגַּדֵּר, מִגִּדֵּר), that is to say in patterns where the middle radical should be doubled and hence greater attention is paid to it. When the development of a medial ל or י does not take place, the inflection for פֿעל, פֿעל, and הִתְפַּעֵל in this paradigm is identical to that of geminates described in the preceding section.

Inflectional Bases of Mute ע פ–י פ Paradigm. The inflectional morphemes detailed in 20 are affixed to these bases according to rules 1, 3, 4, 5 (but rule 5 does not apply to the bases *qám*, *nakón*), 6, 8, 10 listed in 20. (See Table: Hebrew Grammar 4.) In addition, transitional vowels are formed according to rules 1 and 2 stated for the geminates (see section on verbs with duplicated radicals in Paradigms of Assimilated Forms above), with only a slight difference: the transitional vowel of the prefix is always *a* (except for the base of the verb בּוֹשֵׁ – which serves both past and future – where it is *e*). The following rules are peculiar to this paradigm:

Table: Hebrew Grammar 4

	Past and Participle	Future Imp. Inf.
<i>Pa'al</i>	<i>qám</i>	<i>qúm</i>
<i>Nip'al</i>	<i>nakón</i>	<i>šír</i>
<i>Hip'il</i>	<i>heqím</i>	<i>hikkón</i>
<i>Hup'al</i>	<i>huqám</i>	<i>haqím</i>

(1) The vowel *ú* of *qúm* changes to *o* before the suffix – *na*:

qúm + *na* → *qómna*

(2) The vowel *ó* generally changes to *u* before the transitional vowel *ó*:

nakón + *t* → *nakón* + *ó* + *t* → *nkunót*

Here are some additional examples of the production of forms:

(1) (rule 1) *t* + *haqím* → *taqím*

(2) (rule 3) ' + *hikkón* → 'ikkón → 'ekkón

(3) (rule 4) *heqím* + *ta* → *heqámta*

(4) (rule 5) *huqám* + *u* → *huqámu* (pausal form) →

huqmú,

but

qám + *u* → *qámu*

nakón + *a* → *nakóna*

(5) (rule 6) *haqím* + *na* → *haqémna*

(6) *heqámtem* (rule 4) → *hqamtém* (rule 8) → [hāqamtém]

(by rule 5 in the geminate paradigm)

(7) *m* + *huqám* + *t* → *muqámt* (rule 1) → *muqámet* →

muqémet (rule 10).

Examples of the rules for transitional vowels:

(8) *t* + *qúm* → *t* + *a* + *qúm* → *taqúm* (geminate – 1) but

n + *boš* → *nebōš*

(9) *heqím* + *ta* → *heqím* + *ó* + *ta* (geminate – 2) →

hqimóta (rule 8) → [hāqimóta] (geminate – 5)

For an example where a transitional vowel is not formed, see (3) geminate.

4. Mute Third Radical. With respect to the roots in this paradigm too, it can be argued that they were originally bilateral with a third consonant developing in the final position. Indeed, there is evidence in several cases of such a development (see above, Morphology 2: 'ח'א, 'ה'ח). However, the more common view is that these roots were originally trilateral and the final consonant was muted in certain circumstances. This view finds support in the history of Hebrew and other Semitic languages. It is worth pointing out that Hebrew has only a few instances of the existence of ʾ as a third radical (as in שְׁלִיחַ), apparently because already at an early stage the ʾ in such roots was changed to ʿ. It should also be mentioned that the popular name ל"ל is based on the written language and not the spoken, since while the third person masculine singular past forms of these roots are indeed written with final ה, a consideration of the whole of the inflection shows that the final consonant is really ʿ, e.g., in forms like the passive participle רָצוּי or verbal noun in פָּעִלָּה רָצִיָּה *rziya* (like *šmira*); verbal noun in פָּעַל *niqqay* (like *dibbur*); and in various noun forms, e.g., *niqqayon*. Finally, it may be noted that in many instances there is an overlap between roots in the paradigms ל"ל and ל"י, e.g., הִשְׁקָאָה (as well as הִשְׁקִיָּה) from 'ש'ק'י, הִרְצָאָה from 'ר'צ'י. The reverse phenomenon is especially common: forms with a root from the paradigm ל"ל but with their inflection following that of ל"י, e.g., בָּטוּי (ב'ט'א). In mishnaic Hebrew this was the general practice, which was apparently reinforced through the influence of contemporary Aramaic, in which the ל"ל paradigm was completely lost and its forms became identical to those of ל"י. However, it would not be correct to argue that this is a phenomenon restricted to mishnaic Hebrew: the transition is reflected in the pointing of the biblical text, and most of the instances can be explained as deriving from an internal phonetic development, namely, the elision of א when it is second in a consonantal cluster, e.g., הוֹטְאִים ← הוֹטְאִים. Forms common in mishnaic Hebrew, e.g., מְצִינָה, מְצִינָה, serve nowadays merely as stylistic variants.

Inflectional Bases of Mute ל"ל Paradigm. The inflectional morphemes listed in 19 are affixed to the bases of this paradigm and the rules detailed in 20 apply (with the reservations stated immediately below for rules 4 and 10). (See Table: Hebrew Grammar 5.) The following rules are specific to this paradigm:

(1) ' is mute at the end of a word, and in the middle of a word before a suffix beginning with a consonant:

qoré' → *qoré*

qará' + *ti* → *qaráti*

millé' + *ta* → *milléta*

Similarly:

m + *hitmallé'* + *t* → *mitmallét*

i.e., rule 10 of 20 does not apply to this paradigm, because the elision of ' prevents the creation of a segholate form.

(2) Instead of rule 4 of 20 the following rule applies to this paradigm: *a* and *i* in past bases (except of פָּעַל) change to *e* before suffixes beginning with a consonant:

nigrá' + *ti* → *nigráti* (rule 1) → *nigréti*

hiqrí' + *nu* → *hiqrínu* (rule 1) → *hiqrénu*

Note: In a small number of roots in the past base of פָּעַל the second vowel is always *é*, e.g., *zamé'*, *malé'*.

5. Mute ל"י.

Table: Hebrew Grammar 5

	Past	Participle	Future Imp.	Inf.
<i>Pa'al</i>	<i>qará'</i>	<i>qore'</i>	<i>qra'</i>	<i>qro'</i>
<i>Nip'al</i>	<i>nigrá'</i>		<i>hiqqare'</i>	
<i>Pi'el</i>	<i>millé'</i>		<i>mallé'</i>	
<i>Pu'al</i>		<i>mullá'</i>		
<i>Hitpa'el</i>		<i>hitmallé'</i>		
<i>Hip'il</i>	<i>hiqrí'</i>		<i>haqri'</i>	
<i>Hup'al</i>		<i>huqrá'</i>		

Inflectional Bases of Mute ל"י Paradigm. (See Table: Hebrew Grammar 6.) It is easy to see that the distinction between the

past bases and the other bases in this paradigm lies primarily in the final vowel, which is *á* in the past and *é* in the other bases. The following rules specify what is characteristic of this paradigm:

(1) The suffix *a* of the third person feminine singular past changes into *ta* (and is then classed with suffixes beginning with a consonant).

(2) The infinitive is formed by the affixation of a special suffix *ót* to the base (and this is then classed with suffixes beginning with a vowel).

(3) The final vowel of all the bases is omitted before a suffix beginning with a vowel, and in such a case the accent is on the vowel of the suffix (this rule replaces rule 5 in 20):

baná + u → banú

haqné + i → haqní

l + naqqé + ót → lnaqqót

Note: To take account of “pausal forms,” ancient inflectional bases must be considered, e.g., *bakáy + u → bakáyu* (rule 5 in 20).

(4) The vowel *á* in past bases changes to *i* when a suffix beginning with a consonant is added in bases of *פָּעַל*, *הִפְעִיל*, and to *e* in other bases and occasionally in bases of *פָּעַל* and *הִפְעִיל*:

baná + nu → banínu

niqqá + ti → niqqíti (or *niqqéti*)

hiqná + ta → hiqnéta (or *hiqníta*)

nibná + tém → nibnetém

In addition rules 1, 2, 3, 8 detailed in 20 apply to the inflection of this paradigm:

t + hibbané → tibbané (20, rule 1)

t + bné → tibné (20, rule 2)

ʾ + bné → ʾebné (20, rule 3)

ʾ + hibbané → ʾebbane (20, rule 3)

baná + tém → banitém (rule 4 of this paradigm) → *bni-tém* (20, rule 8)

but *l + hibbané + ót + m* (objective pronoun) → *lhibbano-tám* (without change of the vowel *a* of the base).

Table: Hebrew Grammar 6

	Past	Participle	Future Imp. Inf.
<i>Paʿal</i>	<i>baná</i>	<i>boné</i>	<i>bné</i>
<i>Nipʿal</i>	<i>nibná</i>	<i>nibné</i>	<i>hibbané</i>
<i>Piʿʿel</i>	<i>niqqá</i>		<i>naqqé</i>
<i>Puʿʿal</i>	<i>nuqqá</i>		<i>nuqqé</i>
<i>Hitpaʿel</i>	<i>hitnaqqá</i>		<i>hitnaqqé</i>
<i>Hipʿil</i>	<i>hiqná</i>		<i>haqné</i>
<i>Hupʿal</i>	<i>huqná</i>		<i>huqné</i>

[Uzzi Ornan]

SYNTAX

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SYNTAX

1: THE INFLUENCE OF FOREIGN WORKS ON HEBREW SYNTAX

1.1: The Traditional Grammars

The first Hebrew grammarians devoted their attention chiefly to phonology and morphology, generally omitting special, ordered chapters on syntax. Some study was, however, made into the syntactical connections between adjacent or related words. This usually appears in traditional grammars when they deal with the system of accents. Many centuries passed before syntactic questions such as agreement of gender and number between different words in a sentence were first discussed comprehensively in a Hebrew grammar (*Miqne Avram* by Abraham de *Balmes, 1523).

1.2: Neglect of Syntax

This neglect seems to be due to the influence of the treatment of syntax in languages such as Latin, Greek, or Arabic, where the function of a word is generally shown by its form, and especially by the suffixes attached to it. The grammarian might therefore suppose that syntax essentially consists of such case suffixes, so that Hebrew, which lacks these suffixes, “has no syntax,” or at least its syntax is not central to the language. The grammarian might therefore persuade himself that he should rather devote his energies to phonology and morphology. This conception of syntax continued to influence the treatment of Hebrew syntax even in the period of “scien-

tific grammar,” when philologists included a separate chapter on syntax in their Hebrew grammars. Until very recently, syntax was considered a study which attempted to reveal the logic behind language and thus external reality. For several centuries Latin was thought to be the most complete expression of logic and reality. Hence, while grammarians such as Gesenius, Ewald, or König and their modern counterparts such as Perez and Segal treat Hebrew syntactic phenomena in great detail, their approach is not based on linguistic formal criteria derived from a study of Hebrew, but on categories of “reality” as reflected in Latin and as “laid bare” in Latin syntax.

1.3: Conventional Syntax in Other Languages

It is well known that this defect has affected the treatment of syntax in other modern languages, including English. For example, grammarians have continued even recently to discuss the distinction between dative and accusative in English, as if the formal differences between them – noticeable in Latin but hardly at all in English – reflect relationships in external reality, and as if these relationships need to be considered in the syntax of every language, even where no distinction between them is made in the language.

1.4: Conventional Hebrew Syntax

Hebrew grammarians likewise saw Hebrew syntax as reflecting reality and the relationships existing in it, rather than as a formal study of the way words are linked and sentences are linked. For example, the Latin distinction between “direct object” and “indirect object” (see section Object below) is based upon the difference between a word that was an obligatory complement to a verb and was linked to it directly, i.e., without the word being preceded by a preposition, and a word which, while being an obligatory complement to a verb, needed a preposition before it. But in Hebrew what was called a “direct object” is under certain clear (and very frequent) conditions preceded by the preposition **אֶת**. “Direct object” in Hebrew, then, was applied not to a word with a certain status (or function) in the sentence, but to a word that designated a substance. That substance had a certain status in “reality” and had a certain relationship with another substance existing in the world. This relationship is realized by an action passed from this second substance to the one designated by the word which is “direct object.” In other words, this syntax deals not with the grammatical relationships between words but with the relationships in the real world between what the words signify. A good illustration of this treatment of syntax appears in the comment usually quoted in the section dealing with the “direct object”: “Sometimes the preposition **לְ** appears before the direct object instead of the preposition **אֶת** (for example in the biblical verse **וְהָרָגוּ לְאַחֲרָיו**, II Samuel 4:30).” In this comment “direct object” is stated by the fact that a person is directly affected by the action, that is to say it is a person existing in the world that makes it “direct object” and not a linguistic relation existing in the sentence.

2: THE PARTS OF SPEECH

2.1: The Parts of Speech and External Reality

This conception of the word as reflecting reality is evident in what is traditionally the opening chapter of books on syntax: the chapter dealing with the “parts of speech.” Since the early grammarians believed that reality was reflected best in Latin, it is precisely here that there is the greatest influence of Latin (and Greek) syntax. In these languages the function of a word can be recognized through its form, largely because of the many case suffixes that these languages have; hence, it was natural for the forms to serve as a basis for the treatment of functions. But in Hebrew it is exceptional for form and syntactic function to correspond, as in *הַבִּיתָה* contrasting with *הַבֵּית*. Only in the verb is there a regular correspondence, since it has merely one function, namely, to be the predicator of the sentence. It is reasonable to suppose that without the influence of foreign works on syntax the chapter on the “parts of speech” would have been the introduction to a treatment of morphology rather than of syntax. Indeed, the earliest medieval grammarians did include a discussion of the “parts of speech,” which they then divided into three only: noun, verb, and particle (*מַלְה* – literally “word”). They defined “noun” and “verb” semantically (for example, “a word denoting a substance or concept,” “a word denoting an action or state”), while “particle” (comprising whatever was not regarded as “noun” or “verb”) was defined by the function it had of linking other words. But, particles were also termed “sense words,” since they supplied sense to the sentence. (See above 5. Parts of Speech in section Morphology above.)

2.2: The Classification into Parts of Speech

The division into three parts of speech was preserved in Hebrew grammar even when the division into nine parts of speech, traditional in Greek and Latin (and also in modern languages), entered Hebrew grammar. The nine were grouped under the three earlier parts as follows:

- A. *noun*: 1. noun (substantive) 2. adjective 3. numeral 4. pronoun
- B. *verb*: 5. verb
- C. *particle*: 6. conjunction 7. preposition 8. adverb 9. interjection

2.3: A Criticism of the Conventional Classification

The division into nine parts of speech is also largely based on the meaning of words. That is to say, the assignment of a word to a particular part of speech is generally decided not by its formal features nor by its function, but by the concept it denotes. As a result, the classification suffers from several defects:

- (1) Not every word denotes a concept. For example, conjunctions merely denote that words are linked to each other. In practice, therefore, grammarians define different parts according to different criteria: meaning, function, and sometimes even form.
- (2) The meaning of a word depends on its context,

and therefore the same word type is likely to be considered as belonging to several parts of speech, depending on the context of the particular word tokens. For example, in the sentence *הַשּׁוֹמְרִים מְטִילִים הַלֵּילָה* (The watchmen are walking around tonight) the first word is considered a noun and the second a verb, and the same applies to the sentence *הַמְטִילִים שּׁוֹמְרִים הַלֵּילָה* (The hikers are on guard tonight). The third defect of this classification follows from the previous two:

- (3) The division into parts of speech does not establish exclusive sets, since many words belong to more than one part of speech. It is this third defect in particular that has led some prominent linguists to deny any value to the classification into parts of speech. Yet this classification, virtually in its entirety, is generally accepted even in the most modern Hebrew textbooks, although it is clear that in many ways it does not fit the facts of the Hebrew language. Thus, many scholars claim that there is no basis for distinguishing in Hebrew between noun and adjective, since every adjective can be considered a noun (e.g., *חָכָם*, *גִּבּוֹר*), and clearly many nouns originally served as adjectives (e.g., *לְבָנָה*, *חֲמָה*). It is true that this claim is made particularly for biblical Hebrew, but it is true also for modern Hebrew. It applies to the forms of the participle, which can be taken as nouns, as adjectives, or as verbs. This last possibility is especially evident in modern Hebrew, where the forms of the participle are given in the verb paradigm, though formally they resemble nouns.

3: SENTENCE TYPES

A sentence is a syntactical unit built from a word or words of which each one (or a combination of them) fulfills a specific syntactical function as a “sentence-part.” This unit can stand by itself, can sometimes be connected to other similar units – whether preceding it or following it, and whether they are articulated by the same speaker or by others – and it is intoned in a manner which members of that language-group recognize as a complete articulated unit which does not lack a continuation. The sentence has an additional typical attribute: it is recursive, i.e., this unit can include in it a further internal sentence or sentences, each one of which fills a function as a sentence-part (see below). Unlike many other languages, the Hebrew sentence – apparently also in its deep structure (see below 3.1: Structural Analysis) – does not have to include a verb (see below 4.23: Nominal Sentence and Verbal Sentence). On the other hand the Hebrew sentence may be a single word which is a verb, since the Hebrew verb includes a pronoun. Transformational rules (see below Structural Analysis) are likely to influence the sentence and reduce it to a single word which is not a verb; however, this attribute can be found in many languages.

3.1: Structural Analysis

Modern linguistic theory considers grammar to be a set of generative rules for the language. A central place is occupied by what are called transformational rules. Transform-

mational rules are also generative rules, but they apply to sentences or parts of sentences derived from simpler generative rules. Transformational rules change the order of words in a sentence, produce conjoinings and dependencies within sentences or between sentences, replace words by other words or formatives by other formatives, delete sentences or parts of sentences, etc. According to this theory, one must distinguish between the surface structure of a language and its deep structure. The latter includes the generative and transformational rules and also most of the semantic links that appear “on the surface.” So far, only a few works have been written on Hebrew grammar according to this theory or under its influence, and even these follow its earlier formulations. Consequently it is neither possible to describe here the “deep structure” of Hebrew, nor to survey the transformational rules that operate in the language, except in those areas where a few details have been discovered. The following description is therefore essentially a survey of surface structure, taking into account works written according to the classical method.

3.11: CLASSIFICATION OF SENTENCES. A classification of sentences according to their surface structure yields four types of sentences: (1) simple sentence, (2) multiple-unit sentence, (3) compound sentence, and (4) complex sentence.

This classification is usual in books on Hebrew syntax, except that some authors treat together the multiple-unit sentence and the compound sentence, while some do not treat the compound sentence at all, because “there is nothing to deal with in the compound sentence except what we find in its parts as separate sentences” (Segal).

3.12: THE SIMPLE SENTENCE. A simple sentence is a sentence in which each part is realized by one word. This seems the best definition, even though there are some problems with it. For example, several adjectives may be attached to one noun to form a noun phrase. At first sight each one might be considered adjectival to the same noun, and yet in most cases the sentence will be regarded as simple, e.g., *הַמָּעִיל הַשָּׁחֹר שְׁלִי נִקְרַע* (My new black coat was torn). Another problem is that sometimes the function of the predicator is realized by a verb phrase, one word of which is the main verb while the rest are auxiliaries, e.g., *הַשִּׁיעוּר מֵתַחֵל לְהִרְאוֹת מְעִיֵּן* (The lesson begins to appear interesting). Here the three final verbs together realize the function of predicator. The problem of adjectives in a noun phrase can be solved by recognizing that sometimes an adjective is not attached directly to the noun, which forms the nucleus of the noun phrase, but to the whole of the preceding phrase – the phrase of noun + adjective. In the above example, the correct analysis for the constituency of the adjectives is *הַמָּעִיל הַשָּׁחֹר* (1) *הַחֹדֶשׁ* (2) *שְׁלִי* (3) *נִקְרַע* (3), compare the English equivalent (My (new (black coat))) was torn. First the words *הַמָּעִיל הַשָּׁחֹר* (the black coat) form a phrase; then to this phrase as a unit the following adjective *הַחֹדֶשׁ* is attached, forming the phrase *הַמָּעִיל הַשָּׁחֹר הַחֹדֶשׁ*; finally *שְׁלִי* is added, relating to the whole of the preceding phrase *שְׁלִי*

(*הַמָּעִיל הַשָּׁחֹר הַחֹדֶשׁ*). This explanation is based on one of the important principles of structural linguistics, “the theory of immediate constituents” (IC). A close examination reveals that each of the adjectives belongs to a different adjectival category, i.e., has a different function within the sentence. There are indeed many more parts of the sentence than is traditionally supposed (see below). The problem with auxiliaries is solved by considering them morphemes attached to the center of the predicator (“the main verb”) to give it some modal or aspectual nuance (see below 4.45 Infinitive as Object). The auxiliaries also vary in their function. If they are regarded as realizing certain parts of the sentence, then they too are additional parts of the sentence.

3.13: THE MULTIPLE-UNIT SENTENCE. The multiple-unit sentence is a sentence in which one of the parts is realized by several words linked to each other by parataxis (sometimes expressed by a conjunction), e.g., “*אָבִיךָ וְאִמָּךְ דּוֹאֲגִים לָךְ*” (Your father and mother are anxious about you), “*הָבֵא כַפּוֹת וּמִזְלָגוֹת*” (Bring spoons and forks). Some exclude from this type such sentences as have verbs that are linked paratactically, e.g., “*הוּא הִתְרַחֵץ, הִתְלַבֵּשׁ וַיֵּצֵא לַעֲבוֹדָה*” (He washed, dressed, and went out to work); “*וַיֹּאכַל וַיִּשְׂתַּה וַיִּקָּם וַיֵּלֶךְ וַיֵּבֶן*” (“and he did eat and drink, and rose up, and went his way. So Esau despised his birthright,” Gen. 25:34), maintaining that such a structure should be classed as a compound sentence (see 3.14: The Compound Sentence). The motivation for this view is that a construction containing a subject and a predicator is considered to be a sentence, and this definition applies to the verb, every form of which contains a subject-pronoun. Since a group of consecutive sentences linked paratactically is termed a compound sentence, the sentences in the above example should be considered compound sentences. In an analysis of the sentence (to be more precise, an analysis of the surface structure of the sentence) this approach is advantageous.

3.14: THE COMPOUND SENTENCE. The compound sentence is traditionally subclassified according to the type of linking: addition, contrast, choice, or result. It is obvious that this classification is essentially semantic. Though there is a practical need for it, it is doubtful whether it has a place in a theoretical treatment in syntax, at least as long as syntax is concerned only with surface structure (but see below 6.31: Coordination in section Links beyond the Sentence).

3.15: THE COMPLEX SENTENCE. The complex sentence is defined as a sentence one or more of whose parts is realized by a sentence (rather than by a word or a phrase). In every complex sentence there is therefore an embedded sentence. Since the embedded sentence performs, as a sentence, a function within the complex sentence, one can say that it is subordinate in the complex sentence. Some therefore define a complex sentence as follows: It is a sentence consisting of at least two sentences, which are linked by the subordination of one sentence to another. According to this view, the subordinated sentence is termed the dependent sentence, and the subordinating one

the main sentence. But one should rather say that one sentence is a part of the other, and, in the same way as a sentence-element expressed by one word, it generally relates to one of the parts of the sentence as an independent unit. For example, if its function is that of adjunct, it is linked to the noun (irrespective of the noun's function), as in *הַיֶּלֶד שֶׁרָאִינוּ אֶתְמוּל חֹזֵר כְּבוֹר לְבֵיתוֹ* (The boy, whom we saw yesterday, has already returned to his home) or *רָאִיתִי אֶת הַיֶּלֶד שָׁבָא מִן הַכִּפּוּר* (I saw the boy who came from the village). Similarly *וְיִשְׁמְמוּ עָלֶיהָ אוֹיְבֶיכֶם הַיּוֹשְׁבִים בָּהּ* ("and your enemies that dwell therein shall be astonished at it," Lev. 26:32) as opposed to *כָּכָה יַעֲשֶׂה ה' לְכָל אוֹיְבֵיכֶם אֲשֶׁר* ("for thus shall the Lord do to all your enemies against whom ye fight," Josh. 10:25). Adjunct sentences are divided into relative clauses, as in the above examples, and adjunct-content sentences to be discussed below, in 4.38: Relative Clause. If adverbial, such a sentence is linked to the verb-predicator, e.g., *חֲזַרְנוּ מִן הַטִּייל לִפְנֵי שֶׁשָּׁקַעָה הַשָּׁמֶשׁ* (We returned from the hike before the sun set). Even when the subordinated part is subject, it can be said to be chiefly linked to the predicator, e.g., *מִי שֶׁטָּרַח בְּעֶרֶב שַׁבָּת יֵאָכֵל בְּשַׁבָּת*, (Whoever exerts himself on the Sabbath eve will eat on the Sabbath). The last example demonstrates the inappropriateness of the term "dependent" for the subordinated sentence, since it can realize one of the main functions of the sentence, that of subject, and hence "main" is likewise inappropriate for the subordinating part of the complex sentence. For other types of sentence structure, see 4.23: Nominal and Verbal Sentences, 4.24: Identifying Sentence, 4.25: Attributive Sentence, 4.26: Focusing Sentence, and 4.27: Indefinite Sentence.

3.2: Pragmatic Classification

Other analyses of sentences may be made according to the speaker's commitment to what is being said or according to his attitude to what is being said.

3.21: THE SPEAKER'S COMMITMENT. The speaker's commitment is discernible from the form of the sentence: declarative, exclamatory (or optative), and interrogative ("yes-no" question or "specific" question, i.e., question specifying type of information required). In modern Hebrew "yes-no" questions generally differ from declarative sentences merely in intonation, though sometimes – particularly in the written language – a question may be prefaced by a word indicating that the sentence is a question, e.g., *הֲאֵם* or *כִּלּוּם*. In any event, the structure of the sentence remains the same when it serves as a "yes-no" question. In a specific question the sentence is introduced by the appropriate interrogative word, e.g., *מָתַי* (when), *אֵיךְ* (how), *מָדוּעַ* (why). See below for the order of words in such questions. The same applies to the exclamatory sentence. Any declarative or interrogative sentence can be considered an exclamatory sentence when rendered by an exclamatory intonation. Investigation into Hebrew syntax must include intonation to allow for such a classification of sentences. But so far no research in this field has been published. We must therefore be content with the general observation that for a Hebrew sentence to be interpreted as a question it must be said with a rising tone,

particularly toward the end, and in any case the last syllable must be heard as being on a higher pitch than the penultimate. On the other hand, in a declarative sentence the last syllable is lower in pitch than the penultimate. Specific questions vary and it is difficult to state what their characteristic intonation patterns are. However, it is important to point out that specific questions can function exactly as they are, as embedded (subordinated) sentences in a complex sentence, and then obviously they do not have an interrogative intonation.

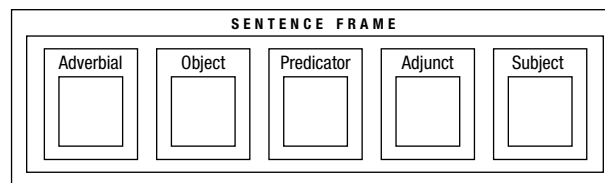
3.22: THE SPEAKER'S ATTITUDE. The attitude of the speaker toward what is said in the sentence or toward one of the details in it, and the extent of his belief in what is said, can be expressed in three ways: (1) parenthetically, e.g., *הַסּוֹס, יָמַח שְׁמוֹ, מִתְגַּרֵּה בִּי* (The horse – damn it – is annoying me);

(2) by a verb, by a subordinating expression, or by a sentence, the sentence transmitting the main content being subordinated to them, e.g., *יִתְכַּן שֶׁמָּחָר יֵרֵד שֶׁלֹּג* (It is possible that tomorrow snow will fall), *יְהִי רָצוֹן שֶׁתֵּלֵד אִשְׁתִּי זָכָר* ("May it be [God's] will that my wife bear a male child"), or *יְהִי יְיָ תְּבוּאָה שֶׁאֶלְתִּי (וְ) מִי יִתֵּן* ("Would (lit. who will give) that my desire be fulfilled"). See also Subordinators in 6.321: Links beyond the Sentence – *אֲשֶׁר*; (3) through certain auxiliaries (modal auxiliaries) that are attached to the nucleus of the predicator, e.g., *מִסְפַּר הַמּוֹרְדִים עָלוּל לִגְדֹל* (The number of rebels may increase). See 4.45: Infinitive as Object.

4: THE PARTS OF THE SENTENCE

4.0: A Syntactic Framework

A syntactic analysis of surface structure means the identification of a string of words as a sentence and the identification of the function in the sentence of each word or group of words. The process of identification and analysis will be better understood if the sentence is compared to an elastic frame that can be expanded as required. The frame contains a string of words and each word or group of words appears within an inner frame, a frame symbolizing a part of the sentence. This conceptual framework underlies the definitions given above of types of sentences. Identification of a word's function in a sentence means determining in which inner frame to put the word; identification of sentence type means recognizing the composition of the inner frames in the external, sentence frame. The structure of the sentence is illustrated as follows with each term designating a frame making up a part of the sentence:



Note: The order of the parts of the sentence given from right to left is not intended to represent their actual order. On this, see below.

The frames shown here are filled with words. They are “elastic,” that is to say they can “stretch” and contain more than one word. When one or more frames of the parts of the sentence is filled by a sentence, the sentence frame covering all the frames is termed a “complex sentence” and the sentence filling one of the parts of the sentence is termed an “embedded sentence.” The features of an “embedded sentence” are generally the same as those of other sentences. An embedded sentence can itself contain within one of its internal frames another embedded sentence. This feature of the sentence – its recursiveness – allows for the possibility, at least theoretically, of expanding it to an infinite length.

4.1: The Division into the Primary Five Parts

Traditionally, Hebrew syntax distinguishes five parts of the sentence: (1) subject, (2) predicator, (3) adjunct, (4) object, (5) adverbial. It should be noted that this does not correspond to the division into subject and predicate, which is traditional in the grammars of many languages. On this, see 4.2: Subject and Predicator; 4.21: Predicator and Predicate. The first two parts are called the principal parts of the sentence, and the other three the subsidiary parts of the sentence or complements. The adjunct is complement to any noun whatever its function may be; the object and adverbial are complements to the predicator, but see 4.53: Sentence Adverbial. Some parts of the sentence are traditionally subclassified. A distinction must be made between two types of subclassification: (1) a part of the sentence is designated variously according to the nature of the words realizing it, e.g., the usual distinction between different kinds of adverbial: place, time, cause, result, etc.; (2) a part of the sentence is itself divided into two parts, each of which denotes a different syntactic functions, e.g., a predicator can be said to be composed of two parts: copula and predicator. (Some designate as extended predicator the part of the sentence comprising both of these.) The first type of classification is generally based on non-syntactic surface-structure features. For example, the distinction between place adverbial and time adverbial is determined merely by the meaning of the word filling the frame adverbial. A frame complementing a verb and filled by *אתמול* (yesterday) or *אחרי ארבעים יום* (after 40 days) is called time adverbial, whereas if it is filled by *כאן* (here) or by *ברחוב פלוגי* (at X Street) it is called place adverbial. It is doubtful whether such a classification is relevant to the surface structure analysis, though obviously there are many occasions even here when it is necessary to make such distinctions (cf. 4.5: Adverbial). On the other hand, the classification of a part of the sentence into different internal parts is clearly relevant to all levels of syntax, since each part fulfills a different syntactic function and is distinct from the other parts of the sentence. For example, it is not enough to say that the phrase *מתחיל להראות מענין* (begins to seem interesting) is the predicator in the sentence *השעור מתחיל להראות מענין* (The lesson begins to seem interesting). To describe the internal composition of this part of speech: one part functions as predicator-nucleus (*מענין* – interesting), while the others are attached

to it, their function being to express the aspect (*מתחיל* – begins) or the modality (*להראות* – to seem) of the predicator-nucleus. These deserve attention from writers on syntax and an appropriate term, such as predicator-auxiliaries. Generative rules are needed for the ways in which the predicator-auxiliaries combine with the predicator-nucleus. Unfortunately, this area has not yet been sufficiently investigated in Hebrew. In the literature on Hebrew syntax there are only a few scattered remarks on such distinctions. In what follows each of the traditional parts of the sentence is surveyed in turn, with comments where possible on any subclassification.

4.2: Subject and Predicator

In syntax it is usual to define these two parts of the sentence in relationship to each other. The justification for doing so is that what determines whether a word fulfills the function of subject is the existence of a relationship between that word and another word with the function of predicator in the sentence. This relationship called Nexus by Jespersen – whether it exists between words actually appearing in the sentence or whether it exists only in the deep structure of the sentence – is a necessary condition for sentence status. It is not, however, a sufficient condition, since some types of Nexus appear in a frame which is not a “sentence,” though it is the consequence of a transformation applied to a sentence, e.g., *הליכת הרופא* (the doctor’s walk) derived from *הרופא הלך* (the doctor walked) or *אני חושב אותו לחכם* (I consider him wise) the last two words of which are derived from *הוא חכם* (He is wise). It is usual to define subject and predicator semantically, e.g., “The subject is the word denoting the substance spoken about in the sentence, the predicator is what is said about this substance.” However, the question that the speaker is posing is not always amenable to an unequivocal answer. Moreover, sometimes it is clear that what is being spoken about in the sentence is not denoted by the word that is subject, but by a word with a different syntactic function. For example, in the sentence *היא חמה* (She is warm, literally, Warm is to her) the topic of the sentence is third person singular feminine, but the corresponding pronoun is not the subject of the sentence. As elsewhere in syntax, one ought to use formal rather than semantic criteria to define “subject,” “predicator,” and the other parts of the sentence. If a straight definition (such as “The subject is...”) seems too difficult, we can define the parts of the sentence operationally. The following is an example of such an operational definition of subject and predicator (following Ornan, *The Syntax of Modern Hebrew*): If one has a word that by itself constitutes a sentence, and if (1) the word is a verb, and one can substitute for it a combination of that verb and a subjective pronoun – *הוא* (he), *היא* (she), etc., agreeing with it in gender and number, and this combination is likewise a sentence, then in this new sentence-frame the function of the subjective pronoun is termed “subject” and that of the verb is termed “predicator”; or if (2) the word is a noun, and one can substitute for it a combination of that noun and the verb *היה* (be) agreeing with the noun in gender and number, and this combination is likewise a sen-

tence, then in this sentence-frame the function of the noun is termed “subject” and that of the verb is termed “predicator.” (On concord, see 5.11: Concord Between Subject and Predicator.) Substitution is an important factor in this definition. Indeed, it is a central principle in structural linguistics. According to this principle, words, phrases, or parts of words that are substitutable within a given frame, form a grammatical class. The above definition can be extended by the method of substitution to include all the words or phrases filling the function of subject in the given frame and all those filling the function of predicate. For that purpose the above definition must be supplemented: “Any word, or group of words, that can replace a word filling the function of subject, likewise fills the function of subject, provided that the resultant sentence does not thereby become deviant.” A corresponding addition can be made for the definition of the predicator.

4.21: PREDICATOR AND PREDICATE. As noted above the division of the sentence usual in Hebrew syntax differs from that usual in the grammars of many languages, though Hebrew grammarians have not sufficiently considered the difference. In particular, a distinction should be made between the Hebrew concept *נִשּׂוּא* (predicator) and the general concept “predicate.” The parts of the sentence in the predicate are the predicator, the object, the adverbial, and any adjunct to these parts. The predicator is the nucleus of the predicate, with all the other parts in the predicate the complements of the predicator.

4.22: THE COPULA. The predicator itself can be expressed by more than one word. Modal or aspectual predicator-auxiliaries were mentioned above (in 4.1: The Division into the Primary Five Parts, cf. 4.5: Adverbial). To these should be added the past and future forms of the verb *הָיָה* (be), since when the predicator is expressed by a noun or participle these may be combined with it to denote time, e.g., *וְקַיִן הָיָה עוֹבֵד אֲדָמָה* (Cain was a tiller of the earth). In this use the verb *הָיָה* fills the function of copula, which is also considered a predicator-auxiliary. Similarly, the forms of the third person pronoun – *הוּא*, *הִיא*, *הֵם*, *הֵן* – are used as copulas. This type of copula is used for emphasis (but 5.23: Copula Concord). Some consider the negative word *אֵין* as a copula, since “like the third person pronouns” it can be combined only with a noun or a participle (see below). However, it is more correct to consider as copula only the pronominal attached to this negative word. Thus, it is true that there is a copula in the sentence *אֶסְתֵּר אֵינָהּ מַגִּידַת* (Esther does not tell), but it is the pronominal suffix in *אֵינָהּ* (literally she-not), while in *אֶסְתֵּר מַגִּידַת* there is no copula. It should also be noted that *הוּא*, *הִיא*, *הֵם*, *הֵן* can be combined with the predicator even when it is a verb in the past or future, e.g., *עָצַת יְהוָה הִיא תְּקוּמָה* (see 4.25: Attributive Sentence; 4.26: Focusing Sentence; 5.23: Copula Concord).

4.23: NOMINAL SENTENCE AND VERBAL SENTENCE. It is usual in Hebrew syntax to distinguish between nominal sen-

tences and verbal sentences according to whether the predicator is a noun or verb. This distinction was borrowed from Arabic syntax, but in Arabic it depends on the first word of the sentence: if it is a noun, the sentence is nominal; if it is a verb, the sentence is verbal. Opinions differ when the predicator in Hebrew is a participle. In earlier Hebrew the participle was regarded as a noun and hence a sentence whose predicator was a participle was considered a nominal sentence. However, in modern Hebrew the status of a participle having the function of a predicator is identical with that of a verb, and consequently it is doubtful whether it is correct to consider such a sentence in modern Hebrew as a nominal sentence. Opinions also differ when the predicator consists only of a prepositional phrase, as in *הַיֵּלֶד בְּבֵית* (The boy [is] in the house). Generally, books on Hebrew syntax assign such sentences to the class of nominal sentences. Some maintain that a sentence whose predicate is a prepositional phrase has no predicator and therefore it cannot be a nominal sentence, but instead should be termed a verbal sentence without a predicator. The presence or absence of predicator (expressed by a verb) is the sole difference, according to this view, between these sentences and sentences such as *הַיֵּלֶד יָשָׁב בְּבֵית* (The boy sat in the house), *הַיֵּלֶד הָיָה בְּבֵית* (The boy was in the house). The word *בְּבֵית* (in the house) serves in the sentences exactly the same function of complement to the predicator (in this instance, adverbial).

4.24: IDENTIFYING SENTENCE. Nominal sentences (in the restricted meaning of the term) where the state of determination of the subject and predicator is the same – whether they are both determined or both undetermined – are called equative or identifying sentences. With such sentences, e.g., *מָלַחְמָה הִיא מָוֶת* (War is death), it is sometimes impossible to decide which is subject and which is predicator except by the context. At all events, each of the parts identifies the other, the predicator being called the identifying predicator. Of particular interest are cases where the second part of the sentence is realized by a subordinate sentence, e.g., *יְהוָה אֱלֹהֵיכֶם הוּא הַנִּלְחָם לָכֶם* (The Lord your God is the one who fights for you). There is no basis for the view that in such a structure the first part *יְהוָה אֱלֹהֵיכֶם* is always the subject and the second part *הַנִּלְחָם לָכֶם* is the predicator. On the contrary, the first part usually has the function of predicator.

4.25: ATTRIBUTIVE SENTENCE. When the subject is determined and the predicator is undetermined, the predicator's function is to attribute what is denoted in the subject to the class possessing the characteristic denoted by the predicator, e.g., in *יוֹסֵף הוּא פְּקִיד* (Joseph is an official) the attribution is to the class of officials. Such a predicator is termed an attributive predicator.

4.26: FOCUSING SENTENCE (EXTRA-POSITION). This last structure formally belongs to the focusing sentence structures, but this term is usually assigned to sentences such as *אֵישׁ אֵינוֹ שָׁם לִבְ אֱלֵיהֶם* (The veterans – nobody

pays any attention to them) or סבא – הוא אינו מתעייף לעולם (Grandpa – he is never tired). The structure of such a sentence is explained in current syntax as the result of a transformation from another sentence in which the first word of the focusing sentence appears in the second part of the sentence in place of the pronoun that agrees with it in gender and number: איש אינו שם לב אל הותיקים (Nobody pays any attention to the veterans), סבא אינו מתעייף לעולם (Grandpa is never tired). With a focusing sentence (in the restricted sense of the term) the first word, or first endocentric phrase, is always to be considered the subject of the sentence, while whatever comes after it is the predicate. The predicate itself is an embedded sentence, and hence the focusing sentence is always a complex sentence. Others maintain that the focusing sentence is merely a simple sentence with a change in the order of the words. In any case, all agree that the noun appearing initially in a focusing sentence is very much more emphasized than it would be in a simple sentence.

4.27: INDEFINITE SENTENCE. It is worth noting that there are sentences without a subject, in particular where the predicator-nucleus is realized by an infinitive linked to a modal auxiliary, e.g., אפשר להבחין בכך מיד ([It is] possible to discern it immediately), cf. 4.45: Infinitive as Object. However, many will argue that אפשר (possible) alone is predicator, and the string of all the other words in the sentence is the subject. In any case, this sentence is an indefinite sentence, that is to say a sentence whose understood subject is any man or men in general.

4.3: Adjunct

The adjunct differs from the other parts of the sentence in that by definition it cannot serve as nucleus for another part of the sentence, nor can it be linked to any part except a noun, irrespective of what function the noun fills in the sentence. Any word to which an adjunct serves as a nucleus, is considered in Hebrew syntax also as an adjunct.

4.31: MORPHOLOGICAL CLASSIFICATION OF ADJUNCTS. From a morphological point of view, seven types of adjunct can be distinguished:

(1) attributive adjunct; (2) possessive pronoun adjunct (whether affixed or independent); (3) adjunct in the construct case; (4) prepositional phrase adjunct; (5) adjunct before nucleus; (6) appositive; (7) embedded sentence. These types are exemplified as follows:

- (1) האיש הזקן האזין בסבלנות (The old man listened patiently);
- (2) הכובע שלי נפל למים (My hat fell into the water);
- (3) קירות הבית מכסים אוב (The walls of the house are covered with moss);
- (4) הזקן מנהרם הקים את המפעל (The old man from Nahrayim set up the enterprise);
- (5) שלושה סוסים דוהרים (Three horses are galloping);
- (6) ראובן, הבכור, ירד למצרים (Reuben, the firstborn, went down to Egypt);

(7) הנער, שלא ידע בין ימינו לשמאלו, הסכים ברצון (The lad, who could not distinguish between his right and left, agreed willingly).

All these types of adjunct appear to be transformed from other structures. With uncertainty as to the source of adjuncts of type (5), all have their source in the predicator (cf. 5.12: Predicator Transformed into Adjunct) or, in some cases, in another part of the predicate. Thus, the following set of sentences can be seen as the source of the adjuncts in the above examples:

- (1) האיש זקן; הוא האזין בסבלנות (The man is old; he listened patiently);
- (2) יש לי כובע; הוא נפל למים (I have a hat; it fell into the water);
- (3) לבית יש קירות; הם מכסים אוב (The house has walls; they are covered with moss);
- (4) הזקן גר מנהרם (קשור מנהרם); הוא הקים את המפעל (The old man lived in Nahrayim (he is connected with Nahrayim); he set up the enterprise);
- (5) ראובן הוא הבכור; הוא ירד למצרים (Reuben is the first-born; he went down to Egypt);
- (6) הנער לא ידע בין ימינו לשמאלו; הוא הסכים ברצון (The lad could not distinguish between his right and left; he agreed willingly). At present it is not clear what the source is for an adjunct denoting quantity. On concord with the adjunct, see 5.12: Predicator Transformed into Adjunct, and 5.3: Determiner Concord.

4.32: RESTRICTIVE AND NONRESTRICTIVE ADJUNCT. Only a few works dealing with Hebrew syntax mention the distinction between restrictive adjunct and nonrestrictive adjunct, sometimes merely to indicate that a nonrestrictive adjunct “is not an adjunct.” An example of a restrictive adjunct would be if a man having three sons and wanting to say something about the eldest says בני הגדול לומד כבר באוניברסיטה (My grown-up son is already studying at the university). The function of the word הגדול (grown-up) is that of restrictive adjunct, distinguishing this son from the others. An example of a nonrestrictive adjunct would be if a man with one son wants to say something about him and wants incidentally to mention that he is grown-up; he says בני הגדול לומד כבר באוניברסיטה (My grown-up son is already studying at the university). The function of the word הגדול (grown-up) is then that of nonrestrictive adjunct. This distinction is important, and in practice has also a formal expression, particularly in intonation, but sometimes also in punctuation. There is no pause between the nucleus and a restrictive adjunct: the pitch of the latter rises slightly, and it has greater stress. On the other hand, there is a slight pause between the nucleus and a nonrestrictive adjunct: the pitch of the latter falls slightly, and it has a lighter stress. If the nonrestrictive adjunct is long, it is usual to put a comma before it. Usually there is no comma before a restrictive adjunct, even when it is a subordinate embedded sentence (despite the official rules for punctuation, which require a comma before every adjunct that is a sentence).

The structural ambiguity of the adjunct can be explained in transformational grammar. The adjunct is transformed from the predicate of another sentence, this sentence being the continuation of a preceding sentence. The same subject serves these two sentences, both of which are deleted by a deletion transformation and hence do not appear in the text. But the subject of the second sentence does not always refer to the same quantity of substances or material that the subject of the first sentence refers to. When it refers to a lesser quantity, the adjunct in the transformed sentence is a restrictive adjunct; when it refers to the same quantity, the adjunct is nonrestrictive. The sources of the above examples are therefore in the following two sets of sentences:

- (a) He has three sons. **יש לו שלושה בנים**
 One of them is grown-up. **אחד מהם גדול**
 He is studying at the university. **הוא לומד באוניברסיטה**
 His grown-up son is studying at the university (restrictive adjunct). **בנו הגדול לומד באוניברסיטה**
- (b) He has one son. **יש לו בן אחד**
 He is grown-up. **הוא גדול**
 He is studying at the university. **הוא לומד באוניברסיטה**
 His grown-up son is studying at the university (nonrestrictive adjunct). **בנו הגדול לומד באוניברסיטה**

4.33: POSSESSIVE PRONOUN AS ADJUNCT. Some explanatory comments on several of the types of adjuncts enumerated above are called for. The possessive pronoun as adjunct: in “deep grammar” its source is in a sentence denoting possession, e.g., **יש לו אח** (He has a brother) → **האח שלו** or **אחיו** (his brother). The possessive pronoun affix, e.g., in **אחיו**, and the independent possessive pronoun, e.g., **שלו**, are not entirely free variants, but sometimes the appearance of one or the other is conditioned (see below). It is worth noting that in written Hebrew the use of the affix is between ten and fifteen times more frequent than the use of the independent form. As far as can be ascertained from the few studies in this area, the use of the affix is greater in spoken Hebrew, but more substantial studies are required before one can establish the relative frequency with any certainty.

The most obvious conditions favoring the appearance of the independent form of the possessive pronoun are the following:

- (1) when a second possessive pronoun is used to emphasize an affixed possessive pronoun, e.g., **קרמי שלי לא נטרתי** (I did not tend my own vineyard);
- (2) when the nucleus is a proper noun, e.g., **לא יעזב ולא** (He will not desert his Mendele);
- (3) generally with a foreign or borrowed word, e.g., **הטלפון שלו מצלצל** (His telephone is ringing);
- (4) with a noun-numeral, e.g., **בשנות השלושים שלו** (In his thirties);
- (5) with a noun in the construct state, e.g., **דירת השגרד שלו** (His official residence);
- (6) with a word that was not originally a noun, e.g.,

אתה מוכן להפר את הברגז שלך? (Are you ready to cancel your anger?);

(7) with a phrase that is used metaphorically, e.g., **גם בארבע אמות שלנו** (Even within our “four cubits”);

(8) when the nucleus has two meanings and the rarer meaning is intended, e.g., **העיר התפרסמה בצדיקים שלה** (= **באדמו"רים**) (The city was famous for its “pious men” = hasidic rabbis);

(9) when the nucleus is used euphemistically, e.g., **זאת מציעים לי ה“ידידים” שלי!** (My “friends” suggest it to me!). Haim Rosén (see bibliography) has argued that the difference in usage between the two forms corresponds to the difference between inalienable possession (e.g., the family relationship or the parts of the body) and alienable possession. This proposal seems dubious.

4.34: THE CONSTRUCT STRUCTURE. An endocentric phrase consisting of nouns, or words that have nominal function, the order of which cannot be changed without changing the meaning of the phrase, is said to be in the construct state. This phrase may be in three structures:

(1) Close construct state, when two nouns are linked without interruption (except for the definite article), e.g., **בית האיש** (The man’s house). On the changes in form of the first noun, see above, Morphology. The second noun does not change.

(2) Loose construct state when the word **של** interrupts between the two nouns, e.g., **הבית של האיש** (The house of the man).

(3) Reduplicated construct state, when a possessive pronominal affix agreeing in gender and number with the second noun is attached to the first noun, and the word **של** is put between the nouns, e.g., **ביתו של האיש** (The (his) house of the man). The two last structures are termed dismembered construct states. There are other ways as well of making the construct state discontinuous, for example by the preposition **ל** or **מן**, e.g., **צנצנת מזכוכית** (A glass container). It is difficult to say under what conditions the three types of construct states are in free variation and when one of them must be used. But it is clear that there are certain phrases that can only be used in one type of construct state, e.g., **הקמת הבית** (the inauguration of the home), **זוטו של ים** (the floor of the sea). With other phrases, the meaning changes if a different type is used, e.g., **זה דבר המפקד** (This is the message of the commander), **זה דבר של המפקד** (This item belongs to the commander); **בן עשרים** (twenty years old), **בנם של עשרים** (the son of twenty). In a construct state consisting of two words the nucleus is usually the first word, while the second word is the adjunct, e.g., **עבודת אלילים** (the worship of idols). For other possibilities, see 4.36: Adjunct before the “Head.” If it consists of three or more words, usually the second and later words are each adjunct to the immediately preceding word, and the combination is in turn adjunct to the immediately preceding word. For example in the phrase **עבודת אלילי זהב** (the worship of idols of gold), **זהב** (gold) is adjunct to **אלילי** (idols) and **אלילי זהב** (idols of gold) is adjunct to **עבודה** (worship):

(The farmer has cows) פְּרוֹת־הָאֶפֶר → לְאֶפֶר יֵשׁ פְּרוֹת
(The fish has a sword – its characteristic) → לְדָג יֵשׁ חֶרֶב
דֶּג־הַחֶרֶב
(The pen is made of iron) עֵט־בָּרָזָל → הָעֵט עֲשׂוּי מִבָּרָזָל
(The moon is in the form of a sickle) → הַיָּרֵחַ הוּא בְּצוּרַת חֶרֶמֶשׁ
חֶרֶמֶשׁ־הַיָּרֵחַ
(The land is called “Canaan”) אֶרֶץ כְּנָעַן → הָאֶרֶץ נִקְרָאת “כְּנָעַן”
(The Jordan flows through the valley) → הַיַּרְדֵּן זֹרֵם בְּתוֹךְ בִּקְעָה
בִּקְעַת־הַיַּרְדֵּן
(The child is healthy) בְּרִיאּוֹת הַיֵּלֵד → הַיֵּלֵד בְּרִיא

It is worth demonstrating how this explanation appears in the usual formulation of the generative-transformationalists. The two sentences are first placed one after the other:

Representation of האוטובוס יאחר לצאת

(The bus will leave late): NP₁ + VP_j

Representation of האוטובוס נוסע לירושלים:

(The bus travels to Jerusalem): NP₁ + VP_k + PP

NP₁ + VP_j + NP₁ + VP_k + PP

(1) (2) (3) (4) (5)

However, under certain conditions (e.g., when the subjects of the two sentences are two instances of the same nominal structure, if the referent of the subject is identical in both sentences), a transformation applies which changes the order of the words. In place of the order given above (left to right) the words are ordered (1) (3) (4) (5) (2), i.e:

NP₁ + NP₁ + VP_k + PP + VP_j

The second sentence is parenthetically included, as it was, in the first: האוטובוס (האוטובוס נוסע לירושלים) יאחר לצאת. Now an obligatory transformation applies, which deletes the second instance of NP, and adds instead a relative (אשר, ש, or ה). The result is NP₁ + $\mathcal{S}e$ + VP_k + PP + VP_j, i.e., האוטובוס שנוסע לירושלים יאחר לצאת. However, this sentence can again be transformed as follows:

Structural Description: NP₁ + $\mathcal{S}e$ + VP + PP + VP_j

Structural Change: (1) (2) (3) (4) (5)

(1) \emptyset \emptyset (4) (5)

The relative \mathcal{S} and the internal predicator VP are deleted, leaving only NP₁ + PP + VP_j: האוטובוס לירושלים יאחר לצאת

4.352: Prepositional Phrase with Verb Transformed to Noun.

(2) The prepositional phrase is a remnant as before. However, the verb which is complemented is not deleted, but transformed into a noun, the phrase changing from complement of a verb to complement of a noun, that is to say an adjunct. For example:

adverbial adjunct
הליכתו לבית הספר → הוא הלך לבית הספר
הטיול בבקר → הילדים טילו בבקר

We should treat as a special case prepositional phrase adjuncts introduced by מן (= מ) (from) when they designate the place of origin or of action of what is denoted by the noun serving as nucleus, e.g., הנזקן מנהרסים (the old man from Naharayim), המכשפה מפריס (the witch from Paris). It is not clear what is the source sentence from which these adjuncts are transformed.

4.36: ADJUNCT BEFORE THE "HEAD" (CENTER, NUCLEUS). A pre-nucleus adjunct generally denotes quantity, and it comprises cardinals, dividers, measures, and words such as הרבה (much), רב (the majority of), שאר (the rest of), קצת (a little), מברר (the best of).

Cardinals agree with the nucleus in gender, and in the case of units of measurement, also in number, e.g., חמשה אנשים (five men), חמש אמות בד (five cubits linen), שנים עשר דונם אדמה (twelve dunams of land). The numbers 3–10 are likely to be in the construct state before the nucleus, especially when the latter is determined, number 2 generally so, while number 1 appears after the nucleus when the latter is singular (איש אחד), and in the construct state before the nucleus when it is determined and plural (אחד האנשים).

Nouns for containers, such as בקבוק (bottle), פח (can), may serve as measuring units for liquids or for bulk solids such as קמח (flour), or פירות (fruit), provided the reference is to mass-produced vessels of fixed size, e.g., הקבית מכילה שלושה פחים (The barrel contains three cans), ארבע תבות תפוזים (four boxes of oranges). It has not yet been established whether there is in modern Hebrew a systematic semantic difference (as Haim Rosén has claimed) between measures appearing in a close construct state, e.g., שני שקי קמח (two sacks of flour), in a loose construct state, e.g., שני שקים של קמח, or in apposition, e.g., שני שקים קמח. Similarly nouns for shapes, provided reference is to shapes with a more or less fixed size, can serve as measures for solids, e.g., שני ככרות לחם (two loaves of bread).

4.37: APPPOSITION. Two nouns one of which has the function of adjunct to the other, but without their being in the construct state relationship, are said to be in apposition. An appositive is transformed from a noun predicator. If the predicator from which it is transformed functioned as identifier in an identifying sentence (cf. 4.24: Identifying Sentence), the appositive also functions as an identifying appositive, e.g., היא נמצאת מרים היא האחות הראשית (Miriam is the matron). היא נמצאת מרים, האחות הראשית, נמצאת בקפשה (She is on leave) → מרים, האחות הראשית, נמצאת בקפשה (Miriam, the matron, is on leave). When the predicator is attributive (cf. 4.25: Attributive Sentence), the appositive is an attributive appositive, e.g., לוי הוא ד"ר למשפטים (Levi is a doctor of law). הוא התמנה למרצה (He has been appointed lecturer) → לוי, ד"ר למשפטים, התמנה למרצה (Levi, a doctor of law, has been appointed lecturer). Books on syntax generally note that the appositive follows the nucleus. Hence, in שלמה המלך (Solomon the king), המלך is said to be appositive, while in המלך שלמה (King Solomon), the proper noun שלמה is said to be appositive. But on the basis of the semantic identity of the two phrases, it has been proposed that an attributive noun denoting status, occupation, or title that is attached to a proper noun should be considered an appositive even when it precedes the proper noun, e.g., לוי התמנה למרצה (Doctor of Law Levi has been appointed lecturer). In such cases the appositive has a determiner.

As with the adjectival adjunct, all appositives can be divided into restrictive and nonrestrictive. Other types of appositives are appositional compounds, e.g., מטה = ברכה (divan bed) and quantifying apposition, e.g., שלושה אנשים (three men). Certain introductory expressions appear before identifying appositives, e.g., כלומר (that is to say), דהיינו (that is), בייחוד (especially). Another characteristic of the identifying appositive is that the preposition before the nucleus is sometimes repeated before the following appositive. It seems that this only applies when the appositive is nonrestrictive. Such a repetition is obligatory when the nucleus is a pronoun and the following appositive is a noun, e.g., אמרו עליו על רבי עקיבא (They said about him, about Rabbi Akiva).

4.38: RELATIVE CLAUSE. An adjunct sentence is a transformation of a complete predicate and not just of a predicator, e.g., המחזה העלה אמש לראשונה (The play was put on last night

for the first time). *הוא נדאי יזכה להצלחה* (It will certainly meet with success) → *המחזה שהעלה אמש לראשונה נדאי יזכה להצלחה* (The play which was put on last night for the first time will certainly succeed). The condition for this transformation is that the noun appearing in one sentence will also appear in the other sentence. In the transformed adjunct sentence this noun is deleted and is replaced by a pronoun agreeing with it in gender and in number. However, if the noun functioned as subject of the sentence before its transformation, then generally gender and number concord with the predicator is sufficient and a pronoun is not inserted. See further on this, 5.22: Pronoun Concord in a Relative Clause. The indicators of the subordination of the adjunct are *ש* and *אשר* (virtually in free variation), and *ה* under certain conditions (cf. 6.32: Subordinators in Links beyond the Sentence). Adjunct sentences may also be asyndetic, cf. 6.322: Word Order in Links Beyond the Sentence. Another category of adjunct sentence must also be distinguished, namely the adjunct content-sentence, e.g., *ההשערה שיש חיים על המאדים נתבדתה* (The supposition that there is life on Mars has been proved false). The source for the content-adjunct is not in the predicate of a preceding sentence but in the object sentence of a preceding sentence. It is formed when the verb complemented by the object is converted into a noun. The source of the content-adjunct in the above example is in the object of the following sentence. *שערו שיש חיים על המאדים* (It was supposed that there is life on Mars) → *ההשערה שיש חיים על המאדים* (The supposition that there is life on Mars...), cf. the similar phenomenon in 4.35: Prepositional Phrase Adjunct and 4.352: Prepositional Phrase with Verb Transformed to Noun, a prepositional phrase as adjunct. There is no element in a content-adjunct which agrees in gender and number with the noun to which the adjunct is attached. Introducing words of the subordination of the content-adjunct are *ש* or *כי*. If the content-adjunct is transformed from a question, the interrogative word serves as an introducing word of subordination, e.g., *הוא דאג: מה יעשה בעיר הגדולה? זה לא נתן לו מנוח* (He worried: What would he do in the big city? This gave him no rest) → *הדאגה מה יעשה בעיר הגדולה לא נתנה לו מנוח* (The anxiety about what he would do in the big city gave him no rest). When the content-adjunct begins with an infinitive there is no other introductory word of subordination, e.g., *נבר אצלם הרצון להתבלט* (In them could be seen the desire to excel).

4.4: Object

Grammars of European languages and of Arabic, also accepted in Hebrew grammars, have long defined the object semantically (e.g., “The word denoting the substance to which the action expressed in the predicator passes is called the direct object. If the action is merely connected with it, the word is called the indirect object”).

4.41: OBLIGATORY COMPLEMENT AND OBLIGATORY PREPOSITION. The syntactic definition of an object is based on its being obligatory, or “close,” complements of the verb-predicator. Optional complements are adverbials (cf. 4.5:

Adverbial). In many instances it is possible to distinguish sharply between an obligatory complement, e.g., the prepositional phrase consisting of *ב* and a following noun as complement to the verb *השתמש* (use) and an optional complement, e.g., the same phrase as complement to the verb *הלך* (walk). *השתמש בחדר* (He used the room), as opposed to *הלך בחדר* (He walked in the room). Usually the preposition introducing an obligatory complement cannot be changed, for example, we cannot replace the preposition *ב* linked to the verb *השתמש* by another preposition. Sometimes there is a restricted range of permissible substitutions though generally only one additional preposition is allowed, e.g., *נתמנה ל...* = *נתמנה כ...* (He was appointed as...). Sometimes a change of preposition effects the meaning of the verb, e.g., *קנא ב...* (He envied) ... ≠ *קנא ל...* (He suspected). A preposition introducing an obligatory complement is called an obligatory preposition. It can be considered a part of the lexical entry for the verb. Although at first sight the obligatory preposition must always accompany its verb, there are certain conditions, apparently varying with particular items, under which it can be omitted. In all probability one should speak of varying degrees of obligatoriness in Hebrew (cf. 5.5: Obligatoriness). Moreover, the same verb may appear also without requiring a particular preposition. Since the obligatory preposition is part of the verb's lexical entry, it must be concluded that such a verb should be given two separate lexical entries, one when the obligatory preposition is a part of it, and the other when the verb appears without an obligatory preposition. Generally the two entries will have different meanings, e.g., *עבד על* (He worked) – *עבד על* (He worked upon); *התגלגל* (He wandered around) – *התגלגל ל...* (He was transformed into); *השתגע* (He became mad) – *השתגע אחרי* (He longed desperately for). The difference can cause ambiguities since a particular preposition not required by the verb in a certain occurrence can nevertheless be attached to it as an optional complement. Hence, the combination of the same verb and preposition can be followed by either an object or by an adverbial. In such instances, of course, the distinction is not so easy to make. At all events, dictionaries do not adequately distinguish between prepositions that are obligatory to a certain degree, and optional prepositions.

4.42: DIRECT AND INDIRECT OBJECT. The terms “direct object” and “indirect object” derive from European or Arabic grammars. They were originally intended to distinguish between objects preceded by a preposition and those linked directly to a verb without an intervening preposition. Hebrew, however, has a preposition – *את* – which appears before a direct object. Thus, the use of this term in Hebrew does not correspond to its original use. On the other hand, *את* generally appears only before an object which is a determined noun, and many writers point to this as justification for the use of the term in Hebrew. It has also been argued that *את* should not be regarded as a preposition at all, but merely as an indicator of determination. In practice there is no essential syntactic distinction between direct object and indirect object,

since all objects are obligatory complements. A subclassification of obligatory complements based on the nature of the obligatory preposition should include **את**, even though **את** can be replaced under certain conditions by \emptyset , which is merely a variant of **את**. It seems that here too the influence of foreign grammars has been excessive.

4.43: TRANSITIVE AND INTRANSITIVE VERB. These terms are entailed by the preceding terms. Generally, those defining object semantically will define “intransitive verb” and “transitive verb” semantically, e.g., “a verb whose action passes to another body is a transitive verb,” while an intransitive verb is a verb “whose action does not pass to others, but affects only the actor.” It is obvious that in such definitions “verb” means the lexical entry of the verb, comprising all its forms in all its occurrences. A moment’s thought will show, as Jespersen has shown, that the action of many transitive verbs does not pass to another body. The syntactic approach should be applied here too and each verb classified in the sentence in which it appears. That is to say, one should not refer to a verb in this respect as a concept comprising all the possible forms distinguished in the grammar, but as a given form appearing in a given sentence. The tokens of the verbs and not their entries or their types should be classified as transitive and intransitive. In the sentence **הַמַּלְחָה מַעֲשֵׂן סִיגָר** (The sailor is smoking a cigar), **מַעֲשֵׂן** is considered a transitive verb since it has an obligatory (close) complement, while in the sentence **הַמַּלְחָה מַעֲשֵׂן** (The sailor is smoking) or **הַמַּלְחָה מַעֲשֵׂן בְּלִיטוֹת** (The sailor is smoking eagerly) it is an intransitive verb since it does not have a complement or it has an optional complement.

4.44: FIRST AND SECOND OBJECT. When in the same sentence there are two objects with the relationship between them of subject-predicator, i.e., nexus (cf. 4.2: Subject and Predicator), it is usual to call them first object (the object performing the function of subject in that relationship) and second object (performing the function of predicator), e.g., **הָרופֵא חָשַׁב אֶת הַחוּלָה לְבִדְאִי** (The doctor considered the patient an impostor), underlying which is the sentence **הַחוּלָה בִּדְאִי** (The patient is an impostor). Only certain verbs can appear in such a sentence, verbs denoting the attitude or opinion of the person designated in the subject to what is designated in the first object. This attitude, or an action resulting from this attitude, is expressed in the second object. Thus, in the above the attitude of the doctor to the patient is expressed in **בִּדְאִי** (an impostor). Similarly, **מוֹצֵא אֲנִי מֵר מִמּוֹת אֶת הָאִשָּׁה** (I find woman more bitter than death) – **הָאִשָּׁה** (woman) is first object, **מֵר מִמּוֹת** (more bitter than death) second object. Here another structure should be mentioned, namely sentences in which the object is a subordinate sentence beginning with a subordinator, e.g., **הָרופֵא חָשַׁב שֶׁהַחוּלָה בִּדְאִי** (The doctor thought that the patient was an impostor). In biblical Hebrew the word **וַיַּבְהֵ** (behold) often opens the subordinate sentence, e.g., **וַיַּכְרַעַה חֵלֶם...וַיֵּרָא מִן הַיָּאֵר עֶלְת שְׁבַע פְּרוֹת** (“and Pharaoh dreamed... and, behold, there came up out of the river seven kine,” Genesis 41:1, 2) and **וַיֵּרָא וַיְהִי חֲרִבּוֹ פָּנֵי הָאֲדָמָה** (“and he

looked, and behold, the face of the ground was dried,” Genesis 8:13). See also 4.51: Circumstance Adverbial.

4.45: INFINITIVE AS OBJECT. A complex sentence whose predicator is a verb denoting saying or thinking and whose object is an inner sentence, e.g., **הִבְטַחְתִּי שָׁאֲבוּא** (I promised that I would come) with **שָׁאֲבוּא** (that I would come) as object, can be expressed also as **הִבְטַחְתִּי לָבוֹא** (I promised to come) with **לָבוֹא** (to come) as object. The infinitive **לָבוֹא** is transformed in this case from **אֲנִי אָבוּא** (I will come), containing subject and predicator. Sometimes the infinitive has its own complements, e.g., in the sentence **הַמַּפְקֵד דָּרַשׁ מִן הַחִיָּלִים לְהִשְׁמַע לוֹ** (The officer required the soldiers to obey him), **לוֹ** is object, obligatory complement to **לְהִשְׁמַע** (to obey) while **לְהִשְׁמַע לוֹ** (to obey him) is object of **דָּרַשׁ** (required). However, sometimes an identical surface structure should not be treated in this way because the first verb in such a combination is an auxiliary verb while the infinitive is the nucleus of the phrase with the function of predicator. “Auxiliary verb” has a wider range in this sense than is accepted for some languages, including English. These verbs complementing the nucleus of the predicator comprise modals and aspectual verbs, viz. verbs denoting the speaker’s attitude toward the content of the sentence, the attitude of the person designated as subject toward the content of the rest of the sentence, or the point of time in the action, its duration, its recurrence, etc. For example: **הַגֶּשֶׁר עֲלִיל לְהִשָּׁבֵר** (The bridge is likely to break), **הַמַּפְקֵד נִצָּלַץ לְהִמָּתֵן** (The officer was forced to wait), **הַגֶּשֶׁר מֵתְחִיל לְהִשָּׁבֵר** (The bridge is starting to break), **הָאָכָר נוֹהֵג לְשִׁתּוֹת** (The rain continues to fall), **הַגֶּשֶׁם מוֹסִיף לָרֶדֶת** (The farmer is accustomed to drink). It ought to be added that besides the infinitive (the most usual form), the nucleus in such combinations may also take on such forms as participle, e.g., **הֵתְחִיל מְפַקֵּק** (He began doubting); verbal noun preceded by the preposition **ב**, e.g., **הִרְבָּה בִּאֲכִילָה** (He ate a lot, literally: He increased in eating); or finite verb identical in person and tense to the auxiliary, the two verbs being coordinated by the conjunction **ו**, e.g., **חָזַר וְקָרָא** (He again read, literally: He returned and read); another aspect is expressed by repeating the same verb itself: **הֵם הָלְכוּ וְהָלְכוּ** (They walked for a long time). There have been hardly any studies in this area of Hebrew, and there is still no complete list or categorization of these auxiliaries.

4.46: INTERNAL OBJECT. An internal object is the term applied to a verbal noun functioning as object to a verb of the same root. The internal object is usually not an obligatory complement. It has one of two functions: (1) to emphasize the verb serving as predicator, e.g., **לְגִזֹּל גִּזְלוֹהָ, לְמַעַל מַעְלֶיהָ, לִגְנוֹב. לִגְנוֹבָהּ וּלְהִסְתַּלֵּק** (To embezzle (misuse), to rob, to steal – and to disappear). This use is a modern counterpart of the use of the infinitive absolute in biblical Hebrew, e.g., **הַלֹּחַד הָלְכוּ הַעֲצִים** (The trees have surely gone); (2) to serve as nucleus to an adjunct when the combination of nucleus and adjunct functions as adverbial to a predicator, e.g., the phrase **יָשִׁיבָה כְּבֵדָה וּמֵאֲשָׁשֶׁת** (a heavy and firm sitting) in the sentence **יָשָׁב הַכֹּפֶרִי יָשִׁיבָה וּמֵאֲשָׁשֶׁת** (The villager sat heavily and firmly). A direct

object is usually not determined, and therefore the preposition **אֶת** rarely precedes it.

4.5: Adverbial

The adverbial is an optional complement of the predicator (or of the sentence as a whole, cf. 4.53: Sentence Adverbial). Adverbials generally begin with a preposition, if we exclude a few words considered adverbs, e.g., **פה** (here), **אתמול** (yesterday), **יחדו** (together), **היטב** (well), or temporal words, e.g., **יום** (day), which in this function generally appear without anything added before them (though two adjacent instances of such words may appear, e.g., **יום יום** (every day), **שנה בשנה** (year by year), similarly **טפין טפין** (drop by drop)) and if we exclude the locative expressed by a noun to which is added an unstressed **א**, e.g., **צפונה** (northwards), **הביתה** (home(wards)). The prepositions used for this purpose are the same prepositions introducing obligatory complements, except for **אֶת**. (See 4.51: Circumstance Adverbial.) In Hebrew syntax, as in the syntax of other languages without cases, it is usual to classify adverbials not formally – a method used in languages with cases – but according to content. Thus, often the following adverbials are distinguished, or at least some of them: place, time, cause, purpose, manner, measure, circumstance, condition, concession, and result. Not all of these appear in every book, nor do the authors agree on the ascription of a phrase to the same adverbial. Thus, there are differences with respect to phrases denoting duration of time, e.g., **עבד שלוש שעות** (He worked three hours). Different authors designate such a phrase as time adverbial, measure adverbial, or manner adverbial. Studies on the deep structure of adverbials have scarcely been written, apart from some work on the circumstance adverbial, which is recognized as a transformation of a predicator under certain conditions, e.g., **הילדה חזרה עייפה** (The girl returned tired) ← **הילדה חזרה** (The girl returned); **היא הייתה עייפה באותו זמן** (She was tired at that time). It may be supposed that research in this area will show that the traditional categories of adverbials, now based on semantic distinctions in surface structure, derive from deep structure.

4.51: CIRCUMSTANCE ADVERBIAL. The circumstance adverbial is also called “circumstance adjunct,” since like adjuncts it agrees in gender and number with subject or object, e.g., **הילדים יצאו שמחים** (The children went out happy), **פגשתי אותם מאשרים** (I met them happy). In both instances the agreement derives from the same source. The adjunct is transformed from a predicator – an adjective or participle – and so is the circumstance adverbial, except that with the latter the predicator denotes not a permanent phenomenon, but one that is contemporaneous with the action expressed by the predicator in our sentence. Thus, in the sentence **הילדה חזרה עייפה** (The girl returned tired) the girl is said to be tired at that time. If tiredness was a permanent characteristic, the adverbial **עייפה** would have been changed into an adjunct: **הילדה העייפה חזרה** (The tired girl returned). On the other hand, the circumstance adverbial does not have to be attached to a subject or object, and these do not function

as nucleuses to it. Moreover, the circumstance adverbial is not determined, even when the noun it is related to is determined. This adverbial can be expressed by a participle form preceded by the preposition **ב**, e.g., **הוא נכנס לענין במתכוון** (He entered into the affair intentionally). The adverbial differs in these features from the adjunct. (For the difference between circumstance adverbial related to the object and second object, cf. 4.44: First and Second Object.) Since the predicator is the source for both circumstance adverbial and adjunct, we cannot accept the suggestion that the circumstance adverbial be termed “circumstance predicator.” The transformation of the predicator does not necessarily produce a circumstance adverbial. Furthermore, terms for the parts of the sentence in surface grammar are not generally based on their transformations from deep structure. A circumstance adverbial can be realized by a complete sentence. This sentence, considered a subordinate sentence, is linked to the independent part by the conjunctions **כש**, **בלי ש**, **בלא ש**, and **ו**, or it is juxtaposed to the independent sentence without a conjunction, e.g., **הילדה הצביעה על השודד כשהיא רועדת מפחד** (The girl pointed to the robber while she was trembling with fright), **הולך לו ידידנו בדרך, השמים הכחלים מעל ראשו והנהחל לימינו** (Our friend walks along, the blue skies above his head and the brook on his right). In circumstance sentences, the predicator is realized by a participle form (or the sentence lacks a predicator, cf. 4.23: Nominal Sentence and Verbal Sentence). See also 5.13: Predicator Transformed into Circumstance Adverbial.

4.52: TYPES OF CONDITIONAL ADVERBIAL. The conditional adverbial is unique among the adverbials. In the rare instances when it is realized as a nominal phrase in a simple sentence it will normally begin with... **במקרה של** (in case of), but it is chiefly realized as a subordinate sentence in a complex sentence. The conditional adverbial is called **רישעה** (protasis) whether it appears at the beginning or end of the sentence, while the rest of the sentence is called **סיפעה** (apodosis). The conditional adverbial can be distinguished grammatically, and not just semantically. Moreover, the two chief categories – real condition and hypothetical condition – are also formally distinguishable. Conditional sentences also have their own intonation patterns.

A “real condition” denotes something that has happened, is happening, or will happen and whose existence entails a result expressed in the apodosis part of the sentence. The chief signs of an adverbial of real condition are (1) special subordinating conjunctions – **אם**, **כש**, **כאשר**; (2) the word order in the protasis; (3) the place of the protasis in the sentence; (4) the dependence of the tense of the verb in the superordinate part on that of the verb in the conditional part. Sometimes several of these signs come together, cf. 6.322: Word Order as Indication of Subordination in section Links beyond the Sentence.

A “hypothetical condition” is one which at the time it is said is known not to be fulfilled. The speaker speculates as to the possible results if the condition had been fulfilled.

The traditional conjunctions for a hypothetical condition are לו, אלו, and in the negative לולא, אלוּלָא. The introductory אֶלְמָלָא (אֶלְמִלָּא), used mainly in literature, is sometimes interpreted as positive and sometimes as negative. In modern Hebrew (also in some places in biblical Hebrew) אִם is used also for a hypothetical condition. This use is accompanied by a verb form consisting of הָיָה (verb “be”) plus participle, e.g., לוּ אִם הָיִיתָ אוֹמֵר לוֹ (If you had said to him), which is usually interpreted as a hypothetical condition indicating that the speaker knew the other had not said it. On the other hand, לוּ אִם אָמַרְתָּ לוֹ (If you said to him) is interpreted as a real condition, denoting that the speaker does not know whether the other had said it or not, but it is certainly possible that he said it. The sign of an unreal condition here is not a special conjunction (לוּ, לולא, אלוּלָא as opposed to אִם) but the form of the verb (הָיָה + participle as opposed to past tense). The verb in the apodosis of a hypothetical condition also has the form הָיָה plus participle, irrespective of the verb in the protasis.

A double condition is one in which the speaker sets out both the result of the fulfillment of the condition and the result of its lack of fulfillment. This structure is also known as **תְּנֵאִי בְּנֵי גַד וּבְנֵי רְעוּבֵן** (a condition of the children of Gad and the children of Reuven), cf. Numbers 32:29–30.

An emphatic condition with negative followed by positive (see below), is apparently related to the double condition and is derived from it by a deletion transformation. For example, *לֹא יָכֻנס אָדָם לַמַּחֲנֶה צְבָאִי אֲלֵא אִם (כֵּן) הָרָשָׁה לָכֵךְ* (A person may not enter a military camp unless he is expressly permitted), which is presumably before the transformation *לֹא יָכֻנס אָדָם לַמַּחֲנֶה צְבָאִי אִם לֹא הָרָשָׁה לָכֵךְ; יָכֻנס אָדָם לַמַּחֲנֶה צְבָאִי אִם (כֵּן) הָרָשָׁה* (A person may not enter a military camp if he is not expressly permitted; a person may enter a military camp if he is expressly permitted).

A concessive sentence is a conditional sentence the content of whose apodosis is reversed as far as can be determined from its presumed protasis and the subject matter of the whole sentence. It also appears to be derived from a double condition, where neither the fulfillment nor the lack of fulfillment of the condition can change the result. For example, the sentence **אם לא תעמוד על שלך – לא תקבל, וגם אם תעמוד על שלך – לא תקבל** (If you don't defend your own, you will not receive anything, and even if you defend your own you will not receive anything) can be contracted to **אם לא תעמוד על שלך וגם אם תעמוד על שלך – לא תקבל** (If you don't defend your own and even if you defend your own, you will not receive anything). (The introductory formula for such a structure can be, "אם...או...אם" "בין...ובין...ש", "גם...וגם"). If from such a structure the condition which is more probable in the context is deleted, the result is a concessive sentence: **גם אם תעמוד על שלך – לא תקבל** (Even if you defend your own you will not receive anything). A concessive sentence can also come from a series of conditional sentences in which one element is changed every time until the series comprises a wide range of topics the last of which is the converse of the first. When only the last is ex-

pressed, the rest of the possibilities are understood, deduced *a fortiori*. For example, in לא אֶבְלִיעֵינִי וְאֶסְקֶרְךָ (Even if they call me an abolitionist, I shall not hand over the Negro), what is also clear is that על אחת כמה וכמה לא אֶסְקֶרְךָ (All the more so, I will not hand over the Negro if they call me names that are less derogatory, if they do not use any derogatory names against me, or they praise me for it).

4.53: SENTENCE ADVERBIAL. Some adverbials do not complement the predicator, but are comments adding details to what is said in the sentence as a whole, e.g., *בְּמִקְלִי עָבַרְתִּי אֶת הַיַּרְדֵּן* (With my staff I crossed the Jordan), *דְּרָכָם וּמִשְׁכָּה בְּשֵׁיתִיקָה* (Their journey continued in silence). These are not predicator adverbials but sentence adverbials or situation adverbials. A subordinate clause can also realize this function, e.g., *הוּא נָכַס לֵעָצֵם הָעֵצִין בְּלֹא שְׁנִתְכּוֹן לָכֵךְ* (He went into the heart of the matter though he did not intend to do so). Following N. Chomsky's works on transformational grammar, it has been claimed by some authors, that in many cases place and time adverbials, as well as some other adverbials, should be considered as sentence adverbials, e.g., *פֹּה הַנְּעוּרוֹת נָאוֹת* (Here the girls are nice) (see Rubinstein, *Lešonenu*, 35).

4.54: PREPOSITIONS AS INTRODUCERS OF ADVERBIALS. Grammars do not give a complete list of prepositions introducing classes of adverbials, but a large number can be extracted from the examples they give. A fuller list is provided of conjunctions introducing subordinate sentences functioning as adverbials. Below is a list of the main prepositions and conjunctions serving as introducers to adverbials:

Place Adverbial: prepositions – בּ, לְ, מִ, אֶל, אַצֵּל, מִמֶּעַל לְ; conjunctions – וְ, כִּי, שֶׁ, עַד, אֲשֶׁר; (אל מקום ש' and other prepositions preceding ש' or מקום ש', eg. מִמָּקוֹם אֲשֶׁר).

Time Adverbial: prepositions – ב, כ, מ, ל, אחר, אחר, לפני, קדם, ש, טרם, ש, מאז, אך, לאחר ש; conjunctions – עד, מעת ש, משעה ש, מדי, כל עוד, בעוד, כיון ש, כל אימת ש, בעת ש, להש, לפני ש, אחר ש, משה, כש, ש, e.g., or (except ב, ל) in combination with ש, e.g., or (except ב, ל, מ) in combination with אשר, e.g., אשר, אחר אשר, כאשר.

Manner Adverbials: prepositions – כְּ, בְּ, לְ, מִ, מִתּוֹךְ, כְּמוֹ, יוֹתֵר מִ.

Measure Adverbials: prepositions – כּ, עַד.

Cause Adverbials: prepositions – הודות ל, מִמֶּנּוּ, בְּשִׁבְלֵי; conjunctions – הוֹאִיל וְ..., מֵאֲחֵר שֶׁ..., לְפִי שֶׁ..., מִכִּיּוֹן שֶׁ..., כִּי בְּאִשְׁרֵי, עַקֵּב, יֵעָן כִּי, יֵעָן, and several of the above prepositions followed by שֶׁ, e.g., בְּשִׁבְלֵי שֶׁ, מִפְּנֵי שֶׁ

Purpose Adverbials: prepositions – לְ, לְשֵׁם, לְמַעַן, כְּדִי; conjunctions – כִּי, שֶׁ, בְּשִׁבְלֵי שֶׁ, לְמַעַן אֲשֶׁר, לְמַעַן

Conditional Adverbials: prepositions – במִּקְרָה שֶׁ; conjunctions – כִּשְׁ, בְּזִמְנָן שֶׁ, לְכֶשׁ (and other introducers of time adverbials) כֹּל מִי שֶׁ, מִי שֶׁ.

(She spoke, as her eyes were flashing). In many circumstance clauses, however, no concord exists, at least in the surface structure, e.g., *וַיַּעֲמֵד בְּמִשְׁעוֹל הַכְּרָמִים, גֶּדֶר מִזָּה וְגֶדֶר מִזָּה* (And he stood in the path of the vineyard, a fence here and a fence here = between two fences).

5.14: LACK OF CONCORD BETWEEN SUBJECT AND PREDICATOR. In some instances there is no concord between subject and predicate. Usually, this results from a difference between the grammatical gender or number of the noun and the natural gender or number of the person or entity denoted by the noun (Hebrew has no neutral), as in the following cases:

(1) *Collective noun*. When the noun denotes a group of individuals, its form is singular, but its predicator can be in the plural, agreeing with the content rather than the form, e.g., *החבורה רצו ללכת* (The group wanted to go. Colloquial). The number of collective nouns with this usage seems to be fewer in modern Hebrew than in earlier periods of the language.

(2) Proper nouns that have the plural or dual form are always combined with a predicator in the singular and take the grammatical gender corresponding to the natural gender of the person, e.g., רַחֲמִים הָלַךְ (Raḥamim went off), תָּמַר חָזְרָה (Tamar returned), יוֹנָה הָלַךְ (Jonah went off (when the reference is to a male)), יוֹנָה הָלָכָה (Jonah went off (when the reference is to a female)).

(3) Names of countries are always in the feminine, whatever the form of the noun, e.g., וַתִּכְנַע מוֹאָב בַּיּוֹם הַהוּא (Moab surrendered on that day), מִצְרַיִם שְׁלָחָה צְבָא לַיָּמֵן (Egypt sent an army to Yemen), יִרְדֵּן הִכְרִיזָה עַל מַצְבַּח חָרוֹם (Jordan proclaimed a state of emergency), אֲרֻצוֹת-הַבְּרִית יָזְמוּ עֵידֵת שָׁלוֹם (The United States initiated a peace conference).

(4) *Pluralis majestatis*. The noun is in the plural not to indicate plurality but out of respect to the person designated. Modern Hebrew includes in this category אֱלֹהִים (God) and also בְּעֵלִים (owner), e.g., לֹא נִמְצָא בְּעָלֵי הַכֶּלֶב (The owner of the dog was not found).

5.21: PRONOUN CONCORD IN A FOCUSING SENTENCE (EXTRA-POSITION). Gender and number concord in a sentence is sometimes not the basic concord between subject and predicator (5.11–5.13), but the result of a transformation deleting a noun and replacing it with a pronoun. The substituted pronoun always agrees in gender and number with the deleted noun. Since there is usually another instance of the same noun elsewhere in the sentence, the pronoun agrees in gender and number to this other instance, as in the example given in 4.26: the sentence **הַהַנְתִּיקִים לֹא שָׁם לֵב** (Nobody paid any attention to the veterans) is transformed into a focusing sentence when the noun **הַהַנְתִּיקִים** (the veterans) is taken from its place and put initially while in its place is introduced a third person masculine plural pronoun, agreeing with it. Since the deleted noun followed a preposition, the substituted pronoun also follows the preposition and hence is attached to it. The resulting sentence is **הַהַנְתִּיקִים – לֹא שָׁם לֵב אֵלֵיהֶם** (The veterans, nobody paid any attention to them). The same applies when the

focused part functioned as subject in the source sentence, e.g., **סבא אינו מתעייף אף פעם** (Grandfather never gets tired). When the subject is extracted from this sentence and placed initially, a third person masculine singular pronoun is introduced in its place, agreeing with **סבא** (Grandfather). Since the noun is not preceded by a preposition, neither is the pronoun. The resulting sentence is **סבא – הוא אינו מתעייף אף פעם** (Grandfather, he never gets tired). The pronoun agreeing with the focused part is called referring pronoun or “binder”. As explained in 4.26: Focusing Sentence, the first noun in a focusing sentence is the subject and the rest of the sentence is the predicate. Consequently, the basic concord rule between subject and predicate applies here too; the element in the predicate agreeing with the subject is the referring pronoun.

5.22: PRONOUN CONCORD IN A RELATIVE CLAUSE. When the predicate of a focusing sentence is transformed into an adjunct sentence (4.38: Relative Clause), the concord between subject and predicate is transformed into concord between the noun nucleus and the adjunct sentence: – הַנְּתִיקִים [הַנְּתִיקִים] אִישׁ לֹא שָׁם לֵב אֲלֵיהֶם [הֵחֱלוּ לְהִתְאָרְגֵן בְּאִרגוּנִים נִפְרָדִים] (The veterans [The veterans, nobody paid any attention to them] began to organize themselves in separate organizations → הַנְּתִיקִים, שְׂאִישׁ לֹא שָׁם לֵב אֲלֵיהֶם, הֵחֱלוּ לְהִתְאָרְגֵן בְּאִרגוּנִים נִפְרָדִים] (The veterans, to whom nobody paid any attention, began to organize themselves in separate organizations). Even when the focused part was subject in the source sentence, e.g., סָבָא – הוּא אֵינוֹ מִתְעַיֵּף אֶף פַּעַם (Grandfather, he never gets tired), the whole of the predicate can be transformed into an adjunct sentence. However, if there is already subject-predicator concord in this sentence, for example when the predicator is a verb or there is a copula in the predicate, then this concord is usually sufficient. In this case, the adjunct sentence does not contain the subject pronoun, e.g., סָבָא, שְׂאִינוֹ מִתְעַיֵּף אֶף פַּעַם, חִיךְ בְּסִלְחָנוֹת (Grandfather, who never gets tired, smiled forgivingly) and not... הָאִישׁ שֶׁהָלַךְ, שְׂהוּא אֵינוֹ מִתְעַיֵּף אֶף פַּעַם, חִיךְ בְּסִלְחָנוֹת (The man, who went off on a journey, did not return), and not הָאִישׁ, שְׂהוּא הָלַךְ בְּדֶרֶךְ, לֹא חִוֵּר (The man, who went off on a journey, did not return), and not הָאִישׁ, שְׂהוּא הָלַךְ בְּדֶרֶךְ, לֹא חִוֵּר. This does not apply to a nominal sentence that does not have subject-predicator concord, e.g., הַמִּחְסָנִים הֵם הַמְּכָשׁוֹל הָאַחֲרוֹן (The stores[they] are the last obstacle), the source of which is in the identifying sentence הַמִּחְסָנִים – הַמְּכָשׁוֹל הָאַחֲרוֹן (The stores – the last obstacle), cf. 4.24: Identifying Sentence. The relative clause formed from the predicate includes the pronoun הֵם, which agrees with the subject: הַמִּחְסָנִים שֶׁהֵם הַמְּכָשׁוֹל הָאַחֲרוֹן עוֹלִים בָּאֵשׁ (The stores, which are the last obstacle, are going up in fire). On whether the subject pronoun (הֵן, הֵם, הוּא) is copula or referring pronoun of a focused part, see below 5.23: Copula Concord.

5.23: COPULA CONCORD. The source of the copula (see 4.22: The Copula) is a referring pronoun in a subject-focusing sentence, cf. the examples in 5.21: Pronoun Concord in a Focusing Sentence and 5.22: Pronoun Concord in a Relative Clause. However, the subject pronoun is also used in sentences where the focused part is not felt to be emphasized in any way (4.24:

Identifying Sentence). This appears to have happened for two reasons:

(1) Subject-focusing sentences became common in nominal sentences in the present tense by analogy with nominal sentences in the past and future tenses, that is speakers tended to insert a word agreeing with subject in gender and number between subject and predicator, or more precisely, to link such a word to the predicator (not necessarily putting it before the predicator) as they do with sentences in the past or future. Since this word (an inflected form of הָיָה (be)) does not introduce any emphasis to the sentence in the past or future, the emphasis is also lost in sentences with subject pronouns in the present tense.

(2) In certain constructions that lack subject-predicate concord, and particularly in sentences without a predicator the desire for “leveling” activates speakers, i.e., the need is felt to add something that will produce subject-predicate concord, in order that such constructions can enter the regular framework of Hebrew sentences, in which there is subject-predicator concord. We can explain in this way the obligatory appearance of the pronoun as a copula in sentences such as הַפְּגֹר הוּא בְּיָצוֹר דְּשָׁנִים (The delay is in the production of fertilizers), הָעֲלִיָּה הִיא בְּשָׂכָר (The rise is in salary), which are transformed from sentences פְּלוֹנִי מְפַגֵּר בְּיָצוֹר דְּשָׁנִים (X is lagging in the production of fertilizers), הַשָּׂכָר עָלָה (The salary rose) respectively. (See E. Rubinstein, for another explanation.) Usually the copula agrees with the subject. However, there are cases where the copula agrees with the predicator, when several words separate the subject from the copula and the copula is next to the predicator. In the colloquial language, and sometimes in writing, some use וְהוּא, וְהִיא, וְהֵם (or וְאֵנִי) as copula. There is also quite frequent use of הֵנּוּ or הֵנָּה and other inflected forms of הָיָה as copula.

5.24: OTHER CASES OF CONCORD. (1) A possessive pronoun agreeing with a noun mentioned after it is to be found in the double construct state: בֵּיתוֹ שֶׁל הָאִישׁ (the man’s house), חֲרָדָתָם שֶׁל הַהוֹרִים (the parents’ dread), cf. 4.34: The Construct Structure.

(2) A pronoun attached to a preposition and referring to a noun mentioned after it is to be found in the apposition structure אָמְרוּ עָלָיו עַל רַבִּי עֲקִיבָא (They said about him, about Rabbi Akiva), cf. 4.37: Apposition.

(3) A demonstrative pronoun introducing an identifying sentence agrees in gender and number with the noun appearing as part of the complement in the identifying sentence, and not with the noun in the preceding sentence to which the pronoun refers, e.g., הַשְּׂאֵלָה יְדוּעָה, אֲבָל זֶה עִנְיָן אֲחֵר (The question is well-known, but this is a different matter); וְזוֹ פְּסָקָה חֲדָשָׁה (... this is a new paragraph); אֵלֶּה דְּבָרִים יְדוּשִׁים (... these are matters that are well-known), cf. also 6.12: Demonstrative Pronouns. The same applies if the reference is to something mentioned after the identifying sentence, e.g., זֹאת הַתּוֹרָה (This is the law) or אֵלֶּה הַחֻקִּים (These are the statutes), when the details come after such a sentence.

The demonstrative pronoun זֶה can be attached to an undetermined noun or to an undetermined construct state. The noun or construct state then becomes determined. That is to say, זֶה הָאֲבָנִים is equivalent to הַבֵּית זֶה and הָאֲבָנִים. Agreement in gender and number between pronoun and preceding noun is obligatory.

5.25: LACK OF CONCORD IN ADJUNCT SENTENCES. (1) Adjunct content-sentences (see 4.38: Relative Clause), which are not transformed from a predicate but from an object sentence (on which there is no obligatory concord in gender and number with anything outside the sentence), do not require concord with the noun nucleus transformed from the verb-predicator in the source sentence.

(2) Introductory expressions, especially for adverbial sentences (see 4.54: Prepositions as Introducers of Adverbials), e.g., בְּאֵפֶן שֶׁ, שָׁעָה שֶׁ, מְקוֹם שֶׁ. The sentence subordinated by such an expression does not include a referring pronoun agreeing with מְקוֹם שֶׁ, שָׁעָה שֶׁ, אֵפֶן, etc., e.g., כָּל פֶּעַם שֶׁנִּפְשׁוֹ הָיְתָה מְרֵה עָלָיו (every time that he felt depressed). It means that the noun in the introductory expression loses its semantic force, in whole or in part, and becomes entirely or virtually a grammatical word. Its “adjunct sentence” is not really an adjunct sentence. The introductory expression can also subordinate a sentence with a different function, for example as subject, e.g., הָאֵם לֹא הִגִּיעָה הַשָּׁעָה שֶׁתִּתְאָחַד חֻכְמַת יִשְׂרָאֵל עִם שִׁפְתֵי יִשְׂרָאֵל? (Has the time when the wisdom of Israel will be united with the language of Israel not come?).

(3) Pronoun substitute. In some adjunct sentences the place adverbial שָׁם (there) replaces a pronoun attached to a preceding preposition, e.g., הַחֲלוֹן שֶׁהִצְטֻפְפוּ שָׁם יוֹנִים... (the window where the doves crowded, literally the window which doves crowded there). The substitution of שָׁם for an inflected preposition is found in the Bible, e.g., אֶרֶץ כְּנָעַן, אֲשֶׁר אָנִי מְבִיא אֶתְכֶם שָׁמָּה (the land of Canaan, where I shall bring you).

(4) If in the source the nucleus was the object of אָת in the adjunct sentence, the appearance of אָת with an inflected pronoun agreeing in gender and number with the nucleus is not obligatory. For stylistic reasons it is normally omitted, unless the omission will lead to ambiguity. For example, חִמָּר שֶׁשָּׁמַע מִפִּי מוֹרֵיו אוֹ קָרָא בְּעֵבֶר (material that he heard from his teachers or read in the past) and not חִמָּר שֶׁשָּׁמַע אוֹתוֹ מִפִּי מוֹרֵיו אוֹ קָרָא אוֹתוֹ בְּעֵבֶר (literally, material that he heard it from his teachers or read it in the past). It is normally possible to add in any such adjunct sentence the preposition אָת inflected to agree with the nucleus.

(5) When the nucleus is a verbal noun or abstract noun with the same root as the predicator in the adjunct sentence. In such a case there is no referring pronoun in the adjunct sentence, e.g., הָאֲבֵל שֶׁמִּתְאַבֵּלֶת עַל בְּנָהּ (the mourning which she mourns for her son). This phenomenon is presumably connected with the characteristics of the internal object.

(6) “Space words.” When the nucleus is only required for grammatical purposes, namely for the attachment of an ad-

junct sentence, words devoid of semantic content, such as indefinite pronouns or demonstrative pronouns, e.g., *זה*, *כך*, *מה*, or words with a very general semantic content, e.g., *דבר* (thing), *עובדה* (fact) are used. Such a nucleus does not require the presence of a referring pronoun in the adjunct sentence that is attached to it, whether the nucleus sums up what is said before or whether it comes after an obligatory preposition as introduction to what is to follow. For example: *לֹאֲבָא אָמְרָה כִּי אֶת אֲרוֹנוֹת: מָה שֶׁהוּא שֹׁמֵעַ מִתּוֹךְ שְׁתִּיקַת הַכְּנָעָה* (She told Father that he is eating lunch today at a restaurant, which he heard in submissive silence). However, sometimes the “space words” are not entirely devoid of semantic content and denote something more than a word like *דבר* or *עובדה*, e.g., *בְּמִלְאֵת שְׁבַעִים שָׁנָה לְהִדְחַת בֵּית הַמְּלוּכָה הַפּוֹרְטוּגָלִי, תִּאֲרִיד שָׁחַל*, e.g., *אֶתְמוּל* (At the end of seventy years following the dethronement of the Portuguese monarchy, a date which fell yesterday...) or *הוּא נִחְבֵּשׁ בְּמַחֲנֶה רְכוּז, מְקוֹם שֶׁמָּת אוֹ נִהָרַג בֵּין 1939 ל־1941* (He was imprisoned in a concentration camp, a place where he died or was killed between 1939 and 1941).

5.3: Determiner Concord

Determination is not recursive. It follows that the four methods of determination exclude each other: (1) the definite article; (2) a proper name; (3) a noun in combination with a possessive pronoun; (4) a *nomen regens* in the construct state. Determiner concord exists between a nucleus-noun and an adjective serving as its adjunct, i.e., either both words are determined or neither are determined: *נִיָּר חֲלָק* (smooth paper), *הַנִּיָּר הַחֲלָק* (the smooth paper). In mishnaic Hebrew and to some extent in biblical Hebrew it is possible for the adjunct to be determined while its nucleus is not determined, e.g., *מֵיִם הָרָעִים* (the evil waters), *יָם הַתִּיכוֹן* (the Mediterranean Sea), *יוֹם הַשֵּׁשִׁי* (the sixth day). This phenomenon is seldom found in modern Hebrew. Determiner concord does not have its source in the deep grammar. It is a surface phenomenon: the adjunct adjective receives determination even though the predicator, which served as its source, was not determined. The cause of determination is attraction: determination of the noun attracts determination of the adjunct adjective attached to it. The attraction of the definite article from the noun to the adjunct applies even to a demonstrative pronoun following a noun with the definite article (see section 5.24: Other Cases of Concord), since corresponding to *בֵּית זֶה* (this house) we can have *הַבֵּית הַזֶּה* without a difference in meaning being felt between these phrases. The same applies to the construct state relationship. Here too if the noun is determined by the definite article and the pronoun *זֶה* follows, the article is also attached to the pronoun *זֶה הַבֵּית הָאֲבָנִים זֶה* – *בֵּית הָאֲבָנִים זֶה* (this house of stone). In the phrase *הַבֵּית הַזֶּה* there is therefore a double determination. This is a clear example of redundancy, unique in determination, since determination is not recursive, i.e., a noun that is already determined cannot accept additional determination.

5.4: Restrictions on Determination

The non-recursive nature means that the definite article can-

not be combined with a proper name, nor with a noun with an inflected possessive, nor with a *nomen regens*; a proper name cannot be combined with the definite article (unless the name has been changed into a common name, or if the definite article is part of the name, e.g., *הַיַּרְדֵּן*, *הַלְבָּנוֹן* (the Jordan, the Lebanon)) nor with a possessive pronoun and it cannot be a *nomen regens*; a noun inflected for the possessive cannot be a proper name (unless it became an independent item, not connected with the common noun), cannot be combined with the definite article, and cannot be a *nomen regens*; a *nomen regens* cannot be a proper name unless it is a shortened name, e.g., *רֹאשׁוֹן* for *רֹאשׁוֹן לְצִיּוֹן*, *נְחֻלַּת יְהוּדָה* for *נְחֻלַּת יְהוּדָה לְצִיּוֹן*; it cannot be combined with the definite article or with a possessive pronoun, but if the construct state is taken to be a compound the definite article can precede it, e.g., *הַכְּדוּרְגָל* (the football). It should be added, however, that two (or more) people with the same name may be referred to with a definite article preceding the name in plural “שְׁתֵּי הַשְּׂפָרוֹת”. Determination by the demonstrative pronoun *זֶה*, which may precede or follow the noun, does not come under this rule: *זֶה* can come in addition to the above four methods. But if *זֶה* follows a noun with the definite article or the construct state with the definite article, the definite article must precede: *הַזֶּה* (see 5.3: Determiner Concord). When *זֶה* follows a noun determined by another method, the definite article is not obligatory but optional: *זֶה כּוֹבְעִי זֶה* (or, *כּוֹבְעִי הַזֶּה*) (my hat), *זֶה אַבְרָהָם הַזֶּה*, *אַבְרָהָם הַזֶּה* (this Abraham), but *זֶה בֵּית זֶה* (this house) – *בֵּית הָאֲבָנִים זֶה* (this house of stone) – *בֵּית הָאֲבָנִים הַזֶּה*.

5.5: Obligatoriness

Obligatoriness in the widest sense refers to the obligatory appearance of a word or form as a result of the existence of another word or form in the same sentence. It signifies roughly what is signified by “dependency” in the sentence but from the standpoint of one element in the dependency, either the active element or the passive one. For example, when the word *אֶתְמוּל* (yesterday) appears in a verbal sentence the verb normally is in the past. Here, what has been made obligatory is the element signifying that the verb is in the past form, while what made it obligatory is the word *אֶתְמוּל*. A further instance is the infinitive following certain auxiliaries, e.g., *עָשׂוּ, מָכַרְהוּ, עָלּוּ* (cf. 4.45: Infinitive as Object). Other auxiliaries require either an infinitive or a certain form of the verb, i.e., a participle, or a verbal noun, e.g., *הִתְחִילוּ לְהִבִּין* (they began to understand), *הִתְחִילוּ מִבִּינִים* (they began understanding), *הִמְעִיט לְדַבֵּר* (he spoke less, literally: he lessened to speak), *הִמְעִיט בְּדַבּוּר* (literally: he lessened in speech). In a narrow and more usual sense, obligatoriness is used to denote the obligatory appearance of a particular preposition when there is in the same sentence a particular verb requiring the preposition. For example, the appearance of the preposition *בְּ* is required by the verb *הִשְׁתַּמֵּשׁ* (cf. 4.41: Obligatory Complement and Obligatory Preposition). Compared with English, the rules are less stringent in this respect, since there are various cases when certain “obligatory” prepositions can be omitted without affecting the mean-

ing of the verb. In most cases when an obligatory preposition is retained, the meaning of the verb without the preposition differs discernibly from its meaning with the preposition, e.g., דָּלֵק (burn) – דָּלֵק אַחֲרַי (pursue after); הִתְלַגֵּל (roll) – הִתְלַגֵּל לִי (change to). When the verb does not have another meaning, then under certain conditions the obligatory preposition can be omitted, e.g., לֵּ after הִתְכַּוֵּן (intend) can be omitted before a subordinate sentence beginning with שׁ, e.g., הִתְכַּוֵּנִי שֶׁתָּבוֹא (I intended you to come). It is also possible to retain the preposition לֵּ here, but it would then be necessary to add a space-word between לֵּ and שׁ, e.g., הִתְכַּוֵּנִי לְכָךְ שֶׁתָּבוֹא, cf. 5.25, (6): Lack of Concord in Adjunct Sentences – “Space Words.” This area of degrees of obligatoriness, i.e., when the obligatory preposition can be omitted, has not been sufficiently investigated in Hebrew. The preposition אֶת is required (after certain verbs) only before a determined noun (it may be omitted, however, for stylistic reasons) but if an undetermined noun follows, its omission is obligatory. Some phrase the rule differently: “Before an undetermined noun the obligatory preposition אֶת is changed to the obligatory preposition Ø.” Obligatory prepositions are retained in many cases when the verb is converted into a verbal noun, e.g., הִרְדִּיפָה אַחֲרֵי הַנְּאוֹת הַחַיִּים (the pursuit after the pleasures of life), הִזְלוּל בְּסִכְנָה (the contempt for danger). This area too requires further investigation.

5.6: The Order of the Parts of the Sentence

Concord between different parts of the sentence in gender, number, and person; marking of the subject pronoun in the verb form (Morphology – 19. The Inflection of the Verb); presence of prepositions, particularly presence of **ל** to mark the “direct object” – all these allow a reduction in Hebrew of restrictions on the order of the parts of the sentence. While comprehensive investigations have not been undertaken into the order of parts of the sentence in modern Hebrew, it is possible to say in general that word order is fairly free, and usually what the speaker wishes to emphasize he says at the beginning of the sentence. Below is given a list of restrictions (more or less accepted by all) on the order of the parts of the sentence. Nevertheless, in some instances the strict observance of them is more a matter of style than of syntax. The influence of word order in other languages can sometimes be discerned.

(1) When the sentence begins with an object or adverbial and the predicator is a verb, the predicator follows the object or adverbial and the subject comes after the predicator. The rule applies particularly when the verb is in the past or future, e.g., *הַאֲנִיָּה הִפְלִיגָה אֶתְמוֹל* – (Yesterday sailed the boat) *הַאֲנִיָּה הִפְלִיגָה אֶתְמוֹל* – (The boat sailed yesterday). In colloquial Hebrew, sometimes in writing also, there are cases where this rule is not kept.

When two complements of the predicator occur in the sentence, for example two different objects or an object and an adverbial, the speaker is free to give them in any order. But if one of them is an inflected preposition, i.e., the complement includes a personal pronoun, the inflected preposition pre-

cedes the second complement. If both of them are inflected prepositions, the order is free, unless one of the words is **את** with a pronominal inflection, in which cases it comes first. For example: **רָאִיתִי אֶת הַיֶּלֶד אֶתְמוֹל** (I saw the child yesterday); **רָאִיתִי אֶתְמוֹל אֶת הַיֶּלֶד** (I saw yesterday the child) – but: **רָאִיתִי אֹתוֹ אֶתְמוֹל** (I saw him yesterday) and not **רָאִיתִי אֶתְמוֹל אֹתוֹ** (literally: I saw yesterday him). **לָקַחְתִּי אֶת הַסֵּפֶר מֵאֲחוֹתִי** (I took the book from my sister); **לָקַחְתִּי מֵאֲחוֹתִי אֶת הַסֵּפֶר** (I took from my sister the book) – **לָקַחְתִּי אוֹתוֹ מִמֶּנָּה** (I took it from her) and not **לָקַחְתִּי מִמֶּנָּה אוֹתוֹ** (literally I took from her it).

(3) Interrogative words, coordinating conjunctions, and the various subordinating conjunctions appear at the beginning of the sentence, whether the sentence is independent or subordinate. But a few subordinating words such as **לָכֵן**, **עַל כֵּן**, **אִם כֵּן**, sometimes occur not at the beginning of the sentence they are connecting but within it, e.g., **לָכֵן שָׁאַלְתִּי אוֹתוֹ מָדוּעַ לֹא בָּא** (Therefore I asked him why he did not come), **עַל כֵּן, מָדוּעַ לֹא בָּא, שָׁאַלְתִּי אוֹתוֹ** (I asked him, therefore, why he did not come). The coordinating word **גַּם** (also) links the word after it to one of the words preceding it in that sentence or in a preceding sentence. Hence, **גַּם** can appear in various places in the sentence. In speech **גַּם** sometimes occurs after the word it is linking (undoubtedly under the influence of foreign languages). For example: **גַּם שָׁתִיתִי [וְ]אָכַלְתִּי** (I ate [and] also I drank); **הָיָה שָׁם גַּם הַנָּשִׂיא** (Also the president was there). The latter sentence implies a previous statement that others were there.

(4) There is still no adequate investigation in modern Hebrew of the order of the parts of the noun phrase, i.e., the order of the various adjuncts relative to the nucleus. But if there is no special reason for changes, the order seems to be as given below (the degree of confidence in this order is sufficiently high for the first five parts, though in the rest it is less; the parentheses denote that it is possible to omit that part and pass on to the next, and still preserve a noun phrase): (quantity adjunct +) noun phrase nucleus (+ *nomen rectum* adjunct) (+adjective adjunct) (+separate possessive pronoun adjunct) (+demonstrative pronoun) (+prepositional phrase adjunct) (+appositional adjunct) (+subordinate sentence adjunct). For example: שְׁנֵי מַעֲלִי הַצֶּמֶר הַחֲדָשִׁים שְׁלִי הֵם מֵאֲנְגְלִיָּה, מִתַּת דּוּדִי, (Those two new woolen coats of mine from England, my uncle's gift, which arrived exactly a week ago, have disappeared; literally: Two coats of wool – new – mine – those – from England – the gift of my uncle – which arrived exactly a week ago – have disappeared). “A special reason for change” (above) includes the wish for emphasis, an afterthought, and the length of the adjunct, particularly when it is a subordinate sentence. An attached possessive pronoun may accompany any noun.

(5) Any noun can be placed initially as a focused part (cf. 4.26: Focusing Sentence). Though as a result the general word order is changed, within the source sentence now serving as predicate the word order remains as it was, with the referring pronoun taking the place of the focused noun, cf. also 6.322: Word Order as Indication of Subordination.

6: LINKS BEYOND THE SENTENCE

Although speech consists not only of the combination of words, but also of the combination of sentences, the links between sentences in the same discourse have not been described in books on syntax, and in fact have not been given a linguistic description at all. Those dealing with the combination of sentences do so within theories of rhetoric or composition and pay attention not to grammatical questions but to literary and logical structure. In this respect some changes occurred in the early 1950s, when Z.S. Harris began linguistic analyses of a whole discourse, which can include much more than one sentence and can sometimes consist of a dialogue between two or more speakers. In doing so, even though some previous scholars had already dealt with this topic, he laid the foundations for the development of modern linguistic views on deep structure. As stated in the section 3.1: Structural Analysis above, there are few descriptions in Hebrew as yet which are based on those assumptions, still there are works in Hebrew that describe some of the material related to the problem of links beyond the sentence, for example the uses of the various subordinating conjunctions. The following survey covers these topics: (1) anaphoric references in sequentially related sentences; (2) elliptical sentences related to previous sentences; (3) ways of combining sentences.

6.1: Anaphoric Reference in Sequentially Related Sentences

6.11: PERSONAL PRONOUNS. Those rules of pronoun concord applying within the sentence, e.g., in a focusing sentence or in a relative clause, apply also when the pronoun is in a different sentence, which follows the one with the noun, even though the two sentences do not have any other grammatical links. Moreover, the pronoun in the new sentence (if indeed the second instance of the noun has been deleted and a pronoun has replaced the noun) normally cannot be omitted as happens under certain conditions in adjunct sentences. Thus, the deletion of the second instance of a noun and its replacement by a personal pronoun happens not only in a focusing sentence or in a relative clause but in general, whether the first noun is in the same sentence (in surface structure) or in a preceding sentence. The personal pronoun therefore agrees in gender and number with the noun, even though only the first instance of the noun remains. For example: *הִילֵד חָזַר לְבֵית הַסֵּפֶר. רָאִיתִי אֶת הַיֵּלֵד.* (I saw the child. The child returned to school), *רָאִיתִי אֶת הַיֵּלֵד. הוּא חָזַר לְבֵית הַסֵּפֶר.* (I saw the child. He returned to school).

6.12: DEMONSTRATIVE PRONOUNS. (1) A demonstrative appearing in a sequentially related sentence but not functioning as adjunct sometimes refers back to a noun in a previous sentence. However, if its function in the sequentially related sentence is that of subject or predicator, it must agree in gender and number with the predicator or subject respectively of the sequentially related sentence and not with the noun in the preceding sentence to which it refers (cf. 5.24, (3): Other Cases of Concord). For example:

הֵבֵאתִי אוֹתוֹ אֶל הַדִּירָה; "זֶה יְהִי בֵיתְךָ" אָמַרְתִּי (I brought him to the apartment. "This will be your home," I said). The same applies to the demonstrative *כֵּן* and its inflectional variants, e.g., *יֵשׁ לִי עֲשָׂרָה פְּקִידִים גְּרוּעִים; אֵינֶנִּי רוֹצֶה עוֹד פְּקִיד כֵּן* (I have ten rotten clerks; I don't want another clerk like that). (See H. Rosén, *Ivrit Tova*, for another explanation.)

(2) Sometimes the demonstrative does not refer to a noun in the preceding sentence, but to the whole of the content of the sentence or to a part of it. In such a case there is no requirement for concord with a particular element in the preceding sentence. Generally the demonstrative is then *זֶה*, e.g., *זֶה הָיָה בְּשָׁעָה עָשָׂר. הַיְלָדִים שָׁכְבוּ לִישׁוֹן.* (The children went to bed. That was at ten). A sequentially related sentence with such a structure can introduce stories, e.g., *זֶה הָיָה בְּחֻנֻּכָּה...* (It happened at Hanukkah). By doing so, the narrator plunges the reader straight into the story, making him feel that he is not at the beginning of the story. Another possible explanation: *זֶה* refers in these cases to something unknown which is to be explained later, so that the reader becomes anxious to know what is coming.

(3) The definite article should also be mentioned here, since its appearance before a noun indicates a reference to the previous appearance of the noun and confirms that the two instances of the noun have the same referent, e.g., *אִישׁ הָיָה בְּאֶרֶץ עוּז, אִיּוֹב שְׁמוֹ. וְהָיָה הָאִישׁ הַהוּא תָם וְיָשָׁר* (There was a man in the land of Uz, whose name was Job. And that man was perfect and upright). The fact that sometimes the definite article appears before the first appearance (in surface structure) of a noun does not invalidate this claim, since in such a case it may be supposed that a previous sentence containing a non-determined instance of the noun has been deleted as a result of a transformation. Here belong also various adjuncts, restrictive and nonrestrictive alike (4.32: Restrictive and Non-restrictive Adjunct). There is no doubt that the sentences in which these appear are linked to preceding sentences, whether they are retained or deleted.

6.2: Fragmentary Sentences

Usually every sentence has two parts, a subject and a predicate. However, in Hebrew, as in other languages, there are short sentences that cannot be divided in this way. Some have called them single-element sentences, analyzing them according to their surface structure. But from the point of view of deep grammar they should be considered as remnants of normal sentences, with subject and predicate, from which some parts (subject and/or predicate or parts of the latter) have been deleted. Here belong expressions of agreement with or opposition to a preceding sentence (usually said by another speaker), e.g., *כֵּן* (Yes!), *לֹא* (No!), *אֲוִלִּי* (Perhaps!), these being remnants of the predicate. Sentences such as *רוּחַ. שֶׁמֶשׁ. חֹם* (Wind. Sun. Warm.) are used in literature and not necessarily in sequentially related sentences. The part that would complete them and make them into proper sentences has been omitted, because it can be understood or because it is unimportant, and not because it has been mentioned previously.

6.3: Sentence Connection

Two juxtaposed and linked sentences may be related in one of two ways: (1) The two sentences have equal status syntactically and are linked by coordination (see 3.14: The Compound Sentence above); (2) The two sentences have a different syntactic status, one of them being subordinate to the other (see 3.15: The Complex Sentence above).

6.31: COORDINATION. It is customary to classify the kind of relations between two coordinated sentences by the relation of the content of the sequentially related sentence to that of the preceding sentence. The relation may be (1) addition; (2) contrast; (3) alternative; (4) explanation or conclusion; (5) result.

Coordinated sentences may be juxtaposed without a coordinating marker between them (asyndetic coordination), but generally in modern Hebrew the coordination is marked by a coordinator (syndetic coordination). Some coordinators mark only one of the above types of coordination, others mark more than one kind. Coordinations of types (1) and (3) can comprise more than two consecutive sentences. In that case the coordinator can come merely between the last sentence and the one preceding it. When the coordination is expressed without a coordinator, it generally requires a special intonation, particularly for coordinations of explanation and result, and a significant pause before the sequentially related sentence suggests the content-type of the coordination. Sometimes the coordination is marked by a coordinator before the first sentence. Every such coordinator has available a correlative between that sentence and the sequentially related sentence, e.g., ...**וְגַם** **כִּי אִם** ..., **לֹא רַק**, (Not only... but also...). Sometimes, however, the correlative is omitted, the speaker being content with the appropriate intonation.

The coordinators:

- (1) coordination of addition: ... גם ... ; ... ; אלא ... די ...
... לא רק ... אלא גם ; ... אף ... ; ... עוד אלא ש ... (ו) גם ; גם ... ; ש ...
... לא זו בלבד ... אלא ש ; לא רק ... (כי אם) גם ... ;
(2) coordination of contrast: ... אבל ... ; ... ; אלא ...
... כי אם ... ; אין ... אלא ... ; אולם ... ; אך ... ; רק ... ; אפס ...
(3) coordination of alternative: ... או ש ... ; או ... ; או ש ... או ...
(4) coordination of reason or conclusion: ... מכאן ש ... ;
... לומר ... ; ש ... ;
(5) coordination of result: ... לפיכך ... ; ... על כן ... ; לכן ...

6.32: SUBORDINATION. A subordinated sentence realizes a function within another sentence (see 3.15: The Complex Sentence above). From the point of view of the other sentence “a link outside the sentence” does not apply, but from the point of view of the subordinated sentence that is the nature of the link.

Subordination is chiefly marked in Hebrew by words exclusively used to mark subordination, by words that mark either coordination or subordination, and by the order of the sentence elements, whether within the subordinated sentence or in the place of the subordinated sentence within the super-

ordinate sentence. Intonation is also criterial for the nature of the sentence, but since descriptions of Hebrew intonation have not yet been published there will merely be occasional comments in this area. The following survey will cover only (1) words marking subordination; (2) the order of the sentence elements.

6.321: *Subordinators*. ׀ is the most general subordinator. It can introduce an adjunct sentence and an object sentence (after verbs of saying), and can combine with other words to introduce various adverbial sentences (cf. 4.54: Prepositions as Introducers of Adverbials). In historical grammar ׀ is considered to have evolved from an ancient demonstrative pronoun, the ancient subordination marker ׀ (found in biblical Hebrew) being pointed to as a transitional form between demonstrative pronoun and subordination marker. But even if this claim can be proved right historically, it should not be taken into account in a consideration of the function of ׀ in modern Hebrew. It now serves solely as a subordination marker and there is no trace in it of an ancient demonstrative pronoun. No concord of any kind applies between it and what precedes it, and therefore it does not serve as “substitute for the subject,” as some authors have alleged.

אָפּער. Although this word is typical of biblical Hebrew (where פּ appears only in late passages), modern Hebrew uses it too. Indeed, אָפּער is found in all levels of the contemporary language, particularly as a stylistic variant for פּער, when the latter occurs too often for the speaker's taste. This variation is restricted, since פּער cannot be replaced in all its uses by אָפּער, this being one of the reasons for the relative infrequency of אָפּער as compared with פּער in literary modern Hebrew. אָפּער cannot introduce the following structures which are related in deep structure and can be transformed from one another: (1) adjunct content-sentences (see 4.38: Relative Clause); (2) object sentences which can be transformed into adjunct content-sentences; (3) subject sentences derived from such object sentences by the change of the predicator verb from active to passive, or by its replacement by modal predicators such as טוב (good), יפה (fine), הָיָא (would that), חֶבֶל (a pity), which express the attitude of the speaker to what is said in the subordinated part. The following are examples:

<i>Object content-sentence</i>	<i>Adjunct content-sentence</i>
יָדַעְתִּי שְׂרוּת עוֹבֶדֶת	הַיָּדִיעָה שְׂרוּת עוֹבֶדֶת
(I knew that Ruth works)	(the knowledge that Ruth works)
<i>Subject content-sentence</i>	<i>Subject content-sentence</i>
טוֹב שְׂרוּת עוֹבֶדֶת	נוֹדַע לִי שְׂרוּת עוֹבֶדֶת
(It's good that Ruth works)	(It became known to me that Ruth works)

In such sentences אָז can only be used exceptionally, in highly rhetorical language. Likewise, וואָס does not introduce indirect speech, and generally it does not precede the participle.

כי introduces indirect speech, adjunct content-sentences, object sentences from which adjunct content-sentences can be transformed, and subject sentences derived from these object sentences by a change of the verb-predicator from active to passive. כי therefore is used in all structures not open to אשר. However, כי cannot introduce a subject sentence when the predicator is an initial modal expression such as הָלֹאִי (would that), חָבֵל (a pity), הָלֹאִי שִׁירֵד שָׁלֵג (would that snow will fall), but not הָלֹאִי כִּי יֵרֵד שָׁלֵג †. Similarly, כי cannot introduce relative clauses. Another function of כי is to introduce adverbial sentences of cause (and in biblical Hebrew, also time and condition adverbials).

ה introduces relative clauses that begin with the participle form of the verb, which agrees in gender and number with the nucleus.

ו mostly marks coordination rather than subordination. However sometimes, and especially in literature, it introduces a sentence that is or seems to be subordinated to the preceding sentence, when the subordinate sentence is one of circumstance, comparison, result, or purpose, e.g., הַנֶּעֱרָץ יָצָא לְדֶרֶךְ וְיָדָיו רִיקוֹת (The lad went out and his hands were empty) – circumstance; הַשֶּׁמֶשׁ נִרְחָה, הַשִּׁיטָה פָּרְחָה, וְהַשּׁוֹחֵט שָׁחַט (The sun shone, the acacia blossomed, and the slaughterer slaughtered) – comparison; בִּקֵּשׁ רַחֲמִים וְיִסְלַח לָךְ (Seek mercy and you will be forgiven) – result; מָה נַּעֲשֶׂה וְנִנָּצֵל? (What shall we do and we shall be saved?) – purpose. See also 4.54: Prepositions as Introducers of Adverbials.

6.322: *Word Order as Indication of Subordination*. Generally, the order of the parts of the sentence in a subordinated sentence does not differ from that in an independent sentence (5.6: The Order of the Parts of the Sentence). But word order in relative clauses and conditional sentences may influence the nature of the link between them and the sentences in which they appear. In conditional sentences the place of the subordinated sentence may determine the nature of the link, usually together with other factors, such as intonation.

(1) A relative clause beginning with an inflected preposition that agrees in gender and number with the nucleus (see 5.21: Pronoun Concord in Focusing Sentence; 5.22: Pronoun Concord in a Relative Clause) can occur without the initial subordinator ש (or אשר) e.g., רָאִיתִי אֶת הַבַּיִת בּוֹ גָר אָחִיךָ (I saw the house in which your brother lives), as opposed to בּוֹ רָאִיתִי אֶת הַבַּיִת שֶׁאָחִיךָ גָר (I saw the house in which your brother lives). It is usual to term such a relative clause as an asyndetic relative clause, since it lacks an initial conjunction. It may be argued that a marker of subordination is present, though not the usual ש, the inflected preposition filling also that function besides its function within the relative clause. In biblical Hebrew an asyndetic relative clause may occur also without this condition e.g., יֵאבֵד יוֹם אֲנִלָּד בּוֹ (A relative clause without an inflected preposition may appear without a marker of subordination if it has a verb in the future agreeing with the nucleus and preceded by the negative participle בֹּל, e.g., אֱמוּנָה בִּלְתִּיעָרֵר (a faith that cannot be uprooted). It is impossible to add the subordinator ש or some

other subordinator in initial position here. In such a structure the negative participle לֹא can replace בֹּל but it is then possible to add ש or אשר, e.g., כִּבְדֹּ שְׁלֹא יִתְאַר (weight that cannot be described) or כִּבְדֹּ לֹא־יִתְאַר.

(2) Conditional sentences (see 4.52: Types of Conditional Adverbial) can be expressed without an initial conditional word under certain restrictions: (a) the protasis must come first, (b) the predicator must come first in the protasis. The absence of the conditional word is usual in legal language, e.g., יִבְיֹאֲנוּ לְתַחֲנַת הַמִּשְׁטָרָה הַסְמוּכָה, מָצָא אָדָם חֶפֶץ, יָבִיאָנוּ לְתַחֲנַת הַמִּשְׁטָרָה הַסְמוּכָה (A man has found an object, he shall bring it to the nearest police station). The future form of the second verb expresses not the condition, but the intention of the whole sentence to serve as a permanent instruction in all cases to which the condition applies. Similar conditional sentences are found in literature. However, they are not instructions, but refer to recurring events. In these the second verb may also be in the past, e.g., הָבִיאָם לְאִמּוֹ; מָצָא מִסְמָרִים – הָבִיאָם (He found buttons – he brought them to his mother; he found nails – he brought them to his father). Proverbs may likewise have this form, e.g., in biblical Hebrew, – מָצָא אִשָּׁה (He found a wife – he found a good thing). When such sentences are said orally, the conditional sentences have characteristic intonation patterns. In the colloquial language, too, there may occur conditional sentences without an introductory conditional word. Only sentence order, word order, and intonation show them to be conditional, e.g., – יֵרְצוּ – יֵאָכְלוּ (They will want – they will eat; they won't want – they won't eat). A change of sentence order, of word order, or of intonation will necessitate a conditional word, e.g., אִם יֵרְצוּ, אִם יֵאָכְלוּ, אִם לֹא יֵרְצוּ (They will eat if they want; they will not eat if they don't want).

[Uzzi Ornan]

The following is not intended to serve as an exhaustive bibliography, but rather as an aid to the interested reader seeking additional information. It includes entries of three types:

- (1) General research works on Hebrew linguistics and contemporary language problems.
- (2) Publications containing particularly extensive bibliographical material.
- (3) Publications presenting a wide variety of approaches.

BIBLIOGRAPHY: A. GENERAL WORKS: F.E. Koenig, *Historisch-kritisches Lehrgebäude der hebraeischen Sprache und historisch-comparative Syntax der hebraeischen Sprache*, 3 vols. (1881–97); E. Kautzsch (trans. A.E. Cowley), *Gesenius' Hebrew Grammar* (1910²⁸); H. Bauer and P. Leander, *Historische Grammatik der hebraeischen Sprache des Alten Testaments*, 3 vols. (1918–22); G. Bergstraesser, *Wilhelm Gesenius' hebraeische Grammatik*, 3 vols. (1918–29); M.B. Sznajder, *Torat ha-Lašon bēhitpattēhūtah*, 2 vols. (1923–40); Š.Š. Kantoroviz, *Diqduq ha-Šafa ha-ivrit lē-koḵ Signoneha*, 2 vols. (1928); M.H. Segal, *A Grammar of Mishnaic Hebrew* (1927); idem, *Diqduq lešon ha-Mišna* (1936); M. Lambert, *Traité de grammaire hébraïque* (1938); Y. Avinery, *Heḳal Rashi*, 4 vols. (1940–49); D. Yellin, *Diqduq ha-Lašon ha-ivrit* (1942); P. Joüon, *Grammaire de l'hébreu biblique*

(1947²); P. Joüon-T. Muraoka, *Z. Har-Zahav, Diquduq ha-Lašon ha-ivrit*, 6 vols. (1951–55); N.H. Tur-Sinai, *ha-Lašon wê-ha-Sefer*, 3 vols. (1954–59); B. Klar, *Mehqarim wê-iyunim ba-Lašon, ba-šira u-va-Sifrut* (1954); W. Chomsky, *Hebrew the Eternal Language* (1952; Heb., 1967); R. Meyer, *Die hebraeische Grammatik* (1955², 1966³), adaption of G. Beer's Grammar; E.Y. Kutscher, *Ha-Lašon wê-ha-Reqa' ha-Lēšoni šel meḡillat Yeša'yahu* (1959); A. Sperber, *A Historical Grammar of Biblical Hebrew* (1966); A. Kašer (ed.), *Balšanut Ḥiššuvit* (1969); R. Macuch, *Grammatik des Samaritanischen Hebraeisch* (1969, see Z. Ben-Ḥayyim, in: *Biblica*, 52 (1971)); C. Rabin, in: *Current Trends in Linguistics*, vol. 6 (1971), 304–46. **ADD. BIBLIOGRAPHY:** M. Mishor, "The Tense System in Tannaitic Hebrew" (dissertation, Heb. Univ., 1983); N. Braverman, "Ha-Milliyot ve-To'arei ha-Po'al Bilšon ha-Tanna'im" ("Particles and Adverbs in Tannaitic Hebrew (Mishnah and Tosefta)," dissertation, Heb. Univ. Jerusalem (1995); P. Joüon, *A Grammar of Biblical Hebrew*, trans. and rev. by T. Muraoka, 2 vols. (1993). **B. PROBLEMS OF MODERN HEBREW:** E.M. Lipschuetz, *Vom lebendigen Hebraeisch* (1920); I. Garbell, *Fremdsprachliche Einflüsse im modernen Hebraeisch* (1930); Z. Har-Zahav, *Lēšon Dorenu* (1930); Y. Klausner, *Diquduq Qazar šel ha-ivrit ha-Ḥādaša* (1935); Y. Avineri, *Kibbuš ha-ivrit bē-Dorenu* (1946); Y. Epstein, *Hegyon Lašon* (1947); Y. Klausner, *Ha-Lašon ha-ivrit Lašon Ḥayya* (1949²); E.M. Lipschuetz, *Kētavim*, vol. 2 (1949); A. Avrunin, *Mehqarim bi-lēšon Bialik wê-Yalag* (1953); Z. Ben-Ḥayyim, "Lašon 'attiqa bi-Mēzi'ut Ḥādaša," in: *Lešonenu La'am*, nos. 35–37 (1953); Ḥ. Rosén, *Ha-ivrit Šellanu* (1956); Y. Klausner, *Ha-ivrit ha-Ḥādaša u-vē'ayoteha* (1957); Y. Livni, *Lašon Kē-Hilkatah* (1957); A. Bar-Adon, *Lēšonam ha-Mēdubberet šel ha-Yēladim bē-Yiśra'el* (1959); Y. Perez, *ivrit ha-Hālaqa* (1961²); R. Sivan, *Žurot u-Mēgammat bē-Ḥidduš ha-Lašon ha-ivrit bi-Tēqufat Tēḥiyatah* (1963); A. Bendavid, *Lēšon Miqra' u-Lēšon Ḥakamin* (1967–69²); M. Ben-Asher, *Hitgabbērut ha-Diquduq ha-Normaṭivi* (1969). **ADD. BIBLIOGRAPHY:** M. Bar-Asher, *L'Hébreu Mishnique, études linguistiques* (1999). **C. PHONOLOGY AND MORPHOLOGY:** E.A. Speiser, in: *JQR*, 16 (1925/26), 343–82; 23 (1932/33), 233–65; 24 (1933/34), 9–46; M. Segal, *Yēšode ha-Fonetiqa ha-ivrit* (1928); J. Cantineau, in: *Bulletin d'études orientales*, 1 (1931), 81–98; L. Gulkowitsch, *Die Bildung von Abstraktbegriffen in der hebraeischen Sprachgeschichte* (1931); E. Porat, *Lēšon Ḥakamin* (1938); C. Sarauw, *Ueber Akzent und Silbenbildung in den älteren semitischen Sprachen* (1939); H. Birkeland, *Akzent und Vokalismus im Althebraeischen* (1940); C. Brockelmann, in: *ZDMG*, 94 (1940), 332–71; G. Lisowski, *Die Transkription der hebraeischen Eigennamen des Pentateuch in der Septuaginta* (1940); Z. Ben-Ḥayyim, in: *Lešonenu*, 11 (1941), 83–93; E. Brønno, *Studien ueber hebraeische Morphologie und Vokalismus der Hexapla* (1943); D. Yellin, *Tolēdot Hitpattēḥut ha-Diquduq ha-ivri* (1945); Y. Cantineau, in: *Bulletin de la Société de Linguistique*, 46 (1950), 82–122; R.W. Weiman, *Native and Foreign Elements in a Language* (1950); G.J. Botterweck, *Der Triliterismus im Semitischen* (1952); Z. Elner, *Al Ḥuqqeha ha-Na'ālamim šel ha-Nēgina ha-ivrit* (1952); V. Christian, *Untersuchungen zur Laut- und Formenlehre des Hebraeischen* (1953); Y.G.P. Gumpertz, *Mivṭē Šēfatenu* (1953); Z. Ben-Ḥayyim, *Studies in the Traditions of the Hebrew Language* (1954); I. Garbell, in: *Homenaje a Millās-Vallicrosa*, 1 (1954), 647–96; S. Moscati, *Preistoria e storia del consonantismo ebraico antico* (1954); Z. Ben-Ḥayyim, *ivrit wa-a'ramit Nosah Šomēron*, 5 vols. (1957–77); Ḥ. Rabin, in: *Sefer Tur-Sinai* (1960), 169–206; idem, in: *Tarbiš*, 30 (1960/61), 99–111; Š. Morag, *Ha-ivrit še-bē-Fi Yēhude Teman* (1963); Ḥ. Yalon, *Mavo' lē-Niqqud ha-Mišna* (1964); K. Koskinen, in: *ZDMG*, 114 (1964), 16–58; K. Aartun, *ibid.*, 117 (1967), 247–65; E. Jenni, *Das hebraeische Pi'el* (1968); R. Mirkin, in: *Lešonenu*, 32 (1968), 140–52; Y. Kutscher, in: *Sefer Zikkaron l-Vinyamin de-Vries* (1969), 218–51; W. Weinberg, in: *HUCA*, 40–41 (1969–70), 1–32; E.

Brønno, *Die Aussprache der hebraeischen Laryngale nach Zeugnissen des Hieronymus* (1970); J. Blau, *On Pseudo-Corrections in Some Semitic Languages* (1970), 23–42, 114–25. **ADD. BIBLIOGRAPHY:** Y. Yeivin, *Masoret ha-Lašon ha-ivrit ha-Mištakkefet ba-Nikkud ha-Bavli* (1985); O. (Rodrig) Schwartzwald, *Dikduk u-Metzi'ut ba-Po'al ha-ivri* (1981); *ibid.*, *Perakim be-Morfologi'ah ivrit* (2002); U. Ornan, *Ha-millah ha-Aḥaronah: Mangelon ha-Tezurah shel ha-Millah ha-ivrit* (2003). **D. SYNTAX AND STYLE:** S.R. Driver, *A Treatise on the Use of the Tenses in Hebrew* (1892³); E. Koenig, *Stilistik, Rhetorik, Poetik in Bezug auf die biblische Literatur* (1900); Y.H. Ṭaviov, *More ha-Signon* (1902²); J. Nodel, *Der zusammengesetzte Satz im Neuhebraeischen, auf Grund der Mischna, der Tosefta und Midraschim* (1928); G.R. Driver, *Problems of the Hebrew Verbal System* (1936); Y. Perez, *Taḥbir ha-Lašon ha-ivrit* (1942); F.R. Blake, *A Resurvey of Hebrew Tenses* (1951); M. Gottstein, *Taḥbirah u-Millonah šel ha-Lašon ha-ivrit še-bi-Tēḥum Hašpa'atah šel ha'aravit* (1951); E. Lemoine, *Theorie de l'emphase hebraïque* (1951); M.M. Bravmann, *Studies in Arabic and General Syntax* (1953); C. Brockelmann, *Hebraeische Syntax* (1956); U. Ornan, in: *Lešonenu*, 25 (1961), 35–51; F. Rundgren, *Das althebraeische Verbum, Abriss der Aspektlehre* (1961); E.J. Revell, *A Structural Analysis of the Grammar of the Manual of Discipline* (1962); U. Ornan, *Ha-Zerufim ha-Šemaniyim bi-Lēšon ha-Sifrut ha-ivrit ha-Ḥādaša* (1964); Y. Perez, *Mišpaṭ ha-Ziqqa ba-ivrit lē-Ḳol Tēqufoteha* (1967); Ḥ.B. Rosén, *ivrit Ṭova* (1967²); E. Rubinstein, *Ha-Mišpaṭ ha-Šemani* (1969); Y. Hayon, *Relativization in Hebrew* (1969); U. Takamitsu, *Emphasis in Biblical Hebrew* (1969); I.F. Anderson, *The Hebrew Verbless Clause in the Pentateuch* (1970); E. Rubinstein, *Ha-Zeruf ha-Po'oli* (1971). **ADD. BIBLIOGRAPHY:** A. Abbadi, *Taḥbir ha-Siyaḥ shel ha-ivrit ha-Ḥadashah* (1988); S. Fassberg, *Sugi'ot be-Taḥbir ha-Mikra* (1994); M.Z. Kaddari, *Taḥbir ve-Semantikah be-ivrit she-le-aḥar ha-Mikra*, 2 vols. (1991–95). **E. LEXICON AND SEMANTICS:** J. Levy, *Woerterbuch ueber die Talmudim und Midraschim*, 4 vols. (1876–89); Ḥ.Y. Kohut, *Sefer he-'arukh ha-Šalem me'et Natan Ben-Yehi'el*, 8 vols. (1878–92); S. Krauss, *Griechische und lateinische Lehnwoerter im Talmud, Midrasch und Targum*, 2 vols. (1898–99); M. Jastrow, *A Dictionary of the Targumim etc.*, 2 vols. (1903); F. Brown, S.R. Driver, and C.A. Briggs, *A Hebrew and English Lexicon of the OT, Based on... Gesenius* (1907); E. Ben-Yehuda, *Millon ha-Lašon ha-ivrit ha-Yešana ve-ha-Ḥadašah*, 16 vols. (1908–50); W. Gesenius, *Hebraeisches und aramaeisches Handwoerterbuch ueber das AT* (ed. by Buhl; 1921¹⁷); Y. Klatzkin, *Ozar ha-Munnaḥim ha-Pilosofiyim*, 4 vols. (1928–33); S. Krauss, *Tosefot he-'arukh ha-Šalem* (1937); Y. Kena'ani, *Ozar ha-Lašon ha-ivrit*, 1–11 vols. (1948–71); L. Koehler, W. Baumgartner, *Lexicon in Veteris Testamenti libros & Supplementum* (1953, 1958, 1967³); F. Zorell, *Lexicon Hebraicum et Aramaicum Veteris Testamenti* (1954); D. Sedan, *Avne Šafa* (1967); Š.E. Loewenstamm, Y. Blau, *Ozar Lashon ha-Miqra' (N-Ṭ)*, 3 vols. (1957–60); J. Barr, *Semantics of Biblical Language* (1961); Y.Y. Kutscher, *Millim ve-Toldotehen* (1961); R. Sappan, *Darke ha-Sleng* (1963); idem, *Millon ha-Sleng ha-Yiśrēli* (1965); Z. Scharfstein, *Ozar ha-Millim wê-ha-Nivim* (1964³); Y. Avineri, *Yad ha-Lašon* (1965); A. Even-Šošan, *Millon Ḥadaša*, 5 vols. (1949–52); idem, *Ha-Millon he-Ḥadaš*, 7 vols. (1966–1970); Ḥ. Yalon, *Mēgillot Midbar Yēhuda, Divre Lašon* (1967); Y. Avineri, *Gēnazim Mēgullim* (1968); N. Stutchkoff, *Ozar ha-Safā ha-ivrit* (1968); M.Z. Qaddari, *Ha-Ḥiyuv bi-Lēšon ha-Mēgillot ha-Gēnuzot* (1968); idem, *Mi-Yrušat Yēme ha-Benayim* (1970); Ḥ. Rabin and Z. Radday, *Ozar ha-Millim* (1970). **ADD. BIBLIOGRAPHY:** J. Schweka, *Rav Millim, Ha-Millon ha-Shalem Ivri-Ivri*, 6 vols. (also on CD and updated version at: www.cet.ac.il/rav-milim) (1997); A. Even-Shoshan, *Millon Even-Shoshan: Mehuddash u-Me'udkan Lishnot ha-Alpayim* (ed. Moshe Azar), 6 vols. (2003). **F. PERIODICALS:** *Lešonenu* (1929–); *Lešonenu La'am* (1949–);

Qunteresim le-'inyene ha-Lašon ha-'ivrit (1937–8, ed. H. Yalon); *'Inyene Lašon* (1942–3, ed. H. Yalon); *Balšanut Ivrit Hoššit* (1969–).
ADD. BIBLIOGRAPHY: *Mehkarim be-Lashon* (1985–).

HEBREW IMMIGRANT AID SOCIETY (HIAS), international immigrant and refugee service. HIAS was founded in New York City in 1881, when the Russian Emigrant Relief Committee, a temporary body established to help Jews escaping Czarist Russia, formed the Hebrew Emigrant Aid Society. The new organization provided meals, transportation, and employment counseling to arrivals at New York's Castle Garden, the main immigrant-processing center of that time. In 1882 the first Jewish shelter was established on the Lower East Side. In 1889 the shelter adopted the name Hebrew Sheltering House Association and was reorganized by East European Jewish immigrants under the Hebrew name, Hachnosas Orchim. In 1909 the Hebrew Sheltering House Association (1884) and the Hebrew Immigrant Aid Society (1902) merged. Responding to the growing needs of Jewish immigrants from Eastern Europe, the organization soon grew to national dimensions, providing help in legal entry, basic subsistence, employment, citizenship instruction, and locating of relatives for nearly half a million newcomers to the United States during the organization's first decade. Under President John L. Bernstein (1917–26), HIAS offices were opened in Eastern Europe and the Far East.

In 1927 HIAS joined the Jewish Colonization Association (ICA) and the European Emigdirect to form the collectively run HICEM. Although the economic depression of the 1930s resulted in demands for additional domestic services to Jewish communities all over the world, most of HICEM's efforts were devoted toward financing and assisting emigration from Nazi Germany and finding outlets for refugees from Eastern and Central Europe in Western Europe and South America. HIAS continued its European activities throughout World War II, while imploring Western governments to open their gates wider to Jewish war refugees. In 1945 HIAS dissolved its partnership with HICEM, and in 1949 it cooperated with the American Jewish Joint Distribution Committee (JDC) in forming the Displaced Persons Coordinating Committee. As in previous years, HIAS continued to fight against restrictive U.S. immigration laws following World War II, and worked with Israel and with other Jewish immigrant services.

In 1954 HIAS merged with the United Service for New Americans and the JDC Migration Department into the United HIAS Service, a single international agency which helped thousands of East European and North African immigrants – especially following the Hungarian revolt of 1956 and the Middle East crises of 1956 and 1967 – to find new homes, mainly in Western Europe, the United States, and South America. Today about 30 percent of HIAS's budget comes from the U.S. Department of State; the remainder comes from private donations.

During the 1980s there were tensions between HIAS, representing the American Jewish community along with some of the Soviet Jewry movement's agencies, and the Israeli govern-

ment over whether and how to aid Soviet Jews seeking freedom in countries other than Israel. The Israeli government felt that the Soviet Jewry movement was a Zionist movement and that since it had issued the visas under which Soviet Jews were able to leave, all Soviet Jews should go to Israel and emigrate, if they so chose, from Israel to other countries. HIAS, some local federations, and the Union of Councils felt that the Soviet Jewry movement was a human rights and human freedom issue and therefore, they were prepared to assist Soviet Jews just as they assisted Jews leaving other lands of oppression. The divisions were deep. Each side was faithful to the truth of their experience. In the end HIAS helped those Soviet Jews who wished to come to the United States directly and local federations assisted in the resettlement.

In addition to its world headquarters in New York City, HIAS maintains offices in Buenos Aires, Charlotte, N.C., Djabal and Goz Amir, Chad, Kiev, Moscow, Nairobi, Quito, Ecuador, Tel Aviv, Vienna, and Washington, D.C. Since its beginnings in 1881, HIAS has helped more than 4.5 million people to immigrate to the United States and other countries of safe haven around the world.

[Morris Ardoin (2nd ed.)]

HEBREW LANGUAGE. This entry is arranged according to the following scheme:

PRE-BIBLICAL
BIBLICAL
THE DEAD SEA SCROLLS
MISHNAIC
MEDIEVAL
MODERN PERIOD

A detailed table of contents precedes each section.

PRE-BIBLICAL

Nature of the Evidence
The Sources
Phonology
Morphology

Pre-biblical Hebrew, for the purposes of this article, refers to the Hebrew language as reflected in written documents up to and including the 12th century B.C.E. (Taanach, cf. below). This study is limited to an analysis of the written evidence which reflects the Hebrew spoken in Palestine during the pre-biblical period. (No attempt will be made to reconstruct Proto-Hebrew (‡) forms based on the masoretic Hebrew found in the Bible). Evidence of this type exists for the period from the mid-20th to the 13th centuries B.C.E.

Nature of the Evidence

There is no corpus of texts written in pre-biblical Hebrew, but only toponyms and single words transcribed into syllabaries which were not able to render accurately the consonants and vowel patterns of Hebrew. This material is written in the Egyptian and Akkadian syllabaries and care must be

exercised in reconstructing the language upon which these transcripts are based.

The Akkadian syllabary (as a result of Sumerian influence) was unable to represent gutturals except for *h*. Therefore, these transcriptions cannot help to determine which of the Proto-Semitic gutturals were still in use in pre-biblical Hebrew. However, whenever a guttural was pronounced it was usually rendered by an *h*, e.g.,

נוֹחַשֵׁת	<i>nu-hu-uš-tum</i> (EA 69:28)
חַפַּר	<i>ha-pa-ru</i> (EA 141:4; also <i>a-pa-ru</i> , EA 143:11)
זֶרַע	<i>zu-ru-uh</i> (EA 287:27)
צֶהַר	<i>zu-uh-ru-ma</i> (EA 232:11)

The Egyptian material, while more faithfully representative of the consonantal system, did not have a clearly defined vowel system. As far as the vocalization of the Egyptian material is concerned, this study bases itself on W.F. Albright's *Vocalization of the Egyptian Syllabic Orthography* (VESO).

In discussing the verbal scheme of pre-biblical Hebrew, it must be carefully determined if a particular form is pure Canaanite, or whether it is in fact simply poor Akkadian, or the result of contamination – a combination of Akkadian and Hebrew elements (cf. the discussion on *yaqattal* forms, Morphology no. 5 below). When assessing place names, it is necessary to remember that they are conservative by nature, and do not always undergo the same linguistic changes as other words (e.g., *Ak-ka* Phonology no. 5). It is important, too, to remember that place names are often lexically difficult and may at times be non-Semitic in origin (cf. Hazor Phonology no. 5). Naturally, such words are expected to behave differently than the norm of pre-biblical Hebrew. Finally, it must be remembered that Canaanite itself was probably under the strong influence of Amorite, and that some forms found in the transcriptions may be directly due to this influence.

Keeping these factors in mind, and remembering that there is no corpus of pre-biblical Hebrew as such, but words or groups of words written in non-Hebrew syllabaries, it is surprising how much can actually be said about the phonology and morphology of the earliest stage of Hebrew.

The Sources

(1) The Egyptian material consists of lists of Canaanite personal and place names. In 1909, Burchardt published all the words and Hebrew parallels known at that time. Much more important are the Execration texts, published first by Sethe, and supplemented by Posener. These are texts inscribed on vases and contain the names of potential rivals; it was assumed that with the smashing of the vase, the opponent would also be destroyed. These texts date from the mid-20th to the late 19th centuries B.C.E. The Egyptian material is completed by an 18th-century list of Egyptian slaves (The Hayes List) which contains more than 30 North-West Semitic names, and was published by Albright. In all, there are 150 names from the period between 1900 and 1750 B.C.E.

(2) At Taanach (5 mi. (8 km.) south of Megiddo), some important cuneiform material was unearthed by the archae-

ologist E. Sellin in 1903–04. It contains six letters written in cuneiform Akkadian, which date from the 16th–15th-century B.C.E. period and were edited by the Assyriologist F. Hrozný in 1904. The letters appear to have been written by Canaanite scribes (especially the first two), and in several instances their native speech is clearly reflected in the strange Akkadian forms found in the letters. This material was supplemented by another letter found at Taanach and published originally by D.R. Hillers in 1964; it is written in alphabetic cuneiform and dates from the 12th century B.C.E. (cf. F.M. Cross's republication of this letter).

(3) It has long been recognized that many of the Ur III and Old Babylonian names found in Akkadian sources do not reflect standard Akkadian, but a distinct dialect or language. The traditional division of Semitic languages sets Akkadian off as East Semitic, and it was naturally agreed that these names, if they are not Akkadian, must be West Semitic. In 1926, Th. Bauer collected and analyzed about 700 names of this type in his work *Die Ostkanaanaeer* and argued (following Landsberger) that these names were Canaanite (but originated east of the Tigris, hence were East Canaanite). Since many of these names were prefaced by the Sumerian ideogram *MAR.TU*, which is equivalent to the Akkadian *amurru* ("west"), the people who bore these names came to be known as Amorites. Other scholars (Albright) have suggested that the language was a dialect (eastern) of Canaanite, while some (Goetze) feel that Amorite and Ugaritic make up a separate division within North-West Semitic. Since Bauer's publication, the number of known Amorite names has virtually tripled; a more up-to-date study can be found in Huffmon's *Amorite Personal Names in the Mari Texts* (with a complete bibliography of the problems of Amorite). It is not clear whether the designations *MAR.TU* (Sumerian) and *amurru* (Akkadian) were originally independent terms or linguistic equivalents. In the older (Ur III) period, persons described as *MAR.TU* have names which are often not Semitic, while in the later (Old Babylonian) period, many persons with West Semitic names are not designated in this way. This fact has prompted scholars to distinguish two linguistic strains: one called Amorite (Ur III) and the other East Canaanite. It seems clear today that the relationship between these two groups is much closer than originally thought and both may be referred to as Amorite (cf. Gelb, in *JAOs*, 88 (1968), 39–47).

The similarity between many Amorite names and names found in the Egyptian Execration texts, points to the importance of this material for the study of pre-biblical Hebrew. There undoubtedly were many points of similarity between the Amorite West Semitic dialect and the language of Canaan; Amorite, however, is not Canaanite as seen clearly from the fact that *ā* does not go to *ō* (the Amorite *s* = the Canaanite *š* is also significant).

(4) Possibly the most important source which has direct bearing on the language spoken in Canaan in pre-biblical times are the *Tell el-Amarna letters (EA). Discovered in 1887 at Tell el-Amarna, in Egypt, these letters contain the

correspondence between the ruling Egyptian court and their vassal princes in Canaan. The letters are ostensibly written in Akkadian, which was at that time (14th century B.C.E.), the lingua franca of the Near East. However, the Canaanite scribes were not fully conversant with the Babylonian language they attempted to write, and constantly substitute Canaanite forms and idioms for the Babylonian, producing a real “*Mischsprache*” which, when analyzed, yields much information about the scribes’ native tongue. There is, in fact, at least one Canaanite proverb written entirely in the language of the scribe: *ki-i na-am-lu tu-um-ḥa-zu la-a ta-ka-bi-lu u ta-an-si-ku qa-ti amelim ša yi-ma-ḥa-aš-ši*: (meaning, “If ants are smitten, they do not accept [the smiting quietly], but they bite the hand of the man who smites them”) (EA 252:16–19; cf. Albright, in BASOR, 89 (1943), 29–32).

More important than the native influence on the Akkadian in these letters are the Canaanite glosses which the scribe wrote in the margins of the text (in the Akkadian syllabary) as the equivalents to Akkadian words in the body of the letter. For example, in a letter from Jerusalem (EA 287:27), the Akkadian *qat* has the gloss *zu-ru-uḥ* is equivalent to the Hebrew *zəroaʿ* (זרוע, “hand”). In the Akkadian syllabary ^c = *ḥ*; and *ō*, which was non-existent, was transcribed as a *u*; therefore, *zu-ru-uḥ* is the exact equivalent to the Hebrew זרוע.

The reasons for writing these glosses are unclear. The scribe may have written the Canaanite gloss for an Akkadian word he was not sure of, and filled in the proper form later. This explanation is the most likely since the gloss is always the exact equivalent of the Akkadian word in the text, and the scribe surely did not expect the gloss to clarify the text for the Egyptian reader. Still, whatever the reason, these glosses remain the most direct evidence of pre-biblical Hebrew.

The letters were given an excellent edition by Knudtzon (with some help by Weber and Ebeling) in 1915. Further texts were published by Dossin, Gordon, Schroeder, and Thureau-Dangin (for complete references cf. R. Borger, *Handbuch der Keilschriftliteratur*, 1 (1967), 238). This was supplemented by fine grammatical studies by Boehl, Ebeling, Dhorme, Albright, and Moran (cf. bibliography).

The material is presented under two headings: Phonology and Morphology. Each grammatical point is given separate treatment with the appropriate title preceding the evidence. When necessary, any differences between the earlier (Egyptian) and the later (cuneiform) material are noted and explained.

Phonology

(1) *ḥ* AND *ḥ*. These two Proto-Semitic consonants are not distinguished in the Hebrew script. The Phoenician-Canaanite alphabet contains only one grapheme for these two consonants indicating that the language for which this alphabet was developed did not differentiate between these two sounds. The Tiberian vocalization shows that the reading tradition also did not distinguish between the two sounds, as a diacritic was not used to differentiate between them (as opposed to *š* and

ś). Greek material indicates some differences in transcribing the *ḥ*, but this seems to be rooted in secondary and dialectal developments. It is, therefore, necessary to look elsewhere to determine whether Hebrew ever differentiated between the *ḥ* and *ḥ*. The material written in cuneiform (Taanach, Amorite, Amarna) is of no help here since the Akkadian syllabary only recognizes the consonant *ḥ*; thus the distinction, if it did exist, could not be represented in that syllabary. The Egyptian material, however, is of crucial importance.

The early Egyptian material clearly distinguishes between *ḥ* and *ḥ*:

ḥa-ar-pu in Canaanite *ḥarbu*, Hebrew *ḥereb* (VESO XII, A, 4); while

ḥu-ru in Canaanite *ḥurru*, Hebrew *ḥor* (VESO XIII, A, 5).

In the later Shoshenq list (c. 950), the etymological *ḥ* seems to have merged with *ḥ*, as: *bt ḥ(w)rn* (Beth-Horon) (which etymologically is probably *ḥ*). This indicates that the Egyptian (Amarna) documents reflect the state where the assimilation of *ḥ* to *ḥ* was becoming finalized, and that this later state is reflected in the Shoshenq list.

It is difficult to accept the position (Goetze) that where these consonants are differentiated, it is as a result of Amorite (!) influence. Amorite was written in the cuneiform syllabary which could not differentiate between *ḥ* and *ḥ*, so there are no objective grounds for assuming that Amorite made this distinction. This position can only be justified by the assumption that Ugaritic and Amorite form a subgroup within North-West Semitic, and that the Ugaritic differentiation was maintained in Amorite. But there is no real evidence that this distinction was maintained in Amorite, and it is more reasonable to assume that cuneiform writing limited the Amorite pronunciation of gutturals just as it did the Akkadian. While there was clearly an Amorite influence in Canaan, there is no reason to assume that some early stage of Hebrew could not have differentiated between *ḥ* and *ḥ* as in the early Egyptian material.

(2) INDEPENDENCE OF THE *ś* PHONEME IN PRE-BIBLICAL HEBREW. The fact that only two graphemes are used in biblical Hebrew to distinguish the three sounds *s*, *ś*, *ś* (*ś* and *ś* are distinguished by means of a diacritic) reflects the situation in the language from which the alphabet was borrowed, and not directly on Hebrew. The fact that Greek and Latin transcriptions were unable, at a much later date, to distinguish between the three sounds is not relevant, since there is only one Greek-Latin grapheme *s* (σ) which parallels the early Hebrew sibilants.

In biblical Hebrew the three phonemes *s*, *ś*, and *ś* are kept distinct. This is also the case in Epigraphic South Arabic, while in the other Semitic languages these three phonemes have coalesced into two. This indicates that the situation reflected in biblical Hebrew is primary, and not the result of a late innovation.

In the pre-biblical cuneiform material, this distinction is difficult to recognize (where only *s* and *ś* are distinguished),

while the Egyptian material seems clearly to indicate that the distinction between these three phonemes was carefully maintained. Here *š* and *t* were transcribed by the sign for *s*, while *š* was represented by *š*, so that etymological *š* and *s* were kept distinct:

Ya-si-r-*i*-ra, in Hebrew *Yasir'el* (יִשְׂרָאֵל, "Israel") (VESO III B3);

sa-*ʿ*a-ra-ta, in Canaanite *šaʿar(a)t(a)*, in Hebrew *sa'ara* (שַׁעֲרָה, "hair") (VESO V A 13); while,

ša-*ʿ*a-ra, in Hebrew *ša'ar* (שַׁעַר, "gate") (VESO XV A 4).

(3) *t* AND *š*. The Hebrew-Phoenician alphabet has only one grapheme for these two Proto-Semitic consonants, and they both seem to have coalesced into *š*.

The early Egyptian material seems to indicate that the distinction between these two phonemes was still maintained. In these transcriptions both *t* and *š* are written with an *s*:

ʿa-ti-ra, in Canaanite *ʿasira(a)*, in Amarna *asiru*, in Hebrew *ʿasir* (אַסִּיר);

tu-pi-ir, in Canaanite *soper*, in Hebrew *sofer* (סוֹפֵר), but *ʿstrt* (*ʿattartu*) = Astarte (Burchardt 285);

ha-da-sa-t (*hadašatu*), in Canaanite *hadaš(a)t(a)*, in Hebrew *hadaša* (הִדְּשָׁה, "new") (VESO XII, A, 6).

But *š* is transcribed as *š* in the word *qa-di-š*, in Hebrew *qadoš* (קָדֹשׁ) (VESO XC9).

However the same lists mention *ša-ʿa-ra*, in Canaanite *ša-ar*, in Hebrew *ša'ar* (שַׁעַר, "gate") (VESO V, A, 14) (from *ta'aru*), indicating that the *t* was unstable even here and that it tended to merge into *š*. In the Shoshenq list, the *š* and *t* are undifferentiated: *šbrt* = *šibbolet* (from *tibbolet*?). In short, the *t* was already on its way to coalescing with the *š* in the period of the early material, and by the time of the Shoshenq list and biblical Hebrew, it had disappeared as a separate phoneme.

The Amarna evidence is difficult to interpret. On the one hand, the difference in spelling between La-ki-si (EA 288:43) and Ša-ak-mi (EA 289:23) in the Jerusalem letters indicates that in that area *š* and *t* were kept etymologically distinct (*š* in Ša-ak-mi must be from *t*, cf. Ugaritic *tkm*, as well as the fact that it is written with an *s* in the Egyptian transcriptions (VESO XIV A 15); and *š* in masoretic Hebrew). However, it has been noted (Goetze) that the spelling La-ki-ši also appears in the Jerusalem letters (EA 289:13) and that the cuneiform signs for *sa*, *si*, *su*, serve as scribal variants for *ša*, *ši*, *šu*.

(4) *ʿayin* and *gyin*. These two phonemes, which have coalesced into *ʿayin* in biblical Hebrew, are still distinguished in the Egyptian material.

ʿn-qn-ʿa-m(a), in Canaanite En-qne-ʿam(ma), in Hebrew Yoqnēʿam (יוֹקְנְעָם) (VESO V, A, 6), while

ʿa-da-ta, in Canaanite *ḡazzat(a)*, in Amarna, Azzati, Hazati, in Hebrew Azzah (עֲזָה, Gr. Γαζα) (VESO XVI, A, 11).

However, we also find *ša-ʿa-ru*, in Hebrew *šar* (שַׁר, "gate") < *taeru* (VESO V, A, 14), which would indicate that *ḡ* > ʿ, as it has in biblical Hebrew. Here too, it must be pointed out that while the transcriptions prove that the distinction between the two phonemes still existed in early Hebrew, the distinction was fast disappearing. The cuneiform material can be of

no help as the syllabary does not (generally) distinguish between these consonants.

In a published letter from Taanach (BASOR, 173 (1969), p. 45–50), dated the late 13th or early 12th century B.C.E., the name *p'm* (*pu'm*) appears. If this name is related to the Ugarit *pḡm*, this would indicate that *ḡ* < ʿ. (This letter is written in an alphabetic orthography (related to Ugaritic?), and it may be assumed that if the *ḡ* = ʿ distinction still existed in Canaanite, it would have been represented in this way).

(5) LONG *a* (*ā*) BECOMES LONG *o* (*ō*). All the relevant material indicates that this shift, which is considered unique in Canaanite (of the classical Semitic languages), took place as early as the 15th century B.C.E. An instance from Amorite is especially interesting. The name of a northern city appears as Ḥašura (Hazor). Since the *ā* > *ō* shift did not take place in Amorite at all, this seems to indicate that the situation in Canaan in the 15th century B.C.E. was already post shift. (However, care must be taken in this case since the name is etymologically unclear and its vocalization may reflect a non-Semitic pronunciation.) All other relevant material indicates that when the Amarna period started the shift had already taken place in Canaanite.

(a) *Egyptian Material*. Bi-ʿa-ru-ta, in Canaanite *be'rot*, in Hebrew *ba'ar* (בְּאֵר) (VESO X, C, 4)

(b) *Amarna Canaanite (Many Examples)*. a-nu-ki (EA 287:66, 69), in Hebrew *ʿanכי*; šu-un-nu (EA 263:12), in Hebrew *šunנ*; ru-šu-nu (EA 264:18), in Hebrew *ruשנו*. The place name Ak-ka, in Hebrew *ʿakכ* reflects a conservative pronunciation.

(c) *Taanach*. Interestingly enough the only indication for this shift in Taanach is the name Gu-li which may be derived from the Canaanite Go'eli, Hebrew *gual* (גּוּאֵל) (I 3) (but cf. below). However, other place names, such as Ra-ḥa-bi (IV 22), Hebrew *rahוב*, and Ma-gi-id-da (V 15), Hebrew *magיד*, seem to indicate that this shift had not yet taken place. (Another possible reading for the name in IV 22 is Elu-ra-pi-i, Hebrew *elurפא*.)

Unfortunately, all the Taanach evidence is in the form of personal and place names, and it may be that although the shift had taken place generally, these names had preserved an older pronunciation. It is also possible that the shift had not yet taken place in the pre-Amarna period, or, at any event, not in the south of Canaan. The only evidence to the contrary is the name Gu-li which may be part of the Canaanite Gu-li-Adad (Albright), or the Hurrian Guli-Tešub (Maisler (Mazar)), in which case it is not relevant to the problem. The sum of the evidence seems to indicate that in Taanach, in the period preceding Amarna (16th–15th century) the shift *ā* > *ō* had not yet taken place.

(6) THE PROTO-SEMITIC *n* IS ASSIMILATED TO THE FOLLOWING CONSONANT. In biblical Hebrew, the Proto-Semitic *n* is assimilated to the following consonant. The pre-biblical material shows that this process was in a state of flux and that in the early period the *n* was not as consistently assimilated as later on.

The Egyptian *Bi-in-ti-^c-n-t* is in Canaanite $\ddot{B}int(i)-\acute{a}nat$ ("daughter of Anat"; Canaanite *bint* = Hebrew בַּת). In other words the *n* of בַּת remained unassimilated (VESO VI B 12).

In Amarna there is both *gitti* < *ginti* as well as *ginti* (Hebrew *gat*), indicating that the tendency to assimilate the *n* did exist, but had not yet reached the proportions of biblical Hebrew where it is the norm in these circumstances. *La-bi-tu* < *labintu* (EA 296:17) is also found in Amarna.

(7) $\acute{a} > (\bar{a}) > \bar{o}$. The Amarna material indicates that this change had already taken place in Hebrew:

(a) *ru-šu-nu* (EA 264:18), *roš* (רֹאשׁ, "head") reflects the following development: *rōš* < *rāš* < $\ddot{r}aš$.

(b) *zu-u-nu* (EA 263:12); *zon* (צֶן, "sheep") here too we assume *zōn* < *zān* < *zān*.

The Egyptian material generally reflects the later stage, as in the name *ršqdš* (*rš* = רֹאשׁ) (VESO X, C, 9), but *ru-²u-š* (*a*) is also found (VESO X, C, 7). *Ru-²u-š(a)-qdš*, in Canaanite $\ddot{B}Roš-qids$, is explained by Albright as being a Canaanite back formation of *ro²(o)š* from *rōš*, on the analogy of the plural *rašim* (רִאשִׁים) which was probably dialectic (VESO III, E, 6). Another possible interpretation is that this name preserved the earlier pronunciation (cf. the name Ak-ka (עֲכוֹ) in Amarna Hebrew (Phonology, no. 5).

(8) MIMMATION. Mimmation, known in early Akkadian, is almost unknown in biblical Hebrew, except for a few fixed forms like אֲמַנָּם, יוֹמָם, חָנָם. The earlier material preserves several interesting examples. In the Execration texts, the city of Jerusalem is transcribed as ʒwsʒmm (= Urusalimum). Similarly, the Taanach letters indicate a high rate of mimmation, especially in the Canaanite letters. (In Amarna there is a marked decrease in the use of mimmation, an indirect indication that the Taanach letters precede the Amarna letters).

Morphology

(1) CASE ENDINGS. The Semitic languages had originally three basic cases: nominative, accusative, and genitive, which were differentiated by suffixes (in singular *-u*, *-a*, *-i*). Especially prominent in the early history of the language, they generally fell into disuse. In biblical Hebrew, the nominal case endings have generally been lost, except for certain compound names like מִתְּשֻׁלַּח, and possibly poetic forms like בָּנוּ בְּעוֹר, and חִיתוֹ אֶרֶץ. The *heh localis*, long thought to be a preserved accusative in biblical Hebrew, has to be reevaluated in the light of the Ugaritic evidence. In Ugaritic, which does not generally employ the *mater lectionis*, there is the word *šmmh* which would indicate that the *h* has consonantal force (cf. Speiser, in: *Israel Exploration Journal*, 4 (1954), 108–115).

Both the Egyptian material and the cuneiform material from Amarna indicate that case endings were still in use at that time. In the earlier Egyptian lists, place names usually end with *-u*, but the tendency was for *-a* to replace *-u* in later material, e.g., Ayaluna, Ašqaluna, Šiduna, and Ḥašura. This indicates that before the case endings were completely dropped, there was a period where these final short vowels were confused and the cases were no longer grammatically distinguished.

Boehl has shown (see also Dhorme, in: RB, 23 (1914), 347–8 = *Recueil E. Dhorme* (1951), 460–1) that the case endings in Canaanite are by and large not confused and the distinction between the different cases is maintained. Examples of the use of the nominative *-u*:

a-pa-ru (עֶפֶר) EA 141:4

ru-šu-nu (רֹאשֵׁנוּ) EA 264:18

The genitive *-i*:

sa-aḥ-ri (שַׁעֲרֵי) EA 244:16

a-na-yi (אֲנִי) EA 245:28

The accusative *-a*:

ḥa-an-pa (חֲנֹפֶה) EA 288:7

mu-ur-ra (מִוֹרָה) EA 269:16

These case endings were elided in Hebrew after the Amarna period and are very rare in biblical Hebrew.

(2) THE FIRST PERSON SINGULAR INDEPENDENT PRO-
NOUN: *ʾanoki*. The *ʾanoki* form is found in Amarna Hebrew (*a-nu-ki* EA 287:66, 69). In late biblical Hebrew, this form becomes rare and is almost always replaced by *ʾani*.

(3) THE DUAL ENDING: *-ay(m)a*. In Amarna, the dual ending is known from the word *hi-na-ia* ("my (two) eyes" (nom.)) (EA 144:17). A similar form is known from Taanach *išma-ga-re-ma* (II, 8) ("two Chariot wheels"), with the Canaanite dual endings.

(4) FIRST PERSON POSSESSIVE SUFFIX: *-nu* (OUR). *Ti-mi-tu-na-nu* ((and you) "killed us"), in Amarna (EA 238:33).

THE VERB (1) CAUSATIVE PREFIX *ha-*. The Hebrew causative prefix *ha-* appears in Amarna as *ḥi-* (attenuation). The example is from EA 256:7, *ḥi-iḥ-bi-e*; it is clearly a Hebrew form which is impossible in Akkadian. The scribe used the Hebrew הִחְבִּיֵּא for the common Akkadian verb of the same meaning, *puzzuru*.

(2) THE ENDING OF THE FIRST PERSON SINGULAR OF THE QATALA FORM: *-ti*, *qatalti*. In Amarna, *qatalti* forms appear, e.g., *ba-ni-ti* "I built" (EA 292:29).

TENSES. The Hebrew verbal scheme, which consists (primarily, cf. below) of two tenses, differs radically from the Proto-Semitic system. The two tenses: a prefixed one indicating incompleting action (imperfect), and the suffixed one indicating completed action (perfect), are secondary. It is possible to give approximate dates for the introduction of these verbal forms from the cuneiform evidence for early Hebrew.

(3) QATALA PRETERITE FORM. The *qatal(a)* form, which in Akkadian is the basis of the stative form (a nominal not a verbal form in Akkadian), is found in Amarna serving also as the Hebrew preterite form. For example:

la-ma-ad ("he has learned") (EA 196:30).

ša-al ("he questioned") (EA 289:10).

(4) YAQTUL IMPERFECT FORMS. The Amarna evidence points clearly to the fact that the *yaqtul* imperfect form had already been developed in Canaan. However, as Moran has pointed out, this function was not exclusive with this form. His work on the Amarna letters from Byblos led him to the conclusion that the imperfect indicative had two functions:

(a) present future; (b) past iterative. The passage EA 104:17–36, which Moran quotes, is instructive. The verb *lequ* (“take”) appears three times in the prefixed form *tilquna*, once as a present, once as a future, and once as a past.

miya mārū Abd-aširta ardi kalbi šar māt Kašši u šar māt Mitanni šunu u tilqūna māt šarri ana šāšuna panānu tilqūna ālāni ḥazānika u qālāta annū inanna dubbirū rābišaka u laqū ālānišu ana šāšunu anumma laqū al Ullaza šumma kiamma qālāta adi tilqūnu al Šumuru u tidūkūna rābiša u šāb tillati ša ina Šumura.

Who are the sons of Abd-aširta the slave and dog? Are they king of the Kassites or the king of the Mittani that they take the royal land for themselves? Previously they used to take the cities of your governors, and you were negligent. Behold! now they have driven out your commissioner and have taken his cities for themselves. Indeed, they have taken Ullaza. If you are negligent this way they will take Simyra besides, and they will kill the commissioner and the auxiliary force which is in Simyra.

(5) YAQATTALU FORM OF THE VERB. The *yaqattal* form of the verb, attested to in the Akkadian present and the Ethiopic indicative, is generally thought to be missing from North-West Semitic. There are, however, certain forms found both in Amorite and in Amarna Hebrew which seem to indicate that an independent *yaqattal* form may have existed in North-West Semitic.

In Amarna Hebrew, the forms which seem to be of the *yaqattalu* pattern are, e.g., *tidabbibu* (EA 138:49) (“they speak”) and *i-paṭ-ṭar* (EA 2:46) (“he loosens”). However, the situation is not so simple. Even if the gemination in these forms is accepted as being genuine, they can be explained as Akkadian present forms with the Amarna Canaanite *i-* prefix in place of the Akkadian *a-*. In other words, these would not be genuine Canaanite forms but blends of Akkadian stems with Canaanite prefixes which were produced when speakers of Canaanite tried to write Akkadian.

In Amorite there are also certain names which give the impression of being *yaqattal* forms: e.g., the names *yabanni* (Akkadian: *ibanni*) and *yanabbi* (Akkadian: *inabbi*). Huffmon feels that these names can be properly compared to Ugaritic (cf. *piʿel* of *bāna* in post-biblical Hebrew), and do not necessarily reflect North-West Semitic *yaqattal* forms. Personal names, such as I-ba-as-si-ir and Ya-ba-an-ni-AN, are in his opinion clearly *piʿel* forms. There is therefore, in his opinion, no unambiguous evidence which indicates that there were in fact *yaqattal* forms of the verb in early North-West Semitic.

However, it has been pointed out (Von Soden, in: *Die Welt des Orients*, 3 (1964), 180) that the situation in Amorite is not at all clear:

(a) It is noteworthy that all the *yaqattal* forms that have been found in Amorite are derived from three weak verbs (excepting *ibassir* which may not even be Canaanite);

(b) Some of the roots, like *yanabbi* (“he calls”) and *yabanni* (“he builds, makes”) are not found as *piʿel* forms in Akkadian. The obvious conclusion is that these are not *piʿel* forms at all but the present of a true *yaqattal* form. (Some of

the other names which appear in Amorite: *yabassi*, *yaḥatt/ṭṭi*, *yamatt/ṭṭi*, and *yasatṭi* are lexically unclear, and cannot be used as evidence.)

The fact that this form is clearly found in a North-West Semitic dialect (Amorite) may indicate that the Amarna Canaanite material should be reassessed. It may be that those forms which appeared to be Canaanite-Akkadian contaminations are true Canaanite Hebrew forms.

(6) YAQATULA (SUBJUNCTIVE) FORM OF THE CANAANITE VERB. In biblical Hebrew, the moods of the imperfect stem have a limited use (opposed, for example, to classical Arabic). The situation in pre-biblical Hebrew is more difficult to determine. Since Akkadian has a homophonous morpheme, known as the *ventive* (a modal suffix in Akkadian which indicates motion toward the speaker or focus of attention; e.g., *illik* (“he came”), *illikam* (“he came here”)), a large number of relevant occurrences of the suffix *-a* (with *ya/i/u/ qtal* forms) are readily explained, at least at first glance as examples of the *ventive*.

Moran has proposed that true *yaqatula* forms are identifiable by semantic means and that they are specifically used in two instances (*Orientalia*, 29 (1960), 1–19):

(a) to express a wish, request, or command – *yi-sa LUGAL* (“may the king come forth”).

(b) in clauses of purpose or intended result – *ib-lu-ṭa* (“so that I may live”).

The fact that the biblical Hebrew form, known as the cohortative, has the same functions as the Byblian Amarna (a group of Amarna letters from Byblos) *yaqtula*, indicates that the Hebrew cohortative is a continuation of this “subjunctive” (H. Bauer and P. Leander, *Historische Grammatik der hebraeischen Sprache* (1922), 273; P. Joüon, *Grammaire de l’Hébreu Biblique* (1923), 315 n. 1).

(7) TAQTALU(NA) THIRD PERSON MASCULINE PLURAL FORM. There seems to be some evidence from Amarna which points to the fact that a *taqtalu(na)* third person masculine plural form existed in pre-biblical Hebrew, as in Ugaritic (cf. Boehl, p. 53 and Moran, in: *Journal of Cuneiform Studies*, 5 (1951), 33–35). Hints of this form are also found in biblical Hebrew: e.g., וְתִקְרְבוּ in Ezekiel (37:7) as well as וְתִקְרְבוּ and וְתִמְרוּ in Deuteronomy (5:21).

(8) INFINITIVE ABSOLUTE USED AS A FINITE VERB. In biblical Hebrew there are a few clear cases of the use of the infinitive absolute form of the verb with finite force. וְשָׁבַח אֱלֹהִים (Eccles. 4:2) וְנִהְיָה הוּא (Esth. 9:1) are the clearest examples of this phenomenon, paralleled by the *qtl/yqtl ’nk* construction found especially at Karatepe. The fact that this was a fairly regular construction in Early Hebrew (and North-West Semitic in general) is shown by the many examples in the Amarna letters: e.g., (from Amarna), *u ma-ti-ma šu-ut* (“and when he died truly”) where the form *matima* is an infinitive absolute followed by the independent pronoun with the force of an independent verb (cf. Moran, in *Journal of Cuneiform Studies*, 4 (1950), 169–72).

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Biblical Hebrew is also called early Hebrew in contradistinction to living middle Hebrew, as reflected in the Mishnah, the older portions of the Talmud and early Midrash; to written middle Hebrew, as it was used after its extinction as a living language; and to modern Hebrew. It is known mainly from the Hebrew portions of the Bible (i.e., the whole Bible with the exceptions of its quite restricted *Aramaic parts, i.e., two words in Gen. 31:47; Jer. 10:11; Dan. 2:4–7:28; Ezra 4:8–6:18), which constitutes a rather limited corpus. The name “Hebrew Language” itself does not occur in the Bible; instead, it is called the “language of Canaan” (Isa. 19:18) and “Judean” (11 Kings 18:26, 28; Isa. 36:11, 13; Neh. 13:24, in the last passage already in accordance with the late, post-exilic usage, which extended the term “Judean” to the nation). Not until about 130 B.C.E. (in the prologue to Ben Sira) does εβραϊστί – occur to denote old Hebrew. Josephus and the New Testament, however, use this term both of Hebrew and Aramaic (in contradistinction to Greek).

Ancient Evidence (Inscriptions and Transcriptions)

Only slight additional material can be adduced from inscriptions and transcriptions, which is not only due to their limited extent. The most important old Hebrew inscriptions are the calendar of *Gezer (c. 10th century B.C.E.), ostraca of *Samaria (from the eighth (?) century B.C.E.), the inscription of *Siloam (c. 700 B.C.E.), the *Lachish and Tel *Arad letters (sixth century B.C.E.). Their linguistic evaluation is impeded by their consonantal script, even the vowel letters being less frequent than in the Masoretic Bible Text. Thus *i* and *ú* in a medial position are often unmarked (as *š* Siloam 2 = *š* (“man”), *šr* Siloam 3; 6 = *šúr* (“rock”). Nevertheless, some new, grammatical material may be derived from them, as the monophthongization of diphthongs even in stressed syllables outside Judah (cf. *qš* Gezer 7, *qayiš* (“summer”); cf. the pun of the prophet Amos (8:2) of this word with *qēš* (“end”); *yn*

in the Samaria ostraca, *yávin* (“wine”) or the ending-*ô*, which is considered by some scholars as dual nominative ending in *status constructus* (*yrhw* (“two months”), Gezer *passim*), and even the attestation of forms occurring exceptionally in the Bible (as *hyt* Siloam 3 = *hayât* (“she was”), a rare form of the third person feminine perfect of *verba tertiae yôd*, instead of the usual *hâyâtâ*) is of help. Moreover, they often contain additions to the limited vocabulary of Biblical Hebrew.

Akkadian, Greek, and Latin transcriptions, on the other hand, mark the vowels as well, thus making the recognition of grammatical structure possible. Yet the special conditions of both the transcribed and the transcribing language has to be taken into account, besides the intricacies of transcription itself. Disregard of these pitfalls inevitably results in misinterpretations, as when P. Kahle regarded the double pronunciation of *b*, *g*, *d*, *k*, *p*, and *t* as artificial, *inter alia* because Origen (185–204 C.E.) and Jerome (342–420 C.E.) deviate in their transcriptions. Kahle did not take into account the fact that Greek and Latin at that time had no means of differentiating between aspirates and spirants (cf. e.g., the use of *χ* for Arabic *k* in the Greek papyri of Nessanah, because *k* was at least slightly aspirated; see Blanc in *To Honor R. Jakobson* (1967), 298). Moreover, with the exception of Origen’s transcription of coherent texts, and words quoted by Jerome, these transcriptions are limited to proper names and thus make an insight into the lingual structure rather difficult. Nevertheless, they are by no means unimportant. Sometimes they exhibit Aramaized forms as against the Hebrew feature according to the Masorah (as Akkadian *sa-me-ri-na-ai*, Septuagint Σεμερων, Σαμερων; cf. Ezra 4:10, 17 *šâmrâyin*, as against masoretic *šômrôn*), and vice versa (as masoretic *Bnê braq*, cf. modern *Ibn ibraq*, as against Akkadian *ba-na-a-a-bar-qa*, Septuagint Βαυβακάτ [!]). In some cases the noun formation is different (as Akkadian *am-qa-ru-na*, Septuagint ἁκκάρώ, exhibiting *qattâlôn* (masoretic *qittâlôn*), as against masoretic *‘eqrôn*, reflecting the parallel *qittâlôn*; or masoretic *‘erek* corresponding to Septuagint Ὀπέχ, Akkadian *Uruk* (also *Arku?*)). Septuagint Ἀμμάν and Akkadian (*Bit-*) *Ammānu* exhibit the stage preceding masoretic *‘ammōn* (cf. Septuagint variant lecture Ἀμμών). Even more important are transcriptions exhibiting features preceding the masoretic vocalizations, as Akkadian *a-u-si* (Hosea) presumably still containing the diphthong, or Akkadian *ha-za-ki-a-a*, which, as against masoretic *Hizqiyā*, perhaps still exhibits the preservation of *a* in the second and first syllables (cf. also Septuagint Ἐξεκίας). Since Greek may distinguish between long and short *e/o* by using *η*, *ω* and *ε*, *ο*, respectively, Greek transcriptions may even be very important for the recognition of grammatical structures (forms like Septuagint Ἡσν = masoretic *‘ēšāw*, exhibit, it seems, the oldest attestations of the lengthening of vowels in pretonic open syllables). This situation may sometimes be complicated by later sources exhibiting forms that are considered to be earlier, as when the masoretic so-called *segolata* (as *zēker* – “remembrance”), similarly transcribed in the Septuagint (as Γαθηρ – *geter*), still appear *apud* Origen as monosyllables (as ζεχρ = *zēker*).

The Masoretic Text

The Masoretic Text is also not easy to evaluate. It is made up of three historically distinct elements, viz. (in order of their antiquity and stability) the consonantal text, the vowel letters, and the system of diacritical marks for vowels and cantillation.

In the course of time, even the consonantal text underwent changes – an altering in pronunciation led to a change in spelling (since *šîn* was pronounced as *samek*, the latter was rarely substituted for it, as *stâw* (“winter”), Song of Songs 2:11 instead of the original *štâw*). Similarly, antiquated forms were replaced by more usual ones (cf. e.g., 11 Sam. 22:37, 40, 48 *taḥatēni* (“under me”), as against *taḥtây*, Ps. 18:37, 40, 48, representing the more usual and, presumably, later form), and synonyms replaced obsolete words (cf. parallel passages occurring, e.g., in Chronicles as against Kings, or readings exhibited by “vulgar” Qumran biblical texts). It is even possible that puristic redactions expurgated usages still alive, in favor of literarily preferred features (as Bergstraesser, in: ZATW, 29 (1909), 40ff. assumed for *še* being superseded by *’āšer*). On the other hand, the differences between Masoretic manuscripts (in contradistinction to the Samaritan version) are so few that this uniformity has to be explained according to the “one-recension” (or even the “archetype”) theory.

More conspicuous are differences in the usage of the vowel letters *’*, *h*, *w*, and *y*: in the Masoretic Text, as a rule, but not always, etymologically long vowels, with the exception of medial *â*, are marked by one of these letters. The spelling, however, was more defective than in available texts (cf. also the spelling of inscriptions discussed *supra*), at least at the time of the Septuagint, and there are some differences between the Tiberian and other traditions. Nevertheless, the uniformity mentioned above obtains, as a rule, also in the sphere of the vowel letters. However it has to be assumed that changes affected vowel letters (just as the consonantal text) as obsolete forms were superseded by later ones, and this is exhibited by variant readings occurring in “vulgar” biblical passages found in Qumran. In the Masoretic Text this development is reflected by the so-called *ktiv*, (“what is written”) and *qrê* (“what is to be read”), two variant readings of which the *ktiv*, occurring unvocalized in the text, is rejected in favor of the *qrê*, adduced vocalized on the margin (in many Bibles, however, the *ktiv* is adduced in the text with the *qrê*’s vocalization, thus causing confusion). Sometimes the *ktiv* exhibits an older feature, given up in favor of the later *qrê* (and in many manuscripts what is adduced as *qrê* in other manuscripts, has already penetrated into the text as a single reading). Thus, it seems that the archaic perfect third person plural feminine *-h*, to be read *-â*, as exhibited by *ktiv*, was superseded by the ending *-û* in *qrê*. Moreover, the pronominal suffix *-ô* of the third person singular masculine, after nouns terminating in a consonant, is still sometimes archaically spelled with *h* in *ktiv*, as against the more usual spelling with *w* in *qrê*. (Sometimes, however, the spelling with *-h* is the only spelling transmitted.) In other cases the *ktiv* exhibits the later feature. Thus *’ty*, representing

’attî (“you”) (feminine singular), presumably due to Aramaic influence (cf. the Samaritan version and *DS1a*), sometimes occurs as *ktiv*, the *qrê* being *’att*. The same applies to the perfect second person singular ending *-ty*, to be read *-tî*, which was superseded by *-t*.

The latest stage is exhibited by the vowel and cantillation marks, which developed between c. 600 C.E. (the date of the final redaction of the Talmud, in which they did not yet occur) and the beginning of the 10th century (from which period dated manuscripts have been discovered), but is based on a much older tradition. The only vocalization and cantillation system in use is the so-called Tiberian vocalization. It represents the most elaborate system and is the only one completely preserved. Therefore, it serves as the main base for the grammatical investigation of biblical Hebrew. In principle, however, the other vocalization systems are equally important, i.e., the Babylonian system, which includes several sub-species, and the so-called Palestinian. One has also to take into consideration the Samaritan tradition of pronunciation, and important linguistic features may also be elicited from the Dead Sea Scrolls. The most important innovation, differentiating Tiberian (and one subsystem of Palestinian) vocalization from the others is change of *â* to *â*, thus coinciding with *â < u*. (This feature seems to be very late, however, not after Jerome’s time.) There are also other divergences, such as less attenuation of *a* to *i* in closed unstressed syllables according to the Babylonian vocalization (as *šâb’â* = Tiberian *šlḇ’â*, which, *obiter dictum*, already penetrated into Babylonian), a wider supersession of the perfect *pā’il* by *pā’âl*, and the preservation of *â* in the perfect, imperfect, imperative, and infinitive of *hitpā’el*. Yet even the Tiberian system exhibits inconsistencies, and it is difficult to establish whether they are due to the mixture of readings of different subschools (cf. those of *Ben Asher, whose readings have been accepted, and *Ben Naphtali), to chance, or to the desire to be over-accurate. Yet, in spite of all these difficulties in proper linguistic evaluation, the main features of biblical grammar are quite clear.

Despite the multilayered character of the linguistic tradition, the Bible, though stretching over many hundreds of years and emanating from different parts of Palestine, exhibits a surprisingly uniform language. This is due to its being a standardized literary language, on the one hand, and the later changes the text underwent (see *supra*) on the other. Nothing is known from the Bible even about dialectal differences, with the exception of the fact that the Ephraimites pronounced *sibbôlet*, rather than *šibbôlet* (cf. also *supra* for more far-reaching monophthongization outside Judah). Post-Exilic books, however, exhibit certain special features which are also found in Middle Hebrew (and sometimes in Aramaic), such as the prevalent use of *’āni* for *’ânôkî*, and of *’et* with pronominal suffixes rather than their direct annexation to the verb, and the usage of the participle becomes more frequent. Moreover, these books evince a penchant for *scriptio plena*. On the other hand, poetry, in contradistinction to prose, exhibits certain peculiarities, as the longer forms of the prepositions *’elê*, *š’alê*,

‘ade (“to, on, till”) as against prosaic ‘el ‘al ‘ad respectively, the less frequent use of the definite article, of the object marker ‘et and the relative pronoun, further the use of endings -i / -ô in the noun in *status constructus* (-i in additional cases as well), the pronominal suffix -mô (“their/them”), the use of *status constructus* when preceding prepositions, and the extended use of the shortened imperfect.

CONSONANTS. Biblical Hebrew uses the following letters to mark consonants (four of which may also serve as vowel letters, *v. supra*): א = ‘, ב = b, ג = g, ד = d, ה = h, ו = w, ז = z, ח = h, ט = t, י = y, כ = k, ל = l, מ = m, נ = n, ס = s, ע = ‘, פ = p, צ = s, ק = q, ר = r, ש (or ש) = š (š), ת = t. The letters k, m, n, s, and p have special forms in final position. The inventory of Hebrew consonantal phonemes, as marked by these letters, is reduced as against the Proto-Semitic one, Hebrew z representing Proto-Semitic z and δ, Hebrew h Proto-Semitic h and h, Hebrew š Proto-Semitic š, q, and z, Hebrew ‘ Proto-Semitic ‘ and ġ, and Hebrew š Proto-Semitic š and t. On the other hand, some of the letters in the early period might have been polyphonic, as no doubt was ש, marking, in the Judean dialect at least, both š and s (differentiated in Tiberian vocalization, e.g., by a point above the letter on its right or left side respectively). It has been claimed that ח and ע were polyphonic as well, exhibiting h / h and ‘ / ġ respectively, and that reminiscences of this feature were still alive at the time of the Septuagint, which transcribes ח and ע by zero / χ and zero / γ respectively, χ and γ roughly corresponding to h and ġ respectively. On the other hand, these transcriptions may be due to difficulties of transcribing sounds lacking in Greek (cf., *mutatis mutandis*, the transcription of Arabic ‘ by Greek γ; see Violet, in: OLZ, 4 (1901), 384ff., and the papyri of Nessana, transcribing Arabic h and h as a rule by zero, once Χαλέδ, Χομας by χ; ġ by γ, but once by zero [‘Αζαλῆς]. B, g, d, k, p, and t after vowels developed into spirants (even in juncture; differentiated in Tiberian vocalization by the absence of a point, the so-called *dageš lene*, in them, as against the point in stops), thus entailing the polyphonic use of them in writing. Yet, at first at least, these stops and spirants did not represent different phonemes, and even if they did so later (cf. *perhaps* ‘alpē – “thousands,” *status constructus* as against š‘alpē – “2,000” *status constructus*), their phonemical load was very small: this, however, depends on the moot question of the phonemic status of šewa, *v. infra*. It was in the later biblical Hebrew as well that š coalesced with s, and this entailed rare cases of mixing them up in spelling (cf. *supra*). Other important sound shifts, affecting consonants in certain positions, are initial w very early becoming y (with the notable exception of w – “and”), which then often analogically penetrates into medial position as well; the dropping of intervocalic h (as šūsahu becoming sūsô); and w and y dropping in many positions (as šyīnawu > ya‘āne, – “he will be humble,” šgalaya > gala – “he went into exile”) and ‘ in some positions (‘ākilu > ‘ōkel [pause] – “I shall eat”). N preceding a consonant is assimilated to it. At a later phase, the laryngals and pharyngals became weakened and were no longer apt to be doubled

(this applies to r as well); as compensation, the vowel preceding them is often lengthened in this situation. Moreover, ə following them appears in the Tiberian vocalization as ā, ē ē, and ā, and these sounds usually develop after pharyngals and laryngals not followed by a vowel in the middle of the word. Moreover, these consonants often change i / u into a (i at least into ē). Doubling of final consonants is given up (as šsall > sal (“basket”)) (with the partial exception of tt occurring e.g., in ‘att (“you,” feminine singular)), and this occurs even in medial position when followed by a consonant (as tāsōhnā (“they will turn,” feminine)), and also when the originally following ə has become zero, (as šwayyāhī > wayhī (“it was”)).

VOWELS. The vowels according to the various vocalization systems differ: mention has already been made that in Tiberian vocalization (and in one subsystem of Palestinian) ā shifted to ā. Babylonian vocalization does not differentiate between a and ē. Whereas the consonantal script is phonemic (and in some cases even polyphonic), the vowel marks, especially according to the Tiberian system, can designate auxiliary vowels as well (cf., e.g., the so-called furtive pattaḥ, automatically developing before final h, h, and ‘ after vowels other than a and ā). On the other hand, the Tiberian vocalization is polyphonic as well, since absence of vowel, and ə are marked by same sign ְ, šewa (but in other vocalization systems absence of vowel is not marked at all, this being also the case with final letters in the Tiberian system, with the exception of k, t as stop, and final consonant clusters); it is perhaps the most important moot question of Hebrew vocalization, whether ְ has or has not to be analyzed as a phoneme, since, e.g., the phonemic status of spirantic b, g, d, k, p, and t largely depends on it (cf. *supra* š‘alpē as against ‘alpē; if ְ has to be accorded a phonemic static, ‘alpē has presumably to be phonemicized as ‘alpē, and then the spirantization would merely result from the preceding vowel). At any rate, historical ə may develop into zero, and vice versa. The Tiberian vocalization (and at least a part of the others) denotes (with the exception of šewa and its allophones ā, ē, and ē) quality rather than quantity: this is demonstrated mainly by the use of the same sign (ְ = ā) to mark both historical ā and u, as well as by the parallel occurrence of a/ē, accounted to be short, and ē/o, regarded as long, in certain paradigms (as the verbal paradigms pā‘al, pā‘el, pā‘ol, the nominal paradigms qātal (t being h, h, or ‘), qēṭel as against qēṭel, qōṭel; for the usage of p‘l, q‘l *v. infra*); therefore, length as marked in this article rests on historical reconstruction of a linguistic stage preceding that of the Tiberian vocalization (another change as against Tiberian vocalization, as used in this article, is that, as a rule, vowels were transcribed in accordance with the Sephardi pronunciation, ְ, as a rule, transliterated by ā rather than by ā).

The vowels of the Tiberian system (with the exception of šewa and its allophones mentioned above) are (the Tiberian vowel signs, are, as a rule, sublinear, whereas the other systems use superlinear vocalization): ְ = a, ֿ = ā, ֿ = ē, ֿ = ē, ֿ = i, ֿ or ֿ = o, ֿ or ֿ = u. Since no quantitative distinctions exist,

there is no difference whether or not a vowel sign is followed by a vowel letter (as between $\dot{\text{v}}$ and $\dot{\text{v}}$; $\dot{\text{v}}$ and $\dot{\text{v}}$, or $\dot{\text{v}}$ and $\dot{\text{v}}$ respectively) and even $\dot{\text{v}}$ and $\dot{\text{v}}$ are identical: their respective use depends only on whether or not the consonantal text exhibited vowel letters. Whereas the inventory of Hebrew consonants is restricted against the Proto-Semitic one (see *supra*), that of the Hebrew vowels is extended: Proto-Semitic had, it seems, a system of three short ($a:i:u$, at an earlier stage presumably $a:i:u$) and three long vowel phonemes ($\hat{a}:\hat{i}:\hat{u}$) only, which, of course, were differently actualized. Tiberian a mainly stems from Proto-Semitic a , and also from i in closed stressed syllables (*lex Philippi*, as $\text{ḥafīṣtā} > \text{ḥafastā}$ ("you wanted")), Tiberian \hat{a} from Proto-Semitic a , \hat{a} , and u (in the last case, pronounced according to Sephardi pronunciation o , as against \hat{a} in the other cases), Tiberian ϵ from Proto-Semitic a , i , and ay (when preceding \hat{a}), Tiberian ϵ from Proto-Semitic i and ay , Tiberian i from Proto-Semitic i , i , and a (in unstressed, closed syllables, see *supra*), Tiberian o from Proto-Semitic u , \hat{a} (in formerly stressed syllables, then often analogically spreading to other positions as well), and aw , and Tiberian u from Proto-Semitic u and \hat{u} . As shown, the diphthongs aw and ay were monophthongized, becoming o and e respectively. Sometimes, they are preserved, as normally before double w and y , e.g., gawwkā ("your back"), ḥayyīm ("life"), and in other conditions, like mnūḥaykī ("your rest," Ps. 116:7) and ʿawlā ("wickedness"). In closed syllables bearing the main stress aw and ay were split into two syllables, as $\text{ṭawḵ} = \text{ṭawek}$ ("middle"), $\text{ḥayt} > \text{ḥayit}$ ("house"), iy often becomes i , especially after prepositions (as $\text{ḥilyhūdā} > \text{ḥilīhūdā}$ ("to Judah")); so also $\text{ḥimyyādē} > \text{ḥimydē} > \text{midē}$ ("from the hands of..."). In Babylonian vocalization $yā$, especially in initial position, is graphically represented by $yī$, which, according to some scholars, is intended for the pronunciation of \bar{i} (as yirā ("be afraid!"), as against yārā), and similarly in Tiberian vocalization w - ("and") before labials, and consonants followed by ə , becomes u (as umēlek ("and king")). Moreover, according to the Ben Naph-tali school of the Tiberian system, medial əyi is apt to shift to i . ə (marked by šewa) developed from original short vowels in open syllables two or four syllables before the stress (as $\text{ḥladabaraykūmu} > \text{ḥlāḏḥarēkēm}$ later ḥlāḏḥarēkēm , ("to your things"); sometimes short vowels in open pretonic syllables are reduced (as $\text{ḥmasmērīm} > \text{masmrim}$ ("nails")); so always in *status constructus* and prepositions, bearing only secondary stress or no stress at all, as $\text{ḥdabar-} > \text{dabar-}$); in other cases again the following consonant is doubled, thus enabling the retention of the short vowel, as qṭannā ("small," feminine); as a rule, however, pretonic short vowels (especially a) in open syllables are lengthened (as $\text{ḥdabar} > \text{dāḥār}$ ("thing"), $\text{ḥinab} > \text{ḥenāḥ}$ ("grape"), as well as in open stressed final syllables. In closed stressed final syllables vowels are lengthened, as a rule, in nouns in *status absolutus* (as yād ("hand")), but not in *status constructus* (as yaḏ-) and in verbs (as kātab ("he wrote")), presumably because the latter lost their short final letters earlier, thus terminating in closed syllables. Eventually, however, short final vowels were generally omitted.

STRESS. The stress is transmitted by the cantillation marks: it falls on the last or the penultimate syllable. Because oxytones are more frequent, in this article, as a rule, only paroxytones are marked as such. Since, as a rule, the penultimate syllable is stressed when no final syllable was lost, whereas the last syllable bears the stress, when the word terminated in a short final vowel at an earlier stage, a stage of general paroxytone accent may be reconstructed. The few exceptions, as kāṭbā ("she wrote"), kāṭbū ("they wrote"), and similar perfect, imperfect, and imperative forms, further e.g., yāḏkā ("your (masculine singular) hand"), also exhibiting exceptional reduction of the vowel in the syllable preceding the stress (see *supra*), have to be regarded as later forms, the original syllable pattern being preserved in the pausal forms kāṭāḥā , kāṭāḥū , and yāḏēkā . An even later stage of stress is exhibited by the so-called *segolata*, in which the cluster was split at a very late stage (as $\text{ṣīpr} > \text{seper}$ ("book"); cf. *supra* for the transcription of these forms). An early stage of Proto-Hebrew stress may tentatively be reconstructed by the assumption (cf. *supra*) that it was stressed \hat{a} that shifted to \hat{o} .

PRONOUNS. Hebrew (as Semitic) word formation exhibits, as a rule, tri-radical structure: the main meaning is carried by the (generally three) radical consonants, while the vowels only add shades to it. Yet particles (as much as not of nominal origin) and pronouns deviate from this structure, pronouns also allowing word composition, a feature alien to Semitic linguistic system (as hallāzē ("this"), compounded from the demonstrative that serves as definite article as well+ lā+zē).

"I" is expressed by ʾānī and ʾānōkī , both occurring in pause as $\text{ʾānī} / \text{ʾānōkī}$, exhibiting a more original stress structure (as in the case in pause in most cases, cf. *supra*; for ʾānōkī being the original form; cf. also the preservation of \hat{a} , as well as $\hat{o} < \hat{a}$ peculiar to stressed syllables, v. *supra*). The same is the case for pausal ʾattā (also ʾattā) as against the context form ʾattā ("you," masculine singular). In some rare cases ʾattā is spelled defectively without the usual final h , i.e., ʾt (e.g., 1 Sam. 24:18), always as ktiv , in others again ʾt is vocalized ʾatt (e.g., Num. 11:15). For ʾatti (ktiv) occurring for ʾatt ("you," feminine singular), v. *supra*. For hī ("she"), hū ("he") is substituted as ktiv in the Pentateuch, for which, as qrē perpetuum , hī ("") is read. היא , הוא ("he, she"), as occurring in the Qumran scrolls, exhibiting long forms with final vowels, are, it seems, due to secondary analogical formation. For the regular ʾānāḥnū ("we") nāḥnū occurs rarely, and once (Jer. 42:6) the ktiv nw , identical, it seems, with mishnaic ʾānū . Whereas hem and ḥemmā (Babylonian hām and hāmmā ; "they"), attēn (once, Ezek. 13:20) and attēna (Babylonian attān and attānnā , "you," feminine plural) alternate, heʿnna (Babylonian heʿnnā ; "they," feminine plural) is the only existing form, rather than ḥen . attēm ("you," masculine plural) is the only existing form in the masoretic text, tmh (attēmā or perhaps attēmmā) occurring only in "vulgar" versions found in Qumrān, presumably exhibiting (as does ḥemmā) a late analogical formation. For marking possession, etc., and direct object, identical pro-

nominal suffixes attached to nouns, prepositions and verbs respectively are used in Hebrew (and in Proto-Semitic), the only difference between them being in first person singular, -*î* denoting “my” (and, as a rule, attached to prepositions) and -*nî* “me.” If the word to which the pronominal suffixes are attached terminates in a consonant, it is, as a rule, preceded by a “connecting” vowel, *a* being the favorite vowel after perfect, *e* after imperfect and imperative. Yet before -*ken* / *ken* the “connecting” vowel is missing (as *yedken* (“your hand”) as against, e.g., *yâdê-nû* (“our hand”)). The absence of the “connecting” vowel before the pronominal suffix of the second person singular masculine (as *yâdkâ* (“your hand”)), however, is secondary, see *supra*. On the other hand, pausal forms such as *lâk* (“to you,” masculine singular) display the omission of the final syllable. -*kâ* is sometimes spelled with a final *h*, and this spelling becomes more frequent in the Qumran scrolls. After nouns, prepositions, and imperfect forms terminating in consonants the pronominal suffix of the second person feminine singular is -*ek*, rarely -*âk* (*kullâk* (“you in your entirety”), presumably influenced by *lâk* (“to you” where the *â* belongs to the particle) or -*ekî*. -*ô* (“his”), spelled archaically also with -*h*, v. *supra*, is sometimes superseded by -*ehû*-, which is the regular suffix only after imperfect, imperative, and nouns terminating in *e*, but becomes more frequent in the Qumran scrolls. After perfect forms, -*ô* and -*âhû* alternate. *Tagmûl’ôhî* (“his benefits,” Ps. 116:12), instead of ordinary *tagmûlâw* (-*âw* being the usual suffix after plurals), exhibits Aramaic influence. For -*âh* (“her”), also used after perfect (the consonantal value of the *h* being marked by a point in it, the so-called *mappiq*), quite often -*â* occurs (without *mappiq*, the *h* used as vowel letter only). For -*ken* (second person plural feminine), -*hem*, -*hen* (third person plural masculine and feminine respectively), forms with final -*â* rarely occur: -*kenâ*, -*hêmâ*, and *henâ* respectively, and even *ken* (second person plural masculine) is attested in the Qumran scrolls with final -*â*, where this ending is especially frequent. For -*hem* the archaic poetical -*mô* occurs. For -*ân* (which together with -*âm* replaces -*hen* and -*hem* respectively after nouns and perfect forms terminating in consonants, whereas -*êm* is used after imperfect forms for the masculine) after nouns -*ânâ* is rarely attested. In nouns terminating in the plural ending -*ôt*, for *ôtêhem* / -*ôtêhen* (“their,” masculine/feminine) -*ôtâm* / -*ôtân* occurs. Suffixes after imperfect and imperative forms, as well as after certain particles, are sometimes preceded by -*en*, the so-called *nûn energeticum*, as *ybârâkenhû* (“he will bless him”), generally assimilated to the following consonant, as *yakkekâ*, (“he will smite you”), or assimilating a following *h*, as *yišmrennû* (“he will keep him”).

The demonstrative pronouns *ze* (masculine singular), *zô* (feminine singular, rarely *zô*), *ell* *e* (plural, rarely *el*) (“this”), exhibiting the alternation of *δ*-root in singular and *l*-root in plural, well known from other Semitic languages, are, if used attributively, preceded by the definite article, in analogy to the usage of attributive adjectives (as *hayyôm hazze*, “this day”). This construction is to be regarded as later than that occurring in Middle Hebrew, exhibiting both the noun and the attribu-

tive demonstrative pronoun without the definite article (as *yôm ze*). Accordingly, a phrase like *ballaylâ hû* (instead of the regular *ballaylâ hahû*, exhibiting the use of the third person of the personal pronoun as “that” – demonstrative), in which the definite article is attached to the noun, rather than to the demonstrative, is, it seems, the intermediary stage. The definite article *ha*- (with doubling of the following consonant) has still retained its demonstrative force in phrases like *hayyôm* (“this day, today”). On the other hand, *ze* is sometimes used as presentative, or as relative pronoun (as is also *zû*). *Mâ/me* (“what”), spelled *mh*, with doubling of the following consonant (this doubling is a real one, not like that called *dhiq* or *’âtê mērahîq*), has presumably, partly at least, to be derived from *ṣmah* / *ṣmeh*. “Who” is *mî*.

TENSE SYSTEM. The Hebrew tense system, besides the imperative (in second person only, in form closely related to the imperfect), consists of four finite forms, viz. the perfect and the consecutive (the so-called conversive) perfect, the imperfect and the consecutive (conversive) imperfect. The consecutive tenses are preceded by *w*- (“and”), which before the imperfect has the basic form *wa* (with doubling of the following consonant). It is a moot question whether this system marks aspects (without any notion of time) or rather time. At any rate, in biblical prose at least, these forms seem to denote time, since the difference between perfect and consecutive imperfect, referring to the past, and imperfect and consecutive perfect, referring to the future/present respectively, depends, it would seem, on the syntactical environment only: as a rule, whenever it makes the use of *w*-, etc. (“and”) possible, the consecutive forms are used, in accordance with the demanded time, otherwise simple imperfect/perfect are applied. Besides the indicative, the imperfect has a cohortative (especially in the first person), formed by the ending -*â*, (also occurring after consecutive imperfect and the singular masculine of the imperative), and a jussive. The latter, though often coinciding with the indicative, even more resembles the consecutive imperfect, both being formed from the apocopate; the main difference between them is the paroxyton stress of the consecutive form (presumably an archaic feature, reflecting the stage in which, see *supra*, general paroxyton stress obtained, the indicative being *ṣyaf’âlu* > *yaf’âl*, the apocopate *ṣyaf’al*. The jussive was then more fully adjusted to the stress pattern of the indicative than the consecutive imperfect). In *verba tertiae* *y*, apocopate forms of the imperative occur as well. As to the consecutive perfect, it often exhibits oxyton stress, as against the paroxyton stress of the perfect. Yet this oxyton stress is, it seems, secondary, since syllable structure is in accordance with the paroxyton stress (as *wâ’âkaltâ* (“and you shall eat”), parallel to *âkaltâ* (“you ate”), rather than *ṣwâ’âkaltâ*).

The perfect is formed by affirmatives, which in the first and second persons resemble the endings of the personal pronouns (but first person singular terminates in -*î*). The third person singular masculine has the ending *zero*, the feminine -*â*, the plural -*û*.

Less clear are the formatives of the imperfect, which uses the prefixes *v* (*v* marking any vowel) for first person singular, *tv* for second person, and third person feminine, *yv* for third person masculine, and *nv* for first person plural. Other persons are indicated, apart from the mentioned prefixes, by suffixes as well: *-î* (rarely *-în*) in second person feminine singular (as *tišm'î* “you will hear”), *-û* (rarely *-ûn*, which, very seldom, penetrates into the third person plural of the perfect as well) in second and third person masculine plural (as *tišm'û* / *yišm'û* (“you/they will hear”)), and *-nâ* in second and third person feminine plural (as *tišma'nâ* (“you/they (feminine) will hear”)); rare is the *yv* prefix in third person feminine, as *y'aāmoḏnâ* (“they (feminine) will stand,” Dan. 8:22)). The imperative has no prefixes, but the same suffixes; for *-nâ* very rarely *ḥ-n* occurs: *šmā'an* (< *ḥšmā'n*) (“hear (feminine plural)!,” Gen. 4:23) (in most cases forms of the imperfect and imperative terminating in *n* are considered as *scriptio defectiva*, and vocalized *-nâ*).

Among infinite forms, the Hebrew verbal system possesses a participle, which may behave as a noun (it may, e.g., stand in *status constructus* and be negated by *ʔen*, the negation of nominal sentences), on the one hand, and as a finite verbal form, on the other (it may, e.g., govern direct object and be continued by a consecutive finite form, as *makke ʔiš wāmet* (“if one smites a man and he dies”), although the participle stands in *status constructus*). Among the two infinitive forms, the so-called *infinitivus constructus* has usual infinitive functions, as *meṭib naggen* (“he who excels in playing,” Ezek. 33:32); *wayyered... lirōt* (“and He descended... to see,” Gen. 11:5). Very often the *l*-form is used even when not in final sense, exhibiting the coalescence of *l* with the infinitive, as *ḥāfeṣ... lahāmīṭenū* (“He wanted... to kill us,” Judg. 13:23; in Middle Hebrew this form becomes the only existent infinitive form). It is also used as gerund, as *bārâ... laʔsōt* (“he created... in making,” Gen. 2:3). The so-called *infinitivus absolutus*, so called, because it does not stand in *status constructus* nor is it governed by preposition, is a peculiar blend between verbal noun and verbal interjection. It is, besides its rare infinitive functions, mainly used as internal object (as *bēraḫtâ bārēk* (“surely you have blessed,” Num. 23:11), as a rule preceding the finite verb (as *mōt yūmāt* (“surely he will be killed,” Gen. 26:11); also replacing modal adverbs (as *wayyēlek ḥālōk wāʔkōl* (“he went while eating,” Judg. 14:9), and as substitution of finite verbal forms (as *zraʔtem harbe whābe mʔat ʔākōl wʔen-lōbʔā*, “you have sown much, but brought home few, you have eaten, but not to satiety,” Hag. 1:6), mainly of the imperative (as *zākōr ʔet-yôm haššabbāt* (“be mindful of Sabbath”)).

VERB PATTERNS. Of all word classes it is the verb that has the most conspicuous patterns, although patterns as such are one of the main characteristics of Semitic languages in general and of Hebrew in particular. These patterns are characterized by a certain vowel sequence, which, interwoven with the triliteral root, together with the repetition or doubling of radical consonants, as well as the addition of certain formative con-

sonants, reflects various modifications of the root connected with specific meanings. It is customary to denote the verbal themes by the root *pʔl* (which, however, has the disadvantage of not being able to denote the doubling of the second radical, since *ʕ* cannot be doubled) in accordance with the vocalization of the third person masculine singular of the perfect. The usual verbal patterns in biblical Hebrew are the ground theme *pāʔal* (also called *qal*); its reflexive-passive *nifʔal*; *pīʔel*, exhibiting doubling of the second radical and denoting intensive and factitive action, its passive *puʔal* and reflexive-reciprocal theme *hitpʔael*, the causative *hifʔil* and its passive *hofʔal*. Beyond these themes a stage may be reconstructed which, with the exclusion of *nifʔal*, exhibits a well-balanced system:

	Ground pattern	Double pattern	Causative pattern
	<i>pāʔal</i>	<i>pīʔel</i>	<i>hifʔil</i>
internal passive	<i>ḥpuʔal</i>	<i>puʔal</i>	<i>hofʔal</i>
t-form (reflexive reciprocal)	<i>ḥhitpʔal</i>	<i>hitpʔael</i>	<i>ḥhitafʔel</i>

From the patterns marked by a double dagger (‡) only remnants exist. The inner passive of *puʔal* disappeared because of its resemblance to the inner passive of perfect *pīʔel* and imperfect *hifʔil*, being superseded by *nifʔal*, which, besides its original reflexive meaning, acquired passive functions as well; it can only be recognized by its perfect being identical with *puʔal*, the passive of *pīʔel*, its imperfect with *hofʔal*, without a corresponding *pīʔel* / *hifʔil*. *Hitpʔal* subsisted in *hitpāqḏū* (“they were counted”) only (which is mixed up with its passive *hotpāqḏū*) whereas the very existence of *hitafʔel* is dubious, depending on the analysis of forms like *təṭahārē* (“you will compete”), *wattəṭaššab* (“and she stood”).

In *pāʔal*, the neutral perfect forms *pāʔel* and especially *pāʔol* are being superseded by *pāʔal*. In the imperfect and imperative *yafʔol* / *pʔol* and *yafʔal* / *pʔal* respectively are alive, *yafʔil* / *pʔil* being absorbed by *hifʔil* and not really subsisting but in some “weak” roots. From vestiges a stage may be reconstructed exhibiting the imperfect forms *yafʔol* (and *yafʔil*) as against *yifʔal*, cf. *yehelaš* as against *yaḥāloš*; *yēbōš* as against *yāqūm*; *yēqal* as against *yāsob*. The only living *infinitivus constructus* is *pʔol*, *pʔal* (as *liškab* (“to lie”)); the stop *k*, as against *ḵ* in *škab*, is due to the coalescence of *l* – with the infinitive, v. *supra*) being marginal and *pʔil* existing in some “weak” verbs only. Feminine forms of the *infinitivus constructus* are attested as well, as *ʔahābā* (“to love”). The *infinitivus absolutus* has the form *pāʔol*, *ô* in the second syllable also occurring in other themes. The active participle, originally belonging to *pāʔal*, is *pōʔel*, whereas *pāʔel* and *pāʔol* are the original participles of *pāʔel* and *pāʔol* respectively, yet losing ground against *pōʔel*. The passive participle is *pāʔul* (whereas the participle of the internal passive of *pāʔal* is *puʔal* and *pīʔol*, with redoubling of the second radical, as *ʔukkāl* (“eaten”), *yillōḏ* (“born”)).

Nifʔal, exhibiting attenuated *i* in its first syllable, still preserves *a* in some “weak” roots. In the imperfect, the impera-

tive and the infinitive (the two latter forms have a *hi-* prefix), the *n*, immediately preceding the first radical, is assimilated to it; the last radical of these forms is, as a rule, preceded by Tiberian *ē*, but Babylonian *ā*. In contradistinction to all the other themes, with the exception of the ground theme, the participle is not formed with the prefix *m-*, but in accordance with the perfect (*nifʿāl*).

Piʿel exhibits *a* in perfect in the second syllable about as often as *ē*; in the Babylonian vocalization *ā* (corresponding to *a* / *ē*) prevails, and some few verbs (as *dibber*, “he spoke”) exhibit *ē* according to Tiberian vocalization as well. In the imperfect, etc., the first radical is followed by *a*, the second by *ē* in the Babylonian system sometimes by *ā*).

Hitpaʿel sometimes exhibits *a* in its third syllable in all forms (with the exception of the participle), especially in pause, and in the Babylonian vocalization the corresponding *ā* prevails. If the first radical is a sibilant, it precedes the *t* (as *hištappek* (“to be poured”)). Sometimes, the *t* is assimilated to the first radical (as *hiṭṭammē* / *hiṣṭaddeq* (“to be defiled/to clear himself”)).

In *hifʿil* the vowel of the prefix is *i* in the perfect (*a* occurring in “weak” verbs only), *a* in the other forms; that of the second syllable, as a rule, stressed *î*, before consonantal affirmatives in the perfect *a*, in the imperfect, etc., *ē*, which is exhibited also by *infinitivus absolutus* and those forms of the imperative and jussive which lack conjugation endings and pronominal suffixes. The *h* of the prefix is, as a rule, dropped in the imperfect.

Puʿal and *hofʿal* have the vowel sequence *u* / *o*-*a*, characteristic of the internal passive.

WEAK VERBS. Verbs are that class of words in which trilateralism is most strictly carried out. Nevertheless, some verbal classes, viz. *mediae infirmae* and *geminatae*, cannot be explained on the assumption of sound shifts operating on trilateral roots only: they have to be considered as partly emerging from biliteral roots, blending with forms of trilateral roots, which underwent changes because of “weak” letters; and this may apply to other “weak” verb classes as well.

Verba primae n assimilate the *n* to the immediately following second radical, this being in accordance with the general behavior of *n* (see *supra*). Moreover, those having the imperative *pʿal* in the ground theme, drop the *n* in it (as *gaš* (“approach”)), as well as in the *infinitivus constructus*, which terminates in the feminine ending *-t* (as *ḡgašt* > *gešet*). The same is the case with *nātan* (“to give”), which is the only verb *primae n* having an *i* – imperfect (*yitten*): *tēn*, *ṭint* > *teṭ*. It is also the only verb *tertiaie n* which assimilates this *n* to consonantal suffixes, as *nāṭattî* (as against e.g., *sākanî*, where the *n* is analogically restored). It may be due to the influence of *nātan*, that its antonym *lāqah* (“to take”) treats its *l* like an *n*: *yiqqah*, *qah*, *qāḥaṭ*. Also some *verba primae y* (especially those having *š* as their second radical, as *niššab* (“he stood”) as against *hiṭyaššēb*) and *mediae infirmae* (as *massig* (“removing”) as against *nāsōg*) behave like *primae n*.

Verbae primae y form *yafʿil* imperfect, its imperative and its infinitive omitting the *y*: *yāšab* (“to seat”), *tēšēb* (with assimilation of the prefix vowel to the following one), *šēb*, *šēbet* (< ṣībt, *ə* with feminine ending); *yādaʿ* (“to know”), *tēdaʿ* (< *tədeʿ*, cf. the infinitive-noun *dēʿā*), *daʿ*, *dāʿaṭ*. *Hālak* (“to go”) behaves similarly: *tēlek*, *lek*, *leket*. *Yākol* (“can”) has the solitary imperfect *yūkal*. *Nifʿal* has in perfect and participle *ô* (*nôlad* (“was born”), *nôlad*, exhibiting the prefix vowel *a*, cf. *supra*, as does the whole paradigm of *hifʿil*, as *hōlid*), the other forms, as a rule, exhibit *w* as first radical. *Hofʿal* has *û* (as *hūbal*, “he was brought”).

In *verba tertiae infirmae*, *y* has superseded *w*. Forms without suffixes have the same endings in all themes: *-ā* in perfect (and *ātā* in feminine singular third person), *-ē* in imperfect and participle, *-ē* in imperative, *-ôt* in construct infinitive. Consonantal affirmatives are preceded in perfect by *-ē* or *i* in unstable distribution, *i* only being used in *pʿal* (as if continuing *pʿil*); *ʿenā* (*ʿē* < *ē* [< *ay* due to assimilation to the following *ā*, pronounced *ā*]) is the suffix of imperfect second and third person, and imperative second person, plural feminine. Before vocalic affirmatives *y* and the preceding vowel drop (as *ʿāsû* (“they did”), *ʿāsi* (“do,” feminine singular)). In jussive and the consecutive imperfect the second radical syllable is omitted (as *tēʿās*, “let it be done”); final double consonants thus arising are simplified (as *wayman* (“and he appointed”)); so also in the shortened form of the imperative: *šaw* (“order!”). Final consonant cluster may be preserved, if the second consonant is a stop (as *wayyebk* (“and he wept”)), or as a rule, broken up (as *yireb* < *ṭyirb* (“let it multiply”)).

In *verba tertiae ʿ*, the *ʿ* is dropped (preserved as vowel letter only) in final position and a preceding short vowel lengthened (as *ṭmāšaʿ* < *māšā*, “he found”). Before consonantal affirmatives of the perfect *ʿ* is dropped, *ā* (ṣ-) being the preceding vowel in *pʿal* (as *māšāṭi*) and, it seems, in *puʿal* and *hofʿal* (the only instance being *hūbātā* (“you have been brought”, Ezek. 40:4)). *ē* (ṣ-) in the other perfect forms (as *yāreṭi* (“I feared,” *pʿel* form of the ground theme), *nirqeṭi* (“I was called”)), as well as in the feminine singular of the participle (as *mūšet* (“being brought out”)). The suffix of imperfect second and third person and imperative second person, plural feminine, ends, as in *tertiaie y*, in *-ʿenā*, yet exhibiting *ʿ* as vowel letter, rather than *y* as in *tertiaie y*.

Verba mediae infirmae exhibiting in the first and second persons of the perfect of the ground theme short vowels (as *qamî*, “I stood up”), but long ones in the third (as *qām*, corresponding to the *pʿel*-form *meṭ* (“he died”) and the (synchronically) *pʿol*-form *bōš* (“he was ashamed”)). In the (regular, jussive, and consecutive) imperfect, the imperative and *infinitivus constructus* of the ground theme, *verba mediae w* exhibit *û*, etc., as *yāqûm*, *yāqôm*, *wayyāqom* (with *qāmāš qātân* in the last syllable), *qûm*, *qûm* (but second/third person feminine plural *tāšobnâ*, along with *tāmût ʿenâ*, exhibiting, as do *mediae geminatae*, the same ending as *tertiaie y*); *mediae y* *î*, etc., as *yāšim* (“he will put”), *yašēm*, *wayyāšem* (these forms being identical with the corresponding *hifʿil* forms; therefore

ground themes of *mediae y* are apt to pass to *hif'ıl*, as *bántâ* ("you understood") to *heḇîn*, *śim*, *śim*. The old *yif'al* imperfect is preserved in *yeḇôš*. The active participle is identical with the perfect, but in contradiction to it is always oxyton (this applies to the other themes and to *mediae geminatae* as well), even before vocalic affirmatives: perfect *qâm*, *qâmâ*, *qâmû*, *mêt*, *mêtâ*, *mêtû*, *bôš*, *bôšâ*, *bôšû*, as against participle *qâm*, *qâmâ*, *qâm'im*, *qâm'ôt*, *mêtâ*, *bôšâ*, etc. The imperfect and imperative too have paroxyton stress before vocalic affirmatives, and this applies to perfect, imperfect, and imperative *nif'al* and *hif'ıl* and *mediae geminatae pâl*, *nif'al*, *hif'ıl* and *hof'al* as well. Perfect and participle *nif'al* is like *nâsôg* ("to retreat"), *hif'ıl* like *hêqim*, *mêqim* (where the preformative has the same vowel as that of the perfect); the perfect consonantal affirmatives of these two themes as well as of *pâl*, *nif'al*, and *hif'ıl* of *mediae geminatae* are preceded by *ô*, as *nâsûgôti* (exhibiting *û* rather than *ô* in the radical syllable), *hâbî'ôtîw* ("I brought him," along with *heḇêti*; rarely also forms like *wahâqemônû* with *ê* occur). *Nif'al* imperfect, etc., exhibits *ô* (as *yissôg*). *Hof'al* (as also that of *mediae geminatae*) is formed on the analogy of *primae y*. For *pi'el*, *pu'al*, and *hitpa'el*, in classical language *polel*, etc., is used: *qômēm*, *qômam*, *hitqômēm* (externally identical with the *pô'el*, etc., forms of *mediae geminatae*, in which (along with forms like *sibbēḇ*, *gullal*, *hitḥammēm*) forms like *sôbēḇ*, *gôlal*, *hitgôlēl* are used for *pi'el*, etc. From both verb groups *piḇel*, etc., themes may be derived, as *gilgel* from *gll* or *ṭiltel* from *ṭwl*).

Besides "strong" forms, *verba mediae geminatae*, as a rule, exhibit forms containing one radical syllable with doubling of the second (= third) radical (which, however, is simplified when not followed by a vowel, as *pâl rab* ("was much"), *nif'al timmaqnâ* ("they will be consumed")). Along with them forms with reduplication of the first radical occur, the so-called Aramaic formation, together with the doubling of the second radical (as *hoššammâ* ("its being desolate")), and without it (as *wayyiqqdû* ("and they bowed")). Forms without any reduplication are also attested (as *yâzmû*, ("they will plan")). In the imperfect of the ground theme, *yaf'ol* (as *yâsob*, consecutive imperfect *wayyâsob*) corresponds to a perfect (when without ending or with vocalic affirmatives) and participle built according to the "strong" pattern (as *sâḇab*, *sâḇabû*, *sôbēḇ*), whereas *yif'al* (derived from adjectives exhibiting *a* in their sole syllable, the final consonant being doubled when followed by affirmatives, as *yeqal* ("he will be easy") from *qal* ("easy")) has them in the "one radical syllable" form (as *qal*, *qállâ*, *qállû*, *qal*, *qallâ*, *qallim*, *qallôt*). From the *yaf'ıl* imperfect only remnants exist (as *yâḡen*, "he will defend"). Perfect/participle *nif'al* have two forms: *nâsab/nâsâb* (also participle *nâḡel*) and *nâḇoz/nâḇôz*, and the same applies to imperfect/imperative: *yiddam* and *yissob*. *Hif'ıl* perfect has *a* (as *hêqal*) or *ê* (as *heḡel*; the Babylonian system *ä* only), the imperfect *ê* (as *yâqel*; the Babylonian has sometimes *ä*), the participle *ê* in both the radical and prefix syllable: *m'êš'el* (as have some perfect forms, v. *supra*).

SUBSTANTIVES. Both trilateralism and the development of patterns is less conspicuous in nouns than in verbs. There exists a set of biradical substantives with a fixed vowel, which, by their meanings, demonstrate that they belong to the oldest stratum of the language: *yâd* ("hand"), *dâm* ("blood"), *dâg* ("fish"), *b'ên* ("son"), *š'em* ("name"), *êš* ("tree"), *šânâ* ("year"), *šâpâ* ("lip," in plural transferred to triradical scheme by the inclusion of the feminine ending: *šiptô't êkâ*), etc. The notion of patterns is best developed in verbal nouns, in participles and infinitives, as *qittûl* (*q, t, l* denoting the three radical letters respectively) belonging to *pi'el*, moreover in nouns with *m*-prefix, especially in *nomina instrumenti* exhibiting *maqṭel*, less in those with *t*-prefix. The suffixes include *-ôn* and *-ût* (containing the feminine ending as well). Among nouns without affixes *qâṭil*, *qattîl* are frequent in adjectives, *qâtôl*, plural *qtullim*, denotes color adjectives, *qittēl* bodily or mental faults, *qattâl* intense qualities and occupations. One-syllabic nouns, terminating in a consonant cluster, open the cluster, mostly by *ê* (*segol*, the so-called *segolata*, see *supra*), as *yeled* ("child") *ṣyald*, *šēbet* ("to sit") < *ṣšibt* (in pause *yâled*; *šâbet*, yet *melek* and most nouns having original *qitl* pattern do not change in pause).

Substantives are used in different *status*: in *status absolutus*, when standing alone; in *status constructus*, when closely attached to a following noun (the so-called *nomen rectum*, historically a genitive; the *nomen rectum* defines and, when itself determinate, determines the noun in *status constructus*); and *status pronominalis*, when attached to a pronominal suffix, which stands in the same relation to the noun as the *nomen rectum* does. The feminine ending is either *-â* (in *status constructus* and *pronominalis -at*, etc., exhibiting an earlier stage), or *-t*; sometimes these feminine endings alternate, as when *-â* used in *status absolutus* and *t* in *status constructus* and *pronominalis*, as *merkâḇâ* ("chariot"), *mirkeḇet* (< *ṣmirkaḇt*, exhibiting the opening of the final cluster, as in the *segolata*), *merkaḇtô*. The dual is rather reduced, being as a rule used with "two," "two hundred," some nouns denoting time and mainly with objects which naturally occur in pairs, especially the double members of the body. Its ending is *-âyim*, that of the masculine plural *-im*, the *status constructus* and *pronominalis* of both *-ê* (historically to be derived from the dual), which is also added to the *status pronominalis* of the feminine plural ending *-ôt*. The so-called *segolata*, including one-syllabic nouns with feminine ending, as *yaldâ* ("girl"), form their plural from bisyllabic stems, exhibiting *â* after the second radical: *ylâḏim* ("children"), *ylâḏôt* ("girls"). Mention must also be made of the unstressed locative ending *-â* (spelled *-h*, < *ah*, as intimated by Ugaritic), as *šâ'pônâ* ("northward"), also occurring between *status constructus* and its *nomen rectum*, as *midbârâ dammešeq* ("to the wilderness of Damascus").

ADJECTIVES. The boundaries between substantives and adjectives are rather blurred. There are relatively few patterns exclusive to one of these word classes (as *segolata* mainly for substantives, *qâtôl*, plural *qtullim* for color adjectives). Ad-

jectives invariably have feminine forms ending in *-â/t*, masculine plural terminating in *-îm* and feminine plural in *-ôt*; substantives, on the contrary, need not have special feminine forms and also feminines without endings occur (as *’âtôn* (“she-ass”)). Moreover, in the substantives *singularia/pluralia tantum* occur, and the plural ending *-îm* may be attached to feminine substantives (as *’iššâ* (“woman”), plural *nâšîm*), and even more often *vice versa* (as *’âḥ* (“father”), plural *’âḥôt*). Yet some substantives exactly behave as adjectives in this respect (as *yeled*, *yaldâ*, *ylâdîm*, *ylâdôt*). Adjectives proper do not have *status pronominalis*, yet substantival usage of adjectives (and sometimes also *vice versa*) is frequent. Sometimes adjectives may occur in *status constructus*, yet their usage is very special (as *nqî kappâyim* (“clean as regards hands”)), and it may not be substituted by *status pronominalis* (as if *ḥnqîhen*; but this may apply sometimes to substantives in *status constructus* as well). Some syntactical usages, however, seem to be possible for adjectives only, rather than for substantives, as the use of modifiers like *mâ’ôd* (“very”), *yôṭer* (“more”). The simplest solution would perhaps be to set up three different classes: substantives, adjectives, and finally nouns, which would then include both word classes, as far as their special character cannot be defined by formal criteria. Adjectives used as attributes are preceded by the governing noun.

NUMERALS. As to the cardinal numbers, *’ehâd*, feminine *’ahât* (“one”) is mainly used as adjective, *šnâyim*, feminine *štâyim* (sic! with *t* as stop, exhibiting a quite exceptional initial cluster) “two,” as substantive, governing the counted noun in *status constructus*: *šne-*, feminine *šte-*, or following it in *status absolutus*. As to the numbers three to ten, those with zero-ending refer to feminine nouns, whereas those with *-â* (in *status constructus -at/-t*) to masculine ones, a common Semitic feature, in opposition to the other noun classes. They precede or follow the counted nouns in *status absolutus*, but they may precede them in *status constructus* as well (historically an archaic feature): this is the rule with definite nouns, as well as with *yôm*, etc. The “ten” in the numbers 11–19 is *’âšâr* for masculine, *’êšer* for feminine, spelled *’šrh*; it is uncertain whether it exhibits an alleged feminine ending *-e*, since in Ugaritic it is spelled with final *h*, thus intimating a consonantal ending. The ordinal numbers have special forms only from one to ten, exhibiting the theme *qtîlî*, with the exception of *šiššî* (“sixth”), and perhaps *šênî* (“second”). “First” is *rîšôn*, a relatively late form, as it is customary in Semitic language, the older usage being the use of the cardinal number “one,” still persisting in biblical Hebrew.

PREPOSITIONS. Prepositions, as far as etymologically transparent, are as a rule nouns in *status constructus/pronominalis*, as *’ešel* (“near, by”), *’ešlâ;* *’al-*, poetical *’âlê* (“on”), *’âlêkem*, the suffix *-êkem* originally exhibiting the final *-y* root, rather than a plural suffix. Through the influence of prepositions like *’âlêkem*, other prepositions too govern plural suffixes, as *tâḥat* (“under”), *taḥtêkem*. Among the three uni-consonantal prepositions, only *l-* (“to”), and *b-* (“in, by”) govern pronominal suf-

fixes (as *lâkâ*, *lâk*, *lâkem*), but *k-*, originally a demonstrative element, governs pronominal suffixes mainly by means of *-mô-*: *kâmôkâ*, *kmôkem*. *Min* (“from”) as a rule assimilates its *n* to the following consonant (as *mibbnô* (“from his son”), *mikkem*, cf. also *mehem*, with lengthening of the vowel preceding the pharyngeal not capable of doubling); before some suffixes *min* is doubled, as *mimménî* < *ḥminminî* (“from me”), along with poetical *minnî*. There are two prepositions *’et*; one denoting “with,” has the form *’ittô*, etc., before pronominal suffixes, the other, used as optional mark of determinate direct objects, the forms *’ôtô*, *’etkém*; sometimes, however, these two sets become mixed up. Since the impersonal passive may govern objects (as indirect object, e.g., *yḇulla’ lammélék* (“the king will be afflicted,” 11 Sam. 17:16)) or a direct one, e.g., *maššôt ye’âḳel* (“unleavened bread shall be eaten,” Ex. 13:7), it may govern *’et* preceding the definite object as well, e.g., *’et-kol-dgê hayyâm ye’âseḥ lâhem* (“shall all the fishes of the seas be collected for them?” Num. 11:22).

NEGATION. As word negation and in verbal clauses *lô* is used, in nominal clauses *’en*, in prohibition *’al* with the imperfect (jussive; but, as in Semitic languages in general, never with the imperative).

CLAUSE FORMATION. It is in the domain of clause formation that Hebrew has best preserved the ancient Semitic character. In contradistinction to Arabic, it has not relinquished free sentence structure in favor of systematization. Yet, although it has lost, like Aramaic, the case and mood endings, it has not been affected by a similar syntactic formlessness. The boundary lines between main and subordinate clauses are blurred, since *w-* (“and”) may precede the main clause following the subordinate one; cf. also *w-* introducing the main clause after phrases like *wayhî ’im...*, *w...* (“and it happened, when..., then...”). Circumstantial clauses resemble main clauses even more, mainly differentiated by the use of different tenses. Moreover, the number of subordinate conjunctions is relatively small, the most important ones being the relative pronoun *’âšer*, also used as introducing substantive clauses, *kî* introducing substantive and causal ones, conditional *’im* and hypothetical *lû*. Very frequent is the presentative *hinne*, often followed by a participle marking the future.

VOCABULARY. The vocabulary of biblical Hebrew is, in accordance with the limited size of the Bible, restricted, exhibiting many words from the field of religion, morals, and emotion. Loan words include those borrowed from Akkadian, as a rule through the intermediary of Aramaic, the influence of which becomes strong in later language.

[Joshua Blau]

THE DEAD SEA SCROLLS

DISCOVERY

MAIN ELEMENTS OF THE LANGUAGE OF THE DSS

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PROBLEMATIC ELEMENTS

THE INFLUENCE OF THE DSS UPON CHRISTIAN GREEK**DISCOVERY**

The discovery of the *Dead Sea Scrolls (= DSS, 1947) provided an important missing link in the development of Hebrew (= *H): a period which spans biblical Hebrew (= BH) and mishnaic Hebrew (= MH), extending from about the middle of the second half of the first century B.C.E. to 200 C.E. Before this discovery the only extant text dating back to this period (BH to MH) were fragments of the Book of *Ben Sira found in the Cairo *Genizah. Fragments found in the excavations at *Masada, however, indicate that the language used in the *Genizah* fragments is corrupt and does not faithfully represent the original text.

During the last centuries B.C.E., BH ceased to be a spoken language. Insofar as H was spoken, it was apparently, more or less, of the type that later emerged as MH. The literary language, which is represented by the DSS language, tried to hew as closely as possible to late biblical Hebrew (= LBH), as represented, for example, by the Books of Chronicles, which originated during the first centuries of the Second Temple period. Thus the language of the DSS should be considered as the last offshoot of LBH.

MAIN ELEMENTS OF THE LANGUAGE OF THE DSS

The DSS language, which apparently served only as a literary vehicle, is composed of the following elements: (1) BH; (2) Official Aramaic; since Aramaic (= A) had become, even before the destruction of the First Temple (586 B.C.E.), the lingua franca of the Near East and apparently also the vernacular of (nearly?) the whole of Syria-Palestine, it influenced the devel-

opment of H; (3) vernacular H (the later MH) which increasingly infiltrated literary H.

The above three elements were the most important in the shaping of the language of the DSS which, however, also reveals novel traits, especially in spelling and phonology. These elements, apparently reflecting the linguistic situation in Palestine during the period in question, stem from the fact that (4) the educated classes apparently spoke Greek; (5) the vernacular of the common people was (apparently) an A dialect (or dialects) slightly different from literary A, Official Aramaic, the so-called A of the empire; (6) neither BH as transmitted, nor vernacular MH, was uniform (there being mainly two traditions: the Tiberian and the Babylonian, each with its own vocalization; sometimes the Babylonian forms emerge in the DSS); (7) there are many elements of Samaritan Hebrew (= SH) in the language of the DSS; (8) the possibility that archaic forms survived in the language of the DSS that had disappeared from H (known from the vocalization of the Jews and the reading traditions of the Samaritans) cannot be excluded.

Negative factors were also decisive in the formation of the DSS language: (9) an ever-decreasing knowledge of BH, resulting in a situation where archaic and rare words and forms of BH became obscure to the average literate Jews. In his writing, which in intention was to be BH, the literate Jew was inclined to replace obsolete words and forms with common and familiar ones. Thus a kind of basic BH, which included the above elements, came into being; (10) certain biblical words in the vocabulary of the DSS, whose meaning had become obscure (known today through modern research), not used in their original meaning but according to the interpretation given to the words by the members of the sect and their contemporaries; (11) the scrolls contain words that might have been taken over from other languages or dialects of Palestine or the neighboring territories, but have since disappeared entirely (e.g., the language of the Edomites, living in southern Judea); (12) it is possible that some new words in the DSS were common in the H or A vernacular(s) and by mere chance are not in the transmitted H and A sources.

The elements that compose the language of the DSS might have varied with the different writers. There are, for example, sources in which the role played by MH is much more prominent (e.g., the *Copper Scroll) than in other sources. The complexity of the picture that emerges from the DSS is the reason why there is as yet no solution for many of the linguistic problems in the DSS, and the outline of this language, given below, can only be tentative.

SOURCES**Biblical Texts**

The complete *Isaiah* (1QIsa^a) is one of the most important scrolls of the DSS. The language, which is "vulgar" (i.e., the intention was not to render the text exactly as transmitted), is a "modernization" of the original *Isaiah*, as represented by the *Isaiah* type of the Masoretic Text (= MT) whose language

was modified so that the contemporary reader might more easily understand the text. As has been noted above, the average reader was scarcely able to understand the MT properly, and often unable to read it correctly. Therefore, copyists often substituted the contemporaneous forms for the original ones even in the case of proper nouns. For example, the form עוֹיָה, representing the type that became common mainly after 586 B.C.E. (the destruction of the First Temple), is used instead of the original ישעיהו, which represents the dominant type during the previous period.

Most of the biblical texts of the DSS are practically identical with those of the masoretic Bible. Fragments of "vulgar" texts from other books of the Bible, such as Exodus and Psalms, were, however, also found. The linguistic differences between these texts and the masoretic Bible are more or less to be attributed to the tendency to "modernize."

Non-Biblical Texts

The most extensive non-biblical texts are the Manual of *Discipline; the *Thanksgiving Psalms; the *Peshar Habakkuk, a commentary on the Book of Habakkuk; and the *War Scroll. These texts originated with a certain sect (generally identified with the *Essenes). A few fragments of non-canonical writings were also found, such as, The Book of *Jubilees and *Ben Sira* whose Hebrew version had until that time been practically unknown (see above Discovery). The *Zadokite* documents, as represented by the fragments found in the *Genizah*, do not reflect the original language of the DSS. (As with the Book of Ben Sira found in the *Genizah*, their language was also changed by the copyists of the Middle Ages.)

LANGUAGE OF THE DSS

Isaiah is the only DSS text which has been extensively dealt with from the linguistic point of view. The following survey, therefore, will be based mainly on the language of this scroll.

Spelling

The DSS employ the *scriptio plena* to make reading easier (there existed as yet no vowel signs) and to eliminate, as far as possible, a pronunciation. For example, לֹא ("not") was spelled לוֹא, otherwise the reader might have read it as לָא (*lā*) as in A (indeed, the Samaritans in their Bible substitute the A form for the H). Plene spelling with וַ abounds to indicate the phones (*u*, *o*), not only where these vowels represent an original diphthong (*aw*) that turned into an (*ō*), e.g., יוֹם ("day"; a spelling common also in the MT), or an original long vowel, e.g., שְׁלוֹשׁ ("three"; which is fairly common in MT), but also for originally short, later lengthened, vowels, e.g., עוֹל ("yoke"; this type of spelling is rare in MT), and short vowels that were not lengthened, e.g., אוֹזְנִים ("ears"; very rare in MT), and even half vowels, e.g., חוֹלִי ("illness": = חָלִי; extremely rare in MT). To a lesser extent, the same applies to the use of י, e.g., מֵית ("dead"; = מָת in MT), אֲבִיטָךְ (= אֲבִיטָךְ, "your girdle"). א was also used as a vowel letter to indicate the vowel (*a*), e.g., יֵאָתוֹם ("orphan"; the spelling is extremely rare in MT). As a word fi-

nal י might be used instead of ה indicating an (*e*) type vowel, e.g., יַעֲנִי ("he will answer"). Generally there is no real consistency in the spelling. The word "head," for example, has different spellings: רוֹשׁ, רֹאשׁ, ראשׁ. The DSS share these types of plene spellings with MH, especially as preserved in the manuscripts.

The DSS, mainly, in the *Isaiah Scroll* and only sporadically elsewhere, developed another type of plene spelling where a digraph (two letters) indicates one vowel (like the English *ea* ("beat") as against *i* ("bit")). This type of spelling is exemplified at the end of words: לוֹא indicated (*ō*), אִי indicating (*i*), e.g., in the above mentioned לוֹא ("not," the אִי is original and the וַ is added); בּוֹא ("in it," the וַ is original and the אִי is added); כִּיֹּא ("because," the אִי is added). These spellings appear also in the middle of words, e.g., רֹאשׁ, רֹאשׁ ("head"), but in this case the אִי is practically always original, while the וַ (and י) are added. As to consonant spelling, שׁ at that period turned into ס, thus the spelling סֵאִי (= שֵׁאִי "lift up") is found. There is, however, also the inverse where through a hypercorrection מֵאֵס ("to despise, reject") is spelled מֵאֵשׁ.

Phonetics and Phonology

An outstanding feature of the language of the DSS is that the laryngeals ה, א and the pharyngeals ע, ח, which became weakened, are sometimes dropped and sometimes confused with each other. For instance, תַּנְתּוּ (= תַּאֲנַתּוּ "his fig"), יַבּוֹר (= יַעֲבוֹר "he will pass"), מִנְחָל (= מִנְהָל "leader"), סֵלָה (= סֵלַע "rock"). These pronunciations are a characteristic of SH and Samaritan Aramaic (= SA). According to both Talmuds, the Jews of Beth-Shean and Haifa, probably influenced by the Greek vernacular, could not pronounce these phones properly. (The same applies to European immigrants in Israel, since European languages also lack these phones. They do, however, exist in Arabic and the Yemenites, therefore, pronounce them properly.) It is then possible that the weakening of these phones in the DSS occurred under the impact of Greek.

Morphology

PRONOUNS. *Independent Personal Pronouns.* Instead of אַת ("you" fem.), אַתִּי is sometimes found. This form (rare in masoretic BH), which at first sight seems to be archaic, is probably an Aramaism (the same happened in SH). Instead of הוּא ("he") and הִיא ("she") very often הוּאָה and הִיאָה are employed in the DSS. These spellings might reflect archaic forms that disappeared from masoretic BH (see above, Main Elements of... DSS, 8), but the possibility of an analogous new formation cannot be excluded. אַתֶּם = אַתְּמָה ("you" plural) is no doubt a late form parallel with the form transmitted by the Samaritans orally in reading their Bible (despite the spelling אַתְּמָה pronounced אַתְּמָה). אֲנֹ ("we") appears several times in the non-biblical scrolls (MH), in BH only once as *ketib*.

Personal Suffix Pronouns. The type דְּכֶרְךָ ("your word") is very often spelled plene דְּבִרְיָכָה/דְּבִרְכָה (plural). The spelling disproved the theory of P. Kahle who believed that the vocalization of the Masoretic Text came into being under Arabic

influence (after the seventh century C.E.!). The type ידו ("his hand") is sometimes spelled ידי, since apparently, as in SH, י was pronounced (o) and both ו and י could be used indiscriminately. The type בניה ("her sons") is sometimes spelled plene בניה/ה; the type דברכם ("your word") is often spelled דברכמה (as in SH); the type דברם ("their (masc.) word") is often spelled דברמה (by analogy); and the feminine suffix הן is sometimes spelled הנה (original? or a new formation by analogy). There is a strong tendency to use forms like רוחו (= "his spirit"), a BH poetic form, while forms like עליו (= "upon him") are A.

The Verb

PERSONAL SUFFIXES. Instead of the type שמרת ("you (fem.) watched"), the type שמרתי is sometimes used; it appears in the Song of Deborah (Judg. 5:7) whose language is archaic. The type apparently died out in BH but reentered the language under A influence, mainly in the late books of Jeremiah and Ezekiel (mostly as *ketib*, but not as *qeri*). It seems obvious, therefore, that the same influence is responsible for its emergence in the DSS (and in the Samaritan *Pentateuch). This is not the only known case where an archaic form disappeared from H and reentered the language through A, thus creating the impression of an archaic survival. As to the type שמרתמה (MT שמרתם "you (plur.) watched") it also parallels the Samaritan oral transmission (but spelled שמרתם) and is, as אתם, אתמה < (see Morphology, Independent Personal Pronouns), a later development.

OTHER FEATURES. Instead of מסיר ("is taking away") (*hif'il*) there is מהסיר, which again reflects the impact of A. Spellings like ישפול (= ישפל, "he will be degraded") indicate that an original (a) imperfect might turn into an (o) imperfect; such spellings are prevalent in MH and A dialects.

PAUSAL FORMS. Instead of the imperative form דרשו ("seek"), there is דרושו, which is either an A form, or an H pausal, occurring also in BH according to the Babylonian vocalization. There seems to be little doubt that the forms of the type תזכור ("you will remember") and אתמוכה (see below; pausal forms in the context) penetrated the DSS from MH. These forms are still found in the manuscripts (see Mishnaic Hebrew Language) and even entered the Christian Palestinian Aramaic (= CHPA) dialect from MH. The long imperfect forms of the type אתמוכה ("I would like to uphold") (expressing wish, etc.), which often take the place of the normal imperfect אתמוך, continue a trait fairly common in LBH (e.g., Ezra). The assumption of R. Meyer that the DSS employed a tense not found in masoretic BH, the so-called present future (as in Akkadian), is unfounded. However there is as yet no clear-cut solution to forms like ישופטני (= ישפטיני).

Among the new noun patterns one especially worth mentioning is *qutl* (= *qotel* in masoretic H) which sometimes appears as *qotol*, e.g., אוהל ("tent") = אוהל; cf., masoretic מלך = "Moloch" in the Septuagint; kindred forms also appear in CHPA.

SYNTAX

Although very little research has been done in the field of syntax, a few characteristics can be mentioned. Biblical syntax is employed, including the use of the conversive ו (waw), yet the copyist of *Isaiah* (see above Sources) occasionally substitutes a form belonging to the contemporaneous spoken idiom, e.g., instead of ואת כל אלה ידי עשתה ויהיו כל אלה ("All these (things) my hand has made") he used... והיו כל אלה ("and so all these things came to be (mine).") (Isa. 66:2). Biblical syntax requires here the imperfect plus the conversive ו. In MH the perfect is followed by the perfect plus ו; it is then the MH construction substituted for the BH one. Asyndetic relative clauses (= without the relative pronoun אשר) are still found in BH. Since they disappeared from MH and A, the writer is inclined to add the "missing" relative pronoun אשר and instead of בדרך תלך ("the way you should go") (Isa. 48:17) he creates the normal clause: בדרך אשר תלך. Sometimes he employs other means to evade the problem: in Isaiah 62:1 וישועתה כלפיד יבער ("and her salvation is as a burning torch") where there is no אשר after כלפיד he turned יבער into תבער; תבער thus is no longer the subject of וישועתה but יבער becomes the subject of תבער. The translation now is "and her salvation will burn like a torch."

אשר לוא plus the imperfect seems to be employed as a prohibitive in the non-biblical scrolls, e.g., אשר לוא ילך איש ("no one shall walk") which might have its parallel in MH and in the H and A letters of Bar Kokhba. The infinitive plus ל is sometimes used as a command, e.g., לשלח הואה מאתם ("They shall banish him") (LBH) and mainly negated by לוא as a prohibition, e.g., ולוא לסור ("and not to turn aside") also with אין, e.g., ואין לצעוד ("not to walk"). The same use is found in A inscriptions in Jerusalem: לא למפתח (lit., "not to open"), practically unknown in BH; it is also found in Punic (a Canaanite dialect of the Northern African coast); and it perhaps has its parallel in a certain Greek usage (found also in a Greek inscription in Jerusalem). It is impossible to pinpoint the origin of this use.

In the Book of Chronicles (LBH) the use of the accusative particle את with the pronominal suffix is generally avoided as in the *Manual of Discipline* (see above Sources). This is also the case in MH (as represented by the language of the *tannaim* only) which in this respect is a direct offshoot of the DSS.

Note אבית (= בבית "in the house"), and kindred forms, as in MH and Punic. Types like לאין שרית ("without a remnant") is to be found in LBH.

STYLE

In this area, too, more research is required. One point certainly deserves to be mentioned. The non-biblical scrolls are full of either biblical quotations, most of which are slightly different from the original, or of biblical allusions where the meaning is often not quite clear but the reference of the allusion is known, for instance, כי בשררות לבי אלק למען ספות הרוה את הצמאה, "I follow my own willful heart – to the utter ruin of moist and dry alike" (i.e., everything) (Deut. 29:18) is alluded to by וילך בדרכי הרויה למען ספות את הצמאה out of which sense can hardly be made.

VOCABULARY

The vocabulary of the DSS consists of native and foreign elements (loans and loan translations).

Native Elements.

These comprise BH, MH, and H of undefinable origin that does not occur in any other H source, but might be original (or a loan? see above Main Elements of... DSS, 8 and 12).

BIBLICAL HEBREW. BH has to be subdivided according to its sources: (1) archaic BH (= ABH); (2) standard BH (= SBH); (3) LBH. BH should also be divided into: (a) words that survived unchanged; (b) words that are used in a morphologically changed form; (c) words whose meaning changed; (d) words whose meaning changed owing to a certain interpretation of their original meaning which had been forgotten; (e) words which are new morphologically and semantically, but which arise "legitimately" from BH.

ABH. **אדיר** ("mighty"), **האזן** ("to listen"), **מעון** ("dwelling place").

SBH. SBH is very much in evidence. **אדון** ("lord"), **חלק** ("to divide"), **מערכה** ("line of battle"), **עת** ("time"). Thanks to the DSS, MH, and SA it has been shown that the BH **מסר** means "to count" (> "to hand over").

LBH. Since the Hebrew of the DSS is the last offshoot of LBH (above Discovery), the presence of LBH words is not surprising, e.g., **זוע** ("to move") (intransitive), **מדע** ("knowledge?" "opinion?"), **מדרש** ("interpretation, study"), **עמד** ("to get up") instead of **קום**, **פשר** ("explanation"), **שר** ("prince" (= "angel")), **כוהן הרואש** ("high priest"). The case of **קץ** ("time, epoch") is striking. Its proper meaning in LBH, "time" (and not only "end"), was (re)discovered mainly because of its usage in the DSS. These instances represent words that have survived unchanged (type a.)

BH **מְשׁוֹר** (participle of *hof'al*) (= "twisted thread") appears as **משוור** (obviously a participle of *pu'al*); the root **נדב** is used as *nif'al* (with the meaning of *hitpa'el* = "to volunteer"); **להב** ("flame, blade (of sword)") is found as **לוהב**. The plural of **איש** ("man") sometimes appears as **אנושים** (as if it were the plural of **אנוש** "man," which does not occur in BH). These instances represent words that are used in a morphological changed form (type b).

גורל ("lot") is also used for "group" and **עצה** ("counsel") as "council." **מבקר** ("inspector") goes back to the BH root **בקר** ("to visit" > inspect). **דשא (מועד)** "spring (time)" (like Akkadian and Epigraphic South Arabic) in BH is "herbage"; **זרק** ("javelin, dart"). These instances represent words whose meaning changed (type c).

חרישית (= "stormy wind") apparently goes back to the interpretation of Jonah 4:8, but the meaning is obviously not the original (an instance of type d).

MISHNAIC HEBREW. **גודל** ("thumb") = **גודל (א)** in MH; **כנסת** ("assembly"); **תלמוד** ("learning"); **מועט** ("little"); **מלאה** ("pregnant woman" – this word occurs in the *Temple Scroll*); **גבל** ("to knead"); **זעטוט** ("youth (young man)"); **ממון** ("wealth"); **נחשול**

("wave"); and **הלכה** ("rule"?) might be MA or A. But **בית משפט** ("court") is perhaps a loan translation of the MH **בית דין**. Several technical terms of the sect also are found in mishnaic sources, e.g., **קרב** ("admission," lit., "to bring near"), or **רבים** (= "the many") which seems to be one of the names of the sect. However, **רוב** apparently means "many" (only?) as in BH, but not "majority" as in MH.

HEBREW OF UNKNOWN ORIGIN. **בדן (א)** (a kind of brocade?) whose root does not occur in BH. The roots **מוזז** and **תחם** are as yet unexplained.

Foreign Elements

These are (1) A loans and loan translations; (2) Persian loans; (3) Greek and Latin loan translations.

ARAMAIC LOANS AND LOAN TRANSLATIONS. (MH vocabulary itself derives from A) **דוכי** ("purification") = the H root **זכה**. Typical for the language of the DSS is the root **סרך** used as a verb ("to draw up in battle order") and as a noun (meaning "order, battle order, ordinance, prescription"). It seems to be a loan word from A, but the meanings mentioned above are nearly unknown in A. The meaning of the root **סדר** (verb and noun), employed as a military term, is close to **סרך** and is apparently also A; **אוחזי אבות** ("intercessors") is a loan translation from A, going back to Akkadian.

PERSIAN LOANS. **רז** ("secret") and **נחשיר** ("battered") should be mentioned here. The latter shows the impact of the life at the court of the Persian governor.

GREEK AND LATIN LOAN TRANSLATIONS. Since there are no Greek and Latin loans in the DSS, it seems to be dangerous to hazard any suggestion concerning loan translations. However, if **מגדל** ("tower, turret") denotes a military structure and if the same holds true for the Greek **πύργος** and the Latin *turris*, there is reason to believe that some kind of connection exists between Indo-European words and Hebrew words. Even if it is assumed that the term **יחד** ("community") goes back to BH, the fact that the sect chose this term might have been influenced by the Greek **κοινωσία**. But **כנפים** ("wings") as a military term cannot be taken as a sign of Latin influence.

PROBLEMATIC ELEMENTS. Several words, among them **תעודה**, are not entirely clear, both with regard to their meaning and with regard to their development.

THE INFLUENCE OF THE DSS UPON CHRISTIAN GREEK

Scholars found a number of terms in the DSS which parallel Greek terms in the New Testament, e.g., "sons of light" (Luke 16:8). There is reason to believe that the Greek **ἐπίσκοπος**, a technical term of early Christianity (> "bishop"), reflects the term **מבקר** ("overseer") of the sect. The Greek **τάγμα** found in *Josephus, designating the sect of the Essenes, seems to be a loan translation of the term **סרך** which, as in the compound word **סרך (היחד)**, was employed by the sectarians as the name of their sect.

Words and phrases quoted can be traced with the help of concordances and E.Y. Kutscher's indexes.

[Eduard Yechezkel Kutscher]

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INTRODUCTION

The destruction of the Second Temple probably brought the continuous development of biblical Hebrew (= BH) (together with its last branch, the Hebrew of the Dead Sea Scrolls) to an end. With the destruction of the religious and spiritual center, the standard literary language disappeared, and its place was taken by the vernacular, namely mishnaic Hebrew (= MH). The recent discovery of the Bar Kokhba letters, some of which are in MH, supports this view. It is, however, most likely that MH had already existed previously for hundreds of years as a vernacular. Its influence can be detected in the later books of the Bible, e.g., the Chronicles and Esther, but it was not employed as a literary language until after the destruction of the Second Temple.

TYPES OF MISHNAIC HEBREW

Two main types of MH should be distinguished: (1) The language of the *tannaim*, i.e., the Hebrew (= H) of the Mishnah, the Tosefta, the halakhic Midrashim, and the *baraitot* in the two Talmuds. (It seems, however, that the *baraitot* of the Babylonian Talmud were influenced by the language of the *amoraim*, see (2)). It may be assumed that these literary works go back to a time when MH was still spoken, most probably until the end of the second century C.E. (see below). The language of the *tannaim* is known (a) in the form as used in Palestine (often vocalized with the Tiberian vocalization); (b) in the form it was transmitted in Babylonia, sometimes vocalized with the Babylonian vocalization. (2) The language of the *amoraim*. A distinction, however, must also be made between (a) the language of the Palestinian *amoraim* (the Hebrew in the Palestinian Talmud and the aggadic Midrashim); (b) the language of the Babylonian *amoraim* (the Hebrew in the Babylonian Talmud). Since at this period (third–fifth centuries C.E.), MH was probably no longer a spoken language in Palestine – certainly not in Babylonia – it may be assumed that, as in modern H, this dialect was mixed with BH, as well as with Aramaic (= A) of the respective areas (more than tannaitic H). As a result, the H of the *amoraim* cannot be employed as a trustworthy basis for the study of MH (on further difficulties, see infra second drawback of Segal – The Problem of the Sources of MH).

Besides the above three categories, mention should be made of the language of prayer and benediction which also in the language of the *tannaim* contains elements from BH. Even in general prose the BH elements in tannaitic sources might in a few cases be quotations or allusions from the Bible rather than living elements.

GEOGRAPHICAL PROVENANCE OF MISHNAIC HEBREW

It may be assumed that MH was the vernacular only in Judea which was resettled by the Babylonian exiles in the sixth and fifth centuries B.C.E. In the rest of Palestine, especially in Galilee which had been conquered by the Maccabees (second century B.C.E.), A was apparently the only vernacular. The few A words in the New Testament also point to this con-

clusion, since the major New Testament figures came from Galilee. After the Bar Kokhba revolt (132–135 C.E.), however, when the Romans had nearly annihilated the whole population or sold them into slavery, the number of settlements in Judea was greatly diminished. The rabbis and their disciples moved to Galilee bringing with them their language and the tannaitic literature written in it, i.e., MH. On the other hand, their children, born in an Aramaic-speaking environment, did not continue to speak H. As R. Meir (a contemporary of R. Judah ha-Nasi) states: **כל הדר בארץ ישראל וקורא קרית (קריאת)** (“Anyone who dwells in Erez Israel, recites the *Šema*’ morning and evening, and speaks in the ‘Holy Tongue’ is assured a place in the world to come,” Sif. Deut. 333 and parallels). While there were still Jews who spoke MH, its position was already shaky and was in need of some kind of strengthening. The statement of R. Judah ha-Nasi: **בארץ ישראל לשון סורסי למה? או לשון הקודש** (“In Erez Israel why Syriac (i.e., Aramaic)? Either the ‘Holy Tongue’ or Greek,” BB 82a) shows that the language of his contemporaries was mainly A.

The few Jews who continued to live in Judea possibly still spoke H. An indication of this may perhaps be found in the statement of R. Jonathan (fourth century C.E.) from Eleutheropolis, southern Palestine, who recommended **עברי לדיבור** (“Hebrew as the vernacular,” TJ, Meg. 71b, bot.). This indicates that MH had not completely died out in this area, but in Galilee it was nonexistent. R. Johanan (the first Palestinian *amora* who was still a disciple of R. Judah ha-Nasi) had to emphasize that in MH the correct plural of **רְחֵל** (“ewe”) is in a certain case (Epstein) **רְחֵלִים** and not **רְחֵלִים** as in BH. (His maxim was **לשון תורה לעצמה ולשון חכמים לעצמן** (“The language of the Torah is a language by itself and the language of the sages is a language by itself” (Hul. 137b)). The assumption that MH died out because the *tannaim* moved to Galilee explains why the disciples of R. Judah ha-Nasi had to ask his maidservant the meaning of such H words as **מִטְאָטָא** (“broom”) (occurring in the Bible) and **חֲלָלוֹגוֹת** (“purslane”) which were unclear to them (Meg. 11a). It may be assumed that the (old?) maidservant had moved from Judea to Galilee with R. Judah’s household, and, therefore, spoke H. On the other hand, the (young?) disciples, who may have been born in Galilee, did not know the meaning of these words.

THE PROBLEM OF MISHNAIC HEBREW

The religious reformer A. Geiger, who was the first to write a scientific grammar of MH, thought that MH had never been a spoken language, but had been artificially created by the rabbis to facilitate their halakhic discussions. He was not the first to hold the opinion that MH was not a “normal” H dialect; some medieval Jewish scholars considered it to be a “corrupt” BH to a large extent. Since the concept of linguistic development was unknown in the Middle Ages, medieval scholars could see the reason for the differences between BH and MH only as deliberately wrought changes. Geiger, however, lived at a time when the historical study of languages and their development

was taken for granted. H. Graetz, S.D. Luzzatto, and J. Levy, contemporaries of Geiger, strongly opposed his views. However, they, like Geiger, did not substantiate their arguments with tangible proofs and Geiger’s view came to be accepted by all contemporary non-Jewish and some Jewish scholars until Segal refuted it convincingly.

In an article published at the beginning of the 20th century (JQR 1908), M.H. Segal showed Geiger’s views to be unfounded. He demonstrated that MH was a natural outgrowth of BH (by BH is meant, besides the archaic poetic H and the standard prose, also late biblical Hebrew (= LBH) such as the language of the Books of Chronicles and the Book of Esther) and the natural link coming after LBH. As an example, consider the independent first person singular pronouns **אֲנִי** – **אֶנְכִי** (= I) both of which are found in BH. In LBH there is a distinct trend toward the use of **אֲנִי**. Moreover in the Books of Chronicles, which parallel the Books of Samuel and Kings to a great extent, **אֶנְכִי** is replaced by **אֲנִי** (e.g., 1 Chron. 21:10 = 11 Sam. 24:12). In MH only **אֲנִי** survived. Were MH an artificial language, it would be impossible to understand how the rabbis, not being modern linguists, were able to choose only the elements which belong to LBH. The situation is understandable, however, if it is assumed that MH was the natural continuation of LBH.

MH also has forms which are to be found neither in BH nor in A. Were Geiger correct in assuming that MH was an artificial creation, representing a mixture of BH and A, these novel forms in MH could not be explained, for example, where did MH get the pronoun **אֲנִי** (“we,” found once in the Bible (Jer. 42:4) as *ketib*)? Clearly Geiger’s opinion is in this form totally unfounded (see following par.).

The recent discoveries in the Judean Desert, especially the letters of Bar Kokhba and his contemporaries, some of which are written in MH, have dispelled all doubts as to Segal’s conclusions. These letters show – as was rightly pointed out by Milik – that MH was a living natural language. As a matter of fact, however, both Segal and Geiger were right. MH was a living language in Palestine only until about 200 C.E., the time of the *tannaim*, but a dead language during the time of the *amoraim*.

THE PROBLEM OF THE SOURCES OF MISHNAIC HEBREW

Segal committed two methodical errors in his study which he repeated in the grammars of MH composed later: (1) he tried to minimize the extent of the influence of A on MH; (2) he based his work on the printed texts of MH rather than on manuscripts, which was an especially grave scholarly misjudgment.

The studies over the past decades of J.N. Epstein, H. Yalon, and S. Lieberman have shown that the printed texts are unreliable. This does not refer only to normal scribal errors, but it can be shown that during the Middle Ages the copyists, and later the printers, tried to harmonize MH with BH because they considered departures from BH in MH as mistakes. This

“correcting” tendency led to a complete distortion of the linguistic structure of MH.

The following examples will prove this point. A glance at any dictionary of MH will show that the word “man” occurs in the BH form **אָדָם**. Since Segal’s works appeared, however, hundreds of examples of the spelling **אָדָם** have been discovered in manuscripts of the Mishnah, Tosefta, the Palestinian Talmud, and the aggadic Midrashim (Epstein). It was corrected out of existence in printed versions, and in manuscripts where the form **אָדָם** does appear the beginnings of correction can already be observed (see, e.g., Ms. Kaufmann to Ber. 1:8). This phenomenon may be taken as clear proof of the widespread tampering with the printed text: the form **אָדָם** has completely disappeared from the printed texts on which the existing dictionaries of MH are based.

The following is another example: Segal states in his grammar that the second person singular masculine possessive (and objective) pronoun in MH is identical with the biblical form **כִּי** e.g., **כִּי דְבָרְךָ** (“your word”). Mainly on the basis of vocalized manuscripts of mishnaic literature, as well as the oral reading tradition especially of Yemenite Jews, H. Yalon has shown that the correct form in MH is **כִּי**, i.e., **כִּי דְבָרְךָ**. The form was still known to be MH by the disciples of the medieval grammarian *Menahem b. Jacob ibn Saruq and is preserved until this day in the prayer book of the Sephardi (and Yemenite) ritual, e.g., **נִקְדִּישְׁךָ וְנִגְדִּישְׁךָ** (“Let us sanctify you and glorify you”). In the prayer book of the Ashkenazi ritual, however, these forms have been “corrected” by the grammarians. Only in *piyyutim* are traces of the form still to be found, e.g., in the *piyyut* for *Hoshanah Rabba: **בְּרִיתְךָ (לְמַעַן) אֱמֶתְךָ (לְמַעַן) דְּבָרְךָ** (“Your truth and your covenant”). Early transcriptions on the Hexapla (third century C.E.) and in the writings of *Jerome (fourth and fifth centuries C.E.) lead to the same conclusion. They superimposed it, however, on the biblical text (Ben-Hayyim). In the Sephardi communities there were also disputes as to whether this ending should be retained or dropped because the grammarians demanded the eradication of the “error.” Recently, it has been shown that the second person singular feminine possessive pronoun suffered a similar fate. In manuscripts the ending **כִּי** is found; thus **כִּי דְבָרְךָ** and not **כִּי דְבָרְךָ**. Both these suffixes go back to A.

Having come to the conclusion that MH, as it appears in the printed texts, is unreliable, the problem arises: On what uncorrupted source can a description of MH be based? It can also be shown that even manuscripts of the Mishnah, the Tosefta, and the halakhic Midrashim are linguistically unreliable. The problem is to find a manuscript which the copyists have changed only to a minimal extent. The same problem exists with regard to the A of the Palestinian and Babylonian Talmuds. As to the Palestinian Talmud, the problem was solved mainly by comparing its A portions to the language of the contemporary Galilean inscriptions composed in A. Those manuscripts which were linguistically the closest to the Galilean inscriptions were thus linguistically most reliable. Concerning MH, this procedure was more difficult since inscrip-

tions or parchments written in MH, such as the Bar Kokhba letters, are quite rare.

With the aid of reliable manuscripts of the Palestinian Talmud, it is possible, however, to identify good manuscripts of MH. It may be assumed that if the A portions of the text were not corrupted by the copyists, then the H portions are also reliable. With the help of these manuscripts, the few existing H inscriptions, transcriptions of Hebrew–Aramaic words in the New Testament, in Greek inscriptions, and in the writing (transcriptions) of certain Church Fathers, it was possible to establish the most salient criteria for determining how to identify uncorrupted manuscripts. In general, the copyists harmonized the spelling conventions of MH with those of the Bible and the Babylonian Talmud. Thus, if it were possible to show that the words in a particular manuscript had spellings and forms which differed from those found in the Bible and in the Babylonian Talmud, but were parallel to forms found in inscriptions and in the Greek transcriptions from Palestine, then it would be proved that the manuscript represented Palestinian MH close to its original form.

The following are a few examples to illustrate the above methodology:

(1) In good manuscripts of MH there is the form **לְעֹזֶר** instead of the biblical **אֶלְעֹזֶר**. This form is found in contemporary Palestinian inscriptions and in the New Testament. On the other hand, it is nonexistent in Babylonian manuscripts and sources. This shows that manuscripts with the form **לְעֹזֶר** represent a Palestinian version.

(2) The name Shammai is always spelled **שַׁמַּאי** in the Babylonian Talmud. In good manuscripts of the Mishnah it is spelled **שַׁמַּי** or **שַׁמַּי**. It can be demonstrated that the orthography **שַׁ-**, **שַׁ-** is the Palestinian representation of the final diphthong *ay*. (The problem of the final *hiriq* (*e*) remains as yet unsolved.) On the other hand the Babylonian orthography is **שֶׁ-**.

With the aid of several other distinguishing features, it was possible to identify several good manuscripts, in particular the following: the Kaufmann manuscript of the Mishnah (entirely vocalized), the Parma manuscript of the Mishnah (partially vocalized), the Cambridge manuscript published by W.H. Lowe (unvocalized), and fragments from the Cairo *Genizah*. The first two manuscripts mentioned above are vocalized with Tiberian signs, though in a vulgar manner since the punctuator, who had a “Sephardi” pronunciation, interchanged *qameṣ* with *pataḥ*, *šere* with *segol* (and *qameṣ qaton* with *holem*). The above sources represent, more or less, Palestinian tannaitic H. On the other hand, the Sifra manuscript (which is good) and certain Mishnah fragments from the Cairo *Genizah*, both with Babylonian vocalization, reflect tannaitic H as preserved in Babylonia.

With regard to the language of the Palestinian *amoraim*, the Vatican Ms. Ebr. 30 of Bereshit Rabbah, as well as the *Genizah* fragments of the Palestinian Talmud, were found to be reliable. Reliable sources for the H of the Babylonian *amoraim* have as yet to be determined.

The following description of MH is based, in the main, on the Kaufmann manuscript. Occasionally, reference will be made to Babylonian vocalized forms known mainly from the Sifra (see previous par.) and from *Genizah* fragments of the Mishnah (published mainly by P. Kahle and studied by E. Porath and recently by I. Yeivin).

Spelling

The spelling is more plene than that of BH. Not only the so-called long vowels (*ū*, *ō*) are spelled with ו (waw) e.g., שומר ("guard"), but also short and even half vowels are indicated by ו, e.g., עומר ("sheaves") (the punctuator crossed out the ו). The same applies, more or less, to the different varieties of *i-e-ε* (long and short) being spelled with י (yod), e.g., לקרות ("to read"). Even א (*alep*) is (rarely) used to indicate (*a*), e.g., שיארה ("caravan") (also, cf., the following par.). ו and י, used as consonants, are often doubled, thus: וו, יי. The vowels *e*, *ε* as word finals might be indicated by י, cf., יוני = Yavne (see the following par.). Sometimes even spellings reminiscent of the Dead Sea Scrolls are found, like לקראות ("to read"); the etymological א plus the ו indicating (*o*). As the above-mentioned שיארה indicates, א could be used as a vowel letter for *a*.

Phonetics

CONSONANTS. The consonantal inventory of MH is identical with that of BH. Though, undoubtedly, some change took place in their realization (= pronunciation) during the period under discussion, there is no foundation whatsoever for Kahle's assumption that the laryngeals and pharyngeals were completely lost. Nevertheless, some interchanges of these phonemes are found. It is known that in Tivon, Haifa, Beth-Shean, and in the academy of Eliezer b. Jacob ע (*ayin*) and א (*alep*) were interchanged. According to the Babylonian Talmud, the Galileans were unable to distinguish between א (*alep*), ה (*he*), ח (*het*), and ע (*ayin*) in their vernacular, a statement which, however, seems exaggerated. The laryngeals and pharyngeals were apparently confused mainly in the large urban centers, as a result of Greek influence. MH, as transmitted, has only been slightly influenced by this confusion and there are only a few places in the Mishnah where the *amoraim* are in doubt as to whether the correct reading is with א or ע, e.g., עיד or איד ("festival") (Mishnah Av. Zar. 1:1).

It is quite possible, however, that the linguistic change ע < ח (*het* > *ayin*) took place (as in Galilean Aramaic), e.g., עג עיגה ("he made a circle") (Mishnah Ta'an.3:8). Final *mem* in non-declined words very often turns into *nun* אדם < אָדָם or הָם > הֶן (see above the Problem of the Sources of MH). בֵּת (*bet* = ב without *dageš*) and ו (waw) merged. Thus they were interchanged in manuscripts, e.g., יבנה (place name) is spelled יוני. Interchanges between ק (*qop*) and כ (*kap*) are very infrequent. More common is the interchange ב (*bet*) and פ (*pe*), e.g., להפקיע שְׁעָרִים = להפקיע שְׁעָרִים ("to raise prices arbitrarily") (Ta'an. 2:9). Initial א (when followed by a half vowel?) is sometimes dropped (+ its vowel) cf. above לעזר אלעזר (The Problem of the Sources).

VOWELS. The vowels of MH at first glance also seem identical with those of BH. There is, however, reason to assume that some change took place, thus instead of *hiriq qaton* a type of *ε* (*segol*) was pronounced, and instead of *qibbuṣ* a type of *o* (*qameṣ qaton* – *holem*). However, even in manuscripts, very few examples of this pronunciation have survived, apparently as a result of the "corrections" of copyists under the influence of BH, e.g., הָלִיל, הוֹצֵפָה etc. = הָלִל (proper noun), הוֹצֵפָה ("huzpa"). This type of pronunciation parallels that known from the transcriptions of the Septuagint and from vocalized texts of Galilean Aramaic.

ASSIMILATION AND DISSIMILATION. Assimilation of consonants in MH occurs more or less under the same circumstances as in BH. Vowels, as in Galilean Aramaic, preceding labials tended to be realized as *o* (*u*) e.g., מְסַבֵּין < מְסַבִּין (in the *Haggadah* of Passover "reclining") (Ben-Hayyim). ר (*reš*) seems to have had the same effect on vowels as labials. This accounts for forms like קָרָדָם > קָרָדָם (BH) ("spade"), etc. (also cf. the Greek name of the river יַרְדֵּן = *Yordan* (*ēs*)). A long *i* apparently could turn a preceding half vowel (*šewa* (:)) into an *i*, e.g., בִּיסִיד (instead of בְּסִיד ("with lime")).

Dissimilation of a consonant occurs in the word מַרְגְּלִית μαργαρίτις ("pearl") and of a vowel in the Greek word נִמוֹס (from Greek νόμος ("law") (on the pattern of תוֹכֹן (תוכון) – תוך – תיכון ("inside," "central").

Metathesis occurs in נמיל ("port"), למן in the Palestinian form), the Babylonian form of the Greek λμῆν.

Morphology

PRONOUNS. *Independent Personal Pronouns*

Comparative Table

(not all the vocalizations of MH are documented)

Mishnaic Hebrew		Biblical Hebrew	
אָנִי	אַתָּה, אַתָּה	אַנִּי, אַנְכִּי	אַתָּה
הִיא	הוּא	הִיא (אתִּי)	הוּא
אָנוּ	אַתֶּם, אַתֶּם	אַנְהוּ, נְהֻנוּ	אַתֶּם
הֵם, הֵן	הֵם, הֵן	הֵנָּה	הֵם, הֵמָּה

In MH (and already in LBH) אָנִי had disappeared. אַתָּה as a masculine pronoun is apparently a borrowing from A. אָנוּ is an internal H development. The vocalic endings of הֵמָּה and הֵנָּה disappeared. Final מ (*mem*) was apt to appear as נ (*nun*) (see above Phonetics, consonants), therefore in both the pronoun and the verb the plural masculine and feminine forms merged (see following pars. on possessive pronouns and verb (the conjugation)).

The independent personal pronouns furnish a good example for the elements which make up MH: (1) BH; (2) A; (3) internal H development.

Possessive Suffixes

(not all the vocalizations of MH are documented)

Mishnaic Hebrew		Biblical Hebrew	
דְּבָרִי	דְּבָרֶיךָ	דְּבָרִי	דְּבָרֶיךָ
דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ
דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ
דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ
דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ
דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ
דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ	דְּבָרֶיךָ

Note: Instead of the ending ן , ם , there occurs also an ending ים -, generally corrected to ן -, the י being crossed out (Epstein, Kutscher). It is found also as an object suffix of the perfect. The second person singular masculine (Yalon) and feminine (Kutscher) forms are the result of A influence. (On the interchange מ (*mem*) > נ (*nun*), see above Phonetics.)

Independent Possessive Pronouns. MH developed an independent possessive pronoun – שְׁלִי (geminated ל), e.g., שְׁלִי (“mine”). The distribution between this pronoun and the suffixed forms is still unclear as are the rules governing the use of the definite article in this case. The beginning of this development is to be found in the biblical form לִּי אֲשֶׁר לִּי (= MH שְׁלִי), e.g., $\text{בְּמִדְבַּר הַמִּשְׁנָה אֲשֶׁר לוֹ}$ (“in the chariot of his second-in-command,” Gen. 41:43).

Demonstrative Pronouns. Near Deictic Pronouns.

Mishnaic Hebrew		Biblical	
זֶה	זֶה	זֶה (זו, זאת)	זֶה
אֵלֶּה	אֵלֶּה	אֵלֶּה	אֵלֶּה

Instead of זֶה which predominates in the Bible, זו , found mainly in LBH, occurs in MH. It is possible that this word entered MH from another dialect. (If it is assumed that the form developed in MH from the BH זֶה , it is impossible to explain the loss of the final ת (*taw*). The form אֵלֶּה perhaps developed under the influence of plural verbal forms, such as בְּתִבּוֹ , etc. It is unclear under what conditions the definite article is employed with the noun and the demonstrative pronoun.

Far Deictic Pronouns. Alongside the forms הַהוּא , הַהִיא , etc., there are the following forms in MH: הַלֵּל , הַלֵּלָה for the masculine and the feminine, הַלֵּלִי , הַלֵּלִיָּהּ for the plural. The particle אֵת with suffixed pronouns acts as a demonstrative pronoun (preceding the noun), e.g., אֵת הַיּוֹם (“that day”). The reflexive pronoun is created by using עַצְמוֹ (“bone”) (very much like the English “(my) self,” e.g., $\text{קוֹנֶה אֶת עַצְמוֹ}$ “he acquires himself (= his freedom)”; הוּא עַצְמוֹ (“he himself”). The relative pronoun is שֶׁ , which appears both in archaic BH and in LBH.

Since שֶׁ can scarcely go back to אֲשֶׁר of BH and besides is paralleled by the Akkadian ša , here too (see Near Deictic Pronouns) an H dialect different from BH may be assumed as its origin.

VERB. Verbal Roots. The verbal root pattern xyx , e.g., כָּרַךְ (“to wrap”) only emerges in MH while four radicals, e.g., from לָנַעַע roots of the type לָנַעַע (“to shake”), or by duplicating the last radical, e.g., עָרַבַב (“to mix”) already appear in BH.

Conjugations. The pu^{al} has practically disappeared (the participle excepted). The perfect of hitpa^{al} practically disappeared and the form nitpa^{al} (corrupted in the printed editions to nitpa^{el}) occurs instead (only twice in the Bible). It is apparently a blend of nitpa^{al} and hitpa^{el} . In the פִּי^{al} verb an ettap^{al} conjugation (borrowed from A) exists (extremely rare).

In addition to the hip^{il} there is also a šap^{el} conjugation (assumed to be borrowed from Akkadian through A) which is conjugated like the pa^{el} , e.g., שָׁחַרַר (“to liberate”). Traces of the passive qal are found in the פ^{al} verbs, e.g., נוּטַלַּךְ (“taken”), etc., however it might be a recreation in MH as in modern Hebrew נִשְׁכַּתִּי (“I was bitten”) and not נִשְׁכַּתִּי which is identical with the pi^{el} (here an active form). This usage was extended to other verbs, e.g., נוּצַרַּךְ (“saved”).

The exact meanings of the various conjugations still remain to be clarified. The following is a tentative description:

The qal is generally identical with the qal of BH, i.e., it can indicate a simple action (transitive or intransitive) and it can serve as a denominative even in a case like פָּרָה חוֹלֶבֶת (lit., “a milking cow”). There is, however, a conspicuous difference in the intransitive verbs. While in BH a form like גָּדַלְתָּ can mean both “you were great” and “you became great” (even “you are great”), in MH only the second meaning occurs, e.g., גָּדַלָה (“grew” < “she became great”); the first meaning has to be expressed by means of the auxiliary הָיָה , plus the participle or adjective, e.g., הָיָה גָּדוֹל .

Nip^{al} also seems generally to be identical with BH, i.e., it can be a reflexive נִטְמַן (“he hid himself”) and also נִשְׁאַל (“he asked for himself”), apparently in a reciprocal meaning נִחְלְקוּ (“they disputed”), but generally a passive, e.g., נֶאֱכַל (“it was eaten up”), and perhaps also with a new meaning to express perfectivity (inchoation), e.g., זָכוֹר אֲנִי (“I am remembering”) but אֵינִי נֹזֶקֶר (“it comes to my mind”). In BH qal זָכַר is employed in both meanings. Maybe נָכַס (“he entered”) has to be explained the same way (cf., וַיֵּאָסֶף “he entered,” Num. 11:30).

Pi^{el} , as in BH, expresses intensive action, meaning repeated action, or an action performed on many objects (Yalon) (cf., BH $\text{וַיִּבְתֵּר אֶת־הַצֶּפֶר לֹא בְּתֵר וְלֹא בְּתֵר}$ (pi^{el}) (qal) (“and cut them in two... but he did not cut up the bird,” Gen. 15:10)); or when the work is performed by many actors, e.g., הָיוּ מְתַלְשִׁין (“they were plucking”); also as a denominative, e.g., מְעַשְׂנִין (“to fumigate”); even in a privative sense מִיִּבְלִין (“to remove wens”), and as a causative מִיִּלְדִּין (“to help in childbearing”). The pi^{el} also can serve in an intransitive meaning as an inchoative בִּיכְרִירוֹ (“began to ripen”). A few cases of this last meaning already appear in BH, e.g., פֶּתְחָהּ (“has been opened,” lit., “has opened”). In some cases the pi^{el} seems to have dislodged the qal without change of meaning, e.g., עִיָּבַר (“he passed”) (Pes. 3:8), but whether it is a general feature of MH (Ben-Hayyim)

has still to be established (cf., BH דבר “speaking”) *qal*, but generally the *piʿel* is employed).

Hiʿpil, as in BH, serves as a causative מַשְׁחִיטִין (“cause to slaughter”), as a denominative הַגְרִיל (“he cast lots”) as in the *piʿel* (also *nipʿal* and *qal* to a certain extent). It also serves as an inchoative הִעֲשִׁיר (“he grew rich”).

The *hopʿal* served as a passive of the *hipʿil*.

The *hitpaʿel-nitpaʿal* is mainly employed, as in BH, as a reflexive, e.g., נִסְתַּכַּח (“he dried himself”), also as an inchoative, e.g., נִשְׁתַּמָּה (“he went mad”), a reciprocal נִשְׁתַּתְּפוּ (“they became partners”), and very often as a passive נִתְגַּלָּה (“it became uncovered”), rare in BH. In contrast to BH where it serves as a denominative very often meaning “to pretend to,” e.g., מִתְעַשֵּׁר (“he pretends to be rich”), in MH this meaning does not occur and in the *hitpaʿel* it means “to become rich” (cf. *Hiʿpil*). The *šapʿel* is a causative (but conjugated as a *piʿel*).

Prefixes and Suffixes of The Tenses. As with personal pronouns, the masculine and feminine forms in the perfect of the verb also coalesced as a result of the phonological development of final ם (*mem*) > ן (*nun*), thus כתבתם – כתבתן. The loss of the feminine plural forms in the imperfect is the result of a different process. All the archaic forms of BH, e.g., imperfect forms with the ending ן (ן) such as תִּשְׁמְרוּן (“you (plur.) will guard”) disappeared from MH (in spite of the fact that some of them were identical with the parallel A forms).

Perfect		
	כתבת	כתבתה
כתבת	כתבת	כתבת
כתבתה	כתבת	כתבת
	כתבתו	
	כתבתם	
	כתבתו	

(Note the full spelling of כתבתה). It should be noted that MH (as in the Dead Sea Scrolls) very often uses the pausal forms also instead of the contextual form. This is always the case in the *hopʿal*, e.g., הוֹקְדָּשׁוּ לְמִשְׁכָּן (“they were dedicated to the Tabernacle,” Zev. 14:10).

Imperfect		
	תכתב	תכתב
תכתב	תכתב	תכתב
תכתב	תכתב	תכתב
	תכתבו	
	תכתבו	
	תכתבו	

Participle (Imperative and Infinitive). The main changes in the participle are in the feminine singular only the ת- ending is used: שומרת (“guarding”) (except for the ע- and ל- verbs to a certain extent), while the plural masculine employs,

besides the ending ים- also ין- (A). In the imperative, the feminine plural is replaced by the masculine plural (cf., imperfect above). The participle can be negated by לא and not only by אין, while the infinitive is negated by לֹא, e.g., שְׁלֹא לְהַתּוֹם, e.g., שְׁלֹא לְהַתּוֹם (“it is not permitted not to seal”).

Verb Classes. Strong Verb. In the *qal* perfect only the patterns קטל and קטל (חשיכה “it became dark”) have survived, while in the participle all three forms, attested in BH; קטל, קטל, (e.g., דלק “burning”) and the only case of קטל = יכול (“he can,” “is able”) appear. (Incidentally, the feminine and the plurals, not attested in BH Hebrew, are יכולה, יכולין, יכולות.) In the “imperfect” there seems to be a tendency to turn (a) forms (of the intransitive verb) into (o) forms, cf., יקרשׁ (“it should congeal”). The spelling indicates an (o) imperfect; the punctuator of the manuscript, however, crossed out the ו (waw) and vocalized יקרשׁ (also see verbs ע-ע). In the *hitpaʿel* imperfect there appear, though rarely, also forms like תתחבר (“consort”) (Avot 1:7).

Weak Verb. פ-א verbs: the infinitive of *qal* is patterned after the ‘imperfect’; לומר (“to say”) etc. (cf., Spelling above), לנכל (“to eat”).

נעשה פ-ע verbs: note the form נעשה (“it was done”) (= נעשה in BH).

ע-ח verbs: in the imperfect and imperative the (a) turns (always?) into (o), e.g., ישחוט (“he shall slaughter”) שחוט (“slaughter”) (see above the strong verb).

ל-א and ל-י verbs: The ל-א verbs generally turned (as in A) into ל-י verbs: sometimes, however, the former spelling is retained, e.g., קרינו (“we have read”), but יקרא (“he shall read”), לקרות (“to read”); in לקראות (“to read”) the original א appears, in spite of the ל-י form (see above Spelling); in the perfect the ending of the third person singular feminine is often ת, e.g., הִיְתָה (“she was”). This ending, found also in BH (rarely) in the strong verb, is in BH considered mainly an archaic survival. Its emergence in the ל-י verb in MH cannot be attributed to A influence since it does not occur in the other verbal classes. It seems that this form entered MH from a non-biblical Hebrew dialect in which the original הִיְתָה א had not become הִיְתָה. The ending ת (taw) is also found in the other conjugations but in the *nipʿal* there are, besides forms like נִכְוֹת (“she burnt herself”), such forms as נִיטְמָת (“she became unclean”) where the form of the original ל-א verb is identical with the feminine singular of the present. But the same form can also occur in an original ל-י form נִישְׁבִּית (“she was taken prisoner”). Naturally, the biblical forms with the ending תה also occur. In the participle *qal* there are two forms, e.g., קונה (“he buys”) and ינה (“he takes possession,” “he gains,” “he obtains a privilege”).

פ-י verbs: the infinitive of the *qal* is patterned after the imperfect, e.g., לִירֹד (“to go down”). The same applies to פ-י verbs: לִיתֵן (“to give”); note forms like לִיטוֹל (“to take”) where the י is assimilated (which is not the case in BH).

ע-י verbs: *qal*, there are also participle forms like חולות (rare in BH) (“they (fem.) dance”); in the infinitive and in the “imperfect” also forms like לִדוֹן (also לִדוֹן and לִדִּין) are found

(cf., ע"י verbs). There are in BH perfect *qal* forms like קם ("he got up"), טוב ("he was good"), and מת ("he died"), paralleling similar forms in the strong verbs. From the second pattern only בוש survived ("he was ashamed"), as did מת. In the perfect of *nip'al* forms like נדון and נידון ("he (it) was judged or he (it) was discussed"), in the participle נידון, are employed. There is also נמוך ("low, short") but in the Babylonian vocalization נמוך. In the *hip'il* there are forms like הוביר ("he left (the field) fallow") (patterned after פ"ו). In the geminated conjugations (*pi'el*, *pu'al*, *hitpa'el*) the forms derived by doubling of the third radical (practically) disappeared; forms like התכוון ("he intended") (from כון) are replaced (practically always) by the נתכוון type, the second radical being geminated, as in the strong verb.

ע"י verbs: they disappeared almost entirely by (1) turning into ע"ו; ע"ו mostly appears (in the "imperfect") as דון; (2) or by being transferred to the *hip'il* (since the "imperfects" are identical); participle *qal*; שם ("putting" via imperfect ישים) > משים (participle of *hip'il*), only once in BH.

Geminate Verb. There is a tendency in the *qal* perfect and participle to employ the intransitive verbs with the transitive forms, i.e., they are patterned after the strong verb: e.g., גוששת ("(ship) touches (the ground)" – in Hebrew it is intransitive), but רבו ("they multiplied") (intransitive form). In the imperfect the so-called A forms do not seem to occur (ייצנו "to keep it cool," Shab. 22:4) is not a clear-cut case). In the *nip'al* the geminate verbs are generally treated as strong verbs, e.g., נמדד ("was measured"), נמדד ("is being measured"), תיקצץ ("let it be cut off"). There seem to be very rare cases of forms like נמוקו ("they were defeated") patterned after ע"י verbs. In the geminated conjugations *pi'el*, *pu'al*, *hitpa'el* (as in the ע"י verbs, see above) only the strong verb forms appear.

With the verbs הנה and הנה short form יהא (= יהיה) is employed in the imperfect, while in the imperative the root הוה (A) is used often even in the A form הוי (= הוה) ("be" sing.); הו (= הוה plur.). The root חי sometimes appears in the participle *qal* as a geminate חי חי ("he lives"), like קל ("he is easy"), but according to spelling חיה, obviously to be vocalized חיה (like זכה above) but corrected in the manuscripts to חי.

Tenses. The tense system of BH underwent a radical change in MH. The following forms disappeared: the long imperfect of the type אשמרה ("I will guard"); the short imperfect of the type יעל ("he shall go up"); the forms with the consecutive ו (waw) (שמר, ושמר) the absolute infinitive שמור. The infinitive construct only survived with the preposition ל, e.g., לשמור ("to guard"), sometimes even when the preceding verb governs the preposition מן, e.g., אסור מלרחוץ ("(he) is forbidden to wash"). The new system comprises: (1) the perfect (which also serves as a preterit);

(2) a practically new periphrastic form: היה ("be") (mainly used for the past but also for the future and imperative) plus the active and passive participle to indicate repeated, usual, concurrent, etc., action (rare in LBH).

The participle is employed as present and future. A new periphrastic form (mainly employed when the future needs a clear-cut indication, especially when in contrast to the present) came into being: infinitive + ל + אתה הולך + עתיד (דע מאן באתה ולאין אתה הולך + ליתן דין וחשבון, עתיד "Know whence thou art come, whither thou art going, and before whom thou art designed to give an account and reckoning"). Contrary to BH the imperfect does not denote future anymore: it turned into a modal form expressing wish or intention (in the first person) or command (in the third person). It is also used after an imperative, as שמור לי ואשמור לך ("guard for me and I shall (will) guard for you") and as a subjunctive, after the relative pronoun – ש. The imperative survived apparently unchanged. The passive participle, mainly the *qal* of intransitive verbs, is employed with certain verbs as a kind of present perfect-present אני ישוב ("I am sitting (seated)"). מקובל אני ("I have received") (rare in BH).

It should be noted that MH, as A, very often uses the proleptic suffix with verbs, e.g., the common expression י אמר רבי לו רבי (instead of י לרבי x רבי).

NOUN. The noun forms are generally the same as those in BH, though some became more widespread, especially some of the verbal nouns of the *qal*. About 15 different noun forms are used as verbal nouns of the *qal*, among them the noun pattern קטילה should be especially noted, e.g., אנינה ("grief"). This noun pattern in BH as a verbal noun (e.g., אכילה ("eating")) is rare, in the Mishnah, however, there are 130 examples. Its influence was so great that it was able to change the biblical form of שרפה ("conflagration") to שריפה. In the ל"י (and ל"א) verbs this form may appear in the קטילה pattern, e.g., בריה ("creature, creation"), קריה ("reading"), etc. Though rare, the form קטילה is also found, such as בניסה ("entrance"). The form קטילה is also rare (though common with verbs that denote sound), e.g., צווחה ("shouting"). A new form is גול ("robbery"), חנק ("strangulation"). Verbal nouns with suffixes are also found, e.g., פדיון ("redemption"). (The word does not occur in the absolute state in the Bible.) The number of A patterns is relatively small, e.g., כלל ("general rule"), פרט ("specification"); with the prefix מ (mem): מכנס ("bringing in"), showing that A had a minor influence in this field.

The verbal noun of the *pi'el* is קטול or קטלה (both BH but the latter is a borrowing from A). In the *hip'il* also the A form הקטלה (already in the Bible) predominates along with הקטל, e.g., הקטר ("burning" ("of offering")). In the ל"י verbs, the form in Babylonian sources is, e.g., הוראה ("instruction"); whereas in Palestinian sources it is הוריה. The form הקטל, e.g., הקטר, is, in fact, identical with the absolute infinitive in BH. (As in BH, the *segol* is an allophone of *patah*). In the Babylonian vocalization it may appear both as הקטל and הקטל (in certain cases). The passive and reflexive conjugations do not have their own verbal nouns and employ the verbal nouns of the corresponding active conjugations, e.g., ידידי ("confession of sin") from להתודות. It should be noted, however, that the *nip'al* infinitive הברת, occurring in the Mishnah also as

כְּרָת ("extermination"), serves as a verbal noun; even a plural form occurs כְּרָתוֹת.

The form with the ending *qal* (-ān) is a *nomen agentis* (the agent) noun pattern which is peculiar to MH. In Palestinian manuscripts, these appear mainly as גִּזְלָן ("robber"), רוֹצֵחַן ("murderer"), etc. (The vocalization is not uniform.) In Babylonian sources mainly the forms גִּזְלָן and רִצְחָן occur. The origin of this form is still unclear. The *nomen agentis* for *qal* of the קָטוֹל pattern, e.g., לָקוּחַ ("buyer") might be of A origin. It should be noted that MH tried to develop a special form to represent the result of an action, namely קְטִילָה (practically nonexistent in BH). The only example of this form is חֲתִיקָה ("a piece") alongside the verbal noun חֲתִיקָה ("cutting").

Alongside of the construct there is the parathastic (the circumlocuted) construct state which uses the particle שֶׁל. As Yalon has demonstrated, this word was attached to the *nomen rectum* (if this was determined) and contained the definite article, e.g., רַבּוֹנוֹ שֶׁל הָעוֹלָם = רַבּוֹנוֹ שֶׁל הָעוֹלָם ("master of the world"). How and when שֶׁל was separated from the noun and ceased to contain the definite article is not entirely clear. In the Bar Kokhba letters שֶׁל is separated from the following word, which, however, has the definite article. This shows that the dialect of the Bar Kokhba letters is not identical with MH as it is known today.

In the שֶׁל phrase there are four types. In three of them שֶׁל includes the definite article:

(a) הַיַּיִן וְהַחֹמֶץ שֶׁל גִּזְיִים ("wine or the vinegar of Gentiles") (Av. Zar. 2:3). (b) with the proleptic suffix שֶׁל גִּזְיִים "the festivals of the Gentiles"). The difference in meaning of these two constructions is not entirely clear. In each phrase both nouns are determined. (c) שֶׁל צֶדֶק (= נְבִרְשֶׁת) נִפְרָשֶׁת ("a golden candlestick") (Yoma 3:10). (d) לְשׁוֹן שֶׁלִּיהוֹרִית ("a thread of crimson wool"). In each of these phrases both nouns are undetermined. The reason for the difference between the two last constructions is not clear.

Plural. Besides the plural with -ים, -ין, and -וֹת, a plural with the ending -וֹת in Babylonian sources, e.g., מִרְחָצִיּוֹת = מִרְחָצָאוֹת ("bathhouses"). The plural of nouns ending in -וֹת is not -וֹת, as in the Bible, but -וֹת, e.g., מְלָכִיּוֹת ("kingdoms"). A double plural of compound nouns, such as, רִאשֵׁי שָׁנִים ("new years") occurs (cf., for example, the form אֲנָשֵׁי שָׁמָּה, found in Chronicles, to אֲנָשֵׁי שָׁם ("famous men") which appears in Genesis).

The rules governing the use of the definite articles are still not entirely clear. It should, however, be pointed out that a noun with an accompanying adjective generally does not take the definite article, e.g., לַיְלָה הָרִאשׁוֹן ("the first night"). Other usages, such as, הַכֹּהֲנִים הַגְּדוֹלִים ("the high priests") which appear to be exceptions to the rule require further investigation (cf., הַכֹּהֵן הַגָּדוֹל in the Dead Sea Scrolls).

PARTICLES. While there are many new adverbs and conjunctions, such as, בְּנִתְיָם ("meanwhile"), כִּדִּי ("in order to"), עַכְשִׁי ("now"), כִּיצַד ("how"), noteworthy is אֲבִית instead of בְּבִית. It seems that the biblical prepositions have remained

to a greater extent than the other particles, as in the case of the language of the Dead Sea Scrolls and Punic. Some usages which should be especially noted are the following: ל- is used to a great extent for ב-, e.g., הִיָּתָה תְּרוּמָה לְתוֹךְ פִּי ("the *terumah* was in his mouth"). Many verbs take either one of the following prepositions: ל or ב. ל also indicates the accusative (rare in BH but common in A). The prepositions עַל – עַד interchange (as they do in Galilean and Samaritan Aramaic). The copulative ו (waw) sometimes acts as an explicative ו (waw), e.g., מְבָרֵךְ עַל הַטּוֹבָה וּמַעֲשֵׂי עַל הָרָעָה ("A man should say the benediction for good fortune regardless of any consequent evil") (in German: *und zwar*).

In particles of negation besides אֵין ("not"), employed in nominal sentences including participles (note the declension: אֵינִי, etc. אֵינָה / אֵינֶה – "he/she is not"), also לֹא is used to negate participles. The A loan לֹא is used mainly in the phrase אֵם לֹא ("if not"). אֵ ("אֵין") occurs apparently only before א, e.g., אֵי אָתָּם ("don't you"). The expression "yes," which is absent in BH, in MH appears as הֵין (from A).

SYNTAX. Owing to the radical changes that occurred in the tense system of MH (see above), the syntax of MH looks very different from that of BH. However, since research in syntax has to be based on good manuscripts (see The Problem of MH), the picture is as yet not entirely clear.

The following may more or less be stated: in the verbal sentence generally the verb seems to precede the subject but not always. A verb can take a verbal complement in three ways: (a) infinitive plus ל (as in BH); (b) the participle הִתְחִיל בֹּכֶה ("he started weeping") (rare in BH);

(c) a relative clause, צָרִיךְ שִׁיאָמַר ("he must say"). In the past conditional the construction participle plus הִיָּה is preferred, (negative (לֹא) opening the sentence, e.g., אֵילוּ הָיִיתִי יוֹדֵעַ לֹא הָיִיתִי נֹדֵר ("Had I known (that this was so) I would not have made my vow"). Interrogative sentences which expect a negative (?) answer begin with כִּלּוֹם. Relative sentences are more numerous than in BH since in MH subordinate clauses are used instead of the biblical infinitive plus ב or כ (not occurring in MH).

In the comparative sentence often יוֹתֵר is added, e.g., רַע יוֹתֵר מִסּוּדְמִיִּים ("worse than the Sodomites") (Tos. Shab. 7:23).

While in BH the passive is used almost only if the agent is unknown (with very few exceptions), in MH it seems to be employed even if the agent is known, e.g., הַנּוֹלָדִים מִן הַסּוֹס ("all offspring from a horse," lit., "born by a horse"). The agent is expressed by מִן and by ל, e.g., נֶאֱכָלִים לַכֹּהֲנִים ("are eaten by the priests"). As noted, the syntax of MH has to be restudied on the basis of good manuscripts.

VOCABULARY. A great part of BH vocabulary disappeared from MH including even words indicating close relation, דוֹד ("uncle") or parts of the body, such as, בֶּטֶן ("belly"), בֶּהֶן ("thumb") was replaced by גִּזְלָן (אֲגוּדָל). As is well known these two fields are the most resistant to change in every language. Less amazing is the fact that vocabulary used only in the po-

etic parts of BH did not generally survive in MH, e.g. **הָרוֹץ** ("gold"). The vocabulary of MH is composed of the following elements: (1) Hebrew; (2) loanwords from Persian, Akkadian, Greek, Latin, and Aramaic.

Hebrew. The Hebrew element has many facets:

(a) BH whose meaning remained the same, such as, **יָד** ("hand"), **רֶגֶל** ("foot"), **בֵּית** ("house"), **מִטָּה** ("staff"), **יָצָא** ("to go out"), **שָׁמַע** ("to hear"), **רָאָה** ("to see").

(b) BH words which took on a different form (in the following examples the first word is the biblical form and the second the mishnaic): **מִשְׁאָת** – **מִשְׁוָאָה** ("flares," "fire signs"), **לְהִכְשִׁיל** – **לְהִכְשִׁיל** ("to cause to stumble"), **יָמִין** – **יָמִין** ("right hand") (Aramaic?), **זֶג** – **זֶג** ("grape-peel"), **חֵיל** – **חֵיל** ("surrounding wall"). Some words found in the Bible are only in the singular whereas in MH they occur also in the plural, e.g., **שְׁמִיטָה** – **שְׁמִיטִים** ("sabbatical year"). In particular this is the case with collective nouns, such as **פְּרִי** – **פְּרִית** ("fruit"), **יָרֵק** – **יָרֵקוֹת** ("vegetable"). Some words found only in the plural in the Bible occur in MH in the singular, such as, **בִּטְטָחָה** – **בִּטְטָחָה** (= **בִּטְטָחָה** "pistachio"). Verbs, such as **תָּרַם** (**תָּרַם** < **רָוַם** < **רָוַם**), from the BH root **רָוַם**, in **הִפְּרִים** ("to raise"), with the preformative **ת** (**taw**) formed the noun **תְּרוּמָה** ("heave offering"). MH derived from **תְּרוּמָה** a new root **תָּרַם** which is now used instead of BH **לְהִפְרִים**. Nouns were formed from verbs, e.g., **וָעֵד** ("meeting place") < **הִנְעִד** ("to meet"), **וָדוּי** ("confession of sin") < **הִתְוַדָּה** ("to confess") where the biblical aversion to **waw** as the first radical did not apply anymore.

(c) Some nouns which apparently changed their gender under A influence, e.g., **כִּוֶּסֶם** ("goblet") which became masculine while **שָׂדֶה** ("field") became feminine.

(d) A biblical element which changed semantically but not morphologically. Some words are concrete in the Bible and abstract in MH, e.g., **נָהוֹג** "to lead," in MH "to behave." Similarly **גָּזַר** in MH means only "to decide" and not "to cut." **עוֹלָם** in the Bible means "eternity," but in MH "world." Some words were semantically restricted, e.g., **צְדָקָה** "righteousness" and "charity," in MH means only "charity." **חַג** ("holiday") refers only to "Sukkot" in MH and **עֲצֻרָה** ("assemblage") only to "Shavuot." It is sometimes difficult to decide whether a particular biblical root changed its meaning or the root in MH is simply homophonic, for example, **פָּסוּל** in the Bible means "to hew," with the derived noun **פְּסוּלָה** ("refuse") (cf., **נְעוּרָה** "tow"). From **פְּסוּלָה** a denominative **qal** verb was formed ("to declare unfit"); there may, however, be a different root here (as found in Arabic). But the root **לְהִתְחַטֵּא** ("to ingratiate himself") is certainly not identical with the Hebrew root **חָטָא** ("to sin"), but is an A root.

(e) Non-biblical Hebrew elements. It is certain that the Bible does not contain the whole vocabulary of the biblical period, as shown by personal names and inscriptions (cf., the word **זֶדֶה** in the Siloam inscription (as yet unexplained) and **נֶצֶף** appearing on weights (meaning apparently "half," cf., Arabic). Therefore at least some of those roots which cannot be proven to be foreign loans are probably survivals from the bib-

lical period and only incidentally did not appear in the Bible. This is, of course, impossible to prove in most cases. Sometimes, it cannot be determined whether the form originated in H (or in a Hebrew-Canaanite dialect) or in a neighboring dialect (such as Edomite (?)). It seems probable that most of these words are of H (or Hebrew-Canaanite) origin. Consider, for example, the root **חָזַר** ("to return") (in Eastern Aramaic **הָדַר**; in Western Aramaic **חָזַר**, apparently a borrowing from Hebrew). This root may have reached H through one of the Canaanite dialects. On the other hand, the root of **לְהִתְעַכֵּב** ("to be delayed") is less certain. (There is no certain parallel in the other Semitic languages.) The certainty is greater for agricultural terms or for parts of the body, e.g., **סָרֶף** ("resin"), which do not occur in other Semitic languages. The form of the word **סָחַל** ("spleen") shows its Hebrew-Canaanite origin. Since the Arabic cognate is **ṣihāl** and **ā** appears here as **ō**, as in Hebrew-Canaanite (a change which did not occur in A loanwords), the H origin of the word seems more or less to be certain. The root **מָסַק** ("to harvest olives") is probably Hebrew since it has no cognate in the other Semitic languages. It was only by chance that these roots did not occur in the Bible, or maybe they were current in a different H dialect (regarding **מָסַק** compare the biblical root **נָקַף** with a similar meaning) but not in BH. In order to clarify the relationship between MH and BH, and especially A, the vocabulary of the former should be studied thoroughly on the basis of excellent manuscripts and according to different fields in semantics.

Loanwords. Persian. The Persian hegemony in Palestine lasted only 200 years and Persian consequently did not leave a strong mark. Administrative terms such as **גִּזְבָּר** ("treasurer"), already found in the Bible, occur, but not **מַרְכּוּל** (the Palestinian form) – **אֲמֹרְכַל** (the Babylonian form) ("a high official"). The word **וָרֵד** ("rose") seems to be Iranian. The fact that the word begins with **ו** (**waw**) points to its non-Hebrew origin (but see above Vocabulary (b)).

Akkadian. Most Akkadian words in MH were borrowed through an A intermediary. Some words, however, do not appear in A. The Akkadian-Sumerian **אֶפֶר** ("meadow") is hardly found in the A dialects. On the other hand **אֲמִתִּי** ("when"), parallel to BH **מִתִּי**, is found in several A dialects. Many Akkadian mercantile terms, such as, **שָׁטַר** ("writ"), **גִּט** ("writ (of divorce)"), **תַּגֵּר** ("merchant"), **אֲרִיס** ("tenant farmer") from the Akkadian root **erēšu** ("to plough") have entered MH, as have terms from the material culture, such as, **דָּף** ("page") (of Sumerian origin). The root **זָוַה** ("to move") is also of Akkadian origin. It is possible that the meaning of **לָקוּחַ** ("to purchase"), found mainly in MH, is an Akkadian calque (loan translation). That is apparently why when **לָקוּחַ** ("to take") also acquired the new meaning "to purchase," the BH **לָקַח אִשָּׁה** ("to take a wife," i.e., "to marry") changed in LBH to **נָשָׂא אִשָּׁה**.

Greek. Many administrative, religious, mercantile, material culture (excluding agriculture), and even everyday words were borrowed from Greek. From the Greek word **זֶג** ("yoke") a

denominative verb was formed; similarly אָוִיר (אִוִיר?) ("air") and הָדִיט ("simple person") are Greek. There are mercantile terms: פִּינְקֶס ("account book") and סִיטוֹן ("wholesale provision dealer"); household terms: קְתֵדָרָה ("chair with a back"), and פְּרוֹזְדוֹר (corrupted in the printed versions פְּרוֹזְדוֹר) ("vestibule"); administrative terms: סְנֵהֶדְרִין (Greek "assembly"), and לְקַלֵּס ("to praise," mainly a king or a high official); urban terminology: מִטְרוֹפּוֹלִין ("city"), פֶּלְטִין ("palace"), and לָמֶן (in Babylonian sources of מַח ("port")); food terms: כְּרוֹב ("cabbage"). The expression יָפָה (דְּרָשָׁתָּ) ("you have (well) explained") (in בִּח = beautiful) seems to be a calque, as is apparently הַשְׁלִים ("he did") (Lieberman).

Latin. The few Latin loanwords are from the administrative and military spheres, e.g., לִיבֵלֶר ("scribe"), לֵגִיוֹן ⚭ ("legion"), נֹמְרוֹן ("troop of soldiers") – אֶסְטְרָטָה – סֶרְטָה ("street"), קָרוֹן ("wagon"), סֶפֶסֶל ("bench"), and טַבֵּלָה ("table").

Other Languages. Assuming that the language of the Edomites who settled in Palestine was closer to Arabic than to ח (there is, however, no proof of this), it may be hypothesized that the word שׁוֹבֵךְ ("dovecote"), Arabic *šubbak* ("window"), was borrowed from Edomite. The Arabic *š* was taken into Hebrew without the linguistic change to ש. According to an opinion in the Talmud, the expression יוֹנֵי הוֹרְדָסִיּוֹת (the second word appears in various forms) in the Mishnah means "doves of the king Herod," which (according to Josephus) he raised in his home. חוֹטָם ("nose"), from a rare biblical root, brings to mind the nose ring (חֶטֶם) of the camel. This word may have come into Hebrew from the language of a people that still employed camels (from Edomite?); the assumption is, of course, purely speculative.

Influence of Aramaic. Unlike the above languages whose influence on מַח was felt mainly in the vocabulary, א had a far-reaching impact and left its mark on all facets of the language, namely, orthography, phonetics and phonology, morphology including inflection, syntax, and vocabulary. There is room for investigation as to whether מַח was a Hebrew-Aramaic mixed language. This question may be posed owing to the fact that א had a pervading influence in all spheres of the language, including inflection, which is generally considered to be impenetrable to foreign influence. It is possible, however, that because of the symbiosis of א and Hebrew-Canaanite the two exerted a mutual influence (see especially phonology).

Orthography. All of the peculiarities mentioned above as being in מַח are found, more or less, in the Palestinian Aramaic dialects as well, especially Galilean and Christian-Palestinian Aramaic, and even in the eastern dialects.

Phonetics and Phonology. The fact that the consonantal phonemes (according to biblical א also the vocalic phonemes) are from a synchronic point of view identical in both languages – a phenomenon without parallel often even in different dialects of the same language – is noteworthy. There is reason to believe that this is due to Hebrew-Canaanite: from א

inscriptions it is known that there were several phonemes in א which did not exist in Hebrew-Canaanite. Common to ח and א are the double realization בִּגְדִּכְּפִּת (b g d k p t); the weakening of the gutturals to a greater or lesser extent in most of the א dialects; and common assimilation and dissimilation phenomena (with regard to ר (reš), especially in Galilean Aramaic).

Inflection. The independent personal pronoun אַת ("you" masc.) and the possessive pronouns יָךְ, יְךָ (see above Pronouns) are clear indications of א influence. With regard to the verb, the influence was weaker. The א root הוּוּ appears maybe even with an א vocalization (see above). The loss of the *pu'al* is paralleled in א, whereas the *hop'al* still exists as opposed to the א dialects where it disappeared (with the exception of the early dialects). The rare occurrence of the *ettap'al*, the development of the *nitpa'al*, and the rejection of forms such as תִּשְׁמְרוּן (see above conjugations) point to an anti-Aramaic trend. א influence was less felt in the noun patterns.

Tenses and Syntax. The tense system completely parallels that of Galilean Aramaic and is close to that of Christian-Palestinian and Samaritan Aramaic. It is also similar to that of Eastern Aramaic. The assumption that the whole tense system is influenced by א seems to be inescapable. Note, however, that biblical Aramaic and the old א inscriptions show that this system is not original with א. Even though there still is no real comprehensive study on the syntax of מַח and the Western Aramaic dialects, there seems to be a far-reaching parallelism between them.

Vocabulary. It is clear that א influence is considerable in this category. Absolute proof is provided by loanwords having an א root consonant which differs diachronically from the Hebrew cognates (ד, ט, ע, ת), or by loanwords in which a difference arises because of the Hebrew-Canaanite vowel shift *ā > ō*. Thus, for example, הִתְהַטָּא ("to ingratiate"), אִירַע ("to occur") < א ערע, Hebrew-Canaanite עֶרַץ ⚭ are all א; similarly, אִילָא ("but") לא אִם לא in בִּח, שְׁעָה ("hour"). Even in the numerals there are א elements, e.g., שְׁתִּית ("a sixth") and תּוֹמֶן ("an eighth"). As is well known also the numerals are most resistant to penetration of foreign elements.

In other cases the decision may be in favor of an א influence, e.g., אֶמְצַע ("middle"), מָמוֹן (?) ("money"), and many more. There is still no up-to-date work on this subject. All the studies published in this field are unreliable.

There are also many calques, such as, אָחוּ = סָגַר ("he closed"). Similarly the fact that in מַח כּוֹס ("goblet") is masculine and שָׂדֶה ("field") is feminine goes back to א influence.

Due to א influence there are occasionally in מַח words which are archaic in the Bible (but in general such words disappeared from מַח), e.g., עוֹנָה ("time"), – יָמוֹת ("days") as in the phrase יָמוֹת הַחֲמִיקָה ("the sunny season").

א biblical word might change in form because of א influence, e.g., גֵּיהֶנְם (גֵּיָא in the Bible, but גֵּיהֶנְם ("Gehenna") in מַח (with a different meaning). This is the traditional pronunciation in several Jewish communities.

DIALECTS OF MISHNAIC HEBREW

The early state of affairs as represented by the manuscripts will be discussed here and not the differences between the living traditions of the different Jewish communities (mainly the Yemenite, Sephardi, and Ashkenazi). It is certain that there were differences between the Babylonian and Palestinian traditions. It is even possible to assume that archaic forms which later changed in the Palestinian tradition occasionally remained in the Babylonian tradition. Consider the following example: according to the transcription of the New Testament it is known that the old form of רַבִּי ("rabbi") was רַבִּי. This form was preserved in the Babylonian vocalization tradition, but in Palestinian manuscripts the vocalization is רַבִּי (רַבִּי) and even רַבִּי. Greek transcriptions from Palestine, and later transcriptions in Italy, prove that the first two forms are correct Palestinian forms. They were also preserved in the traditions of various communities. The form מוֹעֵט ("small part") is found mainly in Babylonian sources. The normal form מוֹעֵט is found mainly in Palestinian manuscripts (also מוֹעֵט). However in the Dead Sea Scrolls the Babylonian form מוֹעֵט occurs. A clear difference between Palestine and Babylonia is indicated by such forms as הוֹדָאָה ("thanks") (Babylonian) as opposed to הוֹדָאָה (Palestinian). Similarly גוֹלָן (Babylonian) and גוֹלָן (Palestinian).

It seems that even in Palestine there were dialectical differences and though the indications are few concerning the vocabulary, the evidence of the Talmud on certain points may be accepted. רַפְפוֹת ("shutters") were called by one *tanna* רַעְדוֹת. Besides this, it is difficult at the moment to find other differences, such as, the interchange א – ע ('*ayin*) – אֶלֶפ ('*alep*) attributed to the academy of Eliezer b. Jacob. The מַח of the Bar Kokhba letters is slightly different from that which has been transmitted. שֶׁל is not connected to the word following it. The *nomen rectum*, however, has the definite article (as opposed to the situation in the printed editions of מַח texts). Instead of אֶת, there is (as in Punic) ת, e.g., אֶת הַכְּבִלִים = תַּכְבִּלִים ("the chains") (perhaps this form will be discovered in good manuscripts). The word אִזִּי ("then") found in these letters is not present in normal מַח.

There seem to be traces of an ה dialect which was not identical with בִּח. If this is not assumed, then it is difficult to explain the exclusive use of וּ instead of זֹאת (*zō + t*) since there is no way of explaining the loss of the ת (*taw*). It is preferable to assume that וּ came to predominate in מַח from another ה dialect in which this archaic form existed. (וּ already occurs in the Bible.) The forms הָיָה ("she was") and קָנָה ("she bought") are even more to the point (see above weak verb). The regular biblical form הָיָה and קָנָה developed from קָנָה + *ā* which was taken over from the other verbal classes. It is impossible to understand how a retrogression would occur in מַח; these forms are thus better explained as intrusions from a dialect in which the process קָנָה < קָנָה did not take place. (Survivals of the archaic form occur in the Bible and in the Siloam inscription.)

MISHNAIC HEBREW OF THE PALESTINIAN AMORAIM

This dialect has been studied on the basis of Vat. Ms. Ebr. 30 of Bereshit Rabbah. On the one hand it has been found to have a considerable mixture of בִּח and on the other to contain independent forms that are found in מַח but not in tannaitic sources. (They occur in very few cases and must have been corruptions). Thus, זֹאת occurs as an adjective, e.g., הַלְבֵנָה הַזֹּאת ("this moon"). The far deictic pronouns הַלְה ("that") and הַלְז ("that one") disappeared and were replaced by אוֹתוֹ ("him"), etc. These changes are to be regarded as internal ה developments, though the last was perhaps influenced by א. The ending ת is sometimes found in the third person feminine perfect in verb classes other than ל"ה (א influence). In the imperfect first person singular, the first person plural form is sometimes employed (as in Galilean Aramaic). This usage is found only once in the Mishnah. As in בִּח the construct infinitive without ל occurs, e.g., מְבֹאָה (מֵן + מְבֹאָה). As opposed to מַח the following differences should be noted: (1) internal ה development; (2) admixture of בִּח; (3) increased א influence.

MISHNAIC HEBREW OF THE BABYLONIAN AMORAIM

This dialect has not yet been studied (see below). The word אֶשְׁפָּה ("trash") as against אֶשְׁפָּה (in the tannaitic Hebrew) may point to independent development.

[Eduard Yecheskel Kutscher]

Kutcher's description is still valid in its main features. However, since the 1970s research in מַח has made considerable progress. While the description above is based on the Mishnah according to Ms. Kaufmann, in recent years other mss of the Mishnah have been described, such as Paris, Parma 497, Deinard, Maimonides' Autograph, and Genizah fragments. Haneman's description of the verb system in Ms. Parma 138 can serve as a model for the "classic" מַח verb system. Other tannaitic as well as amoraic sources were investigated, such as the Tosefta, Sifra, Palestinian and Babylonian Talmuds. Traditions contained in old sources and oral traditions were described, such as Yemen, Aleppo, Tunisia, Italy, early and late Ashkenazi traditions, the Karaite tradition, and others. The Babylonian Punctuation tradition is presented in detail in Yeivin's monumental work. Syntax is described according to Ms. Kaufmann of the Mishnah and there is a full description of the tense system.

In these descriptions many features were recognized to be typical of מַח. The following are a few examples: It was proved that a doubling of ר was common in certain traditions of מַח. The relative pronoun שֶׁ is vocalized with *sheva* in some circumstances, such as שֶׁהָיָה (these two phenomena are very rare in the Masoretic Vocalization of the Bible). Some conjugations of the verb (or modifications of old conjugations) were established: *nuf'al* as a variant of *nif'al* in verbs I-y and I-n, e.g., גָּטַל (instead of the common נָטַל); *pCE* > *el* and *nitpCE* > *al* (instead of *pa'el* and *nitpa'al*), e.g., מִיָּמֶן, *nitpa'al* in participle can take the form גִּתְפַּעַל (instead of the common

(מִתְפַּעֵל). For the meaning of the conjugations, it was claimed that the *hif'il* can serve for the same meaning as the *qal* (as it is claimed of the *pi'el*).

In the field of vocabulary, Moreshet's lexicon lists and discusses all the verbs in MH not found in the Bible. According to his findings, there are about 500 new verbs in MH, of which two-thirds can be attributed to Aramaic influence. In this field mention should also be made of the Historical Dictionary Project of the Academy of the Hebrew Language, which produced a full concordance of tannaitic and amoraic literature according to reliable MSS (of other periods). This concordance gives an accurate list of the vocabulary of MH and serves as a fundamental tool of research in this field.

The richness and variety revealed in so many reliable sources enabled Bar-Asher to sort and arrange MH sources according to two criteria (he deals exclusively with the Mishnah, but in fact his observations are valid for all tannaitic and amoraic sources): (1) Palestinian vs. Babylonian branches, e.g., while in Palestinian sources (such as Ms. Kaufmann of the Mishnah) we find the verb **נִתְאַלְמָנָה**, in Babylonian sources (such as quotations from the Mishnah in the Babylonian Talmud) the verb is **נִתְאַרְמָלָה**. Although the last verb was probably borrowed from A, it is an ancient borrowing, as it occurs already in the Hebrew of the Dead Sea Scrolls. (2) Western vs. Eastern traditions, which differ mainly in the realization of written texts; e.g. while in the Western traditions a doubling of **ר** is almost nonexistent, it is quite common in the Eastern traditions of MH. Many of these differences seem to go back to ancient times and may have existed when MH was still a living tongue.

[Yochanan Breuer (2nd ed.)]

MEDIEVAL

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INTRODUCTION

After Hebrew as a spoken language was replaced by Aramaic, it became a written language whose history is from and for books alone. The principal sources for the writers were Biblical Hebrew and Mishnaic Hebrew and these met the needs of all forms of written expression: religious and secular poetry, letters, books on science, and philosophy.

Hebrew became a second language, existing side by side with the vernacular languages spoken by Jews wherever they happened to be. Such a duality was quite normal in the Middle Ages; spoken Arabic existed alongside classical Arabic, other languages were spoken where Latin was the literary medium. Although it became a written language, Hebrew did not remain petrified, limited to passages quoted in their original form and meaning, but lived "an active life" in written texts. New topics, whether in original writings or in translations, necessitated an expansion of the language, especially in the coining of new terms for concepts and subjects not found in the Bible, the Mishnah, or the Midrashim, e.g., philosophy, medicine, etc. Responsa which had to deal with everyday subjects, not found in earlier halakhic responsa, also led to linguistic innovation, especially in vocabulary. Since it was a written language, many new forms were invented for literary purposes: rhetorical language and stylistic embellishment, especially in poetry. It is difficult to evaluate the changes on linguistic grounds alone, particularly in poetry; the language was, as it were, raw material for stylistic variation.

In a living language which serves as a natural means of spoken communication, an innovation is any new form which carries a specific meaning (morphological-semantic innovation). Innovation of this kind occurred in the written language in books of science, especially as translations of new concepts which had previously been unknown to the Hebraic world and had no equivalents in Hebrew, e.g., *agron* (more correctly *egron*; "a dictionary"), *mahut* ("essence"). New meanings were added to existing words; this is a common feature of poetry as a means to enrich the language. In *piyyut*, though not only there, use was made of the system of "alternate forms," whereby existing words could change their form – according to regular patterns of analogical formation, and also irregularly – without any change in meaning. These are morphological-stylistic changes, but not semantic. This technique is generally foreign to the spoken language where every form has its own specific meaning.

The linguistic changes of the written language, unlike those of the spoken tongue, do not take place of their own accord, through the operation of analogy, leveling, attraction, etc. They owe their existence to the needs of artistic and stylistic embellishment and are premeditated rather than spontaneous (as will be explained below). They include changes

in frequency – rare words become common – sometimes because of the different frequency in the language of influence, sometimes because of a deliberate choice of words felt to beautify the language. Some innovations rose from a linguistic understanding of the processes of analogical word formation (הִיקָשׁ) available in the language of their execution; others arose from the contact between written Hebrew and the spoken vernacular, or from the influence of a source language upon its Hebrew translation. A description of written Hebrew should include the different periods, places, and styles in which it was written. Each had its own attitude to the original sources; some were sparing in innovation, others rich in additions; some preserved words as they found them, others changed both form and meaning (whether intentionally or not). The different languages with which Hebrew came in contact must also be discussed: the Aramaic of the Midrashim and the Talmud which at the beginning of the period wielded its influence as a spoken vernacular and at the end of the period as a written language which stayed alive as the vehicle for study of the Babylonian Talmud (and to some extent of the Zohar); Arabic, from the period of the *ge'onim*; Middle High German which had considerable influence on the language of the Jews of Germany; there are even signs of French influence (e.g., in the language of Rashi) and Italian (a little in *Megillat Aḥima'az*, 1504, and rather more in the language of *Immanuel of Rome). There is a strong connection between the form which written Hebrew took and the nature of the culture and society which supported it. The language of poetry in Spain flourished against the background of the Golden Age of Spanish culture, in imitation of the craft of Arabic poetry. The Midrashic folk language in Germany, unaffected by the rigors of syntax and grammatical rules, is well explained by the humble character of this Jewish community which was influenced by the liturgy and the *halakhah* of Erez Israel, took hardly any interest in science and grammar, and lacked any social or cultural environment advanced enough to provide a model for literary creation.

The Hebrew language will be described mainly, but not solely, by reference to the language of prominent figures in the world of literature or Jewish intellectual life. An account will also be given of the link between the ideas of the grammarians and the writing of good Hebrew. Nothing will be said of the pronunciations of Hebrew (for phonological developments, see *Pronunciations of Hebrew).

THE LANGUAGE OF PIYYUT

The first revival of Hebrew after its extinction as a spoken vernacular was in the *piyyut* in Erez Israel, where there was a considerable return to written Hebrew, not only as a language from which to quote but as a linguistic activity aimed at increasing the vocabulary with newly derived nouns and verbs. The *piyyuṭim* were religious poems used as prayers in public worship. Some scholars have placed the beginning of liturgical poetry as early as the third or fourth century (J. Schirmann); others have put forward later dates. The generally accepted

opinion is that they date from the fifth–sixth century, in Erez Israel, and were written against a background of Midrashim and spoken Aramaic. The *piyyuṭim* are a blend of Biblical Hebrew, eminently suitable for ceremonial religious poetry of a national character, and Mishnaic Hebrew, without which it would have been impossible to give them the homiletic, midrashic content which is their main characteristic. Zunz seems to have been the first to name the *piyyuṭim* “Midrashim in the guise of poetry,” and it is customary nowadays to emphasize that they are versified homilies (e.g., Mirsky). The linguistic blend is apparent not only in the choice of vocabulary but also in the grammar. The extensive revival of verbs in *binyan pu'al*, the co-occurrence of short and long tense forms, the use of the absolute infinitive and to a limited extent of the conservative *waw* are typical of Biblical Hebrew; the use of *binyan nitpu'al*, and complex infinitive forms like מְלַקְטֵל, etc., derive from Mishnaic Hebrew.

The unique feature of the language of the *piyyuṭim*, however is not the blend of Biblical and Mishnaic Hebrew but its particular variety of linguistic innovation. Though the verse of the earliest known *payṭanim*, *Yose b. Yose and *Yannai, was not overcharged with difficult words in unusual declensions, the language of all the *payṭanim* was customarily referred to as *ʾaz qozeṣ* after the *piyyuṭ* read on Purim (a *qerobah* to *Parshat Zakhor* by Eleazar *Kallir):

אֵץ קוֹצֵץ בֶּן קוֹצֵץ	קְצוּצֵי לְקָצֵץ
לֵץ בְּבוֹא לְלוּצֵץ	רְצוּצֵי לְרָצֵץ
כָּעֵץ מְחַצְצִים לְחָצֵץ	פִּלֵּץ וְנִתְלֹצֵץ
	כָּנֵץ עַל צִפּוֹר לְנָצֵץ

The evil man, son of an evil man, ran
to cut down my persecuted ones;
With slander my broken ones to destroy;
The evil one when he came to do evil
was destroyed and the evil was done to him,
When he advised to shoot the shooters
like a hawk upon a bird to prey.

i.e., Haman, son of Hamdata, ran to cut down the Jews, to destroy them with slander. When the evil man came to do his evil deed he himself was destroyed and the evil was done to him; when he gave counsel that Israel be shot with arrows.

Many typical features of the *piyyuṭim* are indeed to be found in this poem: allusive phrases (קוֹצֵץ בֶּן קוֹצֵץ, also in the Midrash, מְחַצְצִים), innovations in verb forms (פִּלֵּץ) and forms like כָּעֵץ which has both עֵץ for יַעֲץ and כָּ before an inflected verb. The poem demands explication, not only linguistically but as a riddle, with its reminiscences of the Bible and the Midrashim, its brevity, and its wealth of allusive phrases. *Saadia Gaon, whose language has much in common with the writings of the liturgical poets, was aware that the language of some of the *piyyuṭim* was faulty (see his introduction to the *Agron* (more correctly *Egron*) and his note to his *siddur*, p. 225). The main critic was Abraham *Ibn Ezra who described the language of Kallir as “a breached city, with no walls” (commentary to Eccles. 5:1) and said of the liturgical poets in general that

“they do not know how to speak correctly, they strive to use hard words, and say תַּחֲנֹן instead of תַּחֲנִינָה” (in his book *Safah Berurah*). There were also many other harsh critics.

The following were the characteristic features of liturgical poetry:

(a) The method of creating verb forms; what has been called “one rule for all conjugations, defective and reduplicative.” This was the most highly criticized feature (Zulai, *The Liturgical School of Poetry of Saadia Gaon*, p. 7, bibl.). Examples are עָשָׂה for עָשָׂה (conjugating a ל”ה verb as though it were ע”ו), נָסַע for נָסַע (ע”ו for ע”ו), נָסַע for נָסַע (פ”ו for פ”ו) and so on. However, this mixture is only found in the perfect. Forms like יַעֲשֶׂה (the imperfect of עָשָׂה if it were an ע”ו verb) and יָסוּעַ do not occur. Even in the perfect most of the forms can be explained simply as deletion of the first (נָסַע from נָסַע) or last (עָשָׂה from עָשָׂה) letter; only a few isolated forms show a real conversion to a different conjugation, usually to ע”ו, in other forms of the perfect, e.g. הִזְנִיחַ, הִזְנִיחַ. A more plausible approach, therefore, is to describe this method of conjugating verbs (which was not explained by the liturgical poets themselves) in the terms used by Saadia Gaon in the second chapter of his *Sefer Zohar*, as deletion of the initial or final letter of a particular form, and not necessarily of the root consonants, by analogy with certain biblical forms: יָסַע after יָסַע, עָשָׂה after עָשָׂה and so on. The deletion of the *nun* is thus not conditioned by *šewa naḥ*, nor is the deletion of the *he* by the shortened imperfect form. Forms such as מַעֲשֵׂה, מַעֲשֵׂה, and מַעֲשֵׂה can similarly be explained as deletion, by analogy with מַעֲשֵׂה-מַעֲשֵׂה in the Bible. With the recognition of the tri-consonantal basis of the Hebrew root (by *Ḥayyuj) such forms were strongly criticized by grammarians and poets in Spain, and this technique, much used by Saadia Gaon, almost disappeared from secular poetry after the period of the *payṭanim*. (N.B. such forms as נָסַע, נָסַע, etc. are not evidence that the weak roots were considered bi-consonantal. Menahem and Dunash, who were unaware of the tri-consonantal nature of such conjugations, established the root שָׁב for verb forms like שָׁב, שָׁב, and שָׁב, yet did not mix the conjugations in their writings, and derived the forms in accordance with biblical use. They never substituted קָמַיִת for קָמַיִת for example).

(b) The liturgical poets created many new words by conjugating roots in all the *binyanim*; for them the *binyan* was part of the automatic inflectional system, like tense and person. The later poets of Spain saw the *binyan* as non-automatic, not subject to unrestricted analogical extension, confined to forms found in biblical Hebrew and mishnaic Hebrew. Not so the writers of the *piyyuṭim*. They derived many words from nouns: סִמְנִי (from סִמְנִי), זִלְעָה (from זִלְעָה), הִבְטִין (from הִבְטִין), and even from adverbs and particles: טָרַם from טָרַם and לְבַלְעַד from לְבַלְעַד. They also incorporated derivational affixes and suffixes as root letters: לְהַתְּשִׁיר from לְהַתְּשִׁיר by analogy with mishnaic לְהַתְּשִׁיר from לְהַתְּשִׁיר. This abundance of morphological variation is the hallmark of liturgical poetry, and has been vilified as bizarre by its critics. The grammarians and some of the poets in Spain rejected the alternate forms because they

“changed the holy writ” (Dunash ben Labrat’s reply to Saadia Gaon, 95), stating “we shall read every word in the form in which we found it” (*ibid.*). Abraham Ibn Ezra declares: “a man must use a word in the form in which it is found” (*Moznayim*, 33). (A similar statement was made by Moses Ibn Ezra in *Širat Yisrael*, 148). Both Abraham and Moses Ibn Ezra criticized the use of given verbs in *binyanim* in which they did not occur in the Bible. Dunash denounced a change in noun forms but allowed the use of different *binyanim*. The early critics rejected these changes because they wanted to preserve biblical Hebrew; later critics deprecated poets who adopted different forms and made innovations which did not contribute to the sense of the poem.

Criticism of the language of *piyyuṭ* is intrinsically criticism of its style. Abraham Ibn Ezra mentions four flaws – two concerning the language and the other two content and poetic devices: the *piyyuṭ* is (1) influenced by a foreign tongue, i.e., the Aramaic of the Talmud; full of (2) grammatical errors; (3) riddles and fables obscure in meaning; and (4) homilies. In comparison to the prayers, the *piyyuṭ* is obscure in language and style and is unfit to be used in liturgy (Comm. Eccles. 5:1). Basically, however, the language of the *piyyuṭ* is difficult because of its many allusions: עֲמוּסִים (“the encumbered”) standing for “the Children of Israel,” אִיתָן (“the strong”) for “Abraham,” etc. Many of the forms, drawn from the Midrashim, were more difficult for the Jews of Spain than those of Erez Israel who knew the Midrashim well. Graetz sharply criticized the *piyyuṭ*, while Samuel David Luzzatto explicitly defended Ha-Kallir: “not because of ignorance and duress did he write it so, but to embellish the style,” (introd. to *Maḥzor Roma*, 1861), “Eleazar Kallir was not tongue-tied but for his wisdom and of his own will did he write it” (Letter to S.J. Rapaport, 1884). Zunz described the language of the *piyyuṭ* with great understanding and he knew that it was written for the taste of that generation (*Ha-Derašot be-Yisra’el*, pp. 184–5). In his opinion the plenitude of vocabulary serves as an ornament of style, and many forms are simply “nonce words,” not meant to be established as part of the language (see bibl.).

The liturgical poets left nothing in writing which would inform us of their view of language and style, but it is clear that they regarded an active, prolific use of derivational inflections as one of the glories of the language. The wealth of forms is similar to the technique of listing synonyms (the liturgical poets liked to fill a line with a long list of synonyms or near-synonyms), the use of word play, and the use of a recurrent rhyme word. The invention of new forms which do not carry new meanings creates both a richness of sound and a degree of synonymy which are among the rhetorical techniques of liturgical poetry. For Bialik also, criticism of the literary value of the *piyyuṭim* is inseparable from criticism of their language: “the period of Ha Kallir and his disciples was a time of infatuation with liturgical poetry, which became more and more sentimental” (*Širatenu ha-Ze’ira*). He condemned the “makers of acrostics” and the “tasteless stammerers” whose language was “like the gravel (אֲבִנֵי חֶצֶץ) of *az qoḏez*.”

(c) The letter *kap* (כ standing for כַּאֲשֶׁר as well as כ- for כְּמוֹ) can be prefixed to an inflected verb: גַּר צִדֵּק נִצְחָתוֹ כְּנִחְלֵק לוֹ לַיְלָה “you made the righteous proselyte prevail at midnight” (Yannai in “*Wa-Yehi ba-Ḥazi ha-Laylah*”). So also כְּהִלְכֵּנוּ בְּדִבְרֵת, כְּהִלְכֵּנוּ בְּשִׁקְט. This is a characteristic feature of liturgical poetry in Ereẓ Israel. Dunash regarded the prefixing of כ to verbs in the perfect tense as a rule of analogy from biblical practice (הַהֲלִיכֹא, Josh. 10:24 – replies to Saadiah Gaon, 114). In his poem against *Menahem ibn Saruq he uses the form כְּשִׁקְט. Although Ibn Janah permitted the use of *kap* before a perfect tense for reasons of scansion (to provide an iamb (Harikma 45–46)) it was not used in secular poetry in Spain, undoubtedly due to the influence of the grammarians. Saadiah Gaon used *kap* before perfect tenses, but in *Sefer Zahot*, written late in life, he denounced its usage. Examples of *kap* before perfect tenses are also to be found in the writings of Hai Gaon. However, in those communities which drew their inspiration from the Midrashim, the halakhah and the liturgical poetry of Ereẓ Israel, this linguistic feature continues to occur, and not only in acrostics. In *Megillat Aḥimaʿaz* (Italy, 1054) we find כְּבָאוּ, כְּשִׁמְעוּ, and in the German elegies and poems written about the horrors of the Crusades we find כְּהִלְכֵּנוּ and כְּפִחְנוּ.

From the Spanish period until the Enlightenment, the liturgical poets were charged with ignorance of grammar. It would be going too far to say that they had no understanding of language; their view of word creation is not in line with accepted grammar. A realization of the motives which led to such abundance of morphological-stylistic innovation can bring us closer to understanding the liturgical poet as a deliberate, if inartistic, manipulator of language. In recent years new light has been thrown on the language of the *piyyuṭim* as a linguistic and not merely a stylistic phenomenon. Study of Palestinian Aramaic and the language of Hebrew Midrashim written in Ereẓ Israel has revealed that the language of the *piyyuṭim* is based on “Palestinian idiom” (Zulai). Words thought to be arbitrary innovations invented by the liturgical poets have been shown to be rooted in the language of the Midrashim and the Targum. Yallon has pointed out words which passed from the Midrashim to the *piyyuṭim* (גַּהַר meaning reproof, פָּנָה meaning look, יָאֵשׁ meaning weak, לָבַב meaning shout, בָּרוּר meaning strong and existing, and others). Expressions from the Hebrew spoken in Ereẓ Israel survived in the *piyyuṭim*: קִפְיִדַת רוּחַ – severity – and תְּעִידָה מוֹדַע – prayer (noted by Zulai), or תְּעִידָה מוֹדַע – document, and מִסְפֵּק – danger (Shalom Spiegel). S. Lieberman has also pointed out the affinity to midrashic language (see bibl.). The language of Ereẓ Israel can elucidate difficult passages in liturgical poetry, and makes it clear how the creation of the poets was natural and not artificial. A comprehensive description of the language of the *piyyuṭim* against the background of the languages of Palestine and the attitudes to grammar out of which it took shape would contribute greatly to a clearer understanding of this first important manifestation of written Hebrew.

SAADIAH GAON

It was Saadiah Gaon who brought about the great revival of Hebrew writing in Babylon. Actually, even before his time the use of Hebrew in writing had not been set aside completely. In Ereẓ Israel there had been liturgical poetry, Midrashim and collections of legal decisions, the best known, *Sefer ha-Maʿasim* (“The Book of Court Cases” or “Judgments”), was collected at the beginning of the geonic period.

After the period of Saadiah Gaon the Palestinian *geonim* continued to write a good Hebrew, and Ibn Janah affirms that “the men of Tiberias excelled all others in the purity of their Hebrew.” In the talmudic academy of Damascus, which took over from that of Ereẓ Israel, *halakhah* and metrical, rhymed prose were written in Hebrew (in the 11th century). The same kind of thing occurred in Babylon. In the Talmud short extracts from the *amoraim*, consisting of a presentation of the problem and a brief discussion, are written in Hebrew; detailed discussion in Aramaic comes later. At the end of the eighth century Pirkoi ben Baboi wrote chapters of *halakhah* in good Hebrew. The collections of halakhic decisions, *Halakhot Pesukot* of Yehudai Gaon and *Halakhot Gedolot* of Simeon Kayyara both contain sections in Hebrew. Needless to say they derive from Palestinian literature, but they do bear witness to the fact that even in Babylon, Hebrew had not given way completely to Aramaic, and was used for special purposes, e.g., for halakhic decisions. Several Aramaic books on *halakhah* were translated, or translated and edited in Hebrew, notably *Halakhot Re’u to Halakhot Pesukot* and the book *We-Hizhir* to the responsa of Aḥai of Shabḥa. Conventional opinion (Poznan-sky, Epstein, Assaf, and Ginzberg) holds that the translations were done in Ereẓ Israel, or at the very least in Greece and Italy, since Hebrew translation could only have been carried out where Babylonian Aramaic was unknown. Nevertheless, according to S. Abramson it is quite possible that they were written in Babylon when Aramaic had given way to Arabic. Therefore the *Halakhot Pesukot*, for instance, was translated into Arabic too. Linguistic features regarded as typically Palestinian – לִיכַל, אָמַר – אָדָן for אָכַל – cannot therefore be taken as evidence of the place of composition; the translators in Babylon could well have considered language of Ereẓ Israel a fitting model for good Hebrew. If they were written in Babylon, it could not have been earlier than the time of Saadiah Gaon.

Saadiah Gaon introduced the writing of liturgical poetry in Hebrew into Babylon. He was followed by *Hai Gaon, whose language is generally simple, but very similar in its techniques of word creation, patterns, and usage to Saadiah’s language. Saadiah Gaon brought a consciousness of the need for beauty to the writing of Hebrew. In the introduction to his dictionary, the *Agron*, he writes of Hebrew as a woman who had been slighted when the Children of Israel preferred the imperfect foreign tongues of exile to her own beauty of expression. The *Agron* was designed to fashion Hebrew into a proper instrument for the writing of poetry. It is commonly held that the language of Saadiah Gaon is a link in the chain connect-

ing the language of the *piyyuṭim* and the language of Spanish Jewish poetry; this view is expressed primarily in “The Liturgical School of Poets of Saadiah Gaon” by Menahem Zulai. The language of Saadiah Gaon is far removed from the biblical purism of Spanish Jewish poetry, as we shall see. However, though it is true that it shares features with the language of the *piyyuṭim*, and continues this tradition, it also foreshadows in several ways the approach to language of the Spanish poets. Saadiah Gaon wrote *piyyuṭim* in Hebrew as well as polemical literature *Essa Meshali*, *Sefer ha-Galuy* and *halakhah* (*Sefer ha-Mo’adim*). He wrote an introduction to his *Agron*, his grammar of Hebrew (*Sefer Zāhot*), philosophy (*Emunot ve-De’ot*) and responsa in Arabic. It was he who initiated this duality in Jewish writing in the Middle Ages: Hebrew for poetry, and Arabic for prose, even for those who honored Hebrew, the mistress, more than Arabic, the serving maid (expression of Al-Ḥarizi in his book *Tahkemoni* and Solomon ibn Gabirol in *Ha-‘Anaq*).

It was Saadiah Gaon who introduced the concept of “pure” language – *zāhot ha-lašon* – to Hebrew writings and grammar (on the basis of Isa. 32:4), thereby creating a Hebrew cognate of the Arabic *faṣāḥa* which is also etymologically related to the Arabic term *taṣṭīḥ*. “Pure” language for Saadiah Gaon is a linguistic ideal, beautiful, clear, and correct, with all forms derived according to proper rules of analogical formation, free from errors of irregular word formation. Analogy (היקש) is permitted to operate according to biblical patterns which, in his opinion, were “fertile” but not according to infertile patterns. This view of purity of language matches the primary concept of *faṣāḥa*. Later, “purity” will be able to express various linguistic and stylistic qualitative features that affect poetic ornamentation and rhetorical figures (such as plays upon words and synonyms). According to Saadiah “purity” of language is not just the passive use of received vocabulary; it welcomes innovation, since it is linguistic activity that shows knowledge of the language and makes it beautiful. Thus Saadiah Gaon used Hebrew like the liturgical poets who preceded him. He created new verbs by using existing roots in all the *biyyanim*, each with its special meaning, e.g., מְקוֹה – giving hope, שָׁנַע gave rest (נָפַשׁ) (לְהַחְדִּיל) (from חָדַל) and so on. He formed verbs from nouns: הִתְהוֹם (from תְּהוֹם), הִמְעִין (from מַעֵין).

In deverbal derivation Saadiah used the various nominal patterns which he regarded as nouns of action (infinitives), though not other noun-forms: שִׂטְמָה, דְּרָשׁוֹן, טְפִיפָה, לַעַט (hatred) these are the commonest types – and also מְדַבֵּק (for מְגַלְעַת, “quarrel”), מְחַמֵּר (restriction) for חוֹמְרָה. Like the liturgical poets he changed the form of extant words without changing the meaning, as he himself stated explicitly (with respect to word expansion and deletion in the second section of *Sefer Zāhot*, and with respect to the variations in the form of nouns derived from verbs, see replies of Dunash, 122): *wa al-mānā wāḥid* “the meaning is one,” i.e., the different forms are “equivalent in meaning,” differing only in “articulation.”

(a) He used expanded forms of words in accordance with techniques which he explained in his grammatical writ-

ings (he referred to expansion as *tafkim*): דִּתַּת, יִסַּד for סִדְסָד (from דָּת, לְדוּגָג for לְדוּגָג, תִּלְתֵּל for תִּלְתֵּל, סִתְסַת for סִתְסַת, אִימִימָה for אִימִימָה (“horror”). Lengthened forms of the imperative and the imperfect like those of the infinitives are used without any implications of modality: יִבְיָאָה, יִעֲלֶזָה, לְנִשְׁאָה.

(b) He omitted letters in various word forms, on the model of contractions found in the Bible: עֵט, בֵּט, פֶּץ, סָע – shortened perfects; לֶהֱעֵל – shortened infinitive; מַעֲלֶה for מַעֲלֶה – shortened present participle; מַעֲשֵׂה – חֲזוּ, חֲזוּה – תַּחֲיֵה – תַּחֲיֵה – shortened verbal nouns; and of course many shortened imperfects – תִּהְיֶה, תִּהְיֶה – since this form does not carry any jussive meanings and can be used to form further shortened forms without any effect at all on the shade of meaning.

(c) He used alternative forms of words by analogy with doublets found in the Bible: עֲרִיסָה for עֲרִיסָה (“dough” like חֶפְצוֹן – יְבוּשָׁה – כְּפֹר – כְּפֹר, יְסֹד – יְסֹד, יְגִלִּיל – יְגִלִּיל (from חֶפֶץ, like חֶרֶב from חֶרֶב) and so on. The explanations given earlier for the word creation of the liturgical poets are made explicit in the writings of Saadiah Gaon. All these derived forms, he says, come easily to the language; they are mere changes in form which do not necessitate any special shade of meaning. In Saadiah Gaon’s opinion, the principal source for Hebrew writing is the Bible, though he also made no small use of mishnaic Hebrew. Choice was dictated by the needs of style. He did not think of biblical Hebrew and mishnaic Hebrew as separate entities; the latter simply completed the documentation of the words in the former. Like the Arab grammarians of his time, he lacked any historical sense of earlier and later periods in the development of the language. He thought that all the words in the Bible were fit for use, including the rarest and oddest; further words could only be created by the operation of analogy on this vocabulary. He continued the tradition of the liturgical poets in his use of allusive phrases: בְּנֵי אֱלֹהִים (“children of eternity”) for the Children of Israel and פְּרִיזָה for the Temple and many others. Liturgical poetry was a source of literary inspiration for Saadiah Gaon in many ways: specific usages, nonce-words, allusive phrases, rhyme and alphabetical arrangement, and such words and expressions as צֶרֶחַ, פֶּצֶחַ, נֶשֶׁם, גִּיאָה (“valley,” i.e., land), יְחִיד (“unique,” i.e., Isaac), גִּבְעָן (“peak,” i.e., Mt. Sinai). Liturgical poetry was a source of style and thematic material, but not of linguistic innovation *per se*; he would not accept any new forms which did not satisfy his own linguistic principles. Such words, he thought, could be invented by anyone who knew the language and had the inclination. The main features he shares with the liturgical poets is his constant use of derivation without change of meaning. In the following respects he foreshadows the language of Jewish poetry in Spain

(1) There was a close relation between his linguistic inventiveness and his views on language; like the poets of Spain he remained faithful to the rules of grammar (though since his conception of the language was different, the results are also different).

(2) It was he who initiated the criticism of the language of the *piyyuṭim* (in the Arabic introduction of the *Agron*, and *Siddur* p. 225).

(3) Though he continued to use the techniques of the liturgical poets, he did so with reservations. He derived nouns according to the patterns of verbal nouns only, and placed restrictions of the freedom to create new words by analogy. (In Spain also, *vide infra*, innovations were more frequent with verbs than with nouns). Therefore like the Spanish poets he made considerable use of participles, active and passive, as adjectives (פֹּתֵל – “crooked,” כְּחוּד – “hidden”).

(4) He used short and long tense forms freely, without any distinctive modal significance, and this lack of specific meaning facilitated morphological innovation by analogy. The Spanish poets did the same (*vide infra*).

(5) The rules of analogy are binding as far as the derivational inflections are concerned, but a word may have many different shades of meanings. Saadiah Gaon did not always use a word in the sense in which he translated it in his translation of the Bible. He translated תִּבְלָה as “punishment” (in Ar. *Dāhiya*) and then uses תִּבְלִית – by analogy with תְּרִסִּית – תָּרָס (*Siddur Saʿadyah Gaʿon* p. 198) – in the sense of “abomination.” He translates אֲרֻשֵׁת שְׁפָתַיִם in Psalms 21:3, as “permission” (Ar. *istiḏhāna*) and explains this interpretation by reference to Ezra 3:7; in his poetry he uses אֲרֻשָׁה and רוּשָׁה as synonyms, with the meaning “say.” The technique of allusive phrases also depends on the view of language that a word may have many meanings, all available for use.

(6) Saadiah Gaon had his own opinions as to which were the proper patterns for analogical word formation, and the frequency of a word had no relevance. A typically mishnaic word which occurs only once in the Bible is considered biblical. The Spanish poets took the same stand.

A conventional explanation of the language of liturgical poetry holds that it was not difficult for its audience, who were learned in the Midrashim. Saadiah Gaon certainly thought the *piyyuṭim* difficult to understand, and regretted that most people had a scanty knowledge of the language. He thought that people liked *piyyuṭim* even though they did not understand them (*Siddur Saʿadyah Gaʿon* p. 156). Prayers and entreaties (בִּקְשׁוֹת), by which a man might draw near to his Creator, were written by Saadiah Gaon in language devoid of allusions and morphological innovations, lest the language mar the prayers and therefore were praised by Abraham Ibn Ezra (commentary to Eccles. 5.1.). True innovations are scarce in the language of Saadiah Gaon, and occur not in his poetry but when he needs to coin technical terms; for these, like the Spanish writers (*infra*) he uses the method of loan-translation. He borrows both the concept and the way of expressing it: אֲגָרוֹן (lit., “hoard”) for dictionary, a loan-translation of the Arabic *ḡamhara*, (a verbal noun). There are other synonyms for dictionary in Arabic from the roots *ḡml*, *ḡmʿ* and *ʾihatawā*, all meaning “hoard” or “collect” יִסֹּד, from Ar. *ʾaṣl* (root).

Arabic Influence

The influence of Arabic is more strongly felt in his views on language than in his actual grammatical innovations. His grammatical theory is strongly influenced by the opinions

of Arab grammarians on analogy, e.g., in his abundant use of the קָטַל pattern (as most fertile *fiʿl*, *faʿl*, and *fuʿl* in Arabic) in not differentiating between what would now be called the infinitive (קָטַל) and the verbal noun (קָטִילָה). There are very few Arabicisms in his language, even fewer than in the poetry of Spain (*infra*): צָרַח – the root צָרַח is common in liturgical poetry, but the meaning “declare” and the use of the preposition ב are from Arabic عَزַי נְגִדְעַת (in *Tešubot ʿal-Hiwwi* 4) where for reasons of rhyme the word عَزַי (“tree”) is construed as feminine, as in Arabic. In his translation into Arabic he preferred words which were alike in sound to the Hebrew, and sometimes did the same in his own writing. In the introduction to the *Agron* he uses the expression חוֹדְרֵת for “woman,” from the expression יוֹשֶׁבֶת פְּנִימָה בְּחֻדְרִים. This is close to נָהָה which means “wife” in the writings of Saadiah Gaon and is etymologically similar to the Arabic *al-Mukdara* (girl kept indoors).

SPANISH HEBREW POETRY

Spanish Jewry followed the spiritual center that was in Babylonia as far as the *halakhah* was concerned; however in literary writing an important innovation took place there in comparison to both Erez Israel and Babylonia. The duality – Hebrew for poetry and Arabic for prose – which started with Saadiah Gaon was fulfilled to a large extent in the literary activity of the Jews of Spain. Arabic replaced Aramaic as the vehicle for non-poetic expression (mainly *halakhah*) and became the language for prose writing (grammar, medicine, philosophy, exegesis, etc.) although there were still scientific books written in Hebrew (see below). Hebrew was used for poetry although some secular poetry was written in Arabic and Aramaic.

The Hebrew of poetry in Spain underwent a fundamental change when secular poetry became a separate and respectable literary genre. The beginnings of secular poetry are to be found in the polemic writings of Saadiah Gaon (which are the forerunners of poems of personal quarrels and denigration) and secular poetry became an accepted art – important and widespread in Spain – starting with the wine and war poems of Samuel ha-Nagid (d. 1055).

The earliest liturgical poets in Spain (especially Isaac ibn Ghayyat, Ibn Abitur, and Ibn Khalfon) drew their linguistic and stylistic inspiration from the *piyyuṭim*; they wrote mainly sacred poetry, in the same style and language as other liturgical poets, uninfluenced by the Arabs as the Arabs had no religious poetry. But secular poetry, a personal art (unlike religious poetry which was designed for public worship), was the product of Arab culture, and took shape in the image of Arabic poetry with which it competed by imitation. Liturgical poetry could not provide suitable vehicles for the writing of secular poetry. Linguistic change actually crystallized in secular poetry, under the influence of Arabic; iambic meter was taken over, and there is a close tie between the meter and the formation of words and verbal conjugations. In religious poetry it was used only sparingly; *Keter Malkut* by Solomon ibn Gabriol, for example, is written in one of the meters of li-

turgical poetry, with a fixed number of syllables per line. The move towards biblical purism, as understood by the poets of the Middle Ages, began in secular poetry.

The choice of Hebrew for poetry and Arabic for prose is closely interlinked with the move towards a biblical Hebrew. The writing of secular poetry in Hebrew was supported by the continued writing of religious poetry in Hebrew (which there was no cause to write in Arabic). The linguistic duality had its counterparts in the surrounding culture: old Spanish for speech and Latin for writing in Christian Spain, Andalusian Arabic for speech and the Classical Arabic of the Koran for poetry in Muslim Spain. The Jewish poet would rather make a careful, diligent, accurate study of the language of the Bible than learn how to write the language of the Koran. He had to choose between two languages which both required considerable study. (Prose was written in Middle Arabic, which did not need special study.) Perhaps, however, the fact that it suited his background is of little account compared with the national and religious feeling that biblical Hebrew had a special status, was a "superior language," a "very choice tongue" (Solomon ibn Gabirol in *Sefer ha'Anaq*) and "a wondrous language" the best of all the languages, and of course richer and more beautiful than Arabic (Al-Ḥarizi in the first chapter of *Taḥkemoni*). See also the speech of the companion in Judah Halevi's *Sefer ha-Kuzari*, Part 2, 68.

Biblical Hebrew was extolled as a "pure" language by no means inferior and indeed superior to the "pure Arabic" which was used for poetry. It was eminently suitable for the writing of verse comparable with Arabic verse, since it had similar virtues: (a) The similes, metaphors, and other figures of speech in the Bible were well suited to poetic style. In the last chapters of his book *Širat Yisra'el*, Moses Ibn Ezra quotes examples from the Bible for every one of the rhetorical figures used in Arabic poetry. (b) The tradition of a fixed vocalization could serve as a basis for the iambic measures introduced from Arabic poetry. (c) The study of the grammar of biblical Hebrew was highly developed in the Middle Ages; there were few references to features of mishnaic Hebrew and the Hebrew of the period in grammar books. Arabic poetic language was also subjected to perpetual scrutiny by Arab scholars. (d) Biblical commentary added to the vocabulary a wealth of meanings and shades of meaning which were essential to a richness for poetic expression.

The introduction of a wide range of subjects – passion and wine, war, dispute, lampoon and jest, elegy, panegyric and self-aggrandizement, love, friendship and marriage – was accompanied by the use of iambic meters. Instead of every line containing a fixed number of syllables, there was a regular alternation of full vowels and *šewa na'*, i.e., reduced vowels. Dunash ben Labrat is usually considered the first to introduce iambic meters into Hebrew poetry. He used "well-scanned newly invented distinguished metrically constrained poetic forms" (Replies of Dunash to Menahem 4, 19). And this view is confirmed by the accusations leveled against Dunash by the disciples of Menahem, that he abused the forms of the lan-

guage: "our holy tongue destroyed and left it null and void, because he had employed a foreign measure" (Replies of the disciples of Menahem 7, 44.) Menahem's disciples themselves phrased their replies in iambic measures, to show that their condemnation did not stem from poetic incompetence. The iamb was soon accepted by all poets as the proper measure for secular poetry. In the beginning it was difficult to adjust to the new meter; Al-Ḥarizi said of the language of the period when the iamb was first introduced that "the writers of the time wrote bad measures." It was the meter which usually determined the choice of words: *שָׁ* or *אֶשֶׁר*, *אָז* or *אֲזַי*, *אֲנִי* or *אֲנִי*, depending on the needs of the rhythm. Sometimes it even led to a change in the basic form of the word (e.g., *קָרַב*, with a *šewa*, for *קָרַב*); Ibn Janah realized that the exigencies of meter could open the way to deviations from proper inflection (*Ha-Riqma*, 226–7). Many long and short tense forms were chosen to fit the meter (imperfect forms ending in *וּ*, e.g., *וְרִיבֹנוּ* for *וְרִיבֵנוּ*, were very useful) and rare words became common because they could provide iambs. *לִמְעַן* (from Neh. 6:13) or *בִּיעַן* (which occurs only once in the Bible, in the combination *לִמְעַן בִּיעַן*) were regularly used in place of *יַעַן*. The letter *he* with a *šewa* at the beginning of a word for emphasis (*הִנֵּי*, "indeed"; *הִנֵּי לִי*, "indeed to me") fitted the meter and was grammatically acceptable (Ibn Janah, *Ha-Riqma*, 68: "he to establish or verify a fact").

"Pure" language is, above all, grammatically accurate, and Spanish Hebrew poetry, especially secular poetry, is characterized by the poet's strict adherence to the rules of grammar (an approach which, as has been pointed out above, begins with Saadiah Gaon). In his *Sefer ha-Riqma* Ibn Janah notes linguistic usages of the poets and affirms that a poet should not be blamed for linguistic deviations necessitated by the requirements of poetic forms (pp. 226–7 and p. 275); it even happened that poems were corrected by their readers according to the rules of grammar (*Ha-Riqma*, p. 275). In his book *Širat Yisra'el*, Moses Ibn Ezra teaches the art of writing poetry. Matters of grammar, which "add salt to the food," are explained first, before any discussion of decorative figures, and the poet is told which grammar books are worthy of study before he is referred to any books on prosody (p. 100). Poets who "did not follow the grammarians" are condemned (p. 65) see also Al-Ḥarizi in *Taḥkemoni* ch. 18). The ideal form of poetic language is given full expression in *Širat Yisra'el* from which the above are quotations. Essentially it is a matter of adherence to all the rules of the grammar of biblical Hebrew, with no innovations in form due to analogy, since "the language must be imitated, but without creating new words" (147). Verbs must not be used except in the *binyanim* in which they occur in the Bible (148). The given form of a word must not be changed. Care must be taken not to turn masculine into feminine or singular into plural, or vice versa. However, according to his system it is permissible to create new forms in the infinitive, *קָטַל* (149), and it follows from the general trend of his remarks (though he does not say so explicitly) that a verb could be inflected in all the forms of the given *binyan*: short

and long tense forms, and *hip'il* on the model of *יְהִינִי*, which was convenient for iambic meter. The ban on analogical word formation is a reaction against the copious use of such forms by the liturgical poets. (A similar opinion to Moses Ibn Ezra's can be seen in Abraham Ibn Ezra's *Zahut*, 26, with reference to the ban on analogy for nouns, by contrast with verbs and in the replies of Dunash to Saadiah Gaon, no. 95). However, there was not a single poet who abstained completely from morphological innovation, and even Moses Ibn Ezra allowed himself a few new forms, as he himself admitted (p. 156–7). In his opinion, his language was tainted with error because of human weakness, and lack of skill in his early poetry.

Moses Ibn Ezra's deviation into analogy are few: *תְּבוּנוֹ* (the Bible has the form *תְּבוּנוֹת*), *עֲלוּמוֹתִי* (for *עֲלוּמִי*), *מַגְדָּנִי* (for *מַגְדָּנוֹתִי*), *מַעֲצָב* (for *מַעֲצָבוֹת* or *עֲצָב* in the Bible), *אֶהָב*, *גָּחַל*, singular forms derived from *אֶהָבִים*, *גָּחָלִי* – though incorrectly since the correct singular forms occurring in the Bible are *אֶהָבָה* and *גָּחַלְתָּ*. Moses Ibn Ezra's purity – *zāḥot* – of biblical language and abstention from morphological innovation are maintained to a fairly similar extent by Judah Halevi and Abraham Ibn Ezra. However in their work there are also exceptions, giving every secular poem a flavor of liturgical language. A further feature the secular lyrics share with the *piyyuṭim* is the use of allusive phrases: *יְחִידָה* (unique) for soul, *צִיר* (messenger) for Moses, *יְקוֹתֵיאל* for Moses, and so on. Considerable use of word derivation is made by Samuel ha-Nagid, who wrote when the language of Spanish poetry was just beginning to take shape (*גִּנּוּעַ אֶקְנָה*, *אֶקְנָה חֲרִיזָה* (“hope”), and innovations in the *binyanim*. Indeed in his own time he was censured for his use of analogical word formation, especially in the creation of nouns (*Širat Yisrael*, 67). Solomon ibn Gabirol also has many new forms not found in the Bible (David Yellin counted 1,500), and though most are found in his sacred works, there are some in his secular poetry: *חֶפְשׁוֹן*, *תַּחֲנִן*, *בְּהִיקָה*, etc. The most serious offense in the eyes of Moses Ibn Ezra was the creation of verbs and adjectives from nouns; no wonder he criticized Solomon ibn Gabirol for such forms as *מִשְׁתַּמֵּה* and *פְּגִינָה* (*Širat Yisrael* 151).

Most violations of the ban on analogy are to be found in the *binyanim*; it is more difficult to avoid using verbs in active and passive conjugations than to refrain from inventing new noun forms. The use of passive conjugations – *pu'al* and *hop'al* – is particularly common in the language of poetry, partly under the influence of Arabic. Various forms of verbal nouns were fashioned – *גִּנּוּעַ*, *בְּהִיקָה*, *חֶפְצוֹן*, – and many participles, active and passive, since this was the only way of creating adjectives (none of the adjectival patterns were productive). Singular forms were derived from plurals to a degree exceeding the limits prescribed by Moses Ibn Ezra (Al-Ḥarizi has *סִנּוּרִים* from *סִנּוּר*, and Ibn Ezra has *פְּלִילִים* from *פְּלִיל* used in the sense of “judge”). Even more frequent are plurals for singular: *אֶהָבִים*, *לְשָׁמִים*, *גְּרָדִים* and *רַפְשִׁים* (plural forms are much used in rhyming). Nevertheless, fundamentally and in comparison to liturgical poetry and to poetry of Saadiah Gaon on the one hand and to Hebrew prose literature on the other,

secular poetry should be regarded as faithful to the given forms of biblical vocabulary. Innovations of language are of course far commoner in religious poetry. Certain of the techniques found in the *piyyuṭim*, anathema to those believers in “pure” language who hearkened to the grammarians, do occur in religious poetry: *קָ* plus perfect tense (in Ibn Khalfon and quite frequently in Solomon ibn *Gabirol) and the use of “shortened perfects” such as *עָט* (for *עָטָה*) and *סָט* (for *סָטָה*) in Solomon ibn Gabirol.

Moses Ibn Ezra believed that analogical innovation marred the purity of biblical Hebrew, but sparing use of mishnaic Hebrew did no harm: “If we avail ourselves sometimes of the language of the Mishnah, this is acceptable, since its words are pure Hebrew” (p. 59). The language of secular poetry, unlike sacred poetry is free of forms typical of the *piyyuṭim*. Not only literary motives and content-words from the Mishnah are used, *אֶסּוּר*, *תְּנַאי מִדְּרַשׁ* etc., – but also form-words such as *צָרִיד*, *פָּרַט ל־*, *כָּאֵן*. The word *כָּאֵלּוּ* is popular, and the structure *מִלְּקַבְדִּים מִלְּסַפֵּר* (*yaday kebedim mi-lesapper* – Judah Halevi) is quite common. *Binyan nitpa'al* appears sporadically (Abraham Ibn Ezra *niṭrape'ta*), and not because of acrostic composition; Moses Ibn Ezra writes *יִשְׁתַּבַּח* in place of the biblical *יִהְיֶה*. Samuel Ha-Nagid, a great talmudic scholar, especially introduced Mishnaic-Hebrew usage. At the end of the period, from the 13th century onwards, the adherence to biblical Hebrew weakened; Meshullam di Farra, for example, has more usages from the Midrash and even from the languages of his time, *סְפִירָה* from the kabbalists, *בְּהִמָּה*, etc. It should be recalled that it was not frequency and provenance of a word which determined its value. Not merely were rare words acceptable in poetry, but a word that occurred only once or twice in the Bible and regularly in the Mishnah was nevertheless regarded as biblical; it was used as commonly as a biblical word, and not sparingly like the mishnaic vocabulary. The alternation between *שָׁ* and *אָשַׁר* is thus between two biblical words, and words of the *קְטִילָה* pattern (very common in the poetry of Samuel ha-Nagid for example), though regarded by present-day linguistic research as typically mishnaic, are treated as biblical on the strength of *אֶכֶלָה*, *חֲנִינָה*, and other biblical examples.

Despite the restraints on analogy, there were ways of diversifying the vocabulary; any *binyan* could be used in the long forms (*לְכַפְּרָה*, *יְרִיבוֹן*) and in the short forms (*יְתַעַל*, *תִּשְׁו*) in exact conformity with the conventions for adding or subtracting letters found in the Bible. In consequence, and by contrast with the language of liturgical poetry, forms like *עָט* for *עָטָה* and *מָחָה* for *מָחָהָה* are scarcely found in Spanish poetry. The free use of lengthened and contracted imperfect forms, which are useful for rhyming and scansion, derives from the writer's belief that such changes of form, unlike changes of *binyan*, had no effect upon the meaning. Medieval grammarians did not interpret the lengthened imperfect as cohortative, or the shortened imperfect as jussive (see Ibn Janah, *Ha-Riqma* p. 96). Hence the license to use such forms freely accorded with the grammatical theory of the period. And there was similar freedom to meet the stylistic demands of poetry by using the *waw*

conversive, pausal forms, possessive suffixes on the model of *הִפְּרִיד*, *הִכְרִין*, and the imperfect *hip'il* forms like *הִפְּרִיד* (even Moses Ibn Ezra, though not to excess). The restrictions on analogy reduced the abundance of forms, but the language of secular poetry is rich in means of expression, since the poets gave the biblical vocabulary a wealth of meanings. The formal, grammatical features of a biblical word were binding, but not the semantic. (Once the tri-consonantal form of the root was fully established, changes in the interpretation of a word – as revealed by the dictionaries – exceed changes in the formal analysis of root and declension – as revealed in the grammar books.) Abraham Ibn Ezra and Moses Ibn Ezra, for example, insisted on the correct use of a word, in accordance with its meaning in context, and were aware that a word might have different meanings, related and quite unrelated.

The poets were well aware that a particular word had been interpreted in different ways by the lexicographers, the commentators, and the translators, and this enabled them to choose whichever meanings they required for their poetry. They used duality of meaning to rhyme a word with itself, (צִמּוּד שִׁלָּם). *Al-Ḥarizi does this in *Ha-ʿAnaq* and Moses Ibn Ezra in his poem *Ha-ʿAnaq*, also known as *Taršish*. The latter rhymes אֵיד (“misfortune”) with אֵד (“mist”), and צִיר (“pain”) with צִיר (“messenger”) and צִיר (“door”). Judah Halevi writes דִּלְקוֹנִי אֶהְבֵּיד וְאַחֲרָיִךְ דִּלְקָתִי (“my love inflamed me and I pursued thee”), using דִּלְק in two different senses. אֶגְמוֹן (Isa. 9:30) is used by Al-Ḥarizi with the meaning “fortress” (as interpreted by *Ibn Janah) and by Samuel ha-Nagid with the meaning “branch” (as translated by Saadiah Gaon). Many words may be interpreted with the aid of the medieval dictionaries, and these interpretations are supported by the biblical commentators and the translators. Moses Ibn Ezra combines שָׁנָה (“placed”) with שָׁנָה (“straightened”) and שָׁנָה (“lied-deceived”), in accordance with Ibn Janah’s interpretation of the word *yešawwe* in Hosea 10:1 as “will lie.” For Solomon ibn Gabirol *qol ha-tor* is “the voice of salvation,” as in the translation of Targum Jonathan. Moses Ibn Ezra, Samuel ha-Nagid, Al-Ḥarizi and others used the word אֶשֶׁשֶׁה with the meaning “chalice,” an interpretation given to this biblical word by a few commentators. Moreover, the poets could add meanings at their own discretion, as their poetic talents dictated. Since the range of meanings was quite open, the influence of Arabic on poetic language, though on the whole restricted, was felt mainly in the meanings of existing words and not in the creation of new ones.

Influence of Arabic on the Language of Secular Poetry

Whereas the Hebrew of scientific works was deeply influenced by Arabic, the language of poetry was not greatly affected by Arabic other than in the meanings of words and the frequency of rare words. Some words took over the functions of their Arabic cognates but, in addition to the Arabic usage, a source could usually be found for this new meaning in the Bible, sanction was given by the grammarians, and further incentive for the use was provided by the demands of scansion: ל

is used to mean “because,” as in Arabic, and as found by Ibn Janah in the Bible (*Ha-Riqma* 55:13), ואִם to mean “nevertheless,” ostensibly like the Arabic *wa’in* but actually found in the Bible (Num. 36:4; Jer. 5:4).

The process of loan-translation, which so enriched the technical vocabulary of Hebrew in the Middle Ages was restricted in poetic language to literary symbols (in literature these are similar to technical terms): עֹפֶר (“doe”), צִבִּי (“deer”) for “beloved” – *ḡaṣal* in Arabic; זֶמֶן (“time”), יָמִים (“days”) for “hostile fate” – *dahr*, *zamān* in Arabic; גַּן (“garden”) for “paradise,” Arabic *ḡanna*; *perud* for “a parting of lovers” – Arabic *tafriqa*, contrasting with *perida*, which expressed the separation of death; מוֹסָר *musar* (“right conduct”) for “erudition” – Arabic *adāb* (as in Saadiah Gaon’s translation to Prov. 1:2); the expression *aḥi musar* derives from Arabic, and means “a learned man.” *Midbar* (“desert”) for “graveyard,” and a few other expressions are reminiscences of similar Hebrew figures of speech to be found in the Bible or the Midrashim. Sometimes a word acquires a new meaning from the range of meanings carried by its Arabic cognate; even in these cases there is usually a biblical source, with Arabic influencing the preference for a particular usage and turning rare expressions into common ones: שָׁב meaning “became” (Ar. *ʿada*) – וְשִׁנְהָה אֶהְבֵּה (“and love turned to hate”; Al-Ḥarizi). The source of this usage is Isaiah 29:17. עַד for “even” (Ar. *hattā*) אֶבְי אֶבְי אֶבְי אֶבְי אֶבְי אֶבְי “they betrayed me, even my father and my mother” – Moses Ibn Ezra, with authority for the usage in Judg. 4:16; מַעֲנָה for “meaning” (Ar. *maʿnā* as in the Targum version of Prov. 1:1); עַם for “people” (Ar. *qawm*) – as in Judges 9:36 – אָהַב for “want” (Ar. *ahabba*).

Words acquire the meaning of their phonetic (and sometimes etymological) counterparts, even when there is basically no identity of meaning. אָבָל, in addition to its usual meaning of “but,” often signifies “and even more,” as Ar. *bal* and authority can be found in Genesis 17:19. The usual synonym for אָבָל, i.e., אֵוִלָּם also acquired the same meaning: כּוֹכְבֵּי צִצִּים וְאוֹלָם בְּסִתֵּי פָרְחוּ “his stars were flowers, moreover, in winter they bloomed” (Solomon ibn Gabirol). פָּלָךְ is regularly used to mean “the wheel of heaven” (Ar. *falak*), גִּיל is “generation” (Ar. *ḡ’il*), יַעַד means “promise” (Ar. *waʿda*), שָׁם means “afterward” (Ar. *thumma*). שׁוֹעֵר for Shem Tov *Falaquera means “poet”; Ar. *šaʿir*, not the usual medieval interpretations for שׁוֹעֵר in the Bible. יָרַח בְּהָלוֹ (Al-Ḥarizi) is “a new moon” – Arabic *hilāl*. *Iggeret haqura* (Samuel ha-Nagid) is a “despised letter” – Arabic *haqira*. Whereas דָּפוּק means “hasten” in the poetry of Khalfon, in the language of Samuel ha-Nagid and Judah Halevi the root דָּפַק means “flow” (At. *dafaqa*) and is used as in Arabic figures of speech to describe the flow of tears. הִשָּׁק is frequently used as love due to its similarity to Arabic *ašāqa*; נֶעְמָה is “an ostrich” (Arab. *naʿāma*), מְמוּלָּח is “beautiful” (Ar. *malih*), and רִכְבַּ אֲנִיּוֹת (“traveled on a ship”) is also coined after an Arabic expression and הֵנָּה for “here” (Ar. *hunā*).

In translations the prepositions which follow a verb are much influenced by the source language, especially if it is a spoken tongue (see below on the language of the translations).

In the “pure” Hebrew of secular poetry, however, the prescriptions of the grammarians were preserved and the usage of the Bible was followed for most prepositions. Arabic influence explains *נָסַח בִּי* for “moved me” (Judah Halevi), *נָסַח בִּי* for “transported,” *עָבַר בִּי* “transferred” (Moses Ibn Ezra); in Biblical Hebrew, however, one can find quite similar usages (*נָסַח בְּכָרִים*, *נָסַח בְּכָרִים*). Solomon ibn Gabirol wrote *וְאַתְּמָה מְשַׁלְמָה* for “surprised at,” apparently as in Arabic *taʿaḡaba min* and was criticized for it by Moses Ibn Ezra (*Širat Yisrael* 154). There are also characteristic features of poetic language which have no clear links with Arabic: *טוֹר* for “a line of poetry,” *תָּבַל* for “the world below,” *פֶּגֶר* for “a body,” not a corpse. Features of medieval Hebrew which are common in the language of medieval translations are found only sparingly in prose: nouns ending in *וּת* which were regularly masculine in prose, are treated on a few occasions as masculine in poetry: *דְּמוּת נִמְשַׁל* (Judah Halevi) *הָיָה פְתִייוֹת* (Al-Ḥarizi) *לְבָבוֹת גְּדוּלוֹת* (Al-Ḥarizi) – this phenomenon is explained below in the section on the translations.

ORIGINAL PROSE WORKS AND TRANSLATIONS

Those poets who disparaged the writers of Arabic as “guarding the vineyards of others” themselves wrote scientific works in Arabic – on philosophy, *halakhah*, science, poetics, geography, etc. They include Saadia Gaon, Ibn Gabirol, Judah Halevi, Moses Ibn Ezra and Al-Ḥarizi. Ḥayyuj, Ibn Janah and others even wrote studies of Hebrew grammar in Arabic.

Just as various factors combined to produce a secular poetry in Hebrew, and in biblical Hebrew at that, so the writing of prose and the kind of Hebrew used for translations and original works were interconnected. The Arabs wrote prose in Middle Arabic, with none of the ideal “purity” of the language of the Koran reserved for poetry. And the Jews knew how to write this kind of Arabic (by contrast with the language of the Koran, which required special study). For prose writings they had hardly any linguistic tools to hand, unlike the language of sacred verse which provided a beginning for the writing of secular verse. There was the mishnaic tradition of prose writings on *halakhah* but Arabic had taken over the function of talmudic Aramaic, and was judged appropriate for writings on *halakhah*, especially where everyday matters were concerned. Since there was no need to set up a form of Hebrew which should rival the unrhymed Arabic of scientific writings in beauty they could write either in Arabic or in a different Hebrew from that of poetry, with no obligation to observe the rules of “purity” described above. The proportion of mishnaic Hebrew and biblical Hebrew varies from writer to writer. Abraham Ibn Ezra and Abraham b. Ḥiyya (d. c. 1136) both wrote original Hebrew. The former – a grammarian, poet, and biblical commentator – tended to write a biblical Hebrew and preferred forms like *לֹא יָקָא* to *אֵין...אֵלָא* and *כָּל שֶׁכֵּן* and so on; the latter used many talmudic expressions: *אֲנִי גִרָא*, *לְהִלְכִי*, *סְפָקָא*, *כְּדָא*. The language of prose is mixed, though the writers could write a more biblical Hebrew close to the style of the *maqāma*, when they chose to, and this applies not only to the poetry of the translators – Abraham Ibn

Ezra, Al-Ḥarizi, Ibn Ḥasdai but to passages of rhymed prose interspersed among the testamentary injunctions of Judah ibn *Tibbon to his son or in the letters of Abraham son of Maimonides etc. In his introduction to the translation of *Ḥobot ha-Leḇaḇot* (“Duties of the Hearts”) Judah ibn Tibbon explains that he used biblical or mishnaic Hebrew, “whichever seemed closer, and as occurred to me at the time of translation.” (It was, for example, convenient for him to translate *min haythu* by the biblical word *בְּאֲשֶׁר* which is close to it, but the expression *lā illā* becomes mishnaic *לֹא אֵלָא*.) In its syntax the language of prose is close to mishnaic Hebrew – there are no conversions of tense, no long or short verb forms – but the repertoire of conjunctions is considerably mixed (*אֲףִי עַל פִּי שֶׁ* – *אֲףִי עַל פִּי שֶׁ*, *לְמַעַן*, *טָרָם*, *כִּיּוֹן שֶׁ*, *לְפִי שֶׁ*, etc.).

The language of the hundreds of translations carried out from the 11th to the 15th century, and the language of original works written in Hebrew in the style of the translations (e.g., the works of Albo, Crescas, and Levi b. Gershon) is sometimes called Tibbonian Hebrew, after the five generations of Ibn Tibbons who translated into Hebrew innumerable books written in Arabic by Jews and Arabs. Samuel ibn Tibbon called his father Judah “the father of translators,” though there had been earlier translations for almost a hundred years. The “translatorese” in original writing derives from the general influence of Arabic, from imitations of language patterns created by the translators, and from the strong attraction of Arabic literature which, though not translated literally, was summarized, with a flavor of the original remaining in the summary. Of course, in kabbalistic literature in original Hebrew there is no more Arabic than sentence patterns derived from the translators, and some terminology, but these traces of Arabic are clearly discernible, both in Kabbalah and in Maimonides’ *Mishneh Torah*.

Though there are nearly as many styles as there are writers or families of writers, it is possible to give a general description of the language of prose that came under Arabic influence. Since it contains many deviations from the forms described by the medieval Hebrew grammarians, Tibbonian Hebrew was sometimes used as a pejorative term for poor, inelegant Hebrew. But it was not usually the result of deliberate carelessness, or lack of respect for the grammarians. Judah ibn Tibbon in the introductions to his translations of *Ḥobot ha-Leḇaḇot* and *Sefer ha-Riqma*, and his son Samuel in his introduction to his translation of Maimonides’ *Moreh Nebukhim* (“Guide of the Perplexed”) explained the difficulties arising from the tendency of the translator to adhere closely to the source language text (and they both realized that the similarity of the two languages actually strengthened this tendency). Hebrew was inadequate, they thought, to express the full richness of Arabic, and they asked readers to correct mistakes of language.

From the “explanations of strange words” which Samuel ibn Tibbon appended to his translation of the *Guide of the Perplexed*, we learn that after he had completed the translation he changed several Arabic-influenced words to better,

more Hebrew equivalents: *kihun*, a borrowing from the Arabic *kihāna* (though with a Hebrew declension!) was replaced by קִסָּם; the expression עַל דְּעֵתִי modeled on the Arabic *‘alā ra’yī*, even though it can be given biblical authority (Job 10:7), was replaced by כִּפִּי דְּעֵתִי, since the greater frequency of the latter expression gives a more Hebrew flavor to the language. In his testamentary injunction to his son Samuel, Judah ibn Tibbon implored him to preserve “the purity (*ẓahut*) of the language,” and to beware of Arabisms.

As the language of Spanish poetry should be judged by its appropriateness to prosody and poetic style, so the language of prose should be judged by its suitability to translation and for the skill of the writer as a translator. The principal writers who concerned themselves with the problems of translations were Al-Ḥarizi (*Taḥkemoni* ch. 18, and his preface to his translation of Maimonides’ introduction to the Mishnah), Moses Ibn Ezra (*Širat Yisrael* p. 112), Judah and Samuel ibn Tibbon in the introductions quoted, and Abraham b. Ḥasdai in his introduction to his translation of Isaac Israeli’s *Sefer ha-Yesodot*. The last three explained that there were “places which were liable to bring the translator into error,” and the Ibn Tibbons listed the mistakes that were liable to be caused by too close an adherence to the source language text: confusion of masculine and feminine genders, prepositions, meanings of words, etc. They all described the mistakes as stemming from the “translator’s bother.” “Translatorese” is evident even in the *Maḥberot Iti’el* which Al-Ḥarizi translated from the *maqāmāt* of Al-Ḥariri. Despite their poetic style, with biblical interpolations, Arabic influence is more noticeable in them than in *Taḥkemoni*, which he wrote in original Hebrew. The latter has also more Arabic usages than his other poetry, since even though not actually a translation it is based on Arab sources.

For a full understanding of the language of prose, the degree of adherence to biblical and mishnaic Hebrew, the scope of Arab influence in all its aspects, and the particular Arabic patterns which affected the Hebrew, it is necessary to classify all the features of the language, distinguishing those which were deliberate innovations (mainly terminology) and those which were accidental, caused by too close an adherence to the source. There are some features which are hardly found outside translations, e.g., a singular verb preceding a plural subject (excluding the verb הָיָה, which was quite commonly found in the singular before a plural). Samuel ibn Tibbon tried to avoid this Arab grammatical rule of concord, as he explains in the introduction to his translation of *Moreh Nebukhim*. Features of common occurrence include -ל to denote cause and פָּשׁ in the sense of “become.” The Hebrew language of the beginning of the period, before it became a language of translation, can be judged as a separate entity, capable of influencing those who were faithful to it in their writings (e.g., Abraham Ibn Ezra and Abraham bar Ḥiyya), by contrast with the source language which had all the tools of expression for translation ready to hand. It is worth examining the language of those who did not know Arabic and wrote in the style of the translators, and the language of those who did know Arabic but who did

not draw much upon Arabic cultural sources for content, e.g., the kabbalists and writers on *halakhah*.

It is not surprising that Al-Ḥarizi, who wrote in the first chapter of *Taḥkemoni* that Hebrew “is narrow but may turn broad to us, short but will suffice for all of us,” strove to enrich it from its own sources, avoiding Arab loan-words. But Judah ibn Tibbon, who felt that “Hebrew is insufficient for all purposes of speech” (in the introduction to his translations of *Ḥobot ha-Leḇabot*), since biblical and mishnaic Hebrew did not contain the wherewithal for handling new topics, took over many features of Arabic, a richer language in his eyes. However, though it is customary to describe the language of Al-Ḥarizi as simple, correct, elegant, and more biblical (Baneth, Mirsky), it is also full of all kinds of features showing Arabic influence, though not to excess. On the other hand, the Ibn Tibbons also used many specifically Hebrew expressions, out of opposition to Arabic, sometimes consistently and sometimes replacing expressions that showed Arabic influence.

Abraham Ibn Ezra criticized the language of the liturgical poets (in his commentary on Eccles. 5:1) but in the self-same critical passage he wrote that Kallir, as it were, “described the rose on fear,” תָּאֵר אֶת הַשּׁוֹשַׁנָּה בְּאֵימָה (as in Ar. *waṣafa bi*) and that he was “surprised from him” תָּמָה מִמֶּנּוּ (Ar. *ta’aḡab minhu*) and that he fled off the passage, בָּרַח מִן הַפָּסוּק (Ar. *haraba min*). None of these traces of Arabic are to be found in the poetry of Abraham Ibn Ezra.

Notwithstanding his decision to write a good Hebrew, Judah ibn Tibbon made a rule of preferring to impart the idea with precision rather than “use as good a style as he would prefer” (introduction to *Ḥovot ha-Levavot*). This method proved its worth; his translation of *Ḥobot ha-Leḇabot* superseded that of Joseph Kimḥi, which was more grammatical but less accurate and his son’s translation of the *Guide of the Perplexed* replaced that of Al-Ḥarizi, which aimed at a greater beauty of language at the expense of accuracy.

The Components of Arabic-Influenced Hebrew

LEXICON. (a) With all the abundance of innovation and wealth of terminology that accompanied the new ideas, the number of words borrowed with their original form and usage is extremely small; most of the borrowings take the form of loan-translations. Most of the terms in philosophic works were translated into Hebrew (one of the Arabic loans is מִשְׁאַיִם for “peripatetic,” though Al-Ḥarizi translates it הֶהוּלָלִים). The Arabs themselves translated almost all the Latin and Greek terms into Arabic. It was actually in the natural sciences and allied subjects that more words were borrowed. This is immediately apparent if we compare Moses ibn Tibbon’s translation of *Millot ha-Higgayon* (“Words of Logic”) where he translated all the technical terms, with his translation of Maimonides’ *Hanhagat ha-Beri’ut* (“Management of Health”) where foreign words like אֶשְׁרוּב (“syrup”), names of plants, and foods remain untranslated, as they do in other translations of books on medicine in the Middle Ages. The borrowed words are all in forms and patterns which can easily be adapted into He-

brew and thus absorbed in the language and inflected just like any other word: לַחֵן (“melody”), קָטֶר (“caliber”), קֶטֶב (“pole”), מֶרְכֶּז (“center”), אֹפֶק (“horizon”), הֶגְדָּה (“geometry”), תַּאֲרִיךְ (“history”), עֲלָה (“disease”), אֶקְלִים (“region”), חֶקֶן (“enema”), עֶצֶל (“muscle”). Some of them came into general use and became thoroughly Hebraized – תַּאֲרִיךְ – while others were in limited use like עֶצֶל in the works of Nathan ha-Me’ati (“the Italian Tibbon”), or נֹעַ (“type”), which was rare, and used by Nahum ha-Ma’arabi in the translation of *Iggeret Teiman* in place of the more usual סוּג and מִין.

Samuel ibn Tibbon regarded borrowings as the major class of “strange words” and preferred native Hebrew words, changing כֶּהֱוֹן to קֶסֶם, and giving to גֶּשֶׁם, in the sense of “body,” biblical authority – Isaiah 44:14 – though this is not the usual meaning attributed to this verse in the medieval dictionaries. Al-Ḥarizi who as we have seen wished to widen Hebrew from within, suggested נִקְדָּה and עֲמוּד instead of מֶרְכֶּז instead of קֶטֶב, and חֶמֶר רֶאשׁוֹן instead of קֶטֶב. However, in his explanation of foreign words he also includes קֶטֶב and קֶטֶר. He uses two terms for one thing and this suggests that he was unaware of the importance of preserving uniformity of terminology. Other translators also tried to find Hebrew alternatives for loan-words: Nahum ha-Ma’arabi used עֲמוּד in place of קֶטֶב, whilst Abraham Ibn Ezra prefers סֶדֶן. Abraham b. Ḥiyya who composed original scientific works before the language of translation had become fixed, quoted Arabic words as such, e.g., “the center of the circle, which in Arabic is called *markaz*.” He uses the term תַּשְׁבֵּרֶת (“geometry,” “plane,” a loan-translation of Ar. *taksīr*) and prefers בְּרִיחַ to קֶטֶר, though occasionally he uses קֶטֶב.

(b) Words are sometimes introduced that are similar in sound to their Arabic counterparts, and generally any similarity in meaning or etymological connection is either lacking or very slight. “Grammatical inflection” (in Ar. *taṣrīf*) is translated by Dunash צִרְוִף, though נִטְיָה would be more appropriate as a loan-translation (see (c) below).

Judah ibn Tibbon calls apical consonants אֲוִתִּיּוֹת הַדְּלִיקָה after al-Mudālaqa, which should etymologically be הַזְּלִיקָה. The waw consecutive is called וִוִּי עוֹטֶפֶת, from the Arabic *ʾaṭafa*, מְחוּל means “absurd,” like *muhāl*, פֶּרֶק means “difference” (Ar. *farq*), גֶּדֶר means the mathematical “to the fourth power” (Ar. *ḡadr*), לָכֵן is used with the meaning “but” (Ar. *lākin*) and נֶצֶב is both “accusative case” and the vowel “a” (Ar. *naṣb*). Sometimes a biblical word which bears a phonetic resemblance to an Arabic word is used as a translation and the new meaning is given authority by biblical commentary, which was also influenced by the comparison with Arabic. חִידָה is translated as “talk” (Ar. *ḥadīth*), the translation used by Saadiah Gaon for this word in Proverbs 6:16 and the explanation given by Ibn Janaḥ in his book of roots, under חוּד. The Arabic *urūq* is sometimes translated גְּדִים דּוֹקֵקִים, i.e., arteries, and a biblical parallel is found in the word עֲרֵקַי (*oreqay*; Job 30:17), which most medieval commentators interpreted in accordance with the Arabic. It should be pointed out that this kind of innovation is very close to borrowing; the borrowed word, however,

is taken over with a change of form to a Hebrew declension, or is attached to an existing Hebrew word.

(c) The most prolific source of word creation was loan-translation. Among the new words created were אֵיכוֹת (Ar. *kayfiyya*), מַהוּת (Ar. *mahiyya*), כְּמוּת (Ar. *kamiyya*), and many other verbal nouns with suffix -וֹת, which was used to express abstractions. However, Arabic words were mainly translated by existing Hebrew words. Most of the deliberate innovations used by translators for the enrichment of the means of expression and for accuracy, are in the realm of terminology: בְּנִיָּן (“conjugation”; Ar. *mabniyya*), מִשְׁקָל (“declension”; Ar. *wazn*), עֲשִׂית הַלָּשׁוֹן (“language usage”) and שְׁמוֹשׁ הַלָּשׁוֹן (“language manipulation”; Ar. *istiṣmāl*), גִּזֵּר, also קֶצֶב, חֶצֶב, קֶצֶב all meaning “inflect” (Ar. *iṣṭaqqā*), מְלִיִּים נִדְפּוֹת (“synonyms”; *mutarādīfāt*), מְלִיִּים מִשְׁתַּתְּפוֹת (“homonyms”; Ar. *muṣṭaraka*), מְקוֹר (“infinitive”; Ar. *maṣdar*), מְקָרָה (“Abstract noun”; Ar. *ḥadat*), נִשְׁוֹא (“predicate” of a verbal sentence; Ar. *maḥmul*), הַגְדָּה (“predicate” of a nominal sentence; Ar. *ḥabar*), בְּחִינָה (“aspect”; Ar. *iṭbār*), מְפַשֵּׁט (“abstract”; Ar. *muḡarrad*), בְּכַח (“potential”) and מַצְפּוֹן (“conscience”; Ar. *ḍamir*), חֲבוּר (“a book”; Ar. *taʿlīf*), הַתְחַלָּה (“principle”; Ar. *mabdaʿ*), הֶכָּה (“duplicate”; Ar. *ḍaraba*). There are also loan-translations which did not provide any technical terminology: בְּשִׁלוּחַ (“absolutely”; Ar. *bi-ṭlāq*), חֶבֶר עַל (“agreed”; Ar. *uḡmīʿa ʿalā*), -הַסְכִּים לִּי, -נֶאוֹת לִי (“matched,” “fit”; Ar. *wāfaqa*), בְּקֶצֶת הַיָּמִים (“one day,” adv., Ar. *fi baʿḍi al-ayyām*). Since every loan-translation that makes use of an existing word also involves extending the meaning of that word in accordance with the range of meanings of its Arabic counterpart, it is difficult to distinguish between loan-translation and semantic borrowing. Perhaps the fundamental difference between them is the degree of intention. When the motivation is the need to translate an existing Arabic technical term (it is mainly technical vocabulary that is at issue, though non-technical expressions also occur) we speak of loan-translation; when it is the unintended effect of adherence to the Arabic text that leads to certain lexical associations, we speak of semantic borrowing.

(d) The following are examples of extension of meaning by semantic borrowing: עֲנִיָּן (“meaning”; Ar. *maʿnā*), לֵקַח (“begin”; Ar. *aḥaḍa*), אֶגְרָת (“essay”; Ar. *risāla*), בְּאוּר (“proof,” “lecture”; Ar. *bayān*), גּוֹבֵר (“common”; Ar. *ḡālib*), רְמֹז (“advise”; Ar. *iṣāra*), דִּין (“religion”; Ar. *dīn*), כְּמוֹ (“approximately”; Ar. *naḥwa*), רוֹצֶה (“mean”; as in רוֹצֶה לומר (“mean to say; Ar. *yurid*), בַּחֶק (“concerning”; Ar. *bi ḥaqq*), אֶצְלִי (“in my opinion”; Ar. *ʿindi*). Sometimes an extension of meaning derives wholly or mainly from a similarity in sound, with or without any etymological connection: דִּיחַ acquires the meaning “deny” from Arabic *zayyafa*; דִּיחַ (“decorate”), חַג (“pilgrimage”), things which are מְפִיקִים are “suitable” (Ar. *muwāfiq*).

(e) A feeling for the Arabic language governed the choice of particular Hebrew words, and affected the frequency of words whose use in Hebrew was restricted; this gives a distinctly Arabic flavor to the language. רָאָה (“see”) means “think,” a use found in mishnaic Hebrew, אָמַר (“say”) means “order,” חֶשֶׁק (“love”), חוּשׁ (“feeling”) and not רָגַשׁ (because of Ar.

ḥassa), חֲלוּף ("difference"; Ar. *Iktilāf*) and not שְׁנִי or הַבְּדֵל (accident) more common than מְקַרְה or מְאֻרֶּע (Arab. *ḥadat*). What is a borrowing with one writer may be recognized as a legitimate Hebrew usage by another. Samuel ibn Tibbon, for example, quotes from the introduction to Maimonides' *Sefer ha-Madda* the expression לִידַע שֵׁשׁ שָׁמ מְצוּי רָאשׁוֹן to know that there is a God – as clear proof of Arabic usage in the original Hebrew writings of Maimonides, and understandable therefore in a translated text (Introduction to his translation *Moreh Nebukhim* – this is a usage of type (b) as analyzed above). Yet since there are rare examples in mishnaic Hebrew of שֵׁשׁ used to mean "in reality" and not as a locative, it may well be that Maimonides had found this Hebrew source in rabbinic literature for himself. Samuel Ibn Tibbon's father-in-law, Jacob Anatoli, thought that Maimonides found a source for this non-locative use of שֵׁשׁ in Ezekiel (in his book *Mal-mad ha-Talmidim* p. 113a) as illustrated by S. Abramson, which would make it an example of class (e). Expressions of the form תְּכִלִּית הַשְּׁלֵמוֹת ("the peak of perfection") a literal translation of Arabic *Gāyat al-Kimāl* – were widely used, and a source was found for them in Psalms 139:22 – תְּכִלִּית שְׁנֵאָה. Typical words include זוּלַת (as a translation for *gayr* and *duna* in their various meanings) and בְּלִתִּי (to translate *gayr* and *adam*). Samuel ibn Tibbon acknowledged that his innovations led to new homonymy when he himself added new meanings to existing words (the fifth class of "strange words").

The following are the new kinds of homonymy created:

1. In addition to its usual meaning in the language, the word received a new technical sense: שֶׁבֶר is a term for the Hebrew vowel *hireq*; and, not particularly technical: *hida* means "talk" (Ar. *ḥadaṭ*, see above) but also retained the meaning of the *hidoṭ* of the Queen of Sheba, and thus also signifies "allegory" in kabbalistic literature and Maimonides' *Mishneh Torah*. Sometimes homonymy is transferred from Arabic to Hebrew; *bāb* in Arabic means "rule," "chapter of a book," and "explanation," and all these meanings were taken over by the Hebrew שֶׁעַר. Arabic *ḥarf* means both "letter of the alphabet" and "particle," and both meanings were transferred to the Hebrew אוֹת הַעֲתִיק. אוֹת translates *naqala* both in the meaning "translate" and also "hand down (by tradition)," though "tradition" is just as commonly rendered by קַבְלָה. 2. A Hebrew homonym is paralleled by different Arabic words, in different *binyanim* or patterns: מֵאֵמָר is both "essay" (Ar. *maqāla*) and "category" (Ar. *maqūla*); הֵשִׁיג means both "add," a loan-translation of Arabic *alḥaqa* (fourth *binyan*), and "appeal," like the Arabic verb *lāḥaqa ʿalā* (third *binyan*). 3. The Hebrew homonyms translate two different Arabic words: עוֹבֵר means "possible" – (Ar. *ḡaʿiz*) and "past" – (Ar. *māḍi*); מְדַבֵּר is "logical" – (Ar. *nāṭiq* – "believer" in the philosophy of *al-kalām*) and also the grammatical term "first person," – (Ar. *mutakallim*). הֵשִׁיג means "understood" (Ar. *adraka*) and "added" (Ar. *alḥaqa*). הַעֲתִיקָה is "translation" (Ar. *naql*), one of the types of metaphor (Ar. *maḡāz*), and "transmigration of souls" (Ar. *tanāsuh*). 4. The homonymy derives from the falling together of a loan-translation and a phonetic equivalent; גִּדְרִי is both "def-

inition," loan-translation of *ḥadd*, and "to the fourth power" Arabic *ḡadr*. As regards the principles whereby the vocabulary could be expanded, there are equivalences between the language of scientific prose and the language of Spanish poetry, though the degree of expansion in prose is far greater, due to the needs of writing on new topics rich in new terms and concepts. The case is different with morphology and syntax, where derivations in general and those derived from Arabic in particular abound in prose yet are hardly found at all in poetry. Since the language of prose was not subject to the principles of *ḡaḥut* ("purity") which mainly affect the formal aspects of grammar, and since its counterpart was an intermediate variety of Arabic, which had a different degree of adherence to the strict rules of classical Arabic, it even deviated from the rules of grammar established in the grammatical writings of the period. It was not an elegant language, and its foreign features were conspicuous, but its freedom to innovate helped to fashion it into a precise language of scholarship, capable of expressing abstract, scientific ideas.

The following are the salient features of the language of prose:

NOUN MORPHOLOGY. The use of the suffix morpheme י־ (called in Ar. *nisba*) to turn a noun into an adjective meaning "possessing, related to, having the quality of" was productive, almost automatic: גִּשְׁמִי, שְׁמוּשִׁי, דְּבָרִי; Arabic gave new life to this suffix (found in the Bible), which most frequently occurred as in Arabic without the infixed *nun* after short words or words ending in a vowel: רוּחִי, תוֹרִי, צוּרִי, חוּשִׁי, גּוֹפִי (for גּוֹפְנִי, צוּרְנִי, etc.). This morpheme does not feature in the linguistic innovations of Saadiah Gaon and was rare in poetry, which used participles instead: מְדַבֵּר for דְּבָרִי ("logical"), or phrases like בְּעַל גִּשְׁמִי for גִּשְׁמִי and אֲחֵי מוֹסֵר for מוֹסֵר etc. Moses Ibn Ezra also considered this kind of innovation contrary to analogy (unproductive) for the morphology of "pure" poetic language (*Ṣirat Yisrael*, 151, apropos the derivation of פְּנִינִיָּה from פְּנִינָה, which is "mere cleverness").

In varieties of Hebrew which were closer to mishnaic Hebrew, and more restrained in their enthusiasm for Arabic, this derivation was replaced by the typically mishnaic pattern: שְׁקָרָן e.g., in the writings of Abraham bar Hiyya – שְׁקָרִי ("something containing lies" not "one who lies"), מְעַשִׂי for עֲמָלָן, "practical" (contrasted with שְׁכָלִי "intellectual"), דְּבָרִי for דְּבָרָן ("logical"). The morpheme *ut* creates abstract nouns and can be combined with nouns: נֶצַח נִצְחוֹת "eternity," רֵגִיל רֵגִילוֹת "regularity," גִּשְׁמִיּוֹת "corporeality," and with verbal nouns: הַתְרַשְׁמוּת, הַפְעֲלִיּוֹת, הַתְּכַלְּמוֹת. Sparing use had been made of this device by the liturgical poets (דְּבָאֵי, תְּהִימוֹת), apparently under the influence of the infinitive with the suffixed definite article in Aramaic (אַתְּעֲרוּתָא), but in the language of Saadiah Gaon it is not used at all and it is extremely rare in Spanish poetry. In prose it became indispensable, one of the preferred productive morphemes, even in the prose writings of the poets (Abraham Ibn Ezra uses דְּגִשּׁוֹת and דְּיָקוֹת). In Arabic the suffixed morpheme

-ut was borrowed from Aramaic, and is quite limited in distribution; this is not an example of Arabic influence.

The use of the masculine gender for nouns formed with -ות is characteristic, and though Samuel ibn Tibbon found authority for this in the Bible (אָחוּ בְּשָׁרִי פִלְצוּת “a shudder seized me” in the introduction to his translation of *The Guide for the Perplexed*, quoting Job 21:6) the abundance of these forms in the masculine clearly derives from Arabic: Nouns ending in -ות are masculine in Arabic, and a considerable number of the new words formed in Hebrew with this morpheme derive from Arabic infinitives which are also masculine: גִּשְׁמוֹת (Ar. *taḡsim*), נִצְחוֹת (Ar. *taʿbīd*), הִשְׁתַּדְּלוֹת (Ar. *iḡtihad*), and many more. Use of the masculine gender also spread to those words, few in number, where the suffix corresponds with the feminine abstract noun suffix in Arabic: מְהוּת, אֵיכוֹת כְּמוֹת, though these words were also used in the feminine. Words with the suffix -ית were also used in the masculine and Samuel ibn Tibbon found authority for this usage also in the Bible (וְאַחֲרֵיתֶיךָ יִשְׁגָּא Job 8:7). Sometimes words are used in the grammatical gender of their Arabic counterparts: אֶמֶת is masculine – אֶמֶת גָּמוּר (Arab. *haqq*); דַּעַת is also masculine דַּעַת בְּרוּר (Arab. *ʿalm*). Words used in the feminine include אֵי, טִבְעָה (Ar. *ḡazīra*), כֹּחַ (Ar. *quwwa*), מְנִיָּה (Ar. *āda*), כְּדוּר (Ar. *kurra*), and סְפִירוֹ (Ar. *qisṣa*). They are of course also used in the masculine, in accordance with the tradition of the language, and the proportion of Arabic or Hebrew usages varies with the writer’s talent and grammatical knowledge. In addition to the masculine use of אֶמֶת the form אֶמְתָּה is very common, due to Arabic *ḥaqīqah*. When a masculine plural is formed by adding -ot, attributive adjectives characteristically take the same ending: סוּדוֹת עֲצוּמוֹת, מְקוֹמוֹת יְדוּעוֹת, גְּדוּלוֹת, מְקוֹמוֹת יְדוּעוֹת, סוּדוֹת עֲצוּמוֹת (שְׁמוֹת מְשֻׁתָּפִים). This formal correspondence may have been helped by the rule in Arabic that inanimate plurals take adjectives in the feminine singular. When the translator was faced with *asrār aṣima*, the adjective was drawn towards the feminine, though not feminine singular; since there was no precedent in Hebrew for a structure like “סודות גדולה” such a form was naturally rejected. Middle Arabic had also begun to challenge the rules of congruence in Classical Arabic, and tended toward greater uniformity. Since Arabic had only one form and syntactic usage for what are usually described nowadays as the infinitive (קְטוּל) and the verbal noun (קְטִילָה), both these forms are used interchangeably in the language of prose, e.g., הִרְחַקַת הַגְּשָׁמוֹת וְהַעֲמִיד הָאֲחֻדוֹת, “removal of corporeality and establishment of uniformity.” Arabic *Gāyat al-Taḥaffuz* is translated both תְּכִלִּית הַשְׁמִירָה and תְּכִלִּית הַשְׁמוּר and this is the reason that the use of the infinitive with the definite article is common: הַהֲעֲשׂוֹת, הַהֲעֲצֵל (Saadiyah Gaon also makes no distinction between these forms. The inability of the infinitive to take the definite article begins with Samuel ha-Nagid, and in the language of poetry neither the absolute nor the construct infinitive is used as verbal nouns.) The abundant use of fused construct forms (i.e., without *šel*) can be attributed to the influence of Arabic construct forms, as can the use of the definite article before an adjective in the construct form:

הַחֹזֶק הַלֵּבֵן, הַמְּחִיב הַמְּצִיאוֹת and especially before the comparative הַיּוֹתֵר חֲשׁוֹב. This is the Arabic feature of marking as definite any construct form which is not a noun, the so-called “unreal construct.” The tendency to use two construct forms with a single dependent noun – פּוֹשְׁעֵי וְרָשָׁעֵי יִשְׂרָאֵל (“the evil and wicked of Israel”) – may be due to the influence of Middle Arabic.

VERB. In the introduction to his translation of *Guide of the Perplexed*, Samuel ibn Tibbon acknowledges the tendency of a translator to be drawn towards the קָשָׁר (his term for preposition) used with the verb in Arabic, e.g., *qibbel le-* instead of *qibbel min*. Arabic prepositional usages, infrequent in the language of poetry, are quite common in prose:

מִתְרַעַם מִן (Ar. *taʿāḡaba min*), נִפְלָא מִן (Ar. *ḡaḏaba min*); חָקַר עַל (Ar. *fataṣa ʿan*); מְקִיָּה בִּי (Ar. *ʾahāta bi*), חָסַר אֵל (Ar. *iftaqara ilā*); and so are קָרַב מִן, גִּינָה מִן, לֹא יִתְכַּן מִן, etc.

Sometimes the preposition adds a specific meaning as in Arabic: אָמַר בִּי – הֵאֱמִין “believe in” (Ar. *qāla bi*). Intransitive verbs of motion are made transitive by the “causative *bet*” like in Arabic; this usage is also found in poetry, but to a much greater extent in prose; הִתְגַּלְגַּל בִּי – עָף בִּי (“set flying”), etc.

Judah and Samuel ibn Tibbon were aware of the influence of the Arabic *binyanim* on the Hebrew verb, but apparently did not consider this such a serious defect as the influence of the prepositions; in poetry too the amount of analogical formation and innovation in the verb was greater than in the noun and the particles. The main development was the increase in the use of the *hitpaʿel*, which translated three Arabic *binyanim*: *tafaʿala* (as הִתְחַסַּר, Ar. *tanāqasa*); *tafaʿla* (“transitive verb,” Ar. *mutaʿadd*, הִזְדַּכַּר “remember,” Ar. *tazakkara*, הִסְתַּפֵּק “be in doubt,” Ar. *tašakkaka*); *iftaʿala* (שְׁמוֹת מְשֻׁתָּפִים “homonyms,” Ar. *muštaraḡa*, מִתְחַלְפִים “different,” Ar. *muḥtalifa*, הִסְתַּכַּם “agree,” Ar. *ittafaqa*, מִתְאַחֵר “later, following,” e.g. הִתְאַחֲרִים, Ar. *mutaʿahḡir*).

In Middle Arabic, these *binyanim* had largely supplanted the “internal passives,” hence: הִתְבַּאֵר (Ar. *tabayyana*) instead of בִּאֵר (Ar. *buyyina*), הִתְיַלַּד “was created” (said of rainbow, water, etc., Ar. *tawallada*), etc.

The use of *hitpaʿel* as a passive in place of passives with internal vowel modification is not simply continuation of mishnaic practice, since the Ibn Tibbons also introduced many forms of “internal” passives. The increase in the use of passive conjugations, in prose and in poetry, is attributed to the influence of Arabic. The “internal” passives – *puʿal*, and *nipʿal* – were used mostly in impersonal structures: יִחְיֶיךָ, יִצְחָק, יִזְנֶיךָ, יִזְנֶיךָ, יִצְחָק, יִזְנֶיךָ. New auxiliary verbs were created שָׁב, הָיָה in the sense of “become” (Ar. *āda*, *raḡāʿa*), לֹא זָר, לֹא זָר meaning “keep (doing something)” (Ar. *mā zāla*) and עָשָׂה, “make,” with an objective complement – עָשָׂה הִסְפֵּק בְּרוּר (“make doubt clear, clarify doubt”; Ar. *ḡāla*). Tenses converted by *waw* were almost no longer employed. The modal forms of the verb, jussive and cohortative, were scarcely used in medieval Hebrew prose. In poetry the long and short forms of the imperfect

were used simply as morphological variants, not expressing modal ways as they were understood by Hebrew grammarians to appear in the Bible, without any influence from verbal patterns found in Classical Arabic. The language of prose dispensed with these forms, since it had no need of a multiplicity of forms for embellishment. Middle Arabic, which had lost some verb forms, may also have contributed to the general picture and helped to eliminate long imperfects in פָּ since in North Africa and Spain it was the short forms which were used in the plural. A Past Continuous or a Past Habitual, like the Arabic *kāna yaf'al* occurs: *hava yabo* (a usage also found in Saadia Gaon and in the *maqāmāt* of Al-Ḥarizi). The combination of כָּבֵר and the imperfect is used to express possibility, by analogy with Arabic *qad*; in fact, כָּבֵר as an equivalent for *qad* is increasingly used, both in the language and in grammatical description. Ibn Janah (*Sefer ha-Šorashim*, s.v. כָּבֵר) explained that כָּבֵר was like Arabic *qad*, and expressed "the existence of a thing." By using כָּבֵר as an equivalent of *qad* the following tenses were formed: pluperfect: הָיָה כָּבֵר עָשָׂה; future perfect: יִהְיֶה כָּבֵר עָשָׂה. This pattern is found mainly in the language of translation, but also occurs elsewhere (e.g., in the writings of Crescas, 14th century). However, it had already begun to fade from the grammatical stock of medieval Hebrew a few generations after the end of the period of the translations. But the use of כָּבֵר plus the perfect to signify time and for emphasis כָּבֵר נִתְבָּאֵר, כָּבֵר יִדְעָת, כָּבֵר יָדָע equivalent to the Arabic *qad*, was much more in line with the spirit of the language, and Arabic accounts merely for its widespread distribution. As in Arabic כָּבֵר was placed before the verb, as in mishnaic Hebrew where this usage originates, and not after the verb, as occurred occasionally in mishnaic Hebrew and quite commonly in varieties of Hebrew influenced by languages where the equivalent of כָּבֵר (*schon*, *déjà*) come after the verb. There are, however, examples of כָּבֵר occurring after a verb, mainly when the verb is in a subordinate clause: מָה עָשָׂמְעִי כָּבֵר מִטְעֲנוֹת הָהָבֵר ("... those statements of the companion which I have already heard"; beginning of the *Kuzari*).

SYNTAX. The use of the demonstrative without *he* (the definite article) before a noun with *he* is very common: אלו הדברים, וההאיש. The structure with the demonstrative before the noun and no *he* – אותו האיש, as in mishnaic Hebrew – is preferred to האיש ההוא, the biblical form. Though there are a few examples in the Bible to serve as precedents (Ps. 105), and an equivalent structure in late Aramaic (הדין עלמא), Arabic was certainly the major factor: *hādhā al-walad*, *dhalika al-walad*. This usage is not found at all in the writings of Saadiah Gaon and hardly in poetry, but occurs frequently in the original prose writings of Abraham b. Hiyya, Maimonides, and Al-Ḥarizi. However, there are many places where the Ibn Tibbon used forms like האיש ההם, הדברים ההם in their translations, even when this meant deviating from the word order that confronted them in the Arabic text: *ḍalika al-raḡul*. The use of relative clauses with no conjunction after an indefinite antecedent (מלאכה צריכה נסיון, איש שעין ב- for איש עין ב-) is

מְלֵאכָה שְׁצִירָהּ נִסְיִין) is also the exact counterpart of an Arabic structure (*sifa*). This structure can also be given biblical authority (שְׂרִים זָהָב לָהֶם) but comes in prose much more than in poetry. Elegant translators added the definite article, in places where it did not occur in Arabic, in order to bring the structure closer to the form prevalent in mishnaic Hebrew and to a considerable extent also in biblical Hebrew (compare Aḥiṭub's translation of *Millot ha-Higgayon* with Moses ibn Tibbon's). Moreover, the Ibn Tibbons added quite a few relative clause markers (הַ, אֲשֶׁר, שֶׁ) where none existed in Arabic, and translators like Al-Ḥarizi and Aḥiṭub are not free from asyndetic relative clauses. Such clauses are also found in original texts which were influenced by the language of the translations, e.g., *Beit ha-Beḥira* by Ha-Me'iri, written in Provence at the end of the 13th century.

Relative clauses were also formed, on the modal of the Arabic *na't sababī*, in which the adjective or participle is predicative to a following noun, and agrees with it in number and gender, but preserves an indirect link with the antecedent with which it shares the same category of deixis, definite or indefinite: המדות המספר בהן הבורא ("the qualities (feminine plural) attributed (masculine singular) to the Creator (masculine singular)"). This structure occurs most frequently when the predicate in the relative clause is a passive participle and impersonal: צרך הלשון המעתק אליו (Judah ibn Tibbon's introduction to *Hobot ha-Lebabot*) הדברים המזוהר מהם והמזוהר בהם ("things (masculine plural) warned against (masculine singular) and commanded (masculine singular)" (Moses ibn Tibbon's translation of *Sefer ha-Mizwot*). Also based on Arabic is the common structure with מן...מי, מן...מה (and similar structures with other words replacing מה and מן), where the first part of the sentence functions restrictively: מה שיש אתי: מן הטענות והתשובות (the beginning of Ibn Tibbon's translation of the *Kuzari*; "what I have of claims and answers," i.e., those claims and answers that I have). Similarly מה שעשו לנו המצרים, מעול וחמס, etc. This structure, modeled on Arabic, survived at least until the 18th century. Gershon b. Solomon composed his *Šā'ar ha-Šamayim* in the second half of the 13th century. All scholars are agreed that he did not know Arabic. His book, "a breviary of the wisdom of nature," was based on scientific works translated from Arabic. He picked up this structure, new to Hebrew, from the books he studied and he understood how to use it correctly. He writes for example: חוש הראות לכן הנאות לו ממאכל ומשקה ("the appropriate from food and drink," i.e., those foods and drinks which are appropriate). In the spirit of Arabic are the many object-noun clauses in place of infinitives: נרצה שנדע ("we shall want that we shall know"; instead of נרצה לדעת "we shall want to know"; compare the Arabic *nurīdu an na'rifa*; נרצה שיענישו ("we were ordered that we should punish him") instead of נצטוו לעניש אותו ("we were ordered to punish him"), ראיית גם כן שצחקר חבר, ("I decided to compose...") Subordinate clauses are also common after words such as צריך, etc. and are modeled on Arabic *ʿan* clauses introduced after such verbs e.g., צריך שנתבונן ("it is necessary that

we look”) for אָנוּ צְרִיכִים לִהְיוֹנוֹן (“we must look”; compare the Ar. *yağibu ‘an*).

By contrast, infinitives are frequent in place of subordinate adverbial clauses of time, purpose, reason, and comparison: אַחֲרֵי בִּאֲרִי for “after I had explained” (Ar. *bā‘ad tabayyuni*); לְהִיטוֹ for “because he is” (Ar. *likawnihi*); כְּאָמְרוֹ (“as he says” or “as it says in the text”; Ar. *kaqawlihi*). Under the influence of Arabic the use of אֶת before a direct object diminished and the use of cognate objects increased e.g., תִּמְחַה תְּמִיּהָה, The circumstantial use of participles is common אָמַר הַנְּבִיאַ מִתְחַנֵּן (“the prophet said, imploring”; Ar. *qāla al nabī mutašafī‘an*). The use of the objective complement is also frequent: יִשִּׁים הַסֶּפֶק בְּרוֹר (“he will make the uncertainty clear,” i.e., will clarify it.).

Literal translation produces structures which are the exact image of the original Arabic text: וְהָיְתָה מִי שֶׁמָּצָא זֶה הַדָּעַת i.e., the first who found... (Ar. *awwal man ‘amada ‘alā*). The use of the prefix מִי – for listing details and explanations (called in Ar. the *mīm al-mubayyina*) was transferred from Arabic, when it was not translated by such words as כְּמוֹ, כְּגוֹן (“such as”) which is the usual method. Though not mentioned by grammarians like Ibn Jannah, it is found in untranslated Hebrew, even in thoroughly Hebrew contexts such as Maimonides’ *Mishneh Torah*: כָּל הַבְּרוּאִים מִמְּלֶאךָ וְגַלְגַּל (“all created things, such as, angels...” *Yesodei Torah* 4, 1).

In the Bible the word אָמֵן adds emphasis and by virtue of this usage is employed to translate typically Arabic structures. Due to its phonetic similarity to Arabic *ammā* it is used to emphasize the subject: וְאָמֵן הָרִאשׁוֹנוֹת צְרִיכוֹת בָּאוֹר (“as for the first ones, they need proof”). And because of its phonetic similarity to Arabic *innamā* it can emphasize a following predicate. Other words are also used to translate *ammā* and *innamā* – אֵל, אִם, אִשָּׁר לִי – even by the Ibn Tibbons. Al-Ḥarizi, who to some extent preferred אֵל, very often tried to side-step such structures altogether. However, the use of אָמֵן to emphasize what follows, a structure modeled on Arabic syntax, is very common in works which drew their Arabic inspiration from the translations written in the 13th and 14th centuries: they occur frequently, for example, in the writings of Cordovero, who lived in the 16th century.

Translators who were nearly always led to render the Arabic *lā ilā* by לֹא...אֵל very seldom managed to use לֹא אֵל to translate the Arabic *innamā*. The merits of original, untranslated texts are noteworthy by comparison with the language of the translations. Samuel ibn Tibbon translated the words of Maimonides (*Guide of the Perplexed* 2, 44): הַנְּבוּאָה אִמָּן תִּהְיֶה: (“prophecy will only be in a vision or a dream”; in Ar. the word *innamā* comes after the word for prophecy). But Maimonides himself wrote (*Hilkhot Yesodei Torah* 7, 2) אֵין רוֹאֵין מִן הָרִאשׁוֹת בְּנְבוּאָה אֵלָּא בְּחֻלּוֹם (“no vision of prophecy is seen except in dream...”).

MAIMONIDES

This example from Maimonides of a Hebraic structure, לֹא...אֵל rather than the use of אָמֵן in imitation of an Arabic pattern, is not unique. Asyndetic relative clauses are rare in the

Mishneh Torah, and many of the laws begin after the fashion of mishnaic Hebrew: צוֹרוֹת שֶׁעָשָׂאוּם (“shapes that have been made”), אֶפְרָחִים שֶׁקִּנְיָה בָהֶם (“chicks for whom a nest has been made”), נְבִיאַ שֶׁיַּעֲמִיד לָנוּ (“a prophet who shall represent us”) etc. Subordinate clauses are preferred to infinitives, and particularly worthy of comparison are the many occasions where Maimonides uses כְּמוֹ שֶׁנֶּאֱמַר or כְּעֵינֵן שֶׁנֶּאֱמַר as against כְּאָמְרוֹ, which Moses ibn Tibbon uses in his translation of Maimonides’ *Sefer ha-Mizwot*.

In vocabulary also, the Hebrew of Maimonides tends to be free from Arabic influence. Whereas Samuel ibn Tibbon writes of הַקֹּטֵב הַתּוֹרָה (“the pole of the Law”; in his translation of *Guide of the Perplexed*), in line with the Arabic figure of speech, Maimonides himself wrote עֶמֶד הַחֲכָמוֹת – “the pillar of wisdom” (introduction to *Sefer ha-Madd’a*) – see above on the respective uses of עֶמֶד and קֹטֵב. He wrote גִּלְם וְצוֹרָה and not גִּלְם וְצוֹרָה (“matter and form”), נִתְבָּרַר and not נִתְבָּאָר (explained), which is a loan translation of *tabayyana*, מֵאֲרָע and not חֲדוּשׁ (event; Ar. *ḥadaṭ*) though he did also use the words נִתְבָּאָר (meaning “explained and proved”) and יִתְחַדֵּשׁ (meaning “take place”). Maimonides took great care with the language of *Mishneh Torah*; he wanted it to be “clear and precise” (as he wrote in the introduction) and chose to use not the language of prophecy or the language of the Talmud (i.e., Aramaic) but “the language of the *Mishnah* so that it will be easy for the majority” (as he wrote concerning the *Mishneh Torah* in his introduction to *Sefer ha-Mizwot*). In fact, he used typically mishnaic forms more than was usual in the language of the translations: הִיאָךְ, לִילָךְ, לִידַע – and particularly the use of a proleptic pronoun לִמְשָׁה, which is not a feature of Arabic-influenced medieval Hebrew.

For all his conscious preference for “the language of the *Mishnah*,” Maimonides interlarded his prose with many biblical expressions, not just vocabulary items but whole phrases in a rhetorical style replete with biblical quotations: מֵרֵי נֶפֶשׁ (“bitter of soul,” Prov. 31:6); מִפְּזָר וּמִפְּזָר (“dispersed and scattered,” Esth. 3:8); בְּלוּיֵי סְתֵבוֹת (“cast off remnants,” Jer. 38:11), כֶּמֶר מִדְּלִי (“a drop in the bucket,” Isa. 40:15), etc. There are undoubtedly traces of Arabic influence in the language of Maimonides, but they nearly all derive from Arabic features in Hebrew texts written by his predecessors, and most of them have their roots in Hebrew: prefixed ל – to indicate cause, prefixed מ – for exemplification (see above), עֲנִינוֹת רְחוּקוֹת instead of מִסְתַּפֵּק מִן: אִמָּתָה for אִמָּתָה, in the masculine, עֲנִינִים רְחוּקִים meaning “be doubtful about...”; הַעֲבֹדִי אֱלִילִים (“idol worshippers”) with the definite article preceding the construct form; הַשִּׁיג meaning “understand”; הַעֲתִיק meaning “hand down by tradition” (Ar. *naqala*); the technical terms עֶקֶר “principle,” צוֹרָה (“form”); עֵלָה וְעֵלּוּל (“cause and effect”); מִצְוֵי רִאשׁוֹן (“first entity” – a term for God). A typical feature of his prose is the translation into Hebrew of most of the Aramaic expressions in the Talmud: סְלִיק עֲנִינָא for שָׁלַם הָעֵינֵן (“the matter is complete”); כָּל הַמִּתְגַּבֵּר גֵּבַר for כָּל דְּאֵלִים גֵּבַר (“whoever is in power wins”); בֵּר מִצְרָא בֶן מִצְרָא (an immediate neighbor); and many more. Maimonides’ language is closest to the style of learned

medieval Hebrew in passages of philosophical reflection (especially in *Yad, Yesodei ha-Torah*), and it is these sections which best show how superior and “Hebraic” his style is by comparison with the language of the Ibn Tibbons.

ITALY

In the year 1054, in Italy, Ahimaaz b. Paltiel, descendant of a line of liturgical poets, wrote his *Megillat Ahima'az*, the genealogical record of his family. The language of his book is naturally akin to that of the liturgical poets. There are many features of mishnaic Hebrew (*binyan nitpa'al*, proleptic use of pronouns as in *יש לו לאדם*, demonstratives as in *אותם הימים*, words such as *שכן*, *צריך*, *סבור* etc.), enriched by biblical Hebrew in the form of interlarded quotations, morphology, syntax and vocabulary: *waw* conversive, infinitival phrases as in *בבוא, בנהג*, lack of innovation in *pu'al* and so on. A form like *לילכה*, with a mišnaic infinitive – *לילך* – and a biblical lengthening, testifies to the blend of language varieties! Like the liturgical poets that preceded him, he combined *ק* with a perfect tense – *בראו, ברבט*, made much use of allusive phrases (*שושנה*, “rose” = Israel), and employed the typically liturgical vocabulary: *רשה* (for “said, command”), *פציתח*, *גשם*, *בכן* (for “then”) etc. Traces of Italian influence on the language are slight but well defined (*פרקון* for “fork,” and see below with respect to the use of *טרם*). The initial use of a demonstrative (*זו המדינה*) in the language of Ahima'az may derive from late Aramaic, or from the occasional use of the structure in mishnaic Hebrew, or possibly even from Italian or Arabic, as in the case of *מנה הענין* in the writings of Shabbetai Donnolo, who preceded him by almost 100 years. This book was written before the language of Spanish poetry had taken definite shape, but Immanuel of Rome, who lived in the middle of the 13th century, and who wrote a clearly biblical Hebrew, studded with quotations, though enriched with mishnaic features and even references to the Mishnah, was well versed in Spanish poetry, as he himself bears witness. Since he followed the trend of Spanish poetry and drew upon its language as a source of inspiration, he makes use of innovations and words whose frequency has risen under the influence of Arabic: *סר* meaning “stop,” *שב* for “become,” *אנון* for “grief” (Ar. *anna*), *כמו* for “approximately,” *תשבורת* (“geometry”), *גשם* (“body”), *אלוהי* (“theological”), *למודי* (“mathematical”), the pattern *מה...מן* (see above, p. 1631f.) and so on. The imprint of Italian is inestimably greater on his style than on that of Ahimaaz; he wrote poems in Italian and introduced the sonnet into Hebrew poetry. Italian accounts for the use of the following words in the masculine: *תבל*, *בטן*, *רגל*, *צפור*, *אצבע*, and of the following in the feminine: *זקן*, *שער*, *חֶסֶד*, etc. *פרח*, a name of a coin, is a loan translation of the Italian “fiorin” and the pattern *השלו* is a reflection of *il suo*.

Shabbetai Donnolo, a physician who lived in the 10th century in southern Italy, also wrote in a style blended of mishnaic and biblical Hebrew, and the result is entirely different from the language of the Ibn Tibbons. In addition to technical terms borrowed from Latin and Greek, his language also shows Italian influence: *בטן* in the masculine (like *il ventre*),

טרם and *מטרם* take on the meanings of Italian *avanti* i.e., first of all, better: *נאה לרופאים לידע טרם הבשמים* (“it is good for doctors, first of all to know perfumes”). Ahimaaz too uses *terem* in the sense of “before anything else.”

Obadiah of Bartinoro wrote his letters from Erez Israel (in the middle of the 15th century) in a language basically biblical but enriched with mishnaic features, and showing signs of Italian influence, apart from a few usages, mainly in loan words – *cottimo* for “piece work,” *capitano* for “captain” etc.

THE KARAITES

The Hebrew of the Karaites has not yet been described as a distinct variety. For the moment it must suffice to say that the rhymed polemical writings resemble those of Saadiah Gaon and the language used by the *ge'onim* in their liturgical poetry. The writings of Daniel al-Qūmisī (ninth century), Sahl b. Mazlī'ah, and Solomon b. Jeroham (10th century), for example, are largely biblical in style, and richly studded with quotations, but also contain freely derived verb forms, in all the *binyanim*, and noun declensions of which the most productive are *קטלון*, *קטילה*, *קטל*. The Karaites fought against the oral tradition, and Saadiah Gaon countered their arguments by pointing out the indispensability of mishnaic Hebrew for understanding the Bible (in his *Perush Shiv'im Millim*); their language, however, is not a pure biblical Hebrew. None of them abstained completely from mishnaic usage, not merely as regards such content words as were vital in the debate on oral law (*התר*, *אסור*, *גזירה*, *תקנה*, *מדרש*, etc.) but also structures and form words characteristic of the Mishnah: *binyan nitpa'al*, *אותה השנה*, *צריך*, *רואי*, etc. And their vocabulary included words typical of liturgical poetry: *רשה* (“say, command”), *פציתח*, etc.

The Karaites were much influenced by Arabic culture, and their prose style is therefore marked by the influence of Arabic; it is very close to the language of the Ibn Tibbons (see *Eškol ha-Kofer* by Hadassi, written in Istanbul in the 12th century). But its specific features are worth special study. There are certain terms characteristic of Karaite Hebrew, some of which occur nowhere else: *נקבתי* and *נזכרי* (“masculine” and “feminine”), *עדפנות* (“advantage”), *קתם* (“impression”), *אפע* (“event”), *היותות* (“existence”), and so on.

For recent studies of Karaite Hebrew see Maman in Bibliography.

Samaritans

From the 13th and 14th centuries onwards the Samaritans composed prayers and other works in Hebrew influenced by Arabic. A full description has not yet been made; Cowley has offered initial research as has Z. Ben Ḥayyim (*Tarbiz* 10). A necessary line of investigation will have to be how this Hebrew could exist independent of extra-biblical Hebrew (Ben Ḥayyim, *Lešonenu La'am*, 1969).

See also Ben Hayyim, *Ivrit va-Aramit Nusah Shomron*, vols. 1–5 (1957–77).

PROVENCE AND NORTHERN FRANCE

The Jews of Provence came under the influence of Spanish Jewry; it was in the towns of Provence (mainly Narbonne and Lunel) that the work of the Ibn Tibbons and the Kimḥis in translation was carried out. It is not surprising, therefore, that Menahem ha-Me'iri from Provence (14th century) wrote his book *Beit ha-Behira* in a style containing all the typical features of "Tibbonian" Hebrew. The influence of Arabic is marked, especially in the introduction, and not in the body of the work, which is a summary of halakhic judgments. Nevertheless, even the actual discussion of *halakhah* shows far more Arabic influence than the Hebrew of Maimonides' *Mishneh Torah*.

Unlike the Jews of Provence, the Jews of northern and eastern France had strong cultural and social ties with the Jews of western Germany – "Ashkenaz" – and it was in the towns of Champagne, the Rhine Valley and Lorraine that Ashkenazi Hebrew was fashioned. The Hebrew of Rashi and the French authors of *Tosafot* (talmudic commentary) is close to Ashkenazi Hebrew, as regards its sources and constituent elements, but the language of influence is Old French, not Middle High German; the influence is much smaller than the corresponding influence of German on Ashkenazi Hebrew.

The influence of French accounts for the increased use of the verb *ʿasa* in the Hebrew of Rashi, by analogy with "*faire*," e.g., *עשה ברכה*, though such forms do occur in mishnaic Hebrew. Also from French is the use of *בית* and *בשר* in the feminine. But the French background is most marked in the direct quotation of Old French words in order to explain the Hebrew: *רשם*, in French *cogneau*, etc. The language of Rashi is generally excellent, accurate Hebrew; it is largely mishnaic, enriched with biblical words and forms, even his commentary on the Talmud, e.g., *תפעלנה*, infinitival clauses like *בשובי*, *בבוא*, the lengthened imperfect, and figurative expressions such as *לבו דונה עליו* ("his heart grew faint" – see Lam. 5:17), *הון עתק מאד* ("very great riches" – see Prov. 8:18), though on a modest scale compared with the rhetorical figures in the rabbinical style. In his commentary on the Bible he made sparing use of Aramaic, and only in fixed expressions: *דאיתמר דכתיב*, *כמה*, and a wide use of the Aramaic prefix *de-* but in his commentary on the Talmud and in *Siddur Rashi* he did use Aramaic and not only technical terms; his language in this respect can be described in the same terms as we shall use for the language of rabbinical Hebrew in general. Rashi created new words and patterns; his understanding of Hebrew grammar and his ability as a stylist give him a special place among the writers of Hebrew in Ashkenaz.

ASHKENAZIC AND RABBINIC HEBREW

The Jews of Ashkenaz (western Germany and eastern France) had close ties with Erez Israel, and this relationship is very evident in their *piyyutim* (Gershon ben Judah Me'or ha-Golah, Jacob Tam, Meir of Rothenburg etc.), which continued the language and grammar of Palestinian liturgical poetry, though on a more modest scale. However, in the responsa, in the books on ritual, in community records, and to some ex-

tent, also in books dealing with their trials and tribulations, there is apparent, already from the 11th century, the beginnings of the blended style known as rabbinical Hebrew, found in its most characteristic form in the responsa written in Poland, mainly from the 16th century. It is composed of mishnaic Hebrew, biblical Hebrew, Aramaic (largely from the Babylonian Talmud), a certain amount of Arabic-influenced Hebrew, the influence of Middle High German in Ashkenaz, and once the center of Ashkenazi Jewry had moved to Poland the influence of Yiddish, whose German component was the same kind of German as that spoken by the Jews of Ashkenaz.

The Influence of German on the Hebrew of the Jews of Ashkenaz and the Influence of Yiddish on Hebrew in Poland

The status of Hebrew in Ashkenaz as compared with Middle High German was different from its status in Spain compared with its sister-tongue Arabic. In Germany the two languages in contact were from different families and far apart in form and structure. It is the strangeness of the effect of the influencing language that is most marked, though the very distance can also tone down the influence. The Ibn Tibbons were well aware that it was the closeness of Arabic to Hebrew which secured it such huge influence. From Arabic Hebrew borrowed a few words in Hebrew declensions; from German, at the beginning of the period, no words were borrowed at all, and they were quoted as foreign whenever they were needed in explanation: *קנייה* or in German *brennt* (Eleazar b. Nathan, 11th century). Loan words begin to appear in Hebrew in Poland from the 16th century, more in the questions that were posed than in the responsa of the rabbis, and almost all of them dealing with everyday life, hardly any concerned with matters of ritual. They include names of colors and clothes, food, and diseases. Words were also borrowed for which Hebrew equivalents existed: *Diamant* (יהלם), *Juwelen* (תכשיטים) etc. It is the language of the *Hasidim* and the *Mitnaggedim* in the 18th century which is most full of loan words.

Whereas Spanish Jewry was bilingual as far as writing was concerned (Hebrew and Arabic), in Ashkenaz Hebrew served as the sole written language. The literary language of the surrounding culture was mainly Latin, though Middle High German was also beginning to be used in writing for epic poetry, courtly lyrics and sermons. The Middle High German used in sermons to bring people to confession, repentance and fear of sin could well have influenced *Hasidim* of Germany by virtue of the subjects themselves but only as a literary language heard in sermons out of doors, not as a written language. Its influence should therefore be considered as that of a spoken vernacular not as a vehicle for literary expression. The Jew did not regard it as an enlightened, respectable language, worthy of competition with such an excellent tongue as Hebrew. They did not imitate it, they did not translate from it, and they had very little occasion to adopt from it terms and concepts that needed a Hebrew guise. The main effect is felt in passages dealing with everyday life: the account books of

the religious congregations, responsa dealing with everyday affairs, accounts of troubles and persecutions.

When Polish Jewry replaced German Jewry as the spiritual center, a change began to take place in the status of Yiddish, transferred to a Slavic environment (though there had been earlier written documents in Yiddish); it became henceforth a normal second written language. Among the responsa written by Moses Isserles, Solomon Luria and others in Poland in the 16th century there are also some written in Yiddish. No study has yet been made on the relation of Hebrew and Middle High German in Germany as compared with that of Hebrew and Yiddish in Poland. Generally speaking, the German element in the Hebrew of Ashkenaz is close to that in the Hebrew of Poland; it is only in the language of the Ḥasidim and the *Mitnaggedim* in the 18th century that the influence of Yiddish is far more profoundly felt.

In the history of Ashkenazi Hebrew, a special place is reserved for the language of *Sefer Ḥasidim*, a collection of tales and customs attributed to *Judah he-Ḥasid from Regensburg and written or collected by his disciples in the 12th and 13th centuries. The spirit of modesty and humility typical of those ascetic God-fearing Ḥasidim permeated not only the subject-matter but also the language, which was very close to the spoken variety, abounding in anacolouthon, unstylized, without interlarded quotations or figurative embellishment. The vocabulary of the book is small, sufficient for the needs of the subject-matter, with no concern for the needs of style, and the influence of Middle High German is quite strongly felt. The influence of Middle High German and the German element in Yiddish is best described by reference to the *Sefer Ḥasidim* and the responsa written in Germany and Poland. The following are some of the most noteworthy features: there is considerable use of prepositions in the German manner, though Hebrew prepositional usages were not rejected completely; they are also used, the proportion depending on the writer, the translator or the context (as already noted, the influence of German is more marked in passages dealing with everyday affairs: -גַּנְבִּי instead of מִן גָּנַב, ... מִתְגַּאֵה מִן, "proud of") as in *sich rühmen von*; יָדַע מִן, as in *wissen von*. The preposition אַחֲרֵי takes on the uses of *nach* – שְׁלַח אַחֲרָיו ("send for him"), and so on. The preposition עַל is used like *auf*: קָנָה עַל הַשּׁוּק ("bought in the market") *auf den Markt*; הָיָה עַל הָרְחוֹב ("was in the street") – *auf der Strasse*; הִמָּתִין עַל פְּלוֹנִי ("wait for someone") – *auf jemand*; and even more in the language of the Ḥasidim in the 18th century: קָמַח עַל פֶּסַח etc. Though the possessive construct pattern found in the Bible is commoner than the prepositional structure with *šel* found in mishnaic Hebrew, there are exceptional cases where a prepositional structure with *min* is used, in imitation of *von*: גִּבְאֵי מִן הַצְדָּקָה ("a collector of charity"). There are a few loan translations, mainly for the purpose of expressing concepts from daily life: בֵּית הָעֵצָה (*Rathaus*); בֵּית עֲנִיִּים ("poorhouse"); בֵּית יְתוֹמִים ("orphanage"). Much commoner is the extension of the meaning of the Hebrew word in accordance with the meanings of its Middle High German equivalent: נָגַד or נִגְנָד

means "approximately," a secondary meaning of *gegen*, and in later Hebrew סָבִיב ל־ is used in this sense, like *um*. יָדַע means "be able" as well as "know," since *koennen* has both meanings; הִפְסִיךְ עוֹמֵד כְּתוֹב (as in Ger. *steht*), תוֹפֵס means "hurry" (*chap-pen*), עֲזַב means "let" (*lassen*), אִיזָה means "some" as well as "which," both meanings of *welche*; לְהוֹזִיל means "agree" (from *billigen*); חוֹלָה אֶצֶל הַקָּר "sick because of the cold," a secondary meaning of Middle High German *bi* (the similarity between אֶצֶל and עַל יְדֵי may have helped). In the responsa, the phrase הָיָה לֹי expresses duty and obligation, not permission and ability as in mishnaic Hebrew and Aramaic; this is the meaning of Middle High German *hân ze*. Very common is the use of מַה as a relative pronoun – מַעֲשִׂים מַה שְׁחָפִץ שִׁיעֲשֶׂה "deeds that he wants to perform" (*Sefer Ḥasidim*) – like Middle High German *was*. One new sentence structure came from Middle High German: a subjective clause whose predicator was a modal adjective (אָסוּר "forbidden," צָרִיךְ "necessary," טוֹב "good") could begin with the word אִם, which gave it the force of a conditional clause – יֵשׁ דְּבָרִים שְׂאָסוּר אִם יִלְמַד לְאַחֲרֵים "there are things which it is forbidden that (or 'if') he teaches (them) to others." A similar structure with *ob* is found under such conditions in Middle High German.

German also produced a marked increase in the use of features which already existed in Hebrew though less conspicuously. וְ in the prepositional sense of "but" is found in the Bible אֲשֶׁר לֹא תִדְבֹר אֵלַי וְקֵץ אֲמַת ("tell me nothing but the truth"; 1 Kings 22:16) – and this biblical stylistic feature occurs in Spanish Jewish poetry. In Ashkenazic Hebrew וְ is also used as a conjunction in the sense of "but, however," before a verbal clause; it also occurs in the form שֶׁ presumably under the influence of Middle High German *nur*, which means both 'but' and 'only'. An example is חָס לִי לְרֹאוֹת כְּזֶה וְלֹא לִמְחוֹת וְרַק כֹּל זֶה עֲדִין הוּא שׁוֹרֵשׁ רֹאשׁ וְלַעֲנָה "God forbid I should see such a thing and not protest, but all this is still a source of evil and corruption" (from the 17th century *Shenei Luhot ha-Berit*). עַד occurs with the meaning "as long as," found in biblical and mishnaic Hebrew, and assisted by the fact that *bis* carries this meaning. In the Bible אִם sometimes comes at the beginning of the apodosis in a conditional sentence: לֹוִי לִי תוֹרַתְךָ שֶׁשִּׁשְׁעִי אִם אֲבִדְתִּי בְעֵנִי (Ps. 119:92) "if thy law had not been my delight then I should have perished in my troubles." In Ashkenazic Hebrew the high frequency of אִם after a conditional or temporal clause can be attributed to the corresponding use in German of *denn*, e.g., in the language of Berthold from Regensburg, a preacher at the time of the *Sefer Ḥasidim*. The normal pattern is thus אִם יְהִיָּה בְהִגְרָמְתוֹ אִם כָּל הַקְהָל פְּטוּרִים "if he is the cause, then the whole congregation is exempt."

The large number of expressions in German with *ma-chen* is matched in Ashkenazic Hebrew by the number of expressions with עָשָׂה, though a few such phrases can be found in the Midrashim: עָשָׂה עוֹלָה, עָשָׂה עֲבֵרָה, עָשָׂה חֶרֶפָה, עָשָׂה גּוֹיִפָה, עָשָׂה לֹוִיפָה, etc. The influence of German also explains the number of expressions like הָיָה לוֹ צַעַר, הָיָה לוֹ בּוֹשָׁה, הָיָה לוֹ עוֹל. Here it is the frequency which is affected, since they are not

a complete innovation in Hebrew. The use of *sich* as a reflexive object leads to the use of inflected עָצָם in Hebrew translation – equivalents; to the few examples found in mishnaic Hebrew are added מְסַגֵּל עֶצְמוֹ (“adjust oneself”), מְחַזֵּק עֶצְמוֹ (“hold oneself,” i.e., avoid, as in Ger.) תּוֹפֵס עֶצְמוֹ (“consider oneself”). It was also used with verbs in *binyan hitpa’el*, which in such cases lost reflexive meaning: מְתַקְּשֵׁט עֶצְמוֹ (“adorn oneself”), מְתַלְבֶּשֶׁת עֶצְמָה כְּכוֹהֶנֶת (“dresses herself as a priestess” – *Sefer Hasidim*), etc.

German could also lead to a diminution in frequency of occurrence: the relative infrequency of אֵת as compared with biblical and mishnaic Hebrew can be explained by the absence of any corresponding particle in German. Similarly the reduction in the use of the definite article corresponds with its reduced use in Middle High German; נִטְלוּ כָל and not... הַכֵּל is modeled on the use of *alles*.

No new tense forms were created in Ashkenazic Hebrew, but to some extent the systemic relationships of existing forms were reorganized (see Rabin in bibl.). In *Sefer Hasidim* the use of the participle for both present and future indicative is well marked: לְעֵתִיד לְבֹא מִתְפַּלְלִים. The imperfect יִקְטֹל serves as present and future subjunctive, expressing doubt, possibility etc.: הַנֶּרֶע שֶׁל גֵּר יִהְיֶה צְדִיקִים “the seed of a proselyte may produce righteous men.” And this systemic relationship between יִקְטֹל and קוֹטֵל corresponds with the opposition between present-future indicative and present-future subjunctive in Middle High German, where the expression of futurity by means of modal auxiliaries – *will, soll* – was still rare. Moreover, since there is a firm foundation for this division of function between יִקְטֹל and קוֹטֵל in mishnaic Hebrew and Aramaic, the novelty is felt more strongly in the use of the pattern הָיָה פּוֹעֵל not only as a past continuous (a usage inherited from mishnaic Hebrew) but also as a functional, though not formal, equivalent of the past subjunctive in Middle High German: וְהָרִב לֹא הָיָה מְלַמְדוֹ בְּחִנָּם “the rabbi would not teach him for nothing” (*Sefer Hasidim*, section 585). This use is also not a complete innovation, since it resembles the combination הָיָה and present participle in unfulfilled conditions in Aramaic and in mishnaic Hebrew אִלּוּ הָיִיתִי יוֹדֵעַ “if I had known,” (הָיָה אֲמִינָא); what is new is the systemic relationship between קוֹטֵל and הָיָה קוֹטֵל, corresponding to the past indicative and past subjunctive in Middle High German. There are examples in Ashkenazic Hebrew of the sequence of tenses found in German: רָאָה בְּחֵלוֹם שֶׁהָיָה רֹכֵב עַל סוּס אָדָם “he saw in a dream that he was riding on a red horse” (in *Sefer Hasidim*); the tense in the subordinate clause is marked as past, like the main clause, and not present, which is normal in Hebrew.

The Role of Mishnaic Hebrew in Ashkenazic Hebrew

The language of Jews who studied Talmud naturally made great use of mishnaic Hebrew. It should be noted that *Sefer Hasidim* actually uses forms that are not particularly common, e.g., *binyan nuf'al* – נִצַּל (“was saved”), נָטַל (“was taken”) – and the pattern הִקְטִילָה as verbal noun for *binyan hip'il* – הִרְעִיבָה, הִפְסִידָה. The most productive derivational pattern by far was

שָׂדָכָן from mishnaic Hebrew; the innovations include שִׂדְכָן, פִּשְׁרָן, עֲזָרָן (“miser”), שִׂתְדָּלָן, מִטְבֵּעָן (“coiner”), שִׁמְחָן, etc.

The Role of Biblical Hebrew

Ashkenazic Hebrew took from all varieties known to its writers; the Hebrew of the Bible was absorbed from the stratum of biblical Hebrew in the liturgy, from the weekly readings of the law and from the *haftara*. Hence the use of לְמַעַן, יִתְכֵּן, יֵעָן, טָרָם, and so on. And unlike Arabic-influenced prose, Ashkenazic Hebrew also made use of lengthened tense forms: יִשְׁמְרוֹן, אֶכְתֶּבָה and the future with *waw* conversive. This tense is seldom found in *Sefer Hasidim* and relatively infrequently in the prose of Rashi, but it began to occur with increasing frequency until it became a distinguishing mark of rabbinic Hebrew. The increasing use of rhetorical figures from the Bible may have helped to establish it in the language; fragments of verses which contained a *waw* conversive were directly quoted as part of the rhetorical figure, and thus made their way into rabbinic Hebrew. Biblical figures of speech are absent from the humble style of *Sefer Hasidim*, and used with taste and moderation by Rashi; in the language of Jacob Tam they are widespread (their flavor of *piyyut* derives from his being a liturgical poet), and they are quite common in the writings of Rabbi Meir of Rothenburg (end of the 14th century), for example. They are very common in the salutations, at the beginning of many of the responsa from Germany and Poland, though not only there. Some writers use them more, some less, depending on their individual taste and ability. Though most rhetorical figures derive from verses in the Bible, there are also some from mishnaic Hebrew, and even from Aramaic, all for the rhetorical adornment of the opening section of the letter, with no conception of the principle of purity of biblical language as a rhetorical virtue. The writers of the responsa begin יִשְׁמַעְתִּי וְתִרְגְּזוּ בִטְנִי (“I heard and my stomach quaked”; Meir of Rothenburg); or צָלַלְתִּי בְּמֵיִם אֲדִירִים וְהִעֲלִיתִי חֹרֶם (“see Ex. 15:6, “I plunged into deep water and brought up nothing”; Moses Isserles); or וְאֶתְּנֶה אֶת לִבִּי לְדָרֶשׁ וְלִתְרוֹן סְבוּתָיו בְּסִפְרֵיִם (“see Eccles. 1:13, “I gave my heart to seek and search out its reasons in books” (a frequent figure)). They begin with a rhymed eulogy: (see Ps. 18:30, וּמִרְחוֹשֶׁתֶּךָ עֲמָקָה וְצִפָּה “thy word is perfect and thy feelings are deep...”; Meir of Rothenburg)). Sometimes the point of the quotation distorts the original meaning of the verse quoted: Simeon accuses Reuben in the words בְּפִלְגוֹת רְאוּבֵן גְּדוּלִים חֲקָרִי לֵב (see Judg. 5:16, “in the divisions of Reuben there were great heart-searchings” (a question addressed to Jacob Tam)). Sometimes the form is changed: the Rabbi replies יֵעָקֵב הַקּוֹל קוֹל עֲקֵב (not עֲרֵעוּרִים וְקוֹל “the voice is the voice of the deceit.” Sometimes the spelling of the word is changed: הָאֶרֶז אֲשֶׁר בְּלִבְנוֹן בָּאָר (“the cedar of Lebanon is proof”) the reference is to Isaiah 40:16 where the form is actually בָּעַר (“burns”; a quip from the responsa of Šāʿar Efrayim, 17th century).

The Role of Aramaic

In *Sefer Hasidim* there are slight touches of Aramaic – דְּכִתִּיב – and they are fairly restricted in Rashi’s commentary on

the Bible. However, in Rashi's commentary on the Talmud, in the responsa of Jacob Tam, or in *Sefer ha-Rokeah* of Eleazar of Worms, the amount of Aramaic acquires a status comparable to that of mishnaic Hebrew, since both constitute the language of the Talmud and the writers may not always have realized when they had moved from Hebrew to Aramaic.

The extensive use of Aramaic is not confined to the Aramaic *halakhah* under discussion, nor even to the technical terms alone (קיימא לן, אלמא, טעמיהו, צריכא, פליגי, etc.). -ד is used instead of ש in an otherwise completely Hebrew context, to mean "of" – הפרך דהמסכת (the chapter of the tractate); הרב דשפירא; פנקס דועד ארבע ארצות – and also to mean "that" – נראה לי ד- ("it seems to me that..."); אמרתי דאסור ("I said that it was forbidden"). Whereas as Rashi commenting on the Bible writes -אף על פי ש-; כיון ש-; משום ש- when he comments on the Talmud he writes -כיון ד-; משום ד-; The verb forms מייירי and מיייתי are much used in Hebrew contexts, and sometimes complete clauses in Aramaic are interpolated. Generally the Aramaic phrases are quoted freely in new Hebrew contexts, though in the form and with the inflections found in the Talmud. The Hebrew most thoroughly mixed with Aramaic was written in Poland during the 17th and 18th centuries.

The Link With Arab-Influenced Hebrew

The Jews of Ashkenaz and the Jews of Spain maintained cultural ties, whether by means of responsa (e.g., when Asher ben Jehiel moved from Germany to Spain) or by reading each other's books. The kabbalists of Spain were interested in the Ḥasidism of Ashkenaz, in Germany they read the writings of Maimonides, Saadiah Gaon, and the *musar* book, *Hobot ha-Lebabot*. In Poland several of the scientific works, all written in "Tibbonian" Hebrew, were well known.

Since Ashkenazic Hebrew reflects all the varieties of literature known to its writers, and since in principal there was no form of the language whose use was banned on stylistic and grammatical grounds, it is not surprising that several features of Arab-influenced Hebrew also occurred. The use of nouns ending with the suffixes -ות and -ית in the masculine is characteristic of rabbinic Hebrew (תכלית אחרון), and similarly plural concord of the form סודות גדולות (instead of גדולים). It is not clear whether this usage derives from Spanish Hebrew or whether it is an aspect of the general weakening of strict grammatical rules (it is possible that this is due to the fact that words ending in -ut and -it in Yiddish entered the neuter gender). Sometimes Arabic and German/Yiddish tended to produce the same result, e.g., the demonstrative without the article before the noun, reduced use of את, the preposition מן in דבר מן, ספר מן, and the comparative form יותר טוב, יותר נאה, where the frequency and the order of words can be attributed to German (*mehr...*) and French (*plus...*), though Arab-influenced Hebrew also uses this structure as a translation of Arabic.

A deliberate, quite marked use of the Hebrew which took shape in Spain and Provence is found in Poland, mainly

from the 16th and 17th centuries. Moses Isserles was a man of philosophic bent and apart from his responsa on matters of *halakhah* he also used the language of the *Guide of the Perplexed*: עיוני אקלים, אלהי, ("region"), מכנים ("match, fit"), על צד השכל, ברח מלעסק, ("refrain from doing"...), and so on.

Forty years after the expulsion from Spain 16th-century Safed became a center for Jewish learning and Kabbalah whose greatest scholars generally wrote a Hebrew close to the Arabic-influenced variety of Spain and Provence, especially in Kabbalistic works where a style of writing had already been established in Spain (see, for example, the language of Moses Cordovero). In Safed, too, the use of lengthened tense forms and the *waw* conversive were introduced into the language of prose. Isaiah Horowitz, author of *Shenei Luhot ha-Berit*, was educated in Poland and wrote an Ashkenazic Hebrew, but his style contained many of the distinguishing marks of Arabic-influenced Hebrew: the definite article before an infinitive e.g., מהשכל, רשם, השהתמש, meaning "match," אמת in the masculine, עצמות, and so on; after all, he was a kabbalist, immigrated to Erez Israel, and wrote his book there.

The extreme case of the encounter between Spanish Hebrew and Ashkenazic Hebrew is the language of the 18th century Ḥasidim. Besides being stamped with the imprint of Yiddish to a greater extent than any preceding variety of Hebrew, it also continues the traditional prose style of Ashkenazic Hebrew (as exemplified in the responsa, in the *musar* books and especially in the well-loved *Sefer Ḥasidim*). But whereas stories of the *zaddikim* and passages dealing with everyday life are written mainly in Ashkenazic, rabbinic Hebrew, the philosophic literature of Ḥasidim is strongly marked by Spanish Hebrew; the ḥasidic writers continued the kabbalistic tradition of Isaac Luria, and took over the terms and expressions from kabbalistic literature and Spanish books of ethics such as *Hobot ha-Lebabot*; רוחניות ("spirituality"), אחדות ("unity"), גשמיית ("corporeality"), בחינה, סגולה, דבקות, etc. (see M.Z. Kaddari in bibl.).

Influence of Hebrew on Yiddish

It was through rabbinic Hebrew, with its blend of all varieties, that Hebrew words found their way into Yiddish. From biblical Hebrew – אז, יתכן – עולה, אפילו; from mishnaic – אפילו, אפילו; from Aramaic – פשיטא, סתמא – and even from Arab-influenced Hebrew, mainly via ḥasidic literature: גשמיית, etc. Many of the high frequency words most characteristic of Ashkenazic Hebrew, words occurring already in *Sefer Ḥasidim*, came into Yiddish: מאוס ("obnoxious"), עולם (with the meaning "people," as in Aramaic בלי עלמא "an urban Jewish community"), מעשה, ממש (in the language of the *Sefer Ḥasidim* it already has the meaning "story" as well as "deed"), אודות, תדיר. The Hebrew derivational pattern most characteristically Yiddish – קטלן – (in words like ישרן, בקטלן, etc.) is also the pattern most vital to Ashkenazic Hebrew.

Haskalah and Medieval Hebrew

The stylistic uniqueness of rabbinic Hebrew lies in its blend of different varieties of the language: only a few new words were coined, to meet the needs of writing about everyday life. By contrast, Spanish Hebrew was a professional tool, a necessary instrument for all kinds of scientific, philosophic and scholarly writing. The writers of the Haskalah turned their backs on rabbinic Hebrew for its careless grammar and because it represented the Judaism of the Talmud. For poetry and to a considerable extent for stories they adopted biblical Hebrew; however, for serious prose works some of the *maskilim* chose the Arabic-influenced language of Spain, especially for technical terms and expressions (see for example the extensive use of Tibbonian Hebrew made by Naḥman Krochmal in *Moreh Nebukhei ha-Zeman*).

The Hebrew language was a major concern of Haskalah writers. They were keenly aware of normative problems in writing and the need for linguistic research in Hebrew. Writers and grammarians like Naphtali Herz Wessely, Judah Leib Ben Zeev, and those who collected ancient texts made a decisive contribution toward the molding of the language and its modernization. The Haskalah may be seen as a preparatory period for the revival of Hebrew (see Modern Hebrew Literature).

[Esther Goldenberg]

MODERN PERIOD

The growth of Hebrew as a modern language, spoken by masses and gradually used in all areas of life and thought, may be divided into three stages corresponding to periods in the history of modern Palestine: (1) 1881–1918 initiated by Eliezer Ben-Yehuda's arrival in the country. He and his followers developed and propagated Hebrew in everyday life. (2) 1918–1948; under British rule when Hebrew was first considered a language of Palestine, and later (1922) one of the three official languages. During this time the Hebrew-speaking population increased rapidly, established many cultural institutions, including its own educational system up to university level, in all of which Hebrew, with few initial exceptions, became the only language used. (3) 1948– marked by the foundation of the State of Israel. Hebrew became the predominant language of the state, and was used in all branches of its activities: government departments, the army, etc., were integrated into the life of the Hebrew-speaking population. Gradually Hebrew was also spoken by non-Jewish citizens. Each of these three periods, characterized by the cultural background and the linguistic past of the immigrants who adopted Hebrew as their new language, has influenced its revolution.

[Eli Eytan]

At the time of the revival of Hebrew for everyday speech, the languages most current in the old *yishuv* (Jewish population) were Yiddish, Ladino, and Arabic, while French and German formed the main channels to European culture. The immigrants of the first period, mostly from Eastern Europe,

spoke Yiddish; many of them also spoke Russian or Polish and at least understood German. These languages influenced Hebrew but their effect, noticeable in new aspects of Hebrew, gradually decreased, and the impact of English grew. Since the end of World War I English had a marked influence on Hebrew because of the influx of British and other English-speaking government and army personnel and their closer contacts with the *yishuv*. The fact that the establishment of the State of Israel did not diminish this influence is due to a wide knowledge of English among the Israeli population through higher education and close acquaintance with English and American culture to which immigration from English-speaking countries contributed substantially.

Period of Revival (1881–1918)

Hebrew was spoken in Palestine even before the revival movement, but only as a *lingua franca* among Jews who had no other common language. This phenomenon also existed among Jews in many other countries in earlier periods. The revival, in contrast to early periods, however, saw the establishment of Hebrew as the sole or at least the principal language, i.e., a transformation from a language used only occasionally for special purposes by speakers of other languages to a language used by a community for all their communication needs – speaking, reading, and writing.

The revival took place in Palestine. When the British conquered the country, Hebrew was already one of the languages of Palestine. In General Allenby's published proclamation about martial law in Jerusalem, Hebrew was published on top, while Arabic was the second, before Russian and Greek, all considered languages used by the local population. On the other side of the sheet, the proclamation was published in (1) English, (2) French and (3) Italian, languages of the allies. Only toward the end of this period, Hebrew also began to be studied in the Diaspora to a limited extent.

Eliezer Ben-Yehuda's pioneer work for the revival of Hebrew would have failed had there not been at that time three conditions which proved essential to the process of revival: (1) There was no national language in Palestine. The inhabitants did not belong to a "nation" (in the Western sense), but were divided into religious-ethnic communities ("millets") that used a number of languages. Literary Arabic was the language of prayer, worship, and study for all Muslims including government workers and members of the Turkish army and, to some degree, for several Christian denominations. But millions of Muslims outside Palestine also used literary Arabic in a similar fashion, thus preventing it from being an exclusive national language. Turkish was used for political, governmental, and military matters all over the Ottoman Empire. The most common spoken language was local colloquial Arabic, which was used only as a spoken vernacular and thus deemed unworthy to be a national language. Other languages, such as French, Russian, Italian, Greek, and Armenian were used by certain millets, or as cultural languages. None of them, however, could be taken as a national language. (2) European na-

tionalist thought, together with a yearning for a Hebrew renaissance, reached Palestine in the middle of the 19th century. Already in the 1860s young people in the Jewish communities of Palestine attempted to change the static way of life there. Newspapers, printing houses, and various workshops were founded, and settlements were established “outside the walls” (i.e., of the old *yishuv*). The lack of a national language in Palestine created the need for a common language for the developing society, and it was natural that Hebrew be considered worthy of this role; all the more so that Hebrew (in the Sephardi pronunciation) even before this had been the common language of different Jewish communities. (3) The fact that the original language of the country had been Hebrew provided a solid ideological basis for the revival of the language, and gave it an advantage which no other language had. Publication of such ancient Hebrew inscriptions or engravings as the Siloam inscription (1880) and the Mesha inscription (1868) made a deep impression upon the people of that generation and emphasized the connection between Hebrew and Palestine. The revival of the language symbolized the “Golden Age” of ancient Israel which was about to be renewed.

The major difficulty encountered in making Hebrew the sole (or principal) language of the country was in the area of vocabulary. There were few difficulties, if any, in the field of grammar. In Hebrew phonology the need for marking such new sounds as *č*, *ž*, *ğ* (to accommodate foreign words and non-Hebraic personal names) was met without difficulty by adapting the letters *צ*, *ז*, *ג*. (These sounds had previously been marked by combinations of letters such as *טש*, *זש*, *דזש*. *ז* had been indicated for some time also by the letter *י*, undoubtedly through the influence of the French pronunciation of the letter *j*.) The problems of orthography were solved at once: “defective” orthography (*כתיב חסר*) was introduced. There were, certainly, difficulties in this area, and it is relevant to mention Ben-Yehuda’s short-lived experiment in the use of “capital” letters for personal names (as in English and French). Morphology was not expanded, but newly invented words were usually styled according to existing morphological patterns. It is often possible to distinguish tendencies to use a certain pattern or a specific suffix, such as Ithamar *Ben-Avi’s predilection for the suffix of relation (*עמדה זכותית*, *יהודה מיידיית*). Although Hebrew syntax changed considerably during the days of the revival of the language, these changes were generally brought about unintentionally and without premeditation. (However, an apparent example of an intentional syntactical change is to begin sentences with a verb, like in Arabic, as was done for a time in newspapers.) In contrast, the need for new words was recognized from the start. Ben-Yehuda illustrates this in the following statement: “Have any of the readers (of Smolenskin) ever felt that in all of the circumstances of the different events that this very capable author brought into his stories, he never mentioned for example, the simple, common act, of tickling? This act which we meet often in every story in a living language we will never meet in the stories of Smolenskin, simply because he did not have a word for it. In spite of

this his stories are well written. But whoever wishes to write something of wisdom and science, and especially someone like myself, who speaks Hebrew at home with the children, about everything in life, feels every moment a lack of words without which living speech cannot take place” (the Large Introduction, 12–13). Most of the efforts of those who revived the language were dedicated to answering this need.

The End of the Revival Period

The period of revival was characterized by reviving existing words, creating new ones, and enriching the language with words from Semitic sources (in the main) cast in the Hebrew mold. However, a large number of these words (several thousand) were rejected and have fallen into disuse. The pressing need to remedy the critical lack of words often led to hasty innovations. Those educated in literary Hebrew, especially the last generation of *maskilim* in Eastern Europe, did not readily accept this “manufacturing of words” in Palestine. They tended to be more careful in making innovations, preferring to adopt foreign words, especially “international” terms, the majority of which were of a Latin or Greek origin. This school of thought began to make its influence felt in Palestine from 1905 onward, with the Second Aliyah. The coming of the Third Aliyah from Eastern Europe, immediately after World War I, strengthened this view until in the late 1920s the influence of the “language of the revival” could hardly be recognized since many of its words were forgotten. The late books and journalism of Ithamar *Ben-Avi were a kind of “swan song” of the revival period, but even his language greatly reflected the above-mentioned changes. The end of the Ottoman Empire and the recognition of Hebrew as an official language in Palestine is therefore only one reason for fixing the end of World War I as the close of the “revival period.” The other reason is that at this time the influence of those who demanded great caution in the formation of new words grew, and they were tolerant to foreign words as long as proper Hebrew terms had not been created with careful consideration.

See also Y.M. *Pines, Z. *Jawitz, the *Academy of the Hebrew Language.

[Uzzi Ornan]

Linguistic Problems of Modern Hebrew

PRONUNCIATION. Reviewing the first 22 years of the *Va’ad ha-Lashon* (*Zihkronot Va’ad ha-Lashon* 1, 2nd ed. p. 4), Ben-Yehuda recalls the days when all the various pronunciations of Hebrew were heard in Jerusalem “from the Lithuanian to the Sephardi, from the Volhynian to the Yemenite and the Persian.” The necessity to establish a standard pronunciation was under discussion for some time. At a meeting of teachers in 1885, for example, it was decided to teach Ashkenazi Hebrew for the first two years in Ashkenazi schools and then switch to Sephardi pronunciation, while in Sephardi schools the opposite should be done – in “order that they know both.” By 1912, however, Ben-Yehuda continues, “by the nature of things the Oriental pronunciation, the one living among the Sephardim, had become dominant, and from Jerusalem it

spread to all speakers of Hebrew in the country.” This statement was a rough summary of the position which had developed in a relatively short time, but which, in fact, was – and is to this day – only a limited fulfillment of the original wish to adopt the Sephardi pronunciation. The phonetic inventory of the Ashkenazim, both of the old *yishuv* and new immigrants whose number rapidly grew, could not easily be replaced by the whole range of sounds found in genuine Sephardi speech. To give one example, any Ashkenazi could easily learn to pronounce both vowels of the verb **עָצַר** (“he restrained,” etc.) as *a* and to stress its last syllable, instead of pronouncing the first vowel as *o* (as according to his Ashkenazi dialect), and stressing the first syllable. It proved, however, impossible for the vast majority of Ashkenazi Jews – except by sustained conscious effort to – pronounce the Sephardi (like Arabic) consonants **ע** [ʔ] and **צ** [s]. **עָצַר** and **אָצַר** (“he stored up”), as well as many other pairs of linguistic forms, thus became homophonous, creating new problems in teaching orthography and grammar. This process of different phonemes coinciding in actualization even led to certain restrictions in the use of the existing vocabulary and in the possibilities of its enlargement. **אָצַר**, e.g., is hardly ever used in everyday speech, and a possible new noun **מֵאָצַר** † would be rejected owing to its homophonous rival **מַעָצַר** (“retention, arrest”). The difficulties, stemming from the homophony of originally distinctive features, constituted, and still do, one of the main arguments to continue trying to propagate a purer Oriental pronunciation. On the other hand, the common “Sephardi” pronunciation had meanwhile acquired a certain value of social superiority, since most of the leaders of the new *yishuv* came from Ashkenazi circles, and many Oriental Jews, whose original speech did contain the sounds in question, abandoned that part of their native phonetic inventory in order to imitate the speech of their social superiors.

At the first convention of the Hebrew Teachers’ Association in 1903, the pronunciation issue was discussed, but no decision was taken, mainly because Eliezer Ben-Yehuda and David Yellin, members of the Va’ad ha-Lashon, held different views on the desirability and feasibility of one or the other feature of genuine Oriental pronunciation being adopted as standard. The debate went on until, in 1923, the Va’ad ha-Lashon decided to demand the following reform in the pronunciation of the Hebrew letters in question: **ב** without *dageš* = English *v*; **ו** = Arabic *wāw* and English *w*; **ה** = Arabic *hā* as distinct from **ח** without *dageš* = Arabic *hā* and German *ch* (as in “Bach”); **ט** = Arabic *tāʾ* emphatic *t*; **ת** = Arabic *ayn*; **צ** = German *z* (*tz*); **ק** = Arabic *qāf* (emphatic velar); **ת** without *dageš* = Arabic *tā* and English unvoiced *th* (as in “thin”).

It is noteworthy that this ruling does not follow the Sephardi tradition in all details. Here, both alternants of *bet*, one written with *dageš* (**בּ**) and the other without (**ב**), were pronounced by some Sephardi communities as *b*, and the settlers of Galilee, following their Sephardi teachers, had already adopted this pronunciation. The Sephardim also pronounced **צ** as emphatic unvoiced *s*, like Arabic *ṣād*, while the pronuncia-

tion *tz* provided for in the ruling is Ashkenazi. Furthermore, nothing was said about the vowel *segol* (**ֶ**), which in Sephardi speech is not distinguished from *šere* (**ֵ**), i.e., closed *e*, while Ashkenazim and some Israeli speakers to this day distinguish *segol* from *šere*. The Va’ad ha-Lashon in this decision also omitted mentioning the difference in pronouncing *qameš* preceding *ḥataf-qameš*, as in **נֶעֱמִי**, which the Sephardim pronounce *Na’omi* and the Ashkenazim (and most Israelis) *Nóomi*.

The authority of the Va’ad ha-Lashon was not sufficient to enforce this reform in the face of already-established speech habits. Consequently, current Hebrew pronunciation differs from that of the Ashkenazim in the following details only: (1) *qameš-gadol* (**ֹ**) = *a*; (2) *ḥolem* (**ֻ**) = *o*; (3) *taw* without *dageš* (**ת**) = *t*; (4) ultimate stress of most words, while penultimate stress is confined to some classes of words, as in classical Hebrew.

In the matter of stress, however, the Ashkenazi way has led to some more deviations from the Sephardi and classical Hebrew system. Many proper names of persons and places have penultimate stress in everyday speech: (‘Raḥel; ‘Moshe, ‘Shlomo, ‘Hēfa, etc.), and the retracted accent has become, particularly in childrens’ speech, a mark for names of things charged with some affective value: *glida* (“ice cream”), *buba* (“doll”), etc. Penultimate and antepenultimate stresses are also characteristics of foreign borrowings: *komu’nisti* (“communist”), *rele’vanti* (“relevant”) etc., notwithstanding their Hebrew suffix *-i*; *integ’razya* (“integration”), *uni’versita* or *univer’sita*; (“university”), etc.

Efforts to propagate a diction based on classical grammar and Sephardi pronunciation were especially made among broadcasters. The question, however, as to what this desirable correct diction entails and what can be attained was debated up to the late 1960s. Up to that time, the Academy of the Hebrew Language had recommended to the Israel Broadcasting Service to observe the Oriental pronunciation of *ḥet* and *ʾayin*, the gemination of consonants with *dageš-ḥazaq*, as in *hassefer* (**הַסֵּפֶר**); *dibber* (**דִּבֶּר**); and the *šewa-naʾ*, as in *devarim* (**דְּבָרִים**), *katevu* (**כָּתְבוּ**), *dibberu* (**דִּבְּרוּ**). This recommendation was followed to some extent. It is doubtful whether the Oriental diction, though preserved by some Jews of the Oriental communities and applied to Hebrew by Arab citizens, can still contribute to a reform in the speech of wider circles. On opposite trends see Bentolila in Bibliography.

SPELLING. In 1929 when the Va’ad ha-Lashon first published its quarterly *Leshonenu*, the editors stated in their programmatic introduction: “The problem of spelling has not yet been solved.... Some advocate grammatical spelling, others insist on ‘full’ spelling. This is why the editors have decided to use, for the present, the accepted grammatical spelling and add complete punctuation wherever the reading is doubtful... Thus, we have attained uniformity of spelling without deciding upon the problem itself.” What is meant by “full spelling” (**כְּתִיב מָלֵא**) here is the method of employing, instead of vowel punctuation, vowel letters to supplement the letters admit-

ted in the “accepted grammatical spelling” which, in turn, is a standardized biblical orthography. This system had been proposed by David Yellin and adopted in the summer of 1905 at the teachers’ convention at Gederah. Although it has been taught in schools ever since, the debate on the problem never ceased, and actual usage outside, and partly inside, schools went its own way.

According to this system, every word is spelled in one way only, whether vocalization for vowels etc. is added or left out, e.g., בֹּקֶר (“morning”), בָּקָר (“cattle”), בִּיקָר (“he visited”), and other words having the same three consonants all have the same written form in unvocalized spelling. Their intended reading is revealed by the context only, unless one or more significant vowel points are added to hint at it, e.g., בֹּקֶר, בָּקָר, בִּיקָר. Yellin’s system of unvocalized spelling was based on the orthography that, as far as is known, had first been used by the writers of the Haskalah who tried to follow the Bible in all respects. But since the spelling of the words of the masoretic Bible is not uniform, i.e., the same or analogous forms are sometimes written *plene* and sometimes defectively (without vowel letters), orthography complying with biblical grammar had to be standardized. While the spelling with few vowel letters in fact causes the reader, who knows Hebrew, less difficulty than the inexperienced may expect, it has been under constant attack for other reasons: (1) It is taught in schools, but most writers and printers continue to insert the available vowel letters in the consonantal skeleton of the word in the same way in which Hebrew has been written for many centuries starting even before the rise of vocalization and continuing side by side with vocalized writing down to the present time. (2) It made the language hard to learn for new immigrants, etc., and occasionally caused even fluent readers to stumble. (3) It demanded of everyone a considerable knowledge of grammar or a rare accuracy in diction that would distinguish between long and short vowels, between geminated and ungeminated consonants, etc.

The advocates of “grammatical” unvocalized spelling, mainly teachers and grammarians, also have some weighty arguments to adduce: (1) Their system nowhere contradicts pointed “grammatical” spelling as preponderantly found in the Bible, prayer books, poetry, etc., and taught in schools in conjunction with grammar from which, in their view, it cannot be divorced. (2) They insist upon the ease with which a learner can pass from vocalized spelling to reading and writing texts with the same allowed vowel letters, but without vocalization. (3) They maintain that supplementary vowel letters obstruct the recognition of word roots and thus hamper learners of the language. (4) They emphasize the educational and cultural disadvantage of the simultaneous currency of two contradictory systems. (5) They stress the absence of generally accepted rules for, and the prevailing confusion in the use of, supplementary vowel letters.

This last point is aimed at the fact that many writers add, whenever they see fit, *y* for *i* or *e*; *u* for *u* or *o*; and – particularly in foreign words – *x* for *a*; and use *u* for consonantal *u*

and *y* for consonantal *y* or the diphthong *ay*. Thus, סִבָּה may be found spelled סִבָּה or סִיבָּה; שְׂרָפָה – שְׂרִיפָה or שְׂרִיפָה; קֶדֶשׁ – קֶדֶשׁ or קֶדֶשׁ; אֶקְדָּמִי – אֶקְדָּמִי; שֹׁלַחַן – שֹׁלַחַן or שֹׁלַחַן; קוֹדֶשׁ or קוֹדֶשׁ; בְּנִינִי or בְּנִינִי, בְּנִינִי – בְּנִינִי; עִיּוּר or עִיּוּר, עוּר – עוּר; אֶקְדָּמִי or דָּאִי or דִּי, דִּי – דִּי.

When the Va’ad ha-Lashon published, in 1948, its “Rules for Unvocalized Spelling” (*Lěšonenu* 16, 82ff.), this was the outcome of over 30 years of deliberations in general meetings of the Va’ad, in committees, and in subcommittees, where frequently also teachers and scholars from outside took part. The various proposals submitted and discussed included suggestions to equip the Hebrew alphabet for the representation of the vowel *a* and *e* by creating new letters. The use of Latin script for Hebrew was also advocated, as had been done earlier by Ithamar Ben-Avi and Zēv V. Jabotinsky. The principles underlying the rules are set forth in the introduction to the draft rules published in 1943 (*Lěšonenu* 11, 232ff.) and will be summarized here:

The rules must be founded upon the literary sources and the grammar of Hebrew, adapted to modern pedagogical and practical needs, and be acceptable to the public. Therefore, extreme innovations such as the use of *x* or *y* or new letters as vowel signs are to be avoided. The aim is to regularize the spelling actually current and direct it in line with the general tendency of linguistic and cultural developments. For many generations two spelling systems, the vocalized and unvocalized, have existed side by side, and each has its domain of function. But while punctuation by now has fairly well-established rules, in unpointed spelling two contradictory systems compete, one with and the other without supplementary vowel letters; both of them sometimes intermingle in the same text. The evolution of orthography from its beginning to our days tends toward supplemented spelling; unvocalized orthography must therefore be based on it. This is by no means incompatible with grammar and correct pronunciation, for nowadays Hebrew, like any other living language, is naturally learnt by hearing, not from writing. The aim is to facilitate reading, and that is why, whenever supplemented spelling is liable to mislead, it must be dispensed with. Complete consistency is not sought, but this does not mean giving up the formulation of systematic and scientifically founded rules, it rather explains the exceptions recommended by the committee.

The rules themselves submitted for discussion and decision were substantially the same that were later adopted by the Va’ad ha-Lashon in 1948 and again confirmed, with few amendments, by the Academy of the Hebrew Language in 1969. The following words, each spelled without vocalization in accordance with the rules, followed by unvocalized grammatical spelling, and then again fully vocalized will illustrate the principal rules:

הַשְׁוֹלְחָנוֹת כּוֹלֵם = הַשְׁלַחְנוֹת כָּלֵם; חוֹלְצָה אֲדוּמָה; חֲלָצָה אֲדוּמָה = חֲלָצָה אֲדוּמָה; בּוֹקֶר = בָּקָר; מוֹחַ = מוֹחַ; מוֹחַ = מוֹחַ; תִּשְׁמְרֶנָּה = תִּשְׁמְרֶנָּה; עֵיקָר = עֵיקָר; זִמְנָן = זִמְנָן; זִמְנָן = זִמְנָן; נִתָּן = נִתָּן; עֵלִיָּה = עֵלִיָּה; זִכְרוֹן = זִכְרוֹן; עִירְבוֹן = עִירְבוֹן; עִירְבוֹן = עִירְבוֹן; פִּרְשׁ = פִּרְשׁ; קִירוֹב = קִירוֹב; יִרְאָה = יִרְאָה; רִאֲתָה = רִאֲתָה; עֵנִין = עֵנִין; הַצִּיר צִיר = הַצִּיר צִיר; הַצִּיר צִיר; בְּנִי = בְּנִי; חֲדָשִׁים = חֲדָשִׁים.

Exceptions to the main rules, i.e., classes of words and letter combinations where no addition of vowel letters is allowed, are shown in these examples: תִּאֲמַר; תִּאֲמָר; קִנְהָה; קִנְהָה (in these verb forms with quiescent א and ה, there is no ו for o); אֲמַנְם; אֲמַנְם; חֲכָמָה; חֲכָמָה; אֲנִיָּה; אֲנִיָּה (qameṣ-qatan and ḥataf-qameṣ are normally not rendered by ו); טְהִרָה; טְהִרָה (i left unmarked when preceding -י- or -י-).

It will have been noticed that this supplemented unpointed orthography still uses the following diacritical points: dots in ו and ו̣ to distinguish them from each other and from consonantal ו; in ב, כ, פ to distinguish them from ב, כ, פ; and in ה to mark this letter as the final consonantal *h*. While recommending this method, the Va'ad ha-Lashon had made it optional considering that the necessary printing types may not be available. The result could have been foreseen: almost nobody used the dotted letters, but wrote ו for both *o* and *u* and used וו to mark the consonant *w* (*v*), taking advantage of the alternative allowed by the Va'ad. Thus, in fact, בָּקָר was (and still is) written בִּיקָר; שְׁלֹחַן – שׁוּלחַן – דְּבוּר – דִּיבוּר, etc., and הוֹעֵד – הוּעֵד – עוֹר – עִיוור, etc. When the Academy of the Hebrew Language adopted the rules of the Va'ad ha-Lashon in 1969, this alternative was abrogated and the basic ruling alone maintained.

The resolution of the Academy was submitted to the Ministry of Education and Culture and published with the minister's signature. A committee appointed by the ministry started consultations to decide at what stage and by what didactic methods supplemented unvocalized spelling should be taught in schools.

Since that time, the Academy revised the spelling rules once again. The decisions made in 1994 can be consulted in R. Gadish (ed.), *Kelalei ha-Pissuk, Kelalei ha-Ketiv Hasar ha-Nikud, Leshonenu La-Am*, special issue, 4th edition (2002).

VOCABULARY. How the vocabulary of the “dead” language was adapted to the requirements of expression in all fields of life and thought is taken by many as the most outstanding achievement of the revival period. True, in less than two generations, thousands of new words and new uses of words have become part of the Hebrew lexicon. However, in this respect at least, Hebrew never was really dead; in literature and occasionally in speech, new words were being coined continually, and while these activities did not cover all domains of life, contents were not restricted to religion, philosophy, poetry and the like. Medieval literature comprises works on medicine, mathematics, astronomy, and other sciences. Matters of daily life were dealt with, for example, in the vast **responsa* literature, in itineraries, etc. and new impulses of modernization further widened their scope. To adduce only two examples, one of a more comprehensive character and the other one particular word: (1) many names of animals used today are not words invented by Ben-Yehuda or after him, but first appeared around 1870 in **Mendele Mokher Seforim’s* “Natural History”; (2) if the Hebrew word for “passport” occur-

ring in medieval literature – תייר (*tiyyur*) or כתב־תייר (*kètav tiyyur*) – had not been overlooked, there would have been no need for the recent use of the ancient word דִּרְכּוֹן (*darkon*, a coin) in this sense.

As the last example shows, new words have been formed for concepts that had already been expressed by other words in the past. *Bialik's idea (in his essay "*Hevlé Lašon*," 1891) that total acquaintance with the store of the language ought to precede coining new words could not be followed, let alone his wish that a complete dictionary of all Hebrew writing should be the source for new word creations. In *Aḥad Ha-Am's view (put forward in his essay *Ha-Lašon we-Sifrutah*, 1909), the vocabulary could only be expanded by creative artists and thinkers who would be guided by the genius of the language. Bialik, though he agreed with him with regard to genuine autonomous creation, insisted upon the necessity to supply, even by designed regular activity, all the words needed, particularly those that had their semantic counterparts in other languages.

Bialik thus approved of, and later participated in, the work undertaken by Ben-Yehuda and the Va'ad ha-Lashon. While many words were, and are, to an ever-increasing degree, invented by writers and experts in their special fields, the principles and methods that guided Ben-Yehuda and his circle were followed by almost all authors of words, if not through conscious abidance, then by imitation and analogy.

The sources and ways for extending the vocabulary were expounded in *Zikronot Wa'ad ha-Lašon* I (p. 7f.): (1) The best method to glean lexical items for modern use was "to search all departments of Hebrew literature and gather from them words..." If the meaning of an ancient word in its original context is doubtful, efforts should be made to clarify its interpretation; if, however, no decision can be reached, coining a new word is preferable to using a contested word. Thus, even today a biblical or later word may be submitted to the Academy for inclusion in a dictionary, but may be opposed by some members, or rejected by the majority, because commentators disagree on its meaning at its source. (2) As far as necessary, Aramaic words may be accepted, but these, unless they are already well known in their original form, are to be reshaped to fit Hebrew pattern and grammar, as happened to the Aramaic עובדא ('ovada) which became עֲבָדָה ('uvda) ("fact"), changing both its vocalization and gender.

Ben-Yehuda's design to exploit freely the abundant vocabulary of Arabic has been accomplished to a limited extent only. Most of the words from an Arabic source found in literary and higher colloquial language are either medieval borrowings: אָפֶק (*'ofeq*, קֶטֶב (*qoṭev*), קוֹטֶר (*qoter*), מְרָכֵז (*merkaz*), and more, or are due to Ben-Yehuda himself: הֶגִירָה (*hagira*), הַצְהָרָה (*hashara*), זִבְדָה (*zivda*), אֲדִיב (*adiv*), לְטִיפָה (*letifa*), etc. Later, few new words entered standard Hebrew from Arabic, presumably because the creators of the new vocabulary came in the main from circles who knew no Arabic. When borrowing from foreign languages, they preferred the European, often international, word to the Arabic one, e.g., נְיִטְרָלוּיִת

(*netraliyyut*; “neutrality”) to the suggested *חייוד* (*hiyyud*: from the Arabic *hiyād*). It is all the more remarkable that sub-standard speech has a high proportion of Arabic words and phrases.

In earlier years, borrowing from non-Semitic languages was firmly rejected with the exception of words with a Hebrew-like form or already in frequent use, but this attitude was later abandoned. Yet, many speakers of Hebrew even today frown upon words taken from European languages, such as, *אקדמיה* (*aqademya*) and *אוניברסיטה* (*universita*) proving that such words are felt to be foreign unwieldy elements and that the prior general attitude in this respect did not merely stem from the extremism of a few. On the whole, however, international technical terms are now widely adopted not only in specialized publications but in newspapers and books for the general public. Colloquial speech, too, comprises many foreign words, partly perhaps due to a passing snobbish fashion. *Even-Shoshan’s seven-volume “New Dictionary” (1966–1970) contains 3,448 foreign, mainly international, words among its 33,549 basic items, and in the “Dictionary of Terms in Photography,” published by the Academy in 1966, there are 53 borrowed international words among its 700 items. An important restriction on the borrowing of words of non-Semitic origin is the structure of the Hebrew verb which is formed according to severe rules, e.g., that certain vowels must appear in certain positions in verb forms; that only a limited number of consonants can constitute a verb-root, etc. As a matter of course, the necessary coining of an original Hebrew verb often also leads to the replacement of the corresponding foreign noun.

According to the principles of the *Va’ad ha-Lashon*, words should be created “in agreement with the rules of grammar and analogy.” As far as possible, they are to be derived from roots found in biblical and talmudic literature and, in the second place, from Aramaic and other Semitic, especially Arabic, roots. To establish new scientific terms, one should aim at the essential signification, not the literal meaning, of the words of other languages. Newly coined words have not only to be grammatically correct, but pleasing to the ear and appropriate to the spirit of the language.

Contrary to the intention to avoid expressing only the literal and etymological meaning of the foreign word, loan-shifts and loan-translations have been and are an ever-growing source for new uses of existing Hebrew words. As in every language throughout the ages, Hebrew words also contract new meanings under the influence of particular applications of corresponding words in other languages, and foreign compound words and phrases are rendered in Hebrew by literally translating their components. English “crane,” for the hoisting machine, French “grue,” etc. have brought about the Hebrew *עגורן* (*‘aguran*) derived from the name of the bird; and German “Kindergarten” has engendered *גן-ילדים* (*gan-yeladim*; “garden” (of) “children”). Nowadays, the principle of such semantic borrowings is seldom debated; only innovations that are felt to be too farfetched and removed from prevailing usage are rejected. In word formation, modern Hebrew, for the

most part, follows the methods inherited from former stages of the language. The available noun and verb patterns are used to the full for innovations. Yet, some possibilities of derivation and combination that in older Hebrew were realized in relatively small measure are now put to use more extensively and, as some maintain, even excessively. The following deserve special mention and exemplification:

(1) Many nouns and adjectives are derived from noun bases by adding suffixes:

(a) *-an*, fem. *-anit* for nouns, as in: *חצוצרן* (*haṣṣeran*, “trumpeter”); *תותחן* (*totahān*, “artilleryman”); *דודן* (*dodan*, fem. *דודנית* (*dodanit*, “cousin”); *מהפכן* (*mahpēkan*, “revolutionary,” n.); *תיקן* (*tīqan*, “cockroach”), from *תיק* (*tīq*, “envelope,” i.e., the protective shell of the insect’s eggs).

(b) *-ay*, fem. *-a’it* for nouns, as in: *עתונאי* (*‘ittonay*, fem. *עתונאית* *‘ittona’it*, “journalist”); *בולאי* (*bulay*, “philatelist”); *אוראי* (*awiray*, “airman”); *מכונאי* (*mēkonay*, “machinist”); *טלפונאי* (*telefonay*, fem. *טלפונאית* *telefona’it*, “telephone operator”); *סטטיסטיקאי* (*statistiḡay*, “statistician”).

(c) *-on*, fem. *-onet*, often for diminutive nouns: *דובון* (*dub-bon*, “young bear, teddy bear”); *ילדון* (*yaldon*, “small boy”), *ילדתון* (*yaldonet*, “small girl”); *שדון* (*šedon*, “sprite”).

(d) *-i*, fem. *-it*, mainly for adjectives: *צבאי* (*ṣeva’i*, “military”); *גמדי* (*gammadi*, “dwarfish”); *אפסי* (*afsi*, “amounting to nothing”); *תהומי* (*tēhomi*, “abysmal”); *ענקי* (*‘anaqi*, “colossal”). The suffix *-i* is also widely used to derive adjectives from compounded pairs of nouns, as in *צפון-מזרחי* (*ṣefon-mizraḡi*, “north-eastern”), from *צפון-מזרח* (*ṣefon-mizraḡ*, northeast); *גב-לשוני* (*gav-lēšoni*, “dorsal,” in phonetics), from *גב-לשון* (*gav-lašon*, “dorsal surface of the tongue”); *קלל-אנושי* (*kēlal-‘enoši*, “all-human, universal”). This mode of derivation, found in the Bible in gentilial names, like *בן-ימיני* (*Ben-Yēmini*, “Benjaminite”) and *בית-הלחמי* (*Bet-Hallahmi*, “Bethlehemite”), has also been extended to compounds whose first member is a quantifier, as in *חד-כווני* (*had-kiwwuni*, “unidirectional”); *דו-לשוני* (*du-lēšoni*, “bilingual”); *רב-צדדי* (*rav-ṣēdadi*, “many-sided”); or a preposition, as in *בין-לאומי* (*ben-lē’ummi*, “international”); *קדם-מקצועי* (*qēdam-miḡso’i*, “pre-professional”); *על-אנושי* (*al-‘enoši*, “superhuman”).

(e) *-it*, for nouns, some diminutive (besides being the feminine form of *-i*): *מכונית* (*mēkonit*, “automobile”); *מונית* (*monit*, “taxi”); *ידית* (*yadit*, “handle”); *מפית* (*mappit*, “napkin”); *תווית* (*tawit*, “label”).

(f) *-ut*, for abstract or collective nouns: *בוררות* (*borērut*, “arbitration”); *ציונות* (*ṣiyyonut*, “Zionism”); *רוקחות* (*roqēḡut*, “pharmacology”); *מילדות* (*meyallēdūt*, “obstetrics”); *עתונות* (*‘ittonut*, “press”).

(g) Several of the foregoing suffixes may combine to form new derivations, such as: *מהפכני* (*mahpēkani*, “revolutionary,” adj.); *מהפכנות* (*mahpēkanut*, “revolutionism”); *תותחנות* (*totēḡanut*, “artillery”); *עתונאות* (*‘ittona’ut*, “journalism”); *גמדיות* (*gammadiyyut*, “dwarfishness”); *אפסיות* (*afsiyyut*, “worthlessness”).

(2) New nouns are built by joining elements of two other words, particularly when this is suggested or facilitated

by both words having one or more consonants in common or by the second word beginning with a glottal stop (*alef*) which can easily be omitted. קולנוע (*qolnoa*, “cinema”) is but a simple joining of קול (*qol*, “sound”) and נוע (*noa*, “movement”), while אופנוע (*ofannoa*, “motorcycle”) joins אופן (*ofan*, “wheel”) and נוע (*noa*). Two original consonants are omitted in דהפור (*dahpor*), a blending of the verbal roots דחף (*d.h.f.*) and חפר (*h.f(p).r*); with the recurring pair ח (*h*) and פ (*f(p)*) inserted only once, the sequence דחפר (*d.h.f(p).r*) is left and shaped into a noun with the vowel sequence *a.o* frequent in nouns. On the same vowel pattern רמזור (*ramzor*, “traffic light”) is formed from the verbal root רמז (*r.m.z.*, “to indicate”) and the noun אור (*or*, “light”) whose initial א *alef* is elided. The popular creation שמרטף (*šəmartaf*, “babysitter”) is compounded from שמר (*š.m.r.*, “to watch”) and טף (*taf*, “children”), but the Academy prefers שומר-טף (*somer-taf*) modeled after the biblical שומר-טף (*šomer-saf*, “keeper of the door”).

(3) Among verbal innovations the amount of denominative verbs is significant: רשת (*riššet*, “to cover with a net”) comes from רשת (*réšet*, “net”); קרקע (*qirq’a*, “to ground [an aircraft]”) from קרקע (*qarqa*, “ground”); נתיב (*nittev*, “to pilot”) from נתיב (*nativ*, “path”), and numerous others, especially scientific, technological, and military terminology. For such new active verbs, the pattern *pīel* is preferred with *hif’il* left far behind and *pa’al* (*qal*) almost entirely neglected.

(4) Many of these new denominative verbs are derived from nouns with prefixed or suffixed formatives. Thereby, new roots, mostly quadriliteral, have entered the language: מרכז (*mirkez*, “to centralize”), with it the passive participle מְרֻכָּז (*mēmurkaz*), and the action noun מְרֻכּוּז (*mirkuz*) have been derived from מְרֻכָּז (*merkaz*, “center”) to differentiate from the former verb רכז (*rikkez*, “to concentrate”) which shows the original root רכז (*r.k.z*). מְסַפֵּר (*mispar*, “to number”) contains in its secondary root מְסַפֵּר (*m.s.p.r*) the consonants of מְסַפֵּר (*mispar*, “number”), a noun derived from the primary root ספר (*s.f(p).r*). The relation between תִּזְמֵר (*tizmer*, “to orchestrate”), תִּזְמֹרֶת (*tizmóret*, “orchestra”), and the primary root זמר (*z.m.r*) is similar. In a *piyyuṭ* by Eleazar *Kallir (of the early Middle Ages) there is the verb הִתְמִיר (*hitmir*) originating from תְּמִירָה (*tēmura*, “change”) which in turn is based on the primary root מור (*m.w.r*); the verb הִתְמִיר (*hitmir*) has now passed from its remote literary source into modern use in the meaning “to substitute” in chemistry. From the primary root חמצן (*h.m.z*) Ben-Yehuda formed the noun חֲמִצָּן (*hamzan*, “oxygen”), and this served as a base for the new verb חִמְצֵן (*himšen*, “to oxydize”).

(5) Another way to form denominative verbs is to derive new roots from contractions or acrostics of compound words. Thus, from דִּין-וְהֶשְׁבֹּן (*din-wě-ḥešbon*, “account, report”) first the acrostic דוּחַ (*duah*, “report”) came into use, and then the verb דִּוְחַ (*diwvah*, “to report”) was formed with the artificial root דוּח (*d.w.h.*). In order to obtain a Hebrew verb for “to internationalize,” to which בֵּין-לְאֻמִּי (*ben-lē’ummi*, “international”) did not lend itself, a contracted root בנאם (*b.n.’m*) had to be presumed to arrive at the desired verb בִּנְאֵם (*binēm*)

and its action noun בִּנְאִים (*bin’um*, “internationalization”). However, this presumption is not so farfetched, since there is a Hebrew noun אִמָּה (*umma*), besides לֵאָם (*lē’om*) for “nation.”

(6) In analogy to several verbs of the *šaf’el* formation inherited from biblical and later Aramaic and Hebrew, some new causative verbs and action nouns with the prefixed *š-* have been created from existing roots, mainly where other verb formations had already been exploited for the same root. To these innovations, some of which have been sanctioned by the Academy, belong שִׁחֲזַר (*šihzer*, “to restore”), root חזר (*h-z-r*, “to return”), and its action noun שִׁחְזוּר (*šihzur*); שִׁקְּם (*šiqqem*, “to rehabilitate”) with שִׁקּוּם (*šiqqum*) as action noun, root קום (*q-w-m*, “to rise”); שִׁפְּרַט (*šifret*, “to elaborate”) derived from פָּרַט (*pēraṭ*, “detail”); שִׁכְּפֵל (*šikpel*, “to duplicate, multiply (written matter)”), etc. Among the first and most widely used of these new words were שִׁחְזוּר (*šihzur*) with the meaning of restoration of a previous condition inherent in its root חזר (*h-z-r*), and שִׁקּוּם (*šiqqum*), which intrinsically only means “causing to rise, erecting,” but was used in contexts entailing the connotation of “again.” Many speakers, therefore, came to attribute this meaning of remaking or redoing to the *šaf’el* formation, and by way of vindicating this semantic shift, some even interpreted the prefixed *š-* as an abbreviated שׁוּב (*šuv*, “again”). On this assumption, more verbs and action nouns with initial *š-*, corresponding to English *re-*, have been formed and in part accepted: שִׁחְלַף (*šihlef*, “to re-exchange”), root חלף (*h-l-f*) – in another sense שִׁחְלַף > שִׁלְחַף (*šalḥef* < *šahlef*) is already found in the Aramaic of the Targum and Talmud; שְׁעִירוּךְ (*šīiaruk*, “reassessment”), root ערך (*‘-r-k*); שִׁזְרַע (*šizra*, “to resow”), root זרע (*z-r-*); שִׁגְזוּר (*šigzur*, “back formation” in linguistics), root גזר (*g-z-r-* “to derive”), etc.

(7) A considerable number of passive verbal adjectives has been adopted with the vowel sequence *a-i* inserted in the root and corresponding in meaning to French and English adjectives in *-able*, *-ible*. The first of these probably was שָׁבִיר (*šavir*, “breakable”), followed by קָרִיאַ (*qari*, “readable,” “legible”), סָבִיר (*savir*, “reasonable”), קָבִיס (*kavis*, “washable”), חָדִיר (*ḥadir*, “penetrable”), דָּחִיס (*daḥis*, “compressible”), and more. However, this pattern has at all times served in the formation of other adjectives (as the biblical אָשִׁיר “rich”) and of nouns (as the biblical קִשְׁיִר “harvest”). Its application to defective roots meets with difficulties; its use is limited to derivations from *pa’al* (*qal*) verbs, and its corresponding abstract noun is ambiguous (e.g., דִּלְחִסוּת *dēlhisut* may be understood as “compressibility” and as “[state of] compression,” from דָּחַס, “compressed”). Words of this semantic category are, therefore, also formed in other ways, either with the suffix *-i* appended to an action noun, as in שִׁמּוּשִׁי (*šimmuši*, “practical”), from שִׁמּוּשׁ (*šimmuš*, “practice, use”), or, as in classical Hebrew, either by the use of passive participles, such as מִתְקַפֵּל (*mitqappel*, “collapsible,” “folding”); נֶאֱכָל (*ne’ēkal*, “edible”); מִטְלָטֵל (*mitṭalṭel*, “portable”), etc., or by compounding בֵּן- or בַּר- with abstract nouns, mostly action nouns, as in בֵּן-סֶמֶךְ (*ben semek*; “reliable”), בֵּן-בּוּז (*ben-buz* [Bialik],

“contemptible”); **בַּר-בִּטּוּל** (*bar-biṣṣua* “executable”); **בַּר-בִּיטּוּל**, “abolishable”), etc.

GRAMMAR. In 1905, the teachers’ convention agreed to Yellin’s proposal for a standardized orthography based on the biblical vocalization system. This, to a large extent, led to the acceptance of biblical Hebrew grammar for modern Hebrew. The spelling and vocalization adopted determined the form of words and their inflection, though in this sphere, too, usage had to be normalized to eliminate variations and prosodic peculiarities of the Bible text.

In 1910, this topic was discussed in a meeting of the Va’ad ha-Lashon in which Eliezer Ben-Yehuda, Yisrael Eitan, David Yellin, Aharon Masie, and Yosef Meyuhas took part. The summary of this debate, published in *Zikronot Va’ad ha-Lašon* 11 (2nd ed., 1929, p. 17ff.) has lost little of its import; many of the arguments set forth then are still heard whenever there is doubt about the preferable form and inflection of a word or a class of words. The discussion then originated from one particular question, i.e., the correct plural for the mishnaic **אֶגֶן** (*ogen*, “rim, brim”), whether it should be **אֶגְנִים** (*oḡanim*) according to grammar based on the Bible, or **(אֶגְנִים אוֹגְנִים)** (*oḡnim*) as found in mishnaic Hebrew. Many aspects of modern grammar were treated in the light of ancient literary sources during this debate.

In conclusion, the following resolution was proposed by D. Yellin and adopted: “We take from talmudic and midrashic literature words and expressions which we need and new grammatical forms supplementing those found in the Bible. Talmudic words accepted are to be given a Hebrew form whenever possible. For verbs no new forms are needed if in the Bible there are corresponding forms.” The significant words in this resolution provide that neither in vocabulary nor in grammar should anything available in the Bible be replaced by elements from later literature. Regarding the special problem of the plural of nouns, such as **אֶגֶן** (*ogen*), both forms were admitted, but later the “Dictionary of Technical Terms,” published in 1929 by the Va’ad with H.N. Bialik as one of its editors, contained only the plural form **אֶגְנִים** (*oḡanim*) in conformity with biblical grammar.

The principles adopted by the Va’ad ha-Lashon were observed, with few exceptions, by teachers and in textbooks. According to these norms, the teaching of grammar, on the whole, not only excluded the divergent traditions of Hebrew and the innovations found in post-biblical literature, but also disregarded the language in which Hebrew literature had been written since the end of the Haskalah. It was to the principles of the Haskalah that normative grammarians now reverted. The literature before the revival of Hebrew speech in Palestine, especially since Mendele Mokher Seforim, had not submitted to the restrictions imposed by the Haskalah, but had freely blended biblical elements with talmudic and later grammatical forms as well as with words and phrases from all periods and even borrowings from modern European languages. However, as modern literature and speech have continued to

grow, grammar based on the Bible has proved inadequate for all the new material.

The strict adherence to what was known and held in biblical grammar is well exemplified by A.Y. Shapiro in his *More Nevuké ha-Lašon* (Warsaw, 1909). The author corrects about 140 words and grammatical forms found in the writings and speech of his contemporaries, naturally according to his views on the Bible text and to the conclusions he draws from it. Thus, he rejects **נָאָבָד** for **אָבָד**; **נָאָנָח** for **הִתְאָנָח**; **אָרְכָה** for **אָרוּכָה** (fem. of **אָרַךְ**, “long”), the infinitives **לִישֵׁב**, **לִידַע**, etc., for the biblical forms **לִשְׁבַּת**, **לִדְעַת**, etc.; infinitives such as **לְקַרְא** for **יָפִי** both in the absolute and construct case for **עוֹמֵס** for **אֶלְמֹד** (“carrying, burdened”); **הִרְאָה אֶת... אֶת...** for **הִרְאָה אֶת... לְ...**; etc. Although the author, in an appendix, shows that some of these and other non-biblical forms are found in talmudic literature, he does not approve of their use in modern language. However, these forms and many more have in fact existed in the literature, or in certain traditions of Hebrew, for centuries and are accepted by some of the best modern writers, their selection being but a matter of personal style.

As Hebrew is the paramount unifying factor of modern national culture in Israel, a distinction had of necessity to be made between the standard language taught in schools and used in public addresses, broadcasting, and the like, and the individual idiom of creative writers and the traditions of the various Jewish communities in reading religious and other texts that naturally also influence their everyday speech. The work of establishing a normative grammar of modern Hebrew – one of the chief tasks of the Va’ad ha-Lashon and the Academy of the Hebrew Language – will understandably take a long time and, in fact, imposes itself constantly anew in response to cultural developments. However, once the foundations have been laid and become general usage, much can be left to natural growth without interference of any linguistic authority. Even today the greater part of new words and word forms used spontaneously by individuals already conforms to grammar rules.

The new, Hebrew grammar is gradually being built by two separate activities: by comprehensive discussion and decision on systematic divisions of grammar and by ad hoc instructions on particular problems submitted by writers, teachers, journalists, and other members of the public or arising from the work of terminological committees. The former course is naturally preferred, yet it is lengthy and cannot answer urgent needs; therefore, the latter is unavoidable, although its ad hoc directives have occasionally to be amended to agree with a subsequent comprehensive ruling.

The foremost aim of the Va’ad ha-Lashon in its systematic treatment of grammar was to decide on words for which the biblical text does not provide sufficient exemplary evidence or offers several divergent forms of one word, e.g., for the noun **לָטָא** (“lizard”), found only in this form once in Leviticus, two forms with pronominal suffixes may be inferred: **לָטָאָתִי** or **לָטָאָתִי**; by analogy, two forms for the post-biblical

מִתְחַהֵּה (“protest”) would be possible; אָגַם (“pool,” “pond”) has two inflected forms belonging to different paradigms: אֲגַמִּים and אֲגַמִּיהֶם, both in Exodus. Whenever there was no doubt about the biblical form of a word, the Va’ad accepted this precept and allowed only very few exceptions dictated by firmly established usage, e.g., permitting קְתָבִי הַקֶּדֶשׁ (“Holy Scriptures”) besides the form based on the Bible קְתָבִי הַקֶּדֶשׁ from קְתָב with an unchangeable *qameṣ*. This principle inevitably led to a twofold treatment of words of one and the same morphological pattern: Words taken from the Bible went one way, and those coming from later sources or coined recently went another. Thus, the rule for nouns of the pattern *qēṭal* to which קְתָב belongs, lists the biblical words whose *qameṣ* is to be unchangeable, and provides for the change of *qameṣ* to *pataḥ* or *šewa* only in words from later sources, such as שָׁטַר (“writ, note”) – שְׁטֵר־חֹב (“note of debt,” sing. construct state) – שְׁטֵר־יֶחֱבֹב (plur. construct state).

When the Academy continued this work of the Va’ad ha-Lashon, the renewed debate led to a fundamental change. Now, the rules are to deal with modern Hebrew as a whole, and the dichotomy of its vocabulary by reason of its sources, whether biblical or post-biblical, has been abandoned. It is no longer a matter of course that for each biblical word its biblical inflection be accepted in the modern language. If this is to be done, and, in general, it is, the issue is open to discussion and subject to decision in accordance with the tendency to allow well-established traditions and usages their proper place, and to make each new rule as comprehensive as possible. Most of the rules still have their exceptions, of course, but these are few, and they sometimes include biblical forms or state their existence without recommending their use.

So far, only the rules for the inflection of nouns have been systematically discussed and partly established. The arrangement of the rules follows the alteration of the vowels in each class of nouns, this being the prominent feature in Hebrew inflection. Each rule is the outcome of a thorough examination of the ways in which the various sources of the language treated the vowels in inflection. The rules for *qameṣ gadol* and *pataḥ* have been published (*Zikronot* 7–8, 1962, p. 91ff and 13, 1967, p. 7f.), and the rules for the other vowels were decided upon and issued by the Academy in later sessions, the most recent publication being in *Leshonenu La-Am*, 51–52 (2000–1), pp. 153–98.

As an example, paragraph 8 of section 2 in chapter I will be given here with some added remarks:

The *qameṣ gadol* is stable in the endings -תָּ, -תֵּן, -תֵּן in nouns denoting occupations and qualities, such as לִמְדָּנִים – לִמְדָּנִים; בִּימָרִי – בִּימָר; לְבָלִירִים – גְּאוֹתָן – גְּאוֹתִי; קִבְּלָן – קִבְּלָנִי; סִמְרָטוֹרִים – סִמְרָטוֹרִי; סִמְרָטוֹרִי – סִמְרָטוֹרִי.

The *qameṣ* is stable in the nouns אֵיתָן – אֵיתִי – אֵיתִי, and in loanwords, such as רִמְזָן, גְּרַפְזָן, etc.

In other nouns, the *qameṣ* changes in inflection: – שְׁלֹחָנִים; בְּנִינִי – בְּנִינִי; עֵינִינִי – עֵינִינִי; אֲמִדָּנִי – אֲמִדָּנִי; פְּלָחִי – פְּלָחִי; שְׁלָחִי (constr.); סוֹדָרִי – סוֹדָר; טַפְסָרִי – טַפְסָר; קִרְבָּנִי – קִרְבָּנִי; עֲכָבְרִי – עֲכָבְרִי; קוֹלָרִי – קוֹלָרִי.

This paragraph presupposes paragraph 1 of section 1 which provides that “every *qameṣ gadol*, occurring in the absolute state in a stressed syllable, changes to *pataḥ* in the singular construct state and before the pronominal suffixes -כֶּם, -כֶּן, -כֶּן.” Therefore, שְׁלָחִי, e.g., in these two contexts becomes שְׁלָחִי and שְׁלָחִי respectively.

Of the 21 words adduced as examples in this rule, only seven are biblical: אֵיתָן, שְׁלָחִי, קִרְבָּן, בְּנִינִי, עֵינִינִי, עֲכָבְרִי, טַפְסָרִי. (The last word, of Sumerian-Accadian origin, occurs twice in the Bible, once with *hīreq* and once with *pataḥ* in the first syllable.) Another nine words, partly Greek or Latin borrowings, are found in talmudic-midrashic literature: סִמְרָטוֹרִי, קוֹלָרִי, סוֹדָרִי, גְּרַפְזָן, אֵיתָן, פְּלָחִי, אֲמִדָּן, סִימָן, לְבָלִירִי, and one, לִמְדָּן, is found in medieval writings (and also in Yiddish), but there are many newly created words of the same formation. Two words are modern derivations from older ones: סִמְרָטוֹרִי (“rag picker”) from the talmudic סִמְרָטוֹ (“rag”) and בִּימָרִי (“stage technician”) from the originally Greek בִּימָה (“stage”). The remaining two, גְּרַפְזָן, רִמְזָן, are contemporary loans from European languages.

The salient point here is that, without regard to their history, all these words are integrated in the modern vocabulary and divided with respect to their inflection not necessarily in conformity to biblical grammar. The fact that they do not behave uniformly in inflection has historical reasons. The group with changing *qameṣ* follows three of its members – שְׁלָחִי, עֲכָבְרִי, קִרְבָּן – for which the Bible text has *šewa*, or *šewa compositum*, replacing *qameṣ* in the relevant inflected forms. The other group, with stable *qameṣ*, complies with the usual pronunciation of most of its members.

Outside of the systematic treatment of grammatical and other problems by the Academy, ad hoc solutions of specific questions deal not only with morphology, but with syntax and style as well. A few examples must suffice here. In the field of morphology it is often necessary to fix the exact spelling and vocalization of old words that have been handed down in several forms. The vowels of the talmudic noun גּוֹפֶן (“character of script”) are uncertain; thus of the forms גּוֹפֶן, גּוֹפֶן, גּוֹפֶן which are found, the first has been chosen. Even for the verb הוֹיַע (“to sweat,” in the *hif’il*, two vocalizations have been in use: הוֹיַע and הוֹיַע; the choice fell on הוֹיַע because it agrees with the root suggested by the inflection of the biblical noun יָעָה (“sweat”) which alone is in common use today (not יָעָה). Committees on terminology, when proposing a new word, are often in doubt about its grammatical form. Thus, מִכָּל (“container”) has been selected instead of מִכָּל previously chosen by the Va’ad ha-Lashon. Foreign words admitted into the language require their Hebrew plural to be determined. Thus for the plural of מַקְסִימוֹם (“maximum”) the form מַקְסִימָאוֹת has been proposed in the same way as mishnaic Hebrew dealt with similar Greek and Latin nouns (וִילוֹן – Latin “vellum” – plural וִילָאוֹת).

Syntactic structure in translated literature and in journalistic writing has been greatly influenced by European languages (now mainly English). One of the results, for example, is the frequent appearance of non-restrictive, continuative relative clauses, such as, הַשּׁוֹטְרִים וְרַפּוֹ אֲחֵרֵי הַגָּבִב שֶׁנִּמְלָט לְתוֹךְ הַבֵּית,

הַקְרֹב. ("The police pursued the thief, who escaped into the nearest house"). Although this use is found neither in the colloquial language nor in that of writers whose Hebrew is considered exemplary, it is frequent in journalese and officialese. Some linguists do not condemn it on this level of the language, and the same applies to other syntactic structures, equally foreign to more elevated and conservative style.

Modern Hebrew as a Semitic language, with an ancient literary heritage still cherished and studied, was already exposed to the impact of the modern world and of modern non-Semitic languages when it only was the vehicle of literary revival and before it became a fully living language. Whoever took part in the revival of the language, in writing or in speech, was aware of this position, its requirements and consequences. But for the past 80 years at least, Ben-Yehuda and his collaborators and their successors have made a conscious effort to develop Hebrew and adapt it to modern use on the lines on which, in their view, it would have developed if its natural life had continued without interruption into the 20th century. In fact many other languages which have not passed a period of suspended animation now face problems quite similar to those of modern Hebrew. What Hebrew experienced now has happened to it before, for example, in the talmudic period and in the later Middle Ages, when not only new words were formed or borrowed and old words were used to refer to new objects, but the morphological, syntactic, and conceptual structure of the language changed in part, both by direct imitation of other languages and under the influence of their manner to organize the relation between words and concepts.

One of the characteristics of modern Hebrew is the speed of the changes in all respects. Thus it offers much interesting material to the linguist to show the trends of its evolution and to discover general linguistic facts and processes in it. Two phenomena: "Westernization" and "re-Hebraization" (much discussed in treatises on language policy, especially by Rosén, Ben-Hayyim, and Bendavid), in the recent development of the language are obvious to all observers. The "ancient language being in a new reality" absorbs concepts and forms of Western languages through cultural contacts, through more or less apt translation, immigration, and bilingualism, etc. The wish to strengthen the inherited Hebrew component is obvious and may be realized through extended Hebrew education, more intense study of classical writings, the growth of modern literature imbued with old language tradition and the increased number of its readers, competent guidance of language development and by adapting old forms to modern contents.

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BIBLIOGRAPHY: PRE-BIBLICAL GENERAL: C. Brockelmann, in: *Handbuch der Orientalistik*, vol. 3, *Semitistik*, Abschnitt 1 (1953), 40–58 (Canaanite dialects and Ugaritic), 59–70 (Hebrew); G. Garbini, *Il Semitico di Nord-ovest* (1961); Gelb, in: *Journal of Cuneiform Studies*, 15 (1961), 27–47; A. Goetze, in: *Language*, 17 (1941), 127–38; Greenberg, in: *JAOS*, 72 (1952), 1–9; Z.S. Harris, *Development of the Canaanite Dialects* (1939); Moran, in: Wright, *Bible*, 59–85; Polotsky, in: *A World History of the Jewish People* 1st series, 1 (1964), 104–11;

Roessler, in: *ZDMG*, 100 (1950), 461–514; Von Soden, in: *WZKM*, 56 (1960), 177–91. EGYPTIAN MATERIAL: W.F. Albright, *The Vocalization of the Egyptian Syllabic Orthography* (1934); idem, in: *JPOS*, 8 (1928), 223–56; idem, in: *JAOS*, 74 (1954), 222–33; Borée, M. Burchardt, *Die altkanaanaeischen Fremdwörter und Eigennamen im Aegyptischen* (1909–10); Moran, in: *Orientalia*, 26 (1957), 339–45; K. Sethe, *Die Achtung feindlicher Fürsten, Völker und Dinge auf altägyptischen Tongefäßscherben des mittleren Reiches* (1926); J. Simons, *Handbook for the Study of Egyptian Topographical Lists Relating to Western Asia* (1937); G. Posener, *Princes et Pays d'Asie et de Nubie* (1940). CUNEIFORM MATERIAL FROM TAANACH: Albright, in: *BASOR*, 94 (1944), 12–27; Gross, *ibid.*, 190 (1968), 41–46; Hillers, *ibid.*, 173 (1964), 45–50; F. Hrozný, in: E. Sellin, *Tell Ta'annek, Bericht ueber eine... Ausgrabung in Palaestina* (1904), 113–22. CUNEIFORM MATERIAL FROM EL-AMARNA: Albright, in: *BASOR*, 89 (1943), 7–17; F.M.T.Boehl, *Die Sprache der Amarnabriefe* (1909); E. Dhorme, in: *RB*, 22 (1913), 369–93; 23 (1914), 37–59, 344–72; Ebeling, in: *Beitraege zur Assyriologie und semitischen Sprachwissenschaft*, vol. 8, pp. 39–70; J.A. Knudtzon, *Die El-Amarna Tafeln* (1915); Moran, in: *Orientalia*, 29 (1960), 1–19; idem, in: *Journal Of Cuneiform Studies*, 4 (1950), 169–72; A.F. Rainey, *El-Amarna Tablets 359–379*, suppl. to J.A. Knudtzon's *Die El-Amarna Tafeln* (1970); For primary references see: R. Borger, *Handbuch der Keilschriftliteratur*, 1 (1967), 237f. AMORITE CUNEIFORM MATERIAL: G. Buccellati, *The Amorites of the Ur III Period* (1966); T. Bauer, *Die Ostkanaanaeer* (1926); A. Finet, *L'Accadien des Lettres de Mari* (1956); E. Dhorme, in: *RB*, 37 (1928), 63–79, 161–180; 39 (1930), 161–78; 40 (1931), 161–84; Gelb, in: *Atti della Accademia Nazionale dei Lincei, Rendiconti, Classe di scienze morali, storiche e filologiche*, serie 8, 13 (1958), 143–64; idem, in: *JAOS*, 88 (1968), 39–47; H.B. Huffmon, *Amorite Personal Names in the Mari Texts* (1965). **ADD. BIBLIOGRAPHY:** ONOMASTICS: S.C. Layton, *Archaic Features of Canaanite Personal Names in the Hebrew Bible* (1990); Y. Munchiki, *Egyptian Proper Names and Loanwords in North-West Semitic* (1999). EL-AMARNA: D. Sivan, *Grammatical Analysis and Glossary of the North-West Semitic Vocables in Akkadian Texts of the 15th–13th C.B.C. from Canaan and Syria* (1984); A.F. Rainey, *Cannanite in the Amarna Tablets*, 4 vols. (1996); W.L. Moran, *The Amarna Letters* (1992); idem, *Amarna Studies: Collected Writings* (2003). AMORITE: I.J. Gelb, *Computer-aided Analysis of Amorite* (1980); C.H. Gordon, "Amorite and Eblaite," in R. Hetzron (ed.), *The Semitic Languages* (1997), 1001–13; M.P. Streck, *Die Amurriter, die onomastische Forschung, Orthographie und Phonologie, Nominalmorphologie* (2000). BIBLICAL. The best grammar is still that of G. Bergstraesser, *Hebraeische Grammatik* (1918–29), which, though a torso, is an impressive piece of scholarship in the field of phonetics and the verb. An excellent short account is contained in G. Bergstraesser's *Einfuehrung in die semitischen Sprachen* (1928, repr. 1963), 36–46. For the development of stress see M. Lambert, *REJ* (1890), 73–77; J. Cantin-eau, in: *Bulletin d'Études Orientales de l'Institut Français de Damas* (1931), 81–98. Important grammars are: H. Bauer and P. Leander, *Historische Grammatik der hebraeischen Sprache des Alten Testaments* (1922; does not contain syntax); W. Gesenius, E. Kautzsch and A.E. Cowley, *Hebrew Grammar* (1913² and many reprints; translated from the 28th German edition of 1909); P. Joüon, *Grammaire de l'Hébreu Biblique* (1923). Important material is contained in E. Koenig, *Historisch-kritisches Lehrgebaeude der hebraeischen Sprache* (1881–97). Biblical Hebrew against its general Semitic background is described in C. Brockelmann, *Grundriss der vergleichenden Grammatik der semitischen Sprachen* (1907–13); yet his *Hebraeische Syntax* (1956), mostly taken from the masterly syntax contained in the second volume of his *Grundriss*, is less good, since it lacks the general Semitic back-

ground. Good is the syntax of A.B. Davidson, *Introductory Hebrew Grammar; Hebrew Syntax* (1912³), and even today one will often consult the masterly syntax contained in H. Ewald, *Ausführliches Lehrbuch der hebraeischen Sprache des Alten Bundes* (1870⁸) which was translated into English by James Kennedy as *Syntax of the Hebrew Language of the Old Testament* (1879). The new work of (G. Beer-) R. Meyer, *Hebraeische Grammatik* (1952–55²) is only important because of the new material adduced; the same applies to A. Sperber, *A Historical Grammar of Biblical Hebrew* (1966), where, e.g., material of Jerome's transcriptions is to be found. For the language of the Qumran scrolls see E.Y. Kutscher, *Ha-Lašon we-ha-Reqa' ha-Lšoni šel Mēgillat Yēšā'yahu ha-Šēlma* (1959; with English summary). For Hebrew inscriptions cf. S. Moscati, *Stato e problemi dell'epigrafia ebraica antica* (1952) where additional literature is adduced; also Aharoni and Amiran, in: IEF, 14 (1964), 138–43; Aharoni, in: IEF, 16 (1966), 1–7. For transcriptions of Palestinian place names see W. Borée, *Die alten Ortsnamen Palaestinas* (1930); for transcriptions of the Septuagint, G. Lisowsky, *Die Transkription der hebraeischen Eigennamen des Pentateuch in der Septuaginta* (1940); for those of Origen, E. Bronno, *Studien ueber hebraeische Morphologie und Vokalismus auf Grund der Mercatischen Fragmente der zweiten Kolumne der Hexapla des Origines* (1943). For the transcription of Arabic names in Nessana see the index of Arabic names by F.E. Day, in: C.J. Kraer (Jr.), *Excavations of Nessana*, 3 (1958), 352–5. For the Bible text see D. Ginsburg, *Tora Nēv'im Kētuvim* (1926²); R. Kittel and P. Kahle, *Biblia Hebraica* (1962¹³). One sample of the edition of the Hebrew University Bible Project has also appeared: M.H. Goshen-Gottstein, *The Book of Isaiah*, sample edition (1965). For an example of P. Kahle's views on the work of the masoretes see his *Cairo Geniza* (1959²). The best biblical dictionaries are still F. Brown, S.R. Driver, and A. Briggs, *A Hebrew and English Lexicon of the Old Testament* (1906, etc.); W. Gesenius and F. Buhl, *Hebraeisches und aramaeisches Handwoerterbuch ueber das Alte Testament* (1915¹⁶); W. Gesenius, *Hebrew and Chaldee Lexicon to the Old Testament* (1857, repr. 1957); and L. Koehler and W. Baumgartner, *Lexicon in Veteris Testamenti libros* (1953, Supplement 1958) – only the Aramaic part is up to the high standards of its predecessors. A new edition of this dictionary by W. Baumgartner, B. Hartmann and E.Y. Kutscher is appearing: *Hebraeisches und Aramaeisches Lexikon zum Alten Testament*, 1 (1967). For further literature see Steinschneider, *Handbuch*. **ADD. BIBLIOGRAPHY:** GRAMMAR: R.J. Williams, *Hebrew Syntax: An Outline* (1976²); J. Blau, *A Grammar of Biblical Hebrew* (1976); idem, *Studies on Biblical Hebrew* (1995); idem, *Studies in Hebrew Linguistics* (1996); idem, *Topics in Hebrew and Semitic Linguistics* (1998); B.K. Waltke & M. O'Connor, *An Introduction to Biblical Hebrew Syntax* (1990); P. Joüon and T. Muraoka, *A Grammar of Biblical Hebrew* (1991), a translation and updating of Joüon's 1923 French grammar; J. Hoftijzer, *The Function and Use of the Imperfect Forms with Nun Paragogicum in Classical Hebrew* (1985); T. Muraoka, *Emphatic Words and Structures in Biblical Hebrew* (1985); J.C.L. Gibson, *Davidson's Introductory Hebrew Grammar – Syntax* (1994); S.E. Fassberg, *Studies in Biblical Syntax* (1994); I. Ben-David, *Contextual and Pausal Forms in Biblical Hebrew* (1995); C.L. Miller, *The Representation of Speech in Biblical Hebrew Narrative* (1996); idem (ed.), *The Verbless Clause in Biblical Hebrew* (1999); T. Zewi, *A Syntactical Study of Verbal Forms Affixed by –n(n) Endings* (1999). DICTIONARIES AND LEXICONS: D.J.A. Clines et al., *The Dictionary of Classical Hebrew* (1993–); L. Koehler and W. Baumgartner, *The Hebrew and Aramaic Lexicon of the Old Testament* (2001); P. Mankowski, *Akkadian Loanwords in Biblical Hebrew* (2000). VERBAL SYSTEM: L. McFall, *The Enigma of the Hebrew Verbal System* (1982); E.J. Revell, "The System of the Verb in Standard Biblical Prose," in: HUCA, 60 (1989), 1–37; G. Hatav, *The*

Semantics of Aspect and Modality: Evidence from English and Biblical Hebrew (1997); W. Randall Garr, "Driver's *Treatise* and the Study of Hebrew: Then and Now," in: S.R. Driver, *A Treatise on the Use of the Tenses in Hebrew and Some Other Syntactical Questions* (1998), xviii–lxxxvi; P. Gentry, "The System of the Finite Verb in Classical Biblical Hebrew," in: HS 39 (1998), 7–39; Z. Zevit, *The Anterior Construction in Biblical Hebrew* (1998); J. Cook, "The Hebrew Verb: A Grammaticalization Approach," in: ZAH, 14 (2001), 117–43. LATE BIBLICAL HEBREW: A. Hurvitz, *The Transition Period in Biblical Hebrew* (1972); R. Polzin, *Late Biblical Hebrew: Toward an Historical Typology of Biblical Hebrew Prose* (1976). TRANSCRIPTIONS: G. Janssens, *Studies in Hebrew Historical Linguistics Based on Origen's Secunda* (1982); DEAD SEA SCROLLS. General: Up to 1965: C. Burchard, *Bibliographie zu den Handschriften vom Toten Meer*, 2 vols. (1957–65). 1965 TO 1970: Bibliographies in: *Revue de Qumran*, 1–6 (1958–69); J.A. Sanders, "Palestine Manuscripts 1947–1967," in: JBL, 86 (1967), 431–40 (includes a bibl. of the text-publications of Mss. discovered in Palestine from 1947 to Aug. 1, 1967). CONCORDANCES: K.G. Kuhn, *Konkordanz zu den Qumrantexten* (1960); idem, "Nachtraege zur 'Konkordanz zu den Qumrantexten,'" in: *Revue de Qumran*, 4 (1963), 163–234; A.M. Habermann, *Mēgillat Miḏbar Yēhuda* (1959), 3–175. WORKS: WAR SCROLL: J.P.M. van der Ploeg (ed. and tr.), *Le Rouleau de la guerre* (1959); Y. Yadin (ed.), *Scroll of the War of the Sons of Light Against the Sons of Darkness*, tr. by B. and C. Rabin (1962). THANKSGIVING PSALMS: M. Mansoor (ed. and tr.), *Thanksgiving Hymns* (1961); J. Licht, "Thanksgiving Scroll," in: *Peruš Mēgillat ha-Hodayot* (1957); E. Kimron, "Language of the Psalms Scroll," in: *Lšonenu*, 35 (1971/72), 99–116. PEŠER ḤABAQQUQ: K. Elliger, *Studien zum Habakuk-Kommentar vom Toten Meer* (1953). MANUAL OF DISCIPLINE: P. Wernberg-Møller (ed. and tr.), *Manual of Discipline* (1957); J. Licht (ed.), *Mēgillat ha-Sēraḳim* (1965; "Rule Scroll"); J. Maier (ed.), *Texte vom Toten Meer...* 2 vols. (1960), includes all the above scrolls. ZADOKITE DOCUMENTS: C. Rabin (ed. and tr.), *Zadokite Documents* (1954, 1958²). STUDIES ON THE GRAMMAR IN THE DSS: E.Y. Kutscher, *Ha-Lašon we-ha-Reqa' ha-Lšoni šel Mēgillat Yēšā'yahu ha-Šēlma* (1959; "The Language and the Linguistic Background of the Isaiah Scroll"), includes summary in English; Ḥ. Yalon, *Mēgillat Miḏbar Yēhuda; Divré Lašon...* (1967; "Studies in the Dead Sea Scrolls, Philological Essay"), includes summary in English; M.Z. Qaddari, *Ha-Ḥiyyuv bi-Lšon ha-Mēgillat ha-Gēnuzat* (1968; "Semantic Fields in the Language of the DSS"), includes summary in English. SELECTED ARTICLES: B. Jongeling, "Les formes QTWL dans l'hébreu des manuscrits de Qumrân," in: *Revue de Qumran*, 1 (1958/59), 483–94; F.W. Bush, "Evidence from Milḥamah and the Masoretic Text for a Penultimate Accent in Hebrew Verbal Forms," *ibid.*, 2 (1959/60), 501–14 (against his conclusions see: E.Y. Kutscher above, 254–61); M.H. Goshen-Gottstein, "Philologische Miszellen zu den Qumrantexten," *ibid.*, 2 (1959/60), 44–46; J.C. Greenfield, "The Root GBL in Mishnaic Hebrew and in the Hymnic Literature from Qumran," *ibid.*, 2 (1959/60), 155–62; E.J. Revell, "The Order of the Elements in the Verbal Statement Clause in IQ Sereq," *ibid.*, 3 (1961/62), 559–69; S.J. de Vries, "Syntax of Tenses and Interpretation in the Hodayoth," *ibid.*, 5 (1964/66), 375–414; S. Lieberman, "The Discipline in the so-called Dead Sea Manual of Discipline," in: JBL, 71 (1952), 199–206; von N. Adler, "Die Bedeutung der Qumran Texte fuer die neutestamentliche Wissenschaft," in: *Muenchener theologische Zeitschrift*, 6 (1955), 286–301; J.P. de Menasce, "Iranien Naxci," in: VT, 6 (1956), 213–4; W. Nauck, "Probleme des fruehchristlichen Amtsverstaendnisses," in: ZNW, 48 (1957), 200–20; Z. Ben-Hayyim, "Traditions in the Hebrew Language, with Special Reference to the Dead Sea Scrolls," in: *Scripta Hierosolymitana*, 4 (1958), 200–14; R. Meyer, "Spuren eines

westsemitischen Praesens-Futur in den Texten von Chirbet Qumran," in: *Gottes ist der Orient. Festschrift... O. Eissfeldt ...* (1959), 118–28; T. Leahy, "Studies in the Syntax of DSS," in: *Biblica*, 41 (1960), 135–57; A. Bendavid, *Lěšon Miqra u-Lěšon Ḥaḳamim* (1967²), 80–94 (deals mainly with mutual influences of Aramaic, Greek, etc. and Qumran Hebrew). COPPER SCROLL: The language of the *Copper Scroll*, first published by J.M. Allegro (1960, 1964²), which is close to Mishnaic Hebrew, was not dealt with in this article because the readings are not sure; see, however, B. Lurie, *Mēgillat ha-Nēhošet mi-Midbar Yēhuda* (1963); H. Braun, *Qumran und das Neue Testament*, 2 vols. (1966); this important work systematically goes through the New Testament and compares it with the Qumran scrolls also in linguistic respects (lone translation); An index *verborum* of Qumran Hebrew only a *Stellenregister*, 368–83. See also bibliography at end of Dead Sea Scrolls article. **ADD. BIBLIOGRAPHY:** EDITIONS OF TEXTS: Y. Yadin, *The Temple Scroll, Three Volumes and Supplement* (1983); J.H. Charlesworth, ed., *The Dead Sea Scrolls* (1994–); F. García Martínez and E.J.C. Tigchelaar (eds.), *The Dead Sea Scrolls Study Edition* (1997); E. Qimron, *The Damascus Document Reconsidered* (1992); idem, *The Temple Scroll: A Critical Edition with Extensive Reconstructions* (1996); idem and J. Strugnell, *Miqsat Ma'ase Ha-Torah* (DJD 10; 1994); idem & D.W. Parry, *The Great Isaiah Scroll (IQIsaa): A New Edition* (1999); J.K. Lefkovits, *The Copper Scroll (3Q15): A Reevaluation* (2000). GRAMMAR: E.Y. Kutscher, *The Language and Linguistic Background of the Isaiah Scroll (IQIsaa)* (1974), Eng. transl. of 1959 Heb. work; E. Qimron, *The Hebrew of the Dead Sea Scrolls* (1986); idem, "Observations on the History of Early Hebrew (1000 B.C.E.–200 C.E.) in the Light of the Dead Sea Documents," in: D. Diamant and U. Rappaport (eds.), *The Dead Sea Scrolls: Forty Years of Research* (1992), 349–62; S. Morag, "Qumran Hebrew: Some Typological Observations," in *VT*, 38 (1988), 148–64; M.S. Smith, *The Origins and Development of the Waw-Consecutive* (1991); T. Muraoka and J.F. Elwolde (eds.), *The Hebrew of the Dead Sea Scrolls & Ben Sira* (1997); idem, *Sirach, Scrolls, & Sages* (1999); idem, *Diggers at the Well* (2000); W.M. Schneidewind, "Qumran Hebrew as an Antilanguage," in: *JBL*, 118 (1999), 235–52; S. Weitzman, "Why Did the Qumran Community Write in Hebrew?" in: *JAOS*, 119 (1999), 35–45. CONCORDANCE: M.G. Abegg et al., *The Dead Sea Scrolls Concordance: The Non-Biblical Texts* (2002). MISHNAIC SPELLING: A. Bendavid, *Lěšon Miqra u-Lěšon Ḥaḳamim*, 1 (1967²; to be used critically); E.Y. Kutscher, "Mazzav ha-Meḥqar šel Lešon Ḥazal," in: 'Eré ha-Millon he-Ḥadaš šel Sifrut Ḥazal (1971); idem, "Mi-Bē'ayot ha-Millon he-Ḥadaš le-Sifrut Ḥazal," *ibid.*, (both articles contain many bibl. refs.); idem, "Mischnaisches Hebraeisch," in: *Rocznik Orientalistyczny*, 28 (1964), 35–48; idem, "Mittelhebraeisch und Juedisch-Aramaeisch imneuen Koehler-Baumgartner," in: B. Hartmann et al. (eds.), *Hebraeische Wortforschung* (1967), 158–75; idem, "Lěšonan šel ha-'Iggerot ha-'Ivriyyot wē-ha-'Aramiyyot šel Bar Kosba' u-Vēné Doro," in: *Lěšonenu*, 26 (1962), 7–23; M.H. Segal, *Mishnaic Hebrew and its Relation to Biblical Hebrew and to Aramaic* (1909; repr. from *JQR*, 20 (1908), 647–737); Much material is to be found dispersed in the works of J.N. Epstein (below) especially in his *Mavo le-Sifrut ha-Tanna'im* (1957); of S. Lieberman (below), especially in his *Hellenism in Jewish Palestine* (1950); and of H. Yalon (below). GRAMMAR: A. Bendavid (above); Z. Ben-Ḥayyim, "Traditions in the Hebrew Language with Special Reference to the Dead Sea Scrolls," in: *Scripta Hierosolymitana*, 4 (1958), 200–14; J.N. Epstein, *Mavo le-Sifrut ha-Tanna'im* (1957), especially 1050, 1207–67; E.Y. Kutscher, "Biššua' Tēnu'ot u, i be-Ta'iqē ha-'Ivrit ha-Miqra'it ba-'Aramit ha-Gelilit u-vi-Lěšon Ḥazal," in: E.Z. Melamed (ed.), *Séfer Zikkaron le-Binyamin De-Vries* (1968), 218–51 (many printing errors corrected in rev. ed. (1971), idem, "Lěšon Ḥazal," in: S. Lieberman et

al. (eds.), *Séfer Hanoch Yalon* (1963), 246–80; idem, "Meḥqarim bē-Diqduq Lěšon Ḥazal (lě-fi Kētav Yad Kaufmann)," in: *Séfer Bar-Ilan*, Qoveš he-'Asor 1956–1968, 2 (1968), 51–77; E. Porath, *Lěšon Ḥaḳamim lě-fi Masorot Bavliyyot u-vē-ḳitvē Yad Yēšanim* (1938); I. Yeivin, "Ha-Niqqud ha-Bavli u-Masoret ha-Lašon hamištaqqefet mimménno" (1968; Typescript, unpublished Ph.D. dissertation Hebrew University, Jerusalem. Important); M.H. Segal, *A Grammar of Mishnaic Hebrew* (1927); M.Z. Segal, *Diqduq Lěšon ha-Mišna* (1936) includes bibliography (both outdated); H. Yalon, *Mavo le-Niqqud ha-Mišna* (1964; very important work); idem, *Pirqē Lašon* (1971). Some material contained in this chapter is as yet unpublished. VOCABULARY: H. Albeck, *Mavo la-Mišna* (1959), 128–215; A. Bendavid (above). J.N. Epstein, *Mavo le-Sifrut ha-Tanna'im* (1957); idem, *Introduction to Amoraitic Literature* (1962); idem, *Mavo le-Nusaḥ ha-Mišna* (1964); (idem, many other works and articles published mainly in *Tarbiš* are very important); S. Lieberman, *Ha-Yērušalmi ki-Fēšuto* (1934); idem, *Greek in Jewish Palestine* (1942); idem, *Hellenism in Jewish Palestine* (1950); idem, *Tosefta* (1970); idem, *Tosefta ki-Fēšuta*, 10 vols. (1955–67); idem, *Tosefet Rišonim*, 4 vols. (1937–39); idem, 'Al ha-Yērušalmi (1929); idem, "Roman Legal Institutions in early Rabbinics and in the Acta Martyrum," in: *JQR*, 35 (1944/45), 1–57; idem, "Palestine in the Third and Fourth Centuries," *ibid.*, 36 (1945/46), 329–70; idem, many other articles (see T. Preschel, "Bibliografya šel Kitvė R. Šaul Lieberman," in: *Hadoar*, 42 (1963), 381–4); H. Yalon (above). DICTIONARIES: s.v. Aramaic; Ben Yehuda, *Millon* (contains the material of mishnaic Hebrew). Some material in this chapter is as yet unpublished. **ADD. BIBLIOGRAPHY:** Two collections of papers on MH are very useful and contain rich bibliography: M. Bar-Asher (ed.), *Koveš Ma'amaram bi-Leshon Ḥazal*, 1–2 (Jerusalem, 1972–80); M. Bar-Asher and S.E. Fassberg (eds.), *Scripta Hierosolymitana 37: Studies in Mishnaic Hebrew* (Jerusalem, 1988). A list of bibliography can also be found in M. Bar-Asher, "The Study of Mishnaic Hebrew Grammar – Achievements, Problems and Goals," in: *Proceedings of the Ninth World Congress of Jewish Studies, Panel Sessions: Hebrew and Aramaic* (Jerusalem, 1988), 30–37. GENERAL: M. Bar-Asher, "The Different Traditions of Mishnaic Hebrew," in: D.M. Golomb (ed.), "Working with No Data," *Semitic and Egyptian Studies Presented to Thomas O. Lambdin* (1987). MSS OF THE MISHNAH: M. Bar-Asher, *The Traditions of Mishnaic Hebrew in the Communities of Italy: According to Ms. Paris 328–329, Eda Ve-Lashon*, 6 (Jerusalem, 1980); Y. Bentolila, *A French-Italian Tradition of Post-Biblical Hebrew, Eda Ve-Lashon*, 14 (Jerusalem, 1989); G. Birnbaum, "Studies in the Phonology and Morphology of Mishnaic Hebrew According to Geniza Fragments," Ph.D. Thesis, Bar-Ilan University (1994); G. Haneman, *The Morphology of Mishnaic Hebrew According to the Tradition of ms Parma (de Rossi 138)* (1980); T. Zurawel, *Maimonides' Tradition of Mishnaic Hebrew as Reflected in his Autograph Commentary to the Mishnah, Eda Ve-Lashon* 25 (2004). OTHER TANNAITIC SOURCES: S. Naeh, "The Tannaic Hebrew in the Sifre according to Codex Vatican 66," Ph.D. Thesis, Hebrew University of Jerusalem (1989); H. Nathan, "The Linguistic Tradition of Codex Erfurt of the Tosefta," Ph.D. Thesis, Hebrew University of Jerusalem, Publication of the Faculty of Humanities, School of Advanced Studies (1984). AMORAIC HEBREW: Y. Breuer, *The Hebrew in the Babylonian Talmud according to the Manuscripts of Tractate Pesahim* (2002); E. Netanel, "Morphological Description of the Hebrew Verb in Jerusalem Talmud," Ph.D. Thesis, Hebrew University of Jerusalem (1995). OLD TRADITIONS: I. Eldar, *The Hebrew Language Tradition in Medieval Ashkenaz (ca. 950–1350 C.E.)*, 1: Phonology and Vocalization; 2: Morphology, *Eda ve-Lashon* 4–5 (Jerusalem, 1978–79; Y. Kara, "Yemenite Traditions in Mishnaic Hebrew According to a 16th Century Manuscript," in: *Leshonenu*, 44:24–42;

M. Ryzhik, "Italian Jewry's Traditions of Mishnaic Hebrew in the MSS of Mahzorim in the 14th–15th Centuries," Ph.D. Thesis, Hebrew University of Jerusalem (2001); O. Tirosh-Becker, "Rabbinic Hebrew Handed Down in Karaite Literature," Ph.D. Thesis, Hebrew University of Jerusalem (1999); I. Yeivin, *The Hebrew Language Tradition as Reflected in the Babylonian Vocalization*, 1–2 (1985). ORAL TRADITIONS: Y. Henshke, "The Hebrew Component in the Judeo-Arabic of Tunisia," Ph.D. Thesis, Hebrew University of Jerusalem (2000); K. Katz, *The Hebrew Language Tradition of the Community of Djerba (Tunisia): The Phonology and the Morphology of the Verb*, Eda ve-Lashon 2 (Jerusalem, 1977); idem, *The Hebrew Language Tradition of the Aleppo Community: The Phonology*, Eda ve-Lashon, 7 (Jerusalem, 1981); T. Kessar, *Oral and Written Traditions of the Mishnah: Morphology of the Noun in the Yemenite Tradition*, Eda ve-Lashon, 23 (Jerusalem, 2001); M. Mishor, "Ashkenazi Tradition – Toward a Method of Research," in: *Massorot* 3–4 (1989):87–128. SYNTAX: M. Azar, *The Syntax of Mishnaic Hebrew* (1995); N. Braverman, "Particles and Adverbs in Tannaitic Hebrew (Mishnah and Tosefta): A Syntactic Analysis," Ph.D. Thesis, Hebrew University of Jerusalem (1995); M. Mishor, "The Tense System in Tannaitic Hebrew," Ph.D. Thesis, Hebrew University of Jerusalem (1983). VOCABULARY: M. Moreshet, *A Lexicon of the New Verbs in Tannaitic Hebrew* (1980); Academy of the Hebrew Language, *Ma'agarim* (databases) CD-ROM (Jerusalem, 1998). ARAMAIC: I. Gluska, "The Influence of Aramaic on Mishnaic Hebrew," Ph.D. Thesis, Bar-Ilan University (1988). MEDIEVAL. THE LANGUAGE OF THE PIYYUT: Zunz, *Lit. Poesie*, 29–41; N. Chomsky, in: *JQR*, 75 (1967), 121; I. Davidson, in: *Qoveš Madda'e ha-Yahadut* (1926), 187–95; S. Lieberman, in: *Sinai*, 4 (1939), 221–50; M. Zulay in: *YMHSI*, 6 (1945), 161–248; idem, in: H. Yalon (ed.), *Quntēresim lē-ʿInyēnē Lašon* (1942–43), 1–4; idem, in: *Moznayim*, 16 (1943), 217–23; H. Yalon (ed.), *Quntēresim lē-ʿInyēnē Lašon* (1942), 3–7, 51–55; S. Spiegel, in: *Hadoar*, 42 (1963), no. 23, 397–400; A. Mirsky, in: *Zikronot ha-ʿAqademya la-Lašon ha-ʿIvrit* (1956–57), 41–45; idem, in: *Lēšonenu*, (1966), 296–304; Y. Kenaʿani, *Millon Qonqordansyon li-Lēšon ha-Piyyuṭim* (1936); K. Levias, in: *Hadoar*, 11 (1932), no. 33. SAADIAH GAON'S LANGUAGE: A. Ben Ezra, in: *Séfer Alfenbein* (1967), 33–43; idem, in: *Horeb*, 8 (1944), 135–7; 9 (1946), 176–85; 10 (1948), 295–318; M. Zulay, *Ha-ʿAskola ha-Payyētanit šel Rav Sēʿadya Gaʿon* (1964), 13–40; S. Abramson, in: Y.L. Eishman (ed.), *Qoveš Rasag* (1943), 677–88; idem, in: *Sinai*, 49 (1966), 133–245; C. Rabin, in: *Saadya Studies* (1943), 127–38. LANGUAGE OF THE HEBREW POETRY IN SPAIN: Schirmann, *Sefarad*, 2 (1956), 27–34; M. Medan, in: *Lēšonenu*, 17 (1951), 110–14; B. Klar, in: *Mehqarim wē-ʿIyyunim* (1954), 174–9; S. Abramson, in: *Ha-Kinnus ha-ʿOlami lē-Madda'e ha-Yahadut* (1947–52), 274–8; A. Mirsky, in: *Lēšonenu*, 18 (1952–53), 97–103; S. Abramson, *ibid.*, 11 (1941–43), 54–57; Y. Ratzaby, *ibid.*, 21 (1957), 22–32; idem, in: *ʿOšar Yēhudē Sēfarad*, 8 (1965), 11–16; in: *Lēšonenu la-ʿAm*, 2 (1969), no. 3–6; N. Allony, in: *Lēšonenu*, 11 (1941–43), 161–4; idem, in: *ʿOšar Yēhudē Sēfarad*, 3 (1960), 15–48; idem, in: *Sinai*, 44 (1959), 152–69; 64 (1969), 12–35, 155–73; idem, in: *Lēšonenu*, 15 (1944), 161–72; D. Yarden, *Diwan Šemuʿel ha-Nagid* (1966), 14–27; D. Yellin, in: *JQR*, 16 (1925/26), 272ff.; A. Mirsky, *Širé Yišḥaq kalfon* (1961), 40–44; D. Yellin, *Ketavim Nivḥarim*, 2 (1939), 319–30; idem, in: *Tarbiz*, 7 (1936), 314–19; Y. Ratzaby, in: *Lēšonenu la-ʿAm* (1959), 18. PROSE AND TRANSLATIONS WITH ARABIC INFLUENCE: A.S. Halkin, "The Medieval Jewish Attitude toward Hebrew," in: A. Altman, *Biblical and Other Studies* (1963), 233–48; M. Gottstein, *Tahbirah u-Millonaḥ šel ha-Lašon ha-ʿIvrit še-bi-Tēhum Hašpaʿatah šel ha-ʿArvit* (1951); idem, in: *Leshonenu* 16 (1948–9), 156–163; B. Klar, in: *Mehqarim wē-ʿIyyunim* (1954), 31–41; C. Rabin, in: *Metsudah*, 3–5 (1945), 158–70; J. Klatzkin, *Ošar ha-Munnaḥim ha-Pilosofiyim*

4 vols., (1928); I. Efros, in: *JQR*, 17 (1926/27), 129–64, 323–68; 20 (1929/30), 113–38; idem, *Philosophical Terms in the Moreh Nebukim* (1924); D.Z. Baneth, in: *Tarbiz*, 6 (1935), 10–40; G. Zarfati, *Munnēhé ha-Matēmaṭiqa ba-Sifrut ha-Maddaʿt ha-ʿIvrit šel Yēmē ha-Bēnayim* (1969); Z. Bacher (ed.), *Séfer ha-Šorašim* (1896), 562–6; M. Wilensky (ed.), *Séfer ha-Riqma*, 2 (1964²) 710–29; Z. Ben-Ḥayyim, in: *Lēšonenu*, 16 (1948–49), 156–63; M. Goshen, in: *Tarbiz*, 30 (1961), 385–95; D.Z. Baneth, *ibid.*, 11 (1939/40), 260–70; 23 (1952), 111–76; N. Shapira, *Lēšonenu* (26), 209; E.M. Lipschuetz, *Ketavim* 1 (1947), 203–209. ADD. BIBLIOGRAPHY: KARAITE HEBREW: A. Maman, "Ha-ʿIvrit shel Toviah b. Moses ha-Karaʿi," M.A. Thesis, Hebrew University of Jerusalem (1979); idem, "Karaites and Mishnaic Hebrew: Quotations and Usage," in: *Leshonenu* (1991), 221–68 (Heb.); idem, "Karaites and Mishnaic Hebrew: Quotations and Usage," in: M. Bar-Asher and S.E. Fassberg (eds.): *Studies in Mishnaic Hebrew, Scripta Hierosolomitana* 37 (1998), 264–83; idem, "Karaite Hebrew, in: M. Polliack (ed.), *Karaite Judaism, A Guide to Its History and Literary Sources* (2003), 485–503. MAIMONIDES' LANGUAGE: B. Z. Bacher, in: *ʿErkē Midraš* (1927), 324–36; P. Birnbaum, in: *Hadoar*, 21 (1942) 721f.; I.A. Zeidman, in: *Sinai*, 12 (1943), 428–38; 13 (1943), 96–101; M.Z. Qadari, *Mi-Yrušat Lēšon Yēmē ha-Bēnayim* (1970). HEBREW IN FRANCE, GERMANY, AND POLAND: Y. Avineri, *Hēkal Raši*, (1949); 3 (1956); 4 (1960); C. Rabin, in: *Fourth World Congress of Jewish Studies, Papers*, 2 (1968); S. Nobel, in: *Lēšonenu*, 23 (1959), 172–84, 216–69; S. Eidelberg, in: *Lēšonenu la-ʿAm*, 20 (1969), 120–7; Y. Avineri in: *Metsudah*, 2–4 (1945), 229–48. MODERN PERIOD *Zikronot Waʿad ha-Lašon*, 1–6 (1912–28); *Lēšonenu* 1–35 (1913–71), (index volume, 1969); E.M. Lipschuetz, *Vom lebendigen Hebraeisch* (1920); idem, *Kētavim*, 2 (1949 50); Z. Har-Zahav, *Lēšon Dorénu* (1930), G. Bergstraesser, *Einfuehrung in die semitischen Sprachen* (1928), 47, 57ff.; S. Spiegel, *Hebrew Reborn* (1930); Y. Avineri, *Millon Hiddušē Ḥ.N. Bialik* (1936); idem, *Hēkal Raši*, 1–4 (1940–60); idem, *Kibbušē ha-ʿIvrit bē-Yamēnu* (1946); Y. Epstein, *Mehqarim ba-Psikologiya šel ha-Lašon wē-ha-Ḥinnuk ha-ʿIvri* (1947); idem, *Hegyonē Lašon* (1947); Y. Klausner, *Ha-Lašon ha-ʿIvrit Lašon Ḥayya* (1949); R.W. Weiman, *Native and Foreign Elements in a Language, a Study in Linguistics Applied to Modern Hebrew* (1950); E. Rieger, *Modern Hebrew* (1953); Z. Ben-Ḥayyim, in: *Lēšonenu la-ʿAm*, (1953/54), 35–37; *Zikronot ha-ʿAqademya la-Lašon ha-ʿIvrit*, 1–17 (1954–71); A. Avrunin, *Mehqarim bi-Lēšon Bialik wē-Yalag* (1954); Ḥ. Blanc in: *Middle Eastern Affairs*, vol. 5, pp. 385ff.; Ḥ. Rosén, *Ha-ʿIvrit Šellanu* (1956); R. Bachi, in: *Scripta Hierosolymitana*, 3 (1956); Y. Livni, *Lašon ke-Hilkatah* (1957); J. Chomsky, *Hebrew – The Eternal Language* (1957); idem, *Ha-Lašon ha-ʿIvrit bē-Darkē Hitpatteḥutah* (1967); C. Rabin, in: *Jewish Frontier* (Sept. 1958), 11ff.; E.Y. Kutscher, *Millim wē Tolēdotēhen* (1961); S. Morag, in: *Lēšonenu la-ʿAm* (1959/60), no. 95; C. Rabin, in: *Jewish Frontier* (June 1961); Z. Ben-Ḥayyim et al, in: *Lēšonenu la-ʿAm* (1960), no. 104; Ḥ.B. Rosen, *A Textbook of Israeli Hebrew* (1962); R. Sivan, *Šurot u-Mēgammat bē-Hiddušē ha-Lašon ha-ʿIvrit bi-Tequfat Tehiyyatah* (1964/65); Y. Avineri, *Yad ha-Lašon* (1964); R. Sappan, *Darkē ha-Sleng* (1964); Z. Iggeret, *Biʿur Košim mi-Kerem Lēšonenu* (1964/65); R. Sappan, *Millon ha-Sleng ha-Yisrēʿeli* (1965); A. Bendavid, *Lēšon Miqra u-Lēšon Haḳamim* (1, 1967; 11 1971); Ḥ. Rosén, *ʿIvrit Ṭova* (1967); M. Goshen-Gottstein, *Mavo la-Millonaʿut šel ha-ʿIvrit ha-Hadaša* (1969); M. Ben-Asher, *Hitgabbēšut ha-Diqduq ha-Normaṭivi* (1969), S. Yeivin et al, in: *Arīel*, 25 (1969); *Leqet Teʿudot lē-Toledot Waʿad ha-Lašon we-ha-ʿAqademya la-Lašon ha-ʿIvrit – 5650–5730 – u-lē-Hiddušē ha-Dibbur ha-ʿIvri* (1969/ 70); R. Sivan, in: *Lēšonenu la-ʿAm* (1970), 204–25; *Munnaḥim ʿIvriyyim le-Miqsoṭehem* (published by the Academy of the Hebrew Language, 1970). ADD. BIBLIOGRAPHY: Y. Bentolila, *The Sociophonology of Hebrew as Spoken in a Rural Settlement of Moroccan Jews in the Negev* (Hebrew University of Jerusalem, 1984)