

linguistics. Israeli children should not be indoctrinated to believe that they speak the language of Isaiah – unless the teacher is referring to the 20th-century Israeli polymath and visionary Isaiah Leibowitz. Although revivalists have engaged in a campaign for linguistic purity, the language they created often mirrors the very cultural differences they sought to erase. The study of Israeli offers a unique insight into the dynamics between language and culture in general and in particular into the role of language as a source of collective self-perception.

*See also:* Description and Prescription; Genetics and Language; Hebrew, Biblical and Medieval; Intonation; Israel: Language Situation; Israel: Language Situation; Jewish Languages; Morphological Typology; Politics and Language: Overview; Semitic Languages; Word Stress; Yiddish.

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## Hebrew Lexicography

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### Biblical Hebrew Lexicography

#### The Early Period

The beginnings of Hebrew lexicography, more than a thousand years ago, were closely accompanied by the beginnings of Hebrew grammatical description, and both are linked to the name of Rav Saadiah Gaon (Egypt and Babylonia, 882–942). His dictionary *Ha-Egron* (902; Nehemiah Allony edition, 1969), only a fifth of which has survived, was rather short, and many of its entries were translated into Arabic. While not intended, therefore, to be a bilingual dictionary in the modern sense, this is actually what it was, at least to some extent. A supplement was appended in which the words were sorted by their last letter, as

was commonly done in dictionaries of Arabic (for rhyming purposes). Another Hebrew-Arabic dictionary from the 10th century is *Kitab Jame’ al-Alfaz* by the Karaite David ben-Abraham el-Fassi, written in Jerusalem between 930 and 950 in two versions, a long one and a short one (the latter was published by Skoss in 1936).

The first Hebrew–Hebrew dictionary was written somewhat later by Menahem ben-Saruq (Spain, mid-10th century), and it provoked a flurry of debates, initiated by the criticisms of his contemporary Dunash ben-Labrat, both on some fine points of grammar and on some explanations of biblical terms. Among other things Dunash asserted, for example, that the root of YGWN *yagon* ‘distress’ is GN while Menahem claimed it to be the one-letter root G (see [Table 1](#) for the method of transcription used in this article). These criticisms were answered by Menahem’s pupils, and the dispute was finally decided by R. Yaacov ben-Meir (known as Rabbenu Tam, France, 12th century). Both these

**Table 1** The Hebrew alphabet

א	aleph	ʾ	ו	waw	w	כ	kaf	K	ע	ayin	.	ש	shin	š
ב	bet	B	ז	zayin	Z	ל	lamed	L	פ	pe	P	ת	tav	T
ג	gimal	G	ה	het	H	מ	mem	M	צ	tsadi	š			
ד	dalet	D	ט	tet	T	נ	nun	N	ק	qof	Q			
ה	he	H	י	yod	Y	ס	samekh	S	ר	resh	R			

In order to give the reader as faithful a picture as possible of the Hebrew words cited, they are represented in up to three forms: a letter-per-letter transliteration (when needed) in small capitals, as per this table; the pronunciation in italics; and an English translation.

dictionaries are arranged alphabetically by roots, i.e., the set of letters that remain fixed throughout all the derivations of a word. According to this view, while most roots were indeed of three letters, there were some roots of two letters and even some of just one letter, such as *z* for the verb *HZH hizza* 'sprinkled,' since this is the only remaining letter in the conjugated form *YZW yazzu* 'they will sprinkle.' (In ben-Saruq's lexicon there were 14 such roots.)

Probably the finest achievement of medieval Hebrew lexicography is *Kitab al-'uṣūl* 'The book of roots' by Yonah ibn-Janaḥ (Spain, 11th century). This dictionary, the second part of his *Kitab al-tankiḥ* 'The grammar book,' in which he describes the grammar of Biblical Hebrew, was the first lexicon to adopt the three-letter root concept devised by ibn-Janaḥ's master, Yehudah Ḥayyuj. It was written in Arabic (as was common for many of the writings of Jewish authors at this period in the region), and was translated into Hebrew in the 12th century by Yehudah ibn-Tibon (Bacher edition, Berlin, 1894–1897). An abbreviated version was prepared by Shlomo Parḥon (Italy, 12th century) in his *Maḥberet he-arukh*. Another Hebrew dictionary in Arabic *Kitab, al-Istighna'*, was compiled by Shmuel ha-Nagid (Spain, 11th century), but only a few fragments of what was apparently a comprehensive work have survived.

By far the most important Hebrew dictionary of the Middle Ages is *Sefer ha-shorashim* 'The book of roots' by R. David Qimḥi (usually abbreviated as RaDaQ; Provence, 13th century), which was in a sense the culmination of all the lexicographic works that preceded it. This dictionary (part of a larger work that included a treatise on Biblical Hebrew grammar), based mainly on the work of Ibn-Janaḥ, was translated into Latin, and had a decisive influence on the Christian scholars who later worked in the field of Biblical lexicography.

### From the Renaissance until Modern Times

From the early Renaissance period onward, there was a steady decline in Biblical Hebrew lexicographical work by Jewish scholars: the bulk of the important achievements in this type of lexicography was achieved by Christian scholars, who were much influenced, as mentioned above, by the works of R. David Qimḥi. A representative lexicon of this category is the *Lexicon hebraecum et chaldaicum* by Johannes Buxtorf (Basel, 1607). Most prominent in this genre were the works of William Gesenius in the 19th century, in which the scientific discoveries of comparative Semitic linguistics and of Near East studies were integrated. His practical *Handwörterbuch* (Leipzig, 1810–1812) was very popular and

went through at least five editions. His masterpiece, *Thesaurus philologicus criticus linguae hebraeae et chaldaeae veteris Testamenti*, published partly posthumously (Leipzig, 1829–1858), went through several new editions and adapted versions, notably a German edition by F. Buhl (Leipzig, 1895–1915) and an English one by F. Brown, S. F. Driver, and C. A. Briggs (Oxford, 1907), which was also reprinted many times. Finally, mention should be made of the important dictionary by L. Köhler and W. Baumgartner, compiled on scientific philological principles, the most recent edition of which, in English by M. E. L. Richardson, was published in 1996.

### Lexicography of Talmudic Literature

All of the dictionaries mentioned so far concern themselves mainly with Biblical Hebrew, generally considered in the Middle Ages to be the only kind of Hebrew deserving of study and attention. Even then, however, there were attempts to deal also with Talmudic literature and even with the core of Hebrew literature available at the time. The first noteworthy work of this kind is *Kitab el-ḥawi* 'The comprehensive book,' by Rav Hai Gaon (Babylonia, 11th century), the last of the *gaonim* (the masters of the official Yeshiva, the Rabbinical Academy, in Babylonia), and of which, again, only fragments remain today. A very important work is *he-'Arukh*, by R. Nathan ben-Yeḥi'el of Rome (11th century), which is a lexicon of Talmudic literature, including those parts of it that are in Aramaic. This work received many additions and supplements (of which *Tishbi*, by Eliyyahu Baḥur [Elijah Levita], Italy, 1541, should be mentioned), culminating in the scholarly *'Arukh ha-Shalem* (Aruch Completum) by Ḥanoch Yehudah (Alexander) Kohut (Vienna, 1878–1892).

To complete the account of this genre, we mention two dictionaries that were published in the 19th century: *Neu-hebräisches und chaldäisches Wörterbuch über die Talmudim und Midraschim* by Jacob Levy (4 vols, Leipzig, 1876) and *A dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic literature* by M. Jastrow (2 vols, New York, 1903). The latter was reprinted several times and is still widely used today.

### Hebrew Lexicography in Modern Times

#### The 19th Century

The 19th century witnessed a revival of Hebrew lexicography, motivated principally by the *Haskala* 'Enlightenment' movement among European Jewry.

A dictionary typical of this period is *Otzar ha-shorashim* ‘The compendium of roots’ by Yehudah Leib ben-Zeev (Vienna, 1807). It is arranged by root, with an appendix that clarifies the root of certain difficult constructs. The explanations contain a translation into German, and the third part is in fact a German–Hebrew dictionary that can be also seen as a Hebrew thesaurus. The *Otzar* was reedited by several scholars, the fifth edition (prepared by Moshe Schulbaum, Lvov, 1889–1891) being in fact a new dictionary of Hebrew. Another important dictionary of the period is *ha-Otzar* by Shmuel Yosef Fünf (Warsaw, 1884–1904), which covers the Hebrew lexicon of the Bible, Talmudic literature, and later Hebrew writings, including the *Piyut* ‘poetry’ literature. It also gives translations into Russian and German. The Biblical Hebrew dictionary *Mishpat ha-’Urim* by Yehoshua Steinberg (1897), which likewise gives translations into Russian and German, should also be mentioned.

### The 20th Century

The revival of Hebrew as a spoken language in daily life in the 20th century radically changed the face and range of activities of Hebrew lexicography, whose basic locus was now in Israel (Eretz Israel or Palestine until 1948). This is where most of the dictionaries mentioned in this section were published.

The first and most important step in this revival can be attributed to the great dictionary of Eliezer ben-Yehudah, *Millon ha-lashon ha-ivrit ha-yeshana ve-ha-hadasha* ‘Dictionary of the old and new Hebrew language.’ This is a comprehensive lexicon of the Hebrew language in its widest spectrum, from Biblical times to the present day, including new words that were coined daily (including some coined by the author himself) to cope with the necessities of using this ‘old new’ language for all kinds of communication in a modern and complex environment. This work, particularly rich in citations from all strata of writing in Hebrew, was the first Hebrew–Hebrew dictionary in which the entries were arranged as lemmas (except for verbs, which were still arranged by root). It was also the first in which the emphasis was on a diachronic description of the meanings of words, their evolution through the ages, and their etymology. The first volume was published in 1908, and the entire dictionary, in 17 volumes (including one with a ‘Comprehensive introduction’), was finally completed in 1959, long after the original author’s death. Volumes 8 and 9 were edited by Moshe Zvi Segal, and volumes 10–16 by Naftali Herz Torczyner (Tur-Sinai). Both faithfully followed ben-Yehudah’s original lexicographic plan and editorial policies. This

work is the only truly comprehensive and authoritative historical dictionary of Hebrew on historical principles.

In 1938, the *Millon ivri* ‘Hebrew dictionary’ of Yehudah Goor (Garsovski) was published. Its second edition (1946) was, in its day, probably the most popular dictionary of Hebrew. A new era of Hebrew dictionaries opened with the publication of *Millon hadash* ‘A new dictionary,’ by Avraham Even-Shoshan, whose first edition (5 vols, 1948–1952) and in particular the second edition, *ha-Millon he-hadash* ‘The new dictionary’ (1966), dominated the dictionary scene in Israel for the second half of the 20th century. Besides covering the totality of the Hebrew lexicon, including recently coined words, this dictionary was the first to include the wealth of loanwords from foreign languages that were rapidly infiltrating everyday speech in Israel, not to mention a wealth of short encyclopedic entries from various domains such as botany, zoology, and chemistry. The dictionary text (entries, definitions, citations, and examples) was fully vocalized, which made it easily accessible to the multitude of citizens of Israel, many of them newly arrived in the country and still struggling with their Hebrew. This dictionary, whose name has become almost synonymous with the concept of ‘Hebrew dictionary,’ was reprinted very many times, but in the 40 years since its appearance in its second edition, no effort has been made to update it to reflect the rapidly changing world of the Hebrew language on one hand, and modern lexicographical principles, including those inspired by the emerging computerized lexicography, on the other. The latest version (edited by Moshe Azar, 2003) has been updated mainly with new entries, but the basic architecture and structure are not affected in any way.

Another large dictionary from the second half of the 20th century is the *Thesaurus of the Hebrew language* by Yaacov Kena’ani (18 volumes, 1960–1989), whose aim was to fully record every word ever used in a Hebrew text, including even the rarest ones, such as one-time words coined by poets. There were of course other dictionaries published with less ambitious scope during this period, including:

- *Me-aleph ‘ad tav* ‘From A to Z’ by Meir Medan (1954, 1973)
- ‘The Hebrew-Hebrew dictionary’ by Reuven Alkalai (3 vols, 1969–1971)
- *Millon ha-hove* ‘Dictionary of the present day’, by Shoshana Bahat and Mordechai Mishor (1995), whose basic novelty was that the entries for verbs were in the present (participle) tense, rather than in the past tense as was traditionally done in other dictionaries. It also strictly adheres to what is

sanctioned by the Academy of Hebrew Language, so it serves as a guide to what is regarded as being formally correct in Hebrew linguistics

- *Millon sappir* by Eytan Avneyon (7 vols, 1998), published earlier in one volume as *The Concise Sapphire dictionary* (1997).

A dictionary that is radically different in its lexicographic principles, as well as in its design and structure, from all of the above is *Rav-Milim: the complete dictionary of Modern Hebrew* by Yaacov Choueka and the Rav-Milim team (6 vols, 1997). As a user-oriented work, *Rav-Milim* is synchronic rather than historical, descriptive rather than normative (although bad usage is clearly tagged as such), and comprehensive. It covers all registers of the language, from literary to slang, and from the refined to the vulgar, and all its strata, from the Biblical to the modern. It does not, however, aim to be exhaustive – for example, it omits historical curiosities, obsolete coinages used only once, and the like. All entries are arranged by lemma, including verbs, whose entries are in the past form (in the specific mode). The entire dictionary – including the entries – is written in *ktiv male* ('plene') spelling, with partial vocalization. Following the new sensitivity to meaning in context, acquired recently through extensive computerized processing of large corpora, the rich spectrum of the different meanings of an entry is deployed, and usage examples, carefully selected to highlight the appropriate sociolinguistic context, are given for every non-encyclopedic entry. For each entry, the word's 'family' (words with the same root and the same semantic field) is detailed. Special attention is given to collocations – compound nouns, verbal attachments, fixed phrases, idioms, etc. – and thousands of collocations, never recorded before, are explained. Also, it is the only Hebrew dictionary that has a computerized version, supporting a number of sophisticated search and analysis functions, available on the Internet.

## Special Topics

### The Academy of the Hebrew Language

Many projects and activities related to linguistic and lexicographic issues are being undertaken at the Academy of the Hebrew Language in Jerusalem. Relevant to this article is the Historical Dictionary Project, already under development for more than 40 years, whose aim is to compile a complete historical dictionary of the Hebrew language throughout its many generations. The project is still basically at the stage of compiling the required corpus. An illustrative brochure was produced in 1982 that gives a complete treatment of just one root, 'RB. A CD was published by the academy in 2001, containing an authoritative

collection of all Hebrew writings from the 2nd century B.C.E. to the middle of the 11th century C.E., based on the best manuscripts available. This forms part of the corpus on which the Historical Dictionary will eventually be based.

Another relevant activity of the academy is the coining of new Hebrew words in various domains such as medicine, law, accounting, psychology, optics, banking, sports, and many more. More than 100 000 words have been coined and officially recorded thus far by the academy. They can be accessed on line at the academy's website.

### Dictionaries of Slang

Until the publication of *Rav-Milim*, slang and vernacular words were seldom included in regular Hebrew dictionaries. The first dictionary of slang was that by Raphael Sappan (1965, 1971), which was followed by the dictionary by Dan ben-Amotz and Netiva ben-Yehudah (2 vols, 1972–1982). A dictionary of military slang was compiled by Oded Ahasaf (1993).

### Bilingual Dictionaries

Many of the Hebrew dictionaries mentioned above, including some of the earliest ones, can be considered *de facto* as bilingual, since they contained translations of the entries in Arabic, German, or Russian. In the stricter sense of the word, however, we may mention first a few works that are of historical interest: *Tzemaḥ David* (Venice, 1587), a trilingual Hebrew–Latin–Italian dictionary by David de Pomis, dedicated to Pope Sixtus V; *Galut Yehudah* (Venice, 1612), a Hebrew–Italian dictionary by Leon da Modena; a Hebrew–Portuguese dictionary (Amsterdam, late 1600s) by Oliveyra Solomon; and *Meir Nativ*, a trilingual Hebrew–Russian–German dictionary by Yehudah Leib Germal (Vilnius, 1835). Much closer to our times is the *English–Hebrew dictionary* by Israel Efron, Judah ibn-Shmuel Kaufman, and Benjamin Silk (1929), intended for learners of Hebrew as a second language. For every English entry, this work lists a large number of Hebrew equivalents; thus it can be viewed also as a lexicon of synonyms in Hebrew.

The second half of the 20th century saw the publication of a huge variety of bilingual dictionaries in a multitude of languages, due to the sociological context of Israel as a 'melting pot' of so many different linguistic communities. It would be a hopeless task to try to review this activity comprehensively, so let us just mention the Hebrew–English dictionary of Reuben Alcalay (1964–65; second enlarged edition, 1996), the *Megido* Hebrew–English and English–Hebrew dictionaries of Edward Levenstone and

Reuben Sivan (1965), and the Hebrew–German dictionary of Jaacov Lavy (1975). Special mention should be made of the dictionaries published by Hayim Baltzan for Hebrew–Russian and Hebrew–English, intended for Hebrew learners who hear Hebrew words but have difficulties in conceiving their spelling, so the entries are Russian/English phonetic equivalents of the Hebrew words, and the dictionary is sorted alphabetically by the transcribed entries.

### Computerized Resources

Quite a number of computerized resources are now available for Hebrew. Regarding corpora, the following should be mentioned:

- *Maba'*, the Bar Ilan University Corpus of Modern Hebrew, which contains 199 books (novels and short stories), a full one-year set of issues of a local weekly magazine, news items from the Internet, collected articles from a daily newspaper, and the full minutes of six months' sittings of the Knesset, totaling in all 25 million words of modern Hebrew;
- the corpus of the Academy of the Hebrew language of early Hebrew writings (mentioned above);
- The Responsa Corpus of Bar Ilan University, available also on CDs to the general public, which contains many hundreds of books of rabbinical literature in Hebrew and Aramaic, encompassing almost 2000 years of writings and originating from all over the world.

Similar CD corpora of (different) rabbinical books have also been circulated in recent years in Israel, too numerous to mention here. In terms of software, two operational programs, both developed by Yaacov Choueka and the Rav-Milim team, can be mentioned: *Milim*, a program for the complete and accurate lemmatization and morphological analysis of any word in Modern Hebrew, and *Nakdan*, a program for

the automatic vocalization of Hebrew texts with an accuracy of 98%.

Finally, a government-supported Knowledge Center for Processing Hebrew has recently been established at the Technion in Haifa, whose mission is to research and produce tools necessary for the intelligent processing of Modern Hebrew, including the building of appropriate tagged corpora and the dissemination of reliable operational software for such processing.

*See also:* Arabic Lexicography; Bilingual Lexicography; Hebrew, Biblical and Jewish; Hebrew, Biblical and Medieval; Hebrew, Israeli; Israel: Language Situation; Lexicography: Overview.

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### Relevant Websites

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- <http://www.melingo.com>.

## Heidegger, Martin (1889–1976)

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In the past 30 years, the abundance of literature that has been dedicated to Heidegger throughout the world gives us a clear measure of the significance of his contribution to philosophy. Heidegger's works have been translated into every major language,

regardless of the intriguing linguistic peculiarities that distinguish them.

In 1924, Heidegger summarized Aristotle's biography as follows: "He was born, he worked, and he died." The same concept could be applied to Heidegger himself. In fact, for him life and work coincided in a way that was almost unparalleled among the authors of the 1900s. After examining the early stages of his own philosophical development, which culminated