

Hebrew alphabet

The **Hebrew alphabet** (Hebrew: אֲלֶפֶת-בֵּית עֵבְרִי^[a] *Alefbet ivri*), known variously by scholars as the **Ktav Ashuri**, **Jewish script**, **square script** and **block script**, is traditionally an abjad script used in the writing of the Hebrew language and other Jewish languages, most notably Yiddish, Ladino, Judeo-Arabic, and Judeo-Persian. In modern Hebrew, vowels are increasingly introduced. It is also used informally in Israel to write Levantine Arabic, especially among Druze.^{[2][3][4]} It is an offshoot of the Imperial Aramaic alphabet, which flourished during the Achaemenid Empire and which itself derives from the Phoenician alphabet.

Hebrew alphabet

אָלפֿבֿיט עִבְרִי

Script type	<u>Abjad</u>
--------------------	--------------

Time period	2nd–1st century BCE to present ^[1]
--------------------	--

Direction	<u>Right-to-left script</u>
------------------	-----------------------------

Official script	<u>Israel</u>
------------------------	---------------

Languages	<u>Hebrew</u> , <u>Yiddish</u> , <u>Ladino</u> , <u>Mozarabic</u> , <u>Levantine Arabic</u> , <u>Aramaic</u> , other <u>Jewish languages</u>
------------------	--

Related scripts

Parent systems	<u>Egyptian hieroglyphs</u> <ul style="list-style-type: none">• <u>Proto-Sinaitic script</u>
-----------------------	--

- Phoenician
alphabet
 - Aramaic
alphabet
 - Hebrew
alphabet

Child systems

Yiddish alphabet
Square Maalouli
alphabet

Sister systems

Nabataean
Syriac
Palmyrene
Edessan
Hatran
Elymaic
Mandaic
Pahlavi

Kharosthi

ISO 15924

ISO 15924

Hebr (125),
Hebrew

Unicode

Unicode alias

Hebrew

Unicode range

U+0590 to U+05FF
(<https://www.unicode.org/charts/PDF/U0590.pdf>).

Hebrew,

U+FB1D to U+FB4F
(<https://www.unicode.org/charts/PDF/UFB00.pdf>).

Alphabetic

Presentation Forms

**This article contains Hebrew text.
Without proper rendering support,
you may see question marks,
boxes, or other symbols instead
of Hebrew letters.**

שלום

Historically, two separate abjad scripts have been used to write Hebrew. The original, old Hebrew script, known as the paleo-Hebrew alphabet, has been largely preserved in a variant form as the Samaritan alphabet. The present "Jewish script" or "square script", on the contrary, is a stylized form of the Aramaic alphabet and was technically known by Jewish sages as Ashurit (lit. "Assyrian script"), since its origins were alleged to be from Assyria.^[5]

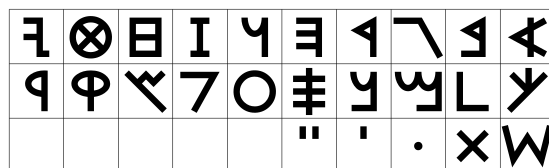
Various "styles" (in current terms, "fonts") of representation of the Jewish script letters described in this article also exist, including a variety of cursive Hebrew styles. In the remainder of this article, the term "Hebrew alphabet" refers to the square script unless otherwise indicated.

The Hebrew alphabet has 22 letters. It does not have case. Five letters have different forms when used at the end of a word. Hebrew is written from right to left. Originally, the alphabet was an abjad consisting only of consonants, but is now considered an "impure abjad". As with other abjads, such as the Arabic alphabet, during its centuries-long use scribes devised means of indicating vowel sounds by separate vowel points, known in Hebrew as niqqud. In both biblical and rabbinic Hebrew, the letters א ב ג ד ה can also function as matres lectionis, which is when certain consonants are used to indicate vowels. There is a trend in Modern Hebrew towards the use of *matres lectionis* to indicate vowels that have traditionally gone unwritten, a practice known as "full spelling".

The Yiddish alphabet, a modified version of the Hebrew alphabet used to write Yiddish, is a true alphabet, with all vowels rendered in the spelling, except in the case of inherited Hebrew words, which typically retain their Hebrew consonant-only spellings.

The Arabic and Hebrew alphabets have similarities because they are both derived from the Aramaic alphabet, which in turn derives either from paleo-Hebrew or the Phoenician alphabet, both being slight regional variations of the Proto-Canaanite alphabet used in ancient times to write the various Canaanite languages (including Hebrew, Moabite, Phoenician, Punic, et cetera).

History



Paleo-Hebrew alphabet containing 22 letters, period, geresh, and gershayim



The Aleppo Codex, a tenth century Masoretic Text of the Hebrew Bible. Book of Joshua 1:1

The Canaanite dialects were largely indistinguishable before around 1000 BCE.^[6] An example of related early Semitic inscriptions from the area include the tenth-century Gezer calendar over which scholars are divided as to whether its language is Hebrew or Phoenician and whether the script is Proto-Canaanite or paleo-Hebrew.^{[7][8][9][10][11][12]}

A Hebrew variant of the Proto-Canaanite alphabet, called the paleo-Hebrew alphabet by scholars, began to emerge around 800 BCE.^[13] An example is the Siloam inscription (c. 700 BCE).^[14]

The paleo-Hebrew alphabet was used in the ancient kingdoms of Israel and Judah. Following the Babylonian exile of the Kingdom of Judah in the 6th century BCE, Jews began using a form of the Imperial Aramaic alphabet, another offshoot of the same family of scripts, which flourished during the Achaemenid Empire. The Samaritans, who remained in the Land of Israel, continued to use the paleo-Hebrew alphabet. During the 3rd century BCE, Jews began to use a stylized, "square" form of the Aramaic alphabet that was used by the Persian Empire (and which in turn had been adopted from the Assyrians),^[15] while the Samaritans continued to use a form of the paleo-Hebrew script called the Samaritan alphabet. After the fall of the Persian Empire in 330 BCE, Jews used both scripts before settling on the square Assyrian form.

The square Hebrew alphabet was later adapted and used for writing languages of the Jewish diaspora – such as Karaim, the Judeo-Arabic languages, Judaeo-Spanish, and Yiddish. The Hebrew alphabet continued in use for scholarly writing in Hebrew and came again into everyday use with the rebirth of the Hebrew language as a spoken language in the 18th and 19th centuries, especially in Israel.

Description

General

In the traditional form, the Hebrew alphabet is an abjad consisting only of consonants, written from right to left. It has 22 letters, five of which use different forms at the end of a word.

Vowels

In the traditional form, vowels are indicated by the weak consonants Aleph (א), He (ה), Waw/Vav (ו), or Yodh (י) serving as vowel letters, or matres lectionis: the letter is combined with a previous vowel and becomes silent, or by imitation of such cases in the spelling of other forms. Also, a system of vowel points to indicate vowels (diacritics), called niqqud, was developed. In modern forms of the alphabet, as in the case of Yiddish and to some extent Modern Hebrew, vowels may be indicated. Today, the trend is toward full spelling with the weak letters acting as true vowels.

When used to write Yiddish, vowels are indicated, using certain letters, either with niqqud diacritics (e.g. אָ or יִ) or without (e.g. ו or י), except for Hebrew words, which in Yiddish are written in their Hebrew spelling.

To preserve the proper vowel sounds, scholars developed several different sets of vocalization and diacritical symbols called *nequdot* (נקודות, literally "points"). One of these, the Tiberian system, eventually prevailed. Aaron ben Moses ben Asher, and his family for several generations, are credited for refining and maintaining the system. These points are normally used only for special purposes, such as Biblical books intended for study, in poetry or when teaching the language to children. The Tiberian system also includes a set of cantillation marks, called *trope* or *te'amim*, used to indicate how scriptural passages should be chanted in synagogue recitations of scripture (although these marks do not appear in the scrolls). In everyday writing of modern Hebrew, *niqqud* are absent; however, patterns of how words are derived from Hebrew roots (called *shorashim* or "triliterals") allow Hebrew speakers to determine the vowel-structure of a given word from its consonants based on the word's context and part of speech.

Alphabet

Unlike the Paleo-Hebrew writing script, the modern Hebrew script has five letters that have special final forms,^[c] called **sofit** (Hebrew: סופית, meaning in this context "final" or "ending") form, used only at the end of a word, somewhat as in the Greek or in the Arabic and Mandaic alphabets.^[b] These are shown below the normal form in the following table (letter names are Unicode standard^{[16][17]}). Although Hebrew is read and written from right to left, the following table shows the letters in order from left to right:

<u>Alef</u>	<u>Bet</u>	<u>Gimel</u>	<u>Dalet</u>	<u>He</u>	<u>Waw/Vav</u>	<u>Zayin</u>	<u>Chet</u>	<u>Tet</u>	<u>Yod</u>	<u>Kaf</u>
א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ
										ך
<u>Lamed</u>	<u>Mem</u>	<u>Nun</u>	<u>Samech</u>	<u>Ayin</u>	<u>Pe</u>	<u>Tsadi</u>	<u>Qof</u>	<u>Resh</u>	<u>Shin</u>	<u>Tav</u>
ל	מ	נ	ס	ע	פ	צ	ק	ר	ש	ת
	ם	ן			ף	ץ				

Order

As far back as the 13th century BCE, ancient Hebrew abecedaries indicate a slightly different ordering of the alphabet. The Zayit Stone,^[18] Izbet Sartah ostracon,^[19] and one inscription from Kuntillet Ajrud^[20] each contain a number of reverse letter orders; such as *vav-he*, *chet-zayin*, *pe-ayin*, etc.

A reversal to *pe-ayin* can be clearly seen in the Book of Lamentations, whose first four chapters are ordered as alphabetical acrostics. While the first chapter has the now usual *ayin-pe* ordering, the second, third and fourth chapters exhibit *pe-ayin*.^[21] The fact that these chapters follows the pre-exilic *pe-ayin* order is evidence for them being written shortly after the events described, rather than being later, post-exilic compositions.^{[22][23][24]}

Pronunciation

Alphabet

The descriptions that follow are based on the pronunciation of modern standard Israeli Hebrew.

		Name of letter					
letter	IPA		Modern	Yiddish /			
		Unicode ^{[16][17]}	Hebrew ^[25]	Hebrew	Ashkenazi	Sephardi	Yemenite
				pronunciation	pronunciation	pronunciation	pronunciation
							א
א	[ʔ], [ʁ]	Alef	אָלף	/aɫɛf/	/ʔaləf/	/ʔalɛf/	/ˈɔləɛf/
							ב
ב	[b]		בֵּית	/bet/	/bɛɪs/, /bɛɪz/	/bɛt/	/bɛθ/
		Bet					בֶּ
ב	[v]		בִּית	/vet/	/vɛɪs/, /vɛɪz/	/vɛt/	/vɛθ/
							ג
ג	[g]		גִּימֵל			/ˈɡimɛl/	/ˈdʒimɛl/
		Gimel		/ˈɡimɛl/	/ˈɡiməl/		גִּי
ג	[ɣ]		גִּימֵל			/ˈɣimɛl/	/ˈɣimɛl/
							ד
ד	[d]		דָּלֶת			/ˈdɛɫɐt/	/ˈdɔləθ/
		Dalet		/ˈdɛɫɐt/, /ˈdɛɫəd/	/ˈdaləd/, /ˈdaləs/		דָּ
ד	[ð]		דָּלֶת			/ˈðɛɫɐt/	/ˈðɔləθ/
							ה
ה	[h]	He	הֵא	/he/, /hej/	/hɛɪ/	/he/	/hɛ/

ו	[v]	<u>Vav</u>	וּ	/vav/	/vov/	/vav/	/wov/	װ
---	-----	------------	----	-------	-------	-------	-------	---

ז	[z]	<u>Zayin</u>	זֵי	/ˈzajin/, /za.in/	/ˈzajɪn/	/ˈzajin/	/ˈzajin/	זײַ
---	-----	--------------	-----	----------------------	----------	----------	----------	-----

ח	[χ]	<u>Chet</u>	חֵי	/χet/	/χes/	/ħet/	/ħeθ/	װ
---	-----	-------------	-----	-------	-------	-------	-------	---

ט	[t]	<u>Tet</u>	טֵי	/tet/	/tes/	/tɛt/	/tʰeθ/	טײַ
---	-----	------------	-----	-------	-------	-------	--------	-----

י	[j]	<u>Yod</u>	יּוּד	/jod/, /jud/	/jʊd/	/jud/	/jœð/	ײַ
---	-----	------------	-------	--------------	-------	-------	-------	----

כּ	[k]		כֶּף	/kaf/	/kɔf/	/kaf/	/kaf/	כײַ
----	-----	--	------	-------	-------	-------	-------	-----

כ	[χ]		כָּף	/χaf/	/χɔf/	/χaf/	/xaf/	כײַ
---	-----	--	------	-------	-------	-------	-------	-----

		<u>Kaf</u>						
ך	[k]		כֶּף סּוּפִית	/kaf sofit/	/ˈlan̩gə kɔf/	/kaf sofit/	/kaf sœˈfiθ/	כײַ

ך	[x]~ [χ]		כָּף סּוּפִית	/χaf sofit/	/ˈlan̩gə χɔf/	/χaf sofit/	/xaf sœˈfiθ/	כײַ
---	-------------	--	------------------	-------------	---------------	-------------	--------------	-----

ל	[l]	<u>Lamed</u>	לָמֶד	/ˈlamed/	/ˈlaməd/	/ˈlamed/	/ˈlɔmɛð/	לײַ
---	-----	--------------	-------	----------	----------	----------	----------	-----

מ		מֶם	/mem/	/mɛm/	/mɛm/	/mɛ̃m/	
	[m] <u>Mem</u>						י
ם		מֶם סּוּפִית	/mem sofit/	/ˈʃlɔs mɛm/	/mɛm sofit/	/mɛ̃m sœʻfiθ/	י
נ		נּוּן	/nun/	/nʊn/	/nun/	/nun/	
	[n] <u>Nun</u>						י
ן		נּוּן סּוּפִית	/nun sofit/	/ˈlaŋgə nʊn/	/nun sofit/	/nun sœʻfiθ/	י
ס	[s] <u>Samekh</u>	סָמֶךְ	/ˈsamɛχ/	/ˈsaməχ/	/ˈsamɛχ/	/ˈsɔmɛχ/	י
ע	[ʔ]~ [ʕ], <u>Ayin</u> [Ø]	עֵיִן	/ajin/, /ʔa.in/	/ajɪn/	/ajin/	/ʕajin/	י
פּ	[p] <u>Pe</u>	פֶּא	/pe/, /pej/	/pɛɪ/	/pe/	/pɛ̃/	י
פּ	[f]	פֶּא	/fe/, /fej/	/fɛɪ/	/fe/	/fɛ̃/	י
ף	[p]	פֶּא סּוּפִית	/pe sofit/, /pej sofit/	/ˈlaŋgə pɛɪ/	/pe sofit/	/pɛ̃ sœʻfiθ/	י

ף	[f]		פֶּא סּוּפִית	/fe sofit/ /fej sofit/	/'laŋgə fɛɪ/	/fe sofit/	/fɛ sœ'fiθ/	1
צ			צָדִי	/'tsadi/	/'tsadi/ /'tsadɪk/	/'tsadik/	/'sɛˈɔði/	1
ץ	[ts]	<u>Tsadi</u>	צָדִי סּוּפִית	/'tsadi sofit/	/'laŋgə 'tsadɪk/ /'laŋgə 'tsadək/	/'tsadik sofit/	/'sɛˈɔði sœ'fiθ/	1 (
ק	[k]	<u>Qof</u>	קוֹף	/kuf/, /kof/	/kʊf/	/kuf/	/gœf/	1
ר	[ʁ]	<u>Resh</u>	רֵישׁ	/ʁɛʃ/	/ʁɛɪʃ/	/reʃ/	/rɛʃ/	1 1
שׁ	[ʃ]	<u>Shin</u>	שֵׁין	/ʃin/	/ʃɪn/	/ʃin/	/ʃin/	שׁ שׁ
שׂ	[s]		שֵׁין	/sin/	/sɪn/	/sin/	/sin/	שׁ שׁ
תּ	[t]	<u>Tav</u>	תּוֹ		/tɔv/, /tɔf/	/tav/	/tɔw/	1
ת	[θ]		תּוֹ	/tav/, /taf/	/sɔv/, /sɔf/	/θav/	/θɔw/	1

By analogy with the other dotted/dotless pairs, dotless tav, ת, would be expected to be pronounced /θ/ (voiceless dental fricative), and dotless dalet ד as /ð/ (voiced dental fricative), but these were lost among most Jews due to these sounds not existing in the countries where they lived (such as in nearly all of Eastern Europe).

Yiddish modified /θ/ to /s/ (cf. seseo in Spanish), but in modern Israeli Hebrew, it is simply pronounced /t/. Likewise, historical /ð/ is simply pronounced /d/.

Shin and sin

Shin and *sin* are represented by the same letter, ש, but are two separate phonemes. When vowel diacritics are used, the two phonemes are differentiated with a *shin*-dot or *sin*-dot; the *shin*-dot is above the upper-right side of the letter, and the *sin*-dot is above the upper-left side of the letter.

Symbol	Name	<u>Transliteration</u>	<u>IPA</u>	Example
שׁ (right dot)	<i>shin</i>	sh	/ʃ/	sh ower
שׂ (left dot)	<i>sin</i>	s	/s/	s our

Historically, *left-dot-sin* corresponds to Proto-Semitic *ś, which in biblical-Judaic-Hebrew corresponded to the voiceless alveolar lateral fricative /ɬ/ (or /ś/).^[27]

Dagesh

Historically, the consonants ב *bet*, ג *gimmel*, ד *daleth*, כ *kaf*, פ *pe* and ט *tav* each had two sounds: one hard (plosive), and one soft (fricative), depending on the position of the letter and other factors. When vowel diacritics are used, the hard sounds are indicated by a central dot called *dagesh* (שׁגט), while the soft sounds lack a *dagesh*. In modern Hebrew, however, the *dagesh* only changes the pronunciation of ב *bet*, כ *kaf*, and פ *pe*, and does not affect the name of the letter. The differences are as follows:

Name	With dagesh				Without dagesh			
	Symbol	Transliteration	IPA	Example	Symbol	Transliteration	IPA	Example
<i>bet/vet</i>	ב	b	/b/	bun	ב	v, <u>b</u>	/v/	van
<i>kaf</i>	^[28] כ	k	/k/	kangaroo	ך כ	kh, ch, <u>k</u> , x	/χ/	loch
<i>pe</i>	פ	p	/p/	pass	פ	f, <u>p</u> , ph	/f/	find
	ף				ף			

In other dialects (mainly liturgical) there are variations from this pattern.

- In some Sephardi and Mizrahi dialects, *bet* without dagesh is pronounced [b], like *bet* with dagesh
- In Syrian and Yemenite Hebrew, *gimel* without dagesh is pronounced [ɣ].
- In Yemenite Hebrew, and in the Iraqi pronunciation of the word "Adonai",

dalet without dagesh is pronounced [ð] as in "these"

- In Ashkenazi Hebrew, as well as Krymchaki Hebrew, *tav* without dagesh is pronounced [s] as in "silk"
- In Iraqi and Yemenite Hebrew, and formerly in some other dialects, *tav* without dagesh is pronounced [θ] as in "thick"

Sounds represented with diacritic geresh

The sounds [tʃ], [dʒ], [ʒ], written ⟨'צ⟩, ⟨'ג⟩, ⟨'ז⟩, and [w], non-standardly sometimes transliterated ⟨ll⟩, are often found in slang and loanwords that are part of the everyday Hebrew colloquial vocabulary. The symbol resembling an apostrophe after the Hebrew letter modifies the pronunciation of the letter and is called a geresh.

Hebrew slang and loanwords						
Name	Symbol	IPA	Transliteration	Example		
Gimel with a geresh	'ג	[d͡ʒ]	ǧ ^[29]	ǧáẖnun	[d͡ʒaχnun]	ג'חנון
Zayin with a geresh	'ז	[ʒ]	ž ^[29]	koláž	[ko'laʒ]	קול'אז
Tsadi with a geresh	'צ	[t͡ʃ]	č ^[29]	čupár (treat)	[t͡ʃu'par]	צ'ופר
Vav with a geresh or double Vav	or 'ו (non standard) [ⓘ]	[w]	w	awánta (boastful act)	[a'wanta]	אוונטה

The pronunciation of the following letters can also be modified with the geresh diacritic. The represented sounds are however foreign to Hebrew phonology, i.e., these symbols mainly represent sounds in foreign words or names when transliterated with the Hebrew alphabet, and not loanwords.

Transliteration of non-native sounds						
Name	Symbol	IPA	Arabic letter	Example		Comment
Dalet with a geresh	ד'	[ð]	<u>Dhāl</u> (ذ) <u>Voiced</u> th	<i>Dhū al-Hijjah</i> (ذو الحجة)	ד'ו אל-חיג'ה	<ul style="list-style-type: none">Also used for English voiced "th"Often a simple ד is written.
Tav with a geresh	ת'	[θ]	<u>Thā'</u> (ث) <u>Voiceless</u> th	Thurston	ת'רסטון	
Chet with a geresh	ח'	[χ]	<u>Khā'</u> (خ)	Sheikh (شيخ)	שייח'	Unlike the other sounds in this table, the sound [χ] represented by ח' is indeed a native sound in Hebrew; the geresh is however used only when transliteration must distinguish between [χ] and [ħ], in which case ח' transliterates the former and ח the latter, whereas in everyday usage ח without geresh is pronounced [ħ] only dialectically but [χ] commonly.
Ayin with a geresh or Resh with a geresh	ע' or ר'	[ʕ]	<u>Ghayn</u> (غ)	<i>Ghajar</i> (غجر); <i>Ghalib</i> (غالب)	ע'ג'ר ר'אלב	The guidelines specified by the Academy of the Hebrew Language prefer Resh with a geresh (ר'); however, this guideline is not universally followed

Geresh is also used to denote an abbreviation consisting of a single Hebrew letter, while *gershayim* (a doubled *geresh*) are used to denote acronyms pronounced as a string of letters; *geresh* and *gershayim* are also used to denote Hebrew numerals consisting of a single Hebrew letter or of multiple Hebrew letters, respectively. Geresh

is also the name of a cantillation mark used for Torah recitation, though its visual appearance and function are different in that context.

Identical pronunciation

In much of Israel's general population, especially where Ashkenazic pronunciation is prevalent, many letters have the same pronunciation. They are as follows:

Letters		Transliteration	Pronunciation (IPA)
א <i>Alef*</i>	ע <i>Ayin*</i>	not transliterated	Usually when in medial word position: /./ (separation of vowels in a <u>hiatus</u>)
			When in initial or final word position, sometimes also in medial word position: <u>silent</u>
			alternatingly.
		,	/ʔ/ (<u>glottal plosive</u>)
ב <i>Bet (without dagesh) Vet</i>	ו <i>Vav</i>	v	/v/
כ <i>Chet*</i>	כ <i>Kaf (without dagesh) Khaf*</i>	kh/ch/h	/x/
ט <i>Tet</i>	ת <i>Tav</i>	t	/t/
כּ <i>Kaf (with dagesh)</i>	ק <i>Qof</i>	k	/k/
ס <i>Samekh</i>	ש <i>Sin (with left dot)</i>	s	/s/
צ ...	תס	and	תש
		ts/tz	/ts/

	Samekh*		Sin*		
צ' <i>Tsadi (with geresh)</i>	טש <i>Tet-Shin*</i>	and	תש <i>Tav- Shin*</i>	ch/tsh (chair)	/tʃ/

* Varyingly

Ancient Hebrew pronunciation

Some of the variations in sound mentioned above are due to a systematic feature of Ancient Hebrew. The six consonants /b g d k p t/ were pronounced differently depending on their position. These letters were also called BeGeD KeFeT letters /berged'kefet/. The full details are very complex; this summary omits some points. They were pronounced as plosives [b g d k p t] at the beginning of a syllable, or when doubled. They were pronounced as fricatives [v ɣ ð x f θ] when preceded by a vowel (commonly indicated with a macron, b̄ ḡ d̄ k̄ p̄ t̄). The plosive and double pronunciations were indicated by the *dagesh*. In Modern Hebrew the sounds d̄ and ḡ have reverted to [d] and [g], respectively, and t̄ has become [t], so only the remaining three consonants /b k p/ show variation. ׀ *resh* may have also been a "doubled" letter, making the list *BeGeD KePoReT*. (Sefer Yetzarah, 4:1)

- ך *chet* and ף *ayin* represented the pharyngeal fricatives /ħ/ and /ʕ/, respectively, צ *tsadi* represented the emphatic consonant /sˤ/, ט *tet* represented the emphatic

consonant /t^ɕ/, and ׀ qof represented the uvular plosive /q/. All these are common Semitic consonants.

- ש sin (the /s/ variant of ש shin) was originally different from both ש shin and ס samekh, but had become /s/ the same as ס samekh by the time the vowel pointing was devised. Because of cognates with other Semitic languages, this phoneme is known to have originally been a lateral consonant, most likely the voiceless alveolar lateral fricative /ɬ/ (the sound of modern Welsh ll)

or the voiceless alveolar lateral affricate /tʃ/ (like Náhuatl *t/*).

Regional and historical variation

The following table contains the pronunciation of the Hebrew letters in reconstructed historical forms and dialects using the International Phonetic Alphabet. The apostrophe-looking symbol after some letters is not a yud but a geresh. It is used for loanwords with non-native Hebrew sounds. The dot in the middle of some of the letters, called a "dagesh kal", also modifies the sounds of the letters א, ב and ג in modern Hebrew (in some forms of Hebrew it modifies also the sounds of the letters ד, ז and/or ח; the "dagesh chazak" – orthographically indistinguishable from the "dagesh kal" – designates gemination, which today is realized only rarely – e.g. in biblical recitations or when using Arabic loanwords).

Symbol	<u>Pronunciation</u>							A equivalent
	<u>Israeli</u>	<u>Ashkenazi</u>	<u>Sephardi</u>	<u>Yemenite</u>	<u>Reconstructed</u>			
					<u>Tiberian</u>	<u>Mishnaic</u>	<u>Biblical</u>	
א	[ʔ, -]	[-]	[ʔ, -]	[ʔ, -]	[ʔ, -]	[ʔ, -]	[ʔ]	א /
ב	[b]	[b]	[b]	[b]	[b]	[b]	[b]	ב
ב	[v]	[v~ɣ]	[b~β~v]	[β]	[v]	[β]	[β]	ב
ג			[g]	[dʒ]	[g]	[g]	[g]	ג
	[g]	[g~g̊]						
ג			[g~ɣ]	[ɣ]	[ɣ]	[ɣ]	[ɣ]	ג
ד			[d̥]	[d̥]	[d̥]	[d̥]	[d̥]	ד
	[d]	[d~d̥]						
ד			[d̥~ð]	[ð]	[ð]	[ð]	[ð]	ד
ה	[h~ʔ, -]	[h, -]	[h, -]	[h, -]	[h, -]	[h, -]	[h]	ה
ו	[v]	[v~ɣ]	[v]	[w]	[w]	[w]	[w]	ו
ו	[u:]	[u:]	[u:]	[əw]	?	?	?	ו
ז	[o:]	[əʊ, ʊə]	[o:]	[œ:]	?	?	?	ז
ז	[z]	[z~ʒ]	[z]	[z]	[z]	[z]	[z]	ז

ח [x~χ] [x] [ħ] [ħ] [ħ] [ħ] [ħ, χ]

ט [t] [t] [t̪] [t̪] ⁽¹⁾ [t̪] [t̪^ɕ] ⁽²⁾ [t̪^ʔ] ⁽³⁾

י [j] [j] [j] [j] [j] [j] [j]

י' [i] [i] [i] [i] ? ? ?

כּ [k] [k] [k] [k] [k] [k] [k^h]

ך [x~χ] [x] [x] [x] [x] [x] [x]

ל [l] [l~ɫ] [l] [l] [l] [l] [l]

מ [m] [m] [m] [m] [m] [m] [m]

נ [n] [n] [ɲ] [ɲ] [ɲ] [ɲ] [ɲ]

ס [s] [s] [s] [s] [s] [s] [s]

ע [ɕ, -] [-] [ɕ, ɲ, -] [ɕ] [ɕ] [ɕ] [ɕ, ʁ]

פ ף	[p]	[p]	[p]	[p]	[p]	[p]	[p]	پ
פ ף	[f]	[f]	[f]	[f]	[f]	[ɸ]	[ɸ]	ف
ץ צ	[ts]	[ts]	[ts]	[s] (1)	[s]	[sˤ] (2)	[sˤ]	س
ק	[k]	[k]	[k]	[g], [ɢ], [q]	[q]	[q]	[q]	ق
ר	[ɣ~ʁ]	[ɹ]~[ʀ]	[r]~[ɾ]	[r]~[ɾ]	[ʀ]	[r]	[ɾ]	ر
שׁ	[ʃ]	[ʃ]	[ʃ]	[ʃ]	[ʃ]	[ʃ]	[ʃ]	ث
שׂ	[s]	[s]	[s]	[s]	[s]	[s]	[ɬ]	س
תּ	[t]	[t]	[t]	[t̪]	[t̪]	[t̪]	[t̪]	ت
ת		[s]		[θ]	[θ]	[θ]	[θ]	ث

1. velarized or pharyngealized

2. pharyngealized

3. sometimes said to be ejective
but more likely glottalized.

Vowels

Matres lectionis

א *alef*, *י* *ayin*, *ו* *waw/vav* and *י* *yod* are letters that can sometimes indicate a vowel instead of a consonant (which would be, respectively, /ʔ/, /ʕ/, /v/ and /j/). When they do, *ו* and *י* are considered to constitute part of the vowel designation in combination with a niqqud symbol – a vowel diacritic (whether or not the diacritic is marked), whereas *א* and *י* are considered to be mute, their role being purely indicative of the non-marked vowel.

Letter	Name of letter	Consonant indicated when letter consonantal	Vowel designation	Name of vowel designation	Indicated Vowel
א	<i>alef</i>	/ʔ/	—	—	ê, ê, â, â, ô
י	<i>ayin</i>	/ʔ/ or /ʕ/	—	—	ê, ê, â, â, ô
ו	<i>waw/vav</i>	/w/ or /v/	יְ	ḥolám malé	ô
			וְ	shurúq	û
י	<i>yud</i>	/j/	יִ	ḥiríq malé	î
			יֵ	tseré malé	ê, ê

Vowel points

Niqqud is the system of dots that help determine vowels and consonants. In Hebrew, all forms of *niqqud* are often omitted in writing, except for children's books, prayer books, poetry, foreign words, and words which would be ambiguous to pronounce. Israeli Hebrew has five vowel phonemes, /i e a o u/, but many more written symbols for them:

Name	Symbol	Written Position	<u>Israeli Hebrew</u>		
			<u>IPA</u>	<u>Transliteration</u>	English example
<u>Hiriq</u>	◊	vowel written below consonant	[i]	i	meet
<u>Tsere</u>	◊◌◌	vowel written below consonant	[e], ([ej] with succeeding yod)	eh (precise pronunciation); ei (imprecise due to modern pronunciation, even if with succeeding yod – see Note 2)	bed, penguin
<u>Segol</u>	◊◌◌◌	vowel written below consonant	[e]	e	men
<u>Patach</u>	◊◌◌◌◌	vowel written below consonant	[ä]	a	father
<u>Kamatz</u>	◊◌◌◌◌◌	vowel written below consonant	[ä], (or [o])	ah, (or oh)	father, login
<u>Holam Haser</u>	◊◌◌◌◌◌◌	vowel written above consonant	[o]	o	home
<u>Holam Male</u>	◊◌◌◌◌◌◌◌	isolated vowel written on its own			
<u>Shuruk</u>	◊◌◌◌◌◌◌◌◌	isolated vowel written on its own	[u]	u	food
<u>Kubutz</u>	◊◌◌◌◌◌◌◌◌◌	vowel written below consonant			

Note 1: The circle represents whatever Hebrew letter is used.

Note 2: The pronunciation of tsere and sometimes segol – with or without the letter yod – is

sometimes *ei* in Modern Hebrew. This is not correct in the normative pronunciation and not consistent in the spoken language.^[30]

Note 3: The dagesh, mappiq, and shuruk have different functions, even though they look the same.

Note 4: The letter ו (waw/vav) is used since it can only be represented by that letter.

Meteg

By adding a vertical line (called Meteg) underneath the letter and to the left of the vowel point, the vowel is made long. The *meteg* is only used in Biblical Hebrew, not Modern Hebrew.

Sh'va

By adding two vertical dots (called Sh'va) underneath the letter, the vowel is made very short. When sh'va is placed on the first letter of the word, mostly it is "è" (but in some instances, it makes the first letter silent without a vowel (vowel-less): e.g. וְ wè to "w")

Name	Symbol	<u>Israeli Hebrew</u>		
		<u>IPA</u>	<u>Transliteration</u>	English example
<u>Shva</u>	◌ְ	[e] or Ø	<i>apostrophe, e, or silent</i>	met or silent
<u>Reduced Segol</u>	◌ֶ	[e]	e	met
<u>Reduced Patach</u>	◌ַ	[ä]	a	cat
<u>Reduced Kamatz</u>	◌ֹ	[o]	o	on

Comparison table

Vowel comparison table ^[31]

<u>Vowel length</u> (phonetically not manifested in Israeli Hebrew)			<u>IPA</u>	<u>Transliteration</u>	English example
Long	Short	Very Short			
א	א	אֶ	[ä]	a	fall
ע	ע	עֶ	[e]	e	men
ו	ו	וֶ	[o]	o	joke
י	י	יֶ	[u]	u	duty
יִ	יִ		[i]	i	media
Note I:		By adding two vertical dots (<i>sh'va</i>) , the vowel is made very short.			
Note II:		The short o and long a have the same <i>niqqud</i> .			
Note III:		The short o is usually promoted to a long o in Israeli writing for the sake of disambiguation			
Note IV:		The short u is usually promoted to a long u in Israeli writing for the sake of disambiguation			

Gershayim

The symbol " is called a gershayim and is a punctuation mark used in the Hebrew language to denote acronyms. It is written before the last letter in the acronym, e.g. ת"ר. Gershayim is also the name of a cantillation mark in the reading of the Torah, printed above the accented letter, e.g. רִי.

Stylistic variants

The following table displays typographic and chirographic variants of each letter. For the five letters that have a different final form used at the end of words, the final forms are displayed beneath the regular form.

The block (square, or "print" type) and cursive ("handwritten" type) are the only variants in widespread contemporary use. Rashi is also used, for historical reasons, in a handful of standard texts.

Letter name (Unicode)	Variants						
	Contemporary			Early modern	Ancestral		
	<u>Block serif</u>	<u>Block sans-serif</u>	<u>Cursive</u>	<u>Rashi</u>	<u>Phoenician</u>	<u>Paleo-Hebrew</u>	<u>Aramaic</u>
Alef	א	א	א	א	א	א	א
Bet	ב	ב	ב	ב	ב	ב	ב
Gimel	ג	ג	ג	ג	ג	ג	ג
Dalet	ד	ד	ד	ד	ד	ד	ד
He	ה	ה	ה	ה	ה	ה	ה
Vav (Unicode) ^[16] / Waw	ו	ו	ו	ו	ו	ו	ו
Zayin	ז	ז	ז	ז	ז	ז	ז
Chet	ח	ח	ח	ח	ח	ח	ח
Tet	ט	ט	ט	ט	ט	ט	ט
Yod	י	י	י	י	י	י	י
Kaf	כ	כ	כ	כ	כ	כ	כ
Final Kaf	ך	ך	ך	ך			

Lamed	ל	ל	ל	ל	ל	ל	ל
Mem	מ	מ	מ	מ	מ	מ	מ
Final Mem	ם	ם	ם	ם			
Nun	נ	נ	נ	נ	נ	נ	נ
Final Nun	ן	ן	ן	ן			
Samekh	ס	ס	ס	ס	ס	ס	ס
Ayin	ע	ע	ע	ע	ע	ע	ע
Pe	פ	פ	פ	פ	פ	פ	פ
Final Pe	ף	ף	ף	ף			
Tsadi	צ	צ	צ	צ	צ	צ	צ, צ
Final Tsadi	ץ	ץ	ץ	ץ			
Qof	ק	ק	ק	ק	ק	ק	ק
Resh	ר	ר	ר	ר	ר	ר	ר
Shin	ש	ש	ש	ש	ש	ש	ש

Tav	ת	ת	𐤀	ת	+	×	ח
-----	---	---	---	---	---	---	---

Yiddish symbols

Symbol	Explanation
ײ ם ם ם -	These are intended for <u>Yiddish</u> . They are not used in Hebrew, aside from in loan words ^[d] . They are possible to visually recreate using a sequence of letters, ״ ײ ם, except when a diacritic is inserted underneath that would not appear in the middle.
ב̣	The <i>rafe</i> (רפה) <u>diacritic</u> is no longer regularly used in Hebrew. In <u>Masoretic Texts</u> and some other older texts, <u>lenited</u> consonants and sometimes <i>matres lectionis</i> are indicated by a small line on top of the letter. Its use has been largely discontinued in modern printed texts. It is still used to mark fricative consonants in the <u>YIVO</u> orthography of <u>Yiddish</u> .

Numeric values of letters

Following the adoption of Greek Hellenistic alphabetic numeration practice, Hebrew letters started being used to denote numbers in the late 2nd century BC,^[32] and performed this arithmetic function for about a thousand years. Nowadays alphanumeric notation is used only in specific contexts, e.g. denoting dates in the Hebrew calendar, denoting grades of school in Israel, other listings (e.g. שלב א', שלב ב' – "phase a, phase b"), commonly in Kabbalah (Jewish mysticism) in a practice known as gematria, and often in religious contexts.



The lower clock on the Jewish Town Hall building in Prague, with Hebrew numerals in counterclockwise order.

letter	numeric value	letter	numeric value	letter	numeric value
א	1	י	10	ק	100
ב	2	כ	20	ר	200
ג	3	ל	30	ש	300
ד	4	מ	40	ת	400
ה	5	נ	50		
ו	6	ס	60		
ז	7	ע	70		
ח	8	פ	80		
ט	9	צ	90		

The numbers 500, 600, 700, 800 and 900 are commonly represented by the juxtapositions ק"ת, ר"ת, ש"ת, ת"ת, and תת"ק respectively. Adding a geresh ("'") to a letter multiplies its value by one thousand, for example, the year 5778 is portrayed as ה'תשע"ח, where 'ה represents 5000, and תשע"ח represents 778.

Transliterations and transcriptions

The following table lists transliterations and transcriptions of Hebrew letters used in Modern Hebrew.

Clarifications:

- For some letters, the Academy of the Hebrew Language offers a *precise* transliteration that differs from the *regular* standard it has set. When omitted, no such precise alternative exists and the regular standard applies.
- The IPA phonemic transcription is specified whenever it uses a different symbol from the one used

for the **regular** standard Israeli transliteration.

- The IPA phonetic transcription is specified whenever it differs from IPA **phonemic** transcription.

Note: SBL's transliteration system, recommended in its *Handbook of Style*,^[33] differs slightly from the 2006 *precise* transliteration system of the Academy of the Hebrew Language; for "צ" SBL uses "ṣ" (≠ AHL "z"), and for ת"כפ"ד"ג with no dagesh, SBL uses the same symbols as for with dagesh (i.e. "b", "g", "d", "k", "f", "t").

Hebrew letter	example	Translation	Standard	example	standard	example	IPA
			Israeli transliteration – <i>regular</i> ^[34]		Israeli transliteration – <i>precise</i> ^[34]		
א	אם	if	<i>none</i> ^[A1]	im			
consonantal, in initial word positions							
א	שאל	asked	'	sha'ál	'	sha'ál	/ɕ/
consonantal, in non-initial word positions							
א	ראשון	first	<i>none</i> ^[A2]	rishón			
silent							
ב	בן	son	b	ben			
ב	טוב	good	v	tov			
ג					g		
ג	גג	roof	g	gag		gaḡ	
ג					ḡ		
ג'	ק'א	roach	ḡ ^{[B1][29]}	ḡuk			/ɕ/
ד					d		
ד	דוד	boiler	d	dud		duḏ	
ד					ḏ		
ה	הד	echo	h	hed			
consonantal							

ה	פה	here	none ^[A3]	po			
silent							
ו	וּ	hook	v	vav	w	waw	
consonantal							
וְ	הוא	he	u	hu			
וִ	לוֹ	to him	o	lo			
ז	זה	this	z	ze			
זְ	ז'רגון	jargon	ž ^{[B2][29]}	žargón			/ʒ/
							/ɔ/
ח	חם	hot	ḥ ^[C1]	ḥam	ḥ	ḥam	di [t]
ט	קט	tiny	t	kat	ṭ	kaṭ	
י	ים	sea	y	yam			/j/
consonantal							
יְ	בִּי	in me	i	bi			
part of hirik male (/i/ vowel)							
יֵ	מֵידע	information	e	medá	é	médá	/ɛ/
part of tsere male (/e/ vowel or /ei/ diphthong)							
כ, כּ ^[28]	כה	so	k	ko			
כּ, כֶּ	סַכָּךְ	branch-roofing	kh ^[C2]	skhakh	ḵ	skak	/ɔ/

ל	לִי	to me	l	li
מ, מם	מוֹם	defect	m	mum
נ, נן	נִין	great-grandson	n	nin
ס	סוֹף	end	s	sof

ע	עֲדֹלָאִידַע	<u>Purim-</u> parade	none ^[A4]	adloyáda ‘	‘adloyáda‘	
in initial or final word positions						<u>di</u> /ɛ/

ע	מוֹעִיל	useful	'	mo'íl ‘	mo'íl	<u>di</u> /ɛ/
in medial word positions						

פ ^[D]	טִיפ	tip	p	tip
------------------	------	-----	---	-----

פ, פף	פֶּסֶפֶס	missed	f	fisfés
-------	----------	--------	---	--------

צ, צץ	צִיץ	bud	ts	tsits	z	ziz	/t̪/
-------	------	-----	----	-------	---	-----	------

צ, צץ	רִיצ'רִץ	zip	č ^{[B3][29]}	ríčrač			/t̪/
-------	----------	-----	-----------------------	--------	--	--	------

ק	קוֹל	sound	k	kol	q	qol
---	------	-------	---	-----	---	-----

ר	עִיר	city	r	ir
---	------	------	---	----

ש	שָׁם	there	sh	sham	š	šam	/j/
---	------	-------	----	------	---	-----	-----

שׁ	שׁם	put	s	sam	ś	śam	
ת					t		
	תות	strawberry	t	tut		tut	
ת					t		

Hebrew letter	Standard Israeli transliteration – <i>regular</i> ^[34]	standard Israeli transliteration – <i>precise</i> ^[34]	<u>IPA phonemic</u> transcription	<u>IPA phonetic</u> transcription
א consonantal, in initial word positions	<i>none</i> ^[A1]			[ʔ]
א consonantal, in non-initial word positions	ʾ	ʾ	/ʔ/	
א silent	<i>none</i> ^[A2]			
בּ	b			
ב	v			
גּ	g	g		
ג		ḡ		
ג'	ḡ ^{[B1][29]}		/d͡ʒ/	
דּ	d	d		
ד		ḏ		
הּ consonantal	h			
ה silent	<i>none</i> ^[A3]			

<div> <div>׀</div> <div>consonantal</div> </div>	v	w		
<div> <div>·׀</div> </div>	u			
<div> <div>י̇</div> </div>	o			[ɔ̞] or [ɔ]
<div> <div>׀̣</div> </div>	z			
<div> <div>׳׀̣</div> </div>	ẏ ^{[B2][29]}		/ɜ/	
			/x̥/ or /χ/	[χ]
<div> <div>ן</div> </div>	ḥ ^[C1]	ḥ	<u>dialectal</u> [ħ]	
<div> <div>ט</div> </div>	t	ṭ		
<div> <div>י̣</div> <div>consonantal</div> </div>	y		/j/	
<div> <div>י̣</div> <div>part of hirik male (/i/ vowel)</div> </div>	i			
<div> <div>י̣</div> <div>part of tseré male (/e/ vowel or /ei/ diphthong)</div> </div>	e	é	/e̞/ or /ej/	[ɐ̞] or [ɐj]/
<div> <div>ך, כּ^[28]</div> </div>	k			
<div> <div>ך, כ</div> </div>	kh ^[C2]	ḵ	/x̥/ or /χ/	[χ]
<div> <div>ל</div> </div>	l			
<div> <div>ם, מ</div> </div>	m			

נ,	n			
ס	s			
ע	none ^[A4]	ʿ		only in initial word position [ʔ]
in initial or final word positions			<u>dialectal</u> /ɕ/	
ע			/ʔ/	
ע	ʾ	ʿ	<u>dialectal</u> /ɕ/	
in medial word positions				
פ ^[D]	p			
פ, ף	f			
צ, ץ	ts	z	/t͡s/	
צ, ץ	č ^{[B3][29]}		/t͡ʃ/	
ק	k	q		
				[ʀ] or [ɐ]
ר	r			<u>dialectal</u> [r] or [ɹ]
שׁ	sh	š	/ʃ/	
שׂ	s	ś		
ת		t		
ת	t	†		

Notes

A¹ 2[^] 3[^] 4[^] In transliterations of modern Israeli Hebrew, initial and final ׀ (in regular transliteration), silent or initial ׀, and silent ׀ are *not* transliterated. To the eye of readers orientating themselves on Latin (or similar) alphabets, these letters might seem to be transliterated as vowel letters; however, these are in fact transliterations of the vowel diacritics – niqqud (or are representations of the spoken vowels). E.g., in ׀ ("if", [ʔim]), ׀ ("mother", [ʔem]) and ׀ ("nut", [ʔom]), the letter ׀ always represents the same consonant: [ʔ] (glottal stop), whereas the vowels /i/, /e/ and /o/ respectively represent the spoken vowel, whether it is orthographically denoted by diacritics or not. Since the Academy of the Hebrew Language ascertains that ׀ in initial position is not transliterated, the symbol for the glottal stop ʔ is omitted from the transliteration, and only the subsequent vowels are transliterated (whether or not their corresponding vowel diacritics appeared in the text being transliterated), resulting in "im", "em" and "om", respectively.

B¹ 2[^] 3[^] The diacritic geresh – "ʾ" – is used with some other letters as well (ʾד, ʾח, ʾט, ʾע, ʾר, ʾת), but only to transliterate *from* other languages to Hebrew – never to spell Hebrew words; therefore they were not included in this table (correctly translating a Hebrew text with these letters would require using the spelling in the language from which the transliteration to Hebrew was originally made). The non-standard "ʾ" and "ʱ" [e1] are sometimes used to represent /w/, which like /d͡ʒ/, /ʒ/ and /t͡ʃ/ appears in Hebrew slang and loanwords.

C¹ 2[^] The Sound /χ/ (as "ch" in loch) is often transcribed "ch", inconsistently with the guidelines specified by the Academy of the Hebrew Language: ׀ח /χam/ → "cham"; ׀סכר /sχax/ → "schach".

D[^] Although the Bible does include a single occurrence of a final pe with a dagesh (Book of Proverbs 30, 6: "אֶל-תּוֹסֵף עַל-דְּבָרָיו: פֶּן-יִכְיֶה בָּרַךְ וְנִזְבַּחַת"), in modern Hebrew /p/ is always represented by pe in its regular, not final, form "פּ", even when in final word position, which occurs with loanwords (e.g. שׁוּפ /ʃop/ "shop"), foreign names (e.g. פִּילִיפ /'filip/ "Philip") and some slang (e.g. חָרַפ /χa'rap/ "slept deeply").

Religious use

The letters of the Hebrew alphabet have played varied roles in Jewish religious literature over the centuries, primarily in mystical texts. Some sources in classical rabbinical literature seem to acknowledge the historical provenance of the currently used Hebrew alphabet and deal with them as a mundane subject (the Jerusalem Talmud, for example, records that "the Israelites took for themselves square calligraphy", and that the letters "came with the Israelites from Ashur [Assyria]");^[35] others attribute mystical significance to the letters, connecting them with the process of creation or the redemption. In mystical conceptions, the alphabet is considered eternal, pre-existent to the Earth, and the letters themselves are seen as having holiness and power, sometimes to such an extent that several stories from the Talmud illustrate the idea that they cannot be destroyed.^[36]

The idea of the letters' creative power finds its greatest vehicle in the Sefer Yezirah, or *Book of Creation*, a mystical text of uncertain origin which describes a story of creation highly divergent from that in the Book of Genesis, largely through exposition on the powers of the letters of the alphabet. The supposed creative powers of the letters are also referenced in the Talmud and Zohar.^{[37][38]}



The four-pronged Shin

Another book, the 13th-century Kabbalistic text Sefer HaTemunah, holds that a single letter of unknown pronunciation, held by some to be the four-pronged shin on one side of the teffilin box, is missing from the current alphabet. The world's flaws, the book teaches, are related to the absence of this letter, the eventual revelation of which will repair the universe.^[39] Another example of messianic significance attached to the

letters is the teaching of Rabbi Eliezer that the five letters of the alphabet with final forms hold the "secret of redemption".^[39]

In addition, the letters occasionally feature in aggadic portions of non-mystical rabbinic literature. In such aggada the letters are often given anthropomorphic qualities and depicted as speaking to God. Commonly their shapes are used in parables to illustrate points of ethics or theology. An example from the Babylonian Talmud (a parable intended to discourage speculation about the universe before creation):

Why does the story of creation begin with bet?... In the same manner that the letter bet is closed on all sides and only open in front, similarly you are not permitted to inquire into what is before or what was behind, but only from the actual time of Creation.

Babylonian Talmud, Tractate Hagigah, 77c

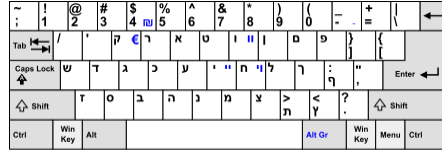
Extensive instructions about the proper methods of forming the letters are found in Mishnat Soferim, within Mishna Berura of Yisrael Meir Kagan.

Mathematical use

In set theory, \aleph_0 , pronounced aleph-naught or aleph-zero, is used to mark the cardinal number of an infinite countable set, such as \mathbb{Z} , the set of all integers. More generally, the \aleph_α aleph number notation marks the ordered sequence of all distinct infinite cardinal numbers.

Less frequently used, the \beth_α beth number notation is used for the iterated power sets of \aleph_0 . The second element \beth_1 is the cardinality of the continuum. Very occasionally, a gimel function is used in cardinal notation.

Unicode and HTML



An example of a Hebrew keyboard.

The Unicode Hebrew block extends from U+0590 to U+05FF and from U+FB1D to U+FB4F. It includes letters, ligatures, combining diacritical marks (*Niqqud* and cantillation marks) and punctuation.^[16] The Numeric Character References is included for HTML. These can be used in many markup languages, and they are often used in Wiki to create the Hebrew glyphs compatible with the majority of web browsers.

Standard Hebrew keyboards have a 101-key layout. Like the standard QWERTY layout, the Hebrew layout was derived from the order of letters on Hebrew typewriters.

See also

- Hebrew braille
- Hebrew diacritics
- Cursive Hebrew
- Hebrew punctuation
- Hebrew spelling

- Help:Hebrew
- Inverted nun
- Koren Type
- Ktiv hasar niqqud ("spelling lacking niqqud")
- Significance of numbers of Judaism

Notes

^{a^} "Alef-bet" is commonly written in Israeli Hebrew without the *maqaf* (מקף, "[Hebrew] hyphen"), אלפ־בית עברי, as opposed to with the hyphen, אלֶף־בֵּית עִבְרִי.

^{b^} The Arabic letters generally (as six of the primary letters can have only two variants) have four forms, according to their place in the word. The same goes with the Mandaic ones, except for three of the 22 letters, which have only one form.

^{c^} In forms of Hebrew older than Modern Hebrew, כ"ף, ב"ת and פ"א can only be read *b*, *k* and *p*, respectively, at the beginning of a word, while they will have the sole value of *v*, *kh* and *f* in a *sofit* (final) position, with few exceptions.^[28] In medial positions, both pronunciations are possible. In Modern Hebrew this restriction is not absolute, e.g. פִּיזִיקָאִי /fizi'kaj/ and never /pizi'kaj/ (= "physicist"), סְנוֹב /snob/ and never /snov/ (= "snob"). A dagesh may be inserted to unambiguously denote the plosive variant: בּ = /b/, כּ = /k/, פּ = /p/; similarly (though today very rare in Hebrew and

fricative variant: ץ = /v/, ך = /χ/ and ף = /f/. In Modern Hebrew orthography, the sound [p] at the end of a word is denoted by the regular form "פ", as opposed to the final form "ף", which always denotes [f] (see table of transliterations and transcriptions, comment^[D]).

^{d^} However, ם (two separate vavs), used in Ktiv male, is to be distinguished from the *Yiddish ligature* ם (also two vavs but together as one character).

^{e1^ e2^ e3^ e4^ e5^} The Academy of the Hebrew Language states that both [v] and [w] be indistinguishably represented in Hebrew using the letter vav.^[34] Sometimes the vav is indeed doubled, however not to denote [w] as opposed to [v] but rather, when spelling without niqqud, to denote the phoneme /v/ at a non-initial and non-final position in the word, whereas a single vav at a non-initial and non-final position in the word in spelling without niqqud denotes one of the phonemes /u/ or /o/. To pronounce foreign words and loanwords containing the sound [w], Hebrew readers must therefore rely on former knowledge and context.

Explanatory footnotes

a. *Possibly rooted from Ancient Egyptian d or dj.*

References

1. *"Hebrew alphabet (<https://www.britannica.com/topic/Hebrew-alphabet>) ." Encyclopedia Britannica.*
"Square Hebrew became

established in the 2nd and 1st centuries bce and developed into the modern Hebrew alphabet over the next 1,500 years."

2. *Abu Elhija, Dua'a (23 January 2014). "A new writing system? Developing orthographies for writing Arabic dialects in electronic media". Writing Systems Research. 6 (2). Informa UK Limited: 190–214.*

doi:10.1080/17586801.2013.868334 (https://doi.org/10.1080%2F17586801.2013.868334) .

ISSN 1758-6801 (https://search.worldcat.org/issn/1758-6801) .

S2CID 219568845 (https://api.semanticscholar.org/CorpusID:219568845) .

3. Gaash, Amir. *"Colloquial Arabic written in Hebrew characters on Israeli websites by Druzes (and other non-Jews)." Jerusalem studies in Arabic and Islam 43 (2016): 15.*
4. Shachmon, Ori, and Merav Mack. *"Speaking Arabic, Writing Hebrew. Linguistic Transitions in Christian Arab Communities in Israel". Wiener Zeitschrift Für Die Kunde Des Morgenlandes, vol. 106, 2016, pp. 223–239. JSTOR, www.jstor.org/stable/26449346. Accessed 15 July 2021.*

5. *Babylonian Talmud (Sanhedrin 21b–22a); Jerusalem Talmud (Megillah 10a). Cf. Mishnah (Megillah 1:8): "The Books [of Scripture] differ from phylacteries and Mezuzahs only in that the Books may be written in any language, while phylacteries and Mezuzahs may be written **in the Assyrian writing only**."* See: *The Mishnah* (ed. Herbert Danby), Oxford University Press: London 1977, p. 202.

6. Naveh, Joseph (1987), *"Proto-Canaanite, Archaic Greek, and the Script of the Aramaic Text on the Tell Fakhariyah Statue"*, in Miller; et al. (eds.), *Ancient Israelite Religion*.

7. Smith, Mark S. (2002). *The Early History of God: Yahweh and the other deities in ancient Israel* (<https://books.google.com/books?id=1yM3AuBh4AsC&dq=Gezer+calendar+phoenician&pg=PA20>) .
Wm. B. Eerdmans Publishing Co.
p. 20. ISBN 978-0-8028-3972-5.

8. *The Calendar Tablet from Gezer*, Adam L Bean, Emmanuel School of Religion (https://esr.academia.edu/AdamBean/Papers/443200/The_Calendar_Tablet_from_Gezer) Archived (https://web.archive.org/web/20110302090228/http://esr.academia.edu/AdamBean/Papers/443200/The_Calendar_Tablet_from_Gezer) March 2, 2011, at the Wayback Machine

9. *"Is it 'Tenable'?", Hershel Shanks, Biblical Archaeology Review* (<http://www.bib-arch.org/scholars-study/jezebel-seal-06.asp>)
Archived (<https://web.archive.org/web/20101225054108/http://www.bib-arch.org/scholars-study/jezebel-seal-06.asp>) December 25, 2010, at the Wayback Machine
10. *Spelling in the Hebrew Bible: Dahood memorial lecture, By Francis I. Andersen, A. Dean Forbes, p56* (<https://books.google.com/books?id=IhFxx8eQIDsC&q=gezer&pg=PA56>)

11. *Pardee, Dennis. "A Brief Case for the Language of the 'Gezer Calendar' as Phoenician".
Linguistic Studies in Phoenician,
ed. Robert D. Holmstedt and
Aaron Schade. Winona Lake: 43.*
12. *Chris A. Rollston (2010). Writing and Literacy in the World of Ancient Israel: Epigraphic Evidence from the Iron Age (http://books.google.com/books?id=kx9Uke_IfloC&pg=PA30) . Society of Biblical Lit. pp. 30–. ISBN 978-1-58983-107-0.*
13. *Saénz-Badillos 1993, p. 16.*

14. *Saénz-Badillos 1993, p. 61–62.*
15. *Saénz-Badillos 1993.*
16. *"Hebrew" (<https://www.unicode.org/charts/PDF/U0590.pdf>) (character code chart). The Unicode Standard. Unicode, Inc.*
17. *Unicode names of Hebrew characters at fileformat.info (<http://www.fileformat.info/info/unicode/block/hebrew/list.htm>) .*

18. *Tappy, Ron E., et al. "An Abecedary of the Mid-Tenth Century B.C.E. from the Judaeian Shephelah." Bulletin of the American Schools of Oriental Research, no. 344, 2006, pp. 5–46. JSTOR, <http://www.jstor.org/stable/25066976> . Accessed 17 May 2024.*

19. A. Dotan. "The Alphabet
Inscription of 'Izbet Ṣarḥah /
כתובת הא"ב מעזבת צרטה" *Eretz-
Israel: Archaeological, Historical
and Geographical Studies /*
ארץ-ישראל: מחקרים בדיעת הארץ
ועתיקותיה, vol. 16 (טז), 1982, pp.
62–69. JSTOR,
[http://www.jstor.org/stable/2361
9530](http://www.jstor.org/stable/23619530) . Accessed 17 May 2024.

20. *Renz, Johannes; Röllig, Wolfgang*
(2016). *Handbuch der*
althebräischen Epigraphik (in
German). Darmstadt: WBG
(Wissenschaftliche
Buchgesellschaft). p. 62.
ISBN 978-3-534-26789-7.

21. *Berlin 2004*, p. 4.

22. *First 2017*.

23. *First 2014*.

24. *Pitre & Bergsma 2018*.

25. *Kaplan, Aryeh*. *Sefer Yetzilah: The*
Book of Creation. pp. 8, 22.

26. *"The Hebrew Alphabet (Aleph-Bet)"* (<https://www.jewishvirtuallibrary.org/the-hebrew-alphabet-aleph-bet>) .

www.jewishvirtuallibrary.org.

Retrieved 4 October 2020.

27. Rendsburg, Gary A. (1997).

"Ancient Hebrew Phonology" (<http://jewishstudies.rutgers.edu/docman/rendersburg/470-ancient-hebrew-phonology-professional-pdf-from-the-publisher/file>) (PDF). In Kaye, Alan S. (ed.). *Phonologies of Asia and Africa*. pp. 70, 73.

28. "ך" is rare but exists, e.g. last word in Deuteronomy 7 1 (דברים) 'פסוק א' (פרק ז') in the word "מֶמֶךְ" – see תנ"ך מנוקד, דברים פרק ז' (<http://www.mechon-mamre.org/i/t/t0507.htm>) . There is a single occurrence of "ף", see this comment^[D].

29. *Transliteration guidelines*

preceding 2006-update (<http://hebrew-academy.huji.ac.il/hahlatot/TheTranscription/Documents/ATAR1.pdf>) Archived (<https://web.archive.org/web/20111116075851/http://hebrew-academy.huji.ac.il/hahlatot/TheTranscription/Documents/ATAR1.pdf>) 2011-11-16 at the Wayback Machine, p. 3

Academy of the Hebrew Language

30. *Laufer, Asher (2008). Chapters in Phonetics and Phonetic Transcription. Jerusalem: Magnes. pp. 207–211. ISBN 978-965-493-401-5.*
31. *"Hebrew lessons for Christians"*
(http://www.hebrew4christians.com/Grammar/Unit_Two/unit_two.html) .
32. *Sirat, Colette (1976), Ecriture et civilisations, Paris: Editions du CNRS.*

33. *"Resources for New Testament
Exegesis – Transliteration
Standards of The SBL Handbook
of Style" ([http://www.viceregency.
com/Translit.htm](http://www.viceregency.com/Translit.htm)) .*

34. *"Transliteration guidelines" (<http://web.archive.org/web/20140703210016/http://hebrew-academy.huji.ac.il/hahlatot/TheTranscription/Documents/taatiq2007.pdf>) (PDF). Academy of the Hebrew Language. November 2006. Archived from the original (<http://hebrew-academy.huji.ac.il/hahlatot/TheTranscription/Documents/taatiq2007.pdf>) (PDF) on 3 July 2014.*

35. *Jerusalem Talmud, Tractate Sanhedrin 21b*


36. *Babylonian Talmud, Tractate Pesach 87b, Avodah Zarah 18a.*

37. *Babylonian Talmud, Tractate
Berachot 55c*

38. *Zohar 1:3; 2:152*

39. *The Book of Letters. Woodstock,
Vermont: Jewish Lights
Publishing, Woodstock. 1990*

Bibliography

-  Gesenius' Hebrew Grammar, §5 ff.
- Berlin, Adele (2004). Lamentations:
A Commentary (<https://books.google.com/books?id=iTH9qth5cbEC>).
Westminster John Knox Press.
ISBN 9780664229740.

- First, Mitchell (June 2014). "Using the Pe–Ayin Order of the Abecedaries of Ancient Israel to Date the Book of Psalms" (<https://journals.sagepub.com/doi/abs/10.1177/0309089214536490>). . *Journal for the Study of the Old Testament*. **38** (4): 471–485.
[doi:10.1177/0309089214536490](https://doi.org/10.1177/0309089214536490) (<https://doi.org/10.1177/0309089214536490>). . ISSN 0309-0892 (<http://search.worldcat.org/issn/0309-0892>). . S2CID 170926400 (<https://api.semanticscholar.org/CorpusID:170926400>). .

- First, Mitchell (2017). *Pe before Ayin in Biblical Pre-Exilic Acrostics* (<http://www.thetorah.com/article/pe-before-ayin-in-biblical-pre-exilic-acrostics>) .
- Hoffman, Joel M. 2004. *In the Beginning: A Short History of the Hebrew Language*. New York: New York University Press. (<https://books.google.com/books?id=momlk7nVNdkC>)
- Pitre, Brant J.; Bergsma, John S. (2018). *A Catholic Introduction to the Bible: The Old Testament* (<http://books.google.com/books?id=nvEmDwAAQBAJ&pg=PA820>) .

Ignatius Press. p. 280. ISBN 978-1-58617-722-5.

- Saénz-Badillos, Angel (1993). *A History of the Hebrew Language*. Cambridge, UK: Cambridge University Press.
- Steinberg, David. *History of the Hebrew Language*. (http://www.adath-shalom.ca/history_of_hebrew.htm)

External links

General

- How to draw letters (<http://www.levsoftware.com/alefhet.htm>)

- Official Unicode standards document for Hebrew (<https://www.unicode.org/charts/PDF/U0590.pdf>).
- Unicode collation charts (<http://www.unicode.org/charts/collation/>). – including Hebrew letters, sorted by shape

Keyboards

- LiteType.com (<http://litetype.com/?lang=hebrew&style=moon>). – Virtual & Interactive Hebrew Keyboard
- Mikledet.com (<https://web.archive.org/web/20060614000600/http://w>

www.mikledet.com/). – For typing Hebrew with an English keyboard (Hebrew keyboard|Hebrew layout)

- Prize Find: Oldest Hebrew

Inscription (<http://www.bib-arch.org/bar/article.asp?PubID=BSBA&Volume=36&Issue=2&ArticleID=9>).

Archived (<https://web.archive.org/web/20120229232512/http://www.bib-arch.org/bar/article.asp?PubID=BSBA&Volume=36&Issue=2&ArticleID=9>). 2012-02-29 at the Wayback Machine Biblical Archaeology

Review

Retrieved from

"https://en.wikipedia.org/w/index.php?title=Hebrew_alphabet&oldid=1240418915"

WIKIPEDIA

This page was last edited on 15 August 2024, at 08:04 (UTC). •

Content is available under [CC BY-SA 4.0](#) unless otherwise noted.