

= Biblical Hebrew =

Biblical Hebrew (Hebrew : ????????? ?????????? Ivrit Miqra 'it or ???????? ?????????? Leshon ha @-@ Miqra) , also called Classical Hebrew , is an archaic form of Hebrew , a Canaanite Semitic language spoken by the Israelites in the area known as Israel , roughly west of the Jordan River and east of the Mediterranean Sea . The term " Hebrew " was not used for the language in the Bible , which referred to Canaanite or Judahite , but the name was used in Greek and Mishnaic Hebrew texts . Biblical Hebrew is attested from about the 10th century BCE , and persisted through and beyond the Second Temple period (which ended in the siege of Jerusalem (AD 70)) .

Biblical Hebrew eventually developed into Mishnaic Hebrew , which was spoken until the second century CE .

Biblical Hebrew is best @-@ attested in the Hebrew Bible , the collection of Judaic religious and historical texts which reflect various stages of the Hebrew language in its consonantal skeleton , as well as a vocalic system which was added in the Middle Ages by the Masoretes . There is also some evidence of regional dialectal variation , including differences between Biblical Hebrew as spoken in the northern Kingdom of Israel and in the southern Kingdom of Judah .

Biblical Hebrew has been written with a number of different writing systems . The Hebrews adopted the Phoenician alphabet around the 12th century BCE , which developed into the Paleo @-@ Hebrew alphabet . This was retained by the Samaritans , who use the descendent Samaritan alphabet to this day . However , the Aramaic alphabet gradually displaced the Paleo @-@ Hebrew alphabet for the Jews , and it became the source for the modern Hebrew alphabet . All of these scripts were lacking letters to represent all of the sounds of Biblical Hebrew , though these sounds are reflected in Greek and Latin transcriptions / translations of the time . These scripts originally only indicated consonants , but certain letters , known by the Latin term *matres lectionis* , became increasingly used to mark vowels . In the Middle Ages , various systems of diacritics were developed to mark the vowels in Hebrew manuscripts ; of these , only the Tiberian vocalization is still in wide use .

Biblical Hebrew possessed a series of " emphatic " consonants whose precise articulation is disputed , likely ejective or pharyngealized . Earlier Biblical Hebrew possessed three consonants which did not have their own letters in the writing system , but over time they merged with other consonants . The stop consonants developed fricative allophones under the influence of Aramaic , and these sounds eventually became marginally phonemic . The pharyngeal and glottal consonants underwent weakening in some regional dialects , as reflected in the modern Samaritan Hebrew reading tradition . The vowel system of Biblical Hebrew changed dramatically over time and is reflected differently in the ancient Greek and Latin transcriptions , medieval vocalization systems , and modern reading traditions .

Biblical Hebrew had a typical Semitic morphology with nonconcatenative morphology , arranging Semitic roots into patterns to form words . Biblical Hebrew distinguished two genders (masculine , feminine) , three numbers (singular , plural , and uncommonly , dual) . Verbs were marked for voice and mood , and had two conjugations which may have indicated aspect and / or tense (a matter of debate) . The tense or aspect of verbs was also influenced by the conjugation ? , in the so @-@ called waw @-@ consecutive construction . Default word order was verb ? subject ? object , and verbs inflected for the number , gender , and person of their subject . Pronominal suffixes could be appended to verbs (to indicate object) or nouns (to indicate possession) , and nouns had special construct states for use in possessive constructions .

= = Nomenclature = =

The earliest written sources refer to Biblical Hebrew by the name of the land in which it was spoken : ??? ????? ' the language of Canaan ' (see Isaiah 19 : 18) . The Hebrew Bible also shows that the language was called ?????? ' Judaeans , Judahite ' (see , for example , 2 Kings 18 : 26 @,@ 28) . In the Hellenistic period Greek writings use the names Hebraios , Hebraïsti (Josephus , *Antiquities* I , 1 : 2 , etc .) , and in Mishnaic Hebrew we find ????? ' Hebrew ' and ????? ' Hebrew

language ' (Mishnah Gittin 9 : 8 , etc .) . The origin of this term is obscure ; suggested origins include the biblical Eber , the ethnonyms ?abiru , ?apiru , and ?Apiru found in sources from Egypt and the near east , and a derivation from the root ??? " to pass " alluding to crossing over the Jordan River . Jews also began referring to Hebrew as " the Holy Tongue " in Mishnaic Hebrew .

The term Classical Hebrew may include all pre @-@ medieval dialects of Hebrew , including Mishnaic Hebrew , or it may be limited to Hebrew contemporaneous with the Hebrew Bible . The term Biblical Hebrew refers to pre @-@ Mishnaic dialects (sometimes excluding Dead Sea Scroll Hebrew) . The term ' Biblical Hebrew ' may or may not include extra @-@ biblical texts , such as inscriptions (e.g. the Siloam inscription) , and generally also includes later vocalization traditions for the Hebrew Bible 's consonantal text , most commonly the early medieval Tiberian vocalization .

= = History = =

The archeological record for the prehistory of Biblical Hebrew is far more complete than the record of Biblical Hebrew itself . Early Northwest Semitic (ENWS) materials are attested from 2350 BCE to 1200 BCE , the end of the Bronze Age . The Northwest Semitic languages , including Hebrew , differentiated noticeably during the Iron Age (1200 ? 540 BCE) , although in its earliest stages Biblical Hebrew was not highly differentiated from Ugaritic and the Canaanite of the Amarna letters .

Hebrew developed during the latter half of the second millennium BCE between the Jordan and the Mediterranean Sea , an area known as Canaan . The Israelite tribes established a kingdom in Canaan at the beginning of the first millennium BCE , which later split into the kingdom of Israel in the north and the kingdom of Judah in the south after a dispute of succession . The earliest Hebrew writing yet discovered was found at Khirbet Qeiyafa and dates to the 10th century BCE .

The kingdom of Israel was destroyed by the Assyrians in 722 BCE . The kingdom of Judah was conquered by the Babylonians in 586 BCE , its higher classes were exiled into the Babylonian captivity and Solomon 's Temple was destroyed . Later the Persians made Judah a province and permitted Jewish exiles to return and rebuild the Temple . According to the Gemara , Hebrew of this period was similar to Imperial Aramaic ; in Pesahim , Tractate 87b , Hanina bar Hama said that God sent the exiled Jews to Babylon because " [the Babylonian] language is akin to the Leshon Hakodesh " .

Aramaic became the common language in the north , in Galilee and Samaria . Hebrew remained in use in Judah ; however the returning exiles brought back Aramaic influence , and Aramaic was used for communicating with other ethnic groups during the Persian period . Alexander conquered Judah in 332 BCE , beginning the period of Hellenistic (Greek) domination . During the Hellenistic period Judea became independent under the Hasmonean dynasty , but later the Romans ended their independence , making Herod the Great their governor . One Jewish revolt against the Romans led to the destruction of the Second Temple in 70 CE , and the second Bar Kokhba revolt in 132 ? 135 led to a large departure of the Jewish population of Judea .

Biblical Hebrew after the Second Temple period evolved into Mishnaic Hebrew , which ceased being spoken and developed into a literary language around 200 CE . Hebrew continued to be used as a literary and liturgical language in the form of Medieval Hebrew , and Hebrew began a revival process in the 19th century , culminating in Modern Hebrew becoming the official language of Israel . Currently , Classical Hebrew is generally taught in public schools in Israel , and Biblical Hebrew forms are sometimes used in Modern Hebrew literature , much as archaic and biblical constructions are used in Modern English literature . Since Modern Hebrew contains many biblical elements , Biblical Hebrew is fairly intelligible to Modern Hebrew speakers .

The primary source of Biblical Hebrew material is the Hebrew Bible. epigraphic materials from the area of Israelite territory are written a form of Hebrew called Inscriptional Hebrew , although this is meagerly attested . According to Waltke & O 'Connor , Inscriptional Hebrew " is not strikingly different from the Hebrew preserved in the Masoretic text . " The damp climate of Israel caused the rapid deterioration of papyrus and parchment documents , in contrast to the dry environment of Egypt , and the survival of the Hebrew Bible may be attributed to scribal determination in preserving

the text through copying . No manuscript of the Hebrew Bible dates to before 400 BCE , although two silver rolls (the Ketef Hinnom scrolls) from the seventh or sixth century BCE show a version of the Priestly Blessing . Vowel and cantillation marks were added to the older consonantal layer of the Bible between 600 CE and the beginning of the 10th century . The scholars who preserved the pronunciation of the Bibles were known as the Masoretes . The most well @-@ preserved system that was developed , and the only one still in religious use , is the Tiberian vocalization , but both Babylonian and Palestinian vocalizations are also attested . The Palestinian system was preserved mainly in piyyutim , which contain biblical quotations .

= = Classification = =

Biblical Hebrew is a Northwest Semitic language from the Canaanite subgroup .

As Biblical Hebrew evolved from the Proto @-@ Semitic language it underwent a number of consonantal mergers parallel with those in other Canaanite languages . There is no evidence that these mergers occurred after the adaptation of the Hebrew alphabet .

As a Northwest Semitic language , Hebrew shows the shift of initial * / w / to / j / , a similar independent pronoun system to the other Northwest Semitic languages (with third person pronouns never containing / ? /) , some archaic forms , such as / naʔnu / ' we ' , first person singular pronominal suffix -i or -ya , and / n / commonly preceding pronominal suffixes . Case endings are found in Northwest Semitic languages in the second millennium BCE , but disappear almost totally afterwards . Mimimation is absent in singular nouns , but is often retained in the plural , as in Hebrew .

The Northwest Semitic languages formed a dialect continuum in the Iron Age (1200 ? 540 BCE) , with Phoenician and Aramaic on each extreme . Hebrew is classed with Phoenician in the Canaanite subgroup , which also includes Ammonite , Edomite , and Moabite . Moabite might be considered a Hebrew dialect , though it possessed distinctive Aramaic features . Although Ugaritic shows a large degree of affinity to Hebrew in poetic structure , vocabulary , and some grammar , it lacks some Canaanite features (like the Canaanite shift and the shift * / ǝ / > / z /) , and its similarities are more likely a result of either contact or preserved archaism .

Hebrew underwent the Canaanite shift , where Proto @-@ Semitic / aʔ / tended to shift to / oʔ / , perhaps when stressed . Hebrew also shares with the Canaanite languages the shifts * / ǝ / > / z / , * / ?? / and * / ?? / > / sʔ / , widespread reduction of diphthongs , and full assimilation of non @-@ final / n / to the following consonant if word final , i.e. ?? / bat / from * bant . There is also evidence of an rule of assimilation of / y / to the following coronal consonant in pre @-@ tonic position , shared by Hebrew , Phoenician and Aramic .

Typical Canaanite words in Hebrew include : ?? " roof " ???? " table " ???? " window " ??? " old (thing) " ??? " old (person) " and ??? " expel " . Morphological Canaanite features in Hebrew include the masculine plural marker -ʔ , first person singular pronoun ???? , interrogative pronoun ?? , definite article ʔ- (appearing in the first millennium BCE) , and third person plural feminine verbal marker ʔ- .

= = Eras = =

Biblical Hebrew as preserved in the Hebrew Bible is composed of multiple linguistic layers . The consonantal skeleton of the text is the most ancient , while the vocalization and cantillation are later additions reflecting a later stage of the language . These additions were added after 600 CE ; Hebrew had already ceased being used as a spoken language around 200 CE . Biblical Hebrew as reflected in the consonantal text of the Bible and in extra @-@ biblical inscriptions may be subdivided by era .

The oldest form of Biblical Hebrew , Archaic Hebrew , is found in poetic sections of the Bible and inscriptions dating to around 1000 BCE , the early Monarchic Period . This stage is also known as Old Hebrew or Paleo @-@ Hebrew , and is the oldest stratum of Biblical Hebrew . The oldest known artifacts of Archaic Biblical Hebrew are various sections of the Tanakh , including the Song of Moses (Exodus 15) and the Song of Deborah (Judges 5) . Biblical poetry uses a number of distinct

lexical items , for example *šay* for prose *šay* ' see ' , *šay* for *šay* ' great ' . Some have cognates in other Northwest Semitic languages , for example *šay* ' do ' and *šay* ' gold ' which are common in Canaanite and Ugaritic . Grammatical differences include the use of *šay* , *šay* , and *šay* as relative particles , negative *šay* , and various differences in verbal and pronominal morphology and syntax .

Later pre @-@ exilic Biblical Hebrew (such as is found in prose sections of the Pentateuch , *Nevi'im* , and some *Ketuvim*) is known as ' Biblical Hebrew proper ' or ' Standard Biblical Hebrew ' . This is dated to the period from the 8th to the 6th century BCE . In contrast to Archaic Hebrew , Standard Biblical Hebrew is more consistent in using the definite article *šay* , the accusative marker *šay* , distinguishing between simple and waw @-@ consecutive verb forms , and in using particles like *šay* and *šay* rather than asyndeton .

Biblical Hebrew from after the Babylonian exile in 587 BCE is known as ' Late Biblical Hebrew ' . Late Biblical Hebrew shows Aramaic influence in phonology , morphology , and lexicon , and this trend is also evident in the later @-@ developed Tiberian vocalization system .

Qumran Hebrew , attested in the Dead Sea Scrolls from ca . 200 BCE to 70 CE , is a continuation of Late Biblical Hebrew . Qumran Hebrew may be considered an intermediate stage between Biblical Hebrew and Mishnaic Hebrew , though Qumran Hebrew shows its own idiosyncratic dialectal features .

= = Dialects = =

Dialect variation in Biblical Hebrew is attested to by the well @-@ known shibboleth incident of Judges 12 : 6 , where Jephthah 's forces from Gilead caught Ephraimites trying to cross the Jordan river by making them say *šay* *šay* (' ear of corn ') The Ephraimites ' identity was given away by their pronunciation : *šay* *šay* . The apparent conclusion is that the Ephraimite dialect had / s / for standard / š / . As an alternative explanation , it has been suggested that the proto @-@ Semitic phoneme * / š / , which shifted to / š / in most dialects of Hebrew , may have been retained in the Hebrew of the trans @-@ Jordan . However , there is evidence that the word *šay* *šay* had initial consonant * / š / in proto @-@ Semitic , contradicting this theory .

Hebrew as spoken in the northern Kingdom of Israel , known also as Israelian Hebrew , shows phonological , lexical , and grammatical differences from southern dialects . The Northern dialect spoken around Samaria shows more frequent simplification of / aj / into / e / as attested by the Samaria ostraca (8th century BCE) , e.g. *šay* (

= / jeʔn / < * / jajn / ' wine ') , while the Southern (Judean) dialect instead adds in an epenthetic vowel / i / , added halfway through the first millennium BCE (*šay* = / ?jajn /) . The word play in Amos 8 : 1 ? 2 *šay* *šay* ... *šay* *šay* may reflect this : given that Amos was addressing the population of the Northern Kingdom , the vocalization * *šay* would be more forceful . Other possible Northern features include use of *šay* - ' who , that ' , forms like *šay* ' to know ' rather than *šay* and infinitives of certain verbs of the form *šay* ' to do ' rather than *šay* . The Samaria ostraca also show *šay* for standard *šay* ' year ' , as in Aramaic .

The guttural phonemes / š h / merged over time in some dialects . This was found in Dead Sea Scroll Hebrew , but Jerome attested to the existence of contemporaneous Hebrew speakers who still distinguished pharyngeals . Samaritan Hebrew also shows a general attrition of these phonemes , though / š h / are occasionally preserved as [š] .

= = Orthography = =

The earliest Hebrew writing yet discovered , found at Khirbet Qeiyafa , dates to the 10th century BCE . The 15 cm x 16 @.@ 5 cm (5 @.@ 9 in x 6 @.@ 5 in) trapezoid pottery sherd (ostrakon) has five lines of text written in ink written in the Proto @-@ Canaanite alphabet (the old form of the Phoenician alphabet) . The tablet is written from left to right , indicating that Hebrew writing was still in the formative stage .

The Israelite tribes who settled in the land of Israel adopted the Phoenician script around the 12th century BCE , as found in the Gezer calendar (c . 10th century BCE) . This script developed into

the Paleo @-@ Hebrew script in the 10th or 9th centuries BCE . The Paleo @-@ Hebrew alphabet 's main differences from the Phoenician script were " a curving to the left of the downstrokes in the " long @-@ legged " letter @-@ signs ... the consistent use of a Waw with a concave top , [and an] x @-@ shaped Taw . " The oldest inscriptions in Paleo @-@ Hebrew script are dated to around the middle of the 9th century BCE , the most famous being the Mesha Stele in the Moabite language (which might be considered a dialect of Hebrew) . The ancient Hebrew script was in continuous use until the early 6th century BCE , the end of the First Temple period . In the Second Temple Period the Paleo @-@ Hebrew script gradually fell into disuse , and was completely abandoned among the Jews after the failed Bar Kochba revolt . The Samaritans retained the ancient Hebrew alphabet , which evolved into the modern Samaritan alphabet .

By the end of the First Temple period the Aramaic script , a separate descendant of the Phoenician script , became widespread throughout the region , gradually displacing Paleo @-@ Hebrew . The oldest documents that have been found in the Aramaic Script are fragments of the scrolls of Exodus , Samuel , and Jeremiah found among the Dead Sea scrolls , dating from the late 3rd and early 2nd centuries BCE . It seems that the earlier biblical books were originally written in the Paleo @-@ Hebrew script , while the later books were written directly in the later Assyrian script . Some Qumran texts written in the Assyrian script write the tetragrammaton and some other divine names in Paleo @-@ Hebrew , and this practice is also found in several Jewish @-@ Greek biblical translations . While spoken Hebrew continued to evolve into Mishnaic Hebrew , the scribal tradition for writing the Torah gradually developed . A number of regional " book @-@ hand " styles developed for the purpose of Torah manuscripts and occasionally other literary works , distinct from the calligraphic styles used mainly for private purposes . The Mizrahi and Ashkenazi book @-@ hand styles were later adapted to printed fonts after the invention of the printing press . The modern Hebrew alphabet , also known as the Assyrian or Square script , is a descendant of the Aramaic alphabet .

The Phoenician script had dropped five characters by the 12th century BCE , reflecting the language 's twenty @-@ two consonantal phonemes . As a result , the 22 letters of the Paleo @-@ Hebrew alphabet numbered less than the consonant phonemes of ancient Biblical Hebrew ; in particular , the letters ? , ? , ? could each mark two different phonemes . After a sound shift the letters ? , ? could only mark one phoneme , but (except in Samaritan Hebrew) ? still marked two . The old Babylonian vocalization system wrote a superscript ? above the ? to indicate it took the value / s / , while the Masoretes added the shin dot to distinguish between the two varieties of the letter .

The original Hebrew alphabet consisted only of consonants , but gradually the letters ? , ? , ? , ? , also became used to indicate vowels , known as *matres lectionis* when used in this function . It is thought that this was a product of phonetic development : for instance , * bayt (' house ') shifted to ????? in construct state but retained its spelling . While no examples of early Hebrew orthography have been found , older Phoenician and Moabite texts show how First Temple period Hebrew would have been written . Phoenician inscriptions from the 10th century BCE do not indicate *matres lectiones* in the middle or the end of a word , for example ??? and ? for later ???? and ?? , similarly to the Hebrew Gezer Calendar , which has for instance ???? for ?????? and possibly ??? for ???? . *Matres lectionis* were later added word @-@ finally , for instance the Mesha inscription has ???? , ???? for later ????? , ????? ; however at this stage they were not yet used word @-@ medially , compare Siloam inscription ??? versus ?? (for later ???) . The relative terms defective and full / plene are used to refer to alternative spellings of a word with less or more *matres lectionis* , respectively .

The Hebrew Bible was presumably originally written in a more defective orthography than found in any of the texts known today . Of the extant textual witnesses of the Hebrew Bible , the Masoretic text is generally the most conservative in its use of *matres lectionis* , with the Samaritan Pentateuch and its forebearers being more full and the Qumran tradition showing the most liberal use of vowel letters . The Masoretic text mostly uses vowel letters for long vowels , showing the tendency to mark all long vowels except for word @-@ internal / a? / . In the Qumran tradition , back vowels are usually represented by ? ? ? whether short or long . ? ? ? is generally used for both long [i?] and [e?] (?????? , ???) , and final [i?] is often written as ??- in analogy to words like ??? , ???? , e.g.

???, sometimes ??? . ? ? ? is found finally in forms like ???? (Tiberian ????) , ???? (Tiberian ????) while ? ? ? may be used for an a @-@ quality vowel in final position (e.g. ?????) and in medial position (e.g. ?????) . Pre @-@ Samaritan and Samaritan texts show full spellings in many categories (e.g. ???? vs. Masoretic ??? in Genesis 49 : 3) but only rarely show full spelling of the Qumran type .

In general the vowels of Biblical Hebrew were not indicated in the original text , but various sources attest them at various stages of development . Greek and Latin transcriptions of words from the biblical text provide early evidence of the nature of Biblical Hebrew vowels . In particular , there is evidence from the rendering of proper nouns in the Koine Greek Septuagint (3rd ? 2nd centuries BCE) and the Greek alphabet transcription of the Hebrew biblical text contained in the Secunda (3rd century CE , likely a copy of a preexisting text from before 100 BCE) . In the 7th and 8th centuries CE various systems of vocalic notation were developed to indicate vowels in the biblical text . The most prominent , best preserved , and the only system still in use , is the Tiberian vocalization system , created by scholars known as Masoretes around 850 CE . There are also various extant manuscripts making use of less common vocalization systems (Babylonian and Palestinian) , known as superlinear vocalizations because their vocalization marks are placed above the letters . In addition , the Samaritan reading tradition is independent of these systems , and was occasionally notated with a separate vocalization system . These systems often record vowels at different stages of historical development ; for example , the name of the Judge Samson is recorded in Greek as ?????? Samps?n with the first vowel as / a / , while Tiberian ???????? / ?im?on / with / i / shows the effect of the law of attenuation whereby / a / in closed unstressed syllables became / i / . All of these systems together are used to reconstruct the original vocalization of Biblical Hebrew .

At an early stage , in documents written in the paleo @-@ Hebrew script , words were divided by short vertical lines and later by dots , as reflected by the Mesha Stone , the Siloam inscription , the Ophel inscription , and paleo @-@ Hebrew script documents from Qumran . Word division was not used in Phoenician inscriptions ; however , there is not direct evidence for biblical texts being written without word division , as suggested by Nahmanides in his introduction to the Torah . Word division using spaces was commonly used from the beginning of the 7th century BCE for documents in the Aramaic script . In addition to marking vowels , the Tiberian system also uses cantillation marks , which serve to mark word stress , semantic structure , and the musical motifs used in formal recitation of the text .

While the Tiberian , Babylonian , and Palestinian reading traditions are extinct , various other systems of pronunciation have evolved over time , notably the Yemenite , Sephardi , Ashkenazi , and Samaritan traditions . Modern Hebrew pronunciation is also used by some to read biblical texts . The modern reading traditions do not stem solely from the Tiberian system ; for instance , the Sephardic tradition 's distinction between qamatz gadol and qatan is pre @-@ Tiberian . However , the only orthographic system used to mark vowels is the Tiberian vocalization .

= = Phonology = =

The phonology as reconstructed for Biblical Hebrew is as follows :

= = = Consonants = = =

Consonants lost and gained during the lifetime of Biblical Hebrew are color @-@ coded respectively .

The phonetic nature of some Biblical Hebrew consonants is disputed . The so @-@ called " emphatics " were likely ejective , but possibly pharyngealized or velarized . Some argue that / s , z , s? / were affricated (/ ts , dz , ts? /) .

Originally , the Hebrew letters ? ? ? and ? ? ? each represented two possible phonemes , uvular and pharyngeal , with the distinction unmarked in Hebrew orthography . However the uvular phonemes / ? / ? and / ? / ? merged with their pharyngeal ones / ? / ? and / ? / ? respectively c . 200

BCE .

This is observed by noting that these phonemes are distinguished consistently in the Septuagint of the Pentateuch (e.g. Isaac ????)

= ????? versus Rachel ??? =

????) , but this becomes more sporadic in later books and is generally absent in Ezra and Nehemiah .

The phoneme / ? / , is also not directly indicated by Hebrew orthography but is clearly attested by later developments : It is written with ? ? ? (also used for / ? /) but later merged with / s / (normally indicated with ? ? ?) . As a result , three etymologically distinct phonemes can be distinguished through a combination of spelling and pronunciation : / s / written ? ? ? , / ? / written ? ? ? , and / ? / (pronounced / s / but written ? ? ?) . The specific pronunciation of / ? / as [?] is based on comparative evidence (/ ? / is the corresponding Proto @-@ Semitic phoneme and still attested in Modern South Arabian dialects) as well as early borrowings (e.g. balsam < Greek balsamon < Hebrew ba'am) . / ? / began merging with / s / in Late Biblical Hebrew , as indicated by interchange of orthographic ? ? ? and ? ? ? , possibly under the influence of Aramaic , and this became the rule in Mishnaic Hebrew . In all Jewish reading traditions / ? / and / s / have merged completely ; however in Samaritan Hebrew / ? / has instead merged with / ? / .

Allophonic spirantization of / b ? d k p t / to [v ? ð x f ?] (known as begadkefat spirantization) developed sometime during the lifetime of Biblical Hebrew under the influence of Aramaic . This probably happened after the original Old Aramaic phonemes / ? , ð / disappeared in the 7th century BCE , and most likely occurred after the loss of Hebrew / ? , ? / c . 200 BCE . It is known to have occurred in Hebrew by the 2nd century CE . After a certain point this alternation became contrastive in word @-@ medial and final position (though bearing low functional load) , but in word @-@ initial position they remained allophonic . This is evidenced both by the Tiberian vocalization 's consistent use of word @-@ initial spirants after a vowel in sandhi , as well as Rabbi Saadia Gaon 's attestation to the use of this alternation in Tiberian Aramaic at the beginning of the 10th century CE .

The Dead Sea scrolls show evidence of confusion of the phonemes / ? ? h ? / , e.g. ??? ?mr for Masoretic ????? / ???mar / ' he said ' . However the testimony of Jerome indicates that this was a regionalism and not universal . Confusion of gutturals was also attested in later Mishnaic Hebrew and Aramaic (see Eruvin 53b) . In Samaritan Hebrew , / ? ? h ? / have generally all merged , either into / ? / , a glide / w / or / j / , or by vanishing completely (often creating a long vowel) , except that original / ? ? / sometimes have reflex / ? / before / a ? / .

Geminate consonants are phonemically contrastive in Biblical Hebrew . In the Secunda / w j z / are never geminate . In the Tiberian tradition / ? ? h ? r / cannot be geminate ; historically first / r ? / degeminated , followed by / ? / , / h / , and finally / ? / , as evidenced by changes in the quality of the preceding vowel .

= = = Vowels = = =

The vowel system of Biblical Hebrew has changed considerably over time . The following vowels are those reconstructed for the earliest stage of Hebrew , those attested by the Secunda , those of the various vocalization traditions (Tiberian and varieties of Babylonian and Palestinian) , and those of the Samaritan tradition , with vowels absent in some traditions color @-@ coded .

= = = Sound changes = = =

The following sections present the vowel changes that Biblical Hebrew underwent , in approximate chronological order .

= = = = Proto @-@ Central @-@ Semitic = = = =

Proto @-@ Semitic is the ancestral language of all the Semitic languages , and in traditional

reconstructions possessed 29 consonants ; 6 monophthong vowels , consisting of three qualities and two lengths , * / a a? i i? u u? / , in which the long vowels occurred only in open syllables ; and two diphthongs * / aj aw / . The stress system of Proto @-@ Semitic is unknown but it is commonly described as being much like the system of Classical Latin or the modern pronunciation of Classical Arabic : If the penultimate (second last) syllable is light (has a short vowel followed by a single consonant) , stress goes on the antepenultimate (third last) ; otherwise , it goes on the penultimate .

Various changes , mostly in morphology , took place between Proto @-@ Semitic and Proto @-@ Central @-@ Semitic , the language at the root of the Central Semitic languages . The phonemic system was inherited essentially unchanged , but the emphatic consonants may have changed their realization in Central Semitic from ejectives to pharyngealized consonants .

The morphology of Proto @-@ Central @-@ Semitic shows significant changes compared with Proto @-@ Semitic , especially in its verbs , and is much like in Classical Arabic . Nouns in the singular were usually declined in three cases : / -u / (nominative) , / -a / (accusative) or / -i / (genitive) . In some circumstances (but never in the construct state) , nouns also took a final nasal after the case ending : nunation (final / -n /) occurred in some languages , mimation (final / -m /) in others . The original meaning of this marker is uncertain . In Classical Arabic , final / -n / on nouns indicates indefiniteness and disappears when the noun is preceded by a definite article or otherwise becomes definite in meaning . In other languages , final / -n / may be present whenever a noun is not in the construct state . Very Early Biblical Hebrew (pre @-@ 1500 BCE) had mimation , of uncertain meaning , in an occurrence of the word uru?alemim (Jerusalem) .

Broken plural forms in Arabic are declined like singulars , and often take singular agreement as well . Dual and " strong plural " forms use endings with a long vowel or diphthong , declined in only two cases : nominative and objective (combination accusative / genitive) , with the objective form often becoming the default one after the loss of case endings . Both Hebrew and Arabic had a special form of nunation / mimation that co @-@ occurred with the dual and masculine sound plural endings whenever the noun was not in the construct state . The endings were evidently felt as an inherent part of the ending and , as a result , are still used . Examples are Arabic strong masculine plural -?na (nominative) , -?na (objective) , and dual endings -?ni (nominative) , -ayni (objective) ; corresponding construct @-@ state endings are -? , -? (strong masculine plural) , -? , -ay (dual) . (The strong feminine endings in Classical Arabic are -?tu nominative , -?ti objective , marked with a singular @-@ style -n nunation in the indefinite state only .)

Hebrew has almost lost the broken plural (if it ever had it) , and any vestigial forms that may remain have been extended with the strong plural endings . The dual and strong plural endings were likely much like the Arabic forms given above at one point , with only the objective @-@ case forms ultimately surviving . For example , dual -ayim is probably from * -aymi with an extended mimation ending (cf . Arabic -ayni above) , while dual construct -? is from * -ay without mimation . Similarly , -?m < * -?ma , -?t < * -?ti . (Note that expected plural construct state * -? was replaced by dual -? .)

Feminine nouns at this point ended in a suffix / -at- / or / -t- / and took normal case endings . (When the ending / -at- / became final because of loss or non @-@ presence of the case ending , both Hebrew and Arabic show a later shift to / -ah / and then / -a? / .)

===== Canaanite shift =====

Hebrew shows the Canaanite shift whereby * / a? / often shifted to / o? / ; the conditions of this shift are disputed . This shift had occurred by the 14th century BCE , as demonstrated by its presence in the Amarna letters (c . 1365 BCE) .

===== Proto @-@ Hebrew =====

As a result of the Canaanite shift , the Proto @-@ Hebrew vowel system is reconstructed as * / a a? o? i i? u u? / (and possibly rare * / e? /) . Furthermore , stress at this point appears to have shifted

so that it was consistently on the penultimate (next to last) syllable , and was still non @-@ phonemic . The predominant final stress of Biblical Hebrew was a result of loss of final unstressed vowels and a shift away from remaining open syllables (see below) .

===== Loss of final unstressed vowels =====

Final unstressed short vowels dropped out in most words , making it possible for long vowels to occur in closed syllables . This appears to have proceeded in two steps :

Final short mood , etc. markers dropped in verbal forms .

Final short case markers dropped in nominal forms .

Vowel lengthening in stressed , open syllables occurred between the two steps , with the result that short vowels at the beginning of a -VCV ending lengthened in nouns but not verbs . This is most noticeable with short / a / : e.g. * kataba (' he wrote ') > / k???av / but * dabara (' word ' acc . ') > / d???v?r / .

The dropping of final short vowels in verb forms tended to erase mood distinctions , but also some gender distinctions ; however , unexpected vowel lengthening occurred in many situations to preserve the distinctions . For example , in the suffix conjugation , first @-@ singular * -tu appears to have been remade into * -t? already by Proto @-@ Hebrew on the basis of possessive -? (likewise first singular personal pronoun * ?ana became * ?an?) .

Similarly , in the second @-@ singular , inherited * -ta -ti competed with lengthened * -t? -t? for masculine and feminine forms . The expected result would be -t or -t? for masculine , -t or -t? for feminine , and in fact both variants of both forms are found in the Bible (with -h marking the long -? and -y marking the long -?) . The situation appears to have been quite fluid for several centuries , with -t and -t? / t? forms found in competition both in writing and in speech (cf. the Secunda (Hexapla) of Origen , which records both pronunciations , although quite often in disagreement with the written form as passed down to us) . Ultimately , writing stabilized on the shorter -t for both genders , while speech choose feminine -t but masculine t? . This is the reason for the unexpected qamatz vowel written under the final letter of such words .

The exact same process affected possessive * -ka (' your ' masc. sing .) and * -ki (' your ' fem. sing .) , and personal pronouns * ?anta , * ?anti , with the same split into shorter and longer forms and the same ultimate resolution .

===== Short vowel lengthening (esp. pretonic) , lowering =====

The short vowels * / a i u / tended to lengthen in various positions .

First , short vowels lengthened in an open syllable in pretonic position (i.e. directly before the stressed syllable) .

Later , short vowels lengthened in stressed open syllables .

In the process of lengthening , the high vowels were lowered . In the Secunda , the lengthened reflexes of / a i u / are / a? e? o? / ; when kept short they generally have reflexes / a e o / .

===== Reduction of short open stressed syllables =====

Stressed open syllables with a short vowel (i.e. syllables consisting of a short vowel followed by a consonant and another vowel) had the vowel reduced to / ? / and the stressed moved one syllable later in the word (usually to the last syllable of the word) . Stress was originally penultimate and loss of final short vowels made many words have final stress . However , words whose final syllable had a long vowel or ended with a consonant were unaffected and still had penultimate stress at this point . This change did not happen in pausal position , where the penultimate stress is preserved , and vowel lengthening rather than reduction occurs .

The previous three changes occurred in a complex , interlocking fashion :

Shift of stress to be universally penultimate .

Loss of final short vowels in verbs , pre @-@ stress lengthening in open syllables . Pre @-@ stress

lengthening / lowering becomes a surface filter that remains as a rule in the language , automatically affected any new short vowels in open syllables as they appear (but ultra @-@ short vowels are unaffected) .

Stress movement from light syllable to following heavy syllable when not in pausa , with newly unstressed light syllable reducing the schwa .

Tonic lengthening / lowering in open syllables .

Loss of final short vowels in nouns .

Examples :

Note that many , perhaps most , Hebrew words with a schwa directly before a final stress are due to this stress shift .

This sound change shifted many more originally penultimate @-@ stressed words to have final stress . The above changes can be seen to divide words into a number of main classes based on stress and syllable properties :

Proto @-@ Hebrew words with an open penult and short @-@ vowel ending : Become final @-@ stressed (e.g. / q???al / (' he killed ') < PHeb . / qa???ala /) .

Proto @-@ Hebrew words with an closed penult and short @-@ vowel ending : Become penultimate due to segholate rule (e.g. / ?m?l?x / (' king ') < * / malku /) .

Proto @-@ Hebrew words with an open short penult and longer ending : Become final @-@ stressed due to stress shift (e.g. / q????lu / (' they killed ') < PHeb . / qa???alu? /) .

Proto @-@ Hebrew words with a closed penult and longer ending : Remain penultimate (e.g. / q???alti / (' I killed ') < PHeb . / qa???alti? /) .

Proto @-@ Hebrew words with an open long penult and longer ending : ? ? ?

===== Pre @-@ stress reduction of short vowel =====

* / a i u / were reduced to / ? / in the second syllable before the stress , and occasionally reduced rather than lengthened in pretonic position , especially when initial (e.g. ???? = ??? / ???mo / ' his name ') . Thus the vowel system of the Secunda was / a e e? i? o o? u? ? / .

===== Later developments =====

The later Jewish traditions (Tiberian , Babylonian , Palestinian) show similar vowel developments . By the Tiberian time , all short vowels in stressed syllables and open pretonic lengthened , making vowel length allophonic . Vowels in open or stressed syllables had allophonic length (e.g. / a / in ??????? / j?ra??em / [j?ra???e?m] (' he will have mercy ') < previously short [j?ra???e?m] < [j?ra???e?m] by Tiberian degemination of / ? / < PSem * / jura???imu /) . The Babylonian and Palestinian vocalizations systems also do not mark vowel length . In the Tiberian and Babylonian systems , * / a? / and lengthened * / a / become the back vowel / ? / . In unaccented closed syllables , * / i u / become / ? ~ i ? ~ u / (Tiberian) , / a ~ i u / (Babylonian) , or / e ~ i o ~ u / (Palestinian) ? generally becoming the second vowel before geminates (e.g. ??????) and the first otherwise . In the Tiberian tradition pretonic vowels are reduced more commonly than in the Secunda . It does not occur for * a / , but is occasional for * i / (e.g. ??????? / masm??rim / ' nails ' < * / masmiri?m /) , and is common for * u / (e.g. ??????? / r???o? ' open place ' < * / ru?a?b /) . In Tiberian Hebrew pretonic * u / is most commonly preserved by geminating the following consonant , e.g. ??????? / ?ðum?mim / (' red ' pl .) (cf. / ??ðom / ' red ' sg .) ; this pretonic gemination is also found in some forms with other vowels like ??????? ~ ??????? / ??sir / ~ / as?sir / (' prisoner ') .

The Babylonian and Palestinian systems have only one reduced vowel phoneme / ? / like the Secunda , though in Palestinian Hebrew it developed the pronunciation [?] . However the Tiberian tradition possesses three reduced vowels / ? ? ? / of which / ? ? / has questionable phonemicity . / ? / under a non @-@ guttural letter was pronounced as an ultrashort copy of the following vowel before a guttural , e.g. ????????? [uv?q? ? ???] , and as [?] preceding / j / , e.g. ?????????? ? ??? [??ðam???juni] , but was always pronounced as [?] under gutturals , e.g. ??????? , ?????? . When reduced , etymological * / a i u / become / ? ? ? ~ ? ? ? / under gutturals (e.g. ??????? ' you [

mp .] said ' cf . ???? ' he said ') , and generally / ? / under non @-@ gutturals , but * / u / > / ? ? / (and rarely * / i / > / ? ? /) may still occur , especially after stops (or their spirantized counterparts) and / s ? ? / (e.g. ?????? / d ? ? ?mi /) . Samaritan and Qumran Hebrew have full vowels in place of the reduced vowels of Tiberian Hebrew .

Samaritan Hebrew also does not reflect etymological vowel length ; however the elision of guttural consonants has created new phonemic vowel length , e.g. / r?b / ?? (' great ') vs. / r??b / ??? (' wide ') . Samaritan Hebrew vowels are allophonically lengthened (to a lesser degree) in open syllables , e.g. ????? [ammis?ri?] , ??? [i?] , though this is less strong in post @-@ tonic vowels . Pretonic gemination is also found in Samaritan Hebrew , but not always in the same locations as in Tiberian Hebrew , e.g. ????? TH / ??mal?im / SH / ??m?l?m / ; ????? TH / ??l?mim / SH / ?elam??m / . While Proto @-@ Hebrew long vowels usually retain their vowel quality in the later traditions of Hebrew , in Samaritan Hebrew * / i? / may have reflex / e / in closed stressed syllables , e.g. ??? / den / , * / a? / may become either / a / or / ? / , and * / o? / > / u / . The reduced vowels of the other traditions appear as full vowels , though there may be evidence that Samaritan Hebrew once had similar vowel reduction . Samaritan / ? / results from the neutralization of the distinction between / i / and / e / in closed post @-@ tonic syllables , e.g. / bit / ??? (' house ') / abb?t / ??? (' the house ') / ?er / ?? / a???r / ??? .

Various more specific conditioned shifts of vowel quality have also occurred . Diphthongs were frequently monophthongized , but the scope and results of this shift varied among dialects . In particular , the Samaria ostraca show / je?n / < * / jajn / < * / wajn / for Southern / jajin / (' wine ') , and Samaritan Hebrew shows instead the shift * / aj / > / i? / . Original * / u / tended to shift to / i / (e.g. ????? and ??????? ' word ' ; ??? ' outside ' and ????? ' outer ') beginning in the second half of the second millennium BC . This was carried through completely in Samaritan Hebrew but met more resistance in other traditions such as the Babylonian and Qumran traditions . Philippi 's law is the process by which original * / i / in closed stressed syllables shifts to / a / (e , g , / * bint / > ??? / bat / ' daughter ') , or sometimes in the Tiberian tradition / ? / (e.g. / * ?amint / > ????? / ? ? m?t / ' truth ') . This is absent in the transcriptions of the Secunda , but there is evidence that the law 's onset predates the Secunda . In the Samaritan tradition Philippi 's law is applied consistently , e.g. * / lib? @-@ u / > / lab / (' heart ') . In some traditions the short vowel / * a / tended to shift to / i / in unstressed closed syllables : this is known as the law of attenuation . It is common in the Tiberian tradition , e.g. * / ?ab?at / > Tiberian ?????? / ?iv??? / (' seven ') , but exceptions are frequent . It is less common in the Babylonian vocalization , e.g. / ?ab?? / (' seven ') , and differences in Greek and Latin transcriptions demonstrate that it began quite late . Attenuation generally did not occur before / i ~ e / , e.g. Tiberian ????????? / maf?tea? / (' key ') versus ????????? / mif?ta? / (' opening [construct] ') , and often was blocked before a geminate , e.g. ??? (' gift ') . Attenuation is rarely present in Samaritan Hebrew , e.g. ??? / maqda? / . In the Tiberian tradition / e i o u / take offglide / a / before / h ? ? / . This is absent in the Secunda and in Samaritan Hebrew but present in the transcriptions of Jerome . In the Tiberian tradition an ultrashort echo vowel is sometimes added to clusters where the first element is a guttural , e.g. ????????? / ja??zin / (' he will listen ') ????????? / p??? ? lo / (' his work ') but ????????? / ja?dið / (' he will make glorious ') ????????? / ???bo / ' its breadth ' .

The following charts summarize the most common reflexes of the Proto @-@ Semitic vowels in the various stages of Hebrew :

== Stress ==

Proto @-@ Hebrew generally had penultimate stress . The ultimate stress of later traditions of Hebrew usually resulted from the loss of final vowels in many words , preserving the location of proto @-@ Semitic stress . Tiberian Hebrew has phonemic stress , e.g. ?????? ? / b??nu / (' they built ') vs. ??? ? ??? / ?b?nu / (' in us ') ; stress is most commonly ultimate , less commonly penultimate , and antipenultimate stress exists marginally , e.g. ??? ? ?????? / h???oh? ? l? / (' into the tent ') . There does not seem to be evidence for stress in the Secunda varying from that of the Tiberian tradition . Despite sharing the loss of final vowels with Tiberian Hebrew , Samaritan Hebrew

has generally not preserved Proto @-@ Semitic stress , and has predominantly penultimate stress , with occasional ultimate stress . There is evidence that Qumran Hebrew had a similar stress pattern to Samaritan Hebrew .

= = Grammar = =

Medieval grammarians of Arabic and Hebrew classified words as belonging to three parts of speech : Arabic *ism* (' noun ') , *fiʿl* (' verb ') , and *ʔarf* (' particle ') ; other grammarians have included more categories . In particular , adjectives and nouns show more affinity to each other than in most European languages . Biblical Hebrew has a typical Semitic morphology , characterized by the use of roots . Most words in Biblical Hebrew are formed from a root , a sequence of consonants with a general associated meaning . Roots are usually triconsonantal , with biconsonantal roots less common (depending on how some words are analyzed) and rare cases of quadri- and quinquiconsonantal roots . Roots are modified by affixation to form words . Verbal patterns are more productive and consistent , while noun patterns are less predictable .

= = Nouns and adjectives = =

The most common nominal prefix used is / m / , used for substantives of location (' assembly ') , instruments (' key ') , and abstractions (' judgement ') . The vowel after / m / is normally / a / , but appears sometimes as / i / , or in the case of ' assembly ' as / o / (contracted from * / aw /) . The prefix / t / is used to denote the action of the verb it is derived from , more common for initial- / w / verbs , e.g. ' thanksgiving ' ; < ydy) . Prefixed / ʔ / is used in adjectives , e.g. ' deceptive ' , and also occurs in nouns with initial sibilants , e.g. ' finger ' . In the latter case this prefix was added for phonetic reasons , and the ʔ prefix is called either " prothetic " or " prosthetic " . Prefixed ʔ often occurs in quadriliteral animal names , perhaps as a prefix , e.g. ' bat ' , ' mouse ' , ' scorpion ' .

In proto @-@ Semitic nouns were marked for case : in the singular the markers were * / -u / in the nominative , * / -a / in the accusative (used also for adverbials) , and * / -i / in the genitive , as evidenced in Akkadian , Ugaritic , and Arabic . The Amarna letters show that this was probably still present in Hebrew c . 1350 BCE . In the development of Hebrew , final * / -u , -i / were dropped first , and later * / -a / was elided as well . Mimation , a nominal suffix * / -m / of unclear meaning , was found in early Canaanite , as shown by early Egyptian transcriptions (c . 1800 BCE) of Jerusalem as Uruʔalimim , but there is no indication of its presence after 1800 BCE . Final * / -a / is preserved in ' at night ' but in prose replacing ' night ' , and in the " connective vowels " of some prepositions (originally adverbials) , e.g. ' with us ' ; nouns preserve * / -i / in forms like ' Construct state nouns lost case vowels at an early period (similar to Akkadian) , as shown by the reflexes of * / ʔadaju / (' absolute but ' in construct) and the reflexes of * / jadu / (' and ') However forms like ' show that this was not yet a feature of Proto @-@ Hebrew .

Biblical Hebrew has two genders , masculine and feminine , which are reflected in nouns , adjectives , pronouns , and verbs . Hebrew distinguishes between singular and plural numbers , and plural forms may also be used for collectives and honorifics . Hebrew has a morphological dual form for nouns that naturally occur in pairs , and for units of measurement and time this contrasts with the plural (' day ' ' two days ' ' days ') . A widespread misconception is that Hebrew plural denotes three or more objects . In truth , Hebrew plural denotes two or more objects . However adjectives , pronouns , and verbs do not have dual forms , and most nominal dual forms can function as plurals (' six wings ' from Isaiah 6 : 2) . Finite verbs are marked for subject person , number , and gender . Nouns also have a construct form which is used in genitive constructions .

Nouns are marked as definite with the prefix / ha- / followed by gemination of the initial consonant of the noun . In Tiberian Hebrew the vowel of the article may become / ʔ / or / ʔ / in certain phonetic environments , for example / hʔʔʔʔxʔm / (' the wise man ') , / hʔʔʔʔiʔ / (' the man ') .

The traditions differ on the form of segolate nouns , nouns stemming from roots with two final consonants . The anaptyctic / ʔ / of the Tiberian tradition in segolates appears in the Septuagint (3rd century BCE) but not the Hexapla (2nd century CE) , e.g. $\text{קִשְׁטָה} / \text{קִשְׁטָה־} /$
= קִשְׁטָה versus $\text{קִשְׁטָה־} / \text{קִשְׁטָה־} /$ =