

Aramaic

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1. HISTORICAL AND CULTURAL CONTEXTS

1.1 Overview

Aramaic is a member of the Semitic language family and forms one of the two main branches of the Northwest Semitic group within that family, the other being Canaanite (comprising Hebrew, Phoenician, Moabite, etc.). The language most closely related to Aramaic is Hebrew. More distantly related languages include Akkadian and Arabic. Of all the Semitic languages, Aramaic is one of the most extensively attested, in both geographic and temporal terms. Aramaic has been continuously spoken for approximately 3,500 years (c. 1500 BC to the present) and is attested throughout the Near East and the Mediterranean world.

Aramaic was originally spoken by Aramean tribes who settled in portions of what is now Syria, Lebanon, Jordan, Turkey, and Iraq, a region bounded roughly by Damascus and its environs on the south, Mt. Amanus on the northwest and the region between the Balikh and the Khabur rivers on the northeast. The Arameans were a Semitic people, like their neighbors the Hebrews, the Phoenicians, and the Assyrians; and unlike the Hittites, Hurrians, and Urartians. Their economy was largely agricultural and pastoral, though villages and towns as well as larger urban centers, such as Aleppo and Damascus, also existed. These urban centers were usually independent political units, ruled by a king (Aramaic *mlk*), which exerted power over the surrounding agricultural and grazing regions and the nearby towns and villages. In later times, the language itself was spoken and used as a lingua franca throughout the Near East by both Arameans and non-Arameans until it was eclipsed by Arabic beginning in the seventh century AD. Aramaic is still spoken today in communities of eastern Syria, northern Iraq, and southeastern Turkey, though these dialects have been heavily influenced by Arabic and/or Kurdish. These communities became increasingly smaller during the twentieth century and may cease to exist within the next few generations.

1.2 Historical stages and dialects of Aramaic

The division of the extant materials into distinct Aramaic dialects is problematic due in part to the nature of the writing system (see §2) and in part to the number, the kinds, and the geographic extent of the extant materials. Possible dialectal differences cannot always be detected in the extant texts, and, when differences can be detected, it is not always clear whether the differences reflect synchronic or diachronic distinctions. With these caveats in mind, the extant Aramaic texts can be divided into five historical stages to which a sixth

stage may be added: *Proto-Aramaic*, a reconstructed stage of the language prior to any extant texts.

1.2.1 Old Aramaic (950–600 BC)

Though Aramaic was spoken during the second millennium BC, the first extant texts appear at the beginning of the first millennium. These texts are nearly all inscriptions on stone, usually royal inscriptions connected with various Aramean city-states. The corpus of texts is quite small, but minor dialect differences can be detected, corresponding roughly to geographic regions. So, one dialect is attested in the core Aramean territory of Aleppo and Damascus, another in the northwestern border region around the Aramean city-state of Sam'al and a third in the northeastern region around Tel Fekheriye. There are a few other Aramaic texts, found outside these regions, most of which attest Aramaic dialects mixed with features from other Semitic languages, for example, the texts found at Deir ʿAlla.

1.2.2 Imperial or Official Aramaic (600–200 BC)

This period begins with the adoption of Aramaic as a lingua franca by the Babylonian Empire. However, few texts are attested until c. 500 BC when the Persians established their empire in the Near East. The texts from this period show a fairly uniform dialect which is similar to the “Aleppo–Damascus” dialect of Old Aramaic. However, this uniformity is due largely to the nature of the extant texts. Nearly all of the texts are official documents of the Persian Empire or its subject kingdoms, and nearly all of the texts are from Egypt. It is likely that numerous local dialects of Aramaic existed, but rarely are these dialects reflected in the texts, one possible exception being the Hermopolis papyri (see Kutscher 1971).

1.2.3 Middle Aramaic (200 BC–AD 200)

This period is marked by the emergence of local Aramaic dialects within the textual record, most notably Palmyrene, Hatran, Nabatean, and the dialect of the Aramaic texts found in the caves near Qumran (the Dead Sea Scrolls). However, many texts still attest a dialect very similar to Imperial Aramaic, but with some notable differences (sometimes called *Standard Literary Aramaic*; see Greenfield 1978).

1.2.4 Late Aramaic (AD 200–700)

It is from this period that the overwhelming majority of Aramaic texts are attested, and, because of the abundance of texts, clear and distinct dialects can be isolated. These dialects can be divided into a western group and an eastern group. Major dialects in the west include Samaritan Aramaic, Jewish Palestinian Aramaic (also called Galilean Aramaic) and Christian Palestinian Aramaic. Major dialects in the east include Syriac, Jewish Babylonian Aramaic, and Mandaic. This period ends shortly after the Arab conquest, but literary activity in some of these dialects continues until the thirteenth century AD.

1.2.5 Modern Aramaic (AD 700 to the present)

This period is characterized by the gradual decline of Aramaic due to the increased use of Arabic in the Near East. Numerous local dialects, such as ʿĪuroyo in southeastern Turkey and

Maʿlulan in Syria, were attested in the nineteenth century, but by the end of the twentieth century many of these dialects had ceased to exist.

2. WRITING SYSTEM

2.1 The alphabet

Aramaic is written in an alphabet which was originally borrowed from the Phoenicians (c. 1100 BC). This alphabet represents consonantal phonemes only, though four of the letters were also sometimes used to represent certain vowel phonemes (see §2.2.1). Also, because the Aramaic inventory of consonantal phonemes did not exactly match the Phoenician inventory, some of the letters originally represented two (or more) phonemes (see §3.2). During the long history of Aramaic, these letters underwent various changes in form including the development of alternate medial and final forms of some letters (see Naveh 1982). By the Late Aramaic period, a number of distinct, though related, scripts are attested. Below are represented two of the most common scripts from this period, the Aramaic square script (which was also used to write Hebrew) and the Syriac Estrangelo script, along with the standard transliteration of each letter. Final forms are listed to the right of medial forms. In Christian Palestinian Aramaic an additional letter was developed to represent the Greek

Table 6.1 Aramaic consonantal scripts

Square script	Estrangelo	Transliteration
א	ܐ	ʾ
ב	ܒ	b
ג	ܓ	g
ד	ܕ	d
ה	ܗ	h
ו	ܘ	w
ז	ܙ	z
ח	ܚ	ḥ
ט	ܛ	ṭ
י	ܝ	y
כ	ܟ	k
ל	ܠ	l
מ	ܡ	m
נ	ܢ	n
ס	ܣ	s
ע	ܥ	ʿ
פ	ܦ	p
צ	ܥ	ṣ
ק	ܩ	q (or k)
ר	ܪ	r
ש	ܫ	š
ת	ܬ	t

Table 6.2 Aramaic vowel diacritics

Tiberian	Transliteration	Jacobite	Transliteration
ܒ or ܒܝ	bi or bî	ܒ̇ or ܒ̈	bī or bî
ܒ or ܒܝ	bē or bê	ܒ̇	be
ܒ	be		
ܒ	ba	ܒ̈	ba
ܒ	bā or bo	ܒ̈	bā
ܒ or ܒܝ	bō or bô		
ܒ or ܒܝ	bu or bû	ܒ̇ or ܒ̈	bū or bû

letter π in Greek loanwords. It had the same form as the letter *p* of the Estrangelo script, but was written backwards.

2.2 Vowel representation

2.2.1 Matres lectionis

Prior to the seventh or eighth century AD, vowels were not fully represented in the writing of Aramaic. Instead, some vowels were represented more or less systematically by the four letters *ʾ*, *h*, *w*, and *y*, the *matres lectionis* (“mothers of reading”). The first two, *ʾ* and *h*, were only used to represent word-final vowels. The last two, *w* and *y*, were used to represent both medial and final vowels. The letter *w* was used to represent /u:/ and /o:/. The letter *y* was used to represent /e:/ and /i:/. The letter *ʾ* was used to represent /a:/ and /e:/, although its use for /a:/ was initially restricted to certain morphemes and its use for /e:/ did not develop until the Middle or Late Aramaic period. The letter *h* was also used to represent /a:/ and /e:/. The use of *h* to represent /e:/ was restricted to certain morphemes and eventually *h* was almost completely superseded by *y* in the texts of some dialects or by *ʾ* in others. The use of *h* to represent /a:/ was retained throughout all periods, but was gradually decreased, and eliminated entirely in the texts of some dialects, by the increased use of *ʾ* to represent /a:/. Originally, *matres lectionis* were used to represent long vowels only. In the Middle Aramaic period, *matres lectionis* began to be used to represent short vowels and this use increased during the Late Aramaic period, suggesting that vowel quantity was no longer phonemic (see §3.3.2 and §3.3.3).

2.2.2 Systems of diacritics

During the seventh to ninth centuries AD, at least four distinct systems of diacritics were developed to represent vowels. These four systems were developed independently of one another and differ with respect to the number of diacritics used, the form of the diacritics, and the placement of the diacritics relative to the consonant. Two systems were developed by Syriac Christians: the Nestorian in the east and the Jacobite in the west. Two systems were developed by Jewish communities: the Tiberian in the west and the Babylonian in the east. The symbols from two of these systems, as they would appear with the letter *b*, are represented in Table 6.2 along with their standard transliteration.

The Tiberian system also contains four additional symbols for vowels, all of which represent “half-vowels.” The phonemic status of these vowels is uncertain (see §3.3.3.1) and one of the symbols can also be used to indicate the absence of a vowel:

(1)	Symbol	Transliteration
	ⲛ	ə or no vowel
	ⲛ̄	ē
	ⲛ̅	ā
	ⲛ̆	ō

2.3 Other diacritics

The Tiberian system and the two Syriac systems contain a variety of other diacritics in addition to those used to indicate vowels. The Tiberian system marks two distinct pronunciations of the letter *š* by a dot either to the upper left or to the upper right of the letter, and it indicates that a final *h* is not a *mater lectionis* by a dot (*mappiq*) in the center of the letter. The Syriac systems indicate that a letter is not to be pronounced by a line (*linea occultans*) above that letter. Both the Tiberian and the Syriac systems also contain diacritics that indicate the alternate pronunciations of the letters *b*, *g*, *d*, *k*, *p*, and *t* (see §3.2.3). The pronunciation of these letters as stops is indicated in the Tiberian system by a dot (*daghesh*) in the center of the letter, and in the Syriac system by a dot (*quššāyā*) above the letter. The pronunciation of these letters as fricatives is indicated in the Tiberian system either by a line (*raphē*) above the letter or by the absence of any diacritic, and in the Syriac system by a dot (*rukkākā*) below the letter (see also Morag 1962 and Segal 1953).

3. PHONOLOGY

3.1 Overview

The reconstruction of the phonology of Aramaic at its various stages is complicated by the paucity of direct evidence for the phonological system and by the ambiguous nature of the evidence that does exist. The writing system itself provides little information about the vowels, and its representation of some of the consonantal phonemes is ambiguous. Transcriptions of Aramaic words in other writing systems (such as Akkadian, Greek, or Demotic) exist, but this evidence is relatively fragmentary and difficult to interpret. The phonology of the language of the transcriptions is not always fully understood and so the effect of the transcriber's phonological system on the transcription cannot be accurately determined. Furthermore, no systematic grammatical description of Aramaic exists prior to the beginning of the Modern Aramaic period. So, the presentation in this section is based upon (i) changes in the spelling of Aramaic words over the course of time; (ii) the information provided by the grammatical writings and the vocalized texts from the seventh to ninth century AD; (iii) the standard reconstruction of the phonology of Proto-Aramaic; and (iv) the generally accepted reconstruction of the changes that took place between Proto-Aramaic and the Late Aramaic dialects.

3.2 Consonants

The relationship of Aramaic consonantal phonemes to Aramaic letters is a complex one since the phonemic inventory underwent a number of changes in the history of Aramaic. Some of these changes took place after the adoption of the alphabet by the Arameans and produced systematic changes in the spelling of certain Aramaic words.

Table 6.3 Old Aramaic consonantal phonemes

Manner of articulation	Place of articulation								
	Bilabial	Inter-dental	Dental/ Alveolar	Palato- alveolar	Palatal	Velar	Uvular	Pharyngeal	Glottal
<i>Stop</i>									
<i>Voiceless</i>	p		t			k			ʔ (ʔ)
<i>Voiced</i>	b		d			g			
<i>Emphatic</i>			t' (ṭ)			k' (q)			
<i>Fricative</i>									
<i>Voiceless</i>		θ (š)	s	ʃ				ħ (ḥ)	h
<i>Voiced</i>		ð (z)	z					ʕ (ʕ)	
<i>Emphatic</i>		θ' (š)	s' (š)						
<i>Trill</i>									
							R (r)		
<i>Lateral cont.</i>									
<i>Voiceless</i>			ʃ (š)						
<i>Voiced</i>			l						
<i>Emphatic</i>			ʃ' (q)						
<i>Nasal</i>									
	m		n						
<i>Glide</i>									
	w				y				

3.2.1 Old Aramaic consonantal phonemes

Table 6.3 presents the consonantal phonemes of Old Aramaic with the transliteration of their corresponding symbols in the writing system (see Table 6.1). Only one symbol is listed in those cases in which the transliteration of the written symbol is identical to the symbol used to represent the phoneme. In all other cases, the transliteration of the written symbol is placed in parentheses. Phonemes listed as “Emphatic” are generally considered to be pharyngealized. Note that three letters (*z*, *š* and *q*) each represented two phonemes and that one letter (*š*) represented three phonemes, although in one Old Aramaic text (Tel Fekheriye) the /θ/ phoneme was represented by *s* rather than *š* each of which, therefore, represented two phonemes. That the letter *š* has /ʃ/ as one of its values and *q* has /ʃ'/ as one of its values is likely (see Steiner 1977), but not certain. An alternative for *q* is /ð'/. No satisfactory alternative has been proposed for *š*.

In texts of the Samʿal dialect of Old Aramaic and in the Sefire texts found near Aleppo, the word *npš* is also spelled *nbš*. The occasional spelling of words with *b* rather than *p* also occurs in Canaanite dialects and Ugaritic and suggests that voicing may not have distinguished labial stops in some of the dialects of Northwest Semitic.

3.2.2 Imperial Aramaic consonantal phonemes

By the Imperial Aramaic period, three changes had taken place among the dental consonants: (i) /ʃ/ had become /s/; (ii) /ʃ'/ had become /ʃ/; and (iii) /ð/, /θ/, and /θ'/ had become /d/, /t/, and /t'/, respectively. These changes reduced the phonemic inventory of dentals to the following:

(2)	Stop	Fricative	Lateral continuant	Nasal
Voiceless	t	s		
Voiced	d	z	l	n
Emphatic	t' (ṭ)	s' (ṣ)		

These changes in the phonemic inventory produced changes in the spelling of Aramaic words. For example, words containing the phoneme /ð/ and spelled with the letter *z* became spelled with the letter *d* because the phoneme /ð/ had become /d/. Similar spelling changes took place in words spelled with the letters *š*, *ṣ* and *q*. For some time, both spellings are attested in Aramaic texts, but the change is complete by the Late Aramaic period, except in Jewish Aramaic dialects in which the letter *š* is retained for the phoneme /s/ in a few words, perhaps under the influence of Hebrew which underwent the same sound change but which consistently retained the older spelling.

3.2.3 Stop allophony

At some time prior to the loss of short vowels (see §3.3.2), the six letters *b*, *g*, *d*, *k*, *p*, and *t* each came to represent a pair of sounds, one a stop, the other a fricative. For example, *b* represented [b] and [v] (or, possibly, /β/); *p* represented [p] and [f] (or, possibly, /φ/); and so forth. At this stage, the alternation between the stop and fricative articulations was entirely predictable from the phonetic environment. The stop articulation occurred when the consonant was geminated (lengthened) or was preceded by another consonant. The fricative articulation occurred when the consonant was not geminated and was also preceded by a vowel. This alternation was purely phonetic in the case of the four pairs of sounds represented by *b*, *p*, *g*, and *k*. In the case of the two pairs of sounds represented by *d* and *t* the alternation was either phonetic or morphophonemic. If the development of this alternation occurred prior to the shift of /ð/ to /d/ and /θ/ to /t/ (see §3.2.2), then the presence of these two phonemes would have made the alternation morphophonemic. If it occurred after this shift, then the alternation was phonetic. At a later stage of Aramaic, short vowels were lost in certain environments and, as a result, the environment which conditioned the alternation was eliminated in some words. The fricative articulation, however, was not eliminated and so the alternation between the two articulations became phonemic in all six cases.

3.3 Vowels

The inventory of Aramaic vowel phonemes is more difficult to specify than that of consonantal phonemes, since vowels are not fully represented in the writing system until the beginning of the Modern Aramaic period. Prior to that time, the *matres lectionis* (see §2.2.1) were the only means by which vowels were represented. In the Old and Imperial Aramaic periods, the *matres lectionis* were only used to indicate long vowels. During the Middle Aramaic period they began to be used to indicate short vowels as well, and this expansion of their use continued into the Late Aramaic period. This change in the use of the *matres lectionis* suggests that vowel quantity was not phonemic by the Middle Aramaic period and that vowel quality was the only relevant factor in their use. Given this evidence and the data provided by the four systems of vowel diacritics that were developed at the beginning of the Modern Aramaic period, three distinct stages of the phonology of Aramaic vowels can be distinguished: Proto-Aramaic, Middle Aramaic, and Late Aramaic.

3.3.1 Proto-Aramaic

The reconstructed Proto-Aramaic inventory of vowel phonemes is equivalent to the reconstructed Proto-Semitic inventory of vowel phonemes:

(3)		<i>Front</i>	<i>Central</i>	<i>Back</i>
	<i>High</i>	/i/ and /i:/		/u/ and /u:/
	<i>Low</i>		/a/and/a:/	

In addition, when /a/ was followed by /w/ or /y/, the diphthongs /au/ and /ai/ were formed.

3.3.2 Middle Aramaic

A number of vowel changes took place between the Proto-Aramaic and the Middle Aramaic periods; providing a relative chronology, much less an absolute chronology, of these changes is problematic. Questions of chronology aside, these changes can be divided into three groups:

1. Changes which did not affect the system of vowel phonemes, such as the shift of /a/ to /i/ (“attenuation”) in some closed syllables.

2. Changes which occurred in every dialect of Aramaic:
 - (i) Stressed /i/ and /u/ were lowered, and perhaps lengthened, to /e/ or /e:/ and /o/ or /o:/.
 - (ii) In all dialects, but differing from dialect to dialect as to the number and the specification of environments, /ai/ became /e:/ (or possibly /ei/) and /au/ became /o:/ (or possibly /ou/).
 - (iii) In the first open syllable prior to the stressed syllable and in alternating syllables prior to that, short vowels were lost. In positions where the complete loss of the vowel would have produced an unacceptable consonant cluster, the vowel reduced to the neutral mid-vowel [ə]. Because the presence of this vowel is entirely predictable from syllable structure, it is not analyzed as phonemic.
 - (iv) Quantity ceased to be phonemic.

3. Changes which apparently occurred in some dialects, but not others:
 - (i) The low vowel /a:/ was rounded and raised to /ɔ/.
 - (ii) Unstressed /u/ was lowered to /ɔ/ in some environments.
 - (iii) Unstressed /i/ was lowered to /ɛ/ in some environments.
 - (iv) Unstressed /a/ was raised to /ɛ/ in some environments.

A dialect in which all of these changes occurred would have the vowel system of (4), along with the diphthongs /ai/ (or /ei/) and /au/ (or /ou/), if they had been retained in any environments:

(4)		<i>Front</i>	<i>Central</i>	<i>Back</i>
	<i>High</i>	/i/		/u/
	<i>Mid</i>	/e/		/o/
		/ɛ/		/ɔ/
	<i>Low</i>		/a/	

A dialect in which only the first two sets of changes occurred would have the same system but without the vowels /ɛ/ and /ɔ/.

3.3.3 Late Aramaic

At the beginning of the Modern Aramaic period, four sets of diacritics were independently developed to represent Aramaic vowels fully. These sets of diacritics represent the phonemic distinctions relevant to four dialects of Late Aramaic. The distinctions indicated by these systems are qualitative, not quantitative, indicating that vowel quantity was not phonemic by this time. In all of these systems, the pronunciation of the low vowel(s) is/are uncertain and so two options are usually given. Also indicated in (5)–(8) are the standard transliteration equivalents in the writing system.

3.3.3.1 The Tiberian system

(5)	Front	Central	Back
High	<i>/i/</i> = <i> and <î>		<i>/u/</i> = <u> and <û>
Mid	<i>/e/</i> = <ē> and <ê>		<i>/o/</i> = <ō> and <ô>
	<i>/ε/</i> = <e>		<i>/ɔ/</i> = <o> and <ā>
Low		<i>/æ/</i> or <i>/a/</i> = <a>	

The phonemic status of the */ε/* vowel is uncertain, because its alternation with other vowels in the system is nearly always predictable. If */ε/* is not a phoneme, then this system would be equivalent to the Babylonian system (see §3.3.3.2).

The Tiberian system also contains four additional symbols for vowels (see §2.2.2), all of which represent vowels of very brief duration: the neutral mid vowel */ə/*, and very brief pronunciations of */ε/*, */ɔ/*, and */a/*. Diachronically, these vowels are the remnants of short vowels which were reduced in certain syllables (see §3.3.2). They are only retained in positions where the complete loss of the vowel would produce an unacceptable consonant cluster and so they represent a context-dependent phonetic (rather than a phonemic) phenomenon.

3.3.3.2 The Babylonian system

(6)	Front	Central	Back
High	<i>/i/</i> = <i> and <î>		<i>/u/</i> = <u> and <û>
Mid	<i>/e/</i> = <ē> and <ê>		<i>/o/</i> = <ō> and <ô>
Low	<i>/æ/</i> (or <i>/a/</i>) = <a>		<i>/a/</i> (or <i>/ɔ/</i>) = <ā>

This system is essentially equivalent to the Tiberian system, but without */ε/*. It is probable that */ε/* is absent in this dialect because it never developed from */i/* and */a/*, rather than because it first developed and then was subsequently lost. This system also contains a symbol for the neutral mid vowel */ə/* but, unlike the Tiberian system, the diacritic is not ambiguous (i.e., it does not also represent the absence of a vowel; see §2.2.2).

3.3.3.3 The Nestorian system

(7)	Front	Central	Back
High	<i>/i/</i> = <i> and <î>		<i>/u/</i> = <u> and <û>
Mid	<i>/e/</i> = <ē> and <ê>		<i>/o/</i> = <ō> and <ô>
	<i>/ε/</i> = <e>		<i>/ɔ/</i> = <ā>
Low	<i>/æ/</i> or <i>/a/</i> = <a>		

This system is essentially the same as the Tiberian and the Middle Aramaic system, though the */ε/* vowel is much more common and is certainly a phoneme in this system.

3.3.3.4 The Jacobite system

(8)	Front	Central	Back
High	/i/ = <î> and <î̄>		/u/ = <û> and <û̄>
Mid	/e/ = <e>		/o/ = <â>
Low		/a/ = <a>	

This system has the smallest of all inventories and is a result of two changes from the Middle Aramaic (= Nestorian) system: (i) the raising of /e/ and /o/ to /i/ and /u/ respectively; and (ii) the raising of /ɛ/ and /ɔ/ to /e/ and /o/ respectively.

3.4 Syllable structure

Aramaic has both closed (CVC) and open (CV) syllables. During the time that vowel quantity was phonemic in Aramaic, a closed syllable could not contain a long vowel, whereas an open syllable could contain either a long or a short vowel. After vowel quantity was no longer phonemic, such restrictions were no longer relevant to the phonemic system, although vowels in closed and open syllables very likely differed phonetically in quantity.

The only apparent restriction on vowel quality in Aramaic syllables occurs in connection with the consonants /ʔ/, /ʕ/, /ħ/, /h/, and /r/. At an early stage in Aramaic, a short high vowel preceding these consonants became /a/. A preceding long high vowel retained its quality, but, in some dialects, /a/ was inserted between the high vowel and the consonant.

3.5 Stress

There is one primary stressed syllable in each Aramaic word (with the exception of some particles; see §§4.6, 4.7.4, and 4.8.1). In Proto-Aramaic, words having a final closed syllable were stressed on that syllable; and words having a final open syllable were stressed on the penultimate syllable, regardless of the length of the word-final vowel. At a very early stage, word-final short vowels were either lost or lengthened and so the stressed, open penultimate syllable of words with a final short vowel became the final stressed, closed syllable. Stress remained on this syllable and the rules regarding stress were not altered. These rules remain unaltered throughout most of the history of Aramaic, though in some dialects of Late Aramaic, stress shifted from the final syllable to the penultimate syllable in some or all words which had a closed final syllable.

3.6 Phonological processes

3.6.1 Sibilant metathesis

In verb forms in which a /t/ is prefixed (see §4.4.1) to a root which begins with a sibilant, the sibilant and the /t/ undergo metathesis: for example, /ts/ → /st/ and /tš/ → /št/. If the sibilant is voiced /z/ or pharyngealized /sʕ/, /t/ also undergoes partial assimilation: /tz/ → /zd/ and /tsʕ/ → /sʕtʕ/.

3.6.2 Assimilation of /t/

In verb forms in which a /t/ is prefixed (see §4.4.1) to a root which begins with /d/ or /tʕ/, the /t/ completely assimilates to this consonant. This assimilation also takes place in a few roots whose first consonant is a labial – /b/, /p/, and /m/ – or the dental/alveolar /n/.

3.6.3 Assimilation and dissimilation of /n/

Historically, the phoneme /n/ completely assimilates to a following consonant when no vowel intervenes between the two: *nC → CC. During and after the Imperial Aramaic period, some geminated (lengthened) consonants dissimilate to /n/ plus consonant, CC → nC, even in cases in which no /n/ was present historically. This dissimilation is the result of Akkadian influence and appears more commonly in the eastern dialects.

3.6.4 Dissimilation of pharyngealized consonants

In some Aramaic texts, words which have roots that historically contain two pharyngealized consonants show dissimilation of one of the consonants to its nonpharyngealized counterpart. In a few Old Aramaic texts, progressive dissimilation is shown: for example, *qtl* (i.e., /kʰtʰl/) → *qtl*. In some Imperial Aramaic texts the dissimilation is regressive: for example, *qtl* → *kʰtl* and *qṣʰ* (i.e., /kʰsʰʔ/) → *kṣʰ*. These dissimilations may have been the result of Akkadian influence, which attests similar dissimilations.

3.6.5 Elimination of consonant clusters

At various stages of Aramaic, phonotactically impermissible consonant clusters were eliminated in various ways.

3.6.5.1 Anaptyxis

In Proto-Aramaic, all singular nouns ended in a short vowel, marking case (see §4.2.2). When this final short vowel was lost, some nouns then ended in a cluster of two consonants: as in */málku/ → /málk/. In order to eliminate this cluster, a short anaptyctic vowel (usually /i/, sometimes /a/) was inserted between the two consonants: /málk/ → /málik/. Stress then shifted to this vowel from the preceding vowel: /málik/ → /malík/. At a later stage, the vowel of the initial syllable was lost and the anaptyctic vowel was lowered (see §3.3.2): /malík/ → /mlík/ → /mlék/.

3.6.5.2 Schwa

The loss of short vowels in some open syllables (see §3.3.2) created the possibility of consonant clusters at the beginning and in the middle of words. In positions where the complete loss of the vowel would have produced an unacceptable consonant cluster, the cluster was avoided by reducing the short vowel to the neutral mid-vowel /ə/.

3.6.5.3 Prothetic aleph

When a word begins with a cluster of two consonants, sometimes the syllable /ʔa/ or /ʔe/ is prefixed to it: for example, the word /dmə/ is sometimes pronounced /ʔadmə/.

4. MORPHOLOGY

4.1 Morphological type

Aramaic is a language of the fusional type in which morphemes are unsegmentable units which represent multiple kinds of semantic information (e.g., gender and number). On the basis of morphological criteria alone, Aramaic words can be divided into three categories:

(i) nouns, (ii) verbs, and (iii) uninflected words. The final category includes a variety of words such as adverbs (see §4.5), prepositions (see §4.6), particles (see §4.7), conjunctions (see §4.8), and interjections (see §4.9). As the name suggests, words in this category are distinguished from words in the first two categories by the absence of inflection. Words in the first two categories can be distinguished from each other by differences in the categories for which they are inflected and by the inflectional material itself.

4.2 Nominal morphology

Under this heading are included not only nouns and adjectives, but participles as well.

4.2.1 Word formation

Excluding inflectional material, all native Aramaic nouns, adjectives, and participles (as well as verbs; see §4.4.1) consist of (i) a two-, three-, or four-consonant root; (ii) a vowel pattern or ablaut; and, optionally, (iii) one or more prefixed, suffixed, or infixes consonant(s). Multiple combinations of these elements exist in the lexicon of native Aramaic words, and earlier and later patterns can be identified within the lexicon.

In Old and Imperial Aramaic, the patterns found are ones that are common to the other Semitic languages. Many patterns are characterized by differences in ablaut only: for example, *qal*, *qāl*, *qil*, *qall*, *qitl*, *qutl*, *qatal*, *qatāl*, *qatīl*, and *qātil*. Additional patterns are characterized by the gemination (lengthening) of the second root consonant: for example, *qattal*, *qittal*, *qattīl*, and *qattāl*. Still others display prefixation – for example, *maqtal*, *maqtil*, *maqṭāl*, *taqtīl*, and *taqtūl*; or suffixation – for example, *qatīlūt*, *qutlīt*, and *qitlāy*; or reduplication – for example, *qatīlal* and *qataltāl*. The semantics of some of these patterns or of individual suffixes is clear and distinct: for example, the pattern *qattāl* indicates a profession (*nomen professionalis*), the pattern *qatīl* is that of the passive participle of the Pəʿal stem; and the suffix *-āy* (the *nisbe* suffix) indicates the name of an ethnic group.

In Late Aramaic, the use of suffixes increased, apparently as a result of two historical factors. First, the loss of short vowels in open syllables prior to the stressed syllable often eliminated the single vowel which distinguished one vowel pattern from another. So, the use of suffixes may have been increased to compensate for the loss of distinct vowel patterns. Second, the contact of Aramaic with Indo-European languages, especially Greek, may have increased the use of suffixes since the morphology of those languages largely involves suffixation rather than differences in vowel patterns.

One notable nonsuffixing pattern that developed in the Middle or Late Aramaic period is the *qātōl* pattern which indicates an agent noun (*nomen agentis*). The older agent noun pattern, *qātēl* (< *qātīl*), is also the pattern of the active participle of the Pəʿal stem, and by the Middle Aramaic period the participle came to be used almost exclusively as a verbal form, and so a new, purely nominal, agent noun form was developed.

4.2.2 Inflectional categories

Nouns, adjectives, and participles are inflected for gender, number, and state. There are no case distinctions in any extant dialect of Aramaic, though such distinctions did exist in Proto-Aramaic. There are also no comparative or superlative forms of adjectives at any stage of the language. There are two genders, masculine and feminine, and nouns can be

distinguished from adjectives and participles in that nouns have inherent gender whereas adjectives and participles do not. There are two numbers, singular and plural, and although a few words retain an ancient dual form, there is no productive dual in Aramaic. There are three states: absolute, construct, and emphatic. The absolute and the emphatic states of a noun are free forms and the construct state is a bound form. In earlier stages of Aramaic, the absolute state represented an indefinite noun, the emphatic state represented a definite noun and the construct state represented a noun the definiteness of which was determined by the noun to which it was bound. In Late Aramaic, the absolute state was almost entirely lost and the emphatic state became used for both definite and indefinite nouns. Definiteness was then determined contextually or by the use of the numeral “one” as a kind of indefinite article. At this stage, the construct state was retained only in frozen forms and was not productive, with the exception of a few words such as *br* “son-of.” However, adjectives and participles retained the absolute state throughout all periods because of their use as predicates to form clauses (see §5.2.1).

The transliterations of the written forms of the inflectional suffixes for nouns, adjectives, and participles are presented in (9). The forms of each suffix are represented both with and without vowel diacritics (see §§2.1, 2.2.2). The symbol \emptyset represents the absence of an inflectional suffix. The letters $\text{'}^{\text{}}$ and *h* are *matres lectionis* (see § 2.2.1). On the phonemic values of the transliteration of vowel diacritics see §3.3.3:

(9)

	<i>Masculine</i>		<i>Feminine</i>	
	<i>Singular</i>	<i>Plural</i>	<i>Singular</i>	<i>Plural</i>
<i>Absolute</i>	\emptyset	-yn (= -în)	-h (= -ā)	-n (= -ān)
<i>Construct</i>	\emptyset	-y (= -ay or -ê)	-t (= -at)	-t (= -āt)
<i>Emphatic</i>	- $\text{'}^{\text{}}$ (= -ā)	-y $\text{'}^{\text{}}$ (= -ayyā)	-t $\text{'}^{\text{}}$ (= -tā)	-t $\text{'}^{\text{}}$ (= -ātā)

Several points should be noted regarding these inflectional suffixes:

1. The masculine singular emphatic is also sometimes attested as *-h*.
2. The feminine singular absolute, in some dialects, is also rarely attested as $\text{-}'^{\text{'}}$. In Syriac, it is consistently attested as $\text{-}'^{\text{'}}$.
3. The *y* of the masculine plural absolute is a *mater lectionis* and so is sometimes omitted in writing, especially in early texts.
4. The *y* of the masculine plural construct is either a consonant, representing the diphthong /ai/, or a *mater lectionis* representing /e:/ which had developed from /ai/ in some dialects.
5. The Sam^{al} dialect of Old Aramaic attests *-t* (= *-āt*) as the feminine plural absolute form, the usual form in Canaanite dialects.
6. In eastern dialects of Middle and Late Aramaic, the masculine plural emphatic appears as $\text{-}'^{\text{'}}$ or *-y* (= *-ê*), perhaps under Akkadian influence.

Many Aramaic nouns, adjectives, and participles show two (or more) vowel patterns which alternate depending on the phonological form of the inflectional material. These multiple patterns are the result of the phonological changes that took place during the history of Aramaic. However, explaining these alternating patterns synchronically requires a rather complex set of rules and will not be attempted here. In two groups of nouns, adjectives, and participles (those with a final consonant which was historically /w/ or /y/), these phonological changes also produced changes in the forms of some of the inflectional suffixes. Nouns, adjectives, and participles with a final consonant /w/ developed the vowel /u/ or /o/ in both the masculine singular absolute and construct as well as in the three

feminine singular forms (the /w/ remained a consonant in the other seven forms). In the feminine singular absolute and construct forms, this vowel replaced the vowel of the inflectional suffix.

Nouns, adjectives, and participles with a final consonant /y/ show even more changes. The inflectional suffixes for these words are given in (10):

(10)	<i>Masculine</i>		<i>Feminine</i>	
	<i>Singular</i>	<i>Plural</i>	<i>Singular</i>	<i>Plural</i>
<i>Absolute</i>	-ʾ or -y (= -ê)	-yn (= -ayin or -ên) or -n (= -an)	-y (= -î) or -yʾ (= -yā)	-yn (= -yān)
<i>Construct</i>	-ʾ or -y (= -ê)	-y (= -ay or -ê)	-yt (= -ît or -yat)	-yt (= -yāt)
<i>Emphatic</i>	-yʾ (= -yā)	-yʾ (= -ayyā or -yê)	-ytʾ (= -îtā)	-ytʾ (= -yātā)

In the masculine singular emphatic and the feminine plural forms, /y/ remains a consonant and the inflectional suffix is standard. In the other forms, /y/ generally becomes a vowel, sometimes fusing with the inflectional ending, although in some nouns it remains a consonant and the suffix is standard.

4.3 Pronouns

4.3.1 Personal pronouns

Personal pronouns occur in both independent and bound (i.e., enclitic) forms.

4.3.1.1 Independent personal pronouns

Independent forms of the personal pronouns vary slightly from dialect to dialect and from period to period. All but the rarest of forms are listed in (11):

(11)	<i>Singular</i>	<i>Plural</i>
<i>1st common</i>	ʾnh, ʾnʾ	ʾnhn, ʾnhnn, ʾnhnʾ, ʾnhnh, nhnʾ, hnn, ʾnn
<i>2nd masculine</i>	ʾnt, ʾt, ʾnth, ʾth	ʾntm, ʾntwn, ʾtwn
<i>2nd feminine</i>	ʾnty, ʾnt, ʾt, ʾty	ʾntn, ʾnty, ʾtyn
<i>3rd masculine</i>	hʾ, hwʾ, hw	hm, hwm, hmw, hmwn, ʾnwn, hnwn, ʾynwn, hynwn
<i>3rd feminine</i>	hʾ, hyʾ, hy	ʾnyn, hnyn, ʾynyn, hynyn

The first- and second-person pronouns all have an initial ʾn, and the remainder of each form generally resembles the inflectional suffix of the perfect verb (§4.4.2.1). Forms written without *n* are those which have undergone assimilation of /n/ to /t/ (see §3.6.3). The third-person singular forms have an initial *h*, and the plural forms have an initial *h* or ʾ. The masculine has a back vowel /o/ or /u/, and the feminine has a front vowel /i/ or /e/. Most of the spelling differences reflect the presence or absence of *matres lectionis*, though some reflect historical developments. Of particular note is the replacement of the earlier final /m/ of the second and third masculine plural forms with the later /n/ under the influence of the feminine forms.

In the Samʿal dialect of Old Aramaic the first common singular is the Canaanite ʾnk(y).

4.3.1.2 Bound personal pronouns

These forms are used for the possessor of a noun, the object of a preposition, the subject or object of an infinitive, or the object of a verb and they vary depending on the type of word to which they are suffixed.

The bound forms that are suffixed to nouns, prepositions, particles, and infinitives can be divided into two sets: Set I is used with masculine singular nouns, all feminine nouns, infinitives, and some prepositions; Set II is used with masculine plural nouns, the other prepositions, and the existential particles:

(12) Bound pronouns suffixed to nouns, prepositions, particles, and infinitives

	Set I		Set II	
	Singular	Plural	Singular	Plural
1st common	-y	-n ^ʔ , -n	-y	-yn, -yn ^ʔ
2nd masculine	-k	-km, -kwn	-yk	-ykm, ykwn
2nd feminine	-ky, -yk	-kn, -kyn	-yky	-ykn, -ykyn
3rd masculine	-h, -yh	-hm, -hwm, -hwn	-wh, -why, -wy	-yhm, -yhwm, -yhwn
3rd feminine	-h	-hyn	-yh	-yhn, -yhyn

Note the following:

1. The first common singular suffix occurring on the infinitive is more commonly *-ny* than *-y*. In Syriac, the infinitive also occurs with alternate forms of the third masculine singular (*-ywhy*) and third feminine singular (*-yh*).
2. In Set I, the third masculine singular *-yh* and the second feminine singular *-yk* reflect the presence of an internal *mater lectionis* in Late Aramaic texts.
3. The differences in the second- and third-person plural forms of both sets are a result of the presence or absence of *matres lectionis* and the shift of final /m/ to /n/ in the masculine forms. In Samaritan Aramaic, the third plural forms of both sets are also attested without *-h-*. In Jewish Babylonian Aramaic, the second- and third-person plural forms of both sets are also attested without the final *-n*.
4. In Sets I and II, the first common plural form without ^ʔ reflects the absence of a *mater lectionis* in earlier texts and the absence of a final vowel in later texts.
5. In Jewish Palestinian Aramaic, the third feminine singular, second masculine singular, second feminine singular, and the first common plural forms in Set II are also attested without the initial *y*, suggesting a shift of /ai/ to /a/. The first common singular, first common plural, and third feminine singular forms in Set II are also attested as ^ʔy, *-ynn*, and *-yh^ʔ* respectively, in this dialect.
6. The second feminine singular form of Sets I and II is also written without the final *y* in Jewish Palestinian Aramaic, suggesting the loss of the final vowel, and in Syriac the *y* is written but not pronounced.
7. The third masculine singular form *-wh* of Set II probably reflects the absence of a *mater lectionis* in earlier texts. The *-wy* form reflects the loss of the intervocalic /h/ in later texts. The Sam^ʔal dialect of Old Aramaic attests *-yh*, suggesting the diphthong /ai/ rather than /au/. This diphthong is the historically earlier vowel which became /au/ in all other dialects.

The bound forms of the pronouns that are attached to verbs will vary depending on three factors: (i) the tense of the verb; (ii) the phonological form of the verb; and (iii) the dialect. Most variation is a result of the phonological form of the verb rather than verb tense, although the forms used with the imperfect frequently show an additional *-n-* (= /inn/). In some dialects of Late Aramaic, this additional *-n-* is also found in forms that are used with the perfect. Other differences in bound pronouns across dialects tend to reflect broader phonological changes in the language, such as the loss of word-final vowels or consonants.

Bound forms of the third-person plural pronouns are generally not suffixed to verbs, although there are attested forms in Old Aramaic, particularly in the Sam²al dialect, and in Jewish Babylonian Aramaic and Jewish Palestinian Aramaic. More commonly, an independent form of the pronoun is used instead. However, in some dialects, these forms are not stressed and so they are phonologically enclitic to the preceding verb form, even though they are written as separate words.

In (13)–(15), *y*, *w*, and *ʿ* are all *matres lectionis*, but *h* represents a true consonant:

(13) Bound pronouns suffixed to verbs: perfect tense

	<u>Singular</u>	<u>Plural</u>
1st common	-ny, -y, -n	-n, -nn, -nʿ
2nd masculine	-k	-kn, -kwn
2nd feminine	-ky	-kyn
3rd masculine	-h, -yh, -hy, -yhy	
3rd feminine	-h, -hʿ	

Note the following:

1. The first common singular form *-y* is attested in Jewish Palestinian Aramaic and Samaritan Aramaic. In Jewish Babylonian Aramaic, the form *-n* is attested and it represents the loss of the final vowel. The final vowel is also lost in Syriac, but the form is still written *-ny*.
2. Syriac also attests the third masculine singular forms *-why* and *-ywhy*.
3. The first common plural form *-n* represents the loss of the final vowel, and the form *-nn* represents the additional *-n-*. Both forms are only attested in Late Aramaic dialects.
4. Jewish Babylonian Aramaic also attests a second masculine plural form *-kw*, as well as second masculine singular (*-nk*), second masculine plural (*-nkw*), and third feminine singular (*-nh*) forms with the additional *-n-*.
5. Old Aramaic attests the third masculine plural forms *-hm* and *-hmw*.
6. Jewish Babylonian Aramaic attests the third masculine plural forms *-ynwn*, *-ynhw* and the third feminine plural forms *-nhy* and *-ynhy*. Samaritan Aramaic attests the third masculine plural form *-wn* and third feminine plural form *-yn*.

(14) Bound pronouns suffixed to verbs: imperfect tense

	<u>Singular</u>	<u>Plural</u>
1st common	-n, -ny, -nny	-n, -nn
2nd masculine	-k, -nk, -ynk	-kwn, -nkwn
2nd feminine	-ky, -yk	-kyn, -nkyn
3rd masculine	-h, -hy, -nh, -nhy	
3rd feminine	-h, -nh	

Note the following:

1. In Old and Imperial Aramaic, forms with and without the additional *-n-* are attested. In Jewish Palestinian Aramaic, Jewish Babylonian Aramaic, and Samaritan Aramaic, the forms with *-n-* are much more commonly attested than the forms without *-n-*. In Syriac, the forms with *-n-* are not attested at all.

2. In Old Aramaic, the first common singular form *-n* is pronounced with a final vowel but is written without a *mater lectionis*. In Jewish Babylonian Aramaic, the form *-n* represents the loss of the final vowel. In Syriac, the final vowel is also lost, but the form is still written *-ny*.
3. No second feminine singular forms with additional *-n-* happen to be attested in the extant texts. The form *-ky* is pronounced with a final vowel in Old and Imperial Aramaic, but in Jewish Babylonian Aramaic and Syriac the final vowel is lost, though in Syriac the form is still written *-ky*.
4. The third masculine singular forms *-hy* and *-nhy* are only found in Old and/or Imperial Aramaic.
5. Syriac also attests the third masculine singular forms *-yhy* and *-ywhy* and the third feminine singular form *-yh*.
6. Jewish Babylonian Aramaic attests the third masculine singular forms *-yh* and *-ynyh*, the third feminine singular form *-ynh*, and the second masculine plural form *-ynkw*.
7. In Jewish Palestinian Aramaic, the first common plural form *-nn'* is also attested.
8. Old Aramaic attests the third masculine plural forms *-hm* and *-hmw*.
9. Jewish Babylonian Aramaic attests the third masculine plural forms *-ynwn*, *-ynhw* and the third feminine plural form *-ynhy*. Samaritan Aramaic and Jewish Palestinian Aramaic attest the third masculine plural form *-nwn*. Jewish Palestinian Aramaic also attests the third feminine plural form *-nyn*.

(15) Bound pronouns suffixed to verbs: imperative

	<i>Singular</i>	<i>Plural</i>
<i>1st common</i>	-ny, -n, -yny, -yn, -y	-n, -yn, -n', -yn', -nn
<i>3rd masculine</i>	-h, -hy, -yh, -why, -yhy	
<i>3rd feminine</i>	-h, -yh, -h'	

Note the following:

1. The first common singular form *-ny* is attested in all dialects. The first common singular form *-y* is only attested in Jewish Palestinian Aramaic and Samaritan Aramaic. In Jewish Babylonian Aramaic, the forms *-yn* and *-n* are attested in addition to *-ny* and represent the loss of the final vowel. In Syriac, the forms *-ny* and *-yny* are attested, but the *y* is not pronounced.
2. The third masculine singular form *-h* is attested in Old Aramaic, Imperial Aramaic, Jewish Babylonian Aramaic, and Samaritan Aramaic. This form is also written with a *mater lectionis* as *-yh* in Jewish Babylonian Aramaic and Jewish Palestinian Aramaic. The form *-hy* is attested in Old Aramaic, Imperial Aramaic, Jewish Palestinian Aramaic, and Syriac, although in Syriac the *h* is not pronounced. The forms *-why* and *-yhy* are only attested in Syriac and the *h* is not pronounced.
3. Only Syriac attests the third feminine singular form *-yh* and only Jewish Palestinian Aramaic attests the third feminine singular form *-h'*.
4. First common plural bound pronouns are only attested in Late Aramaic. Syriac attests *-n* and *-yn*. Jewish Palestinian Aramaic attests *-n* and *-n'*. Samaritan Aramaic attests *-n* and *-nn*. Jewish Babylonian Aramaic attests *-yn'*.
5. Jewish Babylonian Aramaic attests the third masculine plural form *-nhw* and the third feminine plural form *-nhy*. Jewish Palestinian Aramaic attests the third masculine plural form *-nwn* and the third feminine plural form *-nyn*.

In Late Aramaic, as a result of the use of the participle as a verb form, shortened forms of the first- and second-person independent pronouns became suffixed to the participle to indicate the subject. In Syriac and Jewish Babylonian Aramaic, third-person forms developed alongside the first- and second-person forms, and all of these forms are commonly used in a variety of nonverbal clauses, not just those with participles. In these uses, the pronouns are written as separate words, but are phonologically enclitic to the preceding word (see §5.2.1).

4.3.2 Demonstrative pronouns

4.3.2.1 Near demonstratives

In Old, Imperial, and Middle Aramaic, the singular forms of the near demonstratives are characterized by an initial *z* or *d* (= historical /ð/; see §3.2.2) followed, in the masculine forms, by *n* and a final *mater lectionis* -*h* or -*ʿ*. The forms are as follows: masculine singular *znh*, *znʿ*, *dnh*, *dnʿ* and feminine singular *zʿ*, *zh*, *dʿ*. In Middle Aramaic, the masculine singular forms *dn* and *zn* are also attested, suggesting that the final vowel was being lost in this period. Gender is not distinguished in the plural forms of the near demonstrative. These forms are all characterized by an initial ʾ. They are ʾl, ʾlh, ʾln.

In the Late Aramaic period, the near demonstratives are often attested with an initial *h*. This *h* generally replaces the initial *d* of the singular forms and the initial ʾ of the plural form. However, some singular forms in some dialects attest both the *h* and the *d*. For example, Syriac attests masculine singular *hn* and *hnʿ*, feminine singular *hdʿ*, and plural *hlyn*. Jewish Palestinian Aramaic attests masculine singular *dyn*, *dnʿ*, *hyn* and *hn*, feminine singular *dʿ*, and plural *hlyn* and ʾlyn. Jewish Babylonian Aramaic attests many forms including masculine singular *dyn* and *hdyn*, feminine singular *hdʿ* and *hʿ*, and plural ʾlyn and *hlyn*. Samaritan Aramaic attests masculine singular *dn*, feminine singular *dh*, and plural *hlyn* and ʾlyn.

4.3.2.2 Far demonstratives

In Old, Imperial, and Middle Aramaic, the far demonstratives are like the near demonstratives in that the singular forms are characterized by an initial *z* or *d* and the plural forms by an initial ʾ, but, unlike the near demonstratives, this initial element is followed by *k*. The forms are as follows: masculine singular *znk*, *zk*, *dk*; feminine singular *zk*, *zkʿ*, *dk*, *zky*, *dky*; and plural ʾlk, ʾlky. In addition to these forms, there are sporadic attestations of the third-person independent personal pronouns being used as demonstratives. This usage is common in the Canaanite dialects, and these attestations are generally found in Aramaic dialects influenced by Canaanite such as the Samʿal dialect of Old Aramaic and some Middle Aramaic dialects influenced by Hebrew.

In the Late Aramaic period, the third-person independent personal pronouns become more commonly used as far demonstratives, although in most dialects they do not displace the earlier forms, but are simply attested alongside them. In Syriac, the earlier forms are lost entirely and the far demonstratives are distinguished from the personal pronouns by the vowel of the first syllable of the singular forms and by the presence of *h* rather than ʾ as the initial consonant of the plural forms.

4.3.3 Reflexive pronouns

The equivalent of a reflexive pronoun is expressed by suffixing a bound form of a personal pronoun to *npš* “life, soul” or *grm* “bone.”

4.3.4 Possessive pronouns

Possessive pronouns are usually expressed by bound forms of the personal pronouns, but in Middle and Late Aramaic the particle *z/dyl* (= particle *z/dy* + preposition *l*) with a suffixed bound form became used as a possessive pronoun.

4.4 Verbal morphology

4.4.1 Word formation

Excluding inflectional material, all native Aramaic verbs (as well as nouns; see §4.2.1) consist of (i) a two-, three-, or four-consonant root; (ii) a vowel pattern or ablaut; and, optionally, (iii) one or more prefixed or infix consonants. The root provides the primary semantic value of the verb form. The other two elements (ii and iii) provide semantic distinctions of voice, causation, and so forth; and variations in these two elements define a system of verbal stems or conjugations which are morpho-semantically related to each other. Of these two elements, the vowel pattern is less important than the additional consonant(s) since vowels frequently change from one inflected form to another. The distinctions between the stems are generally, but not always, maintained despite these vowel changes. Furthermore, some of these vowel patterns differ slightly from one dialect to another. For these reasons, the vowel patterns will not be treated in the following discussion.

4.4.1.1 Major verb stems

Numerous verb stems exist in Aramaic, but there are only six primary stems. They can be defined morphologically as follows, assuming in each case a three-consonant root.

1. *Pəʿal*: This stem is the most frequently attested of the six. It is also the simplest stem morphologically, characterized by the absence of any consonants other than the root consonants. For this reason, it is considered the basic stem. This stem attests multiple vowel patterns in both of the primary finite forms of the verb, and it is the only stem with multiple vowel patterns.
2. *ʾEthpəʿel* or *ʾIthpəʿel*: This stem is characterized by the presence of a prefixed *ʾt*-. Historically, this prefix is *ht*-, and forms with *ht*- are sporadically attested in all periods.
3. *Paʿʿel*: This stem is characterized by the gemination (lengthening) of the second root consonant.
4. *ʾEthpaʿʿal* or *ʾIthpaʿʿal*: This stem is characterized by the gemination (lengthening) of the second root consonant and by a prefixed *ʾt*-. Historically, this prefix is *ht*-, and forms with *ht*- are sporadically attested in all periods.
5. *Haphʿel* or *ʾAphʿel*: This stem is characterized by the prefixation of the consonant *h*- or the consonant *ʿ*-. The forms with *h*- are historically earlier than the forms with *ʿ*- and had almost entirely disappeared by the Middle Aramaic period, though a few forms with *h*- survive into the Late Aramaic period.
6. *ʾEttaphʿal* or *ʾIttaphʿal*: This stem is characterized by a prefixed *ʾtt*-. The second *t* is historically the *h*- or *ʿ*- of the *Haphʿel*/*ʾAphʿel* which has been assimilated to the preceding *t*.

Certain modifications of these stems occur when there are two or four root consonants rather than three. Verbs with four root consonants only have forms corresponding to the *Paʿʿel* and the *ʾEthpaʿʿal*/*ʾIthpaʿʿal* stems, the two middle root consonants taking

the place of the geminated (lengthened) second root consonant of a verb with three root consonants. Verbs with two root consonants develop a middle root consonant *-y-* in the *Pa^cel* and the *ʾEthpa^cal/ʾIthpa^cal*, and the distinction between the *ʾEthpə^cel/ʾIthpə^cel* and the *ʾEttaph^cal/ʾIttaph^cal* forms is completely lost, with the retention of the latter forms only.

4.4.1.2 *Voice and other semantic distinctions*

This system of stems expresses a variety of semantic distinctions, and a variety of relationships exist between the stems. One of the primary distinctions is that of voice. The *Pə^cal*, the *Pa^cel*, and the *Haph^cel/ʾAph^cel* stems all express the active voice. The three stems with prefixed *ʾt-* all express the passive voice. Each of the passive stems is directly related only to its morphologically similar active stem, and the relationships of the passive stems to one another simply mirror the relationships of the active stems to one another. In Proto-Aramaic, it is likely that the stems with prefixed *ʾt-* were reflexive, but in the extant dialects of Aramaic, reflexive uses of these stems are only sporadically attested.

The relationships of the active stems to one another are more complex. The *Pa^cel* and the *Haph^cel/ʾAph^cel* are directly related to the *Pə^cal*, but not to each other. The *Haph^cel/ʾAph^cel* expresses causation. A *Haph^cel/ʾAph^cel* verb of a particular root is usually the causative of the *Pə^cal* verb of that same root. For example, the *Haph^cel/ʾAph^cel* verb *hkšl/ʾkšl* “to trip someone up” is the causative of the *Pə^cal* verb *kšl* “to stumble.” There are, however, a number of *Haph^cel/ʾAph^cel* verbs, some of which are denominative, for which there is no corresponding *Pə^cal* verb or which do not express causation.

The relationship of the *Pa^cel* stem to the *Pə^cal* stem varies depending on the semantic class into which the verb in the *Pə^cal* stem falls. The verbs in the *Pə^cal* stem exhibit a number of semantic distinctions, the two most important of which are (i) the distinction between stative verbs and active verbs, and (ii) the distinction between one-place predicates (usually syntactically intransitive) and two-place predicates (usually syntactically transitive). As a general rule, to which there are exceptions, if the *Pə^cal* verb is stative and/or a one-place predicate, the *Pa^cel* verb of that same root is “factitive” (i.e., causative). If there is a *Haph^cel/ʾAph^cel* verb of that same root, it is roughly synonymous with the *Pa^cel* verb or there is a lexically idiosyncratic difference in meaning; for example, *Pə^cal qrb* “to come near,” *Pa^cel qrb* “to bring near, to offer up,” *Haph^cel/ʾAph^cel hqrb/ʾqrb* “to bring near,” or, in some dialects only, “to fight.” If the *Pə^cal* verb is a two-place predicate, the *Pa^cel* verb of that same root will be “intensive,” though in some cases, the two verbs are synonymous or there is a lexically idiosyncratic difference in meaning; for example, *Pə^cal zmr* “to sing,” *Pa^cel zmr* “to sing.” There are, furthermore, numerous *Pa^cel* verbs, many of which have four root consonants and for which there is no corresponding *Pə^cal* verb.

By the Late Aramaic period, the relationships between the stems had broken down through the process of lexicalization. Although some of the relationships still held between individual verbs of the same root, in many cases they did not. This breakdown was aided by the similarity in meaning of some pairs of verbs and, in the case of the *ʾEthpə^cel/ʾIthpə^cel* and the *ʾEthpa^cal/ʾIthpa^cal*, by their increasing morphological similarity due to vowel changes in the language.

4.4.1.3 *Minor stems*

In Old Aramaic, it is possible that a set of passive stems existed, corresponding to each of the three major active stems, and differing from them in vowel pattern only. Possible attestations of such stems are quite rare and many are disputed.

In all periods of Aramaic, and especially in Late Aramaic, a number of still additional stems are attested, but these are limited, occurring in no more than a few roots. One notable pair of stems is the *šaphʿel* and its passive, the *ʿEštaphʿal/ʿIštaphʿal*. These stems correspond in form and meaning to the *Haphʿel/Aphʿel* and the *ʿEttaphʿal/ʿIttaphʿal*, but with a prefixed *š-* rather than *h-* or *ʿ-*. In the *ʿEštaphʿal/ʿIštaphʿal*, metathesis of /š/ and /t/ has taken place (see §3.6.1). The forms of these stems that are attested in Aramaic are apparently loanwords from two possible sources: (i) Akkadian in the Imperial and Middle Aramaic periods, and (ii) (an)other Northwest Semitic language(s) in which the *šaphʿel* was the standard causative stem in the Old and/or Proto-Aramaic periods. Neither of these stems is productive in any extant Aramaic dialect.

4.4.2 Inflectional categories

Verbs are inflected for three persons, two genders (not distinguished in the first person), two numbers, and two primary “tenses,” the perfect and the imperfect. There is also a set of second- and third-person jussive forms (attested in Old and Imperial Aramaic only), a set of second-person imperative forms, and an infinitival form, which is not inflected. In the active stems, there are two sets of participial forms, an active set and a passive set. In the passive stems, there is one set of (passive) participial forms. Participles are inflected like adjectives (see §4.2.2). The perfect and the imperative are characterized by inflectional suffixes, and the imperfect is characterized primarily by prefixes, though some forms have both prefixes and suffixes. The vowels that are associated with the root consonants of these forms will vary depending on the stem of the verb, the phonological form of the inflectional material, and the position of stress. As with nouns, variations in these vowels are the result of the phonological changes that took place during the history of Aramaic. However, explaining these alternating patterns synchronically requires a set of rather complex rules and will not be attempted here.

The exact semantic value of the two primary tenses is uncertain. It is likely that at the earliest stages of Aramaic, the perfect and the imperfect expressed distinctions of aspect and, secondarily, distinctions of tense and modality. The perfect was used to express perfective aspect, and tended to be used to express past tense and realis mode; whereas the imperfect was used to express imperfective aspect, and tended to be used to express non-past tense and irrealis mode. However, as early as the Imperial Aramaic period, tense began to be the primary distinction between the two forms and the participle began to be used more commonly as a verbal, rather than a nominal, form. By the Late Aramaic period, the perfect had become the past tense, the participle had become the non-past tense, and the imperfect was used to express contingency, purpose, or volition and occasionally to express future action. In conjunction with this shift, the system was augmented by “composite tenses” (see §4.4.2.6) that were used to express further distinctions of aspect and modality.

4.4.2.1 Perfect tense

The perfect is characterized by inflectional suffixes. In (16), the written forms of these inflectional suffixes are represented in transliteration, both with and without vowel diacritics (see §§2.1, 2.2.2). Earlier or more broadly attested suffixes are listed above later or more narrowly attested suffixes. The symbol *ø* represents the absence of an inflectional suffix, either graphically and phonologically or only phonologically. In these forms, only *t* and *n* represent true consonants; all other letters are *matres lectionis* (see §2.2.1). On the phonemic values of the transliteration of the vowel diacritics, see §3.3.3. Verbs with a final root consonant that was historically /w/ or /y/ attest slightly altered forms of some of these suffixes.

(16)	<i>Singular</i>	<i>Plural</i>
<i>3rd masculine</i>	-∅	-w (= -û or -∅) -wn (= -ûn)
<i>3rd feminine</i>	-t (= -at)	- ³ or -h (= ā) -n (= -ān) or -yn (= -ên) or -y (= -∅ or -î)
<i>2nd masculine</i>	-t ³ or -th or -t (= -tā) -t (= -t)	-tn or -twn (= -tôn or -tûn)
<i>2nd feminine</i>	-ty (= -tî) -t or -ty (= -t)	-tn or -tyn (= -tên or -tîn)
<i>1st common</i>	-t or -yt (= -et, -êt, or -ît)	-n ³ or -n (= -nā) -n (= -n) or -nn (= -nan)

Note the following:

1. The third feminine singular suffix is also sometimes attested as -³ or -h (= -ā) in Jewish Babylonian Aramaic and in Samaritan Aramaic.
2. The second masculine singular suffix -t³ or -th always represents -tā and is attested in all periods, although in Late Aramaic it is only attested in Jewish Palestinian Aramaic as a rare form. The spelling -t is also attested in all periods. In earlier periods, when *matres lectionis* were less frequently used, -t represents -tā written without a *mater lectionis*. In later periods, when *matres lectionis* were more frequently used, it represents -t.
3. The second feminine singular suffix -ty (= -tî) is an earlier form. In Late Aramaic, -ty is only found in Syriac and Samaritan Aramaic, where it represents -t.
4. The first common singular suffix is written with a *mater lectionis* only in some Late Aramaic texts. Its pronunciation varied from dialect to dialect and sometimes within individual dialects.
5. The third masculine plural suffix -w is attested in all periods and all dialects. It represents -û in all dialects except Syriac where its value is -∅. The suffix -wn (= -ûn) is a later alternate form found in Syriac and Jewish Palestinian Aramaic.
6. There are no distinct forms of the third feminine plural suffix attested in Old or Imperial Aramaic. In a few texts, third masculine plural forms are used with feminine plural subjects. The suffix -³ or -h (= -ā) is attested in most dialects of Middle and Late Aramaic. The suffix -n (= -ān) is attested in Jewish Palestinian Aramaic and in Jewish Babylonian Aramaic. The suffix -y (= -î) is attested in Samaritan Aramaic, and the suffixes -yn (= -ên) and -y (= -∅) are attested in Syriac. These last two forms may have developed by analogy to the second feminine plural suffix.
7. The second masculine plural suffix is also attested as -tm (= -tûm or -tôm) in Old Aramaic. The suffixes -tn and/or -twn are attested in all periods.
8. No forms with a second feminine plural suffix are attested in Old Aramaic. The suffixes -tn and/or -tyn are attested in all other periods.
9. The first common plural suffix -n³ always represents -nā and it is attested in all periods, but not in all dialects. The suffix -n is also attested in all periods. In earlier periods, it represents -nā written without a *mater lectionis*. In later periods, it represents -n. The form -nn (= -nan) is an alternate form only found in some dialects of Late Aramaic.

4.4.2.2 Imperfect tense

The imperfect is characterized by inflectional prefixes, and, in some forms, suffixes as well. In the *ʾAphʿel* and the three stems with prefixed *ʾt-*, a prefixed consonant replaces the *ʾ* of the stem. In the earlier forms of these stems with prefixed *h-* or *ht-*, the *h-* remains and the consonant is prefixed to it. In (17), forms which are almost exclusively attested in eastern Late Aramaic are listed below forms which are attested in western Late Aramaic and all earlier dialects. All letters represent true consonants except *y* in the second feminine singular suffix, and *w* in the second and third masculine plural suffixes, which are *matres lectionis*. Verbs with a final root consonant that was historically /w/ or /y/ attest slightly altered forms of the suffixes.

(17)	<u>Singular</u>	<u>Plural</u>
3rd masculine	y- . . . -∅ n- . . . -∅ or l- . . . -∅	y- . . . -n or -wn (= -ûn) n- . . . -wn (= -ûn) or l- . . . -wn (= -ûn)
3rd feminine	t- . . . -∅	y- . . . -n (= -ân) n- . . . -n (= -ân) or l- . . . -n (= -ân)
2nd masculine	t- . . . -∅	t- . . . -n or -wn (= -ûn)
2nd feminine	t- . . . -n or -yn (= -în)	t- . . . -n (= -ân)
1st common	ʾ- . . . -∅	n- . . . -∅

Note the following:

1. The vowel following the prefix of each of these forms is determined by the stem and/or the initial root consonant of the particular verb.
2. In Syriac, the third masculine singular and plural, and the third feminine plural prefix is *n-* rather than *y-*.
3. In Jewish Babylonian Aramaic, the third masculine singular and plural, and the third feminine plural prefix is *l-* rather than *y-*. This prefix also occurs sporadically in other dialects.
4. In Syriac, there is an alternate third feminine singular form with the suffix *-y* (= *-∅*).
5. In Samaritan Aramaic, the second feminine singular suffix is *-y* (= *-î*), and in Jewish Babylonian Aramaic this suffix is attested as an alternate form.
6. In the Samʿal dialect of Old Aramaic, the third masculine plural suffix is attested as *-w* (= *-û*).
7. In Samaritan Aramaic and Jewish Babylonian Aramaic, the second and third masculine plural suffixes each have an alternate form *-w* (= *-û*).

4.4.2.3 Jussive

In Old and Imperial Aramaic, quasi-imperative forms of the second and third persons, called “jussive forms,” are attested. These forms can be distinguished from the imperfect by the absence of the final *-n* in the plural forms as well as in the second feminine singular form. No distinction between the imperfect and the jussive is found in the other forms. By the Middle Aramaic period, no distinct jussive forms remained, although forms without the final *-n* were retained in some dialects either as the only imperfect form or as an alternate imperfect form (see §4.4.2.2).

4.4.2.4 Imperative

The four imperative forms are closely related to the corresponding second-person imperfect forms. They differ from the imperfect forms in two ways: (i) they lack the prefix of the imperfect form (in the *ʾAphʿel* and the three stems with prefixed *ʾt-* the *ʾ* is present); and (ii) in most dialects, they lack the final *-n* of the imperfect forms, and what remains is a *mater lectionis* indicating the final vowel. Verbs with a final root consonant that was historically /w/ or /y/ attest slightly altered forms of these suffixes.

(18)		<u>Singular</u>	<u>Plural</u>
	2nd masculine	-∅	-w (= -û)
	2nd feminine	-y (= -î)	-h or -ʾ (= -ā)

Note the following:

1. In Jewish Palestinian Aramaic, the final *-n* is retained in the feminine singular and the two plural forms.
2. In Samaritan Aramaic, the final *-n* is optionally retained in the feminine plural.
3. In Syriac, the feminine singular suffix *-y* represents *-∅*, as does the masculine plural suffix *-w*. There is also an alternate form of the masculine plural suffix with final *-n* (*-wn* = *-ûn*). Finally, the standard feminine plural suffix is not attested in this dialect. Instead the feminine plural suffixes *-y* (= *-∅*) and *-yn* (= *-ên*) are attested.

4.4.2.5 Infinitive

Each of the stems has a single infinitive form and this form is not inflected, although bound forms of the personal pronoun may be suffixed to it to indicate its subject or object (see §4.3.1.2). The infinitive is an action noun (*nomen actionis*) and, as such, it commonly occurs as the object of a preposition, especially the preposition *l* (see §5.3).

The *Pəʿal* infinitive has the historical form **maqtal* which becomes *miqtal* or *meqtal*, or remains *maqtal*, depending on the dialect and/or the first root consonant of the word. When a bound form of a personal pronoun is attached to one of these forms and the bound form begins with a vowel, the vowel preceding the final root consonant is reduced to /ə/ (e.g., *miqtəli*). Other, less common, forms of the *Pəʿal* infinitive are attested in a number of periods and dialects. For example, in Old Aramaic, a few infinitives without the prefixed *m-* are attested, and in Old and Imperial Aramaic a few infinitives with final *-at* or *-ût* or *-ā* (written with a *mater lectionis*) are attested. The form with final *-ā* resembles one of the common forms of the infinitives in the other stems and it is also attested in Jewish Palestinian Aramaic, Jewish Babylonian Aramaic, and Samaritan Aramaic. Also noteworthy is the form *miqtôl* attested in Jewish Palestinian Aramaic and Jewish Babylonian Aramaic.

The infinitives of the other stems are all formed in the same way. In every period and nearly every dialect, the infinitive has *ā* preceding and following the final root consonant (the second *ā* being written with a *mater lectionis*). In Syriac, the forms have final *-û* (written with a *mater lectionis*) rather than *-ā*. When a pronominal suffix is attached to any of these forms, *-ā* becomes *-at* or, more commonly, *-ût*, and *-û* becomes *-ût*. Sporadically throughout all periods of Aramaic, forms with final *-at* or *-ût* also occur without a suffix attached. In Old, Imperial, and Middle Aramaic, the infinitives of these stems do not have any kind of prefix, but in most dialects of Late Aramaic the prefixed *m-* of the *Pəʿal* stem is also found on the other stems (this prefix replaces the *ʾ* of the *ʾAphʿel* and the three stems with prefixed *ʾt-*). Jewish Babylonian Aramaic is one dialect that does not attest the prefix *m-* and,

furthermore, it attests an additional set of infinitive forms which are the common forms in this dialect. These forms have *ô* preceding the final root consonant and *ê* following the final root consonant (both vowels are written with a *mater lectionis*). These forms are also sporadically attested in Jewish Palestinian Aramaic.

4.4.2.6 *Composite tenses*

As early as the Imperial Aramaic period, “compound” or “composite” tenses are attested which consist of an active participle combined with a finite form of the verb *hwʾh* “to be.” An active participle in combination with a perfect form of *hwʾh* is used to express past progressive or habitual action, and an active participle in combination with an imperfect form of *hwʾh* is used to express future progressive or habitual action. By the Late Aramaic period, these tenses had become much more commonly used, and additional tenses had developed in some of the dialects. For example, in Syriac, the perfect of *hwʾh* is used with the perfect of another verb either as a pluperfect or as a stylistic variant of the perfect verb.

4.5 Adverbs

In earlier dialects of Aramaic, there are relatively few adverbs and adverbial modification was frequently accomplished by the use of the absolute forms of nouns and adjectives: for example, *š/sgyʾ* “much, very.” In some cases, the noun or adjective may have retained an old accusative suffix */-a/*. One possible example is *klʾ* “completely” a form of the noun *kl* “all, every.” A few examples of adverbs which are not related to nouns are: *tnh*, *tnn* “here”; *tmh*, *tmn* “there”; *kn* “thus, so”; and *ʾdn*, *ʾdyn* “then.”

In Late Aramaic, these adverbs were retained and others were added to the lexicon through the increased use of adverbial suffixes such as *-ʾyt* in Syriac, which can be suffixed to any adjective to form an adverb.

4.6 Prepositions

All prepositions may have bound forms of the personal pronouns suffixed to them (see §4.3.1.2), and some prepositions are attested in combination with the particle *z/d(y)* (see §4.7.4), forming subordinating conjunctions (§4.8.2). Morphologically, prepositions can be divided into three categories:

1. *Inseparable prepositions*: Three prepositions, *b* “in,” *l* “to,” and *k* “like, as” (the last only attested in a few dialects) are phonologically and graphically proclitic to the following word. The preposition *mn* “from,” in some of its forms, also falls into this category.
2. *Independent unstressed prepositions*: These prepositions are written as separate words but receive no stress and so are phonologically proclitic to the following word. Some common prepositions are *ʾl* “over, to,” *ʾm* “with,” and *ʾd* “up to, until.” Also included in this group are the preposition *mn* “from,” in some of its forms, and the marker of the direct object, *ʾyt* in Old Aramaic, *yt* in Imperial Aramaic, Middle Aramaic, and Jewish dialects of Late Aramaic (see §5.2.2).
3. *Independent stressed prepositions*: These prepositions are written as separate words and are not phonologically proclitic to the following word. Some examples are: *ngd* “opposite,” *qdm* “before, in front of,” and *ʾhry* “behind, after.”

4.7 Particles

4.7.1 Existential particles

The particle $\text{ʔ}t(y)$ “there-is/are” expresses existence. The particle $lyt(y)$ “there-is/are-not,” a contraction of the negative particle l' (see §4.7.2) and the existential particle $\text{ʔ}t(y)$, expresses nonexistence. Both of these particles may have bound forms of the personal pronouns suffixed to them (see §4.3.1.2).

4.7.2 Negative particles

The particle l' “not” is used to negate verbs, clauses and, rarely, nouns. The particle l “not” is used in prohibitions, which are expressed in Aramaic not by imperative verbs, but by jussive or imperfect verbs.

4.7.3 Interrogative particles

Numerous interrogative particles are attested in each of the Aramaic dialects, and the forms frequently vary from dialect to dialect. However, mn , $m'n$ “who,” and mh , m' “what” are constant throughout nearly all dialects. In texts influenced by Hebrew (the Biblical Aramaic texts and the Targums), a particle h is attested which may be prefixed to the first word of a clause to indicate that it is a question. In Jewish Babylonian Aramaic, the particles my and $\text{ʔ}w$ have this function.

4.7.4 The particle $z/d(y)$

This particle is spelled zy , z , or dy in earlier texts and d or dy in later texts (see §3.2.2). In some dialects and periods, it is phonologically and graphically proclitic to the following word. It is an extremely important particle which indicates that the following noun or clause stands in some subordinate relationship to what precedes it. It has five primary uses: (i) to express a “genitive” relationship between two nouns; (ii) to introduce a relative clause modifying a preceding noun; (iii) to indicate the object clause of a verb; (iv) to introduce direct or indirect speech; (v) to express purpose or result. This particle is also used in combination with prepositions to form subordinating conjunctions (see §4.8.2).

4.8 Conjunctions

4.8.1 Coordinating conjunctions

A number of coordinating conjunctions are attested. Most notable is the ubiquitous w “and, but, or” which is always phonologically and graphically proclitic to the following word. Also attested are the less common $\text{ʔ}w$ “or,” $(\text{ʔ})p$ “also,” and brm “but,” which are neither phonologically nor graphically proclitic to the following word. In Syriac, the conjunction dyn “but, and then,” equivalent to Greek $\delta\acute{\epsilon}$, is quite common.

4.8.2 Subordinating conjunctions

A number of prepositions are used with the particle $z/d(y)$ to form subordinating conjunctions: for example, mn “after,” d “until,” and k “when.” Other widely attested subordinating conjunctions are: $d\text{lm}'$ “lest, perhaps”; l' , $\text{ʔ}w$ “except that, however”;

bdyl d “so that, because”; *hn*, *ʿn* “if”; and *kl qbl* “because, on account of, inasmuch as.” In Syriac, the conjunction *gyr* “for, because,” equivalent to Greek γάρ, is quite common.

4.9 Interjections

Examples of the few attested interjections are: *ʿrw*, *hn*, *hʿ* “behold,” and *hy*, *ʿy*, *wy* “alas.”

4.10 Numerals

4.10.1 Cardinals

The cardinal numerals 1 through 10 are not inflected for number, only for gender and state, and they rarely occur in the construct and emphatic states. The numeral 2, in both the masculine, *tryn*, and the feminine, *trtyn*, forms, retains the Proto-Aramaic dual inflectional suffix *-yn*. In (19) the most common absolute forms of the numerals 1 through 10 are listed. The forms listed as “masculine” are those which modify masculine nouns, and those listed as “feminine” modify feminine nouns, despite the fact that the masculine forms of the numerals 3 through 10 are morphologically feminine, and the feminine forms are morphologically masculine (cf. §4.2.2 and §5.1).

(19)	<i>Masculine</i>	<i>Feminine</i>
1	ḥd	ḥdh, ḥdʿ
2	tryn	trtyn
3	tlth, tltʿ	tlt
4	ʿrbʿh, ʿrbʿʿ	ʿrbʿ
5	ḥmšh, ḥmšʿ	ḥmš, ḥmyš
6	šth, štʿ, ʿšth, ʿštʿ	št, šyt
7	šbʿh, šbʿʿ	šbʿ
8	tmnyh, tmnyʿ	tmnh, tmnʿ, tmny
9	tšʿh, tšʿʿ	tšʿ, tyšʿ
10	ʿšrh, ʿšrʿ, ʿsrh, ʿsrʿ	ʿšr, ʿsr

Note the following:

1. In these forms, final *-h* or *-ʿ* is a *mater lectionis*. Forms with *-h* occur in earlier dialects and forms with *-ʿ* occur in Late Aramaic, except Jewish Palestinian Aramaic and Samaritan Aramaic, which attest *-h*.
2. The final *-y* in the feminine form of 8 is a *mater lectionis* as is the medial *-y-* in the feminine forms of 5, 6, and 9, but not in the masculine form of 8. In that form, it is a consonant.
3. The medial *-y-* in both forms of the numeral 2 represents the Proto-Aramaic diphthong **/ai/*, which may have been retained in these forms as late as the Imperial Aramaic period. By the Middle or Late Aramaic period, this diphthong in this particular form had become */e:/* (see §3.3.2) in all dialects and so the *y* then functions only as a *mater lectionis*.
4. In some dialects, the masculine form of 6 is sometimes written with a prothetic *aleph* (see §3.6.5.3).
5. The numeral 10 is written with *š* in earlier dialects and with *s* in later ones (see §3.2.2).

The numerals 11 through 19 are inflected only for gender and consist of a combination of a form of the relevant digit (absolute, construct, or alternate) and an alternate form of

the numeral 10. The forms of these numerals vary across the Aramaic dialects, and in some dialects multiple forms of some of these numerals are attested.

The numerals 20, 30, 40, 50, 60, 70, 80, and 90 are not inflected. They each have a single form which is characterized by a suffixed *-in*. These forms are essentially equivalent to the masculine plural absolute form of the corresponding digit, except for the numeral 20 which is equivalent to the masculine plural absolute form of 10: for example, *tlāt* “3,” *tlātīn* “30”; and ‘*sar* “10,” ‘*asrīn* “20.”

The numeral 100 is a feminine noun and the numeral 1,000 is a masculine noun. They are fully inflected for number and state, their plural forms being used in combination with the digits 3 through 9 to form 300, 3,000, and so forth. The numerals 200 and 2,000 are formed using the dual inflectional suffix rather than the digit 2.

Bound forms of the personal pronouns can be suffixed to the numerals 2 through 10, though they are rarely attested.

4.10.2 Ordinals

There are distinct ordinal forms of the numerals 1 through 10. These forms have the same root consonants as the corresponding cardinals, except for the numeral 1, and, except for the numerals 1 and 2, they are characterized by the vowel *ī* preceding the final root consonant and the suffix *āy* following the final root consonant: for example, *tlāt* “3,” *tlītāy* “3rd.” In some dialects of Middle and Late Aramaic, the suffix is *ā’*. These numerals are adjectives and can be fully inflected for gender, number, and state, although they are most commonly attested in the absolute state. For ordinal numerals higher than 10, the corresponding cardinal numeral is used.

In some dialects of Late Aramaic, cardinal numerals with the prefixed particle *z/d(y)* are also used as ordinals: for example, *dtryn* “who [is] 2” = “2nd.”

5. SYNTAX

5.1 Noun phrase structure

Any noun or adjective can constitute a noun phrase by itself. An adjective which stands alone is interpreted as a concrete noun meaning “one who has the quality designated by the adjective.”

Adjectives can be either attributive or predicative (see §5.2.1). An attributive adjective stands in an appositional relationship to a noun. The adjective nearly always follows the noun and agrees with it in gender, number and state:

- (20) A. ’nš ṭb
 man good
 “a good man”
 B. ’nš’ ṭb’
 the-man the-good
 “the good man”

With the decreased use of the absolute state in Late Aramaic, the second example came to mean either “the good man” or “a good man” (see §4.2.2).

Demonstrative pronouns may be used either attributively or predicatively (see §5.2.1), but these uses cannot be distinguished by the form of the demonstrative itself, except in Jewish dialects of Late Aramaic in which an attributive demonstrative has a prefixed *h-* (this *h* is in addition to the *h* which is characteristic of some forms of the demonstrative pronouns in Late Aramaic; see §4.3.2.1). An attributive demonstrative may either precede or follow the noun it modifies, which must be in the emphatic state:

- (21) A. byt' dnh
 the-house this
 “this house”
 B. dnh byt'
 this the-house
 “this house”

Though the position of the pronoun is not fixed, one position or the other tends to be preferred in each dialect and/or time period. With the increased use of the emphatic state, the demonstrative came to be used in some instances as little more than a definite article (see §4.2.2).

The modification of nouns by cardinal numerals shows a number of idiosyncrasies which differ from dialect to dialect. There are a few features that all cardinal numerals show in all dialects.

1. The numerals 1 to 19, which are the only numerals that distinguish gender, must agree in gender with the noun they modify. However, the numerals 3 to 10 show “chiastic concord” – the morphologically masculine form modifies feminine nouns and the morphologically feminine form modifies masculine nouns (see §4.10.1).
2. Numerals other than 1 may either precede or follow the noun, and the noun is plural.
3. The numeral 1 nearly always follows the noun and, of course, the noun is singular.
4. The numerals 2 to 10 can occur in either the absolute or the construct state with a following noun, but there is no difference in meaning: for example, (i) *tryn* (absolute) *'nšyn*; and (ii) *try* (construct) *'nšyn* – both meaning “two men.”
5. The numerals 100 and 1,000 are nouns which may be modified by other numerals.

The ordinal numerals are adjectives and have the syntax of adjectives (see [20] above).

Modification of a noun by a prepositional phrase, an adverb, or a clause is accomplished through the use of the particle *z/d(y)* “who, which”; for example:

- (22) 'nš' dy bbyt'
 the-man who in-the-house
 “the man who [is] in the house”

The particle *z/d(y)* can be omitted in this construction, though this is extremely rare.

The relationships between two noun phrases that are expressed by the genitive case in some languages are expressed in Aramaic in two different ways.

On the one hand, genitive relationships can be expressed by a construct chain in which a noun in the absolute or emphatic state is preceded by one or more nouns in the construct state. The definiteness of all nouns in a chain is determined by the definiteness of the final noun:

- (27) A. ywḥnn hw' khn'
 John he the-priest
 "The priest is John."
 B. ywḥnn khn' hw'
 John the-priest he
 "John is the priest."

In Syriac and Jewish Babylonian Aramaic, the use of such pronouns was greatly expanded and they became used in all kinds of nonverbal clauses. In connection with this use, additional bound forms of the personal pronoun were developed (see §4.3.1.2).

5.2.2 Verbal clauses

In Aramaic, a finite verb form, by itself, can constitute a verbal clause. Since the verb is inflected for person as well as gender and number, no other element is necessary to constitute a clause.

A verbal clause may contain a subject noun (phrase), although the subject is commonly omitted in Aramaic if it is contextually identifiable. The verb agrees in gender and number with its subject. If a plural subject is of mixed gender, the verb is masculine. Not uncommonly, a singular verb will occur with a plural subject or a masculine verb will occur with a feminine subject. Such disagreements between subject and verb are much more commonly attested when the subject follows the verb; when the subject precedes the verb, the verb rarely disagrees with it.

An indefinite direct object of a verb is not specially marked in Aramaic. A definite direct object of a verb is sometimes marked in Old Aramaic by the particle *'yt* (see §4.6). A later form of this particle, *yt*, is sometimes used in Imperial Aramaic, Middle Aramaic, and Jewish dialects of Late Aramaic, often in imitation of the Hebrew particle *'t*. More commonly in these periods and dialects, and exclusively in all other dialects of Late Aramaic, the preposition *l* is used to mark the definite direct object of a verb. In Late Aramaic, a definite direct object often occurs both as a bound pronoun suffixed to the verb and as a noun (phrase) marked with the preposition *l*:

- (28) ktbh lktb'
 he-wrote-it the-book
 "He wrote the book."

Finally, the direct object of a verb may be omitted from a clause if it is identifiable from the immediate context.

The indirect object of a verb is also marked by the preposition *l* "to" which often leads to ambiguity. The indirect object may also be omitted from a clause if it is identifiable from the immediate context.

Two kinds of verbal adjuncts are particularly noteworthy. First, the agent of a passive verb is rarely indicated in most Aramaic dialects; however, in Syriac, the agent is more commonly expressed and when it is, the preposition *mn* marks it. Second, the absolute form of a noun or adjective can be used within a clause as an adverb rather than as a verbal complement. This use of nouns and adjectives is more common in earlier dialects and it decreases in later dialects as the number of true adverbs increases (see §4.5).

5.2.3 Subordinate clauses

There is no difference in the structure of a subordinate clause as compared with a main clause, except, of course, for the presence of a subordinating conjunction. However, this particle is sometimes omitted and the subordinate nature of the clause must then be inferred.

At times, a subordinate relationship exists between two formally coordinate clauses. There are two notable examples of such a relationship. The first is the conditional clause. In general, the protasis of a conditional clause begins with a conditional particle and will either precede or follow the apodosis to which it is subordinate. However, sometimes the protasis and the apodosis will be joined by the coordinating conjunction *w* (the so-called *waw* of apodosis) in which case, the protasis will always precede the apodosis; for example:

- (29) hn kn 'bdw . . . wšdqh yhwh lk
 if thus you-do . . . and-merit will-be to-you
 "If you act in this way . . . (then) you will have merit."

The second is verbal hendiadys, a construction in which two verbs are conjoined and share all verbal complements, but the first verb expresses a modification of the second rather than an independent action, as in the following:

- (30) 'sgy wqr' lhwn
 he-increased and-he-called to-them
 "He called to them often."

This construction tends to occur in dialects and texts which are influenced by Hebrew, where the construction is more common.

5.2.4 Word order

The word order of the elements in a clause is not grammatically fixed in Aramaic and varies in part by the place of any given clause within the larger discourse. However, there are certain orders which can be considered "standard" and appear to have no special discourse function. In most dialects of Aramaic, this standard order is VSO (verb, subject, object, indirect object), although a pronominal object or indirect object will frequently precede a nominal subject. In Imperial Aramaic, the verb is often the final element of the clause, a result of Akkadian influence. Verbal adjuncts usually follow verbal complements within a clause.

A subordinate clause usually follows, but sometimes precedes, all of the elements of the main clause to which it is subordinated, although there are occasional examples of a subordinate clause being followed by complements or adjuncts of the main clause. These examples are most common when the elements of the main clause are particularly long and/or the subordinate clause is particularly short. In general, though, each clause is a discrete unit.

Negative particles, interrogative particles, coordinating conjunctions, and subordinating conjunctions will nearly always occur as the first element of a clause. Two regular exceptions to this tendency are the Syriac particles *gyr* "for, because" and *dyn* "but, and then" which are postpositive, like their Greek counterparts γάρ and δέ.

5.3 Infinitival syntax

The infinitive has aspects of nominal syntax and aspects of verbal syntax. As a verb, the infinitive can occur with its own complements and adjuncts. As a noun, it and its associated

elements can occur as a complement or an adjunct of a verb. As a complement, it most commonly occurs as an object (usually marked with *l*), though its use as a subject, especially the subject of a nonverbal clause, is not uncommon. As an adjunct, it nearly always occurs as the object of the preposition *l*.

The functions of the infinitive as an adjunct are numerous and they parallel the functions of subordinate clauses. Frequently the same function can be expressed either by an infinitive or by a subordinate clause and there are even attestations of infinitives and subordinate clauses being conjoined with *w* “and.” Two of the more common functions of the infinitive, both with the preposition *l*, are purpose/result and “epexegetic” or explanatory. There are also a few isolated examples of the temporal use of the infinitive with prepositions such as *k* “as, when” and *b* “in, when.” This use of the infinitive was never common in Aramaic, and all of the examples of this use after the Old Aramaic period are in texts influenced by Hebrew, where the temporal use of the infinitive is quite common.

Because the infinitive most commonly occurs with the preposition *l* prefixed to it, this *l* became reanalyzed, apparently as early as the Imperial Aramaic period, as part of the infinitive form itself rather than as a preposition indicating the function of the infinitive within a clause. As a result, the word order of the complements of the infinitive became less rigid. In Old Aramaic, the infinitive precedes all of its complements, but in Imperial Aramaic and many dialects of Middle and Late Aramaic, the object of the infinitive commonly precedes it, even though the infinitive has *l* prefixed to it.

In dialects of Aramaic influenced by Hebrew and in the Old Aramaic Sefire texts, the infinitive is sometimes used in the same way as the Hebrew infinitive absolute, a use in which the infinitive occurs with a verb of the same root and stem to express the certainty of the action:

- (31) *mbn'* *bn'*
to-build he-builds
“He will certainly build.”

In this use, the infinitive never occurs with prefixed *l*.

5.4 Additional syntactic constructions

5.4.1 Possession

To express the notion of possession, the particle *'yt(y)* “there-is/are” or the verb *hw 'h* “to be” is used in combination with the preposition *l* “to.” The thing possessed is the subject of the verb or the particle, and the possessor is the object of the preposition:

- (32) *'yt* *l'nš'* *ksp*
there-is to-the-man silver
“The man has silver.”

5.4.2 Comparison

A comparative construction is formed by the use of a predicative adjective in combination with the preposition *mn* “from.” One of the compared objects is the subject of the clause, and the other is the object of the preposition:

- (33) ṭb ‘bd’ mn mlk’
 good the-servant from the-king
 “The servant is better than the king.”

5.4.3 Impersonal constructions

Two impersonal constructions are commonly attested. In the first, a masculine plural (or, less commonly, singular) active verb is used without an explicit or contextually understood subject to express the equivalent of a passive verb:

- (34) lk trdyn mn ’nš’
 you.OBJ. they-will-drive-out from humanity
 “You will be driven out from human society.”

In the second, a passive participle is used in combination with the preposition *l* “to” to express the equivalent of an active finite verb:

- (35) ṭwr’ bšyn lh
 the-mountains be-searched.PASS.PART. to-him
 “He searched the mountains.”

This construction can even be used with an intransitive verb which normally would not have a passive participle:

- (36) qym ly qdm šlyṭn’
 be-stood.PASS.PART. to-me in-front-of powerful-men
 “I have stood in front of powerful men.”

This construction was borrowed from Persian where it is commonly attested.

6. LEXICON

Because of its use as a lingua franca and its contact with many other languages throughout its history, Aramaic contains numerous loanwords in addition to its core lexicon of native words. Nearly all of these loanwords are nouns. Aramaic borrowed very few verbs directly from other languages, although sometimes denominative verbs were created from loaned nouns. In the Imperial Aramaic period, Aramaic acquired words from Akkadian, Persian, and Egyptian. In the Middle Aramaic period, Greek words were added to the lexicon and these additions increased in the Late Aramaic period. Latin words were also added in the Late Aramaic period, as were a second group of Persian words in the eastern dialects. Finally, Hebrew was a constant source of loans in Jewish dialects of Aramaic.

6.1 Akkadian

Most Akkadian loanwords are administrative or architectural terms such as *sgn* (< *šaknu* “prefect”), *pḥt* (< *pīḥātu* “governor”), *’grh* (< *egirtu* “letter”), and *trbš* (< *tarbišu* “court-yard”); though other terms such as *mlḥ* (< *malāḥu* “boatman”) and *šp* (< *āšipu* “enchanter”) are also attested (see Kaufman 1974). Another notable loanword is the Šaph‘el verb *šyzb* (< *ušēzib* “to save”). Akkadian loanwords are completely assimilated to Aramaic, both phonologically and morphologically.

6.2 Persian

Like Akkadian, many Persian loanwords are administrative terms, reflecting the Persian rule of the Near East, and these words are all completely assimilated to the Aramaic inflectional system (despite the fact that Persian is an Indo-European language). Some examples are: *prtrk* (< *frataraka* “governor”), *hmrkry* (< *hmārakara* “accountant”), and *ʾzdkr* (< *azdākara* “messenger”). A number of Persian words for very common items or concepts became the common Aramaic terms as well, for example: *ptgm* (< *patigāma* “word”), *rz* (< *rāza* “secret”), and *zn*ʾ (< *zana* “kind”); see Muraoka and Porten 1998.

6.3 Egyptian

Egyptian loanwords are very rare in Aramaic and are restricted to Imperial Aramaic texts from Egypt. These words do not become part of the broader Aramaic lexicon. For whatever reason, a considerable number of these words relate to boats, though commodities and other terms are also attested. Some examples are: *tqm* (< *tgm* “castor oil”), *qntḥntr* (< *qnḥ-ntr* “divine shrine”), *ṭp* (< *dp* “part of a ship’s mast”), and *šnt*ʾ (< *šnt* “linen robe”); see Muraoka and Porten 1998.

6.4 Greek

Greek loanwords, which total over two thousand from various dialects, represent the largest group of non-native words in the Aramaic lexicon. They are not always completely assimilated to the Aramaic inflectional system. Many loanwords show multiple forms which reflect Greek rather than Aramaic inflectional suffixes. In some cases, forms with Aramaic inflectional suffixes coexist with forms that reflect Greek suffixes. Some examples are: *ʾrtyqy*ʾ, *ʾrtyqws* (< αἰρετικός “heretic”), *ʾwsy*ʾ, *ʾwsy*ʾs (pl.) (< οὐσία “essence”), and *ṭks*ʾ, *ṭksyn* (pl.) (< τάξις “order, row”); see Krauss 1898–1899.

6.5 Latin

Latin loanwords are relatively rare and are mostly restricted to dialects of western Late Aramaic. They are similar to Greek loanwords in that they are not always fully assimilated to the Aramaic inflectional system. Some examples of Latin loanwords are: *dwn*ʾ*tyb*ʾ (< *donativa* “imperial gift”), *ṭblh* (< *tabula* “board, tablet”), and *qlnds* (< *kalendas* [acc.] “first day of the month”); see Krauss 1898–1899.

6.6 Hebrew

Hebrew loanwords are only attested in Jewish dialects of Aramaic, and their status in those dialects is not always clear. This uncertainty is a result, in part, of the similarity of Hebrew and Aramaic. Frequently, words in the two languages only differed by a single vowel or by an inflectional suffix. Also, Hebrew and Aramaic coexisted for a very long time in Jewish communities, and literate members of those communities would have been well acquainted with both languages. So, when a Hebrew word appears in an Aramaic text, it may be a loanword, or it may simply be a Hebrew word which is being used because the writer of the text could assume that the readers of the text would be acquainted with it.

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