

Etruscan

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1. HISTORICAL AND CULTURAL CONTEXTS

Etruscan, the language of the Etruscans, is attested between 700 BC and AD 50 in the area of northwest central Italy between the Arno, the Tiber, and the Tyrrhenian Sea. A few Etruscan texts come from other areas of Italy (especially from Campania and Emilia) and from Corsica, and isolated examples are known from Provence, Tunisia, Greece, and Egypt.

The most important source of Etruscan is the c. nine thousand inscriptions. The majority are funerary inscriptions, which often consist of no more than the name of the deceased. The second largest group is formed by the likewise mostly short texts on objects of daily life which indicate the owner or the manufacturer, or the object as a present or a dedication. Readily comprehensible are the labels inscribed next to figures in pictorial representations. The longer inscriptions are legal or ritual in character. The quasi-bilingual from Pyrgi (with a parallel text in Phoenician) reports the dedication of a cult building; the Perugine cippus records a contract about a piece of land; the clay tablet of Capua (which, with 300 preserved words, is the longest Etruscan inscription) preserves a ritual calendar; and the recently published (Agostiniani and Nicosia 2000) bronze tablet of Cortona seems to contain, as I think, a record of the treatment of tenant farmers after the sale of an estate rented by them. A calendar of rituals is also described in the one noninscriptional, and at the same time longest (1,500 words), Etruscan text – a linen book, which was torn up and used as wrappings on a mummy in Egypt and of which a good half is preserved (often called the Zagreb mummy after its present location). Interesting secondary sources for the lexicon and for textual interpretation are glosses (meanings of Etruscan words given by Latin and Greek authors; e.g., *aesar . . . etrusca lingua deus*, [“*aesar . . .* the Etruscan word for god”] Suetonius, *The Life of Augustus* 97) and loanwords in Latin (*satelles* “body guard” < Etr. *zat[i]laθ* “striker”).

The prehistory of the Etruscans has been disputed for two thousand years. Historians of the fifth century BC (Herodotus 1.94, Hellanicus in Dionysius of Halicarnassus 1.28.3–4) had claimed immigration from the Aegean; the orator Dionysius of Halicarnassus (first century BC) argued from the lack of related languages (but see below) for the autochthony of the Etruscans in Italy. Until now archeological arguments (Pallottino 1988:77–101) have been as poorly conclusive as linguistic.

In the course of their history (seventh to first centuries BC) the Etruscans never formed a centrally governed state. Rather they lived in separate city-states, which were first ruled by monarchs and which later, from around 500 BC, became oligarchies, and were tied to each

other through common cult festivals. The Etruscans who possessed citizenship, the Πάσεννα (Dionysius of Halicarnassus 1.30.3; < Etr. *rasna* “army, people”; see Rix 1984b), clearly made up only a part of the population. Beside these there was a rural population (Πενέσται, Dionysius of Halicarnassus 9.5.4), with personal freedom and economic independence, but without political rights and at least in part of Italic origin. Only in the third to second centuries was this section of the population incorporated into the Etruscan citizenry (Rix 1963:372–376).

Until the beginning of the fifth century BC the Etruscans were the dominating power in upper and central Italy. The defeat at Cumae by the Greeks in 474 BC marks the beginning of the Etruscan decline, which was accelerated by the invasion of the Celts in the fourth century BC. Politically the Etruscans became dependent allies of Rome at the beginning of the third century and two hundred years later Roman citizens. Shortly after the turn of the millennium, Etruscan ceased to be written; around which time the language would also have ceased to be spoken.

The syncope of unaccented internal vowels (see §3.5.2.4) – which around 480 BC changed the structure of many words and may well be connected with the social and political changes of the time – marks the break between *Archaic Etruscan* and *Late Etruscan*. Since the third century, and intensely in the first century, Latin influence is perceptible (orthography, morphology); incorrect texts appear. In spite of changes in the development of the sound system (both some regional changes [see §3.5.1] and fewer affecting the whole of the Etruscan area [see §3.5.2]), there is no evidence that distinct Etruscan dialects developed. This correlates with the political structure of Etruria and speaks for a relatively late spread of the language from a limited area.

To the same language family as Etruscan there belong only two poorly attested languages: Lemnian in the Northeast of the Aegean (sixth century BC; Agostiniani 1986) and Rhaetic in the Alps (fifth to first centuries BC; Schumacher 1992:246–248; Rix 1998). Lemnian and Rhaetic are so close to Etruscan that Etruscan can be used to understand them. The date of the common source language, *Proto-Tyrsenic*, can probably be fixed to the last quarter of the second millennium BC. The location of its homeland is disputed, however; possibilities include: (i) the northern Aegean, whence Proto-Etruscan and Proto-Rhaetic speakers would have come in the course of the Aegean migration westwards at the end of the second millennium (similarly Herodotus [1.94] identifies Lydia as the Etruscan homeland); (ii) central Italy, from which Proto-Lemnian speakers would have migrated eastwards and Proto-Rhaetic speakers northwards. A decisive judgment is not currently possible.

The lack of well-known related languages limits the comparative method's access to Etruscan to the area of loanwords (see §6). Moreover, in reading an Etruscan text, one must first attempt to determine a text's message from its context, and then to correlate the elements of content in the message with the structural elements in the text. Hereby glosses, loanwords, and above all texts in the better-known languages of the same cultural area (Latin, Greek, and so on) can help. From the results, a grammar and a lexicon can be constructed tentatively; these serve to test hypotheses and require continual amendment.

In this way a significant number of elements and rules have been identified more or less securely for the grammar and lexicon of Etruscan, and the meaning of a considerable number of texts and text fragments has been made clear. We are, of course, still far from a complete understanding of the Etruscan language, so that much of what is presented below still needs to be stated more precisely, amended, and corrected.

Table 7.1 The Etruscan alphabet of archaic inscriptions

Character	Transcription	Character	Transcription
A	a	𐌀	p
𐌁	c	𐌁	σ
𐌂	e	𐌂	q
𐌃	v	𐌃	r
𐌄	z	𐌄	s
𐌅	h	𐌅	t
𐌆	θ	𐌆	u
𐌇	i	𐌇	s
𐌈	k	𐌈	Φ
𐌉	l	𐌉	χ
𐌊	m	𐌊	f
𐌋	n		

2. WRITING SYSTEMS

The Etruscan writing system is an alphabet, which was created at the end of the eighth century BC, in several local variants, from an alphabet of West Greek origin; it was taught in scribal schools and is attested in inscriptions (see Table 7.1). The West Greek alphabet contained twenty-two letters derived from Phoenician characters plus four additional signs of Greek origin. This form of the Greek alphabet used X for the sequence /k/ + /s/ and Ψ for /k^h/. A few letters, for which Etruscan had no use, were not used in texts (“lettres mortes”: β, Δ, Ο and Phoenician *samekh* (𐤌) = East Greek Ξ).

The southern variant of the “working” alphabet used three different letters for the three phonetic variants of /k/: (i) *q* (𐌂; Greek *koppa*) before following /u/; (ii) *k* (𐌈; Greek *kappa*) before /a/; and (iii) *c* (𐌁; Greek *gamma*) before /i/ or /e/. This distribution, which continued and generalized an early Greek practice (*koppa* before or after /u/), was possible because Etruscan did not have voiced obstruents and so had no other use for Greek *gamma* (spelling /g/ in Greek). Of the two sibilant phonemes (see §3.1.1), the southern Etruscan script chiefly represents alveolar /s/ with a three-stroke *sigma* (𐌄) (in the far south X [= East Greek Ξ] is also used) and the less common palato-alveolar /š/ with Greek *san* (𐌁 = Phoenician *šade*; details in Cristofani 1972:469–473; see also Woodard 1997:161–188).

In the northern writing area of Etruria /k/ is at first written simply as *k*. *Sigma* and *san* were used in a way quite the reverse of that in the south – *sigma* represents palato-alveolar /š/, *san* represents alveolar /s/. Since in the north, alveolar /s/ before consonants had developed prehistorically to palato-alveolar /š/, this reversal may have arisen by the creator of the northern alphabetic variants beginning with words which he himself pronounced with /š/ but which in his southern model he found written with *sigma* (for instance *spura* “community”; Rix 1998). In the north in the later period, alveolar /s/ was occasionally written with *sigma* as a result of Latin influence. Otherwise the north–south opposition with regard to the writing of the sibilants was maintained up to the end of the Etruscan writing tradition.

In contrast to traditional transliteration based on graphemes, sibilant signs are herein transcribed phonemically (as in Rix and Meiser 1991): /s/ as *s*, if *sigma* is written, and as *š*,

if *san* is written; and /š/ with σ , if *san*, and as $\acute{\sigma}$, if *sigma* is written; likewise northern /s/ (which in certain contexts became [š]) is *phonemically* transcribed with *s*.

By 300 BC the inventory of the Etruscan alphabets had decreased significantly. In the sixth century the south gave up *X*, *q*, and *k*. In the north, in the fourth century, *c* won out for representing /k/, as it also did in the northeast by the middle of the third century. By around 250 BC only nineteen of the twenty-six letters of the “school” or teaching alphabet survived uniformly throughout Etruria.

Beside this loss of signs, there was only one addition to the alphabet. The labiodental fricative /f/ was initially represented by the grapheme cluster *vh* (Greek FH) or *hv* (HF) (out of which Latin *F* was simplified). Towards 600 BC in the north, where there are no local attestations of *vh/hv*, there occurs a sign 8 for *f* (Vn 1.1), which from around 500 BC was in general use in the south too. The origin of this sign, which is also used in sixth- to fourth-century Lydian, has not found a satisfactory explanation; the oldest attestation comes from a Sabellic inscription that dates from the end of the seventh century (Poggio Sommavilla; Rix 1996).

The oldest and latest sequences of the alphabet are contrasted in (1):

- (1) *Archaic school alphabet:* a b c d e v z h θ i k l m n š o p σ q r s t u ϕ š χ
Late “working” alphabet: a c e v z h θ i l m n p σ r s t u ϕ χ f

Note that in the northeast in the fourth to third centuries BC, instead of $\mathbb{W}$ for /m/ a simpler sign was used that looks like the numeral character for “5” Λ ; it was certainly chosen, because *ma χ* , the word for “5,” begins with /m/.

Of the early archaic texts some are written from left to right and some from right to left. Around 600 BC the direction from right to left became standard and was only reversed occasionally in the first century under Latin influence.

Most archaic texts employ *scriptio continua*; only towards 500 BC does word division become more common. This was normally achieved by the use of dots (one dot or two to three dots in a vertical arrangement); spaces alone occur infrequently. The syllabic punctuation used from 600 to 470 BC in the south, in which letters for vowels at the beginning of a syllable and for consonants at the end of a syllable are furnished with dots, is clearly a school rule borrowed from a syllabic writing system (see Rix 1968) and has limited functional value (see Wachter 1986).

The Etruscan numeral characters have the same shape as the Roman ones derived from them: | “1”; X “10”; $\wedge$ (Roman V) “5”; $\uparrow$ (Roman L) “50”; and $\mathbb{X}/\oplus$ (Roman C) “100”. The principle of “subtraction numerals” is also known from Latin: for example, XIX “19,” to which Etruscan *θun-em zaθrum-s* “-1 20” corresponds. The numeral X is at one and the same time a symbol for the outstretched fingers of two hands and a letter (š) for the initial sound of Etruscan *sar* “10.” In the latter it is possible to see an echo of the acrophonic numeral system of Greek (Π for πέντε “5” and so on). The system as a whole, however, is autonomous.

3. PHONOLOGY

Texts and forms cited in the following discussions can be found via the index in Rix and Meiser 1991. A meaning given in brackets (*zusle* [sacrificial animal]) indicates the semantic class of a lexeme, but this cannot be defined further.

Statements about Etruscan phonetics and phonology are based on the sound values of Etruscan letters in other languages: Greek, Phoenician (the source of Etruscan letters); and Latin, Sabellic, Venetic (for which, conversely, Etruscan letters are the source). Amendments and corrections are supplied by the spelling and spelling variations of Etruscan words; in

addition, typology is sometimes helpful. In a poorly accessible, small-corpus language such as Etruscan, however, many questions, especially concerning phonetics, cannot be answered or at least not explicitly so.

In the following discussion, the Archaic Period of the seventh to sixth centuries BC is described first; where appropriate, phenomena first attested in the Late Period, and occasionally prehistoric phenomena, will be included. Subsequently, general changes in the transition to and within the Late Period are described. Context-sensitive developments of little consequence are only treated (and then on an ad hoc basis) where they have relevance for morphology.

3.1 Consonants

3.1.1 Obstruents

The obstruents of Etruscan are phonemically voiceless. In word-initial position they were realised as fortes ([+ tense]) and internally as lenes ([− tense, −/+ son]). Latin transcriptions with *p, t, c, f* at the beginning of a word and *b, d, g* internally lead to this reconstruction (*Pabassa, Tidi, Pergomsna, Fraunal, Noborsinia* for *Papaša, Titi, Percumsna, Fraucnal, Nufrznei* [personal names]).

The *communis opinio* classifies the Etruscan obstruent phonemes essentially on the basis of the sound values of the corresponding Greek characters:

(2)	Graphemes			Phonemes		
Voiceless stops	<p>	<t>	<c/k/q>	/p/	/t/	/k/
Voiceless aspirated stops	<φ>	<θ>	<χ>	/p ^h /	/t ^h /	/k ^h /
Fricatives	<f>	<s> <(ś)>	<σ> <(ś)>	/f/	/s/	/š/

This model (2) leaves unconsidered <h> for the aspirate /h/ and <z> for the affricate /t^s/ (which is clarified by spellings such as *rutzs*). Nor does it account for the spelling variants <Ki>/<K> and the complementary distribution of <h> (word-initially) and <χ> (word-internally and word-finally).

The alternative model (3) overcomes these shortcomings, but suffers from meager typological support (see Rix 1984a; Boisson 1991):

(3)	Graphemes			Phonemes		
Unmarked stops	<p>	<t>	<c/k/q>	/p/	/t/	/k/
Fricatives	<f>	<θ> <s>	<σ> <χ/h>	/f/	/θ//s/	/š/ /x/
Palatalized stops	<φ>	<θ>	<z>	/p ^y /	/t ^y /	/t ^s / (<*/k ^y /)

The assumption of palatalized rather than aspirated stops allows the morphologically inexplicable alternation *Larθia* : *Larθa* (Late Etruscan *Larθial* : *Larθal*) in the genitive of the praenomen *Larθ* to be understood as orthographic variation. And under the simple assumption of a (prehistoric) development **[k^y] > [t^s]*, this affricate then fits into the system pattern. The phonetic similarity of aspirated and palatalized sounds makes the use of Greek aspirated stop symbols for palatalized stops understandable.

Beside the undisputed fricatives /f/ (labiodental), /s/ (alveolar) and /š/ (palato-alveolar; spelling variants *huśiur* : *huśur*, orthographic *Larθališa* for [-alša]), two further fricatives are herein identified: a velar /x/ and an interdental /θ/, written <χ> and <θ>. The fricative nature of /x/ is suggested by the word-initial variant [h]; and by the palatalization /xwa/ > [jwa] (<va>) of the plural suffix -χva (see §4.2.3.2) following a palatal. Evidence may also be provided by the spelling <χσ> in loanwords which contained [k^(h)s] originally (Greek

᾿Αλέξανδρος > *Aliḡsantre*, Proto-Italic **louksnā* > Umbrian **lōxsnā* > Etruscan *lusχnei* “moon”; Meiser 1986:170f.). There are two arguments for the letter *θ* also representing a fricative: (i) the letter occurs too frequently to be only the spelling of a palatalized stop (<φ> for [pʲ] and <z> for [tʰ] < **kʲ*/ are much less common); and (ii) the fricative dissimilation /xʷa/ > /kʷa/ following /s/ in the plural ending (§4.2.3.2). That two phonemes can be represented by a single letter is not unparalleled.

3.1.2 Sonorants

Etruscan has two nasal and two liquid phonemes; glides occur as allophonic variants of high vowels (see §3.2):

(4)	<i>Nasals</i>	m	n
	<i>Liquids</i>	r	l

Within a syllable, the nasals /m/ and /n/ sometimes join with a preceding vowel to create a nasalized vowel and are consequently no longer written (e.g., *Araθ* = *Aranθ*). In loanwords /-n/ is replaced by Etruscan /-m/: thus, *pruxum* from the Greek accusative προχούv “a vessel for pouring.”

Following the vowel /a/, the liquid /l/ shows a velar variant [ɭ], which is not written in archaic texts: *Larθia* Late Etruscan *Larθial*.

The palatalized sonorants /lʲ/, /rʲ/, /nʲ/, written <l(i)> <r(i)> <n(i)>, which occur infrequently and developed in part from geminates, should perhaps be reconstructed. Such an analysis would account for several disparate phenomena: (i) the umlaut in genitive *clens* and the spelling *cliniaras* (gen. pl.), from *clan* “son”; (ii) the variants *tinā*/*tinia* ([tinʲa]), “Jupiter” (as if from **tin-na*, derived from **tin* “day”; Cristofani 1997, 212); (iii) Late Etruscan *rasnea* “public” from **rasn(a)-na*, derived from *rasna* “people”; and (iv) *Melakre* and *Araθa* as the Etruscan renderings of the Greek names Μελέαγρος and Ἀριάδων.

3.2 Vowels

The Etruscan vowel system contains four phonemes:

(5)	/i/	/u/
	/e/	
	/a/	

In Archaic Etruscan, a rounded phonetic realization of /a/ as [ã] is suggested by the orthographic omission of [ɭ] after /a/ (see §3.1.2) in word-final position: for example, *Larθia* (/lartʲal/, see §4.2.2.2; Agostiniani 1997).

Etruscan shows the diphthongs /ei/, /ai/, /ui/, and /au/, as seen, for example, in *zuslei* “with (a sacrificial animal),” *Hamaiθi* “at Hamae,” *papui* “in [name of a month],” *lavtun* “family.” The diphthong /eu/ appears in Late Etruscan.

Before another vowel, the high vowels /i/ and /u/ are phonetically realized as consonantal allophones – the glides of, for example, *vacil* “then,” *avil* “year,” *ilucve* “on the (festival day),” *iane* “?,” *Hirminaia* [a family name].

No phonemic distinction of vowel length occurs in Etruscan (but see §3.5.2.5); vowels are lengthened phonetically when accented and in word-final position. The realization of nonaccented vowels shows some variation: for example, *mulvanice*/*mulvenece*/*mulvunuke* “gave as a present” (for detailed discussion, see de Simone 1970a:66–70).

3.3 Syllable structure

In the Archaic Period the syllabic nucleus was always a vowel. After unaccented vowels underwent syncope (see §3.5.2.4), however, both liquids and nasals could also serve as syllabic nuclei (e.g., *Vestrcna* < *Vestiricina*), as could sibilants in pronouns (e.g., *cs*, *pσl*). An Etruscan syllable can begin with a vowel or with one, two, or three consonants; a syllable can end in a vowel or in one or two consonants. Prehistoric apocope (see §3.5.2.1) and late archaic syncope (see §3.5.2.4) caused many previously open syllables to become closed.

3.4 Accent

The Etruscan word accent, not represented orthographically, was in the Archaic Period characterized by strong expiration, which led in the end to the loss of unaccented internal vowels (see §3.5.2.4). In native Etruscan words the accent falls on the initial syllable; however, from their use as enclitics, demonstrative pronouns acquire a generalized final accent (see §4.3.2). Foreign words which were borrowed from languages having phonemic vowel length appear to have carried the accent on the last word-internal long vowel: for example, *Zimite* < *Ziumite* (by syncope) < Greek Διομήδης; Greek γρῦμεῖα > Etruscan **crumī-na* > Latin *crūmīna* “money bag.” In other words, Etruscan speakers interpreted word-internal length as an indicator of accent.

3.5 Diachronic developments

3.5.1 Consonants

Changes in consonant quality are without exception limited by context or by region. Two such changes may be mentioned here: (i) the change of /f/ to /p/ before liquids or nasals (e.g., *θafna* > *θapna* “cup”; *Θuflθa* > *Θuplθa* [a theonym]); and (ii) the depalatalization of word-final /tʰ/ (deaspiration of /tʰ/?) in an area of the northeast (e.g., *Larθ*, *zilaθ* > *Lart*, *zilat*; see Rix 1989b:1300–1302). There is also an occasional alternation of the letters used to spell fricatives (aspirates ?) and stops (e.g., *zamθic* ~ *zamtic*, *Prexu* ~ *Precu*), though there is no justification for proposing a free alternation or a suspension of a phonemic opposition next to continuants (*pace* de Simone 1970a:175).

3.5.2 Vowels

Several distinct vowel changes can be identified.

3.5.2.1 Apocope

Inflectional phenomena, also attested for Lemnian and Rhaetic, allow the supposition that in the Proto-Tyrsenic period (see §1) word-final vowels were apocopated due to a penultimate accent (see Prosdocimi 1986:608–616): for example, nominative **seχi* > *seχ*, beside genitive *seχi-s* (see §3.5.2). Compare the later apocope of the final vowel of the enclitic: Archaic Etruscan *-ca* > Late Etruscan *-c* “and” (see §4.3.2).

3.5.2.2 Vowel lowering

From the beginning of the Late Period, the phonetic realization of vowels is lowered: (i) /u/ as [o]; cf. the Latin name of the Etruscan King *Porsenna* (500 BC) and Etruscan *Purze*; and (ii) /i/ as [e] before /a/ or /e/ in the following syllable, except when occurring after /tʰ/ < z >: *ica* > *eca* “this,” *Θihvarie* > *Θefarie* “Tiberius,” *ci* “3,” *firin* “?”, *zilaθ* “praetor.” Note also a

change which occurs in the quality of /a/: thus, *Luvcie* instead of *Laucie* for Italic *Loukios*. See Agostiniani 1986:27–28.

Beyond the aforementioned lowering of /i/ to [e], intervocalic /i/ is lost (cf. §3.5.2.4), except in the northwest, as in the genitive of female names: Archaic Etruscan *Apucuiā*, Volterrān *Felmuia*, but otherwise *Velua*.

3.5.2.3 Vowel raising

Around 400 BC /ai/ becomes /ei/, and in the fourth century /ei/, whatever its origin, becomes /e/ before /u/ and word-finally: for example, *Kaikna* (fifth/fourth century) > *Ceicna* (third century; a family name); *Aivas* (fifth/fourth century) > *Eivas* (fourth/third century) > *Evas* (third century), from Greek Αἴας; Archaic Etruscan *Nuzarnai*, Late Etruscan *Peθnei*, *Peθne* (female family names); in final position /ei/ is for the most part restored by analogy.

3.5.2.4 Syncope

Unaccented word-internal vowels disappear between 500 and 470 BC, even in closed and word-final syllables: for example, *turuce* “sacrificed” > *turce*; *Larecena* > *Larcna* (family name); *Scanesna* *Scanasna* > *Scansna* (family name); *Aranθ* > *Arnθ* (praenomen). As a result of this syncope, consonantal sonorants become syllabic between consonants: for example, *Spuriena* ([spuryena]) > *Spurina* (family name), *muluvene* > *mulune* “gives as a gift”; *Leθamsul* > *Leθnsl* (theonym); *vacil vacal* > *vacl* “then.” Syncope is not simply a graphic phenomenon (*pace* Pfiffig 1969:53–63), but a phonetic one. The proof is provided by cases in which an anaptyctic vowel later appears as a secondary consequence of syncope; for example, *Hercele* for *Hercle* < *Hρακλῆς.

Morphologically relevant vowels are preserved analogically or restored: for example, genitive *Aules* instead of **Auls* by analogy to the nominative *Aule*; preterite *lupuce* after perfect *lupu* “has died.” A vowel before final /-n/ is not syncopated (e.g., *Turan* “Venus”), because it was nasalized and thereby phonetically lengthened (see §3.1.2). In some cases in which the expected syncope has not occurred, no compelling reason can be given for its absence – as in the /a/ preserved in *zilaθ* “praetor.”

3.5.2.5 ê of Cortona

The new text of Cortona (see §1; about 200 BC) has shown that the inverted ∃ <ê>, used only at Cortona, represented a phoneme different from the one written with normal <e>. This /ê/ seems to be recent: some examples go back to diphthongs (clitic -σνê < *σναι), others to compensatory lengthening (prenoun *Vêl* < **Vell* < **Venl*, syncopated from *Venel*); for some there is no motivation. The rest of Etruria ignored this phenomenon at least in the script (Agostiniani[-Nicosia] 2000: 47–52).

4. MORPHOLOGY

4.1 Word formation

The usual process of word formation in Etruscan is suffixation. Less commonly, word formation may also be accomplished by, in essence, a phonological modification of morphemes. Less productive still is prefixation. Suffixes can be added both to the *root*, a formant that cannot be analyzed further, and to the *base*, a formant that is already suffixed.

Word-building via apparent phonological modification is commonly the result of phonological processes occurring at morpheme junctures, obscuring the boundaries. For example,

the joining of morphemes may create diphthongs which then undergo monophthongization, as in the locative *zusleve* < *zusleva-i*; compare the nominative *zusleva* (see §4.2.2.3). Less common is distant vowel assimilation, or *umlaut*, as in, for example, genitive *clens* < **klania*; by analogy the ablative is *clen* rather than the expected **clan* < **klania*, beside nominative *clan* < **klania* (cf. gen. pl. *cliniaras*).

A possible Etruscan prefix is *e-* in *eprθnevc* (title of an official) beside *purθne*, *purθ* “first” (?); also in **etrs-* (Latin *Etrus-ci*) beside **turs-* (Greek Τυρσ-ηνοί, Umbrian *Turs-com*, Latin *Tusci*). As the precise meanings of these words are not clear, it is impossible to determine the function of the prefix. The prothetic vowel *e-* in *esl-z* “twice” and *eslem* (“-2” = “8” in numerals), from *zal* “two,” is phonetically motivated.

Typologically, Etruscan is not uniform. Many of its morphological processes are agglutinative. In the noun, for instance, number and case are each marked by their own suffixes: *clan* “son,” genitive *clen-s*, plural *clen-ar*, genitive plural *clinii-ar-as*. Certain cases are not formed from the base, but from the genitive, as with the “pertinentive” *clen-ar-as-i* or the ablative *Arnθ-al-s* (see §4.2.2.4); here the genitive is treated like an adjective.

Other morphological processes, however, are more fusional in nature. These generally result from sound changes which have obscured an agglutinative structure. Thus, locative plural *zusleve* beside nominative plural *zusleva* (from *zusle* [a sacrificial animal]) can be traced to a form *zusle-va-i*, in which the locative suffix *-i* has been added to the plural suffix *-(χ)va-*. The allomorphy *-s/-as/-es/-is/-us/-ls* in the genitive I arose as a consequence of the apocope of final vowels (see §3.5.2.1); earlier this genitive was uniformly characterized by **-s* (< **-si*?).

The *-s/-l* genitive allomorphy (see §4.2.2.2), in contrast, cannot be a consequence of sound change, but is a morphophonemic phenomenon. *Praenomina* (first names in the Etruscan naming system), in which *-s* and *-l* are distributed according to the final phoneme of the base form, reveal the nature of this allomorphy: following dental obstruents (*/s/*, */θ/*) *-l* occurs, otherwise *-s*; thus, *Laris*–*Larisal*, *Larθ*–*Larθal*; *Aule*–*Aules*, *Vel*–*Velus*. As for appellative pairs such as *cilθ-ś*: *cilθ-l* [locality], *suθi-ś*: *suθi-l* “grave,” no functional difference has yet been distinguished. The distribution seen in family names – such as genitive *Velimna-ś* for men: *Velimna-l* for women – is a relatively late development that came into being around 700 BC with the appearance of the Etruscan system of family nomenclature. The *-s/-l* allomorphy can only have arisen as a result of syncretism, perhaps through the merging of a genitive in *-l(a)* with an ablative in *-s* (see §4.2.2.4), and does not argue against an agglutinative morphology.

4.2 Nominal morphology

Both nouns and adjectives are here treated under the rubric of nominal morphology.

4.2.1 Gender

Unlike the Indo-European languages with which it was in contact, Etruscan has no grammatical gender (see Fiesel 1922). The female sex is indicated by a suffix, either *-θa*, *-θu*, or *-i*: for example, *lautni* “freedman”: *lautni-θa* “freedwoman”; *Racvu* [man’s name]: *Racu-θu*, *Rakv-i* [women’s names]. The suffix *-i* (< Italic *-ī* < **-ih₂-*) was borrowed from Italic and was used under Italic influence with family names that were in origin adjectives: for example, *Tarna-i*.

4.2.2 Case

Etruscan nouns and adjectives are marked for case and number (singular and plural; see §4.2.3). The following cases have been identified: nominative-accusative, genitive, locative, ablative, and “pertinentive.”

4.2.2.1 Nominative-accusative

The nominative-accusative is the base form of the nominal paradigm and indicates the subject (*mini zinace Aranθ* “Aranth produced me”); the predicate (*ca suθi* “this [is] the grave”); the direct object (*cn suθi ceriχunce* “he erected this grave”); and the *nominativus pendens*. It is governed by the infrequent postposition *-pi* “?”: for example, *Aritimi-pi* “Artemis.”

4.2.2.2 Genitive

The *genitive I* is formed with one of the allomorphic suffixes *-s*, *-as*, *-es*, *-is*, *-us*, *-ls* (see Rix 1989a). After vowels *-s* occurs; after consonants no morphophonemic rule is apparent. Following prehistoric apocope (see §3.5.2.1) the original word-final vowel of the base was interpreted as part of the ending and was generalized in a number of semantic groups: *-as* in the *-r*-plurals (see §4.2.3.1); *-us* in individual names (*Velθur-us*, *Θanacvil-us*); *-ls* in the south for multiples of ten and *-us* in the north (*cealχ-ls* : *cealχ-us* “30,” syncopated from **-χvis*; Lemnian *σialχv-is*). Not belonging to any such semantic groups are, for example, *clen-s* “son,” *meθlum-es* “city,” *seχ-is* “daughter.”

The suffix of the *genitive II* (see Nucciarelli 1975) is *-l* < **-la* (see §4.2.2.4), as seen in, for example, *spura-l* “community,” *pui-l* < **puia-l* “wife,” *murθ-l* “urn,” *culs-l* “gate.” In proper names velar [t] is mostly written *al* (Archaic Etruscan *a*): for example, *Larθi-al*, *Larθi-a*, *Velu-al* < **Velui-al*.

The genitive is used to indicate (i) nominal dependency (chiefly possession); (ii) the addressee in dedications (*itun turuce Venel Atelinas Tina-s cliniiar-as* “Venel Atelinas dedicated this to the sons of Zeus”) and ordinals (*huθ-iś zaθrum-iś* “the 26th”).

4.2.2.3 Locative

The suffix of the locative is *-i*: Archaic Etruscan *zusle-i* > Late Etruscan *zusle*, plural *zusleve* (< *-e-χva-i*) “with [sacrificial animal]”; *zilc-i* “in the praetorship.” When occurring after a vowel, this *-i* suffix escaped the prehistoric apocope (see §3.5.2.1) and was later extended to base forms ending in a consonant.

The locative indicates (i) sojourn in place and time (e.g., *spure* < *-a-i* “in the community”; *uóil-i* “during the day”: *uóil*); (ii) motion to a place (e.g., *celi* < *-le-i* “to the earth”); and (iii) instrument (e.g., *turza-i* “with [tool of sacrifice]”).

For the purpose of clarifying syntactic-semantic functions, enclitic postpositions are utilized: *-ri*, indicating a benefactive notion (*meθlumeri* < *-e-i-ri* “for the city”); and *-θi*, *-θ*, *-te*, *-ti*, indicating location (e.g., Archaic Etruscan *Hama-i-θi* “at Hamae”; Late Etruscan *spure-θi* < *-a-i-θi* “in the community”; *velθite* < *-a-i-te* “to the earth”; *lauχumneti* < *-na-i-ti* “in the royal house”). These postpositions can also substitute the locative suffix *-i*: for example, *cela-ti* “in the burial chamber.”

4.2.2.4 Ablative

The ablative occurs in three forms (see Rix 1984a:226–227). The *ablative I* is formed with the suffix *-s* and palatalization of the preceding vowel: for example, Archaic Etruscan *lavitunu-is* “family,” *turza-is* (a sacrificial offering); Late Etruscan *faše-iś* “porridge,” *Apatru-is*, *Tarnes* < *-na-is*, *Tetnis* < *-nie-is* (family names). The *ablative II* is formed with the suffix *-las* > *-ls*: for example, Archaic Etruscan *Veleθna-las*; Late Etruscan *Visna{fia}-ls* (family name), *Arnθ-als* (praenomen).

It is possible that originally the ablative was formed by the addition of a suffix *-s* to the genitive suffix. In the case of the ablative II, it would have been attached to the

ending *-l* of the genitive II, which, prior to the prehistoric apocope, must have been **-la* (cf. §4.2.2.5). In the case of the ablative I, the suffix would have been added to the *-s* of the genitive I, whereupon */ss/#* was shortened with palatalization of the preceding vowel.

The rare *ablative III* has no ending and its morphology is therefore identical with that of the nominative-accusative: for example, *faše* “porridge,” *Ravnθu* (praenomen) (an exception is *clen*, nom.-acc. *clan*; see §4.1). This homomorphy arose through a sound change that we are not able to reconstruct. The combination of the endless ablative III forms with the ablative II suffixed forms (in *-als*; *Tute Arnθals*) has led to the suffix of the latter being incorrectly interpreted as a group inflection.

The ablative expresses (i) the agent in passive constructions (e.g., *anc farθnaxe Tute Arnθ-als Haθli-als Ravnθu* “which was *-?-ed* by Arnth Tute and Ravnthu Hathli”), (ii) origin (e.g., *paci-als* “[stemming] from Paci”); and (iii) the shared whole (partitive: *šin aiser faše-is* “take, O gods, from the porridge”). The ablative is governed by the postposition *ceχα* “because of”: for example, *clen ceχα* “because of a son.”

4.2.2.5 Pertinentive

The two constructions of the so-called pertinentive case are likewise based on genitive forms. The *pertinentive I* ends in *-(V)si*, the *pertinentive II* in *-(a)le*. An originally uniform morphology can be hypothesized by proposing that the locative suffix in *-i* (see §4.2.2.3) was added to forms of the two genitives. An original structure **(a)la* (see §§4.2.2.2; 4.2.2.4) is proposed for the suffix of the genitive II; the diphthong in **(a)la-i* developed prehistorically to *-(al)e*. At times the local postposition *-ti/-θi* (see §4.2.2.3) substituted for the locative suffix *-i*: thus, Archaic Etruscan *Misala-la-ti* “in the [area] of Misala” (with genitive II in *-la!*); *Uni-al-θi*, Late Etruscan *Uni-al-ti* “in the [temple] of Juno.”

The pertinentive often functions simply as a genitival locative: for example, *spureθi apa-s-i* “in the community, in [that] of the father”; *zilci Ceisinie-s-i V(elu-s-i)* “in the praetorship of V. Ceisinie”; *Uni-al-θi* “in the [temple] of Juno.” In several syntactic constructions, however, this use is not obvious. For instance, in *mini Spuriaza [Teiθu]rnas mulvanice Alsaiana-s-i* “Spuriaza Teithurna gave me as a present (into the sphere of =) to Alsaiana,” the pertinentive signifies the addressee (that is, functions as a dative); on the stamp marked *Serturie-s-i* “in [the workshop] of Serturie,” it denotes manufacturer (the agent, that is, it functions as an ablative). Expressions of the type *mi mulu Kavie-s-i* “I [am] a present for/from Gavie” are ambiguous.

4.2.3 Number

Etruscan nominals are marked for two numbers, singular and plural; *Tinas cliniiaras* “Zeus’ sons” (gen.) does not demonstrate a dual (*pace* Agostiniani 1985; *-ia-* belongs to the stem).

Etruscan has two suffixes for forming the plural: (i) *-r* with the variants *-ar*, *-er*, *-ir*, *-ur*; and (ii) *-χva* with the variants *-cva* and *-va/-ua*. The variants *-ar*, *-er*, *-ir*, *-ur*, like the corresponding variants of the genitive (see §4.1), arose as a consequence of the stem-final vowel, apocopated in the suffixless base form, being preserved (or transferred by analogy) before the suffix. The word endings *-ras* and *-rasi* in the genitive and pertinentive demonstrate that *-ra-* was the original form of the plural suffix. The variants of *-χva* ([x^wa]) are phonetically conditioned.

The *-r*-plural is predominantly, though not exclusively, used with nominals denoting human referents ([+ hum]). The *-χva*-plural occurs solely with nonhuman referents ([− hum]); see Agostiniani 1993:34–38).

By the side of numerals (Agostiniani 1993:38) the $-\chi va$ -plural is first used in the Late Period, and its use is not consistent: for example, *zusle-va-c mac* “and five *zusle*-sacrificial animals,” but *avils σas* “of six (σa) years.” Otherwise the nominative-accusative or the genitive singular is used: Archaic Etruscan *ci zusle* “three *zusle*-sacrificial animals”; Late Etruscan *muroσ-l XX* “20 urns.” The use of the $-r$ -plural does not show this sort of optionality: thus, Archaic Etruscan *ki aiser* “three gods,” Late Etruscan *ci clenar* “three sons.”

4.2.3.1 The $-r$ -plural

This plural suffix, having the semantic characteristic [+ hum], is used with nouns such as the following (i): *ais-er*, genitive *ais-er-as*; from *ais* “god”; (ii) *clen-ar*, genitive *clinii-ar-as*, pertinative *clen-ar-as*; from *clan* “son”; *papals-er*; from *papals* “grandchild,” *θanó-ur*; from *θanó* “merciful” (referring to gods). Worthy of note is *tušurθi-r* “married couple,” literally “those on the two cushions,” formed from the locative plural *tuš-ur-θi* “on the cushions.” Among $-r$ -plural substantives having the semantic characteristics [– hum, – anim] are the following: (i) genitive *tiv-r-s/tiu-r-as*; from *tiu* “month” (gen. *tiv-s* “moon”), (ii) locative *tuš-ur-θi*; locative singular *tuš-θi*; from *tuš-θi* “cushion”; (iii) locative *ramu-r-θi*; locative singular *ramu-e(θ)* [a vessel].

Distributive numerals are formed like $-r$ - plurals, although they do not necessarily accompany substantives which are [+ hum]: for example, *θu* (stem *θun-*) “one,” in *tun-ur clutiva* “a *cluti*-vessel each” (Pe 5.2); further consider *zel-ur*, from *zal* “two”; *ci-ar*, from *ci* “three.”

In family names and in the formation of collectives $-(V)r$ is replaced by $-\theta ur$ (having the original meaning “descendant?”): for example, *heva Marcniθur Pupeinal* “all Marcni [children] of Pupeinei”; *maru paχaθur-as* “priest of the Bacchantes.”

4.2.3.2 $-\chi va$ - plurals

Plurals made with this formant having the semantic characteristics [– hum, – anim] include the following: *caper-χva*, from *caper*, a vessel; *θesn-χva*, from *θesan* “morning, day”; locative *sren-χve*, from *sren* “picture”; *culś-cva*, genitive singular *culś-l* “gate”; *luθ-cva*, from *luθ* “altar”; *hupniva*, from *hupni* “burial couch”; *zuθeva*, from *zuθe*, a cult vessel; *murzua*, from *muroσ* “urn.”

Two such plurals show the semantic qualification [– hum, + anim]: (i) *fler-χva* (locative *flerχve*); from *fler* “victim,” which is introduced in a sacrificial prayer as *zivas* “living” and is then *θezine* “to be slaughtered”; and (ii) *zusleva* (locative *zusleve*, ablative *zuśleveś*), from *zusle*, a kind of sacrificial animal. The use of the $-r$ -plural suffix was consequently not (or no longer) determined by the feature [+ anim], but by [+ hum]. There is no valid example of a $-\chi va$ -plural with the qualification [+ hum]: *marunuxva* is derived from *marunux* “office of a *maru* (a cult official),” not from *marunu* “being *maru*” (Agostiniani 1997:4–9, Maggiani 1998:109–113).

4.3 Pronouns

The pronominal paradigm is identical to that of the noun except that the accusative is a separate category, distinct in form from the nominative. The accusative suffix $-ni$ is only (after /i/) preserved in Archaic Etruscan *mi-ni* “me,” and before enclitic $-m$ in the archaic adverb *ita-ni-m* “just as” (< “*but this”). Otherwise, as a consequence of the prehistoric apocope (see §3.5.2.1), the suffix became $-n$. Plural forms are rare; only “articulated” forms are certain: nom. *sani-σva* ([sagniśwa]), built from *sa(c)ni-σa* (see §5.2) with the plural suffix $-\chi va$, gen. *Larisali-óvla* (Cortona, see 1), “pert.” *Larθiali-óvle*.

4.3.1 Personal pronouns

The following pronominal lexemes are known:

(6)		<i>First person</i>	<i>Second person</i>
	<i>Nominative</i>	mi	*una
	<i>Accusative</i>	mi-ni	un < *una-n
	<i>Locative</i>		une < *una-i

4.3.2 Demonstrative pronouns

There are three demonstrative pronouns in Etruscan, among which *σa* only occurs in enclitic position (see §5.2)

The demonstrative pronouns *ica*, *ita* > *eca*, *eta* (see §3.5.2.2) > *ca*, *ta* are at times used as independent words, usually positioned before those words they determine, and at times as enclitics, fusing with the words they determine (serving as “articles”; see §5.2). The following forms are known (those marked with superscript *i* are only attested as an “article”):

(7)	<i>Archaic</i>	<i>Late</i>		<i>Archaic</i>	<i>Late</i>	
	<i>Nominative</i>	ica, ika-	eca	ca	ita	eta ta
	<i>Accusative</i>	ican, ikan	ecn	cn	itan	etan tn
	<i>Genitive I</i>	- ⁱ cas	ecs	cś	- ⁱ tas	etas tś
	<i>Genitive II</i>			cla	- ⁱ tala, - ⁱ tula	- ⁱ tla
	<i>Locative</i>			cei	(tei?)	tei
	<i>Ablative</i>			ceś (cś?)		teiś (?)
	<i>Pertinentive</i>				- ⁱ tale	- ⁱ tle
	<i>with</i>		[ecl]θ, eclθi	clθ, clθi	- ⁱ talte, - ⁱ tultei	
	<i>postposition</i>					

The final-syllable accent (see §3.4) reveals itself in the preservation of final *-a* in the genitive II, in the syncope of unaccented /a/ in the penultimate syllable (e.g., *-ⁱtala* > *-ⁱtla*), and in the potential disappearance of the word-initial vowels.

The pertinentive demonstrative is used to designate place and time: for example, *clθ σuθiθ* “in this grave”; Archaic Etruscan *iove-itule*, Late Etruscan *eśv-itle*, place or time of a ritual. The locative forms are, it seems, only instrumental in sense: e.g., *tesne rasne cei* “according to this state regulation” (?).

Archaic Etruscan *itunia* (< **ita-n(i)-na*), *itu-na*, *eta-na-l*, Late Etruscan *ca-n-l*, *c-n-l* are accusative and genitive II adjectives which are derived from an accusative pronoun by means of a formant *-na*; the meaning seems to be the same as that of the pronoun itself.

4.3.3 Relative/interrogative pronoun

A pronoun attested by the forms of (8) functions as an interrogative (*ipas ika-m* “but whose is this?”) and as a relative (see §5.5).

(8)	<i>Nominative</i>	ipa	
	<i>Accusative</i>	inpa	
	<i>Genitive I</i>	ipa-s	Archaic Etruscan
	<i>Genitive II</i>	ipal	Archaic Etruscan
	<i>Genitive II</i>	epl	Late Etruscan
	<i>Locative</i>	ipei, ipe	
	<i>Locative</i>	inpein	Archaic Etruscan
	<i>with postposition</i>	ipe-ri	

This could be a derivative of the relative pronoun *in* (see §4.3.4). On the basis of *in-pa*, interpreted as accusative, a stem *i-pa* could have been abstracted and inflected nominally.

4.3.4 Relative pronouns

The relative pronouns *an* and *in* (also *anc*, *inc* with *-c* “and”) are only attested in nominative and accusative function. Their use is conditioned by the quality of the antecedent: [+hum] requires *an*, [-hum] *in* (Agostiniani and Nicosia 2000:100). The contexts in which the reduplicated *ananc*, *ininc* occur, which (like Latin *quisquis*) could be generalizing, are unclear.

4.3.5 Indefinite pronoun

A pronoun expressing an indefinite quantity (cf. Latin *aliquantus*) is seen in nominative *heva*, accusative *hevn*, genitive *hevl*, *heul* (Steinbauer 1999: 95. 427).

The recently published archaic text *ein θui ara enan* “*not here do/put anything” contains the accusative *ena-n* of an indefinite pronoun. Its genitive *ena-ś* ‘of anything’ in formulas like *spureri meθlumeric enaś* of the Zagreb mummy text (see §1) declares the authorities *spura* ‘community’ and *meθlum* ‘town’ as not specified for a certain community (Benelli 2001:221).

4.4 Verbal morphology

There are fewer attestations of verbal than nominal forms. Thus far, study in this area has been almost exclusively focused on interpreting texts and not on clarification of points of morphology and syntax (but see now Wylin 2000). The following section must therefore be considered highly provisional in nature.

The verb paradigm is of simple structure, characterized by only a single dimension. Verbal categories are not combined with one another, but are each formed directly to the root or the base. Speakers are not designated (i.e., there is no category of person), nor is there a number distinction. The absence of person and number distinction is revealed, for example, by the following pairs:

- (9) A. Turis mi une *ame*
 “Doris *I am* (= I belong) to you,” beside
 [t]eurat tanna la rezus *ame*
 “(The) judge thereby *is* Larth Rezu”;
 B. mi Araθiale *ziχuxε*
 “I am *written* from/for Aranth,” beside
 iχ ca ceχa *ziχuxε*
 “*As this is written* above”;
 C. Araθ Spuriana σ[uθ]il *hecece* (see 4.4.1.2)
 “Aranth Spuriana *set up* the burial construction,” beside
 Arnθ Larθ Velimnaś Arzneal huóiuρ óuθi acil *hece* (see 4.4.1.2)
 “Aranth [and] Larth Velimna, children of Arznei, *set up* grave [and] furnishings”

Thus far, the following verbal categories have been identified: (i) present and preterite tenses, with the latter showing a distinction of active and passive voice; (ii) imperative, subjunctive, and necessitative moods, aside from the indicative. Various verbal nouns are also identified.

Formation of denominative verbs is quite productive. Moreover, many nouns serving as *base forms* (see §4.1) can be analyzed as verbal nouns, derived from simpler verbal forms by the attachment of various suffixes: for example, (i) *-u* (see §4.4.3.1), giving *lup-u* “died,”

mul-u “gift,” *ziχ-u* “writer, writing”; and (ii) *-θ* (see §4.4.3.2), providing *trin-θ* “speaking, speaker,” *sval-θ** “who has lived” (not yet analyzable as verbal nouns are *zilaχ** > *zilχ* “praetorship,” *acas*, “a sacrifice”). There thus arise whole chains of alternately nominal and verbal derivatives.

The most important denominative suffix is *-ane* (the quality of the vowels is uncertain): thus, *mulu-ane** “to make a present of,” *ziχu-ane** “to write,” *acilu-ane** “to manage, get done,” *acna-ane** “to make into a possession, get.” The suffix *-ie* (Late Etruscan *-i*), which is frequent in verbal bases, may also be denominative: for example, *vat-ie** “wish,” *θez-ie** “slaughtering.”

As there are no personal endings, it is not always easy to distinguish nominal from verbal forms. Roots, that is, monosyllabic segments that (unlike bases) cannot undergo further analysis (e.g., *ziχ* “scratch, write”; *mul** “give as a gift”; *am* “be”; *men* “make”; *trau* “keep” (?); for additional examples see §4.4.2.1), can be inflected both verbally and nominally. Roots used verbally and their derivatives can only be identified as such (when they can be identified) via the syntax. Nouns can be recognized by the occurrence of case suffixes; yet it appears – unless in the few apparent examples there is chance homonymy – as though case suffixes can also be attached to some typically verbal suffixes, such as the preterite suffixes *-ce* and *-χe*: for example, genitive *tlēna-ce-s*, ablative *tlēna-χe-is*.

4.4.1 Tense and voice

4.4.1.1 Present

Forms of the present, which are rare and not easy to identify, are marked with the suffix *-e*. They express the actual or contextualized present: for example, *ame* “I am,” “he is” (see the examples of [9]); *ale* “gives as a present, places.” With bisyllabic bases, no *-e*-suffix occurs, so that the present is then identical in form with the imperative (see §4.4.2.1): *nunθen* “I call” (as in *un mlaχ nunθen* “you, you good one, I call”). The denominative suffix *-ane*, on the other hand, retains final *-e*: for example, Archaic Etruscan *muluvene* > Late Etruscan *mulune* “makes a present of”; Late Etruscan *acilune* “gets done.”

4.4.1.2 Preterite active

The preterite active, reporting past events, is formed with the suffix *-ce*, which in the Archaic Period was preceded by a vowel, of unpredictable quality, which was later syncopated. At present there is insufficient evidence to determine whether this vowel (*a*, *e*, *i*, or *u*) was originally the root-final vowel which was prehistorically apocopated (see §3.5.2.1) or belonged to the suffix. The following are examples of the preterite active: *amuce/amake* > *amce* “was”; *turuce/turice* > *turce* “sacrificed”; *zinace/zineke* > *zince* “produced”; *hecece* > *hecce/hece* “erected”; *farice* > *farce* “prepared”; denominative *acasce* > *akške* “sacrificed”; and with a nasal suffix *amavunice* > *amavence* “produced” (lit. “brought into being”); *ziχ(v)anace* > *ziχunce* “had written” (lit. “brought to writing”); Archaic Etruscan *muluvarice* “gave as a present”; Late Etruscan *ceriχunce* (< **cer-ie-χ(e)-u-ana-ce*) “built”; *θezince* (< **θez-ie-ana-ce*) “slaughtered”; *zilaχnuce* (< **zilaχ-an(a)-u-ce*) “was praetor.”

4.4.1.3 Preterite passive

The suffix of the only recently identified preterite passive is *-χe*. Here too, between roots ending in a consonant and the suffix there occurs one of the four Etruscan vowels, but these vowels are nowhere syncopated (to maximize the distinction between the two phonetically similar suffixes *-ce* and *-χe*?). As with the preterite active, it is impossible to determine whether this vowel originally belonged to the root or to the suffix. Examples of the preterite

passive are the following: Archaic Etruscan *zinaχe* “was produced”; *vatieχe* “was wished for”; Late Etruscan *ziχuxē* “was written”; *menaχe* “was prepared”; denominative *farθnaχe* “was prayed for” (?); and with nasal suffix, *muluanix(e)* “was given as a present.”

The passive character of these forms follows from: (i) the number of participants (in each instance only one in a direct case); (ii) passages in which a pronominal subject in the nominative denotes the patient (the agent is in the ablative; see §4.2.2.4):

- (10) A. *mi titasi cver menaχe*
 “I was created for/by Tita as a present”
 B. *inpein . . . mlaχuta ziχuxē*
 “Which . . . as good (the articulated nominative) was carved”

4.4.2 Mood

In addition to the indicative, Etruscan has an imperative, subjunctive, and necessitative mood.

4.4.2.1 Imperative

The imperative, the mood of strict command, occurring frequently in ritual texts, is identical with the verbal base. Monosyllabic roots provide most of the attested imperatives: for example, *ar* “make,” *al* “give,” *tur* “sacrifice,” *trin* “speak,” *σuθ* “lay,” *heχz* “pour.” The remaining imperatives belong to denominative bases formed with *-en* or *-ie* (Late Etruscan *-i*) or, with “reverse” nasalization (see §3.1.2), *-in*: for example, *nunθen* “invoke”; *θezi*, *θezin* “slaughter”; *uσi*, *mutin*, *firin* “?”

4.4.2.2 Subjunctive

The subjunctive mood, expressing wish, obligation, and futurity, is marked by the suffix *-a*. Consider the following examples:

- (11) A. *mula* “he/you should give as a present”
 B. *scuna* “he should/will put at (somebody’s) disposal”
 C. *acasa* “you/he should sacrifice” (denominative)

The subjunctive is also used in subordinate clauses with the conjunction *ipa* “that” (see §5.5). In ritual prescriptions of the Zagreb mummy (see §1), subjunctives alternate with imperative forms: *raχθ tural/tur* “you should sacrifice/sacrifice in fire.”

The subjunctive is also used to express prohibition (see Colonna 1989:345):

- (12) A. *ei . . . ara* “he should not make”
 B. *ei truta* “he should not injure [by means of an evil look]”

4.4.2.3 Necessitative

In the necessitative, which indicates that an action must be carried out, a suffix *-ri* is added to the base; base-final *-ie* appears in Archaic as *i* (*fani-ri*) and Late *e* (*fane-ri*, *θeze-ri*). The nasal *n* is assimilated to the *r* of this suffix as in, for example, *nunθeri* < **nunθen-ri* (cf. the assimilation in the *preaenomen Venel* > *Venl-is* > Late Etruscan *Vel*). Examples of necessitives appear in (13):

- (13) A. *acasri* “X is to be sacrificed” (denominative)
 B. *perpri* “?”
 C. *ziχri* “is to be written, carved,” Late Etruscan

- D. *nunθeri* “is to be sacrificed (by invocation)”
 E. *θezeri* “is to be sacrificed (by slaughter)”

As these examples illustrate, the necessitative has a passive sense. Identification of its voice as passive follows from the same phenomena noted for the preterite passive (see §4.4.1.3): *esvita* . . . *spetri* “the *esvita* (articulated nominative; see §5.2) is to be expiated.”

4.4.3 Verbal nouns

Without an accompanying auxiliary, verbal nouns were used as predicates; these are formed with the suffixes *-u*, *-θ*, and *-as*. Locative verbal nouns in *-e* were used as infinitives.

4.4.3.1 Verbal nouns in *-u*

These function as nouns for results of actions and agent nouns (see §4.4), and they are indifferent to voice. With transitive verbs they can be used both passively (*mul-u* “given as a gift, gift”) and actively (*zic-u* “writer”). They serve as predicates of matrix sentences and designate a state which began in the past and continued over a long period of time, often right up to the present (in this respect, they are reminiscent of the Ancient Greek perfect):

- (14) A. *mi mul-u kaviiesi*
 “I (am) presented / a present for/from [see §4.2.2.5] Gavius”
 B. *eθ fan-u lavtn precuś ipa*
 “Thus (?) has decided the Precu family that . . .”

The difference between this formation, with its stative sense, and the preterite, which records past events, is revealed by sentences such as the following:

- (15) *lupu-ce* (PRETERITE) *munisuleθ* . . . *avils LXX lup-u* (VERBAL NOUN)
 “He died while holding the . . . -office; dead at the age of 70”

Enlarged verbal stems can also provide the base of verbal nouns in *-u*, the final vowel of these enlarged stems disappearing before the *-u*-suffix: **zina-ce + -u > zinaku* “produced, product”; **cerie-χe* (cf. *vatiēχe*) + *-u > ceriχu* “having erected,” **zilaχ-ane + -u > zilaχnu* “been praetor.”

There is no explanation for the locatives *ten-v-e* and *zilaχn-v-e* which are attested once in the context in which the nominatives *tenu* and *zilaχnu* otherwise occur.

4.4.3.2 Verbal nouns in *-θ*

As predicates, the verbal nouns in *-θ* designate an action that is both current and contemporaneous with another action. They are thus comparable with the present active participles of the Indo-European languages:

- (16) A. *celi ουθ heχś-θ vin(u)m*
 “Lay on the ground, pouring wine”
 B. *racθ ουθ nunθen-θ*
 “Lay on the fire, invoking”

Other examples include: *ar-θ* “making,” *trin-θ* “speaking,” and *zarfne-θ* “?” These verbal nouns constitute a special case of the agent nouns in *-θ* such as *zil-aθ* “praetor”; *tevara-θ > [t]eurat* “judge”; *tesin-θ* [a servant]. The alternative suggestion that the above predicates are imperatives II (so Pfiffig 1969:137) explains neither the distribution (why imperative II in particular?) nor the relationship to the agent nouns.

4.4.3.3 Verbal nouns in *-as*

Verbal nouns formed with the suffix *-as*, occasionally also appearing as *-asa* (without there being any distinguishable difference in function), usually occur as the predicates of embedded sentences, denoting a state completed in the past, and hence correspond to a preterite participle. These are formed directly on the root in rare instances. On occasion, the predicate of the matrix sentence is connected with this verbal noun via a coordinating conjunction (*-c*, *-um*; see §5.4):

- (17) A. $\text{ra}\chi \dots \text{mena}\acute{s} \dots \text{mula-}\chi \text{ hu}\acute{o}l\text{na vinum}$
 “Having prepared fire, you/he ought also to give young wine”
 B. $\text{ara}\acute{s} \theta\text{ui u}\acute{o}eti \text{cepen fa}\theta\text{in-um}$
 “having made a ? here in the ?, but then ? (imperative)”

More frequently, this verbal noun is formed from a base having the denominative suffix *-ane* (see §4.4) or the suffix *-θ* of the present participle (see §4.4.3.2); examples of the type *-ane* + *-as* > *-anas* follow:

- (18) A. zelarven-as (< *zal-ur-u-ane-as)
 “Having doubled” (cf. zelur “every two,” see §4.2.3.1)
 B. $\text{ra}\chi\theta \quad \acute{o}ut\text{-anas} \quad celi \quad \acute{o}u\theta$
 in the fire having placed on the earth place
 “Having placed in the fire, place on the earth”
 C. $\text{husur} \quad \text{ma}\chi \quad \text{acn-anas} \quad \text{arce} \quad \text{manim}$
 children five having had he made manim
 “Having had five children, he made manim” (a taboo expression for “he died”)
 D. $\text{papalser} \quad \text{acn-anasa} \quad \text{VI} \quad \text{manim} \quad \text{arce}$
 grandchildren having had 6 manim he made
 “Having had six grandchildren, he died”

As examples of verbal nouns formed from bases ending in *-θ*, consider *sval-θas* “having lived”; *trin-θasa* “having spoken” and the following:

- (19) A. $\text{eslz} \quad \text{zila}\chi\text{n-}\theta\text{as} \quad \text{avils} \quad \theta\text{unem muval}\chi\text{ls} \quad \text{lupu}$
 twice having held the praetorship of year minus one fifty dead
 “Having twice held the praetorship, he died at the age of forty-nine”
 B. $\text{arce} \dots \quad \text{zilc} \quad \text{marunuxva} \quad \text{ten-}\theta\text{as}$
 he made ... presidency marunuxva having held
 “He [died], having held the presidency of the maru”

The verbal noun in *-as* also expresses contemporaneous action in the instance of *sval-as* “living” (*sval-ce* “lived”), the only such verbal noun formed from a stative verb:

- (20) $\text{zila}\chi\text{n}\text{ce} \quad \text{spure}\theta\text{i} \quad \text{apasi} \quad \text{sval-as}$
 he held the praetorship in the community in that of his father living
 “He held the praetorship, [while] living in the community of his father”

The locative in *-as-i* serves as a predicate in an embedded locative absolute clause:

- (21) $\text{clensi} \quad \text{mule}\theta \quad \text{svalasi} \quad \text{zila}\chi\text{n}\text{ce}$
 in the sons in the mula living he held the praetorship
 “While the son lived in the mula, he held the praetorship”

4.4.3.4 Verbal nouns in -e

Verbal noun forms ending in -e, all of them late and therefore open to interpretation as locatives of stems in -e or in -a, function as predicates of embedded sentences with two characteristics: (i) the subjects of matrix and embedded sentences are not identical; and (ii) the verbal nouns lack congruence with another constituent of the embedded sentence (as is the case with the locative absolute). The verbal nouns thus function as infinitives. On the wrappings of the Zagreb mummy, ritual acts are sometimes expressed by a combination of these forms with *acil* (*ame*) “one ought” (Olzscha 1961:155–173): for example, *ture acil* “one ought to sacrifice”; *nexœ acil ame* (VII 14) “one ought to?” Other examples of matrix predicates include *nunθene* “to call,” *ziχne* “to write, scratch.” Consider also the following:

- (22) *une... puθs... zivaś fler θezine... zati zatlχne*
 for you placed the living victim to kill with the axe to strike dead
 “For you ... [is] placed ... the still living sacrificial animal to kill, to strike dead with
 the ax”

4.5 Numerals

The following cardinal numerals are attested: *θu* (1); *zal* (2); *ci* (3); *σα* (4); *maχ* (5); *huθ* (6); *semφ* (7?); *cezp* (8?); *nurφ* (9?); *śar* (10); *zaθrum* (20); *cialχ / cealχ* (30); *sealχ* (40); *muvalχ* (50); *semφalχ* (70); and *cezpālχ* (80). Ordinals identified are as follows: *θunśna* (1st); *cis* (3rd); *huθiś* (6th); *śariś* (10th); and *zaθrumiś / zaθrumsna* (20th).

5. SYNTAX

5.1 Word order

The word order phenomena of Etruscan have not yet been extensively studied (see Pfiffig 1969:207–211; Agostiniani 1982:278–280; Schulze-Thulin 1993). Departure from the unmarked word order occurs often, without any discernible reason. That unmarked word order for phrases with a verbal nucleus is Subject–Object–Verb (SOV):

- (23) A. *Laris Avle... cn suθi ceriχunce*
 Laris Aule this grave they set up
 “Laris [and] Aule ... set up this grave”
 B. *Velχinei Śelvanśl turce*
 Velchinei to Silvanus she dedicated
 “Velchinei dedicated [the statue] to Silvanus”
 C. *ita tmia... vatiexē Unialastres*
 this cult space was wished for by Juno herself
 “This cult space ... was wished for by Juno herself”
 D. *ipa murzua... ein heczri*
 that the urns not are to be sprinkled
 “That the urns ... are not to be sprinkled [with libation]”

Not infrequently, however, Object and Verb reverse positions (SVO):

- (24) *Vipia... turce Verœenas cana*
 Vibia dedicated to Versena the statue
 “Vibia ... dedicated the statue to Versena”

Objects which consist of or contain a deictic pronoun regularly appear at the beginning of the sentence (topicalization) and draw the verb after them creating the order Object–Verb–Subject:

- (25) mini mulvanice Mamarce Quθaniies
 me gave Mamarce Kutanie
 “Mamarce Kutanie gave me [as a present]”

Typical of a language having basic SOV-structure, Etruscan has postpositions: *-pi* “?” (see §4.2.2.1); *-ri* “for”; *θi*, *-θ*, *-te*, *ti* “in” (see §4.2.2.3); *ceχa* “because of” (see §4.2.2.4).

In nominal phrases, evolutionary developments occur between the Archaic and Late Periods which are consistent with a typological shift from SOV to SVO; this is seen most clearly with modifying numerals. In the Archaic Period the numeral is always placed before the substantive it modifies (e.g., *zal rapa* “two *rapa*-offerings,” *ci avil* “three years,” *huθ zusle* “six victims”); in the Late Period, however, the order is almost always reversed (e.g., *halχza θu* “one little *halχ*-vessel,” *clenar zal* “two sons,” *naper ci* “three *naper* (square measure),” although isolated examples of the earlier order still occur (e.g., *hut naper* and *ci avil*). The attributive genitive (as far as it can be identified) behaves similarly: Archaic Etruscan shows the order Genitive–Noun, as in *Marhies acel* “Marhie’s production”; but Late Etruscan has the order Noun–Genitive, *flerχvetr[-] Neθunsl*, “in the rite of Neptunus,” *luθcva Caθaś* “the altars of Catha.” The same is true of the attributive adjective, for which, however, there are no clear Archaic examples; thus Late Etruscan, with the order Noun–Adjective, provides examples such as: *ziχ neθorac* “text concerning the inspection of the liver,” *aiseraś šeus* “of the ? gods.” Compare, however, Late Etruscan *huślνα vinum* “young wine” (Adjective–Noun).

In deictic function, the demonstrative pronoun is always placed before the noun it modifies: Archaic Etruscan *ica tmia* “this cult space,” *etula natinusnal* “of this ?”; Late Etruscan *cn suθi* “this grave,” *clθi mutnaiθi* “in this sarcophagus.”

5.2 Clitics

Demonstrative pronouns can also be used enclitically; they are attached to adjectives and genitival forms, merging with these phonetically, and function essentially as “articles.” The enclitic use of the demonstrative is frequently observed in theonyms such as *Selvans Sanχune-ta* “Silvanus, the one belonging to Sancus.” If the modified word ends in a vowel, the resulting diphthong is monophthongized in Late Etruscan (e.g., /e-i/ > /i/). Consider the following examples: Archaic Etruscan *riθna-ita* “the ?” (nom.), *riθna-itula* (gen.), *riθna-itul-te* (pert. with postposition); Late Etruscan *eśvita* (< **iśve-ita*) “the ?” (indicating locality), *eśvitle* (< Archaic *iśve-itule*, pert.). Following final *-s* the initial *i-* of the pronoun disappears with palatalization of the vowel before *-s*: for example, Archaic Etruscan *tameresca* < (-*a*ⁱ*s-ka* < -*as-ika*) “the master of the house”; *aθeme-i-s-cas* “?” > Late Etruscan *aθumi(s)ćś* (gen.); *θapneśś* (< -*nas-ites*, abl.) “from [the contents of] the goblet.”

In addition to *-ita* and *-ica*, *-sa* is also used as an article, being added to the genitives of personal names and to a few adjectives that refer to persons (e.g., *sacni-sa* “the one dedicated,” that is, a member of a *śacni-ca* “cult brotherhood”). After the word-final velar-*l* of the genitive II, a phonetically motivated *i* appears: for example, *Larθial-i-sa* (gen. *Larθal-i-sla*; pert. pl. *Larθial-i-śvle*) “the [son] of Larth”; *Alfnal-i-śa* “the [son] of Alfnei.” The word-final *-s* of the genitive I and the initial fricative of *-sa* form a geminate cluster, only revealed in Latin transcriptions: for example, *Veluśa* < -*s-sa* (gen. *Veluśla*) “the [son] of

Vel”; *Hanuśa*, Latin *Hanossa* (gen. *Hanuśla*) “the [son] of Hanu,” “articulated” again as *Hanuśliśa* “the [son] of Hanossa.” The double genitives of the type *Larθaliśla*, *Veluśla* are not an absurdness of Etruscan, but quite regular forms.

Apart from these demonstrative pronouns, only the copulative conjunctions *-c* and *-m* (see §5.4) are enclitic.

5.3 Agreement

Since neither grammatical gender nor personal endings are found in Etruscan, agreement occurs only in case and number in nominal phrases. Adjectives and pronouns carry no plural marking when they occur immediately next to the substantive which they modify and there is no chance of misconstruing their relationship: for example, *ais-er-aś še-u-ś* “of the ? gods,” *clen-ar sval* “sons, living (= in their lifetime),” *icac heramao-va* “and these statues.” But if the phonetic distance is greater or there is some possibility of ambiguity, the plural is marked on the adjective: thus, *ais-er śic šeuc*... [9 words intervening] ... *θanś-ur* “gods, ? and ? ... graceful”; *apac atic sanio-va* “father and mother, members of the cult association” (i.e., both, not just the mother).

Case agreement is marked on both adjectives and pronouns: for example, genitive *aiser-aś še-u-ś* “of the ? gods”; locative *tesne raśne* “with regulation, of the state”; locative + pertinentive (functioning as a locative; see §4.2.2.5) *θaure lautneścle* “on the area, that of the family”; *cl-θi mutna-i-θi* “in this sarcophagus”; ablative III *mex θuta* “with one’s own means.”

5.4 Coordination

The coordination of words and sentences can be accomplished using the semantically unmarked conjunction *-c* < *-ca/ka* (see §3.5.2.1) and the weakly adversative conjunction *-m*. The conjunction *-c* can be attached to each member of a coordinated phrase (e.g., *apa-c ati-c* “both father and mother”) or only to the final member (e.g., Archaic Etruscan *hecece farice-ca* “set up and prepared”; Late Etruscan *śacnicleri*... *śpureri meθlumeri-c* “for the cult association, the community and the city”).

Asyndetic construction is also not uncommon: *Laris Avle Larisal clenar* “Laris [and] Aule, the sons (pl.) of Laris”; *acilune turune ścune* “gets done, makes over (to someone), puts at (someone’s) disposal.”

The coordinating comparative particle is *iχ* “as”: *etnam iχ matam* “just as earlier”; *eisna iχ flereś crapśti* “a sacrifice as for Flere Crapsti.”

5.5 Subordination

Clause embedding is accomplished utilizing (i) verbal noun constructions (verbal nouns, participles, and infinitives; for examples see §§4.4.3.1–4.4.3.4); and (ii) subordinate clauses introduced by pronouns and conjunctions. Embedded clauses can function as subjects, objects, adverbials, or attributives.

The only subordinate clauses introduced by a pronoun which are thus far attested are relative clauses; these function attributively, in part with a pronominal antecedent. Such clauses are introduced with *ipa*, *an*, or *in* (also *anc* and *inc*), all of which appear to function in the same way. In shortened relative clauses without a predicate, only *in* occurs:

- (26) A. Vete... ipa amake apa...
 Vete who was father...
 “Vete..., who was the father...”
- B. šulušī θuni šerφue acil ipei... χašri
 LOCATIVE INFINITIVE is necessary where NECESSITATIVE
- C. Vel... an cn σuθi ceriχunce
 Vel who this grave set up
 “Vel..., who set up this grave”
- D. flere in crapsti
 divinity which in *crap*
 “divinity, which [is] in *crap*”
- E. Tins in marle
 of Jupiter who in *marle*
 “of Juppiter, who [is] in *marle*”

The relative pronoun can be omitted, as in *flereš crapsti* “of the divinity in the *crap*.”

The following subordinating conjunctions have been identified: (i) *ipa* “that” (used with a verb in the subjunctive or necessitative mood) and *iχnac* “as” in object sentences; (ii) *iχ*, *iχnac* in comparative sentences; and (iii) *iχ*, *iχnac*, *nac* (“then” >) “as” in adverbial temporal sentences. Consider the following examples:

- (27) A. tezan fusleri... ipa ama... naper XII
 ruling to be made that there are *naper* 12
 “A ruling is to be made, that there are 12 *naper* (unit of square measure)”
 (contract about a plot of land)
- B. eθ fanu lautn precuš ipa murzua... ein heczri
 thus established the family of Precu that the urns not to be sprinkled
 “Thus the family Precu established, that the urns... are not to be sprinkled
 [with a libation]”
- C. eca sren tva iχnac Hercle Unial clan θrasce
 this picture shows how Heracles of Juno the son became
 “This picture (shows?), how Hercules (became?) the son of Juno”
- D. iχ ca ceχα ziχuxe
 as this above was written
 “As this was written above”

6. LEXICON

The major part of the Etruscan lexicon is native. Some words are also attested in Lemnian or Rhaetic, revealing their origin in Proto-Tyrsenic: for example *zal*, Rhaetic *zal* “2,” *maχ*, *sealχls* (gen.), Lemnian *maν*, *σialχvis* “5,” “40”; *zinace*, Rhaetic *t'inaxe* “he made”; *avils* (gen.) = Lemnian *avis* “of years.”

Within the sphere of trade and crafts, Etruscan borrowed some words from Greek (de Simone 1968), such as the names of vessels (often in the accusative) like *aska* from ἄσκος; *pruxum* from προχούv (acc.). Also from Greek come *spurta* from σπυρίδα (acc.) “basket”; *elaiva-* from ἐλαίᾱ *F* “oil”; and probably also *φersu* “[demon with] mask” (**φersu-na* > Latin *persōna*) from πρόσωπα “mask.” From Greek there also come several slave names, such as *Tinusi* from Διονύσιος; a few theonyms, for example, *Aplu* from Ἀπόλλων; and many mythic names, like *Aχle* from Ἀχιλλεύς and *Castur* from Κάστωρ.

The existence of only a few Latin loanwords has been demonstrated, such as *cela* from *cella* “small room” or *macstr-* from *magister* “master.” Etruscan *cletram* is from Umbrian *kletram* (acc.) “litter.” Numerous Etruscan personal names, however, come from the Italic languages: for example, *Marce* from *Marcus*, *Crespe* from *Crispus*, *Vuvzies* from Umbrian *Vuvçis* “Lucius.” A good number of theonyms are also of Italic origin: *Menerva* from Latin *Minerva*, *Neθuns* from Umbrian **Nehtuns* “Neptune.”

The transmission of loanwords from Etruscan into Italic conforms to a similar picture: there are many onomastic borrowings (such as Latin *Aulus* from *Avile*, *Aule*), but few borrowings can be demonstrated in the realm of common nouns (Latin *satelles* “body guard” from *zat[i]laθ*). The sociological and cultic contacts between Etruscans and the Italic peoples seem clearly to have been more intimate than their linguistic contacts.

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