CHAPTER 5

Sabellian languages

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. HISTORICAL AND CULTURAL CONTEXTS

The term "Sabellian" refers to a group of genetically related languages that were spoken throughout a substantial portion of pre-Roman Italy. Oscan and Umbrian are considered the major representatives of this group because they are attested by the largest corpora of inscriptions. The former was spoken in the southern half of the Italian peninsula, in the territories of Samnium, Campania, Lucania, and Bruttium; the latter was spoken east of the Tiber River in Umbria. Other Sabellian languages include Paelignian, Marrucinian, Vestinian, Marsian, Volscian, Hernican, Aequian, and Sabine – languages which were spoken in central Italy in the hill districts lying east and southeast of Rome. Recently, South Picene, a language of Sabellian peoples who inhabited southern Campania before the arrival of the Oscan-speaking Samnites, have been added to the inventory of Sabellian tongues.

Archeological evidence has not yet shed sufficient light on the dates at which or the routes by which, Sabellian speakers moved into the Italian peninsula. By the beginning of the historical period (*c*. 700 BC), however, Sabellian speakers had spread over a considerable portion of central Italy, from Umbria and Picenum in the northeast to the Sorrentine peninsula in the southwest (see Map 2). Sabellian tribes were still on the move during the fifth and fourth centuries. Roman historical sources document the invasion of Campania and the capture of Capua, Cumae, and Paestum by Oscan-speaking Samnites. By the middle of the fourth century they had pushed south into Lucania and Bruttium, and southeast into Apulian territory. At the beginning of the third century there were Oscan speakers in Sicily. The Mamertini, a band of mercenary soldiers, crossed the straits in 289 BC and wrested control of the Sicilian city of Messana from the Greeks.

The Sabellian languages did not survive Roman expansion. Those languages spoken in central Italy succumbed to Romanization earlier than did those in the north and south. Sabellian speakers in central Italy had probably shifted to Latin before the end of the Roman Republic (*c.* 30 BC). In some areas Sabellian was more tenacious. Evidence from the city of Pompeii indicates that Oscan was still being spoken there when the city was destroyed by Vesuvius in AD 79. However, it is unlikely that any Sabellian language survived much beyond the first century AD, by which time the territories of the Sabellians were securely incorporated into the Roman Empire both politically and culturally.

The Sabellian languages are documented almost exclusively by inscriptions. The texts belong to standard epigraphical types: dedications, epitaphs, proprietary inscriptions, inscriptions on public works, religious regulations, contracts, curses, trademarks, legends on coins, and so forth. A few Sabellian vocabulary items are preserved by Roman and Greek writers of the late Republic and early imperial period, but they do not add substantially to our knowledge of any Sabellian language (Vetter 1953:362–378).

Oscan owns the largest corpus of texts, approximately six hundred and fifty inscriptions. They cover a span of six hundred years, from the sixth century BC to the first century AD. Most of the inscriptions belong to the period between 300 and 89 BC, the latter being the date of the final Sabellian uprising against Rome. The nucleus of the corpus, over 30 percent of the texts, comes from the Campanian cities of Capua and Pompeii. One of the most important Oscan inscriptions was also discovered in Campania, the so-called *Cippus Abellanus*, a limestone plaque recording an agreement between the cities of Nola and Abella regarding the common use of a sanctuary of Heracles. The longest Oscan text, the *Tabula Bantina*, is from the Lucanian town of Bantia. This bronze tablet is incised with a list of statutes concerning municipal administration.

Even though the number of Umbrian inscriptions does not exceed forty, the corpus is one of the most important in ancient Italy. Umbrian was the language of the *Tabulae Iguvinae* (Iguvine Tablets), seven bronze tablets that were discovered in Gubbio (Roman Iguvium) in the fifteenth century. The tablets were incised with the ritual regulations and cultic instructions of a religious fraternity, the Atiedian brotherhood. They date from the first half of the third century (for Tablets I–Vb7) to the end of the second century (for Tablets Vb8–VII). Despite the relative lateness of these texts, it is likely that many of the ritual procedures and regulations stem from an earlier tradition (see Rix 1985).

The remaining Sabellian languages are much less well represented. For most, there are only a few short and often fragmentary inscriptions.

Examples of Sabellian inscriptions are given below (Figs. 5.1–2). According to standard epigraphical conventions, texts written in native Sabellian alphabets are transcribed in bold-face type; texts written in a Republican Latin alphabet appear in italics. The *editio minor* of Sabellian inscriptions is Rix 2002. Vetter 1953 and Poccetti 1979 remain invaluable for epigraphic and linguistic commentary. An *editio maior* of the *Tabulae Iguvinae* was published by Prosdocimi in 1984. Shorter Umbrian texts are collected in Rocca 1996. Marinetti 1985 is the *editio maior* for South Picene inscriptions.

The Sabellian languages, together with Latin and Faliscan, belong to the Italic branch of the Indo-European language family. The evidence for an Italic subgroup consists of three significant morphological innovations that are shared exclusively by Sabellian and Latino-Faliscan:

- Innovations shared by Sabellian and Latino-Faliscan
- A. Imperfect subjunctive suffix *-*sē*-, e.g., Oscan **fusíd** "should be" 3RD sG. IMPF. SUBJUNC., Latin *foret* 3RD sG. IMPF. SUBJUNC. < * *fusēd*
- B. Imperfect indicative suffix *-*fā*-, e.g., Oscan **fufans** "they were" 3RD PL. IMPF., Latin *portābant* "they were carrying" 3RD PL. IMPF. (*-*fa* > -*bā* in Latin)
- C. Verbal adjective formation in *-*ndo*-, e.g., Oscan úpsannam ACC. SG. FEM. "to be built," Umbrian pihaner GEN. SG. MASC. "to be purified" (*-*nd*- > -nn- in Sabellian), Latin *operandam* ACC. SG. FEM. "to be built"

The Sabellian languages share several significant morphological innovations, among which are the spread of the *i*-stem genitive singular ending *-*eis* to *o*-stem and consonant-stem inflection; the spread of the *o*-stem accusative singular *-*om* to consonant-stems; personal and reflexive pronominal forms with accusative singular -**om**/-*om* (e.g., Umbrian *tiom* "you," **míom** "me," Oscan *siom* "himself"); and the development of a mediopassive infinitive suffix in -**fir**/-*fi* (Oscan **sakrafír** "to be consecrated," Umbrian *pihafi* "to be purified").

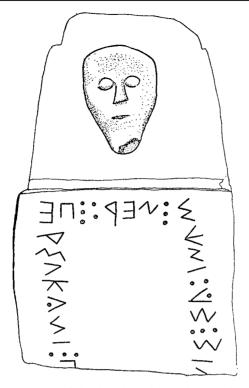


Figure 5.1 South Picene inscription. South Picene, Rix Sp TE 6, stele (fragmentary)
[-?]nis : safinúm : nerf : persukant : p[-?]
Inis-[name ?] "Sabines"-gen. pl. masc. "leaders"-acc. pl. masc. "?"-3rd pl. pres. act. "[names?] they ? the leaders of the Sabines [?]"

Prominent phonological innovations include the syncope of **o* in word-final syllables (* $g^h ortos > Oscan húrz$ "enclosure"), the raising of inherited mid vowels (e.g., *ē to *ē, Proto-Sabellian **fēsnā* giving Oscan fíísnú "sanctuary," cf. Latin *fēstus* "festal"), and the change of Proto-Indo-European labiovelars to labials (*k^wis > Oscan **pis** "who").

Interrelationships among the Sabellian languages are difficult to determine because there is so little evidence for the languages in central Italy. However, the split into two Sabellian subgroups, one closely aligned with Umbrian, the other with Oscan, is not supported by the evidence. Instead, the territories occupied by Sabellian speakers form a linguistic continuum with Umbrian positioned in the north, Oscan in the south, and the Sabellian languages in central Italy constituting a transitional linguistic area where the languages have both Oscoid and Umbroid features (Wallace 1985). Exactly how South Picene fits into this schema is currently under deliberation (Meiser 1987; Adiego Lajara 1990).

2. WRITING SYSTEMS

The Sabellian languages were written in a variety of different alphabets. The type of alphabet employed depended on two factors: when a Sabellian tribe became literate and from what

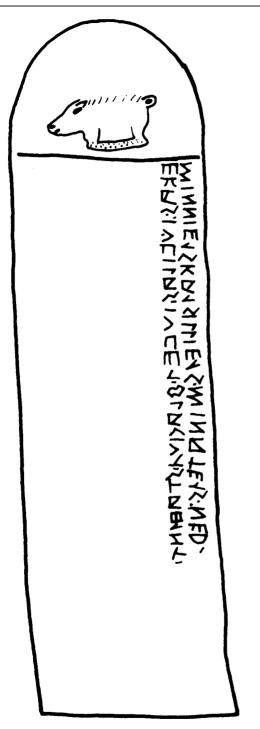


Figure 5.2 Oscan inscription. Oscan, Rix Cp25a, funerary stele (side a)

ekas : iúvilas . iuveí . flagiuí . stahínt . / minnieís kaísillieís . minateís : ner .

"these"-nom. pl. fem. "Iovilas"-nom. pl. fem. "Jupiter"-dat. sg. masc. "Flagius"-dat. sg. masc. "be standing"-3rd pl. pres. act. "Minis"-gen. sg. masc.

"Kaisilies"-gen. sg. masc. "Minaz"-gen. sg. masc. "commander"-abbreviation for gen. sg. masc.

"These lovilas are set up for Juppiter Flagius. [They belong to] Minis Kaisillies, [son of] Minas, commander."

Table 5.1	National Oscan	alphabet, c. 2	50 BC
Character	Transcription	Character	Transcription
Ν	а	М	m
В	b	Н	n
>	g	П	р
Я	d	D	r
Э	e	\$	S
]	v	Т	t
I	Z	\vee	u
Β	h	8	f
I	i	F	í
k	k	Ÿ	ú
1	1		

source – Greek, Etruscan, or Latin – the alphabet was borrowed. Some Sabellian tribes borrowed from more than one source.

Oscan inscriptions were written in three different alphabets. Inscriptions from Campania and Samnium were composed in an alphabet that was borrowed from Etruscans who had colonized the Campanian plain in the sixth century BC. In the territories of Lucania and Bruttium, Oscan inscriptions were written in an alphabet of the East Greek type. A few inscriptions from the first century BC, including the important *Tabula Bantina*, were written in a Republican Latin alphabet.

The Oscan alphabet that developed from Campanian Etruscan sources was formed during the last half of the fifth century BC. This alphabet spread rapidly throughout Oscan-speaking Campania and into Samnium and was eventually codified as the so-called *national* Oscan script (see Table 5.1). At the beginning of the third century, two new signs were incorporated into the *abecedarium* in order to represent more accurately the phonology of Oscan mid vowels. Diacritics were added to the letters **i** and **u** to create signs for the vowels $/\overline{e}/, /e/ \vdash$ and $/o/ \lor$. These signs are transcribed as **í** and **ú** respectively.

The Sabellian-speaking tribes in central Italy, most of whom became literate via contact with Romans, borrowed the Latin alphabet. In a few instances, there is evidence for changes in the inventory of signs. In Paelignian, for example, the sign *delta* was modified by means of a diacritic and then employed on several inscriptions to represent the outcome of the palatalization of a voiced dental stop ($^*dy > [j]$), transcribed as D, for example, Paelignian *petieĐu* "Petiedia" (nom. sg. fem.).

Umbrian was written in several different local versions of an Etruscan alphabet (Cristofani 1979). One of the earliest Umbrian inscriptions, that inscribed on a statue of Mars, was written in an alphabet similar to the one used in the central Etruscan city of Orvieto. The alphabet of Umbrian inscriptions from Colfiorito may also have come from this area, as is indicated by the fact that *gamma* was used for the voiceless velar /k/ rather than *kappa*. In contrast, the Iguvine Tablets I through Vb7 were inscribed in an Etruscan-based alphabet that did not have the letter *gamma*. This alphabet had a north Etruscan source, perhaps Perusia or Cortona (see Table 5.2).

The chief characteristic of the Umbrian alphabet used for the Iguvine Tablets I–Va is the absence of the signs *gamma* and *omicron*. The voiced stop /g/ was represented by *kappa*, and

Table 5.2	Umbrian alphabet, Ig	uvine Tablets I–Vb	7, c. 250 BC
Character	Transcription	Character	Transcription
А	а	М	m
В	b	Н	n
Р	ř	1	р
3	e	D	r
1	v	S	S
1	Z	1	t
\otimes	h	\vee	u
	i	8	f
k	k	Ь	ç
1	1		

upsilon was used for the mid vowel /o/. Interestingly, the signs *beta* and *delta* were a part of this script, although it is not clear whether they were inherited from the Etruscan alphabet that served as a model or were reborrowed from another source. *Delta* was used for a voiced fricative /z/ (ř) rather than for the voiced stop /d/, which was represented by *tau*. Both *pi* and *beta* shared the function of representing the voiced stop /b/, e.g., **hapinaf**, **habina** (acc. pl. fem.) 'lambs.'' The inherited Etruscan inventory of signs was further modified in order to represent the native Umbrian phoneme /š/. The letter d (transcribed ç), of uncertain origin, was assigned this function.

Tablets Vb8, VI, and VII and a small number of Umbrian inscriptions belonging to the second and first centuries BC were written in a Republican Latin alphabet. The inventory of signs was augmented by the addition of S' (/š/, transcribed \hat{s}), a Latin *sigma* modified by an oblique stroke appended in the upper left quadrant of the sign space.

Sabellian inscriptions composed in an Etruscan-based alphabet were generally written sinistrograde (right to left), but some were written dextrograde and a few others were laid out in boustrophedon ("as the ox plows") style, every other line alternating in direction. Oscan inscriptions in the Greek alphabet were consistently written from left to right, as were the Sabellian inscriptions in the Latin alphabet, including Tablets Vb8, VI, and VII of the *Tabulae Iguvinae*.

Most Sabellian inscriptions in Etruscan-based alphabets use some form of punctuation to separate words, although a few of the earliest inscriptions are written *scriptio continua*. Punctuation between words is customarily a single point appearing at mid-line level, but word-dividers also take the form of double or triple puncts, the latter being particularly common on South Picene inscriptions in order to avoid confusion with the sign for /f/ : (see Figure 5.1, South Picene). In contrast, Oscan inscriptions written in the Greek alphabet rarely use punctuation for word boundaries; *scriptio continua* is the norm.

3. PHONOLOGY

Despite the genetic affiliation of the Sabellian languages, the phonological systems of each language developed distinctive characteristics. The Oscan sound system was more conservative, the Umbrian system more innovative.

Manner of			Place of	articulatio	on		
articulation	Bilabial	Labiodental	Dental	Palatal	Velar	Labiovelar	Glotta
Stop							
Voiceless	р		t		k		
Voiced	b		d		g		
Fricative		f	S				h
Nasal	m		n				
Liquid							
Lateral			1				
Nonlateral			r				
Glide				v		W	

Throughout the remaining sections of this chapter, the following abbrevations are used in glossing examples: G (gentilicium); PN (praenomen); DN (name of a god or goddess).

3.1 Oscan consonants

The Oscan consonantal inventory consists of fifteen members. There are three sets of stops – labials, dentals, and velars – with each set having a contrast in voicing. The three fricatives are all voiceless, and the nasals, liquids, and semivowels voiced.

These phonemes are illustrated by the examples of (2):

(2) Oscan consonant phonemes

pús ("who") /p/, tanginúd ("decree") /t/, kúmbened ("it was agreed") /k/ blússii(eís) ("Blossius" G) /b/, deded ("he gave") /d/, genetaí ("Genita" DN) /g/ faamat ("he calls") /f/, súm ("I am") /s/, heriiad ("he should wish for") /h/ maatreís ("mother") /m/, niir ("commander") /n/ leígúss ("statute") /l/, regatureí ("the director," epithet of Jupiter) /r/ iúveí ("Jupiter" DN)/y/, veru ("gate") /w/

The fricative /h/ was probably restricted to word-initial position. The fact that nonetymological **h** appears occasionally to mark vocalic hiatus supports this view; consider Oscan **stahínt** /stāent/.

Intervocalic /s/ was phonetically voiced. The evidence is provided by inscriptions written in the Latin alphabet where the sign *z* is employed to write the sound derived from original *s, for example, *ezum* [ezum] "to be" (pres. inf.), *egmazum* [egmazum] "affairs" (gen. pl. fem.). It is possible that the fricative /f/ was also voiced intervocalically, but the writing system provides no evidence in this instance.

3.1.1 Palatalization

All geographical varieties of Oscan palatalize consonants (except for /f, s, w/) in the environment of a following /y/. Palatalization was marked in the national alphabet by gemination of the palatalized consonant: for example, **mamerttiaís** "of Mamers (name of month)" <*-*ty*-, **meddikkiai** "the office of meddix" (title of political official) <*-*ky*-, **kúmbennieís** "assembly" <*-*ny*-, **vítelliú** "Italia" <*-*ly*-. The dialect of Bantia, which is attested by the *Tabula Bantina* (*c*. 90–80 BC), shows a more advanced stage of development. Dental and velar stops were assibilated and the glide was lost, thus, *bansae* "Bantia" (town in Apulia) <*-*ty*-; *meddixud* <**ky*-. Moreover, palatalized liquids were spelled without any indication of palatalization, e.g., *famelo* [-e.f.o] "servant" <*-*ly*-; *herest* [-efe-] "he will wish for" <*-*ry*-.

3.1.2 Anaptyxis

Another feature characteristic of Oscan phonology is the anaptyxis of vowels to break up clusters consisting of sonorant (liquids, nasals) and some other consonant. Anaptyxis occurred in sonorant plus consonant clusters, for example, **aragetud** "silver" (abl. sg.) < **argentōd*, as well as in consonant plus sonorant clusters, for example, **paterei** "father" (dat. sg. masc.) < **patrei*, provided the preceding vowel was short. In the case of so-called *anterior* anaptyxis, the quality of the anaptyctic vowel was determined by the quality of the vowel preceding the sonorant, for example, **aragetud** and **herekleís** "Herakles" (gen. sg. masc.) < *herkleís. On the other hand, in *posterior* anaptyxis the quality of the anaptyctic vowel was determined by the quality of the vowel following the sonorant, as in **patereí** and **tefúrúm** "burnt offering" (acc. sg.) < **tefrom*.

3.2 Oscan vowels

The Oscan vowel system is made up of eleven phonemes. There are three pairs of phonemes in the front region, each pair being distinguished by the features of height and length: /i/ and / \bar{i} /; /e/ and / \bar{e} /; /e/ and / \bar{e} /. The inventory of back vowels is half that of the front region: two high vowels, /u/ and / \bar{u} /, and one mid vowel, /o/. The low vowels /a/ and / \bar{a} / fill out the system. In the national Oscan script, long vowels in word-initial/radical syllables are distinguished from short ones (see §3.3) by double writing of the vowel sign, though this orthographic practice is by no means consistently employed, even within the same inscription.

(3) Oscan vowel phonemes

viíbis (PN) /ī/, tanginúd ("decree") /i/ (no examples in initial syllables)
fíísnam ("temple, sanctuary") /ē/, idík ("it") /e/
teer[úm] ("territory") /ē/, pedú ("foot") /e/
fluusaí ("Flora" DN) /ū/, purasiaí ("concerned with fire") /u/
púd ("which") /o/ (no examples of /ō/ are attested)
slaagid ("boundary") /ā/, tanginúd ("decree") /a/

In addition to these simple vowel phonemes Oscan also has five diphthongs, /ai/, /ei/, /oi/, /au/, and /ou/.

 (4) kvaístureí ("quaestor") /ai/, deívaí ("divine") /ei/, múínikú ("common") /oi/ avt ("but") /au/, lúvkeí ("grove") /ou/

Although the evidence is not conclusive, it is likely that the distinction in vowel length noted above was maintained only in word-initial/radical syllables (Lejeune 1970:279). It is also likely that distinctions in vowel quality were neutralized in word-final syllables. Etymological $*\bar{a}$ in absolute final position and etymological *o, $*\bar{o}$, and *u in final syllables,

both open and closed, are spelled either $\mathbf{\hat{u}}$ or \mathbf{u} in the national Oscan alphabet, the variation in spelling being tied to the writing habits of local scribes. The use of $\mathbf{\hat{u}}$ or \mathbf{u} to spell what originally were four different sounds suggests that they all developed phonetically to a mid vowel having a quality between that of [u] and [o], perhaps [o] (Lejeune 1970:300–305).

At the beginning of the third century BC, the Oscan vowel system was augmented by a sound that developed from short /u/ after dental consonants. In the national alphabet this sound is spelled **iu**, for example, **tiurrí** "tower" (acc. sg.) < **turrim*, compare Latin *turrim*; this spelling probably represents a palatalized [u], in other words [tyurre]. However, there is some evidence to suggest that by the end of the third century the pronunciation of this phone had developed to a front rounded vowel [ü]. For representing this sound, third- and second-century Oscan inscriptions written in the Greek alphabet use *upsilon* (u), which had the value [ü] in Greek at the time, for example, Niuµσδiŋis /n(y)ümsdieis/ (gen. sg. masc.), Nuµųµµ/nümpsim/ (acc. sg. masc.). In order to keep the high-back vowels /u, ū/ graphically distinct from [ü], they were spelled with the digraph ou, e.g., ouπσενς /ūpsens/ "they built" (3rd pl. perf.).

3.3 Umbrian consonants

The Umbrian consonantal inventory displays several substantive differences when compared with that of Oscan. In addition to the dental fricative /s/, Umbrian has a voiceless palato-alveolar spirant that developed from the prehistoric combinations *ky, *ki, *ke, for example, **çerfie** /šerfye/ "Serfia" (epithet of deities) dat. sg. masc. Perhaps the most interesting innovation in the system was the change that introduced yet another fricative. This new sound, which was probably a voiced retroflex spirant /z/, developed from intervocalic *d and also from intervocalic *l when adjacent to palatal vowels (Meiser 1986:213). In the native alphabet the sound is represented by the sign \P (\check{r}); in the Latin alphabet it is spelled with the digraph *rs*, for example, **teřa**, *dirsa* /deẓa/ "gives" (3rd sg. pres. subjunc.).

Table 5.4	The conso	nantal pl	honemes	of Umbria	an				
				Place of	of articulation	n			
Manner of		Labio-		Palato-				Labio-	
articulation	Bilabial	dental	Dental	alveolar	Retroflex	Palatal	Velar	velar	Glottal
Stop									
Voiceless	р		t				k		
Voiced	b		d				g		
Fricative									
Voiceless		f	S	š					h
Voiced					Ż				
Nasal	m		n						
Liquid									
Lateral			1						
Nonlateral			r						
Glide						у		W	

These sounds can be illustrated by the following examples:

(5) Umbrian consonant phonemes

poplom ("people. nation") /p/, tuta, totam ("community, state") /t/, kumaltu, comoltu ("let him grind") /k/
krapuvi, grabouie ("Grabovius," epithet of Jupiter) /b/, teřa, dirsa ("he should give") /d/, grabouie /g/
fust ("he will give") /f/, stahu ("stand") /s/, çerfie, śerfie ("Serfius, Serfia," epithet of deities) /š/, habia ("he should take hold of") /h/
matrer ("mother") /m/, nerf ("commander") /n/
kumaltu, comoltu ("let him grind") /l/, rufru ("red") /r/, teřa ("he should give") /z/
iuviu, iouiu ("of Jupiter") /y/, verufe, uerir ("gate") /w/

In Umbrian **h** is weakly articulated. The sound was lost in medial environments before the historical period, and the character **h** was frequently used to mark both vocalic hiatus and vowel length, for example, *stahu* /stāu/ "I stand" (1st sg. pres. act.), *ahatripursatu* /ā tripuẓatu/ (3rd sg. impv. II) "dance the three-step." In word-initial position **h** may also have been lost. Spellings with and without **h** are found in the earliest sections of the Tablets, for example, **eretu** "wished for" (abl. sg. neut.), as are examples of **h** appearing where unexpected on etymological grounds, for example, **ebetrafe** acc. pl. fem. + postposition versus **hebetafe** (a place name).

3.3.1 Word-final consonants

Particularly characteristic of Umbrian are changes affecting word-final consonants. In the oldest Umbrian inscriptions word-final **d** is not spelled, for example, **dede** "gave" 3rd sg. perf. Word-final **s** is spelled sporadically in Iguvine Tablets I–Vb7, indicating that it too was weakened. In those Iguvine Tablets written in the Latin alphabet, original word-final *s* was rhotacized to *r*, for example, *popler* (gen. sg. masc.) "people, nation" < **popleis* (Meiser 1986:277); furthermore, word-final *m*, *n*, f(<*-ns), and *r*, including *r* from original *s*, were in the process of being lost. The writing of word-final *f* in these Tablets is illustrative; *f* is regularly, but not always, omitted in polysyllabic words and in monosyllables ending in a consonant cluster. In other monosyllables, however, *f* is generally written. The result is a sentence such as the following, in which final *f* is spelled in two words but not in two others (*rofu, peiu*): *abrof trif fetu heriei rofu heriei peiu* (VIIa 3) "let him sacrifice three boars, either red or spotted."

3.4 Umbrian vowels

The basic inventory of Umbrian vowels is similar to that found in Oscan, though with two additional phonemes. The first is a long mid /ō/, corresponding to short /o/; the second is a short mid vowel which is phonetically lower than /o/, perhaps /ɔ/. As in Oscan, the distinction between long and short vowels is maintained in word-initial or radical syllables, etymological long vowels being shortened in medial and final syllables (Meiser 1986:150).

Umbrian has no diphthongs corresponding to those found in Oscan cognates; all diphthongs inherited from Proto-Sabellian were monophthongized before the historical period and merged with existing long or short vowel phonemes. New diphthongs subsequently arose in Umbrian as the result of phonological changes, for example, /dēytu/ deitu (3rd sg. impv. II) "speak," aitu /aytu/ (3rd sg. impv. II) "set in motion."

(6) Umbrian vowel phonemes

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persnihmu ("pray") /ī/, atiersir ("Atiedian") /i/
sehmeniar ("of ?") /ē/, aves, avis, aueis ("bird") /e/
esuna, eesona ("religious") /ē/, ařfertur ("chief priest") /e/
kumnahkle ("meeting place") /ā/, ařfertur /a/
pihaz, pihos ("purified") /o/
uhtur, oht ("auctor," title of political office) /ō/, poplom, puplum ("people,
nation") /o/
struhçla ("offering") /ū/, fust, fust ("he will be") /u/
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3.5 Sabellian accent

Very little is known about the word accent of any Sabellian language. Nevertheless, it is possible to make informed inferences about accentuation based on orthographic practices and on certain phonological processes that affected the Sabellian languages, in particular Oscan and Umbrian, at various stages in their development. In all Sabellian languages short vowels were lost before word-final *s. Short vowels in open medial syllables were also syncopated before the historic period. This vocalic instability suggests that Sabellian had a stress accent which was positioned on the initial syllable of words. The fact that vowel length is indicated only in initial/radical syllables in both Oscan and Umbrian (with rare exceptions) suggests that word-initial/radical accent was still in place during the historical period (Meiser 1986:150; for Oscan antepenultimate accent, see Schmid 1954).

4. MORPHOLOGY

The Sabellian languages are classified typologically as fusional, inflecting languages. All inflectional categories are signaled through endings attached to nominal and verbal stems. Several word classes, such as conjunctions, pre- and postpositions, sentential adverbs, and the cardinal numerals four and above, are uninflected.

4.1 Nominal morphology

The nominal system is composed of nouns, adjectives, and pronouns. With the exception of a handful of forms, all members inflect for the grammatical features of case, number, and gender. Sabellian has seven cases (nominative, vocative, accusative, dative, ablative, genitive, locative), two numbers (singular and plural), and three gender categories (masculine, feminine, and neuter). Nouns are generally assigned to one of the three genders on the basis of their stem-type. For example, *a*-stems are feminine, *o*-stems and *u*-stems either masculine or neuter, *men*-stems neuter, and so forth. There are, however, exceptions, particularly in the case of animate nouns, which are assigned gender based on sex, not on form. Adjectives, most pronouns, and the cardinal numerals from one to three inflect so as to agree in gender and case with the noun which they modify, for example, Umbrian **tutaper ikuvina** "for the Iguvine state" (abl. sg. fem.); Umbrian **tref sif kumiaf** "three pregnant sows" (acc. pl. fem.).

4.1.1 Nominal classes

Nouns are formally organized into subsystems – declensions – according to the formation of the stem (see Table 5.5). Sabellian has four major vocalic-stem declensions: *a*- (Oscan **aasaí**

a-stems Umbrian Oscan muta, mutu NOM. SG. víú, touto Tursa, prestota VOC. SG. ACC. SG. víam, toutam tuta, totam DAT. SG. deívaí tute, tote eítiuvad, toutad tuta, tota ABL. SG. GEN. SG. vereias tutas, totar víaí, bansae tafle, tote LOC. SG. aasas, scriftas pumpeřias, iuengar NOM. PL. víass, eituas vitlaf, uitla ACC. PL. DAT./ABL./LOC. PL. kerssnaís tekuries, dequrier eehijanasúm urnasiaru, pracatarum GEN. PL. o-stems Oscan Umbrian húrz Ikuvins NOM. SG. Statie, Silie Serfe, Tefre VOC. SG. húrtúm ACC. SG. puplum, poplom DAT. SG. húrtúí kumnacle, pople sakaraklúd ABL. SG. puplu, poplu sakarakleís GEN. SG. katles, popler LOC. SG. tereí, comenei kumne, pople Núvlanús Ikuvinus, Iouinur NOM. PL. feíhúss vitluf, uitlu ACC. PL. DAT./ABL./LOC. PL. Núvlanúís veskles, uesclir GEN. PL. Núvlanúm pihaklu, pihaclo i-stems Umbrian Oscan NOM. SG. aídil ukar VOC. SG. slagím ACC. SG. **uvem**, *uerfale* (NEUT.) DAT. SG. ocre slagid ocri-per ABL. SG. GEN. SG. aeteis ocrer LOC. SG. ukre, ocre NOM./VOC. PL. puntes, sakreu (NEUT.) ACC. PL. avif, avef, perakneu (NEUT.) DAT./ABL./LOC. PL. luisarifs avis, aves GEN. PL. [a]íttíum peracrio consonant-stems Oscan Umbrian NOM. SG. meddíss ařfertur, pir (NEUT.) VOC.SG. Iupater ACC. SG. *capirso(m)*, **pir** (NEUT.) medíkeí DAT. SG. nomne

Table 5.5 Sabellian noun stems

(cont.)

Table 5.5 (cont.)		
	Oscan	Umbrian
ABL. SG.	_	kapiře
GEN. SG.	medíkeís	nomner/matres
LOC. SG.	—	—
NOM./VOC. SG.	humuns	frater/uasor (NEUT.)
ACC. SG.	_	capif , <i>tuderor</i> (NEUT.)
DAT./ABL./LOC. SG.	_	capiřus
GEN. SG.	fratrúm	fratrum

"altar" [loc. sg. fem.]), o- (Umbrian *poplom* "people" [acc. sg. masc.]), i- (Umbrian **uvi-kum** "with a sheep" [abl. sg. + postposition -**kum**]), and u-stems (Umbrian **trifu** "tribe" [acc. sg.]). In addition, four major consonant-stem declensions occur: stop- (Oscan aitatum "one's age" [acc. sg.]), s- (Umbrian **meřs** "law" [nom. sg. neut.]), r- (Oscan **patir** "father" [nom. sg. masc.]), and n-stems (Umbrian **umen** "ointment" [acc. sg. neut.]). Sabellian probably also had another vocalic-stem declension, \bar{e} -stems (Umbrian **re-per** "according to the ceremony" [abl. sg. fem.] + postposition -**per**). Unfortunately, the evidence is limited to a few words in Umbrian, and it is consequently impossible to determine to what extent these constituted a special inflectional class.

Within these basic inflectional categories there exist several distinct paradigmatic subclasses. For example, *o*-stems, *i*-stems, and consonant-stems split into subgroups based on the gender of the noun – neuters having inflectional endings which are distinct from masculines and feminines in the nominative and accusative singular and plural:

(7) Oscan *o*-stem masculines and neuters

	masculine	neuter
NOM. SG.	húrz	tefúrúm
ACC. SG.	húrtúm	dunum
NOM. PL.	Núvlanús	veru
ACC. PL.	feíhúss	veru

In addition, *o*-stems and *i*-stems developed subtypes as a result of sound changes that eliminated short **o* and short **i* in word-final syllables before **s* and, in the case of **o*, also in the environment *-*yom*. Owing to these changes, *o*-stems that were built historically with a **yo*-suffix came to have an inflectional pattern that was distinct from other types of *o*-stems. This latter group, in turn, is distinguished depending on whether the nominative singular retained or lost its original word-final **s*. Compare, for example, the nominative and accusative singulars in (8):

(8) Subclasses of Umbrian *o*-stem nouns

	*to-stems	*ro-stems	*lo-stems	*yo-stems
NOM. SG.	taśez /tašets/	ager	katel	Vuvćis
ACC. SG.	ehiato(m)	kaprum	katlu(m)	graboui(m)

4.1.2 Diachronic developments

The paradigms given in Table 5.5 also serve to illustrate the main features of the diachrony of the nominal system in the Sabellian languages, namely the formal merger of cases both within and across paradigms. The *i*-stem genitive singular ending, Oscan -eís/Umbrian -e(s), was taken over by *o*-stems and consonant-stems. The accusative singular ending -*om*/-úm, originally at home in *o*-stem inflection, spread into the consonant-stems. In Oscan the similarities between these two inflectional classes are even greater because the consonant-stems also borrowed the *o*-stem ablative singular -úd/-ud, for example, Oscan tanginúd (abl. sg.) "decree," *ligud* (abl. sg.) "law."

Generally, however, the formal merger of cases in Umbrian is considerably more advanced than in Oscan. Sound changes in Umbrian, in particular the monophthongization of diphthongs and the loss of word-final consonants, eliminated distinctions between case endings: consider, for example, Umbrian *a*-stem **tote** (dat. sg. fem.) "state," **tote** (loc. sg. fem.) "state," compare Oscan *a*-stem **anagtiai** (dat. sg. fem.) "Angitia" (name of goddess), **aasaí** (loc. sg. fem.) "altar"; Umbrian *a*-stem **uestisia** (acc. sg. fem.) "offering cake," **uestisia** (abl. sg. fem.), compare Oscan *a*-stem **víam** (acc. sg. fem.) "road," **toutad** (abl. sg. fem.) "state."

4.1.3 Adjectives

Adjectives are organized into paradigmatic classes on the same basis as nouns, although the number of stem-types is more restricted. Adjectives are inflected as *o*-stems, *a*-stems, *i*-stems, and consonant-stems (no *u*-stems or \bar{e} -stems occur). Together *o*-stems and *a*-stems form one adjective declension, the masculine and neuters taking *o*-stem inflection (as in Oscan **túvtíks** "of the community, state" [nom. sg. masc.], *touticom* [acc. sg. neut.]) and the feminines taking *a*-stem inflection (Oscan *toutico* [nom. sg. fem.] with -*o* from * \bar{a}). In contrast, *i*-stem and consonant-stem adjectives occur in all three gender classes (e.g., *i*-stem, Umbrian *perakri* "fit for sacrifice" [abl. sg. masc.], **perakre** [acc. sg. fem.]).

The inflectional category of degree, comparative and superlative, is marked by suffixes added to the adjective stem. The regular suffixes are **-tro-** and **-imo-** respectively, for example, Umbrian **mestru** (nom. sg. fem.) "greater," Oscan **maimas** (nom. pl. fem.) "greatest."

4.1.4 Pronouns

The Sabellian pronominal system includes personal, reflexive, demonstrative, emphatic, anaphoric, interrogative, indefinite, and relative pronouns. The pronouns for first and second persons are not marked for gender, but the rest of the forms in the pronominal system are assigned gender based on that of the noun with which they are in agreement or to which they refer, for example, Umbrian **este persklum** "this ceremony" (acc. sg. neut.).

Sabellian pronouns show significant differences in inflection when compared with nouns and adjectives. These differences are particularly strong in the personal pronouns, but are manifest also in other pronominal categories. For example, the dative singular of the firstand second-person pronouns has unique endings -he, -fe/-fei, for example, Umbrian mehe "to me," tefe "to you," Oscan t(e)fei "to you," compare Latin *tibi*. Furthermore, the dative singular and the locative singular of demonstratives and relatives are marked by distinctive endings in Umbrian, dative -smi, -smei, locative -sme, for example, Umbrian demonstrative esmi-k, *esmei* "this" (dat. sg.), relative pusme "who, which" (dat. sg.), demonstrative *esme* "this" (loc. sg.). The pronominal neuter nominative/accusative singular is distinguished from nominals by its case ending -d, Oscan púd "which," Umbrian puře "which" <*pod-id. Outside of the personal pronouns, Sabellian pronominal formations exhibit either *a*-, *o*-, or *i*-stem inflection. The relative and indefinite pronouns have the stems **po**- and **pi**-:

(9) Oscan and Umbrian relative pronouns

	Oscan	Umbrian
NOM. SG. MASC.	—	poi, porsi
NOM. SG. FEM.	paí	—
NOM. SG. NEUT.	púd	puře
ACC. SG. FEM.	paam	—
DAT. SG. MASC.	pui	pusme
ABL. SG. FEM.	pad , poizad	pora
NOM. PL. MASC.	pús	pure
NOM./ACC. PL. NEUT.	paí	porse
ACC. PL. FEM.	—	pafe

Demonstrative formations typically have *a*-/*o*-stem inflection: for example, Paelignian *ecuc* "this" (nom. sg. fem.) < **ekā*-*k*(*e*), Oscan **ekas** "this" (nom. pl. fem.), both with stem **eko*-/*ekā*-; Oscan **eíseís** "his" (gen. sg. masc.), Umbrian **erer** "this" (gen. sg. masc.), with stem **eiso*-; Umbrian **estu** "that" (acc. sg. masc.), with stem **isto*-; Oscan **eksuk** "this" (abl. sg. neut.); Umbrian *eso* "this" (nom. sg. fem.) < **eksā*, with stem **ekso*-/*eksā*-:

(10) Oscan and Umbrian demonstrative pronouns (stem **i*-/*ei*-)

	Oscan	Umbrian
NOM. SG. MASC.	izic	erek
NOM. SG. FEM.	iiuk	
NOM. SG. NEUT.	ídík	eřek
ACC. SG. MASC.	ionc	
ACC. SG. FEM.	íak	eam
NOM. PL. MASC.	iusc	
ACC. PL. FEM.	<i>iafc</i> (Marrucinian)	eaf
NOM./ACC. PL. NEUT.	ioc	eu

The Sabellian anaphoric pronoun is built with the stem **i-/ey-*, for example, Oscan *izic* "he" (nom. sg. masc.), Umbrian **erek**, *erec* "he" (nom. sg. masc.).

In the prehistory of the Sabellian languages many of these pronominal forms were augmented by means of particles. The accretion of these particles to pronominal forms had the effect of producing paradigms with inflectional endings that appear, at first glance, to have little in common with those of the nominal system. In many instances the inflectional ending of a pronominal form cannot easily be recognized until the particle has been removed, for example, Umbrian **erarunt** "the same" = **erar** (gen. sg. fem.) + particle -**unt** < **esās-ont*; Umbrian **erak** "this" = **era** (abl. sg. fem.) + particle -**k** < **esād-k(e)*; Umbrian **puře** "which" = **puř** (nom. sg. neut.) + particle -**e** < **pod-i*.

4.2 Verbal morphology

The Sabellian verb is inflected for the categories of tense, voice, mood, person, and number. There are three persons (first, second, third), two numbers (singular, plural), and two voices (active, mediopassive). The mood categories are indicative, imperative, and subjunctive. Five different tense forms are attested for Sabellian verbs: present, imperfect, future, perfect, and future perfect. The basic symmetry of the Sabellian system and the fact that it is quite similar to that of Latin suggest the occurrence of another tense form, the pluperfect, compare Latin *portauerat* "had carried."

4.2.1 Aspectual stems

The finite verb system is formally organized into subsystems based on two stem-types that mark a distinction in aspect, the *infectum* (present system) and the *perfectum* (perfect system). Present, imperfect, and future tense forms are built on the stem of the infectum, the perfect and the future perfect on that of the perfectum:

(11)		INFECTUM	PERFECTUM
	PRES.	didet "he gives" (Vestinian)	PERF <i>fefa<c>id</c></i> "he should do"
	FUT.	didest "he will give"	FUT. PERF. <i>fefacust</i> "he will have done"
	IMPF.	fufans "they were"	pluperf. ? —
		1	

4.2.2 Verb endings

The grammatical categories of person, number, and voice are signaled by affixes traditionally called "personal endings." These are of two basic sets, one for active and one for mediopassive voice (see Table 5.6). The active set of endings has two forms depending on the tense of the verb to which it is attached: the so-called primary endings are used for present, future, and future perfect tenses; while secondary endings are used for imperfect and perfect indicative, and for all tenses of the subjunctive. In the passive voice, only Umbrian shows a primary versus secondary distinction, for example, 3rd sg. mediopass. – primary **herter** "it is desirable" (3rd sg. pres.); secondary **emantur** "they should be accepted" (3rd sg. pres. subjunc.).

Table 5.6 Sabellian personal end	ings
PRIMARY	
1ST SG. ACT.	Umbrian suboca-u "I invoke"
2ND SG. ACT.	Umbrian herie-s "you will desire"
3RD SG. ACT.	Vestinian <i>dide-t</i> "he gives"
3RD SG. MEDIOPASS.	Oscan uinc-ter "he is convicted"
1ST PL. ACT.	_
2ND PL.	—
3RD PL. ACT.	Umbrian <i>furfa-nt</i> "they shear"
3RD PL. MEDIOPASS.	Umbrian ostens-endi "they will be presented"
SECONDARY	
1ST SG. ACT.	Oscan manaf-úm "I entrusted"
2ND SG. ACT.	—
3RD SG. ACT.	Oscan prúfatte-d "he approved"
1ST PL. ACT.	South Picene adstaeo-ms "we have set up"
2ND PL. ACT.	Umbrian benuso /-us-so/ "you all will have come"
3RD PL. ACT.	Paelignian coisat-ens "they took care of"
3RD PL. MEDIOPASS.	Umbrian ema-ntur "they should be accepted"

The Sabellian languages also possess a third singular mediopassive suffix **-r** for use in impersonal constructions, for example, Umbrian **ferar** (3rd sg. pres. subjunc.). mediopass. "there is a carrying," *ier* (3rd sg. pres. mediopass.) "there is a going."

4.2.3 Verbal classes

The Sabellian verb is organized into paradigmatic classes, or conjugations, based on the form of the verb-stem found in present tense inflection. If verbs such as "to be" (Oscan **súm** "I am") and "to go" (Umbrian *est* "he will go") are excluded as "irregular," five basic conjugational patterns can be established: *a*-conjugation (Oscan **faamat** "he calls"); *e*-conjugation (Umbrian **tusetu/tusitu** "let him pursue," Oscan **fatíum** "to speak," **licitud** "let it be permitted"); *i*-conjugation (Umbrian **seritu** "let him watch out for"); *y/i*-conjugation (Umbrian **façiu** /fašyo(m)/ "to sacrifice," Oscan **fakiiad** "he should make"); and *e/ø*-conjugation (Oscan *agum* "to move," *actud* "let him move," Umbrian **aitu** "let him move"). Forms of the *y/i*- and *e/ø*-conjugations such as the Oscan imperatives *factud*, *actud* are derived from earlier forms in which medial vowels were present – short *i* for *factud* < **fakitōd*, short *e* for *actud* < **aketōd*.

4.2.4 Verb tense

Tense is typically signaled by a combination of stem-type (perfectum versus imperfectum; see §4.2.1) and suffixation. Outside of the present and perfect there are special tense-forming suffixes. The imperfect has **-fa-**, the future **-(e)s-**, and the future perfect **-us-**: for example, Oscan **fu-fa-ns** "they were" 3rd pl. impf., Oscan *deiua-s-t* "he will swear" (3rd sg. fut.), Oscan **tríbarakatt-us-et** "they will have built" (3rd pl. fut. perf.).

Sabellian perfect tense stems of active voice are formed by a number of different morphological operations: (i) reduplication (Oscan deded "he gave" [3rd sg. perf.], fefacid "he should do" [3rd sg. perf. subjunc.]; Umbrian dede "he gave" [3rd sg. perf.]); (ii) suffixation (-tt-: Oscan prúfatted "he approved" [3rd sg. perf.]; -nçi-/-nśi-; Umbrian purdinśiust "he will have presented" [3rd sg. fut. perf.]; -f-: Umbrian andirsafust "he will have made a circuit" [3rd sg. fut. perf.]); and (iii) radical vowel lengthening (Oscan uupsens "they built" [3rd. pl. perf.]). Some perfects are formed from the bare verb-stem, minus the suffix used to generate the present: for example, Umbrian anpelust "he will have slain" (3rd sg. fut. perf.) built to a present that is characterized by a suffix **-ne**, **anpentu** "let him slay" < *-*pennet* $\bar{o}d$ < *-pelnetod. In the mediopassive, the perfect is formed by a periphrastic construction involving the past participle plus a form of the verb "to be": for example, Oscan prúftúset ("they have been approved" [3rd pl. perf. mediopass.]; Oscan scriftas set "they have been written" [3rd pl. perf. mediopass.]; Umbrian pihaz fust "it will have been purified" [3rd sg. fut. perf. mediopass.]). Interestingly, there is one perfect mediopassive formation that is not a periphrastic, Oscan comparascuster "it will have been discussed," a future perfect found in the Tabula Bantina. Presumably this formation is an independent (and late?) Oscan creation.

In some cases, in particular derived verbs, the stem of the perfect is built directly from the present. For example, *a*-stem presents generally form **-t(t)**-stem perfects in Oscan and in the Sabellian languages of central Italy: thus, Oscan **duunated** "he presented" (3rd sg. perf.); Paelignian *coisatens* "they took care of" (3rd pl. perf.); Marrucinian *amatens* "they seized" (3rd pl. perf.); Volscian *sistiatiens* "they set up" (3rd pl. perf.). Still, even here there are exceptions. The verb-stem **opsa**- "build" forms a perfect by lengthening the radical vowel and truncating the present stem vowel **a**, thus Oscan **uupsens** "they built" (3rd pl. perf.).

In Umbrian, *a*-stems form their perfects by means of the suffix **-f**-, *andirsafust* "he will have made the circuit" (3rd sg. fut. perf.). In many cases the type of perfect formation cannot be predicted by the paradigmatic class of the present. For example, the verb "to give" forms a reduplicated present (Vestinian *didet* "he gives" [3rd sg. pres.]) and a reduplicated perfect (Oscan *deded* "he gave" [3rd sg. perf.]), while the verb "to make" forms a *y/i*- present but a reduplicated perfect, **fakiiad** "he should make" (3rd sg. pres. subjunc.), *fefacid* "he should make" (3rd sg. perf. subjunc.).

4.2.5 Nonindicative moods

Subjunctive mood is indicated by suffixes which are attached to the verb-stem preceding the personal endings. Present subjunctive is marked by -a in Umbrian for all present classes except *a*-conjugation, which shows -ia: for example, *e*-conjugation habi-a "he should hold" (3rd sg. pres. subjunc.); compare *a*-conjugation *porta-ia* "he should carry" (3rd sg. pres. subjunc.). In Oscan -*i* is used for *a*-conjugation, *deiua-i-d* "he should swear" (3rd sg. pres. subjunc.), -a for all other conjugation classes, for example, pútí-a-ns "they should be able" (3rd pl. pres. subjunc.).

The imperfect subjunctive is attested only in Oscan and Paelignian. The suffix used is Oscan -sí, Paelignian -se ($< *s\bar{e}$): Oscan fu-sí-d "he should be" (3rd sg. impf. subjunc.); Paelignian *upsa-se-ter* "it was built" (3rd sg. impf. subj. mediopass.). For the perfect subjunctive active, the suffix is -i/*i*, Oscan tríbarakatt-í-ns "they should build" (3rd pl. perf. subjunc.).

Imperative mood forms have two special sets of person, number, and voice endings. Socalled *imperative I* endings are used for commands that are to be carried out immediately following the time of speaking:

(12) Imperative I

2ND SG. ACT.	Umbrian anserio "observe"
3RD SG.	—
2ND PL. ACT.	Umbrian eta-tu "go," Paelignian <i>ei-te</i> "go"
2ND PL. MEDIOPASS.	Umbrian katera-mu "arrange in order"
3RD PL.	—

Imperative II endings are reserved for commands to be carried out at some undefined point in the future. This type is particularly common in the Iguvine Tablets, where sets of ritual instructions are set forth to be carried out whenever the religious observance is required:

(13) Imperative II

2ND SG. ACT.	Umbrian ene-tu "begin"
2ND SG. MEDIOPASS.	Umbrian <i>persni-mu</i> "pray"
3RD SG. ACT.	Oscan liki-tud "let it be permitted"
3RD SG. MEDIOPASS.	Oscan censa-mur "let him be assessed"
2ND PL. ACT.	Umbrian ambre-tuto "circumambulate"
2ND PL. MEDIOPASS.	Umbrian <i>pesni-mumo</i> "pray"
2ND PL. MEDIOPASS. 3RD PL. ACT.	Umbrian <i>pesni-mumo</i> "pray" Umbrian <i>habi-tuto</i> "let them hold"
	1 1,

4.2.6 Nonfinite verbals

An important component of the Sabellian verbal system consists of a constellation of nonfinite formations. These include present infinitives, both active and mediopassive (Umbrian *erom* "to be" [pres. act.]; Umbrian *pihafi* "to be expiated" [pres. mediopass.]); present and past participles (Umbrian **zeref** "sitting" [pres. act.]; Umbrian **çersnatur** "having dined" [past. mediopass.]); supines (Umbrian **anzeriatu** "to observe"); and the so-called gerundive (Oscan **úpsannam** "to be built").

4.3 Derivational morphology

Complex Sabellian words are formed by means of the morphological processes of affixation and compounding. Affixation, in particular suffixation, appears to have been more productive than compounding.

4.3.1 Suffixation

Several suffixes are used productively to form nouns in Oscan and Umbrian. The suffix -iuf (nom. sg.)/-in- (other cases) produces nouns with abstract or concrete meanings, for example, Oscan tríbarakkiuf "a building," compare tríbarakattens "they built." The extended suffix -tiuf/-tin- has the same morphological function, for example, Oscan *medicatinom* "judgment," Umbrian natine "tribe," compare Praenestine Latin *nationu* "childbirth" (gen. sg.). The suffix -tur is used to form agent nouns from verb-stems, for example, Oscan regatureí "the director" (epithet of Jupiter) dat. sg. from **regā*- "direct," ařfertur "flamen, chief priest" from **ad-fer*- "to carry." The suffix -etia, which is added to noun stems to build abstracts, is attested in Umbrian by several formations that serve to indicate terms of elected office, for example, kvestretie "in the term of office as quaestor" (loc. sg.).

One productive adjective-forming suffix is -(a)sio- "relating to, pertaining to," used to form adjectives from nominal stems: for example, Oscan kerssnasias "concerned with banquets" (nom. pl. fem.), compare Oscan kersnu "banquet" (nom. sg. fem.); purasiaí "concerned with fire" (loc. sg. fem.), compare Umbrian pir "fire" (nom./acc. sg. neut.). The suffix -ano- is also used to form adjectives from nouns; most of the examples attested in inscriptions are formed from ethnic or topographical names, for example, Oscan Abellanús "from the city of Abella" (nom. pl. masc.), Umbrian Treblanir "leading to Trebula" (abl. sg. neut.).

Verbs are productively formed in all Sabellian languages by means of the suffix -a or by extensions of this suffix, -ia, -ta, etc. Formations in -a, a suffix used primarily to build verbs from nouns and adjectives, are widely attested: thus, Umbrian kuratu "accomplished" (acc. sg. neut. mediopass. part.); Paelignian *coisatens* "they supervised" (3rd pl. perf.) < *koisā-, compare Latin *cūra* "concern"; Oscan *deiuaid* "he should swear" (3rd sg. pres. subjunc.) < *deiuā-, compare Oscan **deívaí** "divine" (dat. sg. fem.); Umbrian **pihatu** "let him purify" (3rd sg. impv. II), compare Volscian *pihom* "religiously unobjectionable" (nom. sg. neut.); Oscan **teremnattens** "they set a limit on" (3rd pl. perf.) < *termnā-, compare Oscan **teremníss** (acc. pl.), Latin *termen* "limit"; Umbrian **osatu** "let him build" (3rd sg. impv. II) < *opesā-, compare Latin *opus* "work." This suffix, as well as variants derived from it, are also used in the formation of deverbative verbs: for example, Umbrian *andirsafust* "he will have made the circuit" (3rd sg. fut. perf.) < *am-did-ā-; Umbrian kumb**ifiatu** "deliver instructions" (2nd sg. impv. II) < *kom-bif-iā-, compare Latin *fīdit* "he puts confidence in"; Umbrian *etaians* "they go" (3rd pl. pres. subjunc.) < *ey-tā-.

4.3.2 Compounds

Sabellian compound formations consist in large part of words with an adverbial first constituent. In fact, the only pervasive type of verbal composition attested in Sabellian involves the use of adverbial elements: for example, Umbrian **aha-uendu** "let him turn away" (3rd sg. impv. II), **am-pendu** "let him slay" (3rd sg. impv. II), **re-vestu** "let him examine" (3rd sg. impv. II), etc. There is also a substantial number of nominals formed by means of an adverbial first constituent. The best attested are built with the privative element **a-**, **an-** "not": for example, Oscan *an-censto* "unburnt" (nom. sg. fem.); Umbrian *a-uirseto* "unseen" (nom. sg. neut.), **an-takres** "unground" (abl. pl.), **a-snata** "not wet" (acc. pl. neut.), **a-seçeta** "uncut" (abl. sg. fem.).

Nominal compounding is not well represented in Sabellian. There are a couple of good examples of possessive compounds with numerals as the first member, for example, Umbrian *petur-purs-us* (dat. pl.) "animals" (i.e., "having four feet"); *du-pursus* (dat. pl.) "having two feet." But aside from these, there are few formations that qualify as compounds from a synchronic point of view, though several forms derive historically from compounds: thus, Oscan **meddíss** "meddix" (a title of magistracy), which was originally an adjectival compound with first member **med-* "law" and second member **dik-* "speaking," compare Latin $i\bar{u}dex < iowes-dik-$ "speaking the law." The semantics of **meddíss**, the fact that it refers to a magistracy, suggests that it was no longer interpreted synchronically as a compound.

4.3.3 Locative case formation

An especially interesting morphological development is found in the Oscan and Umbrian case system. The postposition Oscan -en "in, upon," Umbrian -en, -e, -em "in, upon" governs the locative case in one of its primary functions. When this postposition was added to the locative of *o*-stem nominal forms in Oscan, or to the locative of vowel stems in Umbrian, the vowel of the case ending and initial vowel of the postposition contracted, as in Oscan húrtín /hortēn/ "in the precinct" < *hortey-en. This contracted form of ending + postposition was then reanalyzed as a new form of the locative case. That such was indeed the case is indicated by noun phrases in which this "ending" is attached to both adjectives and nouns, for example, Oscan hurtín Kerríiín "in the precinct of Ceres" (loc. sg. masc.), Umbrian *ocrem Fisiem* "on the Fisian Mount" (loc. sg.); and by instances in which the postposition has been added to a noun already marked with the original postposition, for example, Umbrian *toteme Iouinem* "in the Iguvine community." In this instance, *toteme* can be segmented diachronically as *tote* (loc. sg. fem.) + postposition -*e*.

4.4 Numerals

Lack of evidence prevents a comprehensive treatment of numerals in Sabellian. Cardinal numbers are well represented only by "two" and "three," which inflected for gender, case, and number: Umbrian **sif trif** "three sows" (acc. pl. fem.), **triia tefra** "three pieces of burnt offering" (acc. pl. neut.). The number "four" **pettiur** is found on one Oscan inscription (Rix Sa17). Unfortunately, the inscription is fragmentary and the context in which the word occurs is no longer recoverable. The number "twelve" is attested in Umbrian in the form of a copulative compound "ten + two," *desen-duf* (acc. pl.). Other cardinals can only be pieced together from derived formations. For example, the Umbrian nominal forms **pumpeřias** "representing 5 decuriae" and **puntes** "groups of five" point to **pompe* as the form for the cardinal "five."

In addition to the cardinals, a few ordinals and multiplicative adverbs are attested. Umbrian has forms for the first three ordinals: **prumum**, *promom* "first" (acc. sg. neut.), **etre** "second" (dat. sg. fem.), and **tertiam-a** "third" (acc. sg. fem.) + postposition -a. Multiplicatives are also attested in Umbrian: **sumel** "once," **duti** "two times," **triuper** "three times," and **nuvis** "nine times."

5. SYNTAX

5.1 Case usage

In Sabellian the role of noun phrases in a sentence is denoted by the inflectional feature case. The complements of the verb are marked by nominative case for subject, accusative case for direct object, and dative case for indirect object or beneficiary. Nominative is also used for adjectival and nominal predicates in copular sentences, and accusative case for the objects of certain prepositions and for goal of motion. Vocative is the case of direct address. The remaining oblique case forms, genitive, ablative, and locative, are used for adnominal (genitive = possession, partitive) or adverbial functions (ablative = place from which, source; locative = place where, time when).

5.2 Word order

The order of the major constituents in a Sabellian sentence is predominantly Subject– Object–Verb (SOV), but almost all possible permutations of this basic order are attested in inscriptions. Changes from basic SOV order do not affect the grammaticality of a sentence and are usually motivated by considerations of focus (topicalization), prosody (speech rhythm), or aesthetics (style).

The order of elements within a noun phrase depends on the type of modifier. Typically, adjectives occupy postnominal position (Oscan **lígatúís núvlanúís** "legates from Nola"), while genitive noun phrases are placed before the modified noun (Oscan **herekleís fíísnu** "temple of Herakles"), though adjectives can also appear in prenominal position (Oscan **múínikeí tereí** "in common territory") and genitives can follow their head noun (**sakaraklúm herekleís** "sanctuary of Herakles"). Numerals and pronominal modifiers are almost invariably placed before the noun (Umbrian **tref hapinaf** "three lambs"; Oscan **eíseí tereí** "in that territory"). Definite relative clauses usually follow the antecedent noun phrase, but there are examples in which the relative clause is preposed; sample relative clauses are given in (14):

(14) Relative clauses in Sabellian

A. púst. feíhúís.	pús.		físnam.
behind walls-ABL.	PL. MASC. which-no	M. PL. MASC	с. temple-асс. sg. fem.
amfret			
surround-3rd P	L. PRES.		
"Behind the walls w	which surround the te	mple" (Osc	an Rix CA)
B. pafe.	trif.	promom.	haburent.
which-ACC. PL. FEM	и. three-асс. pl. fem	. first-adv.	will catch-3rd pl. fut. perf.
eaf.	acersoniem	/	
these-ACC. PL. FI	ем. Acedonia-L	OC. SG. FEM	. + Postposition
fetu			
sacrifice-3RD sG.	impv. II		
"Which three [vict	ims] they will have ca	ught first, t	hese he shall
sacrifice at Aced	onia" (Umbrian VIIa	52)	

The Sabellian languages possess both prepositions and postpositions, Umbrian exhibiting a good selection of the latter: -ař "to, toward"; -*co*, -**ku** "with"; -*en*, -*e*, -*em* "into, to, upon"; -*per* "for"; -*to*, -*ta*, -*tu* "from." In the other Sabellian languages, however, postpositions are much less common (see Oscan *censtom-en* "for the census" and 4.3.3). In the case of prepositional phrases with adjective modifiers, it is common to find the preposition standing between the adjective and the noun: thus, Umbrian *nertru-co persi* (abl. sg. masc.) "at the left foot," compare Latin *magnō cum dolōre* (abl. sg. masc.) "with great sorrow."

5.3 Agreement

There are three basic rules of agreement in Sabellian:

- 1. Pronominal modifiers and adjectives, both attributive as well as predicative, modify their head noun in terms of the inflectional features of gender, number, and case, for example, **sif kumiaf** (fem. acc. pl.) "pregnant sows."
- 2. A relative pronoun agrees with the head of its antecedent noun phrase in gender and number, while case is determined by the role of the relative word within its clause (see the examples in [14] above).
- **3.** Verbs are marked for person and number based on the person and number of their subject. So, in the Oscan sentence of (15) below, the verb form *censazet* "they will assess" (3rd pl. fut.) is marked for third-person plural in order to agree with the nominative plural subject *censtur* "censors."
- (15) pon censtur bansae tautam when-CONJ. CENSORS-NOM. PL. MASC. Bantia-LOC. SG. FEM. people-ACC. SG. FEM. censazet "assess"-3RD PL. FUT.
 "When the censors will assess the people at Bantia" (Oscan Rix TB)

Deviations from these rules of agreement do occur and can usually be attributed to factors such as "agreement through sense." So, for example, in the following sentence from the Iguvine Tablets the main verb **prusikurent** "they will have proclaimed" (3rd pl. fut. perf.) is marked for plural based on the collective sense of the grammatically singular subject noun phrase **mestru karu** (nom. sg. fem.) "the greater portion" = "majority."

(16)	sve mestru	karu	fratru			
	if-conj. greater-nom. sg. H	тем. portion-nom. sg. fem.	brothers-gen. pl. masc.			
	Atiieřiu	pure ulu				
	Atiedian-gen. pl. masc. who-nom. pl. masc. there-adv.					
	benurent	prusikurent	rehte			
	come-3rd pl. fut. perf.	proclaim-3rd pl. fut. perf	. properly-adv.			
	kuratu eru					
	has been executed-perf. pass. INF.					
	((TC) 1 1) C .1 A .1 1	1 .1 1 .111	.1			

"If a majority of the Atiedian brothers who will have come there will have proclaimed that [the ceremony] has been executed properly" (Umbrian Va 24–26)

5.4 Main clauses

The mood of a Sabellian verb in main clauses is semantically determined. Statements of fact take the indicative mood. Subjunctive mood is used for wishes (Oscan **nep pútíad** "([I hope] he is not able") and for prohibitions (*ni hipid* "let him not hold"). Commands

and prescriptions appear in the imperative (Umbrian *anserio* "observe"; Oscan **factud** "let him make").

5.5 Subordinate clauses

5.5.1 Modal distribution

In dependent clauses the distribution of the subjunctive and indicative moods is a function of the type of subordination involved. In indirect commands the subjunctive mood is used as a replacement for the imperative. In Umbrian this type of subordination does not take an introductory conjunction.

 kupifiatu
 rupiname
 erus

 order-3RD SG. IMPV. II
 Rubinia-ACC. SG. FEM. + POSTPOSITION
 erus-ACC. SG. NEUT.

 tera
 ene
 tra sahta

 distribute-3RD SG. PRES. SUBJUNC.
 and-CONJ.
 Trans Sancta-ACC. SG. FEM.

 kupifiaia
 order-3RD SG. PRES. SUBJUNC.

"At Rubinia he shall order him to distribute the *erus* and to give the command at Trans Sancta" (Umbrian Ib 35)

Indirect questions use both indicative and subjunctive depending on whether the event described in the question is considered a fact or a possibility, but there is at least one example, cited in (18), of the use of a subjunctive as a replacement for the indicative mood of the direct question.

 (18) ehvelklu feia... sve rehte
 vote-ACC. SG. NEUT. take-3RD SG. PRES. SUBJUNC. if-CONJ. properly-ADV.
 kuratu si
 execute-PERF. MEDIOPASS. PART. + be-3RD SG. SUBJUNC. (= PERF. PASS.)
 "Let him take a vote on whether [the ceremony] has been properly executed" (Umbrian Va 23)

The spread of the subjunctive mood at the expense of the indicative appears to have been in progress during the historical period.

5.5.2 Subordinating conjunctions

Temporal clauses are introduced by a variety of conjunctions: Umbrian *arnipo* "until"; Umbrian **ape** "when"; Umbrian *ponne*, **pune**, Oscan **pun** "when"; Oscan *pruter pan*, Umbrian *prepa* "before"; Umbrian *post pane* "after." Adverbial clauses of purpose are signaled by the conjunction **puz** Oscan, *pusi* Umbrian "so that" and a subjunctive mood verb in the subordinate clause. The conjunction meaning "if," **sve** Umbrian, **svaí** Oscan, marks the protasis of a conditional clause.

5.5.3 Infinitival complements

Infinitives are used to represent the main verb of a statement that is subordinated in indirect discourse. The subject in the subordinated clause shifts from nominative to accusative case, and the tense of the infinitive is determined by the tense of the verb in direct discourse.

Thus, in the Umbrian example of (19), the perfect periphrastic infinitive is used because the tense of the verb in direct discourse was perfect:

- (19) prusikurent rehte
 proclaim-3RD PL. FUT. PERF. properly-ADV.
 kuratu eru
 execute-PERF. MEDIOPASS. PART. ACC.SG. NEUT. + be-PRES. ACT. INF. =
 PERF. PASS. INF.
 - "(A majority of the brotherhood) will have proclaimed that it [the ceremony] has been properly executed" (Umbrian Va 26)

Infinitives also serve as the complements of verbs that have meanings within the semantic range of "wish," "be necessary," "be fit," etc. The examples cited below are from Umbrian.

(20)	А.	pune	puplum		af	erum		heries
		when-con	1. people-A	CC. SG. MAS	с. рі	urify-pres.	INF.	wish-2ND SG. FUT.
		avef		anzeriatu		etu		
		birds-ACC. PL. FEM. observe-SUPINE gO-2ND SG. IMPV. II "When you will wish to purify the people, go to observe the birds"						V. II
								e birds"
	(Umbrian Ib 10)							
	В.	perse	mers	е	st		e	25U
		if-conj.	right-Noм. se	g. neut. is	s-3rd s	G. PRES. AC	ст. t	his-abl. sg. masc.
		sorsu		persondru				
		pig-abl	. SG. MASC.	excellent-AI	BL. SG.	MASC.		
		pihaclu				pihafi		
			-			-		. MEDIOPASS. INF.
		"If it is rigl	nt that it be pu	urified with t	this exc	cellent pig a	is a vio	ctim of purification"
		(Umbria	an VIb 31)					

Supines are used as complements to verbs of motion; see **anzeriatu** in the first sentence of (20).

5.5.4 Sequence of tenses

In indirect commands, indirect questions, adverbial clauses of the purpose type, and subordinate clauses within indirect discourse, the tense of the subjunctive is governed by the tense of the main verb, so-called *consecutio temporum* "sequence of tenses." Present tense in the main clause requires present tense of the subjunctive in the subordinate clause; past tense in the main requires an imperfect subjunctive in the subordinate clause. In the Oscan example of (21), the verb in the subordinate clause is imperfect subjunctive because the governing verb is in the perfect tense:

 kúmbened
 thesavrúm
 pún

 agree-3RD SG. PERF.
 treasury-ACC. SG. MASC.
 when-CONJ.

 patensíns
 múíníkad
 tanginúd

 open-3RD PL. IMPF. SUBJUNC.
 common-ABL. SG. FEM.
 consent-ABL. SG. FEM.

 patensíns

open-3rd pl. IMPF. SUBJUNC.

"It was agreed [that] when they opened the treasury they should open it by joint agreement" (Oscan Rix CA)

5.5.5 Relative clause formation

There are two important Sabellian syntactic processes that concern relative clause formation – *attraction* and *incorporation*. Attraction refers to the process whereby the antecedent of a relative pronoun is attracted into the case of the relative, or the case of the relative is modified to agree with that of its antecedent (so-called *reverse* attraction). Incorporation refers to movement of the antecedent out of the main clause and into the relative clause.

In the Oscan sentence of (22), both syntactic processes are at work: (i) *ligud*, which serves as the antecedent of the relative pronoun *poizad*, is incorporated into the relative clause; and (ii) the relative pronoun *poizad*, which is the underlying direct object accusative of the verb *anget*<.>*uzet*, is attracted into the ablative case of the antecedent.

- (22) censamur. esuf... poizad.
 assess-3RD SG. PRES. MEDIOPASS. IMPV. II self-NOM. SG. MASC. which-ABL. SG. FEM. ligud / iusc. censtur.
 law-ABL. SG. FEM. this-NOM. PL. MASC. censors-NOM. PL. MASC. censaum. anget<..> uzet
 assess-PRES. ACT. INF. propose-3RD PL. FUT. PERF.
 - "He himself shall be assessed by the law which these censors shall have proposed to take the census" (Oscan Rix TB)

6. THE LEXICON

The basic layer of the Sabellian lexicon is made up of words inherited from Proto-Indo-European. Many of these words are attested in both branches of Italic as well as in other Indo-European languages:

(23) Sabellian words of Proto-Indo-European origin

- A. "father": Oscan **pater** NOM. SG. MASC., South Picene **patereíh** DAT. SG. MASC., Latin *pater*
- B. "mother": Oscan **maatreís** GEN. SG. FEM., South Picene **matereih** DAT. SG. FEM., Latin *māter*
- C. "brother": Umbrian frater NOM. PL. MASC., Latin frāter
- D. "carries": Umbrian *ferest* 3RD SG. FUT., Volscian *ferom* PRES. INF., Marrucinian *feret* 3RD PL. PRES., Latin *fert* 3RD SG. PRES.
- E. "says": Oscan deíkum pres. ACT. INF., Latin dīcit 3RD SG. PRES.
- F. "be": Oscan súm, *sim* 1st sg. pres., *est* 3rd sg. pres., Umbrian *est*, Volscian *estu* 3rd sg. 1MPV. II, South Picene **esum** 1st sg. pres., Pre-Samnite **esum**, Latin *sum, est*
- G. "foot": Umbrian peri Abl. SG. MASC., Oscan pedú GEN. PL. MASC., Latin pēs

Other Sabellian vocabulary items have solid etymological connections with languages in other branches of Indo-European but lack Latino-Faliscan cognates:

(24) Inherited Sabellian vocabulary not found in Latino-Faliscan

- A. "son": Oscan **puklui** DAT. SG. MASC., Paelignian *puclois* DAT. PL. MASC., Marsian *pucle[s]* DAT. PL. MASC., Sanskrit *putras*, cf. Latin *filius*
- B. "daughter": Oscan futír NOM. SG. FEM., Greek θυγάτηρ, Sanskrit duhitā, cf. Latin filia
- C. "fire": Umbrian *pir* NOM./ACC. SG. NEUT., Oscan **purasíaí** "having to do with fire" LOC. SG. FEM., Greek πῦρ, English *fire*, cf. Latin *ignis*

- D. "water": Umbrian **utur** "water" NOM./ACC. SG. NEUT., Greek ὕδωρ, cf. Latin *aqua* but note also Oscan **aapa** "water"
- E. "community": Oscan *touto* NOM. SG. FEM., Umbrian **totam** ACC. SG. FEM., Marrucinian *toutai* DAT. SG. FEM., cf. Venetic **teuta**[**m**] ACC. SG. FEM., Lithuanian *tauta* "people," Gothic *piuda* "people," Old Irish *tuath* "people"

A small set of vocabulary items are restricted to Italic. A substantial number of these shared vocabulary items are associated with religion and ritual practices: for example, Latin *sacer* "sacred," Oscan **sakrím** "victim" (acc. sg.); Latin *sanctum* "consecrated," Oscan **saahtúm** (acc. sg. neut.); Latin *pius* "obedient," *piat* "he propitiates," Volscian *pihom* "religiously unobjectionable" (nom. sg. neut.), Umbrian **pihatu** "let him purify" (3rd sg. impv. II); Latin *feriae* "days of religious observance," Oscan **fiísíaís** (dat pl. fem.). A few items in this category, however, belong to "secular" levels of the lexicon: thus, Latin *cēna* "dinner," Oscan **kersnu** (nom. sg. fem.); Latin *habet* "he has, holds," Oscan **hafiest** (3rd sg. fut.); Latin *ūtī* "to use," Oscan **útítiuf** "use" (nom. sg.); Latin *familia* "family," Oscan *famelo* "household" (nom. sg. fem.); Latin *cūrat* "he superintends," Paelignian *coisatens* (3rd pl. perf.), Umbrian **kuraia** (3rd sg. pres. subjunc.).

Loanwords entered the Sabellian languages from three main sources: Greek, Etruscan, and Latin. The earliest layer of loanwords in Oscan resulted from contact with Greeks and Etruscans in southern Italy. A considerable portion of these loans are the names of deities or their divine epithets: for example, **Herekleís** "Herakles" (gen. sg.), compare Etruscan **hercle**, Greek Ηρακλῆς; **Herukinaí** (dat. sg.), compare Greek Ἐρυκίνη, epithet of Aphrodite; Aππελλουνηι "Apollo" (dat. sg.), **Appelluneís** (gen. sg.), compare Doric Greek Ἐπτέλλων. Outside of *nomina sacra*, there is a handful of cultural borrowings: for example, Oscan **kúíníks** "quarts" (nom. pl.), compare Greek χοῖνιξ "quart (dry measure)"; Oscan **thesavrúm** "storehouse" (acc. sg.), compare Greek θησανρός. Other words, ultimately of Greek origin, made their way into Sabellian via Etruscan intermediation, for example, Oscan **culchna** (nom. sg.) "kylix," cf. Etruscan **culigna**, Greek κυλίχνα.

Greek loans, particularly the names of divinities, penetrated also into the Sabellian languages of central Italy. A late second-century Paelignian inscription (Ve 213) reveals the names of two Greek divinities: *Uranias* "Urania" (gen. sg.), *Perseponas* "Persephone" (gen. sg.).

Etruscan may be the source for one of the most important sacred terms in Sabellian. The word for "god" that is attested in the central Sabellian languages (Marrucinian *aisos* "gods" [nom. pl. masc.], Marsian *esos* [nom. pl. masc.], Paelignian *aisis* [dat. pl. masc.]) and in Oscan (**aisu(s)is** dat. pl. masc.) is based on the root **ais-**, which is the uninflected form of the word in Etruscan, *ais* "god."

In the third and second centuries BC, as the influence of Roman Latin became progressively more pervasive, Latin loanwords began to appear in all levels of the Sabellian lexicon, but most importantly in the spheres of politics and the law. Oscan and Umbrian public officials appear in inscriptions with the titles of magistracies borrowed from Rome: Latin *quaestor* gives Umbrian **kvestur** (nom. sg.), Oscan **kvaísstur** (nom. sg.); Latin *cēnsor* provides Oscan **keenzstur** (nom. sg.); and Latin *aedilis* is taken over as Oscan **aídil** (nom. sg.). The Oscan word for assembly is replaced by Latin *senātus*, thus Oscan *senateis* (gen. sg.). Oscan *ceus* "citizen" is based on Latin *cīuis*. The Oscan *Tabula Bantina*, inscribed at the beginning of the first century BC, attests a formidable array of borrowings and calques based on Latin legal and political terminology. The borrowings in this text are a barometer of Rome's growing cultural, political, and linguistic supremacy in first-century Italy and of the Sabellian languages' declining linguistic fortunes.

Bibliography

- Adiego Lajara, I. J. 1990. "Der Archaismus des Sudpikenischen." *Historische Sprachforschung* 103:69–79.
- Benediktsson, H. 1960. "The vowel syncope in Oscan-Umbrian." Norsk Tidsskrift for Sprogvidenskap 19:157–295.
- Briquel, Dominique. 1972. "Sur des faits d'écriture en Sabine et dans l'ager Capenas. Mélanges de l'Ecole française de Rome." *Antiquité* 84:789–845.

Buck, C. Darling. 1928. A Grammar of Oscan and Umbrian (2nd edition). Boston: Ginn.

- Colonna, G. 1974. "Nuovi dati epigrafici sulla protostoria della Campania." *Atti della riunione scientifica*, pp. 151–169.
- Cowgill, W. 1970. "Italic and Celtic superlatives and the dialects of Indo-European." In G. Cardona, H. Hoenigswald, and A. Senn (eds.), *Indoeuropean and Indoeuropeans*, pp. 113–153. Philadelphia, PA: University of Pennsylvania Press.
 - _____. 1973. "The source of Latin *stāre*, with notes on comparable forms elsewhere in Indo-European." *Journal of Indo-European Studies* 1:271–303.

_____. 1976. "The second plural of the Umbrian verb." In G. Cardona and N. H. Zide (eds.), *Festschrift for Henry Hoenigswald*, pp. 81–90. Tübingen: Narr.

Cristofani, M. 1979. "Recent advances in Etruscan epigraphy and language." In D. and F. R. Ridgway (eds.), *Italy before the Romans: The Iron Age, Orientalizing and Etruscan Periods*, pp. 373–412. London/New York/San Francisco: Academic Press.

Durante, M. 1978. "I dialetti medio-italici." In A. L. Prosdocimi (ed.), *Lingue e dialetti dell'Italia antica*, pp. 789–823. Popoli e civiltà dell'Italia antica VI. Roma: Biblioteca di Storia Patria.

García-Ramon, J. L. 1993. "Zur Morphosyntax der passivischen Infinitive im Oskisch-Umbrisch." In H. Rix (ed.), Oskisch-Umbrisch. Texte und Grammatik. Arbeitstagung der Indogermanischen Gesellschaft und der Società Italiana di Glottologia vom 25. bis 28. September 1991 in Freiburg, pp. 106–124. Wiesbaden: Dr. Ludwig Reichert.

Gusmani, R. 1966. "Umbrisch pihafi und Verwandtes." *Indogermanische Forschungen* 71:64–80. ______. 1970. "Osco sipus." *Archivio glottologico italiano* 55:145–149.

- Jeffers, R. 1973. "Problems with the reconstruction of Proto-Italic." *Journal of Indo-European Studies* 1:330–344.
- Jones, D. M. 1950. "The relation of Latin to Osco-Umbrian." *Transactions of the Philological Society*, pp. 60–87.
 - _____. 1962. "Imperative and jussive subjunctive in Umbrian." *Glotta* 40:210–219.
- Joseph, B. D. and R. E. Wallace. 1987. "Latin sum and Oscan súm, sim, esum." American Journal of Philology 108:675–93.
- Lejeune, M. 1949. "Sur le traitement osque de *-ā final." *Bulletin de la Société Linguistique de Paris* 45:104–110.
 - _____. 1970. "Phonologie osque et graphie grecque." *Revue des Études Anciennes* 72:271–316.
- _____. 1975. "Réflexions sur la phonologie du vocalism osque." *Bulletin de la Société Linguistique de Paris* 70:233–251.
- Marinetti, A. 1981. "Il sudpiceno come italico (e come 'sabino'?): nota preliminare." *Studi etruschi* 49:113–158.

_____, 1985. *Le iscrizioni sudpicene. I: Testi*. Lingue e iscrizioni dell'Italia antica 5. Firenze: Leo S. Olschki.

- Meiser, G. 1986. *Lautgeschichte der umbrischen Sprache*. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck (IBS 51).
 - _____. 1987. "Pälignisch, Latein und Südpikenisch." Glotta 65:104–125.
 - _____. 1993. "Uritalisches Modussyntax: zur Genese des Konjunktiv Imperfekt." In H. Rix (ed.), Oskisch-Umbrisch. Texte und Grammatik. Arbeitstagung der Indogermanischen Gesellschaft und der Società Italiana di Glottologia vom 25. bis 28. September 1991 in Freiburg, pp. 167–195. Wiesbaden: Dr. Ludwig Reichert.
- Negri, M. 1976. "I perfetti oscoumbri in -f-." *Rendiconti dell'Istituto Lombardo di Scienze e Lettere, classe di lettere e scienze morali e storiche* 110:3–10.
- Nussbaum, A. 1973. "*Benuso, couortuso,* and the archetype of Tab. IG. I and VI–VIIa." *Journal of Indo-European Studies* 1:356–369.

_____. 1976. "Umbrian 'pisher." *Glotta* 54:241–253.

Olzscha, K. 1958. "Das umbrische Perfekt auf -nki-." Glotta 36:300-304.

_____. 1963. "Das f-Perfektum im Oskisch-Umbrischen." *Glotta* 41:290–299.

Poccetti, P. 1979. Nuovi documenti italici a complemento del Manuale di E. Vetter. Pisa: Giardini.

Porzio Gernia, M. L. 1970. "Aspetti dell'influsso latino sul lessico e sulla sintassi osca." Archivio glottologico italiano 55:94–144.

Poultney, J. W. 1959. The Bronze Tables of Iguvium. Baltimore: American Philological Association.

Prosdocimi, A. L. 1978a. "L'Osco." In A. L. Prosdocimi (ed.), *Lingue e dialetti dell'Italia antica*, pp. 825–911. Popoli e civiltà dell'Italia antica VI. Roma: Biblioteca di Storia Patria.

_____. 1978b. "L'Umbro." In A. L. Prosdocimi (ed.), *Lingue e dialetti dell'Italia antica*, pp. 587–787. Popoli e civiltà dell'Italia antica VI. Roma: Biblioteca di Storia Patria.

_____. 1984. Le tavole iguvine, I. Firenze: Leo S. Olschki.

 Rix, H. 1976a. "Die umbrischen Infinitive auf -fi und die urindogermanische Infinitivendung *-dhiōi." In A. Morpurgo Davies and W. Meid (eds.), *Studies in Greek, Italic, and Indo-European Linguistics offered to Leonard Palmer*, pp. 319–331. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.

_____. 1976b. "Subjonctif et infinitif dans les complétives de l'ombrien." *Bulletin de la Société Linguistique de Paris* 71:221–220.

__. 1976c. "Umbrisch ene ... kupifiaia." Münchener Studien zur Sprachwissenschaft 34:151–164.

_____, 1983. "Umbro e Proto-Osco-Umbro." In E. Vineis (ed.), *Le lingue indoeuropee di frammentaria attestazione. Atti del Convegno della Società Italiana di Glottologia e della Indogermanische Gesellschaft, Udine, 22–24 settembre 1981*, pp. 91–107. Pisa: Giardini.

____. 1985. "Descrizioni di rituali in Etrusco e in Italico. L'Etrusco e le lingue dell'Italia antica." In A. Moreschini (ed.), *Atti del Convegno della Società Italiana di Glottologia, Pisa, 8 e 9 dicembre 1984*, pp. 21–37. Pisa: Giardini.

_____. 1986. "Die Endung des Akkusativ Plural commune im Oskischen." In A. Etter (ed.), *o-o-pe-ro-si, Festschrift für Ernst Risch zum 75. Geburtstag*, pp. 583–597. Berlin/New York: de Gruyter.

____. 1992a. "La lingua dei Volsci. Testi e parentela." *I Volsci*. Quaderni di archeologia etrusco-italica 20:37–49.

____. 1992b. "Una firma paleo-umbra." Archivio glottologico italiano 77:243–252.

Rix, H. 2002. Sabellische Texte. Die Texte des Oskischen, Umbrischen und Südpikenishen. Heidelberg: C. Winter.

Rocca, G. 1996. Iscrizioni umbre minori. Firenze: Olschki.

Schmid, W. 1954. "Anaptyze, Doppelschreibung und Akzent im Oskischen." Zeitschrift für vergleichende Sprachforschung 72:30–46.

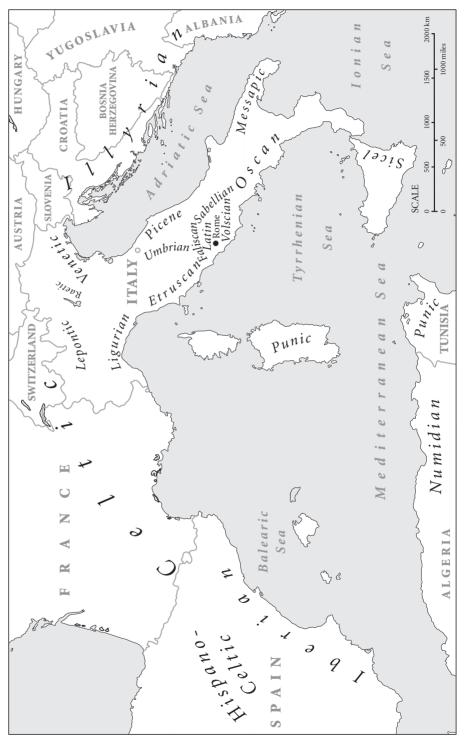
Untermann, J. 1973. "The Osco-Umbrian preverbs a-, ad-, and an-." *Journal of Indo-European Studies* 1:387–393.

Untermann, J. 2000. Wörterbuch des Oskisch-Umbrischen. Heidelberg: Carl Winter.

Wallace, R. E. 1985. "Volscian sistiatiens." Glotta 63:93-101.

Vetter, E. 1953. *Handbuch der italischen Dialekte. I. Texte mit Erklärung, Glossen, Wörterverzeichnis.* Heidelberg: Carl Winter.

Von Planta, R. 1892–1897. Grammatik der oskisch-umbrischen Dialekte (2 vols.). Strasburg: Trübner.



Map 2. The ancient languages of Italy and surrounding regions (for the Greek dialects of Italy and Sicily, see Map 1)