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1 Introduction

The existing Old Italic character repertoire includes 31 letters and 4 numerals. The Unicode Standard, following the recommendations in the proposal L2/00-140, states that Old Italic is to be used for the encoding of Etruscan, Faliscan, Oscan, Umbrian, North Picene, and Adriatic/South Picene. It also specifically states that the languages of ancient Italy north of Etruria (Venetic, Rhetic, Lepontic, Gallic, and Ligurian) are inappropriate for encoding using Old Italic characters. It is true that the inscriptions of languages north of Etruria exhibit a number of common features, but those features are often exhibited by the other scripts of Italy. Only one of these northern languages, Rhetic, requires the addition of any additional characters in order to be fully supported by the Old Italic block. Accordingly, following the addition of this one character, the Unicode Standard should be ammended to recommend the encoding of Venetic, Rhetic, Lepontic, Gallic, and Ligurian using Old Italic characters. In addition, one additional character is necessary to encode South Picene inscriptions.

The whole of this proposal is divided in three parts: The first part identifies the two unencoded characters (Rhetic 𐌟 and South Picene 𐌧) and demonstrates their use in inscriptions. The second part examines the use of each Old Italic character, as it appears in Etruscan, Faliscan, Oscan, Umbrian, South Picene, Venetic, Rhetic, Lepontic, Gallic, Ligurian, and archaic Latin, to demonstrate the unifiability of the northern Italic languages' scripts with Old Italic. The third part demonstrates the viability of this unification via sample encodings of inscriptions from many of the northern Italic languages.

2 New Characters

2.1 Justification

2.1.1 Rhetic 𐌟

𐌟	U+1032F	OLD ITALIC LETTER TTE

Rhetic exhibits a triangle symbol in inscriptions from Magrè. The shape variably appears as 𐌟 or 𐌢, but most frequently as 𐌟. The symbol is interpreted to be a dental phoneme, transliterated as *t'* by Bonfante (1996) and as *th* or *þ* by Jensen (1969). Diringer (1968) acknowledges the existence of the letter, but offers no transcription. And Schumacher (1992), writing on the inscriptions of Rhetia, presents the

inscriptions in transliteration but gives no transliteration of the 𐋡 glyph, rendering it instead with a drawing of the sign itself.

Two inscriptions in which it appears are MA-8/PID 227 and MA-10/PID-229, illustrated below:

73. Corno cervino. Conservato nel Museo di Este. Lungo cm. 10,5. Presenta modanature alle due estremità. L'iscrizione ha ductus sinistrorso; alcune lettere sono capovolte. Si ha un punto all'interno di *uiu* (Tav. XLIII, 3).

G. PELLEGRINI, in *NSc,* 1918, p. 183; *PID* 227.

A. *reitem uiu t'inaχe*
B. *VII*(?)

Fig. 2-1: (Morandi 1982:199)

MAGRE' 8 (PID 227) MNA I.G. 58808 MA-8

Hirschhornsprosse, an den beiden Enden gerillt; am schmäleren Ende ein Loch. L. 10,5 cm.

V: ⟵ reit^{z}emu.iu𐋡inaχe

R: Nichtschriftliche Zeichen

Fig. 2-2: (Schumacher 1992:163)

An example transcription of MA-8/PID 227, supplemented with a PUA 𐋡, is: 𐌑𐌄𐌉𐌕𐌄𐌌𐌖.𐌉𐌖𐋡𐌉𐌍𐌀𐌖𐌄.

G. PELLEGRINI, in *NSc,* 1918, p. 187; *PID* 229; A. MANCINI, in *REI* di *StEtr,* XLIII, 1975, pp. 254-255.

A. *rit'ie kerrinake*
B. *z*(?)

Fig. 2-3: (Morandi 1982:200)

MAGRE' 10 (PID 229, IR 9) MNA I.G. 58809 MA-10
Hirschhornsprosse, am schmäleren Ende ein Loch. L. 10 cm.

V: ⟶ $\frac{r}{p}^{z}$ i?ieker$\frac{r}{p}^{z}$inake

R: Nichtschriftliche Zeichen

Fig. 2-4: (Schumacher 1992:163)

An example transcription of MA-10/PID 229, supplemented with a PUA [PUA], is: 𐌐𐌉[PUA]𐌉𐌄𐌊𐌄𐌐𐌐𐌉𐌌𐌀𐌊𐌄𐌉

2.1.2 South Picene 𐌟

𐌟	U+1031F	OLD ITALIC LETTER ESS

In one South Picene inscription, TE-5, a stele from Penna Sant'Andrea, an unencoded character appears twice. It is believed to be derived from the letter *ka* (𐌊), but mirrored across its *y*-axis. The phonemic value is believed to be some variety of sibilant, transliterated variously as *ś* (Marinetti 1985) and *σ* (Rix 2002). Relative to its first instance, the sign itself appears rotated 90° in its second instance, but the orientation of the first instance is typically cited in sign lists as the exemplar.

Fig. 17. – Museo Nazionale di Chieti. Stele da Penna S. Andrea (TE. 5). Ricostruzione della stele dai tre frammenti combacianti.

Fig. 2-5: TE-5 assembled (Marinetti 1985:Fig. 17)

Fig. 20. – Stele da Penna S. Andrea (TE. 5). Frammento inferiore.

Fig. 2-6: TE-5 lower section (Marinetti 1985:Fig. 20)

Fig. 19. – Stele da Penna S. Andrea (TE. 5). Frammento centrale.

Fig. 2-7: TE-5 middle section (Marinetti 1985:Fig. 19)

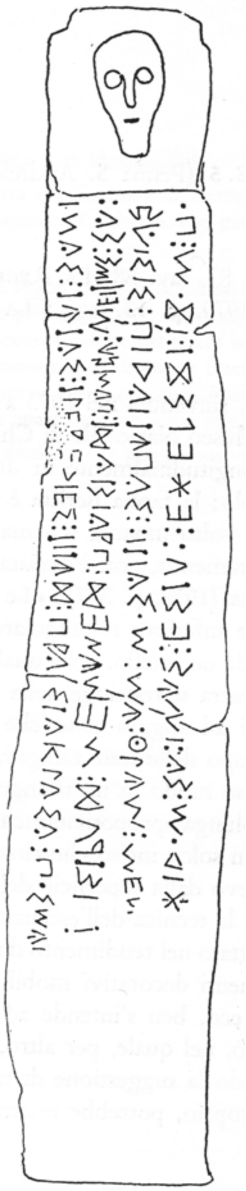

Fig. 2-8: (Marinetti 1985:216)

śidom : safinús : estuf : eśelsít : tíom :po/
vaisis : pidaitúpas : fitiasom : múfqlúm : me
⟦n/t⟧fistrúí : nemúneí : praistaít : panivú :
meitims : saf/inas : tútas : tre$\frac{b}{r}$egies : titúí :
praistaklasa : posmúi

Fig. 2-9: (Marinetti 1985:217)

Sp TE 5 stela *Penna S. Andrea*	**σidom⁝ safinús⁝ estuf⁝ eσelsít⁝ tíom⁝ povaisis⁝** **pidaitúpas⁝ fitiasom⁝ múfqlúm⁝ me{n}fistrúí⁝** **nemúneí⁝ praistaít⁝ panivú⁝ meitims⁝ safinas⁝** **tútas⁝ trebegies⁝ titúí⁝ praistaklasa⁝ posmúi**	IS TE 5*; Marin; 6:s

Fig. 2-10: (Rix 2002:68)

An example transcription of the first line of TE-5, supplemented with a PUA ✱, is:
✱𐌉𐌃𐌏𐌌:𐌔𐌀𐌚𐌉𐌍𐌞𐌔:𐌄𐌔𐌕𐌖𐌚:𐌄✱𐌄𐌋𐌔𐌝𐌕:𐌕𐌝𐌏𐌌:𐌐𐌏-.

2.2 Allocation

The range U+10300-U+1032F is allocated to Old Italic, with positions U+10300-U+1031E assigned to letters and U+10320-U+10323 assigned to numerals.

My recommendation is to assign South Picene 𐌟 to U+1031F and Rhetic 𐌿 to U+1032F. Thus, additional numerals may be assigned to the codepoints following U+10323, if necessary.

2.3 Character properties

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1031F;OLD ITALIC LETTER ESS;Lo;0;L;;;;;N;;;;;
1032F;OLD ITALIC LETTER TTE;Lo;0;L;;;;;N;;;;;
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2.4 Confusables

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1031F OLD ITALIC LETTER ESS     ;       2731 HEAVY ASTERISK
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3 Survey of Old Italic script use across Italy

For the purpose of demonstrating the unifiability of the scripts of northern Italy with the scripts already unified in the Old Italic block, the glyph repertoires from each of the non-Greek, geographically-Italic writing systems presented in Bonfante (1996), Conway (1897), Diringer (1968), Faulmann (1880), and Jensen (1969) are collected and compared below. The writing systems under consideration include: Etruscan (Etr), Oscan (Osc), Umbrian (Umb), South Picene (SP), Faliscan (Fal), Archaic Latin (Lat), Venetic (Ven), Rhetic (Rh), Ligurian (Lig), Gallic (Gal), and Lepontic (Lep).

In considering and enumerating the various glyphs of these languages, mirroring and minor variations in orientation will not be noted—all glyphs will be rendered in their left-to-right orientation, as Unicode does and as is typical of modern scholarship. Differences in rounded versus angled letter forms will not be taken as graphemic differences. The glyphs that appear below are taken from David Perry's Cardo font, with numerous modifications and additions where it was lacking in glyph variants.

U+10300 𐌀 A ā

The first letter of the alphabet is one of the most graphically diverse. Etruscan and southern Italic languages typically use easily recognizable forms such as 𐌀, 𐌁, and 𐌂. Latin uses less common forms such as 𐌉, 𐌊, 𐌋, and 𐌌. Faliscan uses the most dissimilar form of all: 𐌓.

Within northern Italic, 𐌋 (Ven, Rh, Lep, Lig), 𐌅 (Rh, Lep, Gal, Lig), and 𐌁 (Ven, Rh, Lep) are the most common forms, though 𐌂 (Ven), 𐌉 (Rh), and 𐌊 (Rh, Lep) also appear. The widespread northern Italic use of 𐌋 and 𐌅 (itself not elsewhere attested, though clearly related to the former) suggests the possibility that northern Italic constitutes a script distinct from Old Italic, but all forms retain the same general phonetic value and are clearly derived from a common model.

U+10301 𐌁 BE bē

Throughout Italy, the form 𐌁/𐌃 was used, though many of the languages lacked a /b/ phoneme and thus lost the grapheme from their alphabets entirely. North of Etruria, only Ligurian retains this letter.

U+10302 𐌂 KE kē

The most common form of this letter was simply 𐌂/<. Venetic, Rhetic, and Ligurian all attest this form. Etruscan attests a gimel-like form: 𐌇.

U+10303 𐌃 DE dē

For dē, the most common form is again the form most recognizable in modern Latin: 𐌃/𐌓. R-like forms also appear in Oscan: 𐌓/𐌑. And Umbrian attests the novel form: 𐌕. Since northern Italic languages borrowed their alphabets from Etruscan after it had purged letters for phonemes it lacked, this letter is absent in the north.

U+10304 𐌄 E ē

The form 𐌄 is most widespread throughout Italy, though 𐌔 also appears in Etruscan and the southern Italic languages. Latin and Faliscan, in addition to both of these forms, also attest a 𐌇 glyph. In northern Italy, 𐌄 appears for all languages and Rhetic attests a unique 5-stroke form: 𐌔.

U+10305 𐌅 VE vē

The letter vē is widely varied in Italy. The Unicode exemplar form, 𐌅, is typical of Etruscan, but otherwise attested only in Latin and South Picene in southern Italy. Oscan, Umbrian, and Etruscan demonstrate slightly varied forms such as 𐌖 and 𐌚. Latin presents a unique 𐌉 form, akin to its unique shape for ē. And Faliscan possesses a unique 𐌙 form.

In northern Italy, Venetic, Lepontic, and Rhetic all use a shape identical to the Unicode exemplar form, 𐌅, suggesting that their unification with the Etruscan model alphabet is better warranted than the southern alphabets, at least on the basis of this letter. Lepontic also shows limited evidence of a 𐌅 form.

U+10306 𐌆 ZE zē

This letter is also widely varied in shape. The shape 𐌆/𐌉 is common in Etruscan, Oscan, and Faliscan. Other forms include 𐌊 (Etr, Fal, Umb), 𐌕 (Umb), 𐌋 (Fal, Umb), 𐌉 (Osc), 𐌆 (Lat), and 𐌖 (Etr, Fal). In northern Italy, the forms are no less varied. In common with southern Italy, 𐌊 (Ven, Rh, Lep) and 𐌋 (Ven) appear. Unique to the area are variants on the 𐌊 glyph: 𐌘 (Rh, Lig) and 𐌗 (Ven). Since these are clear derivatives with the same alphabetic position and similar phonetic values, they can easily be unified with the model form.

U+10307 𐌇 HE hē

The letter hē appears in two major variants, 𐌇 (Etr, Osc, Fal, Lat) and 𐌈 (Etr). Circular versions of the former are common to Umbrian: 𐌏/𐌐. Other rectangular variants of the same form are rarely attested, usually unique to a single writing system: 𐌇 (Etr; probably only on the Marsiliana abecedarium), 𐌍 (Fal), 𐌐 (SP), 𐌄 (Fal, Lat), 𐌏 (Etr, SP), and 𐌑 (Etr). The Etruscan form 𐌈 is also common in Venetic and Rhetic. Venetic also possesses the novel forms 𐌧, 𐌩, and 𐌨.

U+10308 𐌈 THE thē

The descendants of Greek θ appear in round, squared, and un-circumscribed varieties. Unicode's exemplar form, 𐌈, is common only in Etruscan. A square variety, 𐌗, is seen in South Picene. Circumscribed dots are seen more widely: 𐌘 (Etr, Umb, Fal); 𐌙 (Etr). Varieties with surrounded bars and crosses appear, chiefly in Etruscan: 𐌚, 𐌛, 𐌜. A few empty varieties also appear: 𐌏 (Etr, Fal), 𐌙 (SP), and 𐌝 (Etr). Oscan uses its glyphs for hē (𐌇) and tē (𐌕) to represent thē.

In Venetic and Lepontic, the common 𐌘 glyph is used. The most common glyphs used in Venetic are 𐌗 and its un-circumscribed form 𐌗. Its similarity to the letters eks and tē and their

predecessors have led to suggestions that it is a unique letter that should be separately encoded, but it is, in fact, simply a derivative of western Greek θ, easily unified with the existing Old Italic character.

U+10309 𐌉 I i

The basic 𐌉 shape is used in all Italic languages. The additional forms 𐌋 (Etr) and 𐌊 (Rh) are rare.

U+1030A 𐌊 KA kā

The exemplar form 𐌊, sometimes with minor shape variations, is used in all Italic writing systems that have not dropped the letter (perhaps in favor of kē, as in Etruscan).

U+1030B 𐌋 EL el

The exemplar form 𐌋, is used in all Italic languages. A Greek λ-like form (𐌌) is attested in Faliscan. A Λ-like form (𐌍) is seen in Lepontic. And a modern-type 𐌋 form is seen in Faliscan, Etruscan, and Lepontic. Rhetic and Venetic also attest an inverted 𐌐 form.

U+1030C 𐌌 EM em

The letter em, though widely varied throughout Italy, displays little unique variation in northern Italy. Common shapes include 𐌌 (Etr, Fal, Lat, Ven, Rh, Lep), 𐌑 (Etr, Osc, Umb, Fal), 𐌑 (Etr, Osc, Umb, Fal), and 𐌑 (Umb, SP, Lat, Ven, Rh). Uncommon shapes include 𐌍 (Etr, Umb), 𐌎 (Etr), and the minor variations 𐌜 (Lig, Rh) and 𐌝 (Rh).

U+1030D 𐌍 EN en

The forms of en basically correlate to those of em, if distributed somewhat differently: 𐌍 (Etr, Fal, Lat, Ven, Rh, Lep, Gal, Lig), 𐌇 (Etr, Osc, Umb, Fal, Ven), 𐌎 (Umb, Lat, Rh, Lep), and 𐌍 (Etr, Osc, Umb, Fal, Lat, Lep, Lig).

U+1030E 𐌎 ESH eš

The letter eš (𐌎) is limited to Etruscan abecedaria.

U+1030F 𐌏 O o

The only widely attested forms for o are 𐌏 (Etr, Fal, Lat, Ven, Rh, Lep, Gal, Lig) and the squared northern 𐌏 (Ven, Lep). Early Etruscan also demonstrates a dotted form: 𐌏. South Picene uses a unique form: · (single punct).

U+10310 𐌐 PE pē

The exemplar form 𐌐/𐌐 is widely attested, present in Etruscan, Umbrian, Faliscan, Latin, Rhetic, Lepontic, Gallic, and Ligurian. Venetic uses a form with an extra stroke, 𐌐, also found in Rhetic and Etruscan. Greek Π-shaped letters appear in a few languages: 𐌑 (Etr, Osc, Lat) and 𐌑 (Etr, Osc, SP). Two unique forms also exist: Etruscan 𐌍 and Rhetic 𐌕.

U+10311 𐌋 SHE šē

The letter šē is most common in its original Greek form: 𐌋 (Etr, Umb, Ven, Rh). A common variant is 𐌊 (Etr, Fal, Rh, Lep, Gal). Minor northern variants include 𐌎 (Lep), 𐌌 (Rh, Lep), and 𐌇 (Lep).

U+10312 𐌒 KU kū

This letter appears in three major forms: 𐌒 (Etr, Lat), 𐌘 (Etr, Fal), and 𐌚 (Etr, SP). Minor forms 𐌃 (Etr) and 𐌏 (Fal) are also attested. The letter is unattested north of Etruria.

U+10313 𐌐 ER er

The letter er is most common in its Greek P-like form: 𐌐/𐌿 (Etr, SP, Fal, Lat, Rh). In some southern and all northern Italic languages, the 𐌃/𐌾 (Etr, Osc, Umb, Ven, Rh, Lep, Gal) form is used. The familiar 𐌓 form is attested only in Faliscan and Latin. And Lepontic exhibits a unique, distinctly þ-like form: 𐌝. In spite of the northern Italic languages favoring 𐌃 over the exemplar 𐌐 shape, the writing systems are easily unified with Old Italic, with respect to this letter, just as Oscan and Umbrian, which display the same affinity, are.

U+10314 𐌎 ES es

The letter es appears in 3-, 4-, and 6-stroke varieties, all easily unified: 𐌎 (Etr, Osc, Umb, SP, Fal, Lat, Ven, Rh, Lep, Gal, Lig), 𐌔 (Etr, SP, Fal, Ven, Rh, Lep, Gal), 𐌢 (Fal).

U+10315 𐌕 TE tē

This letter's common form, varying slightly in cross-bar position and angle, is 𐌕/𐌵/𐌶/𐌽 (Etr, Osc, Umb, SP, Fal, Lat, Ven, Rh, Lep). Etruscan, Umbrian, and Faliscan also have the form 𐌟. And Faliscan uses the novel form 𐌅.

In northern Italy, the unique forms 𐌾 (Rh) and 𐌽 (Ven) are found. However, by far, the most common and widespread version of the grapheme in northern Italy is the St. Andrew's cross variety: 𐌗 (Ven, Rh, Lep, Gal, Lig). It is unique to the languages north of Etruria and present in all of its writing systems, suggesting it may deserve independent encoding. However, it is clearly either the basic form, specifically the 𐌽 shape, in a rotated orientation, or a derivative of the 𐌘 thē glyph, as found in Venetic dē above. Since its alphabetic position is identical to tē in other writing systems, the former case is more likely.

U+10316 𐌖 U ū

The letter ū appears in three Y-type shapes: 𐌖 (Etr, Osc, Lat), 𐌟 (Etr, Lep), and 𐌘 (Etr). More widespread throughout Italy is 𐌅 (Etr, Osc, Umb, SP, Fal, Lat, Ven, Rh, Lep, Gal, Lig). Less common are its inverted form 𐌂 (Ven, Rh) and 𐌟 (Etr). Though none of the northern Italic languages use Unicode's exemplar shape, neither do many southern languages, but all of the languages use 𐌅, suggesting that if the southern languages can be unified with Etruscan, so can the northern.

U+10317 𐌗 EKS eks

Eks appears only in southern Italic, most often as 𐌗 (Etr, Osc, Umb, Fal, Lat). Etruscan also evidences a 𐌽 form.

U+10318 𐌘 PHE phē

Phē appears only in northern Italic and Etruscan, usually in the similar forms 𐌘/𐌦 (Etr, Ven, Rh) and 𐌆/𐌧 (Etr, Ven, Rh, Lep). Single-language northern variants include 𐌨 (Ven) and 𐌟 (Rh).

U+10319 𐌙 KHE khē

Khē appears only in northern Italic, Etruscan, and Faliscan, usually in the similar forms 𐌙 (Etr, Fal, Ven, Rh, Lep) and 𐌝/𐌩 (Etr, Fal, Ven, Rh, Lep). The inverted form 𐌚 is limited to Rhetic.

U+1031A 𐌸 EF ef

The Etruscan-invented letter ef, 𐌸, appears without much graphic variation in Etruscan, Oscan, and Umbrian. Faliscan appears to have invented its own form, 𐌚, for the same sound. South Picene simplified 𐌸 to : (double puncts). (Cf. South Picene's simplification of 𐌏 to · (single punct), noted above.) The letter is absent from northern Italic.

U+1031B 𐌟 ERS eř

This letter eř, 𐌟, is unique to Umbrian, without graphic variation.

U+1031C 𐌡 CHE çē

This letter çē, 𐌡, is unique to Umbrian, without graphic variation.

U+1031D 𐌉 II í

Signs for í are present only in Oscan (𐌉/𐌊) and, by independent invention, in South Picene (𐌎).

U+1031E 𐌅 UU ú

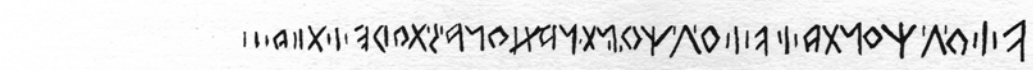
Signs for ú are present only in Oscan (𐌅) and South Picene (𐌝).

4 Encoded examples of inscriptions from northern Italy

The following section employs the existing (as of Unicode 6.0) Old Italic character repertoire in order to demonstrate its sufficiency for the encoding of Venetic, Rhetic, Lepontic, & Gallic inscriptions, along with the Germanic Negau (Negova) helmet inscription.

A Venetic

PELLEGRINI-PROSDOCIMI, *Lingua venetica*, *cit.*, Es 40, p. 143; LEJEUNE, *Manuel*, *cit.*, p. 204 e *passim*.



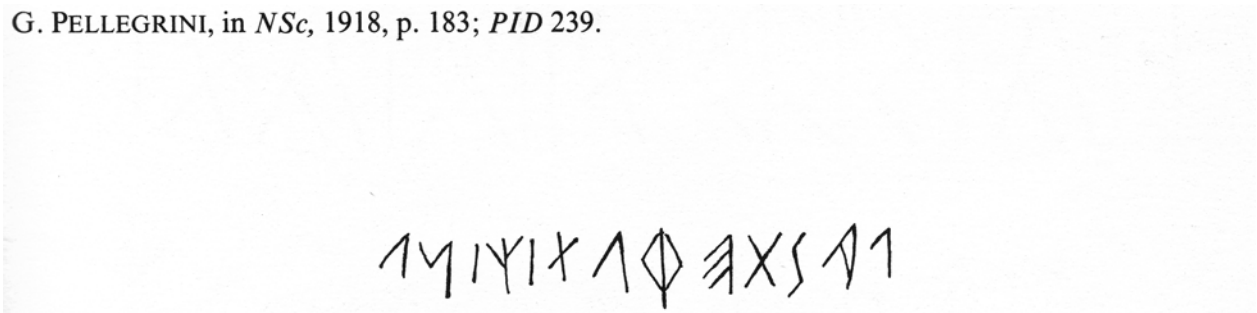
vho.u.χo.n.ta.i.vho.u.χo.n.tnazona.s.tore.i.tiia.i. =
Fougontai Fougontna donasto Reitiai

Fig. 4-1: (Morandi 1982:183)

Example encoding: 𐌆𐌇𐌏.𐌖.𐌖𐌏.𐌌.𐌕𐌀.𐌉.𐌆𐌇𐌏.𐌖.𐌖𐌏.𐌌.𐌕𐌌𐌀𐌉𐌏𐌌𐌀.𐌎.𐌕𐌏𐌐𐌄.𐌉.𐌕𐌉𐌉𐌀.𐌉.

B Rhetic

G. PELLEGRINI, in *NSc*, 1918, p. 183; *PID* 239.



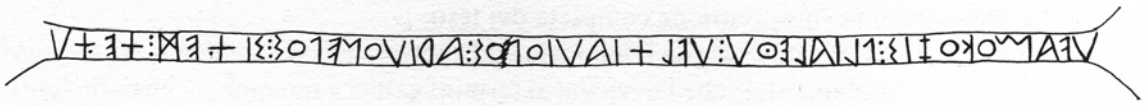
A. *laste φutiχinu*
B. *XI*(?)

Fig. 4-2: (Morandi 1982:199)

Example encoding: 𐌋𐌀𐌎𐌕𐌄 𐌦𐌖𐌕𐌉𐌖𐌉𐌌𐌖

C Lepontic

A. L. PROSDOCIMI, in *StEtr*, XXXV, 1967, p. 199 e segg.; LEJEUNE, *Lepontica, cit.*, p. 96 e segg.; TIBILETTI BRUNO, in *Lingue e dialetti*, p. 141.



uvamokozis plialeθu uvịtiauiopos ariuonepos siteś tetu

Fig. 4-3: (Morandi 1982:188)

Example encoding: 𐌅𐌚𐌌𐌏𐌊𐌏𐌉𐌉:𐌍𐌋𐌉𐌋𐌄⊗𐌖:𐌅𐌚𐌉𐌕𐌉𐌀𐌖𐌉𐌏𐌍𐌏𐌑:𐌀𐌍𐌉𐌅𐌏𐌌𐌄𐌍𐌏𐌑:𐌑𐌉𐌕𐌄𐌌:𐌕𐌄𐌕𐌖

D Gallic

PID 337; M. LEJEUNE, in *Hommages à M. Niedermann, Collect. Latomus,* XXIII, 1956, pp. 206-215; LEJEUNE, *Lepontica, cit.,* p. 39 e segg.; TIBILETTI BRUNO, in *Lingue e dialetti,* pp. 155-156.

[1]*tanotaliknoi* [2]*kuitos* [3]*lekatos* [4]*anokopokios* [5]*setupokios* [6]*esanekoti* [7] *anareuiśeos* [8]*tanotalos* [9]*karnitus / takos toutas* [---] *pu* [---] / [---] *ṭeṭaso poịḳan* (?)

Fig. 4-4: (Morandi 1982:192)

Example enncoding:
TAMOTALIKMOI
KYITOS
LEKATOS
AMOKOMOKIOS
SETYMOKIOS
ESAMEKOTI
AMAPEYIMEOS
TAMOTALOS
KAPMITYS

TAKOS TOYTAS MY TETASO MOIKAM

E Germanic

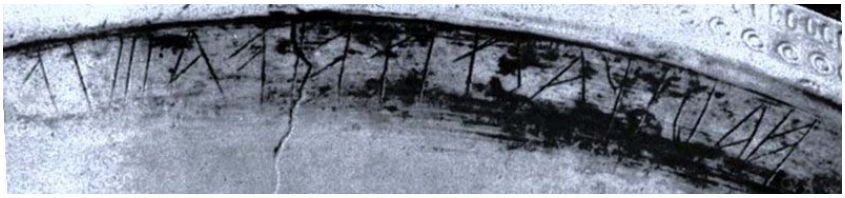


Fig. 4-5: Negau Helm B (from Negova, Slovenia; currently housed at the Kunst Historisches Museum, Vienna)

Example encoding: HAPIYASTI TEIFA III IL

References

Bonfante, Larissa. 1996. "The Scripts of Italy." In *The World's Writing Systems*, eds. Peter T. Daniels and William Bright. Oxford: Oxford University Press.

Conway, R. S. 1897. *The Italic Dialects*. Cambridge: Cambridge University Press.

Diringer, David. 1968. *The Alphabet: A Key to the History of Mankind.* London: Hutchinson & Co.

Faulmann, Carl. 1880. *Das Buch der Schrift.* Vienna: Kaiserlich-Königlichen Hof- und Staatsdruckerei.

Jensen, Hans. 1969. *Die Schrift in Vergangenheit und Gegenwart*. Berlin: Veb.

Marinetti, Anna. 1985. *Le iscrizioni sudpicene. I. Testi.* Firenze: Leo S. Olschki.

Morandi, Alessandro. 1982. *Epigrafia italica.* Roma: L'Erma di Bretschneider.

Rix, Helmut. 2002. *Sabellische Texte.* Heidelberg: C. Winter.

Schumacher, Stefan. 1992. *Die Rätischen Inscriften: Geschichte und heutiger Stand der Forschung.* Innsbruck: Verlag der Instituts für Sprachwissenschaft der Universität Innsbruck.

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646[1]
Please fill all the sections A, B and C below.
Please read Principles and Procedures Document (P & P) from http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html **for guidelines and details before filling this form.**
Please ensure you are using the latest Form from http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.
See also http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html **for latest *Roadmaps*.**

A. Administrative

1. **Title:** Proposal to Encode Additional Old Italic Characters
2. Requester's name: UC Berkeley Script Encoding Initiative (Universal Scripts Project) (Author: Chris Little)
3. Requester type (Member body/Liaison/Individual contribution): Liaison contribution
4. Submission date: 05/17/11
5. Requester's reference (if applicable):
6. Choose one of the following:
   - This is a complete proposal: Yes
   - (or) More information will be provided later: No

B. Technical – General

1. Choose one of the following:
   - a. This proposal is for a new script (set of characters): No
     - Proposed name of script:
   - b. The proposal is for addition of character(s) to an existing block: Yes
     - Name of the existing block: Old Italic
2. Number of characters in proposal: 2
3. Proposed category (select one from below - see section 2.2 of P&P document):

A-Contemporary		B.1-Specialized (small collection)		B.2-Specialized (large collection)	
C-Major extinct	X	D-Attested extinct		E-Minor extinct	
F-Archaic Hieroglyphic or Ideographic				G-Obscure or questionable usage symbols	

4. Is a repertoire including character names provided? Yes
   - a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document? Yes
   - b. Are the character shapes attached in a legible form suitable for review? Yes
5. Fonts related:
   - a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard? Chris Little
   - b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.): Chris Little
6. References:
   - a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? Yes
   - b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? Yes
7. Special encoding issues:
   - Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? Yes
   - (Transliteration examples are included.)

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database (http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

[1] Form number: N3902-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03)

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? No
   If YES explain
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)? No
   If YES, with whom?
   If YES, available relevant documents:
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Scholarly community, particularly Indo-Europeanists working in Venetic, Celtic, Rhetic, Italic, and Germanic epigraphy
   Reference:
4. The context of use for the proposed characters (type of use; common or rare) rare
   Reference:
5. Are the proposed characters in current use by the user community? Yes
   If YES, where? Reference: Scholarly community/publications
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? No
   If YES, is a rationale provided?
   If YES, reference:
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? Yes
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? No
   If YES, is a rationale for its inclusion provided?
   If YES, reference:
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? No
   If YES, is a rationale for its inclusion provided?
   If YES, reference:
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? No
    If YES, is a rationale for its inclusion provided?
    If YES, reference:
11. Does the proposal include use of combining characters and/or use of composite sequences? No
    If YES, is a rationale for such use provided?
    If YES, reference:
    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? No
    If YES, reference:
12. Does the proposal contain characters with any special properties such as control function or similar semantics? No
    If YES, describe in detail (include attachment if necessary)
13. Does the proposal contain any Ideographic compatibility characters? No
    If YES, are the equivalent corresponding unified ideographic characters identified?
    If YES, reference: