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Cisalpine Celtic Celta Cisalpino

David Stifter David Stifter

Abstract: The corpus of Cisalpine Celtic inscriptions consists of *c.* 430 short texts (graffiti and engravings) in two different Ancient Celtic languages, Lepontic and Cisalpine Gaulish. The inscriptions, which are mostly written in a variant of the North Italic script, date approximately from the 7th to the 1st centuries BC and are confined to a small area around the North Italian lakes and the Po Valley. This article presents the current knowledge about the Cisalpine Celtic corpus and indicates directions of future research.

Keywords: Ancient Celtic. Lepontic. Cisalpine Gaulish. North Italic script. Epigraphy.

Resumen: El corpus de las inscripciones del celta cisalpino consiste en c. 430 textos breves (grafitos y grabados) en dos lenguas celtas antiguas diferentes, el lepóntico y el galo cisalpino. Las inscripciones, que mayoritariamente están escritas en una variante de la escritura norditálica, datan, aproximadamente, de un período entre los siglos VII y I a. C. y se concentran en una pequeña área alrededor de los lagos del norte de Italia y el Valle del Po. Este artículo presenta el conocimiento actual del corpus del celta cisalpino así como las perspectivas de su investigación futura.

Palabras clave: Celta antiguo. Lepóntico. Galo cisalpino. Escritura norditálica. Epigrafía.

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1 Overview and state of the art

1.1. Language definition & classification

"Cisalpine Celtic" is an epigraphic term that refers to a corpus of physical objects, mostly from northern Italy and southern Switzerland, and to the inscriptions that they bear in local Celtic languages. In this sense, Cisalpine Celtic is not a linguistic term in the strict sense, but an epigraphic term with linguistic connotations. According to the hypothesis followed here, the Cisalpine Celtic corpus comprises two separate, but probably closely related languages, Lepontic and Cisalpine Gaulish. Some scholars are of the opinion that what appear to be differences between Lepontic and Cisalpine Gaulish are only dialectal and/or can be explained as chronologically different stages of a single language. In that view, Lepontic would be an "early offshoot of Gaulish" (Matasović 2009, 16). On the other hand, it is even conceivable that the fragmentary state of the two subcorpora merely creates the impression of a close similarity between the two languages, whereas the differences would be more substantial if we knew more about them.

As with all ancient Celtic languages, Lepontic and Cisalpine Gaulish are modern names. The linguistic self-designations of these speech communities are unknown. Lepontic has been so named after the Leponti, one of the ancient peoples who inhabited valleys in the southern Alps in the first millenium BC. Their territory extended over the Swiss cantons of Ticino and Grisons, and, in modern Italy, the Val d'Ossola, around Lake Como and Lake Maggiore. The chief settlements were Oscela (mod. Domodossola) and Bilitio (mod. Bellinzona). The *Valle Leventina* in the Swiss canton Ticino still bears their name, but no inscriptions have been found there. The central area of "Lepontic" inscriptions lies in fact to the south and east of this area. It has been suggested that the inscriptions are not even by ethnic Lepontians at all, but for want of any better insights the traditional name will be retained here.

Cisalpine Gaulish refers to the language of the Gaulish peoples who invaded northern Italy around the middle of the 1st millennium BC and who settled an area that extended especially along the north of the Po Valley, but that also stretched further to the south-east along the Adriatic coast. The ethnic subdivisions that are most important from the epigraphic point of view are the Insubres with their chief town Mediolanum (mod. Milan), the Cenomani around Verona, and the Salassi. Too little is known to make definite statements about variation and change of the languages over time and space. Although

Cisalpine Gaulish is spread over the settlement areas of several other known Celtic tribes in Italy, e.g. the Senones or the Boii, it is pointless to make finer linguistic distinctions among the inscriptions. The available evidence does not bear out any dialectal subdivisions of Cisalpine Gaulish. Cisalpine Gaulish is so called from the Roman point of view, for whom Cisalpine Gaul was the land inhabited by the "Gauls on this side of the Alps", whereas its antonym Transalpine Gaulish refers to the idiom of the people who stayed behind in Gaul proper, "on the far side of the Alps", that is in modern-day France. Fundamentally, Cisalpine and Transalpine Gaulish are the same language, or differ from another at best to a minor degree.

Both languages, Lepontic and Cisalpine Gaulish, belong to the Celtic branch of the Indo-European language family. Based on the current understanding of the sub-grouping of Celtic, they form part of Core Celtic, and are probably both part of the Gaulish subbranch of Celtic. From a descriptive geographical point of view, they form part of Continental Celtic.

Typologically, both languages are inflectional languages. The inflectional endings are fully preserved and are similar to those in other ancient Indo-European languages. The endings for the nominative, accusative, dative and genitive singular of several stem classes can be easily recognised. Little is known about the verbal system, but the few pieces of surviving information show typical ancient Indo-European behaviour. Since the inscriptions preserve very few sentences, only the bare outlines of syntax can be established. Word order seems to be rather free — or maybe in flux —, but SOV was probably the dominant order. Genitives follow their head nouns, but since this observation basically refers to patronyms which for pragmatic reasons tend to come after the individual name of a person, it is not excluded that for generic nouns other orders were possible as well.

The area of Cisalpine Celtic literacy forms part of the wider North-Italic writing tradition, the participants of which are palaeographically closely related to each other. The immediately neighbouring literate traditions are Etruscan to the south, Raetic to the north-east and Venetic to the east. The Camunic tradition, which is the only one that stands out as strongly idiosyncratic in the shape of its letters, borders to the east. In addition to this, the Greek literary culture exerted superstratal influence over the region in the early period. Roman script and culture dominated as a supraregional paradigm in the final phase of North-Italic writing.

Even though the written traditions of the region are closely interlinked and display many similarities, the corresponding linguistic map is very checkered. Most of the languages in the region are of Indo-European descent, but belong to separate branches within this large family: Lepontic and Cisalpine Gaulish are Celtic, Venetic is a branch of its own, although perhaps closely related to Italic, Latin belongs to the Italic branch, and the precise affiliation of Ligurian is not known. Etruscan and Raetic are closely related, but are non-Indo-European languages. As a consequence of the strong palaeographic influence of Etruscan on the unrelated, and phonetically very different Indo-European languages of the region, a lot of — partly unsuccessful — experimentation was necessary especially in Cisalpine Celtic and Venetic to adapt the writing system to the needs of these languages. Languages in the region that do not have a literate tradition or only a very limited written tradition include Ligurian in the south-west, and possibly smaller languages and dialects in the Alpine valleys.

1.2. Location and chronology of the inscriptions

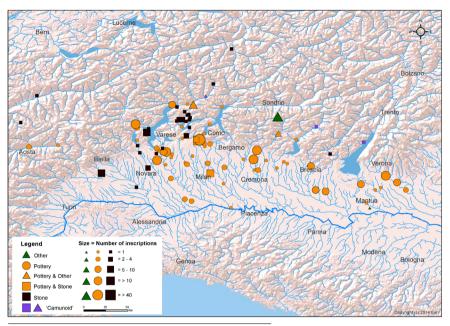
The Cisalpine Celtic inscriptions come from an extended area in northern Italy, sharply bordered in the south by the river Po and less so in the east by the river Adige. The largest number of inscriptions is found in the Italian region of Lombardy, with some findspots also in the Veneto in the east and Piedmont in the west. A considerable amount of texts also belongs to the Swiss canton of Ticino. Within this epigraphic region, inscriptions found in the area between and around the large North-Italian lakes, Lake Como and Lake Maggiore, an area also notable for a concentration of inscriptions on stelae, are counted among the Lepontic corpus, whereas the vast stretch along the northern side of the Po Valley, almost exclusively characterised by graffiti on pottery, is usually regarded as Cisalpine Gaulish. The two distinct areas overlap in the north-west of Milan. In many cases, the linguistic ascription of texts to one of the two languages is unclear.

Lepontic inscriptions have been traditionally dated from c. the 6^{th} century BC until shortly after the time of Christ's birth. More recently, the earliest texts have been back-dated to the 7^{th} century (Maras 2014a, 73-74). The extent of sites with inscriptions from the early phase of Lepontic writing, traditionally encompassed inside a radius of 50 km around the Swiss town of Lugano, coincides largely with the final phases of the archaeologically distinct Golasecca culture.

A major caesura occurs around the middle of the 1st millennium BC with the arrival of Gauls, who came across the Alps from the Gaulish heartland in modern France. There appears to be a drop in the number of inscriptions in the 4th century, probably as a consequence of the social and political unrest in the wake of the migration period. This invasion introduced the Gaulish language into the region and led to the replacement of the Golasecca culture by the La Tène culture (cf. Uhlich 1999). The immigrant Gauls settled the plains around the river Po, south of the Lepontian area, and adopted the Lepontic alphabet from their Celtic-speaking precursors and/or neighbours. When the tradition of writing sets in again in full, it is found more widespread across northern Italy, stretching along the entire plain along the Po Valley, from Aosta in the west to Verona in the east. To what extent the inscriptions from the Lepontic area were "Gaulicised" in this process during the second half of the 1st millennium BC is not clear at the moment. The number of the inscriptions reaches a peak around 100 BC, only to drop drastically shortly afterwards. The epigraphic tradition of Cisalpine Celtic seems to have died out during the Augustan period.

Up to the middle of the 20th century, only a comparatively small corpus of texts was known or accessible to scholars. With the increase in excavations in the latter part of the 20th century, the number of Cisalpine Celtic texts, especially graffiti on pottery, has grown exponentially. The majority of current linguistic and epigraphic scholarship rests on this material. Since the beginning of the 21st century, a significant number of new inscriptions have been discovered, for instance in Cerrione, Verona, or the rock graffiti from Carona, which have not received the same level of attention yet. In particular the large number of texts from Carona, which occasionally are rather long, and which diverge in many ways from the texts hitherto known, may offer interesting new insights and may necessitate major revisions of long-held beliefs about the epigraphy and the linguistics of Cisalpine Celtic.

Indirect evidence for the languages consists of personal names that are recorded on Roman gravestones in the same region, in the works of Latin, and occasionally Greek, authors, and in ancient, medieval and modern placenames. This material has not yet been systematically collected and studied from a state-of-the-art perspective.



Map. Cisalpine Celtic inscriptions (© Egess Tiri 2019).

1.3. Historiography and state-of-the-art

Early studies of the textual evidence known at the time were undertaken by Rhŷs 1905-1906; 1913; 1914 (cf. Falileyev 2019) and by Krahe 1936. The latter established the language of the inscriptions methodically as Indo-European and Celtic. The anthroponomastics were investigated by Untermann 1959-1961 in a series of articles about the names across the entirety of northern Italy. The first in-depth study of the epigraphic evidence that can still be used with profit is Lepontica by Lejeune 1971, even though the corpus that he worked with was tiny compared with what is available today. Other noteworthy textual collections and studies are Tibiletti Bruno 1981; Solinas 1995; Motta 2000. Eska 1998 and Uhlich 1999, followed up by Uhlich 2007, offer fundamental, albeit occasionally divergent, assessments of the language from a comparative Celtic and Indo-European point of view. The most comprehensive printed collection of the sources known up to the beginning of the 21st century is Morandi's Celti d'Italia (Morandi 2004). The major Cisalpine Gaulish inscriptions are also edited in Lejeune 1988. Bilingual inscriptions are treated in Estarán Tolosa 2016. Archaeological and historical information can be found, for example, in De Marinis & Biaggio Simona 2000; Agostinetti 2004; Barral et al. 2014.

The only online corpus of Cisalpine Celtic is *Lexicon Leponticum* (*Lex-Lep*), in which all inscriptions are collected with texts, images (taken from previous publications) and bibliography, created by Stifter *et alii* from 2009 onwards. The database aims at covering the entire linguistic, epigraphic and archaeological information about the inscriptions as well as about their supports. *LexLep* assigns regionally-based sigla to all inscriptions and objects. A compact version of the material has been entered into the AELAW database.

The journal *zixu*. *Studi sulla cultura celtica di Golasecca* (Roma, 2014) is dedicated to the study of the Lepontic world. New discoveries are recorded in *Studi Etruschi*. Celtic Studies journals such *Études Celtiques*, *Keltische Forschungen*, *Studia Celtica* or *Zeitschrift für celtische Philologie*, but also Indo-European journals outside of Celtic Studies, occasionally publish articles about Cisalpine Celtic. Since primary information is often available only in very local journals or publications, *academia.edu* has become an important resource to access the newest information.

1.4. The language

1.4.1. Phonology

There is no perfect binary length opposition in the vowel system. The five basic short vowels contrasted originally with three long vowels. The long midhigh vowels *e*: and *o*: may have occupied a marginal position in the system, either as variants of the diphthongs *ei* and *ou*, or, in the final phase, as loans from Latin.

	Plosive	Nasal	Fricative	Affricative	Glide	Liquid
Bilabial	p b	m			w	
Dental	t d	n				lr
Alveolar			s	ts (?)		
Palatal					j	
Velar	k g		X			
Labiovelar	g ^w					

Table 1. Consonants of Lepontic and Cisalpine Gaulish.

	Front				Back
Close	i i:				u u:
Mid		e (e:)		o (o:)	
Open			a a:		

Table 2. Table 2. Vowels of Lepontic and Cisalpine Gaulish.

1.4.2. Morphology

The nominal morphology of Lepontic and Cisalpine Gaulish can be established in its broad outlines for the singular inflection, and fragmentarily for the plural, by mapping the attested forms onto the reconstructed noun classes of Celtic and Indo-European (indicated by the asterisk * below). The case endings for the nominative, accusative, dative and genitive singular for several stem classes can be readily recognised. Table 3 presents the Cisalpine Celtic endings as they are encountered in the texts, without distinguishing between short and long vowels. In most cases, the endings are identical between the two languages. Where endings are clearly specific to one of them, this is indicated by superscript ^L or ^G.

	- 1 1	1 1	1 1	. 1 1	
	ā-decl.	o-decl.	n-decl.	i-decl.	
Singular					
Nominative	-a < *-eh ₂	-os < *-os	$-u < ^* - \bar{o}(n)$	-is < *-is	
Accusative	-am < *-eh ₂ m	-om < *-om		-im < *-im	
Dative	-ai < *-eh ₂ eį	-ui < *-ōį	-onei/-oni < *-one̯i	-ei < *-ejej	
Genitive	-as < *-eh ₂ es	$-oiso^{ ext{L}} < ^*-osio$ / $-i^{ ext{G}} < ^*-i\hat{H}$	-nos < *-nos		
Plural					
Nominative		-oi (?) < *-oi̯	-ones < *-ones		
Accusative	-aś < *-eh ₂ ns				
Dative	$-api (?) < *-ah_2b^hi$	$-opos < *-ob^hos$ $-onepos < *-on-i-b^hos$			
	Consonantal declension				
Singular					
Nominative	-es ^L < *-nts, -s < *-ks				
Genitive	-os < *-os				
Plural					
Accusative	-eś¹ < *-ņs				

Table 3. Cisalpine Celtic nominal endings.

In several instances, the texts show archaic endings in -m for the accusative singular, like in Celtiberian, whereas in a few other instances, some of which believed to be Gaulish, the more progressive ending -n is found. Final -s of the endings is usually preserved, although in a few cases, L esopnio and G aśkonetio and kośio, the phonetic loss of final s can be observed. In Lepontic texts the genitive singular of o-stems ends in -oiso. In contrast to this, the younger Cisalpine Gaulish texts have ample examples of the widespread Celtic genitive in -ī that is also well represented in Transalpine Gaulish and on Irish Ogam inscriptions. The ending -oiso must be the metathetised variant of an old o-stem genitive ending in *-osio. The "watershed" between the two endings -oiso and -i seems to be around the 4th century BC, but the inscriptions from Carona may change this picture. The formal and functional interpretation of the ending -ois (at least twice in Carona) is still unclear.

Latin influence makes itself sometimes felt in morphology. Occasionally names in -o may show the Latinised ending $-\bar{o}$ instead of the native Celtic version $-\bar{u}$. The nominative ending -us for -os in G esonius must be an adaptation to the Latin ending -us. In the same inscription as esonius, G ueriounos, which

structurally must be a genitive, has the ending -os. If this interpretation is correct, it is a remarkable instance of the awareness of grammatical categories.

So far, only six verbs have been unambiguously identified, and accordingly any statements about verbal morphology are only made with greatest caution. All verbs appear to occur in the context of "giving", "dedicating" or "setting up" inscribed stones, and all are $3^{\rm rd}$ persons: perfect L tetu (= /dedū/) "has given/put", L $totallow{th}$ karite and $totallow{th}$ karite (unless the latter is to be read as $totallow{th}$ karitus, $totallow{th}$ totallows to draw any inferences, it looks as if $totallow{th}$ is a $totallow{th}$ singular perfect ending $totallow{th}$ eseems to be a similar ending, added onto another ending $totallow{th}$. The recently discovered rock inscriptions from Carona may contain more verbal forms, especially in the longer texts, some of which may be sentences. For instance, the recurring form $totallow{th}$ could conceivably be an alternative spelling for $totallow{th}$ ($totallow{th}$), and the recurrent form $totallow{th}$ is a alternative spelling for $totallow{th}$ ($totallow{th}$). Given the still poor understanding of these texts, all of this remains speculation for the moment.

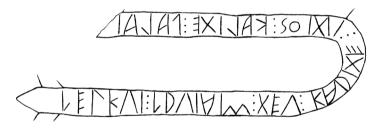


Fig. 1. Inscription VA·6 on a stone from Vergiate (drawing: C. Salomon).

Two dubious texts (the stone from Voltino BS·3, the pitcher from Castaneda GR·3) contain more forms that have been variously identified as verbs (e.g., alleged *tomezeclai*), but they are best treated with extreme caution. Their doubtful readings and the morphological oddness of these verbal forms do not instill confidence in the Celticity of these texts.

1.4.3. Syntax

With little more then half a dozen sentences in the entire corpus, very little can be said about syntax. This is aggravated by the fact that most of the longer texts feature stylised language, either because they are metrical or because the purposes for which they were produced, such as commemoration or devotion, warrant an elevated, rhetorical style. In order to achieve stylistic effects, or to put greater emphasis on specific elements of the sentence, the word order can be very flexible in such texts. The Lepontic inscription CO·48 from Prestino, a long slab that seems to have served as a doorstep to a temple or sanctuary, furnishes a plain sentence of the type SOV:

```
\it uvamokozis: pliale\thetau: uvltiauiopos: ariuonepos: site\'s: tetu nom.sg. (S) nom.sg. dat.pl. (O_{indir}) dat.pl. acc.pl. (O_{dir}) 3sg. (V)
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"Uvamokozis ("having the highest guest") Pliale θu (a patronymic or title) for the *uvltiauioi ariuones* (the recipients) the seats (the object) gave" = "U.P. gave the seats to the U.A."

In the bilingual Latin-Gaulish inscription PG·1.4 from Todi, the word order is inversed VOS, while a genitive that depends on the object has been fronted for emphasis:

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ateknati : trut|ikni : karnitu | artuaś : koisis : t|ṛuṭiknos : gen.sg. gen.sg. 3sg. (V) acc.pl. (O) nom.sg. (S) nom.sg.
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"Of Ategnātos son of Drūtos erected the grave Koisis son of Drūtos" = "K. son of D. erected the grave of A. son of D."

1.4.4. Lexicon

The bulk of lexical items in the Cisalpine Celtic corpus are names. The generic lexicon outside of onomastics is very poorly attested. The only generic noun that occurs more than once is *pala* (restricted to Lepontic), for which the context suggests the meaning "gravestone". Cisalpine Gaulish contains a few more words whose meanings can be guessed from the context or on the basis of etymological considerations, e.g. *lokan* "grave" or "urn", *artuaś* "grave(mound)", *atom* "end(s), area?", *uenia* "family". Sometimes names, es-

pecially compound names, allow inferences about generic nouns or adjectives through etymological comparison with other Celtic or neighbouring languages, e.g. *rik*- "king, ruler", *touta*- "people", *eskengo*- "warrior?", or *maros* "big", *-uinos* "white". Again, Cisalpine Gaulish seems more amenable to this kind of analysis than Lepontic. *Lekatos* "legate" and *uinom* "wine" are probably Latin loans, just like the name *kuitos* "Quintus".

1.5. The texts

Over 430 Cisalpine Celtic inscriptions have been published so far; allowing for the fact that some recently found inscriptions have not been published yet, the actual number of extant texts may be somewhat higher. Most inscriptions are very short. The typical length is one or two words, usually just names. Notwithstanding the fact that due to their fragmentary nature no exact numbers can be given, around 330 texts have one word, over 60 have two words, and around 20 three words. Only around a dozen texts contain four or more words.

The distinction between public and private is not a clear-cut dichotomy, but many objects are on a spectrum between the poles. The coin legends and the funerary and dedicatory inscriptions on large stones and on rocks are clearly aimed at a wider public, even though the degree of literacy — and therefore the potential audience — is unknown. Are graffiti of names on urns in graves an expression of intimate personal affection, or does the use of writing on objects that will become invisible after the grave has been covered up serve a public purpose nevertheless by demonstrating the knowledge of an advanced cultural skill during the brief space of the ritual? Similar questions can be asked about graffiti on objects of everyday use, especially pottery. Producer marks on pottery, e.g. *sekezos* on CO·57-60, have an advertising effect that reaches beyond the immediate circle of users of the objects.

c. 60 inscriptions are written on big stones with a funerary purpose. The rest (not counting coins) is inscribed on middle-sized movable objects, mostly various types of pottery. The objects and the functional roles of the inscribed words on the latter (subject, possessor, recipient) seem to belong to the possessors or the producers of the objects. The number of religious inscriptions is small in comparison. The two long texts VC·1 and CO·48 contain dedications to named or unnamed deities. Apart from these prominent texts, a major part of the thirty or so rock inscriptions from Carona are probably dedicatory to local gods, especially to the mountain god *Poeninos* or *Peninos*. They are situ-

ated on the margin between personal, private devotion and public exhibition of one's devotion.

Between the two languages, a rough dichotomy in the types of objects can be observed. Stone inscriptions belong preponderantly to Lepontic, whereas the Cisalpine Gaulish corpus is for the most part made up of graffiti on pottery. However, inscribed pottery is also very common in the Lepontic area.

1.5.1. Types of supports

- 1. 20 different coin legends are known. As far as documentation exists, only a single piece is known of most legends, rarely 2-4 pieces. Around 20 pieces each are known of NM·4 *pirakos* and NM·5 *rikoi*, over 170 of NM·20 *uol*, and around 1.350 of NM·7 *toutipouos*. Of the 20 types of coins, two are bronze pieces (one drachma and one semis), 10 silver drachmas, and 7 gold staters, the rest is unclear.
- 2. Pottery is by far the most common support for surviving Cisalpine Celtic texts. Altogether around 310 objects fall in this broad category. *LexLep* distinguishes currently the following subtypes on the basis of the archaeological reports and the information in previous textual collections:

```
a. pot (olla, olletta): 16
b. flagon (bucchero): 1
c. pitcher (olpe, boccale): 9
d. bottle (fiasca): 25
e. cup (coppa, coppetta): 40
f. beaker (bicchiere): 9
g. goblet (poculo, pisside): 7
h. bowl (ciotola, patera): 113
i. dish (scodella): 10
j. plate (piatto): 5
k. amphora: 2
l. spindle whorl: 2
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m. unidentifiable and unknown: 68



Fig. 2. Inscription VR-24 from Verona (© Soprintendenza per i Beni Archeologici per il Veneto. Photo and drawing: S. Marchesini).

- 3. There are c. 65 inscriptions on stone objects. Most are large, funerary stelae or gravestones.
 - a. stela: 14
 - b. gravestone: 40
 - c. slab: 5
 - d. gravel: 3
 - e. boundary stone: 1
 - f. spindle whorl: 1
 - g. unidentifiable: 2



Fig. 3. Inscription TI·41 from Stabio (© Raetisches Museum Chur. Photo: C. Salomon).

- 4. So far, only one place with rock inscriptions has been identified in the Cisalpine Celtic area, namely Carona. Establishing the precise number of different graffiti on this rock is difficult. For instance, *isiti* is repeated thirteen times. If text repetitions are only counted once, there are *c*. 31 inscriptions in Carona. It is possible that a number of inscriptions have not been properly identified yet.
- 5. Metal objects are very rare, and the affiliation to the Cisalpine Celtic corpus of some of the 5 objects is doubtful.
 - a. bronze helmet: 1
 - b. bronze tablet: 1
 - c. iron knife: 1
 - d. silver mastos in Latin script: 1
 - e. silver bracelet: 1
 - 6. Only one isolated, fragmentary object on bone is known.

In the case of a few inscriptions from the fringes of the Cisalpine Celtic area, the appurtenance to Celtic is unclear or very doubtful: the bronze pitcher from Castaneda (GR·3), the stela from Voltino (BS·3), several antler pieces with possible Celtic names from Magrè, which are genuinely part of the Raetic corpus and which are not included in *LexLep*, as well as several Etruscan and Ligurian (MS·1, ·2, ·3, SP·1, ·2) inscriptions with Celtic names. They have not been included in the numbers above.

1.6. Writing system

Cisalpine Celtic inscriptions are found in two writing systems, the vernacular and the Roman script. The vast majority of texts, from the earliest time until the end of attestation, is written in the vernacular writing system. This specific subtype of the North-Italic alphabet will be called "Lepontic alphabet" or "Lepontic script" here after the language for which it was first used. A common alternative name is "Lugano script" which derives from the fact that in the earliest period the script was used around the modern Swiss town of Lugano, notwithstanding the fact that there are no inscriptions from the town of Lugano itself, and that it is not even clear if a Celtic settlement existed

in the territory of the modern town at the time at all. "Cisalpine Celtic script" would be a possible third name, but it lacks in conciseness.

Throughout its entire history, the Lepontic script was exposed to constant influence from and interaction with writing systems from outside. The adoption of writing itself is due to such external influence. The Lepontic script is one among several of the North-Italic writing traditions that are all derived from Northern Etruscan as their mother alphabet. Maras 2014a, 73-74; 2014b, thinks of networks of prestige gift-giving from Etruscan that exposed the elites of the Golasecca culture north of the Po Valley to the idea of writing. In this context, he dates certain examples of writing in the Golasecca area to the late 7th century BC, which is almost a century earlier than had been previously believed to mark the beginning of Lepontic writing.

The Lepontic script is very similar to its sister alphabets, Venetic and Raetic, which allows for the possibility of reciprocal influence in the form and practice of writing, e.g. in experimenting with specific characters to render obstruents. At the same time, they are distinguished by unmistakable graphic and systemic shibboleths, such as the absence or presence of certain characters, the use of specific glyphs, or practices such as syllable punctuation or word separation. The Lepontic script goes its own way in the almost exclusive use of the so-called butterfly sign \bowtie for \acute{s} (san or sade), while the graphic variants of this letter that are popular elsewhere are absent. Regarding the origin of the letter, the double pennant symbol M, which is the most likely source for the evolution of the butterfly symbol, is found in Campanian and in early Padanian Etruscan. If there is a connection, the influence must have been very early, and the Lepontic script remained unaffected by later innovations in the neighbouring writing traditions. The neighbouring Schriftprovinzen are also important for another reason: Cisalpine Celtic names are also found in Nebenüberlieferung in the other North-Italic alphabets, such as the linguistically Celtic, but alphabetically Venetic inscription from Oderzo (TV-1), or in mixed alphabets, as on the Voltino stone (BS·3).

The invading Gauls of the middle of the 1st millennium BC adopted the use of the script from the Lepontians for their own Gaulish language. The similarities between the two languages must have facilitated this adoption. No manifest graphic or orthographic differences between inscriptions in Lepontic or Gaulish have been detected so far. Maybe the influence of Lepontic writing extended even a bit further. The letters on a small number of inscriptions from the region to the southwest of the Cisalpine Celtic area, the region that was

inhabited by speakers of the very fragmentarily known Ligurian language, display great formal similarity with those of the Lepontic script. Apparently the Lepontic script was borrowed by Ligurians who, however, never seem to have progressed to a fully developed literate tradition.

However, as an antithesis to the traditional view and to the image painted in the foregoing, namely that the Cisalpine Celtic tradition forms a body of writing that is palaeographically and epigraphically comparatively homogenous and that has a uniform historical development, a note of warning has to be sounded. Just as it has been realised for Raetic and Venetic that those epigraphic traditions encompass several distinct local subtraditions of writing with divergent conventions, a critical-analytical study of the Cisalpine Celtic corpus may reveal chronologically, geographically, contextually and socially determined substrands of the tradition (*cf.* Motta 2000, 186).

The Lepontic script in its most common form utilises only 14 letters (a, e, i, k, l, m, n, o, p, r, s, \acute{s} , t, u). A few more letters are restricted to the early period of experimentation (v, z, θ , χ), while others are doubtful, or may just be modern misreadings (c, q, φ). The Northern Etruscan letters h (heta) and φ (phi), very common in all related literate traditions, are entirely absent. In contrast to the Northern Etruscan model, Lepontic, like Venetic, but unlike Raetic, makes use of o (omikron), which was either inherited as a "dead letter" from Etruscan where the sound o0 did not exist, or was re-borrowed directly from a Greek model to fill the gap in the system. There are no full model alphabets surviving save for two or three short graffiti of the type aev (CO·53, ·54, perhaps VA·5). This sequence of three letters corresponds to the beginning of the Venetic alphabet from Este (Es·23). This may indicate that the entire Lepontic inventory went parallel with the Venetic order.

The Lepontic script is badly suited to render the sounds of an Old Celtic language. It rarely differentiates between letters for voiced and voiceless consonants, and, although the language distinguished simple and geminate consonants, and short and long vowels, this distinction finds no expression in the writing. P(pi), k (kappa) and t (tau) in the shape of St. Andrew's cross are the common letters for stops in Cisalpine Celtic, being used for both unvoiced and voiced stops. χ (khi) can be employed both for k and k (k and k (k and k) and k (k and k) are distinguished. While k are represents inherited k k , the sound value, and with it the source(k), of k are much more disputed. The glides are usually written with the letters of the corresponding vowels, but in the earliest period

v (digamma, waw) could be used for *u. Nasals (n, m) before stops are frequently not written.

Regular use is made of word dividers, usually 1-4 dots between the words, e.g. · : i. Their presence is an indicator of a careful textual layout. In informal graffiti word dividers can be absent and a plain space or a line change can take their place.

Although the general lines of the system are clear, the detailed interpretation of the data is still in flux. Several reassessments of the relationships between graphemes and phonemes have been proposed in the past years (cf. Maras 2014), mainly concerning the characters for sibilants and obstruents. Stifter 2010; 2015, 247-253, suggested that \acute{s} can represent voiced d or even \eth . Another path is pursued by Eska 2017. He assumes that the phonetic opposition between the two obstruent rows in Lepontic was not in voicedness, but in aspiration, and that the only sporadic employment of khi and theta in the older inscriptions points to a Venetic intermediary of the alphabet.

Perhaps the small number of graphemes for the *c*. 24 phonemes of the Cisalpine Celtic languages indicates that writing was only used in conventionalised contexts and no high degree of graphematic precision was required.

Conventional name	Common letter forms	Transliteration
alpha	1A	a
epsilon	1	e
digamma/waw	1	v
zeta	*	z
theta	•⊕	θ
iota		i
kappa	kK	k
lambda	1	1
mu	MMMM	m
nu	ММ	n
pi	1	p
san/sade	MM	ś
qoppa	(9)	q
rho	0	r
sigma	\$ {	s
tau	Χ	t
upsilon	V	u
phi	(CID)	φ
khi	VΥ	χ
omicron	•0	o

Table 4. The Lepontic alphabet with transliteration.

In the final phase of Cisalpine Celtic literacy, in the 2^{nd} and 1^{st} centuries BC, the area had come into the power sphere of Rome. As a consequence, the Roman alphabet, used for administration and international communication, asserts itself as the dominant paradigm beside the native writing system, which it influences and ultimately replaces. Roman influence is especially recognisable in the shape of specific letters, e.g., M, N, S, in the direction of writing (Stifter 2015, 253-257), and possibly in specific subgenres of writing, such as dedicatory formulae or metrical graffiti (VB·3.1).



Fig. 4. Inscription VB·3.1 on a vase from Ornavasso (drawing: C. Salomon).

Since the Cisalpine Celtic coins follow Greek models, it is theoretically possible that Greek graphic influence exerted itself in coin legends, but nothing has been noticed so far.

1.7. Personal onomastic formula

The basic structure of the Lepontic and Cisalpine Gaulish onomastic formulae is bipartite, consisting of an *individual name* followed by a *patronymic*, i.e. the name of the father (or, conceivably, of some other kind of ancestor). However, this ostensibly simple structure finds expression in a large variety of realisations, some of which separate the two languages. In informal contexts, both in isolated names and embedded in sentences, the name of the father can be omitted and the individual name can appear on its own, e.g., L *χosioiso* (NO·1), G *toutoris* (SM·3).



Fig. 5. Double gravestone for a couple from Davesco with inscriptions TI-36.1 and TI-36.2 (@Raetisches Museum Chur. Photo: C. Salomon).

When a second element is present, it is usually a patronymic. Patronymics can be expressed in a variety of ways. Differences exist between the two languages, but there is also variation over time within each language. The oldest and most common formation of the patronymic in Lepontic is by adding the suffix -alo/a- onto the stem of the name of the father. -alo- is the masculine, -ala- the feminine form, as demonstrated by the two inscriptions from Davesco TI·36: $slaniai\ uerkalai$, $tisiui\ piuotialui$. Their fathers' names must have been *uerkos and *piuotios respectively. It is not always easy to establish the basic form of the father's name. For instance, in the case of $teromui\ kualui\ (TI\cdot26)$, was the father called *kuos, or perhaps * $k\bar{u}$ (Celt. "hound")? The suffix is perhaps adopted from Etruscan where -al is one of the endings of the genitive. Occasionally -al alone without an ending is found, e.g. $ualaunal\ raneni\ (GR·1)$. The grammatical status of such forms is not clear: are they just abbreviations, or are they very early formations where the Etruscan ending had not yet been adapted to the Celtic language?



Fig. 6. Inscription GR·1 on a gravestone from Mesocco (©Raetisches Museum Chur. Photo: C. Salomon).

Occasionally patronymics are found that seem to contain the suffix -ilo/a-whose relationship to -alo/a- is unknown, e.g. oletu amaśilu (VB·2). In later stages of Lepontic, formations with the suffix -iio- also occur, e.g. minuku komoneos (TI·42) or namu esopnio (VB·28). Finally, in the late period the individual name can be followed by the name of the father in the genitive case, e.g. atekua aśouni (VB·27). The changes in the Lepontic system may have been triggered by influence from Gaulish.

The situation in Gaulish is somewhat different. Gaulish has a suffixal formation of the patronymic, too, but in its case it is -ikno/a-, e.g. sola nimonikna (NO·20), koisis trutiknos (PG·1). Once, a group of sons are mentioned, namely tanotaliknoi "the sons of Dannotalos" (NO·21). The inscription NO·18 is the only one where unambiguously Lepontic and Gaulish suffixal patronymic formations appear side by side in one text. Formations with -iio- are also found, e.g. lukios sipionios (BI·1). The majority of Cisalpine Gaulish names occur without second element. Secure examples of the combination individual name + name of the father in the genitive are therefore hard to come by for Cisalpine Gaulish, e.g. esopnos kepi (PV·1).





Fig. 7. Inscription NO·21 on a stone from San Bernardino di Briona (© Museo Lapidario della Canonica, Novara. Photo: Ma J. Estarán. Drawing: C. Salomon.

Where patronymics are formed by suffixation in either language, it is only by disciplinary convention that we speak of "father's name". There is no evidence to dismiss the possibility that some — or even all — of these names are actually metronyms, i.e. the names of the mothers (*nota bene*, there is no positive evidence in favour of such a hypothesis either). Where patronymics are expressed through genitives, the stem-class reveals the gender, which is invariably masculine. In those cases, where the name of the father follows in the genitive, the words for "son" and "daughter" are never expressed explicitly. Only in Roman-letter inscriptions are they indicated through abbreviated f for *filius* or *filia*, e.g. EXOBNA DIVCONIS F (VB·24).



Fig. 8. Inscription CO·48 on a door slab from Prestino (Drawing: C. Salomon).

Occasionally, the individual name is accompanied by a second element that appears not to be a patronymic, or that at least is not formed according to any of the above-mentioned rules. Examples from Lepontic are *uvamokozis plialeθu* (CO·48), *aśkonetio pianu* (VB·22). The Gaulish corpus contains an example where the second element is clearly a title or a public function: *akisios arkatokomaterekos* (VC·1). *Arkatokomaterekos* probably means "silver measurer", some sort of treasurer.





Fig. 9. The bilingual Latin-Gaulish dedication VC·1 from Vercelli (© Museo "Camillo Leone", Vercelli. Photo: Ma J. Estarán. Drawing: C. Salomon).

2. Current problems in the study of the language and of the epigraphic culture

A major functional distinction is that between public inscriptions, which target a large audience, and private graffiti with only a limited audience. This raises the question how widespread literacy was, especially in the early period, and what audience a public inscription could reach, or what audience it was intended to reach.

The corpus lends itself to research into gender aspects and gender differences in textual production and reception. The corpus contains a sizeable number of inscriptions that record female names, sometimes in close connection with male names that probably refer to fathers or husbands. Related with this is the question whether it is possible to decide if the names of parents are patronyms or metronyms or both. With very few exceptions, the inscriptions do not reveal other sociolinguistic information.

The most recent addition to the corpus of Cisalpine Celtic, the over thirty rock graffiti from Carona (BG·41), still pose many challenges: their readings are occasionally difficult to establish because they are overlaid by a multitude of later scratchings, and their precise linguistic and historical context still needs to be ascertained. From a linguistic point of view, the Carona inscriptions form a group. Several words, forms and constructions occur only there. Questions are: do the repeated occurrences of *ześu* and *isiti* mean that they are particularly formulaic words, or was, *e.g.*, *isiti* just written by the same person several times for reasons unknown? Could *isiti* contain the copula **isti* < **esti*? Does the Carona corpus contain full sentences with verbs, subjects and objects? And many more questions of this sort.

2.1. Linguistic problems

The central linguistic problem of the corpus is the question whether it comprises one or two different languages, and, if the latter is the case, what distinguishes the languages in the corpus, and by what criteria individual inscriptions can be assigned to one of the two languages. Possible criteria are chronology (pre-4th century exclusively Lepontic?), geography (Alpine areas chiefly Lepontic? Po Valley chiefly Gaulish? but what about the settlements on the border between the two areas?), grammar (phonology, genitive in -oiso Lepontic?, patronymics in *ikno*- Gaulish? past ending in -e Lepontic?), and lexicon (*pala* only in Lepontic inscriptions?). One way forward is to investi-

gate if and how the afore-mentioned criteria, and others more, are clustered, i.e. are those features that are assumed to be typical of Lepontic or of Cisalpine Gaulish found in clearly defined regions?

If we are looking at two languages, what does this mean for the — already difficult — subclassification of the Celtic languages? Is Lepontic a close relative of Gaulish and accordingly part of the same sub-branch, or does it belong to a cladum of Celtic that branched off very early?

More specific questions involve the diachronic and synchronic phonology, for instance, the position of the special sound *tau Gallicum* in the corpus, and the diachronic and synchronic morphology. An example of the latter is the clarification of the verbal morphology that is encountered in the Cisalpine Celtic corpus. It would also be worthwhile to revisit the realm of personal names, both on vernacular and on Latin inscriptions, to go beyond the somewhat agnostic approach of Untermann 1961. Equipped with up-to-date methods and insights into the linguistic geography of pre-Roman northern Italy, more information is bound to emerge from this rich source. In addition to this, onomastic material in foreign transmission has not been exhaustively studied yet.

2.2. Epigraphic problems

A central deficiency is the uncertainty over how reliable the received datings are that are available for the inscriptions and the objects which bear them. In most cases the dating depends on the archaeological context, but many inscriptions were found at a time when archaeological methodologies, and especially archaeological documentation, were in their infancies. The entirety of the older part of the Cisalpine Celtic corpus needs to be critically evaluated and re-checked. In many cases, dates of texts are derived from letter shapes or from linguistic arguments — in such cases, the dating process becomes circular.

Likewise, the readings of all older inscriptions need to be ascertained in the light of up-to-date knowledge about the internal history of North-Italic scripts, and all inscriptions need to be documented with modern technology (high-resolution photography, 3D-scans, photogrammetry, etc.).

Little attention has been paid to the precise definition of functional roles of inscribed objects. Marchesini & Stifter 2018, 145-146, ask the question if inscriptions found in graves can automatically be assumed to bear the name

of the deceased. For instance, in VR·15 the male name *kośio* is found in the grave of a female person, and therefore cannot refer to the dead. Similar considerations apply to name-bearing objects in graves of foetuses (!) who may not yet have been given a name. This has further implications for gender and hierarchical roles in the society.

2.3. Writing system problems

Although minor differences may still exist in the way how the inscriptions are transcribed in existing scholarship, for instance, whether letters for stops are written in capitals to indicate their ambivalence in voice, these systems can be easily and unambiguously transferred from one into the other. In fact, most active scholars seem to adhere to a common system. The only diacritic symbol currently in use for the transcription of Cisalpine Celtic texts in the Lepontic script is a special sign for the letter *san*. In accordance with the practice in other epigraphic traditions, especially Celtiberian, contemporary scholars predominantly use the diacritic ', *i.e ś*, to distinguish the letter from ordinary *s*, but in the past *š* was also used. Depending on progress in the understanding of the use of letters for various dental sounds, it may be conceivable to introduce diacritics to make distinctions between the sound values and their graphic expression, after the model of Raetic or Venetic.

The core features of the writing system are well understood. A question that straddles the boundaries between linguistics and palaeography is whether in addition to linguistic differences between Lepontic and Cisalpine Gaulish there are also graphic differences between the two subtraditions, e.g., significant differences in the glyphs, in the letters used for the sounds of the languages, or in the overall orthographic rules. For the entire tradition, the strategies employed by the scribes for marking the distinction between voiced and voiceless sounds remain a vexing problem. In some inscriptions it seems as if a differential usage of inherited letters signs was practiced, but the precise strategies seem to vary over time and over space. Do these strategies give an indication of schools of writing as they existed in neighbouring *Schriftprovinzen*? From a wider perspective, the precise origin of the script and its relationship to its "mother" Etruscan and to its "sibling" writing systems Raetic and Venetic still needs further investigation. Do the neighbouring traditions, especially Venetic, continue to influence Lepontic writing throughout its history?

"Histories" could be written of the variable use, frequency and sound values of each single letter. Questions about specific letters include: what is the source for *omicron* in the alphabet? Is it an inherited dead letter from the Etruscan mother alphabet, or was it borrowed from another writing tradition, e.g., Greek? What is the origin of the St. Andrew's-cross-shaped tau, frameless theta or rotated traditional tau? What is the derivation of or motivation for the inverted forms of upsilon and lambda? What is the exact chronology of the forms of alpha? The development of closed alpha via an open form to an upright flag-shape has been used as a dating criterion, even though it is is not clear whether this development happened uniformly in the entire Schriftprovinz. Where do the functions of sigma, san and zeta overlap over time, where do they differ, and how are they demarcated against each other? The distribution of sigma and san in the Lepontic script, which follows the model of Southern rather than Northern Etruscan, calls for an explanation. Questions remain also about the use of rare letters especially at the beginning of the tradition. Were these letters ever actually used and, if so, what was their phonetic value — or are the alleged examples just misreadings?

Other questions that merit further investigation relate to word separation. In general, word separation seems to be used systematically in Cisalpine Celtic inscriptions. The origins of this practice, either through inheritance from the mother alphabet, or through loan from neighbouring writing traditions, deserve a closer study, as do the details of the practice. Does empty space between words occur systematically as a word separator as well? Is the change of lines a substitution for the use of word separators? Do the practices change across time, space, and languages? From a wider psycho-linguistic perspective, the use of word separation may give insights into concepts of words.

The framework of an Old Italic alphabet is encoded in the Unicode block U+10300-1032F, of which several slots are not assigned to letters yet. The Old Italic block is designed to include any Old Italic alphabet; it is not tailor-made for the individual literate traditions of ancient Italy. Stefan Schumacher and I met with representatives of the Unicode Consortium in summer 2015 during the *International Celtic Congress* in Glasgow. The meeting made it clear that the goals of the Consortium are different from the requirements and wishes of philologists and palaeographists of the individual languages and writing traditions. The Unicode Consortium wants to ensure that there is one code position for each letter, irrespective of the graphic realisation (glyph) of that letter, whereas palaeographists need an encoding system that allows to record subtle graphic distinctions between the glyphs that represent one letter. As a consequence, although the Lepontic alphabet is included in Unicode in some

form, it is of little practical use for advanced research. In order to represent the distinctions between allographs of a letter in print or online, it will be necessary to make use of custom-made, proprietory fonts, as practiced, for instance, in *LexLep*.

2.4. Edition problems

Because of the rapid increase in documented texts in the past years, none of the existing printed collections of Cisalpine Celtic can give a comprehensive overview of the currently available material. Solinas 1995 offers only minimal information or discussion for *c*. 150 inscriptions with occasionally unreliable readings. Morandi 2004 contains over 300 inscriptions and provides more information, as well as drawings of the texts. A considerable part of the available epigraphic documentation of the Cisalpine Celtic corpus is over a century old and does not conform with modern standards; good photographs are only available for a handful of testimonies. Even editions from the end of the 20th and the beginning of the 21st century often just reproduce the old images or drawings. Most material is readily available in museums or other institutions, but occasionally the existing literature does refer to the fact that the current whereabouts of objects are unknown.

Following the standards of other epigraphic traditions, photogrammetry and 3D-scans must be carried out on the objects, especially on the lapidary texts. High-resolution photographs must be created of all texts.

The only comprehensive online database is *LexLep*, which currently incorporates over 400 texts. Because of its online nature, *LexLep* is more congenial to the constantly growing corpus of Cisalpine Celtic. When completed, *LexLep* is intended to provide a full digitisation of the entire corpus. However, a number of practical issues prevent it from operating at full strength. *LexLep* has so far not been formally finished and is still in a beta phase. Only images and drawings from previous editions have been reproduced, thereby perpetuating a fundamental weakness in the field, pointed out above. A major technical issue is the underlying software on which the site operates, *Semantic MediaWiki*, which is no longer developed further. This makes it vulnerable to technical disruptions whenever the host server is updated, and the threat of a general incompatibility between server and website is always looming on the horizon. One solution could be to migrate the entire database to another server and to a different database system. Finally, ideally one dedicated person would be constantly occupied with updating the database with new discov-

eries and newly published literature, but for practical reasons only sporadic updates have been possible in the past. It requires major investment to tackle any of these challenges.

Since there is a significant overlap between Cisalpine Celtic and Gaulish material, a fundamental conceptual question must be considered: is the Cisalpine Gaulish material to be kept separate from Transalpine Gaulish since it belongs to a distinctly different epigraphic and palaeographic culture, and since it has a clearly delimited geographic distribution? Or is it to be registered twice, namely both in the Cisalpine Celtic and in the Gaulish corpus (in particular, in the new *Récueil informatisé des inscriptions gauloises* — *RIIG*), since it belongs, as it were, "to two worlds"? Or should the Cisalpine Gaulish texts only be recorded in the Gaulish corpus, in an extended *RIIG*? In any case, clear linguistic, palaeographic, epigraphic, historical and geographical criteria are prerequisite to understand what is meant by "Lepontic" and what by "Cisalpine Gaulish".

2.5. Publication problems

It appears to be a common problem to have a time lag between the discovery of new Cisalpine Celtic inscriptions and their publication in widely accessible form. Furthermore, since publications are sometimes made in local Italian journals, even when new inscriptions have been formally published, they may remain hard to access for international scholars. However, this difficulty is mitigated by informal ways of modern academic distribution, e.g. sharing publications via platforms such as *academia.edu*.

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