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# The early Celtic epigraphic evidence and early literacy in Germanic languages

David Stifter

Maynooth University

This paper outlines the individual histories of the attested ancient Celtic epigraphic traditions, Cisalpine Celtic, Celtiberian, Gaulish and Ogam-Irish. It discusses the types of literacy in each of them and presents them as examples of how and under which conditions literacy arose and grew, and finally disappeared, in non-classical languages of antiquity. Where possible, the Celtic languages are viewed against an early Germanic background, to highlight similarities and parallels between the two philological areas, but also to contrast the differences between them and to give an account of where and when opportunities of literate interaction may have arisen between the two groups. These zones of potential interaction, as well as uncommon shapes of letters in some Celtic writing systems, are of relevance for the concluding section where observations from a Celtologist's point of view will be made that may have a bearing on the origins of Runic writing.

## 1. Preliminaries

The first part of this article provides an overview of the epigraphic traditions of Celtic languages in antiquity, up to the end of antiquity, and looks in particular at the adoption, creation and development of the medium of literacy, i.e. of the writing systems as such, in those traditions. Where it is meaningful, the situation in Celtic will be compared with that of the Germanic language family, as far as it is possible for a specialist in Celtic to do so. Several factors make a contrastive study of the two language families, which are similar and dissimilar to each other at the same time, a worthwhile undertaking. The historically known extent of the two language families overlapped partly, both chronologically in the centuries around the turn of the eras, and geographically, in that both occupied space in what can be called the extended west of Europe. Some speech communities within the two language families must have been in contact for an extended time. We have historical reports about interactions in Central Europe, especially along the rivers Rhine

and Danube, since the late 2nd century B.C., and the contacts do not cease until the effacement of the Continental Celtic languages in late antiquity. It is conceivable that there may have even been more intensive contacts of which no historical records survive. For instance, loan relationships between the languages, especially loan words from Celtic into Germanic, hint at connections that go back far in time, possibly to the middle of the 1st millennium B.C.

One aspect where literacy in ancient Celtic languages differs from that of Germanic is the historical starting point, both in absolute dates, but also in the relative time-depth when comparing the internally reconstructable histories of their respective language branches. The written tradition of ancient Continental Celtic languages begins as early as the 6th or possibly even the 7th century B.C., and thus much earlier than that of the Germanic languages whose earliest written remains are traditionally assigned to the 2nd century A.D. (but see below), and it disappears on the European Continent towards late antiquity, at a time when literacy in Germanic languages just about begins to unfold.

When Germanic peoples first come into the light of history around the beginning of the Common Era, they appear to be speaking a language which can be reasonably equated with Late Common Germanic, the reconstructable protolanguage of all Germanic languages. To all extents and purposes, the earliest preserved texts are very close to Proto-Germanic. However, the unity is not only linguistic, but even scriptorial, epitomised by the common runic script. The distinct branches of Germanic and the individual languages, better known from the medieval tradition, seem to emerge only during the historic period, going hand in hand with the adoption and adaption of more particularised writing systems. Even if the notion of a perfect linguistic uniformity is surely an idealisation, one still gets the impression of a unity that for a while permitted communication across the entire Germanic speech area.

The situation in Celtic is very different. From the earliest attestations accessible to modern scholarship, the picture is linguistically and palaeographically diverse. All attested languages are already at a remove from the reconstructed Proto-Celtic ancestor language, and there is no single writing system that served as a mediating tie; nor would one single system have been able to cater for all the varieties. Diversity in Celtic does not only refer to linguistic diversification. The very use, and often misuse, of the term “Celtic” evokes a common, if not a unitary culture, but such a notion cannot be farther removed from the historical reality. However, the many cultural differences between the various peoples and regions will be passed over here, unless they have a direct relevance to the literate remains.

Nevertheless, there are also a few commonalities. The adoption, development and spread of literacy in Celtic-speaking populations, and the position of writing within the respective societies, can be viewed as reactions to external political and

cultural influences from dominant Mediterranean civilisations, notably, but not exclusively, the Romans. However, these reactions are not always of the nature that one might expect a priori. Rather, they reveal a certain amount of cultural and linguistic self-awareness in the native populations.

While at the time of its emergence the situation of the Germanic branch of Indo-European roughly resembles that of Ancient Greek, where we have fundamentally one language with dialectal variation that gave its speakers a sense of belonging to a single group even over a vast space, Celtic is better compared with the Italic branch of Indo-European in that it is internally differentiated. As already suggested, the generalising depiction of “The Celts” in the popular media conjures up a misleading and wrong image. As regards the subject of the present survey, there is thus no single, uniform type of epigraphy that could be conveniently described as Celtic, but a number of individual – and geographically separated – writing traditions, each subject to its very own outside influences and without any appreciable interaction with other Celtic writing traditions. Scattered across the ancient Celtic world, at least five very different writing systems were used, and there is vascillation between two or three systems within each single language. The subject-matter of ancient Celtic epigraphy are therefore four separate cultural and linguistic groups with individual, very particular conditions applying to every one of them. It is not possible, and it makes no sense at all, to speak about ancient Celtic writing in generalising terms. In the following, these four ancient Celtic epigraphic cultures will be introduced and a sketch of their unique features will be presented. At the end, several doubtful cases that have been claimed for ancient Celtic will receive brief discussion.

The following chapters will be accompanied at the end by sections on further reading that provide references to standard handbooks and editions of inscriptions. Reference will only be made to collections and databases. For all Celtic writing traditions, it is important to keep in mind that the information given in this article about the extent and the number of inscriptions only reflects today’s state of the knowledge. In all regions with ancient literacy, new inscriptions are constantly discovered. Though most of the new discoveries tend to be short and usually do not alter the overall picture very much, there is always the chance, or danger, that a new find will contain that crucial piece of new information that will overthrow received wisdom.

Remarks about the linguistic aspects of the languages will be kept to a minimum unless they have a bearing on the interpretation of the writing systems. However, a number of general typological remarks that are valid for all ancient Celtic languages are necessary in order to understand some of the issues in the following chapters. The phonology of all ancient Celtic languages makes regular distinction between vowel length, and it contrasts two series of stops. Traditionally

this contrast is analysed as one of voice, but it could also be a fortis-lenis opposition (cf. Eska 2017). It is widely accepted today that intervocalic voiced (or lenis) stops underwent allophonic fricativisation or lenition. Some languages maintain a contrast between final *-m* and *-n*, in others this has been neutralised. All ancient Celtic languages are inflectional languages with grammatically significant endings, very similar in type to Latin or most other ancient Indo-European languages.

Further reading:

For general linguistic surveys of Old Celtic languages see Eska 2004; Eska & Evans 2009, and Vath & Ziegler 2017, Stifter 2015, 2017, Stüber 2017; Eska 2017b, 2017c; Wodtko 2017b and Russell 2017. The handouts of my lectures for the “Celtic Spring” at the University of Copenhagen in May 2012 (Stifter 2012) contain a comprehensive collection of primary material and references to important secondary literature, but are by necessity brief.

### 1.1 Cisalpine Celtic – Lepontic and Cisalpine Gaulish

The earliest written tradition in a Celtic language is that of the Cisalpine Celtic inscriptions (cp. p.161–163). Cisalpine Celtic is here used as an exclusively epigraphic term that refers to any inscription in an ancient Celtic language in northern Italy. As far as our current knowledge goes, the Cisalpine Celtic corpus of inscriptions consists of texts in two separate languages, which, however, are closely related or, due to the very fragmentary state of both corpora, appear to be very similar to each other. These languages are called Lepontic and Cisalpine Gaulish. Like all ancient Celtic languages, these names are exonyms, namely modern coinages. It is not known how the native speakers themselves referred to their idioms.

Lepontic is the language of the Lepontians, one of the many peoples who inhabited the valleys of the Southern Alps around the North-Italian lake region in the first millennium B.C. They seem to have been native to that region from at least the 12th century B.C. (Uhlich 1999). The earliest attested phase of Lepontic, the Early Cisalpine Celtic phase, coincides with the final periods of the archaeologically defined Golasecca culture, the extent of inscriptions from that period overlapping largely with the extent of the Golasecca culture.

The other language is Gaulish, brought to the region by invaders from Gaul who, according to classical historians, entered northern Italy in the course of the 5th or 4th centuries B.C., bringing the archaeological La-Tène style with them, and settling the fertile plains around the river Po, south of the Lepontic area. The Gauls adopted the use of the script from the speakers of a Celtic language who were already living there, i.e. the Lepontians. Their arrival ushers in the

Middle Cisalpine Celtic phase. In order to distinguish the Gaulish language in northern Italy from the much better attested variant in Gaul proper, the variety in Italy is called Cisalpine Gaulish, i.e. ‘Gaulish on this side of the Alps’ from the Roman point of view, as opposed to the variant that stayed behind in Gaul, namely Transalpine Gaulish, i.e. Gaulish on the far side of the Alps. Linguistically there does not seem to be a big difference between these two variants, which are only distinguished geographically and by the alphabet they used.

Because of the similarity between Lepontic and Cisalpine Gaulish, it is often impossible to assign a given Cisalpine Celtic text with any confidence to one of the two languages. Chronological and geographical criteria are usually employed to distinguish between them. Inscriptions from before the Gaulish invasion into northern Italy are believed to belong to the Lepontic language proper. Likewise, inscriptions from the Alpine Valleys in a radius of 50 km around the Swiss town of Lugano are also traditionally counted to the Lepontic corpus. Everything else, especially texts from along the Po Valley, is considered to be Cisalpine Gaulish. None of these criteria are linguistic. There may be a few morphological and lexical indicators for the one or the other language, but given our extremely limited knowledge of them, most of this rests on shaky foundations. For instance, there seems to be a correlation between an early age of a text and it being restricted to the small “Lepontic” core area around the North-Italian lakes. Also, the word *pala* for ‘tombstone’ or some morphological features such as the ending *-oiso* of the genitive singular of *o*-stems are concentrated in this core area.

By far the greatest part of the Cisalpine Celtic texts is written in the local Lepontic script (also called “alphabet of Lugano”). With only a few exceptions, the Cisalpine Celtic *Schriftprovinz* or ‘scriptorial territory’ is confined to a narrowly circumscribed area in the North-Italian lake region and in the Po Valley. Towards the end of the attested vernacular Celtic languages in the north of Italy, in the Cisalpine Celtic phase of the 2nd and 1st centuries B.C., the Roman script gradually encroaches and replaces the vernacular script. Roman influence is subtle at the beginning. Since both scripts derive from a variant of the Greek alphabet, several letters in the Lepontic and Roman alphabets possessed identical shapes by inheritance. But in cases where differences existed in letter shapes, Lepontic letters gradually assimilated to their Roman counterparts. This leads to a situation where it is occasionally not possible to tell if a given graffito is in the Lepontic or in the Roman script.

The Lepontic script is one of the daughter scripts of the northern Etruscan variant of the Etruscan alphabet, which itself was ultimately borrowed from an early Greek alphabet. The two sisters in that pedigree of the Lepontic script are the Venetic and Raetic scripts, used in comparably circumscribed regions east of Cisalpine Celtic to write their respective languages. While the shapes and the duc-

tus of the letters in these three scripts are fairly similar, the distinctions between the North-Italic *Schriftprovinzen* reside mostly in the relative frequency of individual letters. The Lepontic script in its common form utilises only 14 letters. A few more letters are restricted to the early period of experimentation, while others are highly doubtful, or may just be modern misreadings. A graphic shibboleth of the Lepontic script, and therefore of Cisalpine Celtic texts, is the almost exclusive use of one particular glyph for the letter *ś* ‘san’, the so-called butterfly sign  $\text{𐌆}$ . Although it can be found in early southern Etruscan inscriptions, it is completely absent from Lepontic’s sister scripts Venetic and Raetic, where instead the double pennant symbol  $\text{𐌆}$  is the ordinary form of this letter, just as it is in northern Etruscan. On the other hand, Cisalpine Celtic inscriptions are characterised by the complete absence of the letters *h* ‘heta’, *φ* ‘phi’ and *q* ‘qoppa’, all of which are common elsewhere, and by the absence for the most part of *z* ‘zeta’, except sometimes as a sort of tokenistic character, but very rarely as a real letter. The most eye-catching unique feature of the Venetic script, however, is its use of syllable punctuation, a practice not shared by any of its neighbours. The Raetic script, finally, has developed a special sign for a dental sound (Schumacher 2004: 319), but it does not have the letter *o* ‘omikron’ (nor does it have the sound).

The Lepontic alphabet is very deficiently suited for reflecting the sound system of an Old Celtic language. Because of its inability to express crucial phonological distinctions, Joe Eska (2017) has recently described it as a “hypocharacterised” alphabet. Like in most Mediterranean writing systems, vowel length cannot be indicated. Because its northern Etruscan “mother” had discarded all characters for voiced stops (*b* ‘beta’, *d* ‘delta’, *g* ‘gamma’), the script in general makes no distinction between letters for voiced and voiceless consonants. Occasionally spelling variation can be observed that indicates experimentation to make up for this shortcoming.

Like in most ancient scripts of the western Mediterranean, but unlike standard Latin writing practices, use is commonly made in Cisalpine Celtic inscriptions of word dividers, usually dots between the words, ranging from 1 to 4, e.g.  $\cdot\cdot\cdot\cdot$ . Their presence is an indicator of a careful and well-considered textual layout especially for texts that are meant for public display, whereas in informal graffiti word separation can be absent, replaced by a plain space or by a change of line.

The direction of writing was never absolutely codified, but from the beginning of Lepontic writing, the orientation was preponderantly sinistrouse, i.e. running from right to left. Whereas in the Early and Middle Cisalpine Celtic phases, from the 6th to the 3rd centuries B.C., sinistrouse texts occur with an average frequency of over 80%, from the end of the 3rd century, coinciding with the Roman conquest of northern Italy, this situation changes drastically. From this point onwards, the proportion of sinistrouse inscriptions drops continuously

and fast. Two centuries later the Lepontic writing tradition, which at that time is exclusively dextroverse, ceases completely. There is no sharply defined end to Cisalpine Celtic literacy, but the tradition seems to trickle out in the 1st century B.C. Some graves with graffiti in Canton Ticino have been dated to the end of the Augustan period, making it likely that they are among the very latest texts in the vernacular language or writing system.

Currently, around 400 Cisalpine Celtic texts are known, most of them either in a very fragmentary state or very short. The oldest graffiti have been traditionally assigned to the 6th century B.C. (e.g. Uhlich 1999). More recently, earlier dates in the last quarter of the 7th century have been suggested (De Marinis 2009: 158; Maras 2014: 82). Among Maras' evidence are two inscriptions from Sesto Calende, at the effluence of Lago Maggiore and therefore in the core Lepontic area. One is a cup with the acephalous graffito *jiunθanaχα* (VA-3),<sup>1</sup> the other one is a beaker (VA-4) whose partially damaged text could contain the two words *amkouvi???ri* and *viχu*. Notwithstanding the palaeographic arguments that support an early dating of the inscriptions – indeed there are several graphic features that do not occur in later writing – I am hesitant to draw from them far-reaching conclusions for Cisalpine Celtic literacy. Although explanations based on Celtic have been suggested for the two inscriptions, mostly on the basis of strings of signs that can be superficially compared with ancient Celtic morphemes, I remain sceptical about their linguistic affiliation. Apart from *viχu*, which, if it stands for \**uikū* 'fighter', could conceivably be a Celtic name, nothing in these words strikes me as unambiguously Celtic. In my view, the goblet from Castelletto Ticino (*χosioiso*; NO-1) remains the earliest uncontroversial evidence for written Lepontic.

As regards contents and purpose, the extant texts in the proper Cisalpine Celtic corpus are well within the usual range of early literacy. Most of them have been found in funerary contexts. Typically, the very short graffiti can be identified as names in various inflectional forms (nominative, genitive, dative). They record either the names of the proprietors or producers of the items, pottery for the most part, on which they are written, or they give the names of the deceased or of persons who made offerings to the deceased. Names on these objects tend to consist of a single word, the individual name of the person referred to. Where names are written on gravestones (the word for which seems to have been *pala* in Lepontic), the certainty is greater that the names refer to the dead. In these cases, the naming formulas are more elaborate. They usually consist of an individual name followed by the name of the father. The latter can be expressed through a patronymic suffix (e.g., Lep. *-alo-*, Gaul. *-ikno-*, *-io-*), or in the younger Gaulish material by the name of the father in the genitive. The differences in the naming formulas reflect

1. References to inscriptions of the type AB-1 follow the system of *LexLep*.



the fact that different languages are involved, and that these in turn were subject to external influence in the course of time.

Aside from the epitaphs, only few inscriptions can be classified as public. They furnish the longest texts in the Cisalpine Celtic corpus, but long only in a very relative sense. The longest inscription in the Lepontic language has seven words, in Cisalpine Gaulish around a dozen, but even in these texts anthroponyms preponderate, either as agents or recipients of dedications. In a nutshell, Cisalpine Celtic epigraphy can be characterised as onymocentric. Only about half a dozen verbs are found in the corpus, allowing very little insight into verbal morphology or syntax.

The Cisalpine Celtic corpus is an instructive example for the caution that needs to be exerted when working with fragmentary or ill-understood material. On the geographical margins of the *Schriftprovinz*, or beyond, a number of inscriptions are found whose precise relationship to the central corpus remains partly elusive. Despite its great distance from the core area, the bilingual inscription from Todi (PG-1), in Latin and Gaulish, is a genuine part of the corpus. It must have been brought to Umbria by emigrants from northern Italy who, in a foreign linguistic environment, still felt the need to make a statement about their linguistic heritage.

However, without a proper palaeographic and philological assessment one runs the risk of admitting data into the corpus which does not belong there, either because, albeit being Celtic in language, it is the product of a neighbouring writing tradition, or because it contains texts in a completely different, perhaps unknown language. Such examples are interesting in their own right, but they distort the picture of the Cisalpine Celtic corpus proper. Some specimens of Cisalpine Celtic are written in alphabets that are not part of the native tradition. The graffito *pazros: / pompetexuaios: / kaialoiso* on a pebble from Oderzo (TV-1), to the east of the Cisalpine Celtic region, has been identified as a Celtic name (Eska & Wallace 1999), but the inscription is in Venetic characters.

The fragment from Montmorot (JU-1) in the French Jura region is in no immediate geographical contact zone with Cisalpine Celtic inscriptions, from which it is separated by the Alps. The potsherd that bears the text allows no archaeological identification or connection with the Lepontic zone. The letters of the short inscription *pris* are manifestly in northern Etruscan characters, but could otherwise belong to any of the local writing traditions. However, the letter *ś* ‘san’ has a shape that is similar to our modern M. This feature distances it from the Cisalpine Celtic writing tradition where this particular shape of *san* is not otherwise attested with any certainty (Stifter 2010). The interpretation of *pris* as Celtic \**brigs* ‘high one, hill’ is one possibility, but by no means the only one.

In the notorious bilingual inscription from Voltino (BS-3) and on the beak-spouted ewer from Castaneda (GR-3), characters occur that do not form part of any known writing system. Some of the characters have a superficial similarity with letters of established alphabets, but this is no guarantee that identical sound values are meant. One need only look at the Cherokee syllabary for a glaring example of a script that in phenotype resembles the Latin alphabet, but encodes completely unrelated sounds. There is, in fact, no good reason to assign these texts to the corpus of writing in Lepontic letters. Some of the characters resemble letters of the Camunic script, the very peculiar local writing tradition of the Val Camonica which developed been developed very idiosyncratically from Greek writing (Schumacher 2007). Although there has been no dearth in attempts at interpreting these texts, one better stays sceptical about their alleged Celtic character.

Further reading:

Practical overviews of Cisalpine Celtic epigraphics and linguistics are Lejeune 1971; Motta 2000; Morandi 2004 and Stifter 2020. All Cisalpine Celtic inscriptions are collected with an extensive bibliography in the database *LexLep*. The long Cisalpine Gaulish texts are edited in RIG II.1, 1-54. For the bilingual texts see Estarán Tolosa 2016. Aspects of the Lepontic script receive a discussion in Stifter 2016; the script is documented at [https://www.univie.ac.at/lexlep/wiki/North\\_Italic\\_Script](https://www.univie.ac.at/lexlep/wiki/North_Italic_Script).

## 1.2 Celtiberian

The Celtiberian epigraphic region encompasses the centre of the Iberian Peninsula, occupying the area between the headwaters of the Duero, Tajo, Júcar and Turia rivers and the Ebro river. The Celtiberian language is the only one of perhaps several Hispano-Celtic varieties in the Iberian Peninsula that is attested to any significant amount.

Around a hundred inscribed objects have been discovered so far, with some containing texts of substantial length. The epigraphic tradition in Celtiberia lasted only for the comparatively short period of around 150 years. The first objects, coins, date to the middle of the 2nd century B.C. The tradition seems to have had its peak around the first half of the 1st century B.C., but must have fallen into disuse soon afterwards. I am not aware of finds that date from after the Augustan period. The use of epichoric Celtiberian writing seems to have vanished from the public sphere in tandem with the language itself. We know nothing about the fate of the language after this period.

It is conventionally assumed that the speakers of the vernacular languages of Spain, with the exception of Basque, switched to Latin very soon after having

a	𐌀𐌁𐌂
e	𐌃𐌄
v	𐌅
z	𐌆
θ	𐌇
i	𐌈
k	𐌉𐌊
l	𐌋
m	𐌌𐌍𐌎𐌏
n	𐌐𐌑
p	𐌒
ś	𐌓𐌔𐌕
r	𐌖
s	𐌗𐌘𐌙
t	𐌚𐌛
u	𐌜𐌝
χ	𐌞𐌟
o	𐌠𐌡𐌢

**Table 1.** The Lepontic alphabet

become part of the Roman Empire. However, this is an *argumentum ex silentio*. For the sake of the argument, it is at least conceivable that Celtiberian continued to be used as a rural, non-literate idiom long into the first millennium A.D., confined to the local, private sphere of the lowest classes. In the case of Galatian, another non-literate Celtic language of antiquity, we happen to possess stray references to its survival, in the shadow of the all-dominating Greek language, until the 4th, if not even the 6th century A.D. If the fate of Celtiberian was in any way similar, there is at least the theoretical possibility that the East Germanic conquerors of the Iberian Peninsula in the 5th century still encountered speakers of Celtic,

although without any written expression of their speech. For a similar, but more elaborate scenario involving Gaulish see the next section.

The surviving inscriptions are for the most part written in the Iberian semi-syllabic script. This writing system had already been in use for centuries for the Iberian language, a language isolate, perhaps ultimately related to Basque, which neighboured Celtiberian in the east and south. Iberian had a phonological structure that was very different from that of an ancient Celtic language. For many centuries, objects bearing Iberian letters were known to and collected by antiquarians, but the script could not be read. Pre-20th century readings like those in Faulmann (1880: 168) are guesswork, based on a superficial resemblance to Latin or Greek letters. The decipherment of the Celtiberian texts went hand in hand with the decipherment of the Iberian script as such by Manuel Gómez-Moreno in the first half of the 20th century, even though, because of the political situation, his discovery did not become widely known until after the Second World War. It was only when the texts could actually be read that it was realised that the inscriptions known at the time contained two entirely different languages, one non-Indo-European, namely Iberian, the other one Celtic, namely Celtiberian. Within the Celtiberian area, in fact two slightly diverging variants of the script were used, a western and a more frequently attested eastern variant.

The adoption of the semisyllabic Iberian script by the Celtiberians around the middle of the 2nd century B.C. coincides approximately with the Numantine War (154–133 B.C.), one of the last great insurrections against Roman dominance on the Iberian Peninsula. It is one of the great mysteries why this particular script, which is essentially unsuitable for rendering a Celtic language, was chosen. The Roman alphabet, with which the Celtiberians must have been acquainted at the time, would have been almost perfect for the sound system of Celtiberian. It is my suspicion that under the given political circumstances the choice of the autochthonous Iberian script was a deliberate political decision, fraught with cultural symbolism. What makes the script unsuited for Celtiberian? It is a semisyllabic script, which means that for vowels and resonants alphabetic letters are used, but for stops, only syllabic signs of the type CV, consonant + vowel, are available. Consonant clusters, which are as common in Celtiberian as they are in any ancient Indo-European language, cannot therefore be directly expressed. Take as an illustration the placename *Contrebia Belaesca*, a cultural centre of Celtiberia and today the village Botorrita, with its internal cluster *-ntr-*. On one coin legend, it is rendered *konterbia* with graphic metathesis, another one says simply *kontebia*, the liquid being not written at all. A third possibility would be to insert an empty support vowel, i.e. *\*konterebia*.

To complicate matters, most times the scribes make no voice distinction among stops, even though a system existed that would have allowed this. Some

texts in the Iberian script are written in the so-called “dual system” for the syllabic signs where a distinction is made between “simple” signs, which stand for voiced consonants (*d* and *g*) + vowel, and more “complex” signs (the complexity usually consisting in an additional stroke), which represent the voiceless counterparts, e.g.  $\Lambda$  for <ga> and  $\Delta$  for <du>, but  $\lambda$  for <ka> and  $\Delta$  <tu>. No distinction is made in the labial series, since Celtiberian did not possess the phoneme *p*. Unfortunately, the Celtiberians made only sparing use of this practical graphic distinction (Jordán Cólera 2005). Only a small number of the preserved Celtiberian corpus, probably from the late phase of Celtiberian literacy, uses the Roman script. Apart from several short dedicatory and commemorative graffiti on rocks, only one, the rock inscription from Peñalba de Villastar, can be called a long text. It was only noticed recently that this inscription distinguishes two sibilant signs, *s* and *š* where a little diacritic stroke has been added to the Latin letter. It is not clear yet what phonetic value this extra sign represents, but the distinction is reminiscent of the distinction between two sibilant signs  $\wedge$  <*s*> and  $\zeta$  <*z*> in the vernacular script.

Common objects are coins, pottery with painted inscriptions and other domestic objects which carry short texts, mostly names. Grave stones are not very common. Perhaps the most idiosyncratic type of inscribed objects in Celtiberia are the so-called *tesserae hospitales*, or documents of hospitality. Usually in bronze, these small three-dimensional objects appear in the most inventive and artistically appealing forms, ranging from the figural, depicting, for instance, boars or fish or hands, to abstract geometrical objects. Their purpose is to document and guarantee treaties of mutual hospitality between two partners, one or both of which are usually named in the inscription, sometimes with additional information or short statements. The partners of hospitality, who can be separated by long distances, can be persons or communities. It is believed that there would have usually been two identical or interlocking copies of each *tessera*, one for each partner in the treaty, but usually only one example survives. They have been found all over the Celtiberian territory, sometimes several hundred kilometres from the places which are mentioned on them.

Of much more wide-ranging interest are the long texts of Celtiberian, engraved on bronze plates. They are often of an official or legal nature and are manifestly meant for public display. The prime examples of the tradition appear to belong to the period around the second quarter of the 1st century, of which the texts called Botorrita I and Botorrita III are the most famous. The latter, containing over 500 words, is the longest written document known from the Old Celtic period. Unfortunately almost all of the words on this massive text are personal names. It accordingly allows deep insights into the tripartite Celtiberian naming formula, which consists of individual name, gentilic and patronym, but it tells us next to nothing about syntax, morphology and other things that historical lin-

guists are eager to know more about. This deficiency is counterbalanced by several other bronze tablets with more interesting content. Botorrita I apparently regulates the agricultural use of land that belongs to a territory of religious significance. Even if these texts still cannot be completely understood, the insights that they give into verbal morphology or syntax have provided a great boost to comparative Celtic linguistics in the past decades.

The choice of the code, i.e., choosing the script of their neighbours the Iberians, may have been a deliberate political statement vis-à-vis Roman hegemony, but the choice of the medium speaks a different language. The practice of writing on bronze is totally un-Iberian. Iberians used to write private texts on thin sheets of lead which for them was the equivalent of paper, or they left marks on pottery. Putting up bronze tablets for public notification is instead a perfect imitation of Roman administrative practices. While Celtiberians may thus have made an effort to use a writing system that was as un-Roman as possible, their writing culture mirrored the one they encountered in Roman colonial practice. So far only a single example of the normal Iberian application of writing, namely on lead sheets, has been found for Celtiberian, apparently a business letter, called the lead-plate from Iniesta.

Of all the ancient Celtic traditions, Celtiberian is the only one that has led to a small modern industry of forgeries. Because many inscriptions are found on artistically produced – and accordingly valuable – objects, something of a market has grown, especially for *tesserae hospitales*. Forged inscriptions are usually easy to identify. In the worst cases, the alleged texts are meaningless gobbledygook, in the better executed examples authentic inscriptions have been copied in part or in entirety.

Further reading:

Beltrán Lloris & Jordán Cólera 2017 offer a practical overview of the Celtiberian writing tradition. The language and the inscriptions are discussed in great detail in Jordán Cólera 2019. The texts known until 1995 are edited in MLH IV: 349–722. New finds are annually reported in the journal *Palaeohispanica*. The online database *Hesperia* contains all texts.

	G	K	B/P	D	T				
A	𐌱	𐌲	𐌳	𐌴	𐌵	Z	𐌶	M	𐌷
E	𐌸	𐌹	𐌺	𐌻	𐌼	S	𐌽	N	𐌾
I	𐌿	𐍀	𐍁	𐍂	𐍃	R	𐍄	L	𐍅
O	𐍆	𐍇	𐍈	𐍉	𐍊				
U	𐍋	𐍌	𐍍	𐍎	𐍏				

**Table 2a.** The Celtiberian semisyllabary (western variant with “dual system”) (after Ferrer i Jané 2005)

	G/K	B/P	D/T				
A	𐌱	𐌲	𐌴	Z	𐌶	M	𐌷
E	𐌸	𐌹	𐌻	S	𐌽	N	𐌾
I	𐌿	𐍀	𐍂	R	𐍄	L	𐌲
O	𐍆	𐍇	𐍉				
U	𐍋	𐍌	𐍎				

**Table 2b.** The Celtiberian semisyllabary (eastern variant)<sup>2</sup>

### 1.3 Gaulish

Of all the known ancient Celtic languages, Gaulish had the longest life, extending well into late antiquity, although its written attestation seems to have petered out one or two centuries before the language as such disappeared. Even though, as regards the sheer numbers of speakers, it must have been the dominant language in Gaul at least in the 1st and 2nd centuries A.D., it too ultimately succumbed to the sociolinguistic pressure of Latin. Latin as the language of administration, education, the military, supraregional trade, and, in the final phases of the existence of Gaulish as a living idiom, the Church usurped all the prestige functions of language in society and thus led to the demise of the last great Continental Celtic language.

At least three different writing systems were used to write Gaulish in the course of its history, which are traditionally referred to as Gallo-Etruscan, Gallo-Greek and Gallo-Latin. These names do not imply any linguistic influence of the respective idioms on Gaulish; they merely signify that the Gaulish language was written in an alphabet that is more commonly associated with another language. So we have Gaulish in Etruscan, or rather in Lepontic letters, that is, the Cisalpine Gaulish language that was mentioned earlier in the context of Cisalpine Celtic, and the Transalpine variants of Gaulish in Greek and in Latin letters.

2. Source: [https://es.wikipedia.org/wiki/Escritura\\_celtibérica](https://es.wikipedia.org/wiki/Escritura_celtibérica) (visited 17.5.2018)

Gallo-Etruscan and Gallo-Greek in fact show superstratal linguistic influence from Latin. There is also a small *Nebenüberlieferung* ‘additional attestation’ of Gaulish names in the Iberian script from the oppidum of Ensérune in southern France, but we do not speak of a Gallo-Iberian writing tradition as such.

Some of the Gauls who invaded northern Italy in the middle of the 1st millennium B.C. took over the local variant of the northern Etruscan script from the Lepontians in order to write their own language, Cisalpine Gaulish. In the handbooks, usually only half a dozen Gallo-Etruscan inscriptions, namely the longer ones, are mentioned, but the actual number amounts to several hundred, although most of them are very short and record no more than a name.

At all periods, the fates of literacy in Transalpine Gaul can be understood as a reaction to activities of the Roman Empire. The use of writing starts comparatively late, in the last quarter of the 3rd century or the early 2nd century B.C., and for almost the entire next two centuries it is confined to a small region around the delta of the Rhône, west of the Greek city-state of Massalia. It is probably more than chance that the beginning of writing coincides with or follows an important event that affected southern Gaul in the late 3rd century B.C., namely the Second Punic War (218–201 B.C.). However, even though the result of the war was that southern Gaul moved into the sphere of Roman strategic interest, it was not Roman literacy that the southern Gauls adopted. It was the Greek writing system with which they were confronted through overseas trade with the Mediterranean world and in the city of Massalia that must have exerted some local power and cultural influence. The height of the production of Gaulish inscriptions in the Greek script was from c. 125–25 B.C., the century after the Roman conquest of southern Gaul and its integration into the empire as Gallia Narbonensis. The body of texts, some 300 in total, consists of short funerary and dedicatory inscriptions with a public outlook, in addition to tiny fragments of more private graffiti on pottery that often contain no more than two or three letters.

In addition to the physical artifacts that bear inscriptions, a few literary accounts also give evidence of writing practiced by Gauls at that time. Poseidonius, transmitted in Diodorus’ Βιβλιοθήκη V 28,6, arguably writes about the situation in the Provincia Narbonensis: διὸ καὶ κατὰ τὰς ταφὰς τῶν τετελευτηκότων ἐνίους ἐπιστολὰς γεγραμμένας τοῖς οἰκειοῖς τετελευτηκόσιν ἐμβάλλειν εἰς τὴν πυράν, ὡς τῶν τετελευτηκότων ἀναγνωσομένων ταύτας. ‘At the funerals of their deceased some therefore throw letters into the fire; they write them because they think that the deceased will read them.’ Such a practice would be meaningless if it did not presuppose literacy in a certain social class. In his *Commentarii de bello Gallico*, Julius Caesar talks about Gaulish tribes outside the Narbonensis. On the one hand, he reports about literacy for bureaucratic purposes among the Helvetii: *in castris Heluetiorum tabulae reper-*



*tae sunt litteris Graecis confectae [...] quibus in tabulis nominatim ratio confecta erat, qui numerus domo exisset, qui arma ferre possent, et item separatim pueri, senes mulieresque* ‘in the camp of the Helvetii tablets in Greek script were found [...] on these tablets lists by names had been made as to how many had left their homes, who were capable of bearing arms, and separately boys, old men and women’ (BG I 29,1); on the other hand he speaks more generally about Gauls: *neque fas esse existimant eas litteris mandare, cum in reliquis fere rebus, publicis priuatisque rationibus, Graecis litteris utantur* ‘they [= the druids] consider it a sacrilege to give it [= their sacred knowledge] over to letters, while they use the Greek script for all other matters, public and private’ (BG VI 14,3).

There is only scant evidence for the use of the Greek alphabet beyond its core area, in particular northwards along the Rhône valley, and in isolated places across Gaul, places that the objects that bear the inscriptions could have reached through trade. In Switzerland two short inscriptions in Greek letters were found, one of which apparently stems from the period of Roman provincial rule. In the oppidum of Manching, Bavaria, two short inscriptions in Greek letters from the 1st century B.C. (La Tène D) were found. Perhaps writing in Greek letters was just about on the verge of becoming a pan-Gaulish cultural commodity. However, before this could become reality, the conquest of the entirety of Gaul by Julius Caesar in the fifties of the 1st century B.C. brought the production of inscriptions in the Greek alphabet to a halt. Only in a few pockets such as Alesia the tradition was kept alive until the Neronian period.

In the aftermath of the catastrophe, something remarkable happened. It would have come as no great surprise if the human losses suffered during the Roman conquest and the establishment of Roman administration in the Latin language had acted as the death blow to the Gaulish language. However, quite to the contrary, the richest phase of attestation of Gaulish was yet to come. The Roman administration of Gaul, which was inherently founded on literacy, meant that the art of writing was suddenly and forcefully spread to the entire country and was not just confined to a small pocket in the south. As a consequence, instead of dying out, the practice of writing changed: the Roman alphabet replaced the Greek. In the Gallo-Greek period, before Caesar’s conquest, almost all of the surviving texts belong to the public sphere and are dedicatory or commemorative stones of an almost tediously formulaic nature. Within one or two generations of the Gallo-Latin period, the written Gaulish language, which at first was still used for the odd public document, receded from the public to the private sphere, not necessarily to the detriment of historical linguists. The standard handbooks record around 150 Gallo-Latin inscriptions, but this relatively small-looking number is due to the counting method: only texts that contain more than two Gaulish

words are registered in the corpus, in contrast to the Gallo-Greek corpus, where every fragment with at least two letters counts.

This shift meant that the range of written genres suddenly exploded, and with this the type of vocabulary, syntax and phonology that is attested, as well as the types of register of which the extant texts give testimony. We find almost everything, from the sublime to the mundane, from religion to business. Of all the ancient Celtic writing traditions, the Gallo-Latin period certainly provides the most interesting and most exciting texts. Only a fraction of Gallo-Latin texts can be mentioned here. A large variety of objects, of types of texts, and of types of contents, give us an insight into how writing became part of the everyday life of Gaulish people and how deeply literacy in the native language pervaded Gaulish society especially in the first one or two centuries after the Roman conquest. Famous examples of Gaulish writing include magical tablets, curse tablets as well as tablets with curative magic, invitations to erotic activities, social-interactive graffiti such as summons to drinking games, sales receipts and accounts. These documents betray an advanced level of Romanisation, or rather, of mutual convergence of the cultures. In many cases the names of the involved persons are Roman, but often transparently first-generation Romans of Gaulish lineage, and the shapes of the objects follow Roman models, but still the vernacular language is resilient enough to cater for almost all communicative situations and registers. A particularly remarkable inscription celebrates the Roman military success against the last Dacian king Decibalus and thus gives evidence of Gaulish identification with the empire at the beginning of the 2nd century. Occasionally, objects give testimony of a contrary mindset: the 5-year-cycle calendar from Coligny may be the product of Gaulish cultural resistance.

Inscriptions in the Roman alphabet can be found all over the territory of ancient Gaul and its neighbouring regions. The monumental stone inscriptions from Gaul in the imperial period, comparatively few in number, use Roman capital letters, which are identical to our modern script. However, most Gaulish texts on other materials (mostly pottery or lead) are written in the Roman cursive script, a shorthand variant of the Roman alphabet employed for everyday purposes. Because of the reduced shapes of its letters, which is owed to the unwieldy materials such as lead, pottery or wax on which they were written, Roman cursive script is very difficult to read. Most letter components converge towards vertical or slightly oblique strokes, even though the underlying alphabet is the same as ours. However, Gallo-Latin cursive script differs in a few more substantial ways from the modern usage. One is the use of an over-long <I> (called *I longa*) beside normal <i>. Although no clear rationale emerges, there seems to be a predilection to use it for the glide /j/. The letter E is commonly expressed by two parallel hastae, i.e. <II>. Finally, Gallo-Latin employs – although by no means in a uniform

manner across time and space – several letters in addition to the traditional inventory of Roman writing. Beside the Latin letter X which serves as a sign for /ks/ and, in Vulgar Latin practice, /s/, the identically shaped Greek letter *chi* has been borrowed to represent the sound /χ/. Barred Greek *delta* <δ> and *theta* <θ> can serve as signs for “*tau Gallicum*”, a peculiar sound comprising dental and sibilant features. Apparently influenced by this, barred double *s* <ss> is also found in late inscriptions, although this may have nothing to do with original *tau Gallicum*, but may rather represent a strident sibilant sound that is opposed to a weakened *s*.

The Gaulish texts, extending over a period of 500 years, give us snapshots of a language that was clearly changing diachronically. The late texts show unambiguous signs of a language that is developing in tandem with other languages of western Europe, i.e. weakening of final syllables and perhaps a collapse of vowel quantities has set in. It is less clear how much diatopic variation is represented in the texts, which originate from a large area. The numerous linguistic testimonies do not form a coherent picture but display peculiarities that may reflect dialectal divisions. The Gaulish language, and with it the last representative of a Continental Celtic language, ultimately fades away around the middle of the 1st millennium A.D. Ironically, the disappearance of the ancient Celtic writing tradition, which now only survives in fragmentary form, coincides with the adoption of writing in the much better attested Insular Celtic world (Irish, British Celtic).

Speakers of Gaulish have always been known to have been in contact with speakers of Germanic. When, during the migrations of the Teutons and the Cimbri towards the end of the 2nd century B.C., Germanic people first came within the horizon of the Classical world, their route led them largely through Gaulish-speaking countries, from the northern parts of the Balkans to the west in Gaul. In the first book of the *Commentarii de bello Gallico*, Julius Caesar talks about the Suebian king Ariovist and his 120.000 Germanic followers in Gaul of the mid-1st century B.C. who had become a veritable force inside Gaulish tribal politics. It is also very likely that speakers of Germanic languages came into contact with Gaulish speakers in the later centuries of Roman rule in Gaul, during the age of migrations. However, the cultural-linguistic impact of Gaulish on Germanic in this scenario may have been negligible. The dominant regional language at the time was Latin, which would have reduced any potential influence of Gaulish on Germanic to the anecdotal, be it in strictly linguistic terms or in regard to epigraphy. In one conceivable scenario of the demise of Gaulish, the Germanic invasions dealt the death blow to a still vital rural Gaulish language by disrupting the social fabric of late antique rural Gaul.

Finally, at the very end of antiquity, the Anglo-Saxon invaders of Britain came into contact with speakers of an advanced variety of ancient Celtic, perhaps closely related to Gaulish, a variety on the verge of being transformed into a very

different-looking medieval language, namely Proto-British, the common ancestor of Welsh, Cornish and Breton. The extent of this contact is unclear, however. It is likely that most of Lowland Britain, which would have been the first part of the island to be occupied by the Germanic invaders, was speaking a Romance language at that time. The better documented interactions of later times, in any case, took place between languages that are outside of the scope of this survey – Old English and the medieval British languages.

Further reading:

Ruiz Darasse & Mullen 2018 offer a practical overview of Transalpine Gaulish. The Gallo-Greek and Gallo-Latin inscriptions known until c. 2000 are collected in the four volumes of RIG. The important texts are conveniently discussed in Lambert 2003 and are also accessible in Delamarre 2003. The most remarkable finds from after this time are Stifter 2010–11; Lambert & Stifter 2012 and Lambert & al. 2013. The Gallo-Etruscan inscriptions are collected in the database *LexLep*. Scenarios of linguistic interaction between Gaulish and Germanic are discussed in Schrijver 2014.

**Table 3.** The Gallo-Greek alphabet

a	b	g	d	e	ē	θ	i	ī	k	l	m	n	χs	o	p	r	s	t	u	χ	ō
A	B	Γ	Δ	Ε	Η	Θ	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ρ	Σ	Τ	Υ	Χ	Ω	

a	b	c	d	e	f	g	i	l	m	n	o	p	r	s	t	u	χ	δ	θ				
Α	Β	Γ	Δ	Ε	Ϝ	Ζ	Η	Θ	Ι	Κ	Λ	Μ	Ν	Ξ	Ο	Ρ	Σ	Τ	Υ	Χ	Ϙ	ϙ	Ϛ

**Table 4.** The Gallo-Latin cursive script (after RIG II-1, 370)

### 1.4 Ogam Irish

The foregoing three traditions are traditionally subsumed under the term Old Celtic. However, if Old Celtic is defined as covering all vernacular remains of Celtic languages before the middle of the 1st millennium A.D., a fourth tradition must be mentioned as well, namely the Irish Ogam<sup>3</sup> script. This brings us from the Continent to Insular Celtic. Unlike the ancient Continental Celtic languages, Irish did not die out, but it developed from its primitive state on the Ogam stones into the well-attested medieval Old Irish language (650–900), and further into the modern Gaelic languages in Ireland, Scotland and on the Isle of Man. Still, the

3. As a scholar of Old Irish, I prefer the Old Irish spelling *Ogam* ['oyəm] over the more commonly used Modern Irish spelling *Ogham* ['o:m].

difference between the earliest forms of Ogam Irish and Old Irish, let alone the modern Gaelic languages, not only in the writing system as such, but also in their grammar, can hardly be any greater. Primitive Irish in Ogam script resembles Old Irish as much, or as little, as Latin resembles French, even though in the case of Irish only around three centuries separate the two stages of the language. The precise conditions that triggered the massive transformation in such a short period are unknown; language contact and rapid shift from one language to another may be a factor, but the changes did not happen in a vacuum. Structurally very similar transformations affected languages in the entirety of north-west Europe during the middle of the 1st millennium A.D., including the Germanic languages. It is a lucky coincidence for historical linguists that the Ogam script was devised shortly before the GUPS (Great Upheaval of Phonological Systems) in north-west Europe, at a stage when the language was still very close in phonology and morphology to the other ancient Celtic languages, and that this writing system continued to be used exactly during the time when the most decisive changes affected the language. Some of the most important changes are directly reflected on the Ogam stones, e.g. when the same name is attested from a sequence of transitional stages. The following Primitive Irish variants, in chronological order, of the Proto-Celtic genitive \**Lugudikos* are found:

1. LUGUDECCAS (CIIC 263) [vowel changes, lowering of *i* > *e* and *o* > *a*]
2. LUGUDECA (CIIC 286) [loss of final -s]
3. LUGUDEC (CIIC 4) [loss of final short syllables]
4. LUGUDUC (CIIC 108) [loss of distinct vowel quality in unstressed syllables]

However, a number of other crucial phonological developments such as lenition or palatalisation cannot be represented in Ogam, but must be inferred indirectly. The name in question occurs finally in 8th-century Old Irish manuscript sources as *Luigdech*, genitive of *Lugaid*, additionally showing the effects of syncope and palatalisation.

Ogam is a curious script consisting of strokes and notches engraved on the edges of standing stones. The Ogam tradition flourished mainly between the 4th–6th/7th centuries. It is assumed that Ogam was a deliberate invention by somebody familiar with Latin writing and grammatical theory, possibly in the west of Roman Britain, an area that saw Irish settlements in the late antique period. Ogam inscriptions appear to be exclusively commemorative, but they were occasionally secondarily re-used as demarcations of land possession. They record the name of an individual, almost exclusively male, followed by the name of his father. Only very rarely do Ogams contain other elements. Many of the approximately 400 known stones can still be encountered *in situ* in Ireland. The inscriptions from Britain in particular give evidence of the multilingual milieu in which

they were produced. These inscriptions are usually bilingual and contain Latin or Old British versions of the Irish text. There are even examples, for instance on the Isle of Man, that show the interaction of runes with Ogam.

Ogam is an inherently monumental script. It requires big stones to write on, but is extremely unsuited for manuscripts. Nevertheless, in the medieval antiquarian tradition the odd examples of Ogam can be found in manuscripts, quite patently written by the scribes for their own amusement, and as a distraction from their tedious scribal tasks, for instance an item which says in Old Irish *latheirt* ‘intoxication’ (Sg. 204b). Maybe Ogam was used on wooden sticks for other purposes but nothing of that sort has remained in the archaeological record. Odd references in Irish sagas to this practice could be antiquarian fiction.

With Ogam being so inherently unsuited for the recording of longer texts, i.e. longer than three or four words, it is no surprise that the Roman alphabet was eventually adopted and adapted to write the Irish language, as soon as a real literate culture developed in Ireland as part of Christian culture.

Further reading:

The stones known until the mid-20th century are collected in CIIC. There are several online databases, the most ambitious being *Ogham in 3D*. McManus 1991 discusses Ogam in a wide cultural context, Ziegler 1994 concentrates on the language.

**Table 5.** The Ogam alphabet

┆	Beith	ƒ	Muin	┆	Úath (H?)	┆	Ailm
┆┆	Luis	#	Gort	┆┆	Dair	┆┆	Onn
┆┆┆	Fern (V)	##	nGétal (G <sup>w</sup> ?)	┆┆┆	Tinne	┆┆┆	Úr
┆┆┆┆	Sail	###	Straif (St?)	┆┆┆┆	Coll	┆┆┆┆	Edad
┆┆┆┆┆	Nin	####	Ruis	┆┆┆┆┆	Ceirt (Q)	┆┆┆┆┆	Idad

## 1.5 Marginal and imaginary writing traditions

Finally, a group of marginal texts needs to be discussed, marginal mostly for the fact that they do not belong to Celtic at all, or that they are altogether imaginary.

The South-Western or “Tartessian” corpus, almost 100 inscriptions from the south-westernmost corner of the Iberian Peninsula, does not belong to Celtic, although there have been attempts to show that they are evidence of an early Celtic language (Koch 2009, 2011). Their linguistic affiliation is unknown and only highly speculative interpretations have been proposed so far.

In older literature, one may find references to Lusitanian, attested primarily in Central Portugal and east of it, as a Celtic or para-Celtic language. Neither term is correct, however. The modern consensus is that Lusitanian represents a sepa-

rate branch of Indo-European, albeit genetically close to Italic or the Italo-Celtic subnode of Indo-European.<sup>4</sup> Although with only five canonical inscriptions in the Latin alphabet the language is still regrettably meagerly attested, its very slowly growing corpus has permitted better insight into its character.

Aside from the five main ancient Celtic writing systems discussed above, a number of more or less well attested marginal traditions must be mentioned. In the region north of the Adria, scattered evidence is found for the use of the Venetic script on early Celtic coin emissions of the 2nd century B.C. (Stifter 2010b). However, this practice remained extremely limited. The very medium, coin legends, indicates that the practice is connected with the contemporary political configurations in the south-east Alpine region. Further west in the Alps, what appear to be wayward siblings of the northern Etruscan writing family occur on isolated objects. The two most prominent examples, the inscriptions from Voltino and Castaneda, have already been discussed in the section on Cisalpine Celtic.

Finally, there are two or three (the number itself is not easy to define) entirely doubtful writing systems. The first is the so-called Glozel script, found on clay tablets (!) around a village of that name in France. They were discovered under obscure circumstances in the late 1920s. So far, they have only been studied without the indispensable scientific background and rigour. While some of the objects themselves have been dated by physical methods to antiquity and the middle ages, nothing can be said with any certainty about the inscriptions, not even if they represent an authentic writing system at all, let alone if they go back to pre-Roman times.

Jürgen Zeidler (2003) attempted to identify an Eastern-Alpine La Tène script as a separate writing tradition. Both the brevity of the alleged texts, which consist almost exclusively of single signs of very basic graphic shape, and the vagueness and variety of the glyphs are indicative of a pre- or paraliterate system of marking rather than of true literacy. Zeidler also included in his corpus material that had been published by the archaeologist Rudolf Egger in the fifties and sixties of the 20th century as part of the latter's excavation reports from the Magdalensberg in the Austrian province of Carinthia. This "Noric script", as Egger (1968) called it, is a chimaera born out of his desire to discover his own writing tradition. The bulk of the material are either paraliterate potters' marks or misread Latin letters. The only "long" text, half a dozen letter-like signs scratched onto the fragment of a terra-sigillata plate, is a fake, perhaps part of a practical joke played on him by members of his Magdalensberg team in 1957.

This is not the only time that such a thing happened to Egger. More than thirty years earlier, one of the unskilled assistants excavating the Celtic hill-top

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4. Perhaps one should even speak of the Italo-Lusitano-Celtic subnode instead.

settlement on the Maria Saaler Berg in Carinthia, a member of an Alpine ranger regiment dispatched to assist in the excavations, had planted a faked bone awl into which a sequence of random runic letters had been incised. Egger took the authenticity of the piece for granted and understood the text, which he read as *xsetoš*, as the name of the alleged pre-historic proprietor of the awl (Egger 1927: 1–2). The inscription received a lot of attention from runologists over the following years, for, if genuine, the Maria Saaler Berg inscription would have been the earliest known runic text. Carl Marstrander, for example, was convinced of its authenticity. Ultimately, the affair was not resolved because of scholarly doubts about the authenticity of the nonsensical inscription, but because his conscience drove the falsifier to confess his deed (Pittioni 1937; the story is presented in a slightly more favourable light in Egger 1936: 88–89; 91). In this and the Noric case, Rudolf Egger was too eager to discover local writing systems to be restrained by a sober assessment of the facts.

Further reading:

The “Tartessian” texts are collected in MLH IV, 1–348, the Lusitanian texts known at the time in MLH IV, 723–758. For a sober assessment of the claims about the Celticity of Tartessian see Eska 2013. Wodtko 2017 offers a compact overview of Lusitanian. For the Glozel script, see, with caution, Hitz 2007. For Egger’s “Noric script”, see Stifter 2009: 363–367; 2012b: 298–300.

## 2. Celtic and Germanic

After this tour of the ancient Celtic literate tradition, the final section will be devoted to considerations regarding if and what kind of interface there is between ancient Celtic writing and Germanic peoples of antiquity. In particular I will address the question if a Celtic writing tradition could have provided the model or at least a source for the invention of the runic script, and whether there would have been a suitable place for such an interaction.

Of the four literate Celtic cultural spheres, the Celtiberian one is too distant to have had any possible epigraphic impact on Germanic people. The semisyllabic Celtiberian script is also of a very different structural type from the runes. Ogam is likewise excluded as a possible source, for reasons of chronology, distance, and the fundamental difference in graphic character between the Ogam script and all the other Mediterranean-derived alphabets, including the runes. Nevertheless, it merits brief mention insofar as in the 9th–10th centuries, when Vikings established settlements in the British Islands, we do find some evidence for the interaction of rune carvers and ogam scratchers. Yet at that time Ogam was probably



no more than an antiquarian amusement for a handful of Irish scholars, and the runic script was a fully developed system already.

From a geographical point of view, this leaves only Lepontic and Gaulish as possible zones of literate interaction between Celtic-speaking and Germanic-speaking populations. Of these, Gaulish writing in Latin letters during the younger period when Gaul formed part of the Roman Empire is practically excluded. Firstly, one might expect evidence in historical sources about contacts that would have been extensive enough to facilitate cultural exchange of the required sort. Secondly, during the provincial period, Gaulish writing was always in the shadow of that in Latin. Under these historical circumstances, the obvious model for Germanic people could only have been Latin writing. As regards the pre-provincial period, I only want to mention one episode from the time of Julius Caesar's Gaulish Wars that may be of relevance for the history of Germanic writing in Gaul. Recounting the fate of his Gaulish envoy C. Valerius Troucillus, Caesar (*bell. Gall.* 1, 53,5–7) reports that the young man was held captive by Ariovist's, the Suebian king's, army. Three times, lots were cast whether to burn him immediately or spare him. Although nothing is said about the precise nature of these lots, it is at least conceivable that they contained letters or some paraliterate signs.

The area with the greatest potential for a contact zone between Mediterranean alphabets and speakers of Germanic, and therefore for a pivot for the creation of the runic script, is the Alpine region north of the Appennine Peninsula. It has been impossible so far to derive the runic script directly from any of the known scripts of the circummediterranean area. At the same time it is clear that the overall character of the script, that is, its fundamental type as an alphabetic script, the horizontal sequence of the characters, the letter shapes oriented along a vertical axis, many letter shapes, and the use of word dividers, blends in perfectly with the practices in the North-Italic and Alpine region. Since Lepontic and Raetic, which are linguistic neighbours, and Venetic further to the east, fundamentally share the same script, it is largely impossible to decide which of them could have served as a graphic model. From a geographical point of view, the Raetic writing tradition would have offered the best area of contact, being closest to places where early Germanic people could potentially have found themselves around the turn of the era.

There is, however, one point where the Lepontic script offers the best parallel for a runic letter. The origin of the \**dagaz*-rune  $\mathfrak{M}$  has remained a mystery in the history of the runic script, since no reasonable precursor exists in any of the known Mediterranean writing systems. From the purely formal perspective, the \**dagaz*-rune is identical with the specifically Lepontic variant of the letter *san*. In most literacies of northern Italy, this letter represents some sort of sibilant. This has also been the common assumption for Lepontic, but in a

detailed study I concluded that *san* was also used in Lepontic writing to express the sound *d* (or an allophon of it), probably in an attempt to introduce a graphic distinction between voiced and voiceless stops (Stifter 2010). The most striking example is the spelling *mešiolano* for the town *Mediolanum/Milan*, but there are several other graffiti that allow a straightforward linguistic analysis if the letter *san* represents the sound *d*. If this hypothesis is correct, this particular usage is an exclusively Lepontic feature, with no parallels elsewhere in northern Italy. This coincidence between the runic letter for *d* and a Lepontic letter used to represent *d* would be a strong indication for an interaction between Germanic people and Cisalpine Celts.

It is a major weakness of the North-Italic hypothesis of the origin of runic writing that there remains a gap in time and space between the final stages of vernacular North-Italic scripts roughly in the 1st century B.C. and the first evidence for runes in the 2nd century A.D., namely the Vimose inscriptions from Denmark. This is not an unbridgeable gap. Germanic settlements from the archaeological phase Latène D2a (85–45 B.C.), dating to the first half of the 1st century B.C., have been unearthed in the foothills of the Alps in south-eastern Bavaria (Rieckhoff 2007: 418–420, 423–427). This is in almost immediate vicinity to the Raetic people. But even earlier than that Germanic peoples had come into a position where they could receive the transmission of Mediterranean intellectual culture. The battle of Noreia that was fought between the migrating Cimbri and Teutons and a Roman army in 113 B.C. brought Germanic people for the first time into the horizon of Rome. Noreia, the capital of the probably Celtic kingdom of Noricum in the Central Alps, is an unidentified place in Slovenia or Carinthia. Around the time when the Cimbri and Teutons were migrating through Central Europe, rulers in the recently established kingdom of Noricum had started to issue silver coinage. The earliest Noric coins do not make use of the Latin script, even though Noricum had good and close relationships with Rome, but they used the Venetic script, the sister of the Lepontic and Raetic scripts. Only a few coins were minted in this way (Stifter 2010b). To them, we can add a few other stray objects with graffiti in the Venetic script from southern Noricum. What these pieces demonstrate is that there was at least a limited amount of literacy in a North-Italic script in the 2nd century B.C. in the central Alps. When we move just a little bit later into the 1st century B.C., the Venetic script had already given way to Roman letters on Noric coins. But Germanic people had been there at the right place, at the right time to allow for the possibility of coming into contact with a North-Italic alphabet and being inspired by it. The famous *Harigasti*-inscription from Negau in Slovenia (see Nedoma 1995), kept today in the Kunsthistorisches Museum in Vienna, is another important piece in the history of transmission of North-Italic writing to Germanic-speaking peoples, although its dating is notoriously problematic.

The Danube and the Rhine formed notional, or perhaps at some stage real, boundaries, and at the same time contact zones between the Celtic and Germanic speech communities. The area around the Danube between Vienna and Bratislava, an area settled by the Celtic Boii at the beginning of the 1st century B.C., is another possible hub for bringing Germanic people into contact with the art of writing. At the beginning of that century, Boian rulers had started to issue silver coins, bearing legends in the Roman alphabet. There are altogether fourteen or fifteen different names on these coins. Most of the names are of a typical Celtic formation, but at least two names stick out because of their manifest Germanic look. These are *Ainorix* and *Fariarix* which have been interpreted as ‘one/single king’, comparable to Old Icelandic *Eiríkr*, and ‘king of the ferrymen’ respectively (Stifter 2015b).<sup>5</sup> Whatever the precise political circumstances were, these two coins demonstrate that Germanic people north of the Danube made use of writing for propagandistic purposes as early as the 1st century B.C.

In the foregoing discussion, it was not possible to identify a clear model among the ancient Celtic epigraphic traditions for the beginning of runic writing (and if one existed, it would already have been long discovered anyway). But I hope that I succeeded at least in raising several points that should figure in the debate: the presence of Germanic peoples in the vicinity of the Alpine region, and accordingly in the vicinity of North-Italic literacy, in the 2nd and 1st centuries B.C., the contacts of Germanic-speaking tribes with literate or almost literate Celtic-speaking peoples in the same period, and the striking similarity between the \**dagaz*-rune and the Lepontic letter *san*, a similarity that may not only be confined to the *signifiant*, but may also extend to the *signifié*.

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## References

Beltrán Lloris, F. & C. Jordán Cólera. 2017. *Celtiberian. Language, Writing, Epigraphy*. Prensas de la Universidad de Zaragoza.

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5. These readings, especially that of *Ainorix*, have now been seriously questioned: instead of *Ainorix* <AINORIX>, the coin legend has been suggested to be more likely *Aeuorix* <AIIVORIX>, a perfectly Celtic name meaning ‘king of long age’ (Röttger 2018).

- Birkhan, H. (Hrsg.). 2007. *Kelten-Einfälle an der Donau. Akten des Vierten Symposiums deutschsprachiger Keltologinnen und Keltologen. (Linz/Donau, 17.–21. Juli 2005)*. Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- CIIC = R. A. S. Macalister. 1945. *Corpus Inscriptionum Insularum Celticarum*. Dublin: Stationery Office.
- Delamarre, X. 2003. *Dictionnaire de la langue gauloise*. 2nd edn. Paris: Errance.
- De Marinis, R. C. 2009. Sesto Calende, loc. cascina Presualdo: coppa con iscrizione. In R. C. De Marinis, S. Massa & M. Pizzo (eds.), *Alle origini di Varese e del suo territorio: le collezioni del sistema archeologico provinciale*, 157–159. Rome: Bretschneider.
- Egger, R. 1927. Ausgrabungen in Kärnten 1924–1926. *Carinthia* 117. 1–4.
- Egger, R. 1936. Ausgrabungen auf dem Maria-Saaler Berge. *Carinthia* 126. 87–92.
- Egger, R. 1968. Zum vorlateinischen Alphabet der Noriker. *Arheološki Vestnik* 19. 37–42.
- Eska, J. F. 2004. Continental Celtic. In R. D. Woodard (ed.), *The Cambridge Encyclopedia of the World's Ancient Languages*, 857–880. Cambridge: Cambridge University Press.
- Eska, J. F. 2017. Phonological contrasts and character reduction in the alphabet of Lugano. *Zeitschrift für celtische Philologie* 64. 59–80. <https://doi.org/10.1515/zcp-2017-0003>
- Eska, J. F. 2017b. 70. The syntax of Celtic. In Klein et al. 2017, 1218–1249.
- Eska, J. F. 2017c. 72. The dialectology of Celtic. In Klein et al. 2017, 1264–1274.
- Eska, J. F. & D. Ellis Evans. 2009. Continental Celtic. In M. J. Ball & N. Müller (eds.), *The Celtic Languages*. 2nd edn., 28–54. London and New York: Routledge.
- Eska, J. F. & R. E. Wallace. 1999. The linguistic milieu of \*Oderzo 7. *Historische Sprachforschung* 112/1. 122–136.
- Eska, J. F. 2013. Review of Koch 2009 and Koch 2011. *Kratylos* 58. 58–73. <https://doi.org/10.29091/KRATYLOS/2013/1/4>
- Estarán Tolosa, M. J. 2016. *Epigrafía bilingüe del Occidente romano. El latín y las lenguas locales en las inscripciones bilingües y mixtas*. Prensas de la Universidad de Zaragoza.
- Faulmann, C. 1880. *Das Buch der Schrift enthaltend die Schriftzeichen und Alphabete aller Zeiten und aller Völker des Erdkreises*. 2nd edn. Wien: K.-K. Hof- und Staatsdruckerei.
- Ferrer i Jané, J. 2005. Novetats sobre el sistema dual de diferenciació gràfica de les oclusives sordes i sonores. In F. Beltrán Lloris, C. Jordán Cólera & J. Velaza Frías (eds.), *Actas del IX Coloquio sobre lenguas y culturas paleohispánicas. Barcelona, 20–24 de octubre de 2004*, 957–982. Zaragoza: Institución “Fernando el Católico”.
- Hesperia = J. de Hoz et al. 2005–. *Hesperia. Banco de datos de lenguas paleohispánicas*. Madrid. URL: <http://hesperia.ucm.es/en/index.php>
- Hitz, H.-R. 2007. Lassen sich die Inschriften von Glozel in Frankreich unter den Altkeltischen Texten einordnen? In Birkhan 2007, 279–305.
- Jordán Cólera, C. 2005. ¿Sistema dual de escritura en celtibérico? In F. Beltrán Lloris, C. Jordán Cólera & J. Velaza Frías (eds.), *Actas del IX Coloquio sobre lenguas y culturas paleohispánicas. Barcelona, 20–24 de octubre de 2004*, 1013–1030. Zaragoza: Institución “Fernando el Católico”.
- Jordán Cólera, C. 2019. *Lengua y Epigrafía Celtibéricas*. 2 vols. Zaragoza: Prensas de la Universidad de Zaragoza.
- Klein, J. S. & B. Joseph, M. Fritz (eds.). 2017. *Handbook of Comparative and Historical Indo-European Linguistics. An International Handbook*. Vol. II. Berlin and New York: Walter de Gruyter. <https://doi.org/10.1515/9783110523874>
- Koch, J. T. 2009. *Tartessian: Celtic in the South-west at the Dawn of History*. Aberystwyth: Celtic Studies Publications.

- Koch, J. T. 2011. *Tartessian 2: The Inscription of Mesas do Castelinho. ro and the Verbal Complex. Preliminaries to Historical Phonology*. Aberystwyth: Celtic Studies Publications.
- Lambert, P.-Y. 2003. *La langue gauloise. Description linguistique, commentaire d'inscriptions choisies*. 2nd edn. Paris: Errance.
- Lambert, P.-Y. & D. Stifter. 2012. Le plomb gaulois de Rezé. *Études Celtiques* 38. 139–164.
- Lambert, P.-Y. & J. Viret, K. Stüber, D. Stifter, L. Repanšek. 2013. La défexion gauloise de Chartres. *Études Celtiques* 39. 123–192 [repr. Paris: CNRS Editions 2014].
- Lejeune, M. 1971. Lepontica. *Études Celtiques* 12. 337–500 [repr. Paris: Les belles lettres 1971].
- LexLep = D. Stifter, C. Salomon, M. Vignoli, M. Braun, E. Lettner, M. Schwarz et al. 2009–. *Lexicon Leponticum (LexLep)*. Vienna. URL: [https://www.univie.ac.at/lexlep/wiki/Main\\_Page](https://www.univie.ac.at/lexlep/wiki/Main_Page)
- Maras, D. F. 2014. Breve storia della scrittura celtica d'Italia. *Zixu. Studi sulla cultura di Golasecca* 1. 73–93.
- McManus, D. 1991. *A Guide to Ogam*. Maynooth: An Sagart.
- MLH IV = J. Untermann. 1997. *Monumenta Linguarum Hispanicarum. Vol. IV. Die tartessischen, keltiberischen und lusitanischen Inschriften*. Wiesbaden: Reichert.
- Morandi, A. 2004. *Celti d'Italia. Vol. II. Epigrafia e lingua dei Celti d'Italia*. Roma: Spazio Tre.
- Motta, F. 2000. La documentazione epigrafica e linguistica. In R. C. de Marinis & S. Biaggio Simona, *I Leponti tra mito e realtà*. Vol. II, 181–222. Locarno: Gruppo Archeologia Ticino.
- Nedoma, R. 1995. *Die Inschrift auf dem Helm B von Negau. Möglichkeiten und Grenzen der Deutung norditalischer epigraphischer Denkmäler*. Wien: Fassbaender.
- Ogham in 3D = N. White et al. 2012–. *Ogham in 3D*. Dublin Institute for Advanced Studies. URL: <https://ogham.celt.dias.ie/menu.php?lang=en>
- Pittioni, R. 1937. Zur Frage der Echtheit des Knochenpfriemens vom Maria-Saaler-Berg. *Norsk Tidsskrift for Sprogvidenskap* 8. 460–466.
- Rieckhoff, S. 2007. Wo sind sie geblieben? – Zur archäologischen Evidenz der Kelten in Süddeutschland im 1. Jahrhundert v. Chr. In Birkhan 2007, 409–440.
- Röttger, Ch. 2018. Imitation eines Münztyps aus der Prägung des Oppidums Bratislava, aus der Marchgegend. *Mitteilungen der Österreichischen Numismatischen Gesellschaft* 58/2. 81–90.
- RIG I = M. Lejeune. 1985. *Recueil des inscriptions gauloises (R.I.G.). Vol. I. Textes gallo-grecs*. Paris: Éditions du Centre National de la Recherche Scientifique.
- RIG II.1 = M. Lejeune. 1988. *Recueil des inscriptions gauloises (R.I.G.). Vol. II.1. Textes gallo-étrusques. Textes gallo-latins sur pierre*. Paris: Éditions du Centre National de la Recherche Scientifique.
- RIG II.2 = P.-Y. Lambert. 2002. *Recueil des inscriptions gauloises (R.I.G.). Vol. II.2. Textes gallo-latins sur instrumentum*. Paris: Éditions du Centre National de la Recherche Scientifique.
- RIG III = P.-M. Duval & G. Pinault. 1986. *Recueil des inscriptions gauloises (R.I.G.). Vol. III. Les calendriers*. Paris: Éditions du Centre National de la Recherche Scientifique.
- RIG IV = J.-B. Colbert de Beaulieu & B. Fischer. 1998. *Recueil des inscriptions gauloises (R.I.G.). Vol. IV. Les légendes monétaires*. Paris: Éditions du Centre National de la Recherche Scientifique.
- Ruiz-Darasse, C. & A. Mullen. 2018. *Gaulish Language, Writing, Epigraphy*. Prensas de la Universidad de Zaragoza.
- Russell, P. 2017. 73. The evolution of Celtic. In Klein et al. 2017, 1274–1297.
- Schrijver, P. 2014. *Language Contact and the Origins of the Germanic Languages*. New York and London: Routledge.

- Schumacher, St. 2004. *Die rätischen Inschriften. Geschichte und heutiger Stand der Forschung*. 2nd edn. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck.
- Schumacher, St. 2007. Val Camonica, Inschriften. In H. Beck et al. (eds.), *Reallexikon der germanischen Altertumskunde. Vol. 35: Speckstein bis Zwiebel*, 334–337. Berlin and New York: de Gruyter.
- Stifter, D. 2009. Vernacular Celtic Writing Traditions in the East-Alpine Region in the Iron-Age Period? In R. Karl & J. Leskovar (eds.), *Interpretierte Eisenzeiten. Fallstudien, Methoden, Theorie. Tagungsbeiträge der 3. Linzer Gespräche zur interpretativen Eisenzeitarchäologie*, 361–372. Linz: Oberösterreichisches Landesmuseum.
- Stifter, D. 2010. Lepontische Studien: *Lexicon Leponticum* und die Funktion von *san* im Lepontischen. In K. Stüber et al. (eds.), *Akten des 5. Deutschsprachigen Keltologensymposiums, Zürich, 7.–10. September 2009*, 359–374. Wien: Praesens Verlag.
- Stifter, D. 2010b. Neue Inschriften in norditalischer Schrift aus Österreich. In R. Nedoma & D. Stifter (eds.), *\*h<sub>2</sub> nr. Festschrift für Heiner Eichner*, 233–240. Wiesbaden: Harrassowitz.
- Stifter, D. 2010–11. New early second-century Gaulish texts from La Graufesenque (L-143a–c). *Keltische Forschungen* 5. 197–227.
- Stifter, D. 2012. *Old Celtic (Celtic Spring in Copenhagen, Roots of Europe – Language, Culture, and Migrations)*. Copenhagen. URL: [http://rootsofeurope.ku.dk/english/calendar/archive\\_2012/celtic\\_spring/](http://rootsofeurope.ku.dk/english/calendar/archive_2012/celtic_spring/)
- Stifter, D. 2012b. Inscriptiones Pseudocelticae. Wrong and premature ascriptions of inscriptions as Celtic. In R. Karl, J. Leskovar & St. Moser (eds.), *Interpretierte Eisenzeiten. Die erfundenen Kelten – Mythologie eines Begriffes und seine Verwendung in Archäologie, Tourismus und Esoterik. Tagungsbeiträge der 4. Gespräche zur interpretativen Eisenzeitarchäologie*, 293–301. Linz: Oberösterreichisches Landesmuseum.
- Stifter, D. 2015. Keltische Schriftsysteme. *Historische Sprachforschung* 128. 236–259.
- Stifter, D. 2015b. Über die germanischen Namen auf den boischen Grosssilbern. In H. Reichert & C. Scheungraber (eds.), *Germanische Altertumskunde: Quellen, Methoden, Ergebnisse. Akten des Symposiums anlässlich des 150. Geburtstags von Rudolf Much. Wien, 28.–30. September 2012*, 349–354. Wien: Fassbaender.
- Stifter, D. 2017. 68. The phonology of Celtic. In Klein et al. 2017, 1188–1202.
- Stifter, D. 2020. *Cisalpine Celtic. Language, writing, epigraphy*. Prensas de la Universidad de Zaragoza.
- Stüber, K. 2017. 69. The morphology of Celtic. In Klein et al. 2017, 1203–1218.
- Uhlich, J. 1999. Zur sprachlichen Einordnung des Lepontischen. In St. Zimmer, R. Ködderitzsch & A. Wigger (eds.), *Akten des zweiten deutschen Keltologensymposiums (Bonn, 2.–4. April 1997)*, 277–304. Tübingen: Niemeyer [repr. as: 62. On the linguistic classification of Lepontic. In R. Karl & D. Stifter (eds.) 2007, *The Celtic World. Critical Concepts in Historical Studies. Vol. IV. Celtic Linguistics*, 45–73. London – New York: Routledge].
- Vath, B. & S. Ziegler. 2017. 67. The documentation of Celtic. In Klein et al. 2017, 1168–1188.
- Wodtko, D. 2017. *Lusitanian. Language, writing, epigraphy*. Prensas de la Universidad de Zaragoza.
- Wodtko, D. 2017b. 71. The lexicon of Celtic. In Klein et al. 2017, 1250–1264.
- Zeidler, J. 2003. A Celtic Script in the Eastern La Tène Culture? *Études Celtiques* 35. 69–132.
- Ziegler, S. 1994. *Die Sprache der altirischen Ogam-Inschriften*. Göttingen: Vandenhoeck & Ruprecht.

## Address for correspondence

David Stifter  
Department of Early Irish  
Maynooth University  
Maynooth Co. Kildare  
Republic of Ireland  
david.stifter@mu.ie