

**An tAonú Comhdháil Idirnáisiúnta Déag sa Léann Ceilteach
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**A Disregarded Celtic Script
at the End of the First Millenium BC**

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A Dhaoine Uaisle, a Chairde,

Ba mhaith liom gabháil buíochas mór le eagraithe na Comhdhála seo gur feidir léamh páipéir faoi seanscript Cheilteach ag deireadh an chéad mhílaois roimh Chríost ar an mór-roinn. Tá áthas orm bheith in éineacht libh i gCorcaigh.

Recent scholarship has produced a large amount of work in the field of ancient Celtic scripts and languages, and the number of relevant papers presented during this congress clearly illustrates the fact. In my opinion, a further source could be added to the spectrum which has not yet received the attention it probably deserves. The reason is that the materials appear to be confined to the domain of prehistoric archaeology up to this day. As one of my incentives is interdisciplinary work I shall be trying to bridge the gap between archaeology and philology in this regard. In the first section of my paper I shall discuss the body of evidence in some detail, in the second part I'll concentrate on possible explanations of the materials, and the third paragraphe is dedicated to cross-cultural references with a new approach to the development of some alphabets in the environs of the Alps.

The body of evidence which is the base of my consideration here consists of markings on late eastern Latène ceramics. The first slide gives you an impression of some types current in the first century BC on Magdalensberg, Austria. The signs occur most often on the inside bottom of large open bowls which are typical of the period. Marked bowls are made of graphite clay or a mixture with a graphite component (slide 2: Manching); very rarely the signs appear on a different ware (*c.* 2% of all receptacles). As a rule, the vessels are decorated with multiple parallel incision produced by a comb (*kammstrich*). The marks have been carved into the moist clay *before* the pottery went into the kiln.

Signs on late Latène ceramics are known from 1922 on, when M. Hell published the first one in the Vienna Prehistoric Journal. In slide 3, you see one of the better preserved examples from Waltersdorf, eastern Austria; but usually they look like those presented here (slide 4). Their number steadily increased over the years, especially during the excavations in the *oppidum* of Manching, Bavaria in the last decades. Today *c.* 550 records of bottom marks are known (slide 5). The area of distribution extends from west to east from the river Neckar and Bavaria in Germany to Budapest in Hungary, and from north to south from Stochov in north-west Bohemia to the Magdalensberg in Carinthia, Austria, i.e. the major part of the eastern Latène culture.

It must be noted, however, that half of the material comes from Manching (*c.* 180) and Hallstatt (*c.* 120) alone. Their date of origin probably goes back to late

middle Latène (central European period C2), i.e. the late second century BC; most records belong to late Latène (D1–2), i.e. the first century BC. Some late markings date back to the early Roman period, i.e. the first and early second centuries AD.

The archaeologist I. Kappel distinguished between seven types of marks in 1969 (104–122), in the meantime the number increased to twelve. (Slide 6) As Kappel's arrangement follows stylistic criteria rather than paleographic, I suggest the classification you see in the slide with twenty eight types at present.

1	ψ	11	⊙	21	Λ
2	Υ, Ψ	12	×, X	22	⊠
3	Υ, Ψ ; Ψ (?)	13	×	23	κ
4	Ψ, Υ, X	14	⊘, ⊙, ⊙ (?)	24	⊠
5	Ψ, Ψ, Ψ	15	⊠	25	Υ
6	×	16	l	26	*
7	×, X	17	lll	27	⊙
8	⊙	18	⊠	28	⊙⊙⊙, ⊙
9	⊕, ⊕	19	*		
10	⊙, ⊙	20	⊠		

Slide 6: List of Bottom Marks on Latène Ceramics

Two questions are of special interest in connection with these markings: What *kind* of signs do we have to do with: ornaments, religious symbols, potters' brands, ciphers or letters? And, consequently, what is their *meaning*? Due to the lack of time, I try to give the most valid arguments.








The explanation of the markings as pure ornaments and as number symbols has long been discarded by most of the researchers in the field because undoubted types of decoration look rather different and nobody has ever been able to detect a correspondence between the capacity of the vessels and the incised markings. Moreover, no cipher system needs twenty eight different number symbols. And as a matter of fact, it would be strange to decorate or sign utility pots on the inside bottom. So both ideas can be passed over (Kappel 1969: 121).




The second thesis holds that the marks are religious symbols. An assumption like that cannot easily be disproved and indeed often serves in prehistory as a last help in need. But comparatively certain instances of Latène religious symbols, such as spirals, esp. triskels, swastikas, eyes, plants, animals and the like are almost absent from the sign list of bottom marks. Only the spiral motif occurs (and at the most, the circle with a dot in the centre as an 'eye', perhaps). So there is no foundation of this hypothesis either.







Most interpreters favour the theory that bottom marks are brands. And indeed, the fact that the signs are scratched into the unbaked clay seems to support this idea. Some scholars even tried to identify the potters' workshops (waved lines in Milovice, Moravia: Čížmář & Meduna 1985). But in spite of these arguments some doubt should be cast on the use of marks as potters' brands. Firstly, no correspondence can be found between the distribution of specific bottom signs and a probable area of supply by a particular potter's workshop. Most of the signs seem to be scattered over the whole territory without any discernable rule (slide 7). Secondly, the theory cannot explain why types of valuable ceramics, as e.g. the fine wheel-made ware or the Latène painted ware (from Budapest, or, slide 8, from Yverdon, Switzerland), have never been marked with bottom signs, contrary to ordinary cooking pots and other simple wares. Thirdly, bottom marks have occasionally been incised in Samian ware *after* burning (cf. Hell 1949). And a last point has completely escaped the attention up to now: Almost all sites which have yielded more than one instance of markings always show *different* signs. The *oppida* do not only have the greatest quantity of signs but also display the largest variety of them. Manching, Hallstatt, Třísov, Staré Hradisko and, to a small degree, Magdalensberg show virtually all sign forms known to this day. One would rather expect casual concentrations of marks on one site or the other. So the actual findings clearly contradict the theory of potters' brands.

What remains is the letter hypothesis. From the arrangement in my paper you could already imagine that I was aiming at this alternative from the beginning. So I can tell in anticipation that almost all marks found on the bottom of late Latène graphite bowls have counterparts in North Italic or Alpine local scripts.

This leads me to the second part of the paper, the examination of the script. The first step will be a strictly formal analysis, finding similar letter forms in contemporary alphabets of adjacent regions (slide 9). So far nothing can be inferred concerning the *phonetic value* of the signs. They are treated as purely graphic symbols and thus transliterated with pointed brackets <> in the tables. In the following presentation, I must confine myself to a few examples.

The most common type is the so-called cock-tread symbol (*hahnentritt*) because it closely resembles a hen's footprint. In Kappel's analysis, present types 1–5 are combined, but they are better subdivided as shown in the tables. The first of them (type 1) is a cock-tread with three lines of similar length, without extension of the middle line: . This as well as its inversion  resemble very closely Alpine forms of <a> or maybe <k^h>. In Katsch in Styria and on Magdalensberg it occurs in short inscriptions as well. The second subtype (type 2) is a cock-tread with a short line to the left and to the right and an extended line in the middle:  or . Forms with straight side strokes prevail in the west, curved ones in the east (Čižmář & Meduna 1985: 81). The sign has the orientation of a c as is obvious from a double incision from Hallstatt (Hell 1949). It is identical with Etruscan <x>, representing a dorsal fricative or occlusive (as Greek <k^h>); Camunic, Lepontic, Magrè, Sanzeno and Katsch have identical forms. A further subtype of the cock-tread symbol consists of various forms with a fourth stroke crossing or inclined to the middle line: ,  (here type 4). An almost symmetrical variant , similar to Steinberg and Runic <z>, was found in tumulus 17 in Ratschendorf, Austria (end of 1st c. AD, Artner 1995). Kappel's assumption of a high percentage of cock-tread symbols on Latène ceramics—she gives a figure of 83% (1969: 110)—leads to a wrong impression. The frequency of each of the proposed types 1–5 is actually less than c. 23%.

An interesting sign (type 8) consists of a circle and a vertical line; both elements are written in one stroke: . Not much imagination is called for to discover the similarity to Greek and Etruscan f and Alpine forms , , resp.

(Slide ⑩) A further example (type 9) consists of a circle or a double circle and a cross inscribed into them: . Type 28 (, ) is almost identical with Etruscan and Lepontic forms. The latter type, however, is not carved into the clay, but stamped into it and may be regarded as an ornament. But perhaps type 24 () belongs here although the cross is added to a square in this case. The similarity or identity of the sign with various y-forms of Etruscan and North Italic needs no further comment (cf. Alpine , ).

An ambivalent case is a type found in Moravia (type 17), consisting of three equally long parallel strokes (III = ΠΠ ?). As one of the ends of the *hastae* is lost, it is not certain whether there has been a fourth horizontal line connecting the three. But this need not be the case since in Noric it appears with and without a connecting *hasta*. Alternative renderings would be <m> or a combination of two letters, <pi | ip> (i.e. ΠI or vice versa).

Type	Mark	Transliteration	Select Parallels
1	Ψ or Λ	<a> or <k ^h > ?	K Ψ, EI Λ, C, L, S Δ, C, L, S, V Δ, C, N Δ, F, L Δ
2	Υ, Ψ	<k ^h >	C, E, K, L, M, S Υ, S ↑, E, L, S, V Ψ, Ψ
4	¥, ¥, ¥	<z> (?)	F ¥, Υ, St ¥, C ¥, C ¥ E †, L, M †, V ¥
8	Φ	<p ^h >	E Φ, L, M, S, V Φ, M Φ, E Φ, M, S Φ, Φ, F, S P
9	⊕, ⊕	<t ^h >	E, Novilara ⊕, ⊕
28	⊙, ⊙ (?)		E, L ⊙, E ⊙
24	⊠		V ⊠, C, F, L ⊠, C ∴ (?)
17		<e> or <m>, <pi ip>	N, Nussdorf , N , F M L, M Δ, E, S Δ, C, L Δ, C, V Δ
21	Λ	<u>	C, N, S, V Λ, C, V Λ, F Π

Probably No Letters

26	*		scratch?
27	⊙		spiral motif?
28	⊙⊙⊙, ⊙		eye motif? (stamped)

Abbreviations:

C	Camunic (Capodiponte) (= 'Raetic', Sondrio)	K	Katsch ('Styrian')
		M	Magrè ('Raetic')
E	Etruscan	N	Noric (Magdalensberg)
EI	'East Italic' (PID II)	S	Sanzeno ('Raetic', Bolzano)
F	Futhark (Runic)	St	Steinberg
L	Leponitic (Lugano)	V	Venetic

Slides 9 – 10 : Bottom Marks as Letters

Type 21 (Λ) came to light in 1977 in Oberthürnau, Austria (Bauer & Maurer 1978), carved into the internal side of a graphite vessel, so the orientation of the sign is clear in this case. The mark is of the common north Etruscan inverted V-type, as in Camunic, Sanzeno, Venetic, usually representing the letter <u>.

It is obvious that almost all the bottom marks found on late Latène pottery have counterparts in North Italic alphabets. There are some exceptions which are probably no letters at all. A star-like symbol (type 26) is rather carelessly scratched into the clay, the spiral (type 27: ☉) has already been mentioned as a problem, and the circles with dots in the centre (type 28: ☉, ☉) are smaller in size and, above all, they are stamped, not carved into the clay.

(Slide 11) An early Roman burial site in Katsch in Styria produced a hitherto unknown single marking (☒: type 24, perhaps a variant of type 9: Ehrenreich 1994: 17; 34 pl.5, no. 1), as well as a short inscription of four letters on the external side of a vase with comb incisions: XVKY, probably to be read from right to left <akat> or <aiak> (?). To my knowledge, no Latin letters have been found on the site. The next slide 12 shows a Noric inscription from Magdalensberg, probably reading <taio> (right to left), a masculine personal name also attested in Latin (slide 13). The incisions of this important *emporium* often present a happy jumble of Latin and Noric forms, as in no. 120: native <a> but Latin <t>.

The second of the two initial questions still remains to be answered: The problem what the meaning of bottom marks may have been. In my opinion, the key to understanding them is provided by just these native and early Roman findings on Magdalensberg. All possible combinations of characteristics are present here (slide 14): Inscriptions on import as well as on native ware, personal names in Latin as well as in epichorian script, and incisions made before as well as after baking. The following observations can be made (cf. Egger 1968: 274–276). Markings on import ware have always been incised *after* burning and show a large variety of proper names. The names are either given in full or without grammatical endings, but they are only rarely abbreviated to less than three letters. Markings on native ware, on the other hand, have been carved *before* as well as *after* baking in about equal shares. As a rule, they consist of one or two letters only, with the exception of Latin letters incised after baking. It must be emphasized that it is not possible to explain marks incised before burning as potters' signatures because all different symbols would indicate at least nine potteries for Magdalensberg, which is an excessive number for the site.

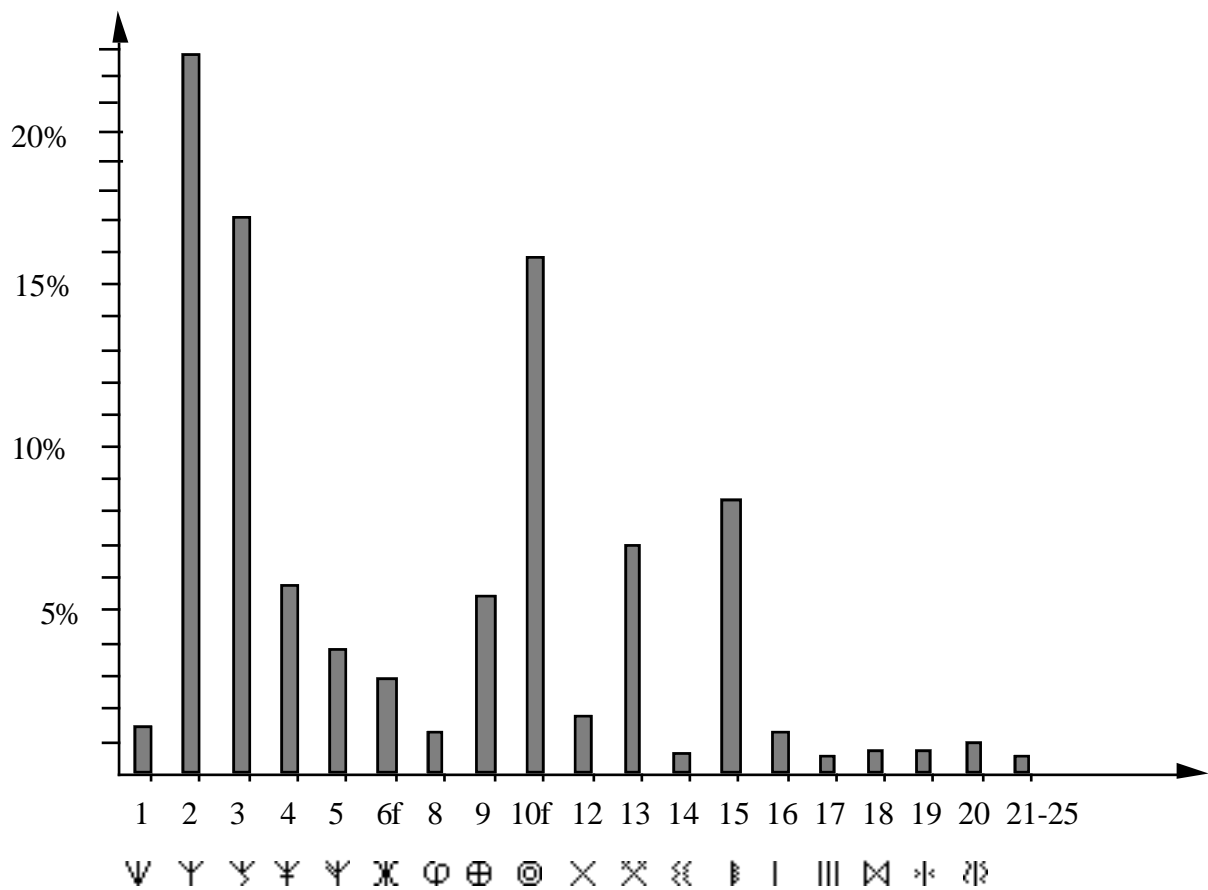
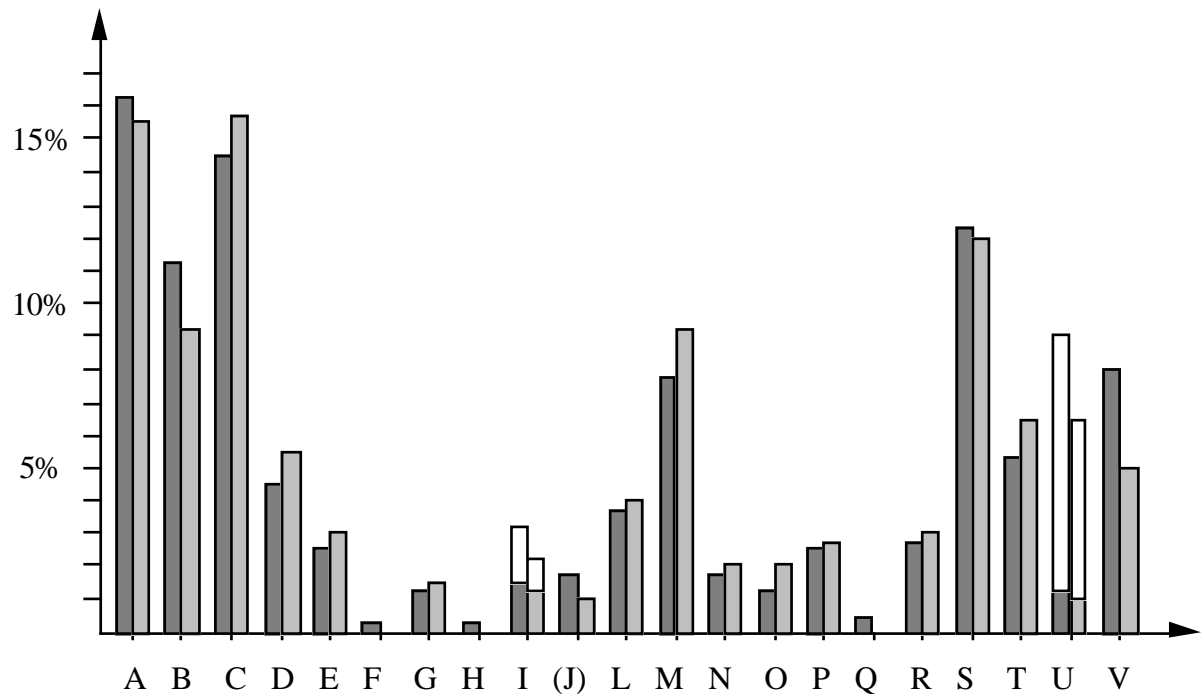
Marks Incised After Baking		... Before Baking	
1. Import Ware (Samian etc.) (* Noric Names)			
Albius	Pameta*	—	
C. Don(nius)	Taio(s)*		
Dion(ysius)	Vita[lina]		
2.1 Native Ware & Noric Alphabet			
At(ta)	T()	A()	T()
E()	V()	E()	U()
		P()	jeik()
2.2 Native Ware & Latin Alphabet			
[C]rutta	M()	A()	O()
Fav(or)	Venustus	H...	

Slide 14: Marks on Magdalensberg Pottery

The same applies for the bottom marks in a purely native context, and additional observations confirm Egger's explanation. The general use of *different* letters on the same site implies that the function of the markings is in all probability to distinguish between owners of vessels. Seemingly there were no supra-regional centres of production of ordinary wares, and we know it was the raw material (graphite clay) that was shipped to distant places (Kappel 1969: 123 ff.). Many potteries, therefore, used to work on a rather small scale. So the customers could very well ask the potters in their neighbourhood to sign the receptacles ordered by them. This would be a quite natural explanation of the fact that most letters have been carved into the unbaked clay, and the same holds true for the Magdalensberg.

Colours in slide 15: >>>

dark grey = initials of different names only
light grey = initials of all names
white = vocalic *i, u* + consonantic *iV(j)uV(v)*



Slide 15 (top): Initial Letters of Personal Names from Roman Noricum >>>

Slide 16 (bottom): Frequency of Bottom Marks

By the way, an additional argument in favour of the explanation of bottom marks as initials of proper names can be advanced. (Slide 15) A statistical analysis of personal names from Roman Noricum, based on 1200 occurrences collected by G. Alföldy (1974: 232–238) and M. Hainzmann (1996: 447–459; see also 1987), reveals that the most frequent names begin with <a> (16%), <c> (15%), and <s> (12%). Unfortunately a letter representing a dental affricate [tʰ] is missing in Latin, but possibly not in Noric (did a *tau Gallicum* exist?— slide 16). The bottom marks most often used, on the other hand, have the shape of <a> (𐌆, 𐌆?), <k^h> (𐌚) and <z> (𐌛), formerly understood as variants of one and the same sign, the cock-tread. The frequency of all three or four marks together is c. 50%, comparable to the 35% or so of initial letters <a>, <c> and part of <s> in Noric names. The agreement is encouraging, and cannot be expected to be total due to the differences in space, time and population.

The strange observation that ordinary cooking vessels got marks whereas valuable earthenware did not, may give us a further hint at the meaning of bottom marks. A distinction between cooking pots of various owners does not make sense unless they were together in the same place and at the same time, in order to prevent a confusion of pots. This could be the case in large workshops, communal feeding, and long-term meetings of varying purposes (as festivals, hearings etc.; see Egger 1968a). Another possibility is suggested by M.J. Enright's study some years ago (1996) who demonstrated the increasing importance of warband organizations in late Latène Europe. Large assemblies of clients and councils (*concilia*) are also well known from Caesar. So it may be that the increasing use of property marks in the first century BC is a concomitant phenomenon of the development of more complex social structures.

In the third and last part of my essay, I shall turn to the derivation and dissemination of the eastern Latène alphabet. Again, I must apologize for the somewhat condensed synopsis. Furthermore I want to emphasize that the following remarks can only be regarded as suggestions or as a working hypothesis because the signs are interpreted as letters with phonetical values, not only as graphic symbols.

(Slide 17) As can be shown, the total inventory of signs is derived from the Venetic alphabet you can see on the beautiful bronze tablet. In almost all cases an identical or very similar sign can be found in this north-east Italic system. (Slide 18) Only in a few instances other Alpine forms are closer than Venetic ones; the most important are type 4 which looks very much like Camunic <z>; Noric or Manching <o> resembling Camunic and Lepontic <o>; or type 15 corresponding to Sanzeno or Magrè <t^h>. Other candidates are the inclined <e>

(type 17), the letter *san* (type 18) and perhaps type 22 which is a bit like <r> in Magrè. As you can see, similarities are equally distributed among Camunic, Lepontic and Raetic, i.e. adjacent alphabets or scripts of fellow Celts, respectively. (Slide 19) Moreover, it seems that bottom marks and Noric are but local variants of the same system, just as there are many local versions of Alpine alphabets; the table drawn by G.M. Mossler (1961: 559) is outdated now but clearly shows the graphic symbols <u>, <a>, ?, <e>, perhaps <ś> etc.

Our picture of the early dissemination of writing to the north and east of the Alps has considerably changed during the last one and a half decade or so. Today we know that the Venetic alphabet was in use in Carinthia and Slovenia (Istenič 1985; cf. Eichner 1994), as well as in Hungary (Szentlőrinc: Lejeune

Type	Latène Mark	Value	C, L, M, S rather than Venetic
4	𐌵, 𐌶, 𐌷	<z>	C 𐌵, C 𐌶	V 𐌷, L, M 𐌸
10 [?]	Manching 𐌺, 𐌻	<o>	C 𐌺, L 𐌻	V 𐌼
15	𐌾	<t ^h >	M, S 𐌾, M 𐌿	—
17	𐌿, ^N 𐍀	<e [?] >	L, M 𐌿, E, S 𐍀	C, V 𐍁
18	𐍂	<ś>	C, L 𐍂	M, S, V 𐍃
22	K 𐍄	<r>	M 𐍄 (?)	C, L, M, S, V 𐍅

Slide 18: Venetic Origin of the Latène Script Except for ...

1991, in spite of Eichner's criticism). Celtic peoples adopted the alphabet probably as early as *c.* 600 BC, as is now clear from a Lepontic inscription from Castelletto Ticino of *c.* 570 BC ("xosioiso": Gambari & Colonna 1988; Prosdocimi 1991: 142–144). Raetic scripts were sporadically found among people north of the Alps since the fifth and fourth centuries BC (Rix 1998; in general: Schumacher 1992). Graffiti from Manching date to the beginning of the first century BC, as the well known 'Boios' inscription (Krämer 1982; cf. 1984; Greek alphabet: e.g. Lambert 1992; Lejeune 1989), and writing implements have been found during excavations in several *oppida*. The next slide 20 shows at the bottom a home-made bone pencil or stylus from Stradonice (Drda & Rybová 1995: 190; see Jacobi 1974; Lenerz-de Wilde 1987); the same site

yielded the bronze frame of a wax tablet. (Slide 21) Small wonder, then, that the bottom marks give a further example of a native script. Although we have not a single text, this disadvantage is balanced by the fact that we are able to define an area of distribution with hundreds of records. A large part of the eastern Latène culture can no longer be regarded a white spot on the map of the history of writing.

At last some remarks on the dissemination of the eastern Latène script may be allowed. We have seen that it is derived from the Venetic alphabet already playing a rôle in the south of the region. But it shows a remarkable similarity to the Runic script, the Old Germanic Futhark, as well (slide 22). The most convincing theory on the origin of the runes still is C. Marstrander's derivation (1928) from North Italic alphabets as has recently been corroborated by H. Rix (1992; 1997; cf. Seebold 1991; differing theories e.g. in Bammesberger 1991; Hachmann 1993; cf. on the Negau B helmet: Nedoma 1995). The major problem of the theory is the eclecticism imputed to the inventors of the Futhark. They seemed to have borrowed a few signs from each valley of the Alps as has been argued. Some of the letters are "typically" Lepontic, Camunic, 'Raetic', Venetic and even Latin; examples are shown in the table. But in most cases even the restricted knowledge we have suggests Noric or eastern Latène letters as an alternative. The forms of <a, z, t^h, u, o, g, d, r, b> are almost the same. I should like to call your special attention to the letter <e> with vertical lines in the Celtic scripts which is closer to the rune than Latin epigraphic <e> usually taken as the model of the *ehwaz*-rune.

So Marstrander ultimately may have been right in assuming a Celtic intermediary stage between the North Italic and Runic alphabets. The eastern Latène script was in common use in the first century BC for restricted purposes and was occasionally incised on ceramics, maybe also on metal objects (cf. Egg 1996: 53–61) and coins (cf. *RIG* IV, 11–15) which have been left out of account here. The writing system could very well become known to infiltrating people from the north, with a material culture similar to those in central Germany and Silesia (short accounts for Carinthia: Gleirscher 1996; Bohemia: Waldhauser 1996; Moravia: Čižmář 1996). The coexistence and eventual fusion of old residents and new immigrants in early late Latène has been studied e.g. on the Staffelberg in northern Bavaria (Pescheck 1977) and extensively in Radovesice in northern Bohemia (Waldhauser et al. 1993). The results basically agree with our knowledge from ancient history of the amalgamation of *Boii* and *Marcomanni* in the first century AD (catchword: kingdom of Maroboduos). If a native script existed in Bohemia, as it seems from the foregoing argumentation, the alphabet

After H. Rix (1992) following Runic forms are ...*)	Runes (Futhark)	But Latène forms are just as similar:
typically Lepontic	ᚦ <a>	N ᚱ, K ᚷ
typically Camunic U	ᚱ, ᚲ <z> [z > R] ᚹ, ᚺ <p>	ᚱ, ᚲ N ᚹ
typically 'Raetic'	ᚦ <t> ᚦ, ᚦ <t ^h >	N ᚦ ᚦ
Venetic ᚱ ᚷ ᚸ ᚹ ᚺ ᚻ ᚼ ᚾ ᚿ	ᚱ <u> ᚷ <o> ᚸ <g> ᚹ <d> ᚺ <j> ᚻ <i> ᚾ <w>	ᚱ Manching ᚷ, ᚸ ᚸ ᚹ, ᚹ ᚺ (?) id. ᚾ
Latin II	ᚱ <r> ᚷ ᚹ <e>	K ᚱ Manching, Ptuj ᚷ III, N III

*) Letters in the left hand column are identical with the Runes unless otherwise indicated.

Slide 22: Origin of the Runic Script

could easily spread along the river Elbe (cf. Salač 1997) across the homeland of the immigrants from the North, especially into the Lübsow culture in central Germany, which is also rich in Roman imports. From there, the primary direction of dissemination would be down the Elbe to Schleswig-Holstein and Scandinavia where the earliest Runic inscriptions have been found (slide 23), such as the bronze statuette from Frøihov, now in Oslo, 2nd–3rd c. AD.

What I could present you here were the outlines of an investigation still in progress. Not all details have been studied with the same thoroughness and part of it may be subject to alterations. So, your comments would be very much appreciated. Thank you.

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List of slides

- 1 types of Latène ceramics from Magdalensberg, Austria (*Celti*, p. 551 left)
- 2 types of Latène ceramics from Manching (Menghin 1980: pl. 22)
- 3 typical example of a bottom mark of the C-type (Turetschek 1976: 130)
- 4 examples from Manching (Maier et al. 1992: pl. 131)
- 5 distribution map of bottom marks in Central Europe
- 6 table of bottom marks
- 7 painted vessel from Budapest (*Celti*, p. 413 left)
- 8 painted vessel from Yverdon, Switzerland (*Celti*, p. 413 right)
- 9 bottom marks as letters I
- 10 bottom marks as letters II
- 11 inscriptions from Katsch, Styria (Ehrenreich 1994: 35, pl. 6)
- 12 inscription <taio> from Magdalensberg (Egger 1968: 40)
- 13 inscriptions from Magdalensberg, partly Latin (Egger 1969: 385, fig. 59)
- 14 marks on Magdalensberg pottery
- 15 initial letters of personal names in Roman Noricum
- 16 frequency of bottom marks
- 17 Venetic syllabary (Fogolari & Prosdocimi 1988: 172)
- 18 table: derivation from Venetic except for ...
- 19 Noric alphabet (Mossler 1961: 559)
- 20 bone artefacts from Bohemian *oppida* (Drda & Rybová 1995: 190)
- 21 distribution map of bottom marks in Central Europe
- 22 origin of Runic script
- 23 bronze statuette with runic inscription (*Etrusker*, p. 218)