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MICHELLE WALDISPÜHL (HG.)**

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## Models and Principles of Wulfila's Gothic Alphabet. Some Methodological Remarks

Raschellà untersucht das Problem des Ursprungs des gotischen Alphabets. Es scheint unbestritten, dass das griechische und lateinische Alphabet und ausserdem die Runenschrift Wulfila als Vorlagen gedient haben. Die Forschung ist sich allerdings nicht immer einig, welches Alphabet konkret für welches Zeichen verantwortlich ist. Raschellà hebt hervor, dass bei der Beurteilung dieses Problems eine Übereinstimmung nicht nur in der Form sondern auch im Lautwert vorliegen sollte, aber dass nicht in jedem Fall beide Kriterien erfüllt sein müssen. Ausgehend vom Verfahren, das Wulfila bei der Erschaffung des gotischen Alphabets wahrscheinlich angewendet hat, diskutiert Raschellà beispielsweise die möglichen Vorlagen des Buchstaben  $\Psi$ , der den dentalen Frikativ /θ/ bezeichnet. Vier Alternativen stehen zur Verfügung: (1) Griechisch Theta, das zu Wulfilas Zeit eine genaue Lautentsprechung bietet, (2) griechisch Phi oder (3) Psi, die von der Form her eher mit dem gotischen Buchstaben übereinstimmen und als «überflüssige» Buchstaben gut für einen anderen Lautwert hätten verwendet werden können, und (4) die Rune þ, die lautlich dem gotischen Laut genau entspricht, bei der man aber von einer besonderen Formvariante, þ̊, ausgehen müsste.

### I

I confess that, initially, I was tempted to entitle the present paper "The puzzle of the Gothic alphabet". As a matter of fact, the question of the origin and the constitution of the Wulfilian alphabet has always been a fatiguing and hopeless search for a practically unreachable solution, as it should clearly appear from the following discussion. Yet, for the sake of scholarly conformity and moderation I eventually decided to adopt a plainer and more descriptive title, in which the actual content of the paper would be manifest.

Quite a number of the ideas represented in this paper have been previously expressed in scholarly work. So, I will not propose any new 'theory' here, as I do not think there is need for a new theory. In effect, I believe that everything that

could be supposed and inferred about the making of the Gothic alphabet and its presumable models has in fact been supposed and inferred, at times without a fully systematic and coherent approach, more often – which is worse – with the intention to assert and demonstrate throughout a personal view, intended as the only correct and resolving one, at the cost of strained deductions and even against the evidence. Rather, I will try to focus on those elements which seem to be crucial to provide a reliable explanation of the foundations and the development of the Gothic alphabet by discussing the basic problems which involve such a process.

It goes without saying that, given the space limitations, only the most relevant hypotheses and theories on this subject will be taken into consideration, and even these in their essentials. As a matter of fact, the question of the origin and composition of the Gothic alphabet has been debated in such a multitude of works and by so many authors that it is virtually impossible to mention them all. However, it may be useful to remember that the various theories put forward in this regard are briefly mentioned, along with the names of their supporters, and commented on by Larry A. Viehmeier (1971: 178–184) in his doctoral thesis,<sup>1</sup> to which reference can be made for further information. Basically, each theory aims at demonstrating, through a discussion of the single letters, that Wulfila's alphabet is founded on one or more of the three alphabets which, according to that same theory, he is supposed to have known, i.e. the Greek, the Latin and the runic alphabets. Most authors start by criticizing the inconsistency of method and/or historical perspective of their predecessors, but their arguments often do not appear, all things considered, more consistent than those they are disputing. Finally, it should not be omitted that views about this subject are frequently characterized to some extent by a sort of 'ideological background', so that the dependence of the Gothic alphabet on one rather than another model is privileged, beyond all scientific and historical reasons, according to the author's cultural attitude.

Before getting to the heart of the matter, however, some additional preliminary remarks are necessary. First of all, it should be kept in mind that the historical investigation of Gothic writing requires a definite series of scientific prerequisites, without which solid results cannot be achieved. Unfortunately, this is such a composite type of knowledge as to be rarely found in a single researcher, so the best results would certainly be achieved through the collective work of a team of specialists. These prerequisites include:

- Knowledge of all the variants of Gothic script attested in manuscript sources.<sup>2</sup>
- Knowledge of all the variants of Greek and Latin writing in Wulfila's time, as well as of those of runic writing attested from its origins up to that same time.<sup>3</sup>
- Knowledge – within the limits allowed by historical and comparative reconstruction – of Greek phonology in Wulfila's time as well as of Latin pro-

nunciation in the same period, particularly in the Greek-speaking areas of the Roman Empire.

- Finally, and most obviously, knowledge of Gothic phonology and, more generally, of old Germanic historical and comparative phonology.

Regarding the search for possible models of the individual letters of the Gothic alphabet, it is necessary to verify the following basic conditions:

- The formal similarity of the letters to the alphabetic symbols from which they are assumed to derive, yet considering that in the lapse of time between their first application and their employment in the extant documents, they may have changed their shape to a greater or lesser extent.
- The possibility to trace all the variants of one and the same Gothic letter to its presumed model in a natural way and with tenable arguments. (It is not useless to underline this fact, since several derivation hypotheses proposed thus far appear to be constructed with too much imagination).
- The correspondence, or affinity, of the (presumable) phonetic value(s) of a given Gothic letter to that of its alleged model.

The above mentioned conditions do not necessarily have to be present at the same time, although it is highly desirable that they are. Moreover, the third point has a lesser probative value than the first two, for, in the history of transmission of alphabetic writing, it is not uncommon to find letters that have passed from one language to another with the same form but with a different sound value. However, if graphic similarity is matched by phonetic similarity the derivation hypothesis appears to be, *ceteris paribus*, much more realistic.

## II

It is now time to take a closer look at the figure of the alleged 'inventor' of the Gothic alphabet, as well as the translator of the Bible from Greek to Gothic: the Arian bishop Wulfila. Although historical sources fully agree in referring to Wulfila as the 'inventor' of an alphabet for the Goths,<sup>4</sup> it cannot be taken for granted that he really was. As a matter of fact, doubts have been cast now and then on Wulfila's role in devising the Gothic alphabet,<sup>5</sup> yet with no practical consequences. However, the exact identity of the inventor(s) of the Gothic alphabet is an element of secondary importance for the purpose of the present discussion: it suffices to know that he was a man (possibly at the head of a group) of Gothic descent, who lived in 4<sup>th</sup>-century Greece and belonged to some ecclesiastical community whose task was, among other things, to teach the Christian doctrine to the Goths living inside the boundaries of the Eastern Roman Empire. Nevertheless, for practical reasons, the name 'Wulfila' will be used here as a conventional and compendious

expression to signify the person who is responsible for the invention and/or the improvement of Gothic writing as well as for the overall layout of the Gothic alphabet as we know it from the preserved manuscript sources (cf. Raschella 2008: 4). Historical evidence about Wulfila's childhood and youth is very poor. He was born about 310 AD in a region north of the lower Danube on the western coast of the Black Sea. On the basis of his name it has been assumed that his father was a Goth. His mother, on the other hand, is described as belonging to a Greek family of Cappadocian origin. Thus, Wulfila is supposed to have grown up in a bilingual Greek-Gothic milieu. He was then educated as a priest and attained the highest degree in the ecclesiastical career, becoming bishop at the age of about thirty. It is therefore reasonable to imagine that he was quite familiar with Latin too, the second official language of the Eastern Roman Empire.<sup>6</sup> However fragmentary and vague, these data leave little doubt about the role played first by Greek and secondly by Latin in Wulfila's cultural background; therefore, it is quite natural to assume that the writing systems of these two languages exerted a fundamental influence on his creating an alphabet for the Gothic language.

Still, the Greek and Latin alphabets do not seem to be the only two alphabets known by Wulfila: actually, it is highly probable that he also knew and utilized the runic alphabet for his undertaking. However, since this is one of the relevant points I am going to discuss below (§ IV), I will not dwell on it here but will come back to it later, assuming for the moment that some letters of the Gothic alphabet *may* have been modelled on runic characters.

### III

In consideration of the foregoing remarks, it seems reasonable to assume that, in constructing his alphabet, Wulfila proceeded substantially along the following lines:

- (1) To start, he would look for all the letters capable of denoting Gothic phonological values in a precise and unambiguous way in the Greek alphabet.
- (2) Where the Greek alphabet did not offer a satisfying solution, Wulfila would resort to the other commonly used alphabet of his time, i.e. to the Latin alphabet.
- (3) If not even the Latin alphabet could provide a suitable solution, he would look for other ways, applying diverse criteria according to necessity and convenience.

That is to say:

- (3a) By deriving the necessary graphemes from the third alphabet at his disposal, i.e. the runic alphabet, which he probably had discarded from the outset as his chief model because of cultural and religious reasons, in spite of the fact that it could fit Gothic phonology better than any other alphabet.

(3b) by using 'superfluous' letters, i.e. letters he had previously discarded as useless or not suitable to represent Gothic phonemes (e.g.  $\Xi$ ,  $\Psi$ , and  $H$ ).

(3c) by devising new letters from scratch (which seems the most unlikely and remote solution).

Besides resting on indisputable historical and cultural grounds, the primary role of Greek writing as a model of Wulfila's alphabet is substantiated by a number of formal characteristics as follows:

- Gothic letters are arranged, irrespective of their possible models, in the same order as in the Greek alphabet and they are assigned the same numerical value as the corresponding Greek letters (e.g., Gk.  $A$  ( $\alpha$ ) = 1,  $I$  ( $\iota$ ) = 10,  $P$  ( $\rho$ ) = 100, etc.; Go.  $\mathfrak{A}$  ( $\alpha$ ) = 1,  $\mathfrak{I}$  ( $\iota$ ) = 10,  $\mathfrak{P}$  ( $\rho$ ) = 100, etc.).<sup>7</sup>
- Some Gothic orthographic features are clearly derived from (contemporary) Greek writing, as the use of double gamma (Gk.  $\Gamma\Gamma$ , Go.  $\mathfrak{P}\mathfrak{P}$ ) for the consonant cluster /ng/, of the vowel digraphs AI and EI (Go.  $\mathfrak{AI}$  and  $\mathfrak{EI}$ ) for the monophthongs /ε/ and /i/ respectively, etc.<sup>8</sup>
- The abbreviation mark ( $\bar{\ })$  (nasal suspension) is used throughout for ⟨n⟩.<sup>9</sup>

It is true that not all of these features, except perhaps the first one, need necessarily be considered as having been introduced by Wulfila: they might very well have been added by later scribes and grammarians closer to the Greek writing tradition than Wulfila. However, there is no reason to exclude that they were present in the Gothic alphabet from the very outset, including the use of nasal suspension for ⟨m⟩, which could find a much wider application in Gothic than in Greek (cf. Mees 2002–03: 66–67).

Moreover, it is possible that also some features of contemporary Latin orthography are concealed under some Gothic letter values, as in the case of the grapheme  $\mathfrak{C}$  ⟨j⟩ denoting the palatal semivowel /j/ – of course in the assumption that this letter is modelled on Latin uncial 'g'<sup>10</sup> – or such spellings as Go.  $\mathfrak{AN}$  ⟨au⟩ for /ɔ/, which *might* reflect a vulgar Latin pronunciation of the classical diphthong /au/.<sup>11</sup> Latin influence might further be inferred from the spelling of certain biblical names in which typical features of Latin orthography are applied against the Greek model. This concerns principally the use of the letter  $\mathfrak{H}$  (h) in word-initial position before vowels, where the traditional Greek aspiration sign, the *spiritus asper* (´), had long fallen into disuse in consequence of its disappearance in common pronunciation, and in word-medial position between vowels, where it was unknown to Greek.<sup>12</sup> Finally, it should always be borne in mind that about a century and a half separates the presumable time of birth of the Gothic alphabet (mid-4<sup>th</sup> century) from that of the earliest extant manuscripts (around 500 AD), a fairly extended period during which the individual letters may have undergone some sensible change in their original shape.<sup>13</sup> Besides this time gap, which involves all of the Gothic written sources, there is one more element which should be considered and that

must have played a substantial role in the history of Gothic script in the western regions of Europe, especially in the Ostrogothic kingdom of Italy, where the most part of the extant Gothic documents were produced, namely the influence of Latin writing, not only with regard to letter forms – as pointed out above – but also to orthographic rules.<sup>14</sup>

#### IV

Let's now go back to the question concerning Wulfila's relation to runic writing. Perhaps this is not such a crucial problem as might appear from the vast and lively discussion that has been devoted to it in the course of time, yet it has no doubt stimulated the debate about the origin and the composition of the Gothic alphabet more than any other issue.<sup>15</sup> This is, in fact, a necessary passage for anyone who wants to investigate the possible components and basic models of the Gothic alphabet, and everyone who has dealt with this matter could not avoid taking a stand either in favour of or against the assumption that Wulfila knew and had recourse to runes.

While on the one hand there is no incontrovertible proof that Wulfila knew the runic alphabet, still less that he was familiar with runic writing practice, on the other hand there is nothing preventing us from assuming that he did and, in this case, that he may to some extent have resorted to runes in order to accomplish his task. The following are some arguments in favour of this surmise.

Although his mother was, as noted above, a Greek native, Wulfila belonged to a Gothic family and grew up among Goths; and the Goths, as all the other Germanic peoples in late Antiquity and the early Middle Ages, knew and practiced, to a greater or lesser extent, runic writing. To be sure, the Goths detached themselves very early from other Germanic peoples, and quite a limited number, if any, of undoubtedly Gothic runic inscriptions have been preserved.<sup>16</sup> Nevertheless, the beginnings of runic writing – whatever their supposed origin, which is not a relevant point here – date back to a period in which the Goths were still in close contact with other Germanic nations, especially in the Northern area, for which the use of runic writing is well attested.

Although runes were closely connected with Germanic paganism, a purely linguistic-communicative exploitation of them would probably not seem too inconvenient or disrespectful even in a strictly Christian milieu as that in which Wulfila lived and operated. On the other hand, recourse to runes to compensate some inadequacies of the Latin alphabet is well attested from other Germanic-speaking peoples – first of all from the Anglo-Saxons – at the very beginning of their Christianization. Moreover, some Gothic letters as we know them from the manuscript sources are

so similar in form to the runic characters representing the same sound values that the influence of a runic model cannot be excluded *a priori*.<sup>17</sup>

In any event, runic would have been just *one* of the three alphabets utilized by Wulfila, and in all likelihood the least exploited one: actually, according to the prevailing opinion, runes would only come into play when neither the Greek nor the Latin alphabet – that is to say, the writing systems of the two official languages of the Eastern Roman Empire – could offer Wulfila a suitable solution. It goes without saying that, from a purely linguistic point of view, the runic alphabet, as a well-tested 'Pan-Germanic' alphabet, would have been the most fit to represent the overall phonological structure of Gothic: actually, only two of the 25 letters of the Wulfilian alphabet have no functional counterpart in the futhark, namely the graphemes denoting the 'labiovelar' clusters [kw] and [hw] (which were probably perceived by Wulfila as phonemic units), i.e. **𐌿** (q) and **𐌠** (h) respectively.<sup>18</sup> As it appears from the above remarks, an absolute refusal to acknowledge Wulfila's acquaintance with the runic alphabet is impracticable, and admitting his recourse to the futhark as one of his models is, to say the least, a necessary working hypothesis (cf. Cercignani 1988: 171 [= 1992: 152]).

#### V

Almost all of the preserved Gothic manuscript records are composed in a type of writing which closely resembles the typical 'uncial' script of the Greek biblical manuscripts and is therefore called uncial itself.<sup>19</sup> This script is attested in two main variants, an 'upright' and a 'sloping' one. In some minor documents the latter type displays a particularly quick and informal ductus, which has often suggested the assumption that Gothic writing knew, from its very beginning, some form of a cursive variant. Some researchers have gone even further, maintaining that Wulfila moulded his alphabet precisely from Greek cursive writing and that, as a consequence of this, the first form of the Gothic alphabet must have been a cursive one.<sup>20</sup> My opinion in this regard is that Wulfila, in creating his alphabet, most likely took into consideration *also* the Greek cursive writing, but *not only* that. On the other hand, it cannot be excluded that he devised some form of cursive for the Gothic alphabet too, and that Gothic may therefore have known, initially at least, two coexistent and functionally distinct types of writing, i.e. the uncial and the cursive one. The strongest clue for the existence of a Gothic cursive derives from the so-called *Arezzo* and *Naples deeds* (contracts of purchase), especially from the latter, because the *Arezzo* document, which disappeared in the second half of the 18<sup>th</sup> century, is only attested by a modern (1731) transcription. The writing of these two papyrus documents, both dating from the first half of the 6<sup>th</sup>

century and originating from Ravenna, bears the imprint of a 'looser' and more fluent hand than that attested in the biblical manuscripts.<sup>21</sup> Later texts – such as the Gothic alphabets and linguistic notes contained in the 9<sup>th</sup>-century Vienna Codex,<sup>22</sup> which show some unusual letter forms, with cursive-like features – are too distant from the time of composition of the Gothic alphabet to be safely taken as evidence for this purpose. Unfortunately, there is no conclusive evidence that this kind of script traces back directly to the inventor of the Gothic alphabet; on the contrary, it might even represent a later development of an original uncial script, in all likelihood of the slanting type. On the other hand, the assumption of a purely cursive origin of the Gothic alphabet can be rejected principally on the basis of two arguments: (1) The only script used in Greek biblical texts of the early Middle Ages belongs to the uncial type (in its diverse variants), with the exception of some minor papyruses written in a sort of cursive-like majuscule;<sup>23</sup> it therefore seems unlikely that Wulfila, who devised his alphabet in order to translate the Scripture into Gothic, would take cursive writing as his basic model; (2) All of the extant Gothic manuscripts – except, perhaps, the later documents mentioned above – are written in a purely, though varied, uncial script, which leads one to believe that the same type of writing was also used for the earliest texts.

## VI

As a final point in my discussion I want to tackle a basic problem which involves the question of the constitution of the Gothic alphabet in its entirety. In the course of time, I have acquired the firm conviction that the most baffling and probably inextricable problem in the search for a clear, fully consistent and convincing explanation of the shape of the letters in Wulfila's alphabet which are not immediately and plainly comparable to letters of the Greek alphabet consists in our *impossibility to define with certainty the chronological sequence and the methodological guidelines followed by Wulfila in selecting, testing, and eventually fixing each single letter of his alphabet*. This may sound like a truism, but it is not. Actually, the conclusions one can arrive at with regard to the relationship between shape and sound value of certain Gothic letters starting from different premises – and there is often no forced starting point – are bound to diverge considerably. As a consequence, whichever solution is proposed in this regard, however accurate and logically tenable, will not go beyond the state of a mere conjecture. I will try to illustrate this with a paradigmatic example. One of the most problematic Gothic letters, which has given rise to a considerable amount of scholarly discussion about its derivation, is that denoting the voiceless

dental fricative /θ/, i.e.  $\Psi$  (þ). The case of this letter is particularly challenging because it brings into discussion other letters as in a chain reaction. The following alternative solutions have been proposed to explain the shape and the origin of this letter:

(1) The model is Greek  $\Theta$ . Considering the fact that Gothic  $\Psi$ , besides having the same sound value as Greek  $\Theta$ , occupies the same position in the alphabet and represents the same numerical value of its Greek counterpart, it seems quite natural to assume that also its shape is derived in some way from the latter. Those, such as J. Boüüaert and J. W. Marchand, who support this hypothesis must explain the origin of this letter starting from some secondary and comparatively unusual variants of both symbols, that is to say from a cursive theta ( $\vartheta$ ) for the Greek model and from a similar graph (a sort of '9' with the loop extended across the ascendant) for the Gothic letter (Boüüaert (1950: 430); Marchand (1973: 20)). To this thesis it may be objected that (a) no variant of  $\Psi$  as just described is attested (in spite of Marchand's statement) in Gothic manuscript sources, and (b) it seems inappropriate to assume that Wulfila derived one (or more) of his letters from a cursive Greek variant when the overall attested Gothic writing is clearly inspired by the Greek uncial.

(2) The model is Greek  $\Phi$ .<sup>24</sup> This hypothesis, clearly based on the formal similarity between  $\Psi$  and the Greek letter, is corroborated by the fact that Wulfila resorted to a different symbol, apparently taken from the Latin (less probably from the runic) alphabet, i.e.  $\mathfrak{F}$ , to denote the voiceless labiodental fricative /f/, thus leaving  $\Phi$  free for a different use. It does not explain, however, why Wulfila should have opted for this odd solution, using a symbol modelled on  $\Phi$  not to denote /f/ but /θ/, thus giving up the possibility of using  $\Theta$  for the latter. Nor does it explain the transfer of this letter from its original position in the alphabet to that of  $\Theta$ , i.e. from the 23<sup>rd</sup> to the 9<sup>th</sup> position.

(3) The model is Greek  $\Psi$ .<sup>25</sup> Also in this case, as in the  $\Phi$ -thesis, the attribution of the model is based on the formal similarity between the Gothic and the Greek letter. Inasmuch as denoting a consonant cluster (/ps/) whose components could be represented by separate graphemes,  $\Psi$  was, in the eyes of the Gothic grammarian, a superfluous letter and could therefore be used even to express a phonological value quite different from the original one. However, this does not explain why Wulfila would use just this symbol to represent the Gothic voiceless dental fricative instead of a symbol modelled on Greek  $\Theta$ , which expressed a sound identical or very close to that of Gothic /θ/. Furthermore, as in the case of the  $\Phi$ -thesis again, the reason for the transfer of this letter from its original position to that of  $\Theta$  remains obscure.

(4) The model is runic þ. Also this hypothesis, as the first, is based on both phonological and palaeographic grounds. The two letters involved virtually represent



the same sound, [θ], in both languages. As to their graphic connection, it may not immediately appear evident, yet an explanation can be given that deserves to be considered attentively. This assumption has most recently been maintained by B. Mees, who has pointed to a variant of the runic symbol þorn, †, attested in some early runic inscriptions discovered in Denmark some decades ago (Mees 2002–03: 65), from which the Gothic letter could be derived directly and without strain. Actually, the principal objection that has been raised so far against the hypothesis of a direct derivation of the Gothic Ψ from the þ rune is that it implies a significant modification of the runic symbol, consisting in extending the right loop (starting from below) across the vertical stroke so much as to form a specular loop on the left side. Now the þorn variant pointed out by Mees, dating from the 2<sup>nd</sup>–3<sup>rd</sup> century, seems able to remove this obstacle. In favour of this thesis is also its capability to explain at the same time, without too many devices and far-fetched conjectures, why Wulfila on one hand used a symbol virtually identical to Θ, i.e. Θ (h), to denote the labiovelar fricative /h<sup>w</sup>/ instead of the dental fricative /θ/ and, on the other hand, gave up denoting the phoneme /f/ by means of a symbol modelled on Φ. Here, of course, the question about the letter position in the alphabet is not relevant, because þ, the alleged model of Ψ, is not a Greek letter. Many other examples, concerning both consonantal and vocalic graphemes, could be made to illustrate the indefiniteness and comparatively arbitrary nature of reconstruction hypotheses of the kind described above as well as the impossibility to verify their historical correctness, but this is too extensive a matter to be discussed here.

## VII

As we have seen, the path towards a full understanding of the criteria underlying Wulfila's alphabet is paved with a number of more or less awkward obstacles which, at the present state of our knowledge, can hardly be removed. This is, however, not a sufficient reason to give up the idea of attempting at least a rough reconstruction of the initial state of this earliest literary alphabet of the Germanic tradition. Indeed, the mass of scholarly speculation about this topic – of which the present paper is a modest but demonstrative example – is good proof of the fact that such an enterprise is far from being abandoned. It is nonetheless necessary to be fully aware that going back to Wulfila's starting point is only possible with some heavy restraints and that no firm and irrefutable conclusion can reasonably be expected.

TABLE 1: Principal variants of the Gothic alphabet\*

Numerical value	Cod. Ambros. B	Cod. Vindob. 795	Cod. arg. Hand I	'Cursive' variants (Naples deed)	Transliter.
1	Α	ʔ	Α	Α	a
2	Β	ʋ	Β	Β	b
3	Γ	ʀ	Γ	Γ	c
4	Δ	ʁ	Δ	Δ	d
5	Ε	Ϸ	Θ	Ε	e
6	Υ	ϸ	Ο	Ε	q
7	Χ	Ϲ	Ζ	Ζ	z
8	Η	Ϻ	Π	Ϻ	h
9	Ψ	ϻ	Ψ	ϻ	p
10	Ι	ϼ	Ι	Ι	it
20	Κ	Ͻ	Κ	Κ	k
30	Λ	Ͽ	Λ	Λ	l
40	Μ	Ͼ	Μ	Μ	m
50	Ν	Ͽ	Ν	Ν	n
60	Σ	Ͽ	Σ	Σ	j
70	Π	Ͽ	Π	Π	u
80	Φ	Ͽ	Φ	Φ	p
90			Υ	Υ	-
100	Χ	Ͽ	Κ	Ρ	r
200	Ε	Ͽ	Σ	Ρ	s
300	Τ	Ͽ	Τ	Ρ	t
400	Υ	Ͽ	Υ	Υ	w
500	Φ	Ͽ	Φ	Υ	f
600	Χ	Ͽ	Χ	Υ	x
700	Ϸ	Ͽ	Ο	Υ	h
800	Ϻ	Ͽ	Ϻ	Υ	o
900		↑		Υ	-

\* The table is drawn from W. Braune / F. Heidermanns, *Gotische Grammatik*, 20. Aufl., Tübingen: Niemeyer, 2004, p. 21, to which a column has been added – the fifth from the left – showing some cursive-like variants from the *Naples deed* (various hands). The numerical values of letters are represented in the first column. The second, third, and fourth columns show the usual forms of the letters in *Codex Ambrosianus B*, *Codex Vindobonensis 795*, and *Codex Argenteus (Hand I)* respectively. For the fifth column, see above. In the sixth column, the conventional transliteration into Latin characters is given.

TABLE 2: Synopsis of the Gothic, Greek, Latin, and Runic alphabets<sup>1</sup>

GOTHIC		GREEK	LATIN	RUNIC	
CA	Translit.	(uncial) <sup>2</sup>	(uncial)	(older futhork)	
1	𐌰	α	Α	ᚦ	1
2	𐌱	β	Β	ᚨ	2
3	𐌲	γ	Γ	ᚱ	3
4	𐌳	δ	Δ	ᚦ	4
5	𐌴	ε	Ε	ᚷ	5
6	𐌵	ζ	Ζ	ᚨ	6
7	𐌶	η	Η	ᚨ	7
8	𐌷	θ	Θ	ᚱ	8
9	𐌸	ι	Ι	ᚱ	9
10	𐌹	κ	Κ	ᚦ	10
11	𐌺	λ	Λ	ᚦ	11
12	𐌻	μ	Μ	ᚦ	12
13	𐌼	ν	Ν	ᚦ	13
14	𐌽	ξ	Ξ	ᚦ	14
15	𐌾	ο	Ο	ᚦ	15
16	𐌿	π	Π	ᚦ	16
17	𐍀	ρ	Ρ	ᚦ	17
18	𐍁	σ	Σ	ᚦ	18
19	S / ε, ɛ <sup>3</sup>	τ	Τ	ᚦ	19
20	𐍂	υ	Υ	ᚦ	20
21	𐍃	φ	Φ	ᚦ	21
22	𐍄	χ	Χ	ᚦ	22
23	𐍅	ψ	Ψ	ᚦ	23
24	𐍆	ω	Ω	ᚦ	24
25	𐍇	ο	Ο	ᚦ	25

<sup>1</sup> The letters of the Gothic and Greek alphabets having only a numerical value have been omitted.

<sup>2</sup> The type represented here is an approximate reproduction of the script in the 4th-century *Codex Sinaiticus*.

<sup>3</sup> The writing of the *Codex Argenteus* (CA) belongs to the so-called 'S type', the main characteristic of which is the Latin shape of the letter (s). Other forms of the same grapheme, belonging to the so-called 'Σ type', are added in the table as variants of particular relevance, the former occurring for instance in the *Codices Ambrosiani B and D*, and the latter in the *Codex Vindobonensis* (Vienna Codex 795).

TABLE 3: Models proposed to date for the Gothic letters\*

Num. value	GOTHIC	GREEK	LATIN	RUNIC
1	𐌰 [a]	Α [a]		
2	𐌱 [b~β]	Β [β]? [v]?		
3	𐌲 [g~γ], [ŋ]	Γ [γ (~j?)], [ŋ]		
4	𐌳 [d~δ]	Δ [δ]		
5	𐌴 [e]	Ε [e]? [ε]?		
6	𐌵 [kw]		ϰ [k(w)]	
7	𐌶 [z]	Ζ [z]		
8	𐌷 [h~x]	Η [i]? [e]?	h [h] [-]	
9	𐌸 [θ]	Θ (θ); Φ; † [θ]; [f]; [ps]		þ (þ) [θ]
10	𐌹 [i]	Ι [i]		
20	𐌺 [k]	Κ [k]		
30	𐌻 [l]	Λ [l]		
40	𐌼 [m]	Μ [m]		
50	𐌽 [n]	Ν [n]		
60	𐌾 [j]	Ξ, Ξ (ξ) [i~j]; [ks]	ϰ [g~j]	ᚦ [j]
70	𐌿 [v], [u]		υ [u]	ᚦ [u]
80	𐍀 [p]	π [p]		
90	(ϥ)	(ϥ?)		
100	𐍁 [r]		ρ [r]	ᚱ [r]
200	S / ε, ɛ [s]	ξ, ϰ [s]	σ [s]	
300	𐍂 [t]	τ [t]		
400	𐍃 [w], [y]?	Υ [y], [w]? [v]?		
500	𐍄 [f]		F [f]	ᚦ [f]
600	𐍅 [x]? [k]?	Χ [x]		
700	𐍆 [hw~xw]	Θ; † [θ]; [ps]		
800	𐍇 [o]	Ω [o]? [o]?		ᚦ [o]
900	(†)	(†)?		

\* The numerical values of the Gothic letters are represented in the first column. The second column shows the usual forms of the Gothic letters in the *Codex Argenteus* (to which the two 'Σ type' variants of the letter (s) are added) together with their presumable sound values. In the subsequent columns, the most commonly accepted model(s) of each Gothic letter are given with their respective sound values. (N.B. Possible variation of quantity in vowel phonemes is not taken into consideration).

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## Notes

- 1 This is, to my knowledge, the most extensive and best documented study on the subject at issue, especially as far as palaeographic matters are concerned.
- 2 See Table 1 for some of the most representative variants.
- 3 To the question of Wulfila's knowledge and utilization of runic writing we will come back shortly below; let's now take it as a provisional postulate.
- 4 Cf., among others, Luft (1898: 61-63), Marchand (1970: 99f.), Ebbinghaus (1979: 18), and Lendinara (1992).
- 5 So, for example, Gutenbrunner (1950: 500). The question is discussed at some length in Viehmeier (1971: 190-194).
- 6 The most comprehensive biographical information on Wulfila to date is that contained in Lippold (1961), while an exhaustive collection of historical sources on Wulfila's personality and cultural milieu is to be found in the introductory section of Streitberg's edition of the Gothic Bible (Streitberg 2000: xvii-xxix). On Wulfila as the founder of a Gothic literary language and his presumable relation to the Greek and Latin languages, see Scardigli (1973: 95-102).
- 7 Cf. Tables 1 and 3 (first column in each table).
- 8 The notation of Gothic vowel phonemes adopted in the present discussion is in accordance with the Gothic vocalic subsystem assumed by Marchand (1970: 113).
- 9 In the so-called Type-II variant – also known as 'S type' because of its use of a Latin-type ⟨s⟩ (cf. Table 2 fn. 3) – the same abbreviation mark is also employed for ⟨m⟩, which is most likely to trace back to Latin orthographic usage (see below).
- 10 See Table 2 (third column, line 7).
- 11 The latter assumption is just a theoretical, though not unrealistic, possibility. Actually, the spelling **𐌱** is more likely to be the result of a kind of grapho-phonemic proportion: **𐌱** (/i/) is to **𐌱** (/e/) as **𐌱** (/u/) is to **𐌱** (/o/), where *x* logically equals **𐌱**.
- 12 Instances of this are: *Herodes* (Gk. (')*Ἡρώδης*) for the initial position, and *Iohannes* (Gk. (')*Ἰωάννης*) for the word-medial position. Cf. Braune / Heidermanns (2004: 68).
- 13 Cf. Ebbinghaus (1979: 26).
- 14 For an essential overview of the influence exerted by Latin orthography on Gothic writing see Francovich Onesti (2007).
- 15 Among the studies specifically devoted to this topic are the works by Zacher (1855), Blomfield (1937-45), Marchand (1959), Hachmann (1994-95), and Mees (2002-03). However, any treatment of the origin of the Gothic alphabet includes a more or less extensive discussion of Wulfila's relation to runic writing, with various positions.
- 16 Cf. Marchand (1959: 278-282) and Mees (2002-03: 70-76), representing opposite views.

- 17 This particularly applies to such letters as  $\Pi$  (u) and  $\Omega$  (o), which can easily be compared to runic  $\mathfrak{N}$  and  $\mathfrak{O}$  respectively. However, interference with runic script cannot be excluded even for Gothic  $\Psi$  (p),  $\mathfrak{G}$  (j), and some other letters (cf. Table 3, last column).
- 18 I intentionally omit treating the question of the (alleged) names of the Gothic letters listed on a page of the Vienna Codex 795 (Codex Vindobonensis) here. This is a problem apart, which has been much disputed in connection with the use of runes by the Goths. However, I do not consider it a relevant issue, still less a decisive argument, in the context of the present discussion. For a brief critical survey of this subject, see Mees (2002–03: 56–63).
- 19 See Table 2 (second column). In this connection it should be observed that a more correct term for the Greek script in question would be 'biblical majuscule', 'uncial' being a general term including other scripts with similar characteristics. I owe this information to my colleague Caterina Tristano, professor of palaeography at the University of Siena.
- 20 So Boüüaert (1950), Ebbinghaus (1979: 26ff., supporting Boüüaert's thesis), and, incidentally, Marchand (1973: 20, in conjecturing the original shape of the letter  $\Psi$  (p)).
- 21 See Table 1 (fifth column) for a specimen of the writing in the Naples deed.
- 22 Cf. n. 18 above.
- 23 I owe this information to my colleague Carla Falluomini, professor of Germanic philology at the University of Sassari and specialist of Gothic codicology and palaeography.
- 24 Cf., for example, von Friesen (1913–15: 308).
- 25 As assumed by, among others, Scardigli (1998: 457).

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