

THE DEVELOPMENT OF THE OE *futhorc* AND THE *PERFECT FIT*

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[Insert Figure 1 here]

The London Thames scramasax

The only complete *futhorc*-inscription in the Old English Runes Corpus (OERC).

In Great Britain runic writing began at approximately 400 and lasted until the 11th century, that is, the end of the OE period. When compared to the Germanic *futhorc*, the OE *futhorc* reveals two important differences: first, the OE rune-row has a few new and exciting runes and, second, is therefore longer. What is the reason for this?

1.0 THE CONCEPT OF THE *PERFECT FIT*

Rene Derolez (1952) holds the view that the Gmc. *futhorc* shows a one-to-one relation between grapheme and phoneme. In his 1990 article (1990: 406), he dealt with his earlier concept of 1952 of the *futhorc*'s *perfect fit* again, saying that "This perfect fit implies that each of the 24 runes represents one, and only one, phoneme of the variety of Germanic existing in the area where runes originated; and, vice-versa, that each phoneme was to be represented by a distinct rune." And he adds: "There was only one significant exception to this rule: long and short vowel phonemes were rendered by the same rune."

However, another possible exception pointed out by the critics of the *perfect fit*, which Derolez (1990: 406) willingly accepts, is the fact "that at least one rune, namely the critical yew-rune (no. 13), does not seem to correspond to any well-defined Germanic phoneme"; and he continues (1990: 407): "let us keep in mind that the perfect fit cannot result in a static runic practice, since by definition it requires readjustment of the *futhorc* each time that changing phonological features of the language threaten to disrupt its 'perfection'."

A mere glance at the phonological changes that emerged between the time of creation of the Gmc. *futhorc* and that of the OE *futhorc* shows the necessity of a great deal of "readjustment".

So the disruption of then perfect system was triggered and then continued by phenomena such as the WGmc. rhotacism (where the voiced fricative */z/ > */r/), by the phonemicization of *i*-umlaut, and last but not least, by the complex processes of PrOE palatalization and assibilation. On the one hand, the number of phonemes was, at a certain point in time, reduced by rhotacism, for example, as the Gmc. voiced fricative */z/ became */r/ and could be rendered by rune no. 5, the regular *r*-rune. At a later stage, however, the phoneme inventory was increased (by the phonemicization of *i*-umlaut, for example: the new phonemes /y(:)/ and /i(:)/ required new graphemes.

2. THE RUNES OF THE OLD ENGLISH *futhorc*

The OE *futhorc* was carefully extended by its users in order to re-establish the one-grapheme-for-one-phoneme-relation. The procedure of "re-shaping" was carried out, in my opinion, in three phases.

The first phase already began in the earliest period of settlement, that is, the time between 400 and ca. 610/650, i.e., the date of the Caistor-by-Norwich Brooch, which shows the new runes for the first time.

Figure 2:

The Caistor-by-Norwich Brooch marks the end of the early inscriptions because it bears witness to the new runes (𐌺 *æsc*, Ȧ *āc*, Ȧ *æ* Ȧ *þil*) and their sound values /æ/, /a/, /ɪ/ for the first time.

Caistor-by-Norwich Brooch
(ca. 610-650: Hines 1991a: 6f.)

[Insert Figure 2a here]

luda : gibœtæsīgilæ

Luda gibætæ sigilæ

'May Luda make amends/make compensation
by means of the brooch' (Bammesberger 2003:
135)

[Insert Figure 2b here]

These first 250 years were marked by enormous changes in the phonological system, the results of which brought about new phonemes and therefore new runes. The following relative chronology shows this:

1a. Gmc. */a ɪ/ > /a:/ led to the new rune Ȧ.

The phonemic split of WGmc. */a:/ led to the shift of rune 𐌺_{futhorc} = Ȧ (position 4) to rune 𐌺_{futhorc} = æ (position 26).

The same phonemic split of WGmc. */a:/ (in combination with the compensatory lengthening processes) also brought about the new phoneme nasalized long o and therefore the new rune Ȧ (no. 4).

/æ:/ led to the shift 𐌺 = /æ:/

1b. Phonemic split of WGmc. */a:/



/ɪ ɪ:/ led to the new rune Ȧ (no. 4)

2. Phonemicization of *i*-umlaut brought about the runes Ȧ /y(:)/ (no. 27) and Ȧ /œ(:)/ (no. 24).

In the time between ca. 450-500 (Undley Bracteate) and ca. 610-650 (Caistor-by-Norwich Brooch), the Common Gmc. *futhorc* of originally 24 runes thus underwent some changes: Firstly, it was enlarged by at least two runes, Ȧ Ȧ *ōs* (no. 4) and Ȧ Ȧ *āc* (no. 25). Regarding the third new rune Ȧ Ȧ *yr*, it is, however, difficult to say if this was already created around 650, although its position in the rune-row (no. 27) and the phonemicization of *i*-umlaut would be strong arguments for this date. Secondly, two runes of the Common Gmc. *futhorc* were assigned new sound values (and in one of the two cases also a new name): the rune Ȧ Ȧ *ōþil* became Ȧ Ȧ *þil* by *i*-umlaut and the old rune 𐌺 Ȧ *ansuz* became Ȧ Ȧ *æsc*.

Therefore we can say:

1. Rune Ȧ Ȧ *ōs* took place 4.

First attestation: Undley Bracteate (ca. 450-500).

2. Rune **a** ^Ä *āc* was added as the first new rune to the end of the rune-row, that is, place 25.
First attestation: **skanomodu solidus**: ca. 575-610 (?OFris.); Caistor-by-Norwich: ca. 610-650).

3. Rune **æ** ^f *æsc* was shifted to position 26.
First attestation: Caistor-by-Norwich: ca. 610-650.

4. Rune **y** ^l *yr* was added to the end of the row (no. 27).

The first attestation is difficult to find as it occurs on three relatively early objects the datings of which are, however, vague. Attempts to date the Lindisfarne Stone I include the mid 7th cent. – 8th or 9th cent., although the mid 7th cent. is probably too early. The Whitby Comb is dated to 657 - second half of the 9th cent. and the Auzon/FC was probably carved in the first decades of the 8th cent. Theoretically, the rune y could have been designed around 657, the earliest possible date for the Whitby Comb, as *i*-umlaut was phonemicized at ca. 650 (Caistor-by-Norwich Brooch).

5. Rune **œ** ^Ŷ *œpīl* retained the place of the old rune **Ŷ** /o(:)/ and therefore holds position 24. But it had to adjust its name.

First attestation: Caistor-by-Norwich Brooch (ca. 610-650).

Figure 3: The first phase of the 're-shaping' of the runes

[Insert Figure 3 here]

In the time between ca. 610-650 (Caistor-by-Norwich Brooch) and ca. 750 (Ruthwell Cross = RC), that is, the second phase, more additions were made in order to meet the new demands.

6. Rune **ea** ^Ä *ēar* was given position 28.

First attestation: RC (ca. 750), but it is difficult to define the time of its creation.

The personal names inscribed in the Cimitero di Commodilla Graffito (689-801) and the Catacombs ad duas Lauros (ca. 650 - the end of the 8th cent.) use bindrunes proper (**MA**) for this diphthong instead of this new rune. For this reason, the conclusion may be drawn that the new rune **ea** ^Ä was created between 650, the earliest possible date for the inscription in the Catacombs ad duas Lauros and 750 (RC).

7. The runes no. 29-31 were, in my opinion, added after the phonemic split caused by palatalization/assibilation processes: Gmc. */k/ was split into the voiceless affricate OE /tʃ/ and the voiceless plosive /k/. Likewise, the Gmc. voiced fricative */ŋ/ was split into the phonemes listed on your handouts as the OE palatal fricative /j/, the voiced plosive /g/, and the voiced affricate /tʃ/.

At the time of the 28-character *futhorc*, the rune *giefu* **X** was applied to both the palatal and the velar allophones of the Gmc. voiced velar fricative */ŋ/ (Table no. 1). Moreover, the *star*-rune could be used for the continuant of Gmc. */j/ as well as for the palatal allophone [j] of the Gmc. voiced velar fricative */ŋ/. The *futhorc* of 31 characters obviously reflects a demand for the new character *gār* **X** for the voiced velar fricative /ŋ/ and the voiced plosive /g/, with the old rune *giefu* **X** being reserved for the palatal sound. The same holds true for velar /k/ (Table no. 2). Before the introduction of *calc* **ſ** (no. 30) and rune no. 31 **ƿ**, whose name is unknown, rune no. 6 *cēn* **k** was used for the palatal and velar allophones of */k/ alike.

The phonemic split of Gmc. voiceless velar fricative */x/ is more complex than that of Gmc. */k/, as the pivotal point in this phonemic split is not the PrOE continuant of Gmc. */x/, but the PrOE continuant of the phoneme Gmc. */j/. In contrast to Gmc. */k/, Gmc. */x/ already had a palatal phoneme (= Gmc. */j/) by its side. Therefore the distinction between the palatal allophone [j] of Gmc. */x/ and the continuant of Gmc. */j/ must have been blurred at some point in time, and these sounds must have been felt to belong to one phoneme which, in turn, could be represented by the rune *g(i)efu* **X**. Additionally, as long as palatalization/assibilation was in its allophonic phase, both the palatal and the velar

allophones of Gmc. */**ɹ**/ could be denoted by the rune *g(i)efu* **ᚷ**. This picture changes, however, after the phonemic split, as the new phoneme */**ɹ̥**/ required a new grapheme, namely the rune *gār*.

Table 1: rune **g** and rune **j**
[Insert Table 1]

Table 2: rune *cēn* **ᚱ**; rune *calc* **ᚦ** and, rune no. 31 **ᚦ**
[Insert Table 2]

At the time of the RC (ca. 750) the OE *fuþorc* had 31 characters.

[Insert figure 5: THE GERMANIC *fupark*]

As we have seen, the graphemic changes within the Pre-OE and OE *fuporc* were made to retain the concept of the *perfect fit*. But what about the time before? Was the rune-row at the time of the *adventus saxonum* a rune-row with the *perfect fit*?

3. THE INHERITED RUNES *star*-rune $\star$, *yew*-rune $\mathfrak{I}$, $\mathfrak{J}$, $\mathfrak{Y}$, and *ing*-rune $\mathfrak{X}$

The inherited runes nos. 12, 13, 15, and 22 (marked in red) are pivotal to this question.

On the one hand, these runes were already superfluous at the time of the *adventus*, as is the case with rune no. 15: The old *z*/runic *r*-rune could have been ignored as there was also rune no. 5 *rād*. On the other hand, some of these runes became redundant afterwards, as in the case of rune no. 12 $\mathfrak{J}$, whose sound value could have been rendered by rune no. 7 *g(i)efu*.

It is, however, difficult to determine when the *yew*-rune (no. 13) became redundant, as we do not exactly know which phoneme it denoted in the Gmc. *fupark*.

Some of these inherited runes were, however, "re-cycled" and these processes belong to the third phase of "re-shaping" the runes.

[insert Table 3a: Common Germanic *fupark*]

Table 3a shows that both the *star*- and the *yew*-runes could have been abolished easily. The rune *giefu* $\mathfrak{X}$ (no. 7) denoted the voiced palatal fricative and could therefore have provided a new home for the OE continuant of the Gmc. phoneme */j/. The runes *h* $\mathfrak{H}$ (no. 9) and *i* $\mathfrak{I}$ (no. 11) covered the phonological space of the phonemes and allophones denoted by the *yew*-rune. As I have already pointed out, no. 15 had become superfluous before.

[insert Table 3b: Common Germanic *fupark* + OE *fuporc*]

Phonologically, the *ing*-rune can be seen as the direct continuant of the Gmc. rune no. 22 although formally the OE successor was adjusted to the size of the other OE rune.

3.1 Rune no. 15 $\mathfrak{Y}$

Rune no. 15 was completely superfluous because [ks] <x> did not exist in early OE as it was still [ɫs] (*wohs* on the Brandon Antler Handle). Therefore, it is not surprising that the rune no. 15 merely occurs three times in the OERC. It is the *earliest attestation* on the St. Cuthbert's Coffin (698 or thereabouts" (Derolez 1981:21) which proves that its use was justified by Latin or rather Greek. The *nomen sacrum* XPS, a partial Latinization of Greek "X PS for XPICTOC", was accordingly rendered by the runes as *xps* (Derolez 1981:21). Clearly, rune no. 15 owed its resurrection to the scholarly need to depict Lat. <x>. The other two examples in the OERC are later and uncertain in their readings.

The sequence *xudfid* on the Heacham Tweezers (8th-9th cent.) has not been interpreted and the *cx* on the late York Spoon (late 10th or 11th cent.: Page 1973:172) is too short a sequence for any conclusions to be drawn from it.¹

Table 4: Rune no. 15 $\mathfrak{Y}$ in OE runic inscriptions

[insert Table 4]

So the question remains why and in what way the *yew*- and the *star*-runes were recycled.

3.2 The *star*-rune $\star$ (no. 12)

Apart from occurring in the *fuporc* inscription on the Brandon Pin (late 8th to early 9th

¹Page (1999:102) suggests that the two runes could be an owner's mark. In my opinion this would be an unusual sequence for a person's initials.

cent.: **fuporc*whni†lpxs[...]**) and in the middle of the four sides of the Gandersheim Casket (ca. 800), the other attested forms appear in names on grave-slabs and as a graffito in the Rome catacombs. It is noteworthy that the inscriptions with a clearly Christian background show the *star-rune* †, maybe used as a 'Christ symbol'. I thus draw the conclusion that the revival of the *star-rune* is due to Christian influence.

But what about the yew-rune?

[insert Table 5 Brandon Pin and Gandersheim Casket]

3.3 The yew-rune 𐌚, 𐌛 (no. 13)

The renaissance of the yew-rune is more complex, since it was used for both /i(:)/ and the voiceless palatal [j] and velar [ɣ] fricatives normally rendered by the rune **h**, since they are allophones of /h/. Only two Nhb. inscriptions, the RC and the Great Urswick Stone, use the yew-rune for this purpose.

Obviously, the RC and Great Urswick designer(s)/carver(s) wished to use a rune other than **h**, "reserving" this exclusively for the breathing [h]. As the earliest attestation of the yew-rune is on the RC, it seems legitimate to assume that this special usage was the "creation" of the RC designer/carver and that it may have been transferred to Great Urswick, for this location (figure 6a) may have been within the Ruthwell sphere of influence, as other parallels with the RC show.

Figure 6a: The yew-rune

The yew-rune in the sequence 𐌚t = [jt]; [ɣt]

[insert Figure 6a: Map]

Figure 6b: The **h**-rune

The rune **h** in the combination ht = [ht]

[insert Figure 6b: Map]

Unprovenanced objects:

Mortain Casket: (?Merc.: 7th/750 -9th cent.)

hct: Monte Sant' Angelo: (late 7th-ca. 850)

The two certain forms² where the yew-rune denoted /i:/ are in the *very early* Loveden Hill Urn (ca. 400-600: **s𐌚pfb/d** (*sīb-* < **sī* *b-* < Gmc. **sinb-*) and in the *very late* Dover Stone (9th or early 10th century: + ***𐌚slheard** PN *Gisheard*). Since it is assumed that the yew-rune originally rendered a high vowel or possibly diphthong, its application to /i(:)/ may be a remnant of its original function.

[insert Table 6: The yew rune]

3.4 The rune **ing** 𐌚 (no. 22)

This rune differs somewhat from the runes discussed above, as it was already "clearly marginal" in the inscriptions of the Common Gmc. *fupark* according to Antonsen (1975: 12), and the same holds true for the OERC. This rune is only attested as a *fuporc*-unit in the *fuporc* inscription on the London Thames *scramasax* and in the RC (ca. 750), where it is used in ***yni** 𐌚 'king' and **u** 𐌚 ***et** 'the two of us'. The only other context where the rune could have been used is **[h]ring** (< Gmc. **hrenga-*; Kluge & Seebold 1989: 601) on the Wheatley Hill Ring (8th cent.; findspot: Nhb.). Although the Wheatley Runic Ring is close to the RC both timewise and geographically, as both objects were found in Nhb., the Wheatley carver/designer did not use the rare *ing*-rune. I regard this fact as additional evidence for the sophisticated and conscientious application of the runes by the RC carver/designer, which has become obvious in so many cases already.

Apart from its use in the RC inscription, the application of the rune was *inevitable* in *fuporc* inscriptions. Unfortunately, the London Thames *scramasax* is the only complete

²In the Caistor-by-Norwich Astragalus the sequence -𐌚- must denote an intermediary stage, [ǣ] or [æ], of the Gmc. */a/ on its way to OE /a:/.

epigraphic *fuporc* row in the OERC. Nevertheless, it proves that the survival of the runes discussed above was also due to the fact that they were *indispensable* in the *fuporc*-rows, although some of them took on secondary functions (e.g.: *star*-rune) or secondary sound values (e.g.: *yew*-rune).

The "re-activated" runes (*star*-rune, *yew*-rune, and the rune no. 15) reveal that the Common Gmc. *fupark* as the prerequisite for the OE *fuporc* had already drifted away from the principle of the *perfect fit*. Yet, as an integrated part of the system, these four runes were not - and possibly could not have been - removed from the row. Their dormant phase came to an end when learned Christians rediscovered and redefined them to perfectly fit their needs - both linguistic and religious.

I would therefore like to emphasize that the creation of new runes and the "re-casting" of extant runes in Pre-OE and OE pursued only one purpose: the perfect fit.

As can be inferred from Figure 7, the OE *fuporc* thus reveals three phases of change and extension:

Runes marked in blue represent the Pre-OE innovations and shifts

Runes highlighted in green are the OE innovations

Runes marked in red are the critical runes discussed above

Figure 7: The OE development

[insert Figure 7]

DEVIATIONS FROM THE PERFECT FIT

Emphasis must, however, also be placed on the fact that in certain areas elements of the non-runic manuscript tradition crept into the runic tradition, although it should be pointed out that frequency regarding influence on the vowels is low. For some possible influence in the case of the consonants, see the following examples:

1. The rune <u> was used for /w/ on the Thornhill Stone III.

+ **ilsuip : arærde : æft[.]*

berhtsui e · bekun

onbergigebiddaþ

þr : saule

'+Gilswith raised a memorial on a mound (*bergi*, though this could also mean 'hill') for Berhtswith. Pray for her soul.'

[Page 1973: 145]

'Gilswith raised up in memory of Berhtswith a memorial on a mound. Pray for her soul.'

[Page 1999: 142]

The runic tradition applies **w** for /w/.

It is noteworthy that while the carver/designer of the Thornhill Stone III (ca. (750)-9th cent.) applied **u** for /w/, the Thornhill Stone I (ca. 750-9th cent.) carver/designer followed the runic tradition as did the carvers/designers of the Collingham Stone (?9th cent.) and the RC (ca. 750).

2. **oe** and possibly <**oi**> were implemented for /ø(:)/

With two exceptions (**oe** and possibly <**oi**>), the new phonemes /ø(:)/ brought about by *i*-umlaut was consistently expressed by the rune **Ɀ**.

2a. The sequence **oe** was used for /ø/ in **roe[...]** on the Falstone Hogback (8th-9th cent.). The influence of the non-runic manuscript tradition may be explained by the fact that there are two identical inscriptions on the Falstone Hogback: one is in runes and the other in insular majuscules, reading **HROETHBERHTÆ**. Parsons (1999: 80), however, regards this form as another stone in the mosaic of the "reform" of runic writing. However, the consistent use of the rune **Ɀ** **œ** on both the RC and the Auzon/FC, which, in my opinion, were created in a monastic context, argues against such a reform.

2b. <oi> was possibly used for /ø(:)/ in **join[.]** on the Lindisfarne Stone II (8th cent.). Clearly, this combination reflects the early non-runic manuscript rendering of /ø(:)/.

4. VIOLATIONS OF THE ACROPHONIC PRINCIPLE

Finally, mention should be made of the fact that some rune names violate the acrophonic principle, according to which the rune names begin with the phoneme represented by the rune in question. The names of the runes nos. 13 (*ēoh/iþ*), 15 (*eolhx*), and 22 (*ing*) clearly violate this principle, but it may be assumed that this did not happen without an underlying reason. All these names either begin with a monophthong, already used in *ī*s for **i**, or a diphthong, already used in *e(o)h* for **e**. These slots had thus been filled by the high-frequency runes and were therefore not available for the "re-cycled" runes *ēoh/iþ* (no. 13 , ), *eolhx* (no. 15 ), and *ing* (no. 22 ). As runic writing does not distinguish between short and long vowels/diphthongs, the different quantities were of no value here. The only logical way out of this dilemma was to reverse the acrophonic principle and take the last sound, which may have been triggered by the rune name *ing*, as no Germanic word starts with *ng*, so the acrophonic principle could not be used for linguistic reasons in this case.