I. Runes

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II. Using Runes to Write Modern English


Appendix: Chart for writing Modern English with Roman Letters, Runic Equivalents, IPA Equivalents, and Examples

Bibliography
I. Runes

A. Futharks and Futhorcs

According to epigraphic evidence, the oldest Germanic script, the so-called older futhark (hereafter referred to as the either the older futhark or Germanic futhark), a runic script of twenty-four letters, was used in northern Europe from ca. 200 CE to ca. 750 CE. Although scholars disagree about the origins of this script, it is certainly based on some sort of Mediterranean alphabet, however, whether that Mediterranean alphabet was Latin, Greek, or Etruscan is fiercely debated. This “alphabet” is called the futhark (or fulpark) after the sound values of the first six runes found in inscriptions of rune-rows which show a complete set of all 24 runes. The first known complete futharks, written out in sequence, appear in the fifth century. The twenty-four runes were divided into three groups, known as ‘families’ in Old Norse (ættir, singular ætt, fem.), and there is some epigraphic evidence for these divisions (see the inscriptions from the Grumpan and Vadstena bracteates below); however, the reason for this division remains unknown. As the proto-Germanic names of each rune in the older futhark are difficult to establish with any certainty, I shall generally refer to runes as the r-rune or K-rune. There are about 250 inscriptions written in the older futhark known today, and most have been found in Denmark, Norway, Sweden, Germany, Frisia and England.

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4 McKinnell, Simek, and Düwel, Runes, Magic and Religion, 27.
Below is the older *futhark* written in a standardized form, based on the most frequent allographs of these runes, along with one of the most common systems for transliteration.\(^7\)

```
\( \text{f w a r k g w} \)
\( \text{h n i j \(i^8\) p z(R)\(^9\) s} \)
```

Chart 1. Germanic *Futhark* (Older *Futhark*)

After the seventh century, as the older *futhark* was falling out of use on the continent (replaced by the Latin alphabet), there can be distinguished two separate developments in runic writing, one in Scandinavia, and one in the Anglo-Frisian area.

From the fifth century onwards, in the British Isles and coastal Frisia, because of phonological changes in the West Germanic languages of Old English and Old Frisian, the number of runes was expanded to 28 runes to accommodate these new sounds. Later, in Anglo-Saxon England, the number of runes was further expanded to 31 runes. This modified runic script is named the Anglo-Saxon or Anglo-Frisian *futhorc* (or *fuþorc*) after the first six letters. Anglo-Saxon runes were used to write inscriptions in Old English and Old Frisian. Although the Anglo-Saxon *futhorc* was well suited for representing Old English in the end it could not compete with the Latin alphabet and, except as an antiquarian interest, the *futhorc* was not used after the Norman Conquest.\(^11\)

Below is the Anglo-Saxon *futhorc* with standardized runes along with transliteration.\(^12\) The first 28 runes are found in the earliest versions. Runes 29-31 are found in later Northumbrian inscriptions.

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\(^8\) Also transliterated as *ǽ*, see Antonsen, *Runes and Germanic Linguistics*, 43.

\(^9\) In Scandinavia, this rune represents the palatal *r* (transliterated as *R*).

\(^10\) Also transliterated as *ng*, see Antonsen, *Runes and Germanic Linguistics*, 43.


\(^12\) Page, *An Introduction to English Runes*, 40; McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 24-25. Inscriptions using Anglo-Saxon runes are transliterated using lower-case Latin letters set between two single inverted commas, thus, ‘fuþorc’. This method differs from representing continental and
Chart 2. Anglo-Saxon Futhorc

In the above chart, it will be seen that the first twenty four runes of the futhorc are based on the Germanic futhark. However, because the Germanic [a] became [æ] in O.E. and OFr, the a-rune Æ (æsc ‘ash-tree’) now had the sound [æ] and was moved to the 26th place. A new rune, a modified form of the a-rune, Æ (ac ‘oak’) was devised for the vowel [a], and stood in the 25th place. The old o-rune Ÿ (now called éðel ‘estate’) came to be used for the sound [œ]. A new rune, another modified form of the a-rune, Æ (ós ‘river-mouth’) took over the function of [o], but the kept the fifth position, thus retaining the position of the a-rune in the Germanic futhark. A modified u-rune U (yr ‘bow’) was created for [y] and was put in the 27th position, and is apparently a combination of the two runes I and Æ. Lastly a new rune Y (ear, ?grave) was devised for the dipthong [ea] and was placed in the 28th position. The Anglo-Saxon runes originally consisted of these twenty-eight runes, and this is the form found on the 9th century Seax of Beagnoth (Thames scramasax).

In later Northumbrian inscriptions, up to three more runes are added to represent the velar consonants k (ƙ) and g (ḡ). The palatal consonants c and g (before front vowels, as in OE circe “church” and giellan “yell”) were represented by the existing c-rune and g-rune, the velar consonants k and g (in cumin “come” and gast “ghost”) were

Scandinavian inscriptions, commonly transcribed in bold type lower-case Latin letters, thus fuþorc. See, Page, An Introduction to English Runes, 50n1. I have used the bold type method for continental inscriptions throughout this paper for both Anglo-Saxon Runes as well as Scandinavian and continental inscriptions following McKinnell, Simek and Düwel, where this method is used for both systems.

13 Transliterated as ȝ yogh by Page, “The symbol ȝ is the Middle English yogh, used here as a compromise equivalent for a rune which occurs in several different contexts.” Page, An Introduction to English Runes, 40. Transliterated as ÷ in McKinnell, Simek, and Düwel, Runes, Magic and Religion, 24-25.
14 “y is clearly a ligature consisting of an i within a u.” Antonsen, Runes and Germanic Linguistics, 399.
15 Antonsen sees this as being derived from the OE a-rune or o-rune, See Antonsen, Runes and Germanic Linguistics, 340.
represented by the new runes ƙ (ƙ, velar k) and ƙ (ƙ, velar g). The form for ƙ is either taken from the old R-rune, which had become redundant with the disappearance of the masc. sing. nom. endings, or is a variation of the c-rune with arms on both sides of the stem. The velar g (which only appears on the Ruthwell and Bewcastle crosses, but does also appear in later manuscripts) is apparently a modification of the g-rune. The last rune ƙ only appears on the Ruthwell cross, but is not attested in any manuscripts. It represents a more subtle variant of the velar k (ƙ, but here for a back consonant preceding a front vowel) in the word cyning “king.”

In addition, there are also other runes that only appear in manuscripts, the so-called runica manuscripta. The Germanic futhark letter ƙ (*jeran [j]) developed into the Anglo-Frisian character ƙ ger [j], and this is attested in surviving epigraphic sources. However, in the later runica manuscript, ger was written as ƙ, which is not found in epigraphic sources. In these same manuscripts, the original graph for ger, the ƙ-rune was then was placed in the 29th position and given the name ior ‘eel,’ and stood for the diphthong [io]. This io-rune is not attested in epigraphic sources. Another rune the ƙt-rune ƙ is found in runica manuscripta, but is not attested in epigraphical futhorc. Lastly, there is a curious rune called cweord which is only found in runica manuscripta and is variously written as ƙ (however, it differs from the ea-rune, by having it’s lateral strokes more developed) or ƙ, which apparently derives from a variation on the p-rune. According to Page, cweord, which stood for ‘kw’ is a word of unknown meaning, and was “probably a rhyme for peord which would immediately precede it in a runic ABC.”

In Scandinavia, during the eighth century, because of significant changes in the Northern Germanic languages (as Proto-Norse evolved into Old Norse), instead of expanding the runic alphabet, a reduced futhark was developed which only had 16 runes. This alphabet is called the younger futhark and has two variations often called ‘Danish
runes,’ which more correctly should be called ‘long-branch runes.’ In the ninth century onwards, the ‘Norwegian-Swedish runes’, better called ‘short twig runes’ were developed. The differences between the two scripts, instead of being regional, have more to do with the materials on which they were employed. Long-branch runes were commonly used for formal inscriptions on stone, and short-twig runes were used for everyday use, usually on wood. Below is the younger futhark, showing the ‘long-branch runes’ on top and ‘short-twig runes’ in the middle along with standard transliteration on bottom. As noted each of these sounds may stand for many sounds in the Old Norse language (i.e. in the younger Danish futhark where the difference between voiced and unvoiced consonants was no longer expressed in writing, “b” and “p” are both represented by the rune, both sounds therefore being transliterated as b).

Chart 3. Younger Danish Futhark

Although there were actually more phonemes in Old Norse, this reduction of runes was achieved by having a single rune represent more than one sound. According to Antonsen,

In Scandinavia, where the new futharks represented several different sounds by the same rune, the runes themselves had taken on simplified shapes, the system was a boon to the carver, but the bane of the reader. It was nevertheless manageable enough to remain in use for approximately 400 years (until ca. 1050), when it was replaced by the medieval system of dotted runes, which adequately represented the sounds of the language. After approximately 1400, even this improved system yielded completely to the Latin alphabet, and runic writing no longer represented a living tradition, although in certain quarters, knowledge of the runes persisted into early modern times.

25 McKinnell, Simek, and Düwel, Runes, Magic and Religion, 17.
26 McKinnell, Simek, and Düwel, Runes, Magic and Religion, 17-18.
27 McKinnell, Simek, and Düwel, Runes, Magic and Religion, 18.
28 Antonsen, Runes and Germanic Linguistics, 50.
Table 1: The Germanic Futhark (Older Futhark)\(^{29}\)

<table>
<thead>
<tr>
<th>Rune</th>
<th>Transliteration</th>
<th>IPA</th>
<th>Reconstructed Proto-Germanic Name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>First ætt</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>f</td>
<td>[f]</td>
<td>*fehu</td>
<td>wealth</td>
</tr>
<tr>
<td>2.</td>
<td>u</td>
<td>[u, u:]</td>
<td>*ūruz</td>
<td>aurochs</td>
</tr>
<tr>
<td>3.</td>
<td>þ</td>
<td>[ð, ð]</td>
<td>*purisaz</td>
<td>giant</td>
</tr>
<tr>
<td>4.</td>
<td>a</td>
<td>[a, a:]</td>
<td>*ansuz</td>
<td>[an] Æsir</td>
</tr>
<tr>
<td>5.</td>
<td>r</td>
<td>[r]</td>
<td>*raidō</td>
<td>ride</td>
</tr>
<tr>
<td>6.</td>
<td>k</td>
<td>[k]</td>
<td>?*kaunan</td>
<td>sore, boil</td>
</tr>
<tr>
<td>7.</td>
<td>g</td>
<td>[g]</td>
<td>*gebō</td>
<td>gift</td>
</tr>
<tr>
<td>8.</td>
<td>w</td>
<td>[w]</td>
<td>*wunjō</td>
<td>joy</td>
</tr>
<tr>
<td><strong>Second ætt</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>h</td>
<td>[h]</td>
<td>*haglaz</td>
<td>hail, as in precipitation</td>
</tr>
<tr>
<td>10.</td>
<td>n</td>
<td>[n]</td>
<td>*naudiz</td>
<td>need, compulsion</td>
</tr>
<tr>
<td>11.</td>
<td>i</td>
<td>[i, i:]</td>
<td>*īsaz</td>
<td>ice</td>
</tr>
<tr>
<td>12.</td>
<td>j</td>
<td>[j]</td>
<td>*jēran</td>
<td>year, harvest</td>
</tr>
<tr>
<td>13.</td>
<td>p</td>
<td>[p]</td>
<td>?*perpō</td>
<td>?</td>
</tr>
<tr>
<td>14.</td>
<td>i, ā</td>
<td>[æː]</td>
<td>*īwaz</td>
<td>yew tree</td>
</tr>
<tr>
<td>15.</td>
<td>z/R(^{30})</td>
<td>[z]</td>
<td>*algiz</td>
<td>elk?</td>
</tr>
<tr>
<td>16.</td>
<td>(ξ)</td>
<td>[s]</td>
<td>*sōwilō</td>
<td>sun</td>
</tr>
<tr>
<td><strong>Third ætt</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>t</td>
<td>[t]</td>
<td>*Tīwaz</td>
<td>Tyr</td>
</tr>
<tr>
<td>18.</td>
<td>b</td>
<td>[b]</td>
<td>*berkanan</td>
<td>birch</td>
</tr>
<tr>
<td>19.</td>
<td>e</td>
<td>[e, eː]</td>
<td>*ehwaz</td>
<td>stallion</td>
</tr>
<tr>
<td>20.</td>
<td>m</td>
<td>[m]</td>
<td>*mannaz</td>
<td>man</td>
</tr>
<tr>
<td>21.</td>
<td>l</td>
<td>[l]</td>
<td>*laguz</td>
<td>lake</td>
</tr>
<tr>
<td>22.</td>
<td>ng, ñg (ŋ)</td>
<td>[ŋ]</td>
<td>*Ingwaz</td>
<td>Ing</td>
</tr>
<tr>
<td>23.</td>
<td>d</td>
<td>[d]</td>
<td>*dagaz</td>
<td>estate, ancestral property</td>
</tr>
<tr>
<td>24.</td>
<td>o</td>
<td>[o, oː]</td>
<td>*öbilan</td>
<td>day</td>
</tr>
</tbody>
</table>

\(^{29}\) Based on McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 22.

\(^{30}\) The rune Algiz, which was apparently pronounced as ‘z’ during the ancient Germanic period, gradually became pronounced as ‘r.’
Table 2: Anglo-Saxon *Futhorc*[^31]

<table>
<thead>
<tr>
<th>Germanic <em>Futhorc</em> Rune</th>
<th>Anglo-Saxon Rune</th>
<th>Transliteration</th>
<th>IPA</th>
<th>Name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ᚠ</td>
<td></td>
<td>f</td>
<td>[f], [v]</td>
<td>feoh</td>
<td>wealth</td>
</tr>
<tr>
<td>2. ᚢ</td>
<td></td>
<td>u</td>
<td>[u], [u:]</td>
<td>är</td>
<td>aurochs</td>
</tr>
<tr>
<td>3. ᛏ</td>
<td>ᚗ</td>
<td>þ, ð, th</td>
<td>[θ], [ð]</td>
<td>þorn</td>
<td>thorn</td>
</tr>
<tr>
<td>4. ᚴ = a</td>
<td>ᚵ</td>
<td>ó</td>
<td>[o]</td>
<td>ós</td>
<td>mouth</td>
</tr>
<tr>
<td>5. ᛕ</td>
<td>ᚴ</td>
<td>r</td>
<td>[r]</td>
<td>rād</td>
<td>riding</td>
</tr>
<tr>
<td>6. ᛍ</td>
<td>ᚳ</td>
<td>c</td>
<td>[k], [kʲ]</td>
<td>cēn</td>
<td>torch</td>
</tr>
<tr>
<td>7. ᚫ</td>
<td>ᚬ</td>
<td>ᛛ</td>
<td>[g], [j]</td>
<td>gyfu</td>
<td>gift</td>
</tr>
<tr>
<td>8. ᛈ</td>
<td>ᚷ</td>
<td>w, p wynn</td>
<td>[w]</td>
<td>wynn</td>
<td>joy</td>
</tr>
<tr>
<td>9. ᚠ</td>
<td>ᚠ</td>
<td>H later ᚠ</td>
<td>[h], [x]</td>
<td>hægl</td>
<td>hail</td>
</tr>
<tr>
<td>10. ᛊ</td>
<td>ᚨ</td>
<td>n</td>
<td>[n]</td>
<td>nyd</td>
<td>need</td>
</tr>
<tr>
<td>11. ᛋ</td>
<td>l</td>
<td>i</td>
<td>[i]</td>
<td>īs</td>
<td>ice</td>
</tr>
<tr>
<td>12. ᛌ</td>
<td>ᚩ</td>
<td>j</td>
<td>[j]</td>
<td>gēr</td>
<td>year, harvest</td>
</tr>
<tr>
<td>13. ᛫</td>
<td>ᚪ</td>
<td>eo</td>
<td>[eo]</td>
<td>ēoh</td>
<td>yew-tree</td>
</tr>
<tr>
<td>14. ᛦ</td>
<td>ᚮ</td>
<td>p</td>
<td>[p]</td>
<td>peorð</td>
<td>?</td>
</tr>
<tr>
<td>15. ᛁ used for z/R</td>
<td>ᚴ or ᚹ</td>
<td>x</td>
<td>[ks]</td>
<td>ᛠolhx</td>
<td>?elk</td>
</tr>
<tr>
<td>16. ᛈ</td>
<td>ᚹ</td>
<td>s</td>
<td>[s]</td>
<td>sigel</td>
<td>sun</td>
</tr>
<tr>
<td>17. ᛗ</td>
<td>ᚺ</td>
<td>t</td>
<td>[t]</td>
<td>Tīr, Tiw</td>
<td>Tyr</td>
</tr>
<tr>
<td>18. ᛜ</td>
<td>ᚹ</td>
<td>b</td>
<td>[b]</td>
<td>beorc</td>
<td>birch tree</td>
</tr>
<tr>
<td>19. ᛟ</td>
<td>ᚺ</td>
<td>e</td>
<td>[e]</td>
<td>eh</td>
<td>stallion</td>
</tr>
<tr>
<td>20. ᛠ</td>
<td>ᚺ</td>
<td>m</td>
<td>[m]</td>
<td>mann</td>
<td>man</td>
</tr>
<tr>
<td>21. ᛡ</td>
<td>ᚺ</td>
<td>l</td>
<td>[l]</td>
<td>lagu</td>
<td>lake</td>
</tr>
<tr>
<td>22. ᛣ used for ð</td>
<td>ᚴ used for œ</td>
<td>y</td>
<td>[ŋ]</td>
<td>ĕðel</td>
<td>estate</td>
</tr>
<tr>
<td>23. ᛥ used for o</td>
<td>ᚴ used for æ</td>
<td>Æ</td>
<td>[æ], [œ]</td>
<td>ĕðel</td>
<td>estate</td>
</tr>
<tr>
<td>24. ᛦ</td>
<td>ᚴ</td>
<td>d</td>
<td>[d]</td>
<td>dæg</td>
<td>day</td>
</tr>
<tr>
<td>25. ᛨ</td>
<td>ᚴ</td>
<td>a</td>
<td>[a]</td>
<td>āc</td>
<td>oak</td>
</tr>
<tr>
<td>26. ᛪ</td>
<td>ᚴ</td>
<td>æ</td>
<td>[æ]</td>
<td>æsc</td>
<td>ash-tree</td>
</tr>
<tr>
<td>27. ᛨ</td>
<td>ᚴ</td>
<td>y</td>
<td>[y]</td>
<td>yr</td>
<td>?bow</td>
</tr>
<tr>
<td>28. ᛩ</td>
<td>ᚴ</td>
<td>ea</td>
<td>[ea]</td>
<td>ēår</td>
<td>? grave</td>
</tr>
</tbody>
</table>

[^31]: Based on McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 24-25.

**Table 3.** Anglo-Saxon Runes found only in *runica manuscript*

<table>
<thead>
<tr>
<th>Germanic Futhark Rune</th>
<th>Anglo-Saxon Rune</th>
<th>Transliteration</th>
<th>IPA</th>
<th>Name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.</td>
<td>†</td>
<td>ia, io</td>
<td>[io]</td>
<td>ior</td>
<td>eel</td>
</tr>
<tr>
<td>30.</td>
<td>ꟊ or ꜳ</td>
<td>kw</td>
<td>[kw]</td>
<td>cweorð</td>
<td>?</td>
</tr>
<tr>
<td>32.</td>
<td>꟤ or ꦂ</td>
<td>st</td>
<td>[st]</td>
<td>stān</td>
<td>stone</td>
</tr>
</tbody>
</table>

**Table 4.** Northumbrian additions to Anglo-Saxon Runes, found in both *runica manuscript* and epigraphically.

<table>
<thead>
<tr>
<th>Germanic Futhark Rune</th>
<th>Anglo-Saxon Rune</th>
<th>Transliteration</th>
<th>IPA</th>
<th>Name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>ꟊ</td>
<td>Ꙁ</td>
<td>velar k</td>
<td>calc</td>
<td>?chalice, ?chalk</td>
</tr>
<tr>
<td>33.</td>
<td>ꦒ</td>
<td>Ꙁ</td>
<td>velar g</td>
<td>gār</td>
<td>spear</td>
</tr>
</tbody>
</table>

**Table 5.** Northumbrian additions to Anglo-Saxon Runes, not attested in *runica manuscripta*, but found epigraphically (Ruthwell Cross).

<table>
<thead>
<tr>
<th>Germanic Futhark Rune</th>
<th>Anglo-Saxon Rune</th>
<th>Transliteration</th>
<th>IPA</th>
<th>Name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>(34)</td>
<td>ꦒ</td>
<td>Ꙁ</td>
<td>[kk]</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
# Table 6. Runic Variants

<table>
<thead>
<tr>
<th>Rune</th>
<th>Scandinavian and Gothic variants</th>
<th>Continental variants</th>
<th>English variants</th>
<th>Frisian variants</th>
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Table 55. Variants of the seventeen runes treated in Chapters 2–18 in Scandinavian and Gothic inscriptions 175–750 and in continental, English and Frisian inscriptions 400–750.

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This table was taken from Odenstedt, *On the Origin and Early History of the Runic Script*, 130, table 55.
B. Complete Germanic Futharks: Epigraphic Evidence

There are six examples of the older futhark from Scandinavia. Three of these are shown below.

- Kylver stone (early 5th century, Gotland)

The inscription on the Kylver stone consists of a 24 rune futhark, a figure resembling an evergreen tree, and an uninterpreted palindrome. The futhark part of the inscription is shown below.

Below is a facsimile of the inscription and a photograph of the stone showing the original inscription.

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35 These runes in the transcription are standardized, but it should be noted that in the original inscription the a-rune and b-rune are retrograde. Also in the inscription the s-rune is a common variant, see Odenstedt, *On the Origin and Early History of the Runic Script*, 87-92, see Runic Variants, Table 6. Also the z-rune (R-rune) the forked part is facing down, see Runic Variants, Table 6, above.
• Vadstena Bracteate and Motala Bracteate (early 6th century)

The Vadstena bracteate is a gold C-bracteate found in 1774 in Vadstena, Östergötland, Sweden. Unlike the Kylver stone, the division of the twenty-four runes into three groups of eight runes is shown. Also differing from the Kylver stone, the positions of the æ-rune and p-rune are switched. The o-rune and d-rune are also apparently switched, however, the d-rune is hidden by the pendant’s fastening. The d-rune is shown in a duplicate piece, the Motala Bracteate, which was apparently pressed with the same stamp, and was found in 1906 in Motala, Östergötland.37

Below is a facsimile of the original inscription38 and a drawing of the Vadstena Bracteate.39

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37 Elmer H. Antonsen, A Concise Grammar of the Older Runic Inscriptions, 72. In the transcription the runes have been mostly standardized. It should be that the p-rune is represented by a rounder version of the b-rune. The æ-rune is retrograde. The z-rune (R-rune) the forked part is facing up.
38 Sigurd Agrell, Lapprummor och Runmagi, 8.
39 Sigurd Agrell, Lapprummor och Runmagi, 12.
The Grumpan Bracteate is a gold C-bracteate found in Västergötland, Sweden in 1911. Each ætt are separated by a row of dots.

Below is a facsimile of the inscription and photo.

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41 The transcription of the Runic inscription is standardized. It should be noted that in the original inscription, the æ-rune is retrograde.
C. Partial Germanic Futharks from the Continent

In addition to the above sources from Scandinavia, there are also partial futharks known from the continent. Two of these, the Charnay fibula and Breza column will be examined.

- Charnay fibula

Below is a drawing of the Charnay fibula (6th century), discovered in Soane-et-Loire, Burgundy in 1857. The inscription lists the first twenty letters of the older futhark in sequence, which is incomplete, apparently because the rune master ran out of space.

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44 Sigurd Agrell, Lapprummor och Runmagi, 9.
45 Elmer H. Antonsen, A Concise Grammar of the Older Runic Inscriptions, 77. The transcription of the Runic inscription is standardized. The variant runes should be noted. In the original inscription, the h-rune is double barred. The s-rune is retrograde. The p-rune has an unusual w-shape and the z-rune (R-rune) has forks pointing in both directions up and down, see Runic Variants, Table 6. The schematized drawing of the runes comes from Raymond I. Page, Runes: Reading the Past, 18.
• Breza marble column

The Breza column, found in Breza, north of Sarajevo, and dated to the 6th century, has a partial futhark carved in it. The Breza rune-carver omitted the b-rune, and the last four letters of this futhark are lost since the stone is broken away.\textsuperscript{46}

\begin{center}
\texttt{f\textsuperscript{u} \texttt{b} \texttt{a} \texttt{r} \texttt{k} \texttt{h} \texttt{n} \texttt{I} \texttt{j} \texttt{\ae} \texttt{p} \texttt{z} \texttt{steml}}
\end{center}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{breza-column.jpg}
\caption{Breza marble column with partial futhark carving.}
\end{figure}

\textsuperscript{46} Tineke Looijenga, \textit{Texts and Contexts of the Oldest Runic Inscriptions} (Leiden: Boston, 2013), 61. The h-rune is double barred, the k-rune is turned downward, and the p-rune has a bar on the right side closing the character, see Table 6, above.
D. The Anglo-Saxon Futhorc

There is only one epigraphical Anglo-Saxon futhorc that has been found; it is inscribed on a scramaasax found in the Thames, more correctly called the Seax of Beagnoth. The runes on it are apparently in a somewhat disturbed order.47

Below is a facsimile of Anglo-Saxon futhorc on the Seax of Beagnoth (Thames scramaasax, 9th century)48

E. Runica Manuscripta: The English Tradition

In addition to this there are several runica manuscripta, which can be divided into two groups: English and Continental.49

- **Four English Runica Manuscripta**

  1) Cotton MS. Domitian A 9 (11th century)
  2) Cotton MS. Otho B 10
  3) Cotton MS. Galba A 2
  4) Oxford, MS. St John's College 17

- **Continental Runica Manuscripta**50 (of the nine described by Derolez 1954, we will look at two).

  1) Vienna MS. 795
  2) St. Gall MS. 878

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E. Runica Manuscripta: The English Tradition

According to Derolez these manuscripts do not represent different traditions. George Hempl has a discussion on the intertextuality, showing that the mistakes in one manuscript are carried over by copyists into other manuscripts. Cotton MS. Otho B 10, known only from a facsimile in Hick'e's Thesaurus, is apparently dependent (at least in the facsimile) on Cotton MS. Domitian A 9. Cotton MS. Galba A 2 and Oxford MS. St. John's College 17 are also very closely related.

1) Cotton MS Domitian A 9 (11th century)

Below is the Anglo-Saxon futhorc in a somewhat standardized form as presented in the Cotton MS Domitian A 9.

\[ \text{further presentation here} \]

Here is a facsimile of the futhorc according to Cotton MS. Domitian A 9

51 Derolez, Runica Manuscripta, 2.
53 George Hempl, "Hickes's Additions to the Runic Poem," Modern Philology 1 No. 1 (1903), 134-141.
54 Derolez, Runica Manuscripta, 2.
55 From Derolez, Runica Manuscripta, 9.
Below is a photo of the original page from Cotton MS Domitian A 9 showing the *futhorc.*
Photo of the futhorc from Cotton Domitian A 9 as recorded in Hickes’s *Thesaurus*.\textsuperscript{56}

2) Cotton MS Otho B X

Cotton MS Otho B X was almost completely destroyed by fire in 1731, fortunately, the futhorc was reprinted in Hickes’s Thesaurus (1705) along with an Anglo-Saxon Rune Poem. However, as shown by Hempl, the futhorc in Hickes is actually based on the one found in Cotton MS Domitian A.ix.\(^ {57}\) Below is the futhorc with sound values as found in Hickes’s Thesaurus.

\[\text{\texttt{PNFRHXPNHESCYY}}\]
\[\text{\texttt{fuporcgw:hnijps}}\]

\[\text{\texttt{TBMGXXHFFAYTJADX}}\]
\[\text{\texttt{tbemlnædæyeào kw(q) ðstg}}\]

The futhorc from the Anglo-Saxon Rune Poem with sound values from Hickes’s Thesaurus.\(^ {58}\)

\(^{57}\) George Hempl, “Hickes’s Additions to the Runic Poem,” Modern Philology 1 No. 1 (1903): 134-141.

\(^{58}\) Hickes, Thesaurus, 136.
Photo of the Rune Poem from Hickes’s *Thesaurus* 59

**MOE-SO-GOTHICA.**

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3) Cotton MS. Galba A 2

Cotton MS. Galba A 2 was destroyed by in 1865, but the following futhorc is reprinted in Hickes’s *Thesaurus*.\textsuperscript{60}

\begin{center}
\begin{verbatim}
feoh ur born os rad cen gyfu wyn hegil
ned is gyg eth peo ih eolhx sigel tir beorc
eoh man lagu mg dæg edel edel ac æsc
yr ear calc querd ior stan gar z
\end{verbatim}
\end{center}

\textsuperscript{60} This image taken from Derolez, *Runica Manuscripta*, 46.
4) Oxford MS. St John's College 17

The Oxford MS. St John's College 17 (1\textsuperscript{st} decade 12\textsuperscript{th} century, Thorney Abbey, a Benedictine monastery in Cambridgeshire) has the following futhorc.\textsuperscript{61}

On the following page is a photo of the original page from the website \textit{The Calendar and the Cloister}, in which the entire manuscript is reproduced.\textsuperscript{62}

\textsuperscript{61} Scan taken from Derolez, \textit{Runica Manuscripta}, 39.
\textsuperscript{62} Image found at \textit{The Calendar and the Cloister}, a scholarly resource devoted to the Oxford MS. St John's College 17. \url{http://digital.library.mcgill.ca/ms-17/folio.php?p=5v}, Copyright © 2007, McGill University.
F. Continental *Runica Manuscripta*

1. Vienna MS. 795

The Vienna Codex (Codex Vindobonensis 795 or Salisburgensis 140, Salzburg-Wiener Handschrift or Salzburg-Wiener Alcuin-Handschrift oder Codex Vindobonensis 795).  

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2. St. Gall MS. 878

St. Gall MS. 878 (The Anglo-Saxon *futhorc* (abecedarium anguliscum) in the Codex Sangallensis 878 (9th century).\(^{64}\)

\(^{64}\) Derolez, *Runica Manuscripta*, 80.
G. Addendum: Ruthwell Cross (ca. 8th century)

The Ruthwell Cross inscription has 31 different letters from the Anglo-Saxon futhorc, and as noted earlier has the graph X, which is not found in any of the manuscript versions of the futhorc. Below is the Ruthwell Cross inscription as found in John Kemble, “On Anglo-Saxon Runes,” *Archaeologia* 28 (1840): 327-372.
The following chart (of the “Ruthwell futhorc”) from M. D. Forbes and Bruce Dickins, “The Inscriptions of the Ruthwell and Bewcastle Crosses and the Bridekirk Font,” shows the 31 runes as found on the monument.

Part II. Using Runes to Write Modern English

In his fantasy novel, *The Hobbit*, J.R.R. Tolkien adapted Anglo-Saxon runes to write modern English. As modern English phonology differs from Old English, Tolkien needed to make certain modifications, and in the introduction to *The Hobbit*, Tolkien wrote about adapting runes for modern English and some of the conventions he used.

Their (the dwarves) runes are in this book represented by English runes, which are known now to few people. If the runes on Thror’s Map are compared with the transcriptions into modern letters, the alphabet adapted to modern English, can be discovered… On the Map all the normal runes are found, except for X Ɂ. I and U are used for J and V. There was no rune for Q (use CW Ʉ); nor for Z (the dwarf-rune Ɂ may be used if required). It will be found, however, that some single runes stand for two modern letters: th Ʉ, ng Ʌ, ee Ɉ; other runes of the same kind (ea Ɂ and st ɂ) were also sometimes used.66

Although based on Anglo-Saxon runes, Tolkien made certain modifications to write modern English. As for spelling, except for a few instances, where special runes are used for two modern letters, described above, Tolkien has, for the most part, retained Modern English spellings. Although, I have also used this convention for writing modern English using runes, it should be noted that phonetic spellings might be preferable. As the Anglo-Saxon runic system really cannot represent modern American English phonemes, it might be better to render words such as “Right” ᴿIXNT by dropping the silent letters (although, historically they were pronounced) and writing the diphthong phonetically, thus, “Rait” ᴹการทำงาน, but this looks also like it could be pronounced “rate,” which if using the correct diphthong, “rate” should probably be written “reit.” Anyway, spelling phonetically creates its own problems and further complicates things, as well as ignoring historical developments, etymology of words derived from Latin or Germanic, and historical pronunciations, which seems an absurd practice when trying to artificially write modern English using the orthography of Old English. Secondly, for these same etymological reasons, I feel certain adaptations made by Tolkien either need to be explained or even amended.

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Notes to Writing the English Alphabet

A

I have opted to use the graph Æ to represent both [æ] as in “cat” and [a] as in “father.” In the Germanic futhark, the graph Æ*ansuz ([an] Æsir) was used for [a] (transliterated “a”). However, in the Anglo-Saxon futhorc, Æ was æsc (ash-tree) and was pronounced [æ] as in “cat” (transliterated “ae”), while the graph Æ’ac (oak) was used to write the sound for [a] (transliterated “a”). The sound for [æ] in the Germanic futhark could apparently be expressed by using the graph Æ+i(h)waz/*ei(h)waz (yew-tree, transliterated “ï” or “æ”). Tolkien made use of this distinction, using Æ for [a], Æ’ for [o], and Æ for [æ]. In the younger Danish futhark, the graph Æ was used for the sounds [æ,o,æ] (Æaurui O.N. Thyri as written on the Jelling Stone DR42. N.B. Jelling Stone DR41 only has Æurui Æurui O.N. Thyrri, while the graph Æ was used for [æ] and [a] (ÆRÆÆÆÆR Haraldr as written on the Jelling Stone DR 42). Tolkien also uses this graph for the “long a” sound. The diphthong [ei], which makes the “long a” sound, could be rendered phonetically as Æl. Writing phonetically, the mane of a horse would be written “mein” ÆÆÆÆÆÆÆÆ. However, in this respect, I have followed Tolkien, who for vowels, generally retained English spellings. These spellings can include the silent “e.” Thus, “mane” ÆÆÆÆÆÆÆÆ, “fate” ÆÆÆÆÆÆÆÆ, “day” ÆÆÆÆÆÆÆÆ, “pain” ÆÆÆÆÆÆÆÆ, and “rein” ÆÆÆÆÆÆÆÆ all use Æ for the “long a” as well. Tolkien on Thror’s Map has “may” ÆÆÆÆÆÆÆÆ and “grey” ÆÆÆÆÆÆÆÆ. The sound of the letter “a” varies depending on dialect. As a native of Cleveland, I feel I should note that due to the effects of the Northern Vowel Shift (in places such as Chicago, Detroit, Cleveland, Buffalo, and Rochester) the [æ] sound in “cat” gets pronounced something like “Kyaat” (IPA [kɪət]). The Æ-rune is perfectly acceptable in this spelling as well – “cat” ÆÆÆÆÆÆÆÆ.

B

Æ – Germanic futhark – *berkanan (birch); Anglo-Saxon futhorc – beorc (birch). In the younger Danish futhark where the difference between voiced and unvoiced consonants was no longer expressed in writing, “b” and “p” are both represented by the graph Æ (ÆÆÆÆÆÆÆÆ tanmarkaÆ but O.N. danmarkaÆ bot, Jelling Stone DR41; ÆÆÆÆÆÆÆÆ knupu O.N. Gnapu, Sigtrygg Runestone DR4). Tolkien on Thror’s Map has “by” ÆÆÆÆÆÆÆÆ.
In the Anglo-Saxon futhorc, the graph ecure (torch) is the “hard c” [k] sound (transliterated “c”). Tolkien uses ecure to write the letter “c” and the graph ound to write the letter “k,” which is apparently a variation of ecure, see Cotton Codex Domitian A.ix. The Anglo-Saxon futhorc also uses this graph for representing the letter “k.” The Elder Futhark used the graph (?*kaunan, “ulcer”?) for “hard c” [k] (transliterated “k”). The graph for [k] (and [g]) in the younger Danish futhark was (transliterated “k” – kununR R.O.N. konungR, Jelling Stone DR41 and DR 42). For “soft c,” use the graph ound [s]. I have followed Tolkien, using ecure to write the letter “c” and the graph ound – to write the letter “k,” for example “knocks” hundhund from Thror’s map.

The sound for “ch” [tʃ] as in “cherry” is a little difficult. Originally Anglo-Saxon would be somewhat like Italian, since the “ch” sound occurred in words preceding certain vowels, thus the letter “c” in the word for “church” (O.E. cir(i)ce) would have been pronounced with a “ch” sound, but if this is followed then Modern English, one can’t distinguish “cart” from “chart” or “curl” from “churl.” Although Tolkien uses the value “ch” in other writing systems of his, apparently there are no examples of this sound in examples using his adapted version of the Anglo-Saxon futhorc. I have opted to write “ch” [tʃ] using ecure “c” + ound “h” in as “cherry.”

In the Younger Danish Futhark where the difference between voiced and unvoiced consonants was no longer expressed in writing, “t” and “d” are both represented by the graph (tanmarkaR “danmarkaR” Jelling Stone DR41). On Thror’s Map, Tolkien also uses the variant graph ound in the word “stand” hundhund as well as ound in the word “day” hundhund.

In the younger Danish futhark, the graph ize was used for both “i” and “e.” The ize-rune is used for “short e” [ɛ] as in “bed” baimaim, as well as the schwa [ə] in “the” am. Tolkien on Thror’s Map follows this usage, where he has “hwen” (when) hundhund and “the” am. For the “long e” sound [I], when it is written “ee,” Tolkien uses the character ound, see Thror’s Map, “feet” and “three” rana. The ound-rune in the Germanic futhark is transliterated “o” and pronounced [o], and in the Anglo-Saxon futhorc, it is transliterated “œ” and pronounced [o1–o1, I, ɛ] which doesn’t correspond well with Tolkien’s usage.
In addition, the graph \( \text{f} \) can be used for “gh” and “ph” when they sound like [f].

For “soft g” [dʒ] in words like “giraffe” see the footnote about the letter “j.”

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H

Also – Both the Germanic futhark and Anglo-Saxon futhorc have two forms for this graph H and ១. Germanic futhark – *hagalaz (hail, as in precipitation); Anglo-Saxon futhorc – hægl (hail, as in precipitation). The younger Danish futhark uses the graph # (َاُِر Haraldr as written on the Jelling Stone DR 42). On Thror’s map, Tolkien uses the double barred h-rune, e.g. “high” ṴIXH.

I

– Germanic futhark – *isaz (ice); Anglo-Saxon futhorc – is (ice). In the older futhark, this rune was used for the long-e sound [i]; in the younger Danish futhark, I is used for the sounds [i] and [e]. On Thror’s Map, Tolkien uses it for the diphthong [ai] “high” ṴIXH, the short-I sound [i] “with” ṴIH. In addition, the long-e sound [i] as in “machine” ṴIPHM (notice “sh” for “ch”) can be written with I; Tolkien uses “ee” Ṵ and "y" ១ to also express the long-e sound.

J

For Latin, Greek, and Hebrew, “j” is the consonant form of “i” (Iulia for Julia Lat. Iulia, Julia; Jason, Jason, Gr. Iaiov; Joshua, Joshua, Heb. יְהוֹשֻׁעְו Y’hoshua). Tolkien uses the graph J to transliterate both “i” and “j.” However, for the Germanic “j” [j] (O.N. jarl), it might be more accurate to use “y” [j] showing an etymological relationship between the German word “jahr” and the English word “year.” N.B. the Germanic futhark graph ᛠ *jēra- (year, good year, harvest).

For the actual “j” sound [dʒ], not derived from Latin, German, Greek, or Hebrew languages (the close sound which did exist in Old English near phoneme [dʒ] was represented orthographically as 'cg' or 'cȝ' N.B wecgas (Nom. Pl.) > wedges) could be approximated with “zh,” “dg,” “di,” or “dy.” Thus, Chinese “Zhou” ṴIXH, Egyptian King “Djet” ṴMMT and “hedge” ṴMMXM. Lastly, for the value of the “soft g,” the same issue arises as what is seen on Old English concerning “c” and “ch.” “Soft g” [dʒ] appears before the vowels “i” and “e” and there are two possibilities. First, the sound could be transliterated with “zh,” “dg” or “dy.” Second the graph X could be used regardless, which is possible since the cognates of “soft g” words in English are often “hard g” words in other languages, for example “Germania,” which in English has “a soft g” but has a “hard g” in Latin. Thus, “giraffe” XRFPPM or XRFFPPM.

Another sound difficult to write in runes is [ʒ] in rouge and genre, “zh” may suffice as in “Azure” either ʃNRM or just ʃNRM.
K

hk – I have followed Tolkien, using h to write the letter “c” and the graph hk – to write the letter “k,” for example “knocks” hkhkhk. See note to letter “c” for explanation of this graph.

L

l – Germanic futhark – *laguz (water, lake) or possibly *laukaz (leek); Anglo-Saxon futhorc – lagu (lake). This graph l is used by the younger Danish futhark (*lRlTR “Haraldr” as written on the Jelling Stone DR 42). On Thror’s Map, Tolkien uses the l–rune for the letter l, e.g. “last light” lllll.

M

m – Germanic futhark – *mannaz (Man); Anglo-Saxon futhorc – mann (man). In the younger Danish futhark, the graph m is used to write the value [m], which looks similar to the Germanic z-rune. On Thror’s Map, Tolkien uses the m–rune to write the letter m, e.g. “may” mmmm.

N

n – Germanic futhark – *naudiz (need); Anglo-Saxon futhorc – nyd (need, distress). This usage continues in the younger Danish futhark. On Thror’s Map, Tolkien uses the n–rune in the word “when” nnnn (for this spelling see, “wh” below). Thus, “Nightingale” nnnnn.

NG

The sound value [ŋ] was written in the Germanic futhark with the graph *ingwaz (Ingwaz, a god); This was modified in the Anglo-Saxon futhorc to µ ing (Ing, a hero). On Thror’s Map, Tolkien uses the µ–rune for the [ŋ], for example “setting” µµµµµ. N.B. use the g–rune if it is pronounced, thus “singer” ggggg, but “finger” ppppp.
O

 Rune O – Germanic futhark – *ōþila-/*œþala- (heritage, estate, possession); Anglo-Saxon futhorc – éðel (estate) [œ]. F Anglo-Saxon futhorc – ós ([a] god) [ô]. In the younger Danish futhark, ᚨ is used to represent [o] as well as [u], [y], [φ], and [w]. The Anglo-Saxon futhorc with some innovations preserved the full set of 24 Germanic futhark runes. However, in some cases these runes acquired new sound values due to Anglo-Frisian sound changes. The graph ᚨ “odal rune” is one of these cases. In the Germanic futhark it represented the sound [o]. As the “o” sound in the Anglo-Saxon system became expressed by ōs ᚢ, a derivation of ᚫ the “Ansuz rune,” the graph ᚨ became known as ēðel and used to express an œ sound [œ, φ]. It is attested only rarely in epigraphy.

For the “long e” sound [I] (but only when spelled “ee”), Tolkien used the character ᚨ, see Thror’s Map “feet” ᚱᚦᚦ and “three” ᚱᚱᛋ. However, on Fimbulfambi’s Map, Tolkien writes “of” as ᚪᚪ, but in the later letter to Katherine Ferrar, he has “of” as ᚱᛃ. On Thror’s Map, for the letter “o” Tolkien uses ᚢ, thus “Door” ᚢᛋ.

One can follow Tolkien’s us of ᚨ, for [o] on Fimbulfambi’s Map, which is probably based on the Germanic futhark. Tolkien assigned it with the value of [I] on Thror’s Map, since in Anglo-Saxon it represented the sound [œ, φ] and in modern English the “œ” in onomatopoeia is pronounced with the value of [I]. Using ᚢ for [o] would be just as sensible, but the graph ᚢ is close to ᚫ and ᚢ. Anyway, I have opted to use the graph ᚨ for various “o” sounds [o, œ, a, oo] “orange” ᚩ⻘吩, “of” ᚬᛋ, “boat” ᚬглас, “boy” ᚬᛋᛋ, “cow” ᚬᚪ, “cloth” ᚬᚪᚪ, “fork” ᚬᛁᚪ, “goose” (long double “oo” [u:]) ᚬᚪᛋ, “food” (short double “oo” [o]) ᚪᛋ, “good” ᚬᛋ, but if you so desire “onomatopoeia” ᚬᛋᛋᛋᛋᛋ. 🇺🇸

P

 Rune ᚯ – Germanic futhark – *þerþ- (meaning unclear, perhaps “pear-tree”); Anglo-Saxon futhorc – peorð (Unknown). In the younger Danish futhark where the difference between voiced and unvoiced consonants was no longer expressed in writing, “b” and “p” are both represented by the graph ᚯ (ᚷᛋᛋᛋᛋᛋᛋ “tanmarkaR but” O.N. danmarkaR bot, Jelling Stone DR41; ᚷᛋᛋᛋᛋᛋ “knupu” O.N. Gnupu, Sigtrygg Runestone DR4). On Thror’s Map, Tolkien uses the ᚯ-rune for [pʰ] and [p], e.g. “upon” ᚯᛋᚪ. 🇺🇸
For “ph,” sounding like [f], just use \( \mathcal{p} \), although \( \mathcal{C} \) may be less confusing for some words, “philosophy” \( \underline{\text{πιλοσφα}} \) or \( \underline{\text{φιλοσοφα}} \).

Q

The sound of the Latin latter Q (kw) should be written using CW \( \mathcal{K} \) (or KW \( \mathcal{H} \)), as Tolkien says in the passage above, “There was no rune for Q (use CW \( \mathcal{K} \)).”

R

\( \mathcal{R} \) – Germanic *futhark – *raidō (ride, journey); Anglo-Saxon futhorc – rad (ride). This usage is retained in the younger Danish *futhark. \( \text{Dr} \text{Tr} \text{Ki} \text{Nu} \text{Nu} \text{Nk} \text{R} \) “Harald the King” as written on the Jelling Stone DR 42). N.B. In the younger Danish *futhark the \( \mathcal{R} \) and \( \mathcal{H} \) sounds remained distinct, however on the final \( \mathcal{R} \) \( \mathcal{R} \) sound in the name \( \text{Dr} \text{Tr} \text{Ki} \text{Nu} \text{Nu} \text{Nk} \text{R} \), where one would expect \( \mathcal{H} \), Elmer Antonsen notes, “Since the trill after apicals must have been itself apical, it is not surprising to find PG (proto-Germanic) */r/ in this position designated by \( \mathcal{H} \). Over time, however, the usual practice came to be the designating of the reflexes of both */r/ and */z/ after apicals with \( \mathcal{R} \).” In modern English the sounds represented by the graphs \( \mathcal{R} \) and \( \mathcal{R} \), vary drastically from dialect to dialect.

The Roman apparently had a trilled r, which was called *littera canina* (the dog’s letter) by Persius, “Sonat hic de nare canina litera”\(^{69}\) That this letter resembled the snarling of a dog shows up in Vergil, where alliteration of the r sound represents the barking of Cerberus, the three headed dog guarding Hades. “Cerberus haec ingens latratu regna trifauci/personat adverso recubans immanis in antro./cui vates horrere videns iam colla colubri”\(^{70}\) As well as in Catullus, where his insult “bitch faced” is accompanied by the alliteration of the snarling r, “ruborem ferreo canis exprimamus ore.”\(^{71}\)

On *Thror’s Map*, Tolkien uses the letter r in “three” \( \underline{\text{P}\underline{\text{R}}\underline{\text{X}}} \) and “grey” \( \underline{\text{X}\underline{\text{R}}\underline{\text{M}}} \) and “door” \( \underline{\text{M}\underline{\text{F}}\underline{\text{R}}} \). There is evidence Tolkien would have used a trilled r before vowels, and in his own non-rhotic dialect, “dark is pronounced [\( \text{d}{:\text{a}:k} \)].

Anyway, the rolled r (trilled r) \( [\mathcal{R}] \) and rhotic r preceding a vowel (Alveolar approximant) \([\mathcal{R}] \) are used in the same place depending on dialect, and the orthography would be the same. Thus “rose” \( \underline{\text{R}\underline{\text{S}}\underline{\text{H}}} \). The same applies to the rhotic r, non rhotic r, and trilled r following a vowel, thus, “bird” ([\( \text{b}{:\text{e}:\text{r}}\text{d} \]] [\( \text{b}{:\text{a}:\text{r}}\text{d} \]), and [\( \text{b}{:\text{r}}\text{d} \]) \( \underline{\text{B}\underline{\text{R}}\underline{\text{N}}} \), “car” ([\( \text{k}{:\text{a}:\text{r}} \]), [\( \text{k}{:\text{e}:\text{r}} \]), and [\( \text{k}{:\text{r}} \]) \( \underline{\text{K}\underline{\text{N}}} \), “deer” ([\( \text{d}{:\text{i}:\text{r}} \]), [\( \text{d}{:\text{r}} \]), and [\( \text{d}{:\text{r}} \]) \( \underline{\text{M}\underline{\text{M}}\underline{\text{R}}} \), and “bear” ([\( \text{b}{:\text{e}:\text{r}} \]), [\( \text{b}{:\text{e}:\text{r}} \]), and

\(^{68}\) Antonsen, *Runes and Germanic Linguistics*, 306.

\(^{69}\) Persius, Sat. 1, 109.

\(^{70}\) Vergil, Aeneid VI 417-19.

\(^{71}\) Catullus, Carmina 42.
RUNES

[ber]) ♀♂♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀♀┉

“Uniform” ðhiprm, [(j)] “Walcyrie” þrm.

V
Words with the letter “v” derived from Latin, ñ “u” should probably use the ù-rune for “v”. In Latin, the graph V (a stemless variation of upsilon Y) was borrowed from the Greek alphabet (either directly from the Western Greek alphabet or from the Etruscan alphabet as an intermediary). This graph represented the vowel [u] sound, as well as the consonantal [w] sound. From the first century CE, in Vulgar Latin the [w] sound evolved into the [v] sound. In this respect, Tolkien’s argument for the use of the ù-rune in the words with “v” is etymologically sound. However, in words derived from the Germanic, the ð-rune might be better, thus Valkyrie (O.N. Valkyrja, O.E. Wælcyrie) “Walcyrie þrm.

On Thror’s Map, Tolkien uses ù-rune for the letter “v” where, based on Germanic etymology, he should have probably used an f-rune, e.g. “five” þfim (Old English fif; Proto-Germanic *fimfe) For words derived from Old English and not Latin, the graph þ is a more appropriate choice than using the ù-rune. This relationship can be seen in the words “fox” (O.E. fox and M.E. fox and vox), “vixen” (O.E. fyxe), and raven (O.E. hraefn).

W
þ – Germanic futhark – *wunjō (joy); Anglo-Saxon furh – wynn (joy), written as the letter wynn (þ, p) in the Old English Alphabet. In the Germanic and Anglo-Saxon systems the þ-rune represented the sound [w]. In the younger Danish futhark, the ù-rune, ñ, was used for the consonant sound [w]. On Thror’s Map, Tolkien uses it for the sound [w], e.g. “with” þþþ.

WH
On Thror’s Map, Tolkien spells the word “when” as “hwen” þþþ, which is etymologically sound as the Anglo-Saxon for “when” is hwenne, hwænne, hwonne. This practice can be used for other words derived from the Germanic that have the wh sound, such as “what” (O.E. hwæt) and “narwhal” (Old Danish: narhval), thus “hwæt” þþþ and “narwhal” þþþþþ.

X
Originally, in the Germanic futhark, the graph þ (?*algiz, unclear, possibly “elk”) stood for the value [z]. In the younger Danish system, due to phonological changes, this graph, now turned upside down ȝ, came to represent a sound with an increasingly more r-like quality and is now transliterated as R (for this sound, see the note for R above).
addition, in the younger Danish *futhark*, the graph  was used to write the value [m]. However, in the Anglo-Saxon *futhorc*, the graph  became eolh (elk-sedge), and stood for the value [ks], which was used in Latin words with “x.” As such this graph could stand for the “x,” in “fox.” However the [ks] sound could just be transcribed phonetically, thus, O.E. *fox*, ipa [ks]. Following the Anglo-Saxon, Tolkien, in his introduction to the Hobbit, wrote, “On the Map all the normal runes are found, except for X .”

In addition, there is the possibility, when “x” is not used for the [ks] sound, of transcribing this letter phonetically, thus using “z”  for words like “xenophobe”  and “hs”  can be used “sh” sound, as in Chinese “Xia” or Mayan Xibalba or Xbalanque, as well as “h” or for some Spanish words, e.g. “Oaxaca”.

A modified u-rune  (yr ‘bow’) was created for [y] and was put in the 27th position of the Anglo-Saxon *futhorc*, and is apparently a combination of the two runes  and . Tolkien uses  for both consonant y and vowel y, thus from the dustjacket of *The Hobbit*, Tolkien has “years journey” (Notice Anglo-Saxon ea-rune  being used in years). However, in Anglo-Saxon,  was used for the vowel sound [y] as in French "tu" or German "Bücher,” so Tolkien’s use for consonant y [j] in “years” and the [i] in “journey” is anachronistic. Anyway, for lack of a better method, it works nicely, thus “yak” and “monkey”.

Originally, in the Germanic *futhark*, the graph  (*algiz, unclear, possibly “elk”) stood for the value [z]. However, in the Anglo-Saxon *futhorc*, this graph became eolh (elk-sedge), which stood for the value [ks] used in Latin words with “x.” The graph  does appear as a variant of  in some Germanic *futhark* inscriptions. In the Cotton Codex Domitian A. ix,  is one of four runes added to the traditional *futhorc*, but stands for the letter “k.” The letter “z” enters English through French and Latin, and O.E. would represent the sound [z] and [s] with the letter “s.” Tolkien notes there isn’t any graph for the letter Z – “There was no rune for Q (use CW ); nor for Z (the dwarf-rune  may be used if required),” which seems to be a compromise using both the Germanic *futhark* and Anglo-Saxon *futhorc* versions, and thus this is his own creation. Anyway, artificial as it is, I have followed Tolkien, therefore – “zebra”.

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72 “y is clearly a ligature consisting of an i within a u.” Antonsen, *Runes and Germanic Linguistics*, 399.
Appendix: Chart for writing Modern English with Roman Letters, Runic Equivalents, IPA Equivalents, and Examples

a ℞ [æ, a, ei] “apple” E̴E̴E̴E̴E̴
b ℸ [b] “bear” E̴M̴F̴R̴
c ℸ [k] “cat” K̴E̴T̴
d ℸ [d] “duck” M̴N̴N̴N̴N̴
e ℸ [e, ɛ, ə, I] “elephant” M̴R̴M̴P̴E̴T̴F̴T̴
f ℸ [f, v] “fox” Y̴S̴H̴N̴ or Y̴S̴Y̴
g ℸ [g] “girl” X̴R̴T̴
h ℸ [h] “hen” N̴M̴T̴
i ℸ [i] “iguana” I̴X̴N̴E̴F̴E̴
j [dʒ] “jaguar” E̴F̴X̴N̴E̴F̴E̴ or N̴X̴E̴F̴N̴E̴F̴E̴ and “giraffe” M̴X̴R̴F̴P̴P̴P̴M̴ or X̴R̴F̴P̴P̴P̴M̴
k ℸ [k] “kangaroo” H̴F̴E̴X̴F̴R̴E̴S̴S̴
l ℸ [l] “leopard” R̴M̴S̴C̴E̴R̴M̴
m ℸ [m] “mouse” M̴O̴N̴H̴M̴
n ℸ [n] “Nightingale” T̴X̴N̴A̴N̴T̴X̴E̴R̴M̴
ng ℸ [ŋ] “thing” P̴H̴X̴ and “finger” P̴E̴X̴M̴R̴
o ℸ (ɔ) [ɔ, ə, a, ʊ] “orange” S̴R̴E̴F̴X̴M̴ or F̴R̴E̴F̴X̴M̴
p ℸ [p] “purple” T̴N̴R̴C̴E̴T̴M̴
q ᚲ (ᚱ) [θ, δ] “queen” ᚴᚴᚴᚴᚴ or ᚴᚴᚴᚴ

r ᚱ [r] “rose” ᚵᚴᚴ

s ᛇ [s,z] “snake” ᚳᚴᚴᚴ

sh ᛖ [ʃ] “shine” ᚵᛁᚴᚴ

t ᛏ [t] “turtle” ᚴᛁᚴᚴ

þ (th) þ [θ, ð] “thrush” ᚴᚴᚴᚴ

u ᚴ [u, o, y, ø, w] “umbrella” ᚵᛒᚴᚴᚴᚴ

v [v] “victory” ᚴᛁᚴᚴ and “raven” ᚴᚴᚴ

w ᚣ [w] “water” ᚴᚴᚴ

wh (hw) “narwhal” ᚴᚴᚴᚴᚴ or ᚴᚴᚴᚴᚴ

x (ᚯ, ᚱ) [ks] “foxes” ᚳᚴᚴᚴᚴ or ᚴᚴᚴᚴ

y ᛈ [j, i] “yak” ᚴᚴ or “monkey” ᚴᚴᚴᚴᚴ

z ᚺ [z] “zebra” ᚴᛒᚴ
Bibliography


