Runes: Notes on Orthography and Pronunciation, with Some Thoughts on Using Runes to Write Modern English

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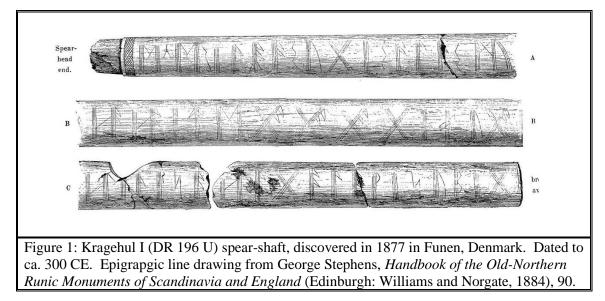
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Bibliography

I. History of Runes, Orthography, and Pronunciation

A. Futharks and Futhorcs

1. Older or Germanic *futhark* (*fupark*)



According to epigraphic evidence, the oldest Germanic script, the so-called older *futhark*¹ or Germanic *futhark*, a runic script of twenty-four letters, was used in northern Europe from ca. 200 CE to ca. 750 CE.² This "alphabet" is called the *futhark* (or *fubark*) 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.³ 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.⁴

¹ This script is often called the elder *futhark*, but here I follow Bengt Odenstedt, Elmer H. Antonsen, and Raymond Ian Page who all call it the older *futhark*. See Bengt Odenstedt, *On the Origin and Early History of the Runic Script: Typology and Graphic Variation in the Older Futhark* (Uppsala: Almquist & Wiksell, 1990), 11; Elmer H. Antonsen, *A Concise Grammar of the Older Runic Inscriptions* (Tübingen: Max Niemeyer Verlag, 1975), 1; R. I. Page, "Quondam et Futurus (1994)," in *Runes and Runic Inscriptions: Collected Essays On AngloSaxon and Viking Runes* (Suffolk UK: The Boydell Press, 1999), 9.

² Bengt Odenstedt, On the Origin and Early History of the Runic Script, 11.

³ R. I. Page, *Runes: Reading the Past.* (Berkeley: University of California Press, 1987), 18.

⁴ McKinnell, Simek, and Düwel, Runes, Magic and Religion: a Sourcebook (Wien: Fassbaender, 2004), 11.

Table 1 shows 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.⁵

Tabl	le 1: G	lerman	nic Futi	hark (Older <i>I</i>	Futhark)	
F	Ν	Þ	۴	R	<	Х	Þ
f	u	þ	а	r	k	g	W
Ν	*	I	\leq	1	ľ	¥	5
h	'n	i	j	ï ⁶	p	z(R)7	S
\uparrow	R	М	\bowtie	Ν	\diamond	M	\diamond
t'	⊳ b	e	m	l	у ⁸	d d	o

The twenty-four runes were divided into three groups, known as 'families' in Old Norse (*ættir*, singular *ætt*, fem.),⁹ 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.¹⁰ As the proto-Germanic names of each rune in the older *futhark* are difficult to establish with any certainty (see table 2), I shall generally refer to runes as the **r**-rune or **k**-rune. There are about 250 extant inscriptions written in the older *futhark*, and most have been found in Denmark, Norway, Sweden, Germany, Frisia, and England.¹¹

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 the Anglo-Frisian area, and one in Scandinavia.

⁵ On the transliteration system, see Bruce Dickins, "A System of Transliteration for Old English Runic Inscriptions" *Leeds Studies in English* 1 (1932), 15-19; On the order of the *futhark*, see Bruce Dickens *Runic and Heroic Poems of the Old Teutonic Peoples* (Cambridge: Cambridge University Press, 1915), x; R.I. Page, *An Introduction to English Runes* (Rochester: Boydell Press, 1973), 43.; see also Odenstedt, *On the Origin and Early History of the Runic Script*, 11; Elmer H. Antonsen, *Runes and Germanic Linguistics* (Berlin: Mouton de Gruyter, 2002), 43; McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 22. ⁶ Also transliterated as *á*, see Antonsen, *Runes and Germanic Linguistics*, 43.

⁷ In Scandinavia, this rune represents the palatal r (transliterated as \mathbf{R}).

⁸ Also transliterated as ng, see Antonsen, *Runes and Germanic Linguistics*, 43.

⁹ McKinnell, Simek, and Düwel, Runes, Magic and Religion, 27.

¹⁰ Antonsen, Runes and Germanic Linguistics, 43.

¹¹ Odenstedt, On the Origin and Early History of the Runic Script, 12.

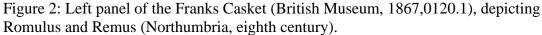
	Rune	Transliteration	IPA	Proto-Germanic Name (Reconstructed)	Meaning
First	ætt		•		
1.	F	f	[f]	*fehu	wealth
2.	N	u	[u, uː]	*ūruz	aurochs
3.	Þ	þ	[θ, ð]	*þurisaz	giant
4.	1	а	[a, aː]	*ansuz	[an] Æsir
5.	R	r	[r]	*raidō	ride
6.	<	k	[k]	?*kaunan	sore, boil
7.	Х	g	[g]	*gebō	gift
8.	₽	w	[w]	*wunjō	joy
Seco	ond ætt				
9.	Ν	h	[h]	*haglaz	hail (precipitation)
10.	+	n	[n]	*naudiz	need, compulsion
11.		i	[i, iː]	*īsaz	ice
12.	\leq	j	[j]	*jēran	year, harvest
13.	Ľ	р	[p]	?*perþō	?
14.	1	ï, ǽ	[æː]	*īwaz	yew tree
15.	Y	z/R ¹³	[z]	*algiz	elk?
16.	(٤) ک	S	[s]	*sōwilō	sun
Thir	d ætt			n	n
17.	\uparrow	t	[t]	*Tīwaz	Tyr
18.	₿	b	[b]	*berkanan	birch
19.	Μ	e	[e, eː]	*ehwaz	stallion
20.	Μ	m	[m]	*mannaz	man
21.	1	1	[1]	*laguz	lake
22.	\diamond	ng, $\hat{\mathbf{ng}}(\mathfrak{g})$	[ŋ]	*Ingwaz	Ing
23.	\bowtie	d	[d]	*dagaz	estate, ancestral property
24.	\Diamond	0	[o, oː]	*ōþilan	day

Table 2: The Germanic Futhark (Older Futhark)¹²

 ¹² Based on McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 22.
 ¹³ The rune Algiz, which was apparently pronounced as 'z' during the ancient Germanic period, gradually became pronounced as 'r.'

2. Development of Anglo-Saxon Runes





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 *fuborc*) 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.¹⁴

Below is the Anglo-Saxon *futhorc* with standardized runes along with transliteration.¹⁵ The first 28 runes are found in the earliest versions. Runes 29-31 are found in later Northumbrian inscriptions.

¹⁴ Antonsen, Runes and Germanic Linguistics, 50.

¹⁵ 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, 'fuborc'. This method differs from representing continental and Scandinavian inscriptions, commonly transcribed in bold type lower-case Latin letters, thus **fuporc**. 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.

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Tab	le 3	Anglo	o-Saxo	on <i>Fut</i>	horc										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
r	Λ	Þ	4	R	ĸ	Х	P	Ħ	+	1	*	1	K	Y	И
f	u	þ	0	r	c	g	W	h	n	i	j	$\widehat{\mathbf{eo}}^2$	¹⁶ p	X	S
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
1	B	Μ	M	7	X	М	Ŷ	۴	F	V	¥	X	λ	Ж	
t	_	e	m	1	ŋ		æ			У	ea		k	Ā	
-	~	-		-	J	•••				J	200	8			

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 \mathbf{F} (*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, \mathbf{F} (*ac* 'oak') was devised for the vowel [a], and stood in the 25th place. The old **o**-rune $\mathbf{\hat{X}}$ (now called *éðel* 'estate') came to be used for the sound [æ]. A new rune, another modified form of the **a**-rune, $\mathbf{\hat{F}}$ (*ós* 'rivermouth') 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 $\mathbf{\hat{k}}$ (*yr* 'bow') was created for [y] and was put in the 27th position, and is apparently a combination of the two runes **l** and $\mathbf{\hat{k}}$.¹⁷ Lastly a new rune $\mathbf{\hat{T}}$ (*ear*, ?grave) was devised for the dipthong [ea] and was placed in the 28th position.¹⁸ 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 Northumbian inscriptions, up to three more runes are added to represent the velar consonants k (\bar{k}) and g (\bar{g}). The palatial 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 represented by the new runes λ (\bar{k} , velar k) and λ (\bar{g} , velar g).¹⁹ The form for λ is either taken from the old **R**-rune, which had become redundant with the disappearance of the

¹⁷ "y is clearly a ligature consisting of an i within a u." Antonsen, *Runes and Germanic Linguistics*, 399.

¹⁶ Transliterated as 3 yogh by Page, "The symbol 3 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 **ï** in McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 24-25.

¹⁸ Antonsen sees this as being derived from the OE a-rune or o-rune, See Antonsen, *Runes and Germanic Linguistics*, 340.

¹⁹ McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 19.

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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.²⁰ The last

rune \mathbb{X} only appears on the Ruthwell cross, but is not attested in any manuscripts. It represents a more subtle variant of the velar k (\bar{k} , but here for a back consonant preceding a front vowel)²¹ in the word *cyning* "king."

In addition, there are also other runes that only appear in manuscripts, the socalled *runica manuscripta*. R. I. Page refers to these as pseudo-runes.²² The Germanic *futhark* letter \checkmark (*jeran [j]) developed into the Anglo-Frisian character \ddagger ger [j], and this is attested in surviving epigraphic sources. However, in the later *runica manuscript, ger* was written as \blacklozenge , which is not found in epigraphic sources. In these same manuscripts, the original graph for ger, the \ddagger -rune was then was placed in the 29th position and given the name *ior* 'eel,' and stood for the dipthong [io].²³ This **io**-rune is not attested in epigraphic sources. Another rune the \$ is found in *runica manusripta*, but is not attested in epigraphical *futhorc*.²⁴ Lastly, there is a curious rune called *cweorð* which is only found in *runica manuscripta* and is variously written as \intercal (however, it differs from the **ea**-rune, by having it's lateral strokes more developed)²⁵ or \checkmark , which apparently derives from a variation on the **p**-rune.²⁶ According to Page, *cweorð*, which stood for 'kw' is a word of unknown meaning, and was "probably a rhyme for *peorð* which would immediately precede it in a runic ABC."²⁷

²⁰ McKinnell, Simek, and Düwel, Runes, Magic and Religion, 19.

²¹ Page, An Introduction to English Runes, 45-51; Odenstedt, On the Origin and Early History of the Runic Script, 141; McKinnell, Simek, and Düwel, Runes, Magic and Religion, 19.

²² Page, An Introduction to English Runes, 42.

²³ Page, An Introduction to English Runes, 79.

²⁴ Page, *An Introduction to English Runes*, 43. "'st' forms, in two variant types, have been identified on Frisian Westeremden B stave, but the reading is uncertain, and modern runic scholars have rejected it." Page, *An Introduction to English Runes*, 50n4. McKinnell, Simek, and Düwel refer to this rune as an "Additional Frisian Rune," McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 25.

²⁵ The form in London British Museum, Cotton MS Domitian A.ix (saec. XI). R. Derolez, *Runica Manuscripta: The English tradition* (Brugge, De Tempel, 1954.), 14.

²⁶ The form is found in two manuscripts, both of which according to Derolez, were based on a single original source. The Oxford, St. John's College MS. 17 (saec. XI ex./XII in.) and the British Museum, Cotton MS Galba A.ii (saec XI/XII ?), which was damaged in a fire and is known through Wanley's account and Hickes's facsimile, see Derolez, *Runica Manuscripta*, 27-47.

²⁷ Page, An Introduction to English Runes, 85-86.

	Germanic Futhark Rune	Anglo-Saxon	Translit- eration	IPA	Name	Meaning
1.	<i>Futhark</i> Rune	Rune V	f	[f] [v]	feoh	wealth
				[f], [v]	ūr	aurochs
2.	N.	N	u L X J	[u], [u:]		
3.	Þ	Þ	þ, ð, th	[θ], [ð]	þorn	thorn
4.	$\mathbf{F} = \mathbf{a}$	4	ó	[0]	ós	mouth
5.	R	R	r	[r]	rād	riding
6.	<	K	с	[k], [k ^j]	cēn	torch
7.	Х	Х	3 yogh	[9], [j]	gyfu	gift
8.	P	P	w, p	[w]	wynn	joy
			wynn			
9.	Н	H, later Ħ	Н	[h], [x]	hægl	hail
10.	ł	ł	n	[n]	nyd	need
11.	1	1	i	[i]	īs	ice
12.	\$	tor ♥	j	[j]	gēr	year, harvest
13.	1	1	eo	[eo]	ēoh	yew-tree
14.	۲	K	р	[p]	peorð	?
15.	Y used for z/R	Y used for x	Х	[ks]	ēolhx	?elk
16.	5	h or V	S	[s],	sigel	sun
17.	1	1	t	[t]	Tīr, Tiw	Tyr
18.	₿	₿	b	[b]	beorc	birch tree
19.	M	Μ	e	[e]	eh	stallion
20.	M	М	m	[m]	mann	man
21.	7	1	1	[1]	lagu	lake
22.	\$	×	ŋ	[ŋ]	ing	Ing
23.	$\hat{\mathbf{x}}$ used for o	\$ used for $$$ æ	œ	[œ, ø]	ēðel	estate
24.	M	М	d	[d]	dæg	day
25.		۴	a	[a]	āc	oak
26.		7	æ	[æ]	æsc	ash-tree
27.		M	у	[y]	ŷr	?bow
28.		٣	ea	[ea]	ēār	? grave

Table 4: Anglo-Saxon Futhorc²⁸

²⁸ Based on McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 24-25.

Tables 5-7. Additional Anglo-Saxon Runes, numbering is based on the London, British Museum, Cotton MS Domitian A.ix (sac. XI).

	Germanic	Anglo-Saxon	Translit-	IPA	Name	Meaning
	Futhark Rune	Rune	eration			
29.		*	ia, io	[io]	ior	eel
30.		¶or ↓	kw	[kw]	cweorð	?
32.		🛱 or 🕅	st	[st]	stān	stone

 Table 5. Anglo-Saxon Runes found only in runica manuscript

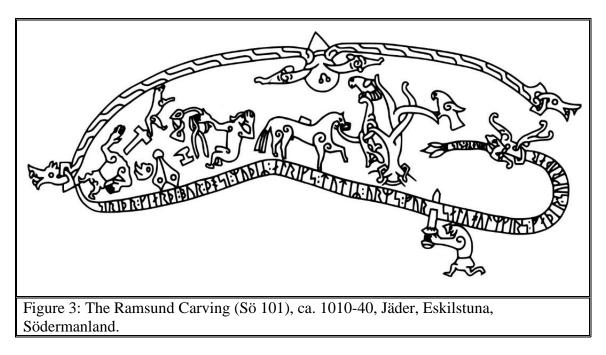
Table 6. Northumbrian additions to Anglo-Saxon Runes, found in both *runicamanuscript* and epigraphically.

	Germanic Futhark Rune	Anglo-Saxon Rune	Translit- eration	IPA	Name	Meaning
31.		¥	Ā	velar k	calc	?chalice, ?chalk
33.		×	ġ	velar g	gār	spear

Table 7. Northumbrian additions to Anglo-Saxon Runes, not attested in *runicamanuscripta*, but found epigraphically (Ruthwell Cross).

	Germanic Futhark Rune	Anglo-Saxon Rune	Translit- eration	IPA	Name	Meaning
(34)		Ж	k	[kk]	?	?

3. Younger *Futhark*



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. The first is often called 'Danish runes,' which more correctly should be called 'long-branch runes.'²⁹ From the ninth century onwards, the second variation, the so-called 'Norwegian-Swedish runes', better known as 'short twig runes' were developed.³⁰ 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.³¹ 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, the sounds for "b" and "p" are both represented by the B-rune, both sounds therefore being transliterated as **b**).

²⁹ McKinnell, Simek, and Düwel, Runes, Magic and Religion, 17.

³⁰ McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 17-18.

³¹ McKinnell, Simek, and Düwel, *Runes, Magic and Religion*, 18.

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Table 8. Younger Danish	Futhark		
Danish Runes	₽NÞŧRY	*1174	£8₩1¥
Norwegian-Swedish Runes	₽NÞFRY	+	1¢†ľı
Sound Values	fuþąrk	hnias	tbmlr

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 *fubarks* 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.³²

³² Antonsen, Runes and Germanic Linguistics, 50.

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130				
Rune	Scandinavian and Gothic variants	Continental variants	English variants	Frisian variants
u	$\land \square \land \square \land \square$	$\land \Box \Box \Box \Box \Box \Box \Box$	$\square \square \land$	$\Lambda \Lambda$
þ	Þ Þ � Ď D	ÞÞ	ÞÞ	Þ
r	RARRA	RRTR	RNNNR	AR
k	< c [,] < , , , , , , , , , , , , , , , , , ,	$< c < \land \circ$	< ^ \	Y
w	P P P P D	PP	PP	\triangleleft
h	ΝH	ΝΗ	ΗR	Ħ
n	\	+	* <i>*</i>	+
j	<>> < <> <> <> <> <> <> <> <> <> <> <> <	4 4 2 4	ł	-
1	1	1	1	
р	K A	$\square \square \flat $	₹ ? Þ	_
r (z)	$\forall \downarrow$	ΥX	Ϋ́	5
s	5 \$ \$ \$ \$ 4 4	5 	534Y	}
Ь	8 B B B B B B	₿₿₿₿	BBBB	
e	ППММ	Μ	Μ	Μ
ŋ	$ \diamondsuit, \square (=y); \diamondsuit, \diamondsuit, \diamondsuit, \uparrow, \\ \Diamond (=iy) $	♦ (= <i>iŋ</i>)	X	_
d	⋈⋈⋈;;∞;[MM	$\bowtie \bowtie \bowtie$	Χ
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³³This 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.³⁴ Three of these are shown below.

1. Kylver stone (early 5th century, Gotland)³⁵

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.



The runes in the transcription are somewhat standardized, but it should be noted that in the original inscription the **a**-rune and **b**-rune are retrograde. The **s**-rune is a common variant, and on the **z**-rune (**R**-rune), the forked part is facing down.³⁶ Below is a facsimile of the inscription³⁷ and a photograph of the stone showing the inscription.



³⁴ Antonsen, *Runes and Germanic Linguistics*, 176-179.

³⁵ Elmer H. Antonsen, A Concise Grammar of the Older Runic Inscriptions (Tubingen: Max Niemeyer, 1975), 47.

³⁶ See Odenstedt, On the Origin and Early History of the Runic Script, 87-92, and Runic Variants, Table 6.

³⁷ Sigurd Agrell, *Lapptrummor och Runmagi* (Lund: C.W.K. Gleerups Förlag, 1934), 7.

2. 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 **á**-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.



This transcription has been mostly standardized. It should be that the **p**-rune is represented by a rounder version of the **b**-rune. The \acute{a} -rune is retrograde, and on the **z**-rune (**R**-rune), the forked part is facing up.³⁸ Below is a facsimile of the original inscription³⁹ and a drawing of the Vadstena Bracteate.⁴⁰



³⁸ Elmer H. Antonsen, A Concise Grammar of the Older Runic Inscriptions, 72.

³⁹ Sigurd Agrell, *Lapptrummor och Runmagi*, 8.

⁴⁰ Sigurd Agrell, *Lapptrummor och Runmagi*, 12.

3. The Grumpan Bracteate (early 6th century)⁴¹

The Grumpan Bracteate is a gold C-bracteate found in Västergötland, Sweden in 1911. Each *ætt* are separated by a row of dots. The transcription of the Runic inscription is standardized. In the original inscription, the *é*-rune is retrograde.

fuþarkgw......hnij æp......tbemlng od......

Below is a facsimile of the inscription⁴² and photo.⁴³



⁴¹ Elmer H. Antonsen, A Concise Grammar of the Older Runic Inscriptions, 72.

⁴² Sigurd Agrell, *Lapptrummor och Runmagi*, 8.

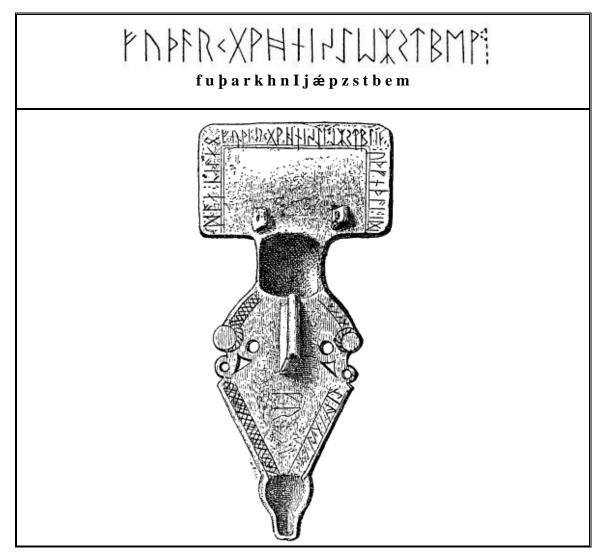
⁴³ Sigurd Agrell, *Lapptrummor och Runmagi*, 13.

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.

1. Charnay Fibula

Below is a drawing of the Charnay Fibula (6th century),⁴⁴ discovered in 1857, in Soane-et-Loire, Burgundy. The inscription lists the first twenty letters of the older *futhark* in sequence, which is incomplete, apparently, the rune master ran out of space.⁴⁵



⁴⁴ Sigurd Agrell, *Lapptrummor 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.

2. Breza Marble Column

The Breza Column, found in Breza, north of Sarajevo, and dated to the 6^{th} 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.⁴⁶ 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.



⁴⁶ Tineke Looijenga, Texts and Contexts of the Oldest Runic Inscriptions (Leiden: Boston, 2013), 61.

D. The Anglo-Saxon *Futhorc*

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

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

⁴⁷ Derolez, *Runica Manuscripta*, 1.

⁴⁸ Sigurd Agrell, *Lapptrummor och Runmagi*, 10.

E. Runica Manuscripta: The English Tradition

In addition to these, 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.ix (11th century)

2) Cotton MS. Otho B.x

3) Cotton MS. Galba A.ii

4) Oxford, MS. St John's College 17

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

1) Vienna MS. 795

2) St. Gall MS. 878

1. Runica Manuscripta: The English Tradition

According to Derolez these manuscripts do not represent different traditions.⁵¹ George Hempl has a discussion on the intertextuality, showing that the mistakes in one manuscript are carried over by copyists into other manuscripts.⁵² Cotton MS Otho B.x, known only from a facsimile in Hicke's *Thesaurus*, is apparently dependent (at least in the facsimile) on Cotton MS Domitian A.ix.⁵³ Cotton MS Galba A.ii and Oxford MS St. John's College 17 are also very closely related.⁵⁴

⁴⁹ Derolez, *Runica Manuscripta*, 1.

⁵⁰ Derolez, *Runica Manuscripta*, 1-89 looks at nine manuscripts in total 1) Vienna MS. 795, 2) Brussels MS. 9311-9319, 3) Brussels MS. 9565-9566, 4) St. Gall MS. 270, 5) Vatican MS. Urbin. 290, 6) Trier MS. R. III. 13, 7) Salzburg MS. a. IX. 32, 8) St. Gall MS. 878, 9) Ghent MS. 306.

⁵¹ Derolez, Runica Manuscripta, 2.

⁵² George Hempl, "Hickes's Additions to the Runic Poem," *Modern Philology* 1 No. 1 (1903): 134-141.

⁵³ George Hempl, "Hickes's Additions to the Runic Poem," Modern Philology 1 No. 1 (1903), 134-141.

⁵⁴ Derolez, *Runica Manuscripta*, 2.

1) Cotton MS Domitian A. ix (11th century)

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



Here is a facsimile of the *futhorc* according to Cotton MS. Domitian A.ix.⁵⁵

feoh. un. dorn of pad cen gifu pen Hegelnezd me geur ligel peord flig F. N. P. F. R. H. X. P: N. I. P. J. J. Y. Y. F. U. D. O. P. C. J. W. H. N. 1. 38 00 P. X. Y orent. cur. iolx. z. et cale. cpeoper. cole. rean. 30p

⁵⁵ From Derolez, *Runica Manuscripta*, 9.

RUNES

HEAT 11 21 citt.

Below is a photo of the *futhorc* in Cotton MS Domitian A.ix.

The *futhorc* from Cotton MS Domitian A.ix, as recorded in Hickes's *Thesaurus*.⁵⁶

11. Extat & altera literarue a cadem bibliothecs, (Domit			
Feoh. up. Sorn.of. pad.c	en.grfu.pen. liegel.	nead. eac. geor.	figel. peopo.
K. N. p. P.R.1	זי¥∙X∙P	: +· 1· •·	J. L. Y.R.
F. u. d. o. p. e	. .	n. 1. Te.	0. p. r. r
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	ALL A N	A A WAY	a ini l
TMMJT	X. W. S. F	F.A.T.	*.4.1
	X H R F	F. A. T.	* W.A
T.B.M.M.F.	X. N. R. F ng. B. or. a	·F.A.T.	* .W.A
T.B.M.M.F.	X. N. R. F ng. B. or. a	·F.A.T.	¥. W. A io. q. K.
T.B.M.M.F.	X. N. R. F ng. B. or. a	·F.A.T.	∦. №. ff io. q. K. iori h.hegel.1grando.
T.B.M.M.F.	X. N. R. F ng. B. or. a	·F.A.T.	¥. W. A io. q. K.
T.B.M.M.F.	X. N. R. F ng. B. or. a	. F. A. Y. ean. untia, manu recenti g.g ifu.i.grahà. d.deg.t.dies. n.ar.t.reverentia.	K. M. M. io. q. K. h.hegel.igrando. th.thorn.i.spina. ae.aesc.ifraxinus.
T.B.M.M.F.S E.b. E.m.L.	K. H. R. F nz. S. OE. A Sequ f. feoh: 1. pecunia. c. ethel. 1. patria. m.manzel mannuhomo. eageanvel ear. 1. añus.	. F. A. Y. untia, manu recent g.g ifu.i.grahà. d.deg.i.dies. n.ar.i.reverentia. IT velz, Itanilapis.	K. M. M. io. q. K. h.hegel.igrando. th.thorn.i.spina. ae.aesc.ifraxinus.

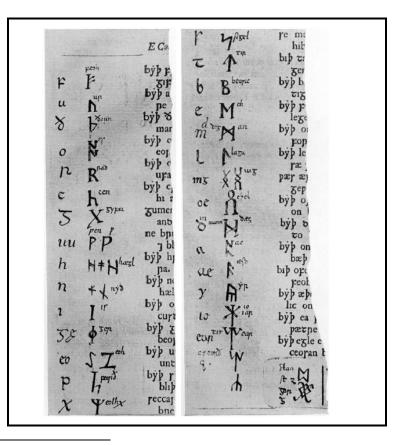
⁵⁶ George Hickes, *Linguarum Vett. Septentrionalium Thesaurus Grammatico-Criticus et Archæologicus* (Oxoniæ: e Theatro Sheldoniano, 1705), 136.

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*.



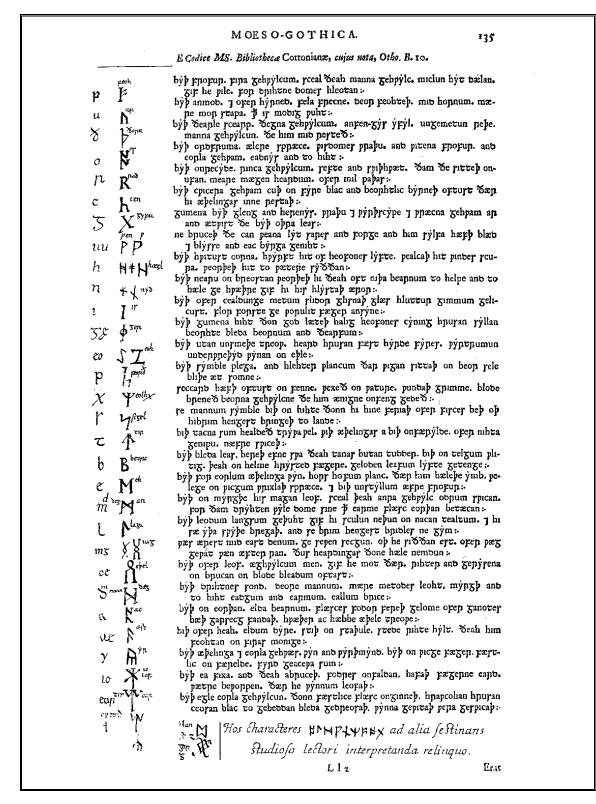
The *furthorc* from the Anglo-Saxon *Rune Poem* with sound values from Hickes's *Thesaurus*.⁵⁸



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 Thesaurus⁵⁹



⁵⁹ Hickes, *Thesaurus*, 135.

3) Cotton MS. Galba A.ii

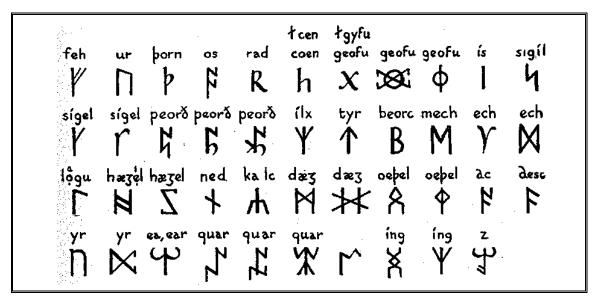
Cotton MS. Galba A.ii was destroyed by in 1865, but the following *futhorc* is reprinted in Hickes's *Thesaurus*.⁶⁰

os rad een gyfu wyn hegil feoh þorn ur ' 2 R Þ Ь X ned gyr eth peoch eolhx sigel tir ís beorc ĸ man lagu mg dæg eðel eðel eoh ac æsc М ጽ X calc querd for stan qar ear Z K

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 (1st decade 12th century, Thorney Abbey, a Benedictine monastery in Cambridgeshire), also called The Byrhtferth's Manuscript, has the following *futhorc*.⁶¹



On the following page is a photo of the original page from the website *The Calendar and the Cloister*, in which the entire manuscript is reproduced.⁶²

⁶¹ Scan taken from Derolez, *Runica Manuscripta*, 39.

⁶² Image found at *The Calendar and the Cloister*, a scholarly resource devoted to the Oxford MS. St John's College 17. <u>http://digital.library.mcgill.ca/ms-17/folio.php?p=5v</u>, Copyright © 2007, McGill University.

RUNES

6 22 A Alamon K n B 19 1 V Feb F + Sitobash ł Q.b c なら 6 X 5 n D Π.ur: of Carbu 11 BLHM 7 R 下任 EGG 1 por e. 11.1 P.III puf. 9 Lache E al GI B 3 Hb 30 11 3 Delfor G + 340 木 R * b Rind Þ P Tf £ H. Cforthu IGGE h 0011 R 25 4 4~ A Eonurhat V 恋 x bag 5 - R 44 A Formedan y b 105 4 h x 12. Stofu 322 K 9: C. Garton until sees \$ mate 1 đ ころん 32 * 4 Fir th C Garfou Y 111 15. N N RI 4 51 M 13 hedmu 3 A 5 4 Sigel Par: R 个 ay m 12 bedinu V figel Arin Ŧ 111 6 YXP B 6 en 1 Johana Blow 米いい木 P Turt 11 WAL-XX, K poorts Pmander M 000 4. Kandsu fat r 1 ¢ 9, 75 karetne Moor N 2 20 N provid TTR 占 3 8 A Lechfu 1 51 1 69 L' pard æ 4-ー t PLT P 100 Malarta N Lut Wilk. 123 S. Malarte Jud 225 FL N dd r A was CAS Tris NT Ý5 10 8 BA B Lant 0 × Ro = AN Dabaloch oc. Bç B Mmode PD a 10 N O Uzerhe a S Chontech 4 日 CDC Vich 2,× 手作 1 H 2 11 D Z DE Diech 7S × F 8 at H St Playetigen Λ FE Tien £* prict. BP 1 A 4 TA A 6 £ F Hhard 4 Â z G Saladry Shered GB 6 YK * 5 R C Salarhe FT b to ud bi 400 XS 四小 X Invaliat H 24 4 KI to has lo N Phoehanso Linor 1 R I R k Mary lo. 2 Tipelamat Min 个 L M L Ht Sats 1 6 开し = n 19 M. P. M. Ajocha 2 ENV 9 JEachard bé CTTTC. 19 HOM Wircham F M vetel 6 \$ at. ··· 4 0: P Po \$ Nac W au Syrchott 6000 b PR P 011. 2 dese XX Nr M E Toebachan ette 3 9 8 2 D 50-¥ 14 F DG e RS R Der y det. ¥ A a division CT. 5 5 at ar Cxx uximbrativplix my Þ r q-T vintering drawn with at at N T H a white are and the spectrum to view Xu R x *x 12 An invitive xix kiny King ÿ NA. to aff hup Mafffemhefr electronkof blane : Da cialec main inq inarchiom shir marue ; W. ma. 4

F. Continental Runica Manuscripta

1. Vienna MS 795

The Vienna Codex (Codex Vindobonensis 795, Salisburgensis 140, Salzburg-Wiener Handschrift, or Salzburg-Wiener Alcuin-Handschrift).⁶³ Below is the *futhorc* from Vienna MS 792, and on the next page is a facsimile and photo of the page with the *futhorc*.

Nur Korn Kos Rråda Keen X zeofu Puyn Nhaegil 1 is Azaer Nih R peord Viles Usygil Nti Bberc 1 mon Vlagu Xluz Hoaez Doedil Nac Naes Neor Ayr

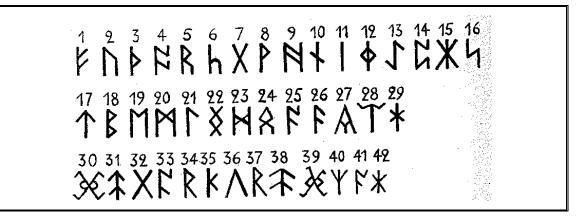
⁶³ Derolez, Runica Manuscripta, 59.

RUNES

52 fe forth A B FACh T berc 45 ur berc * A. PirR forn AL. forn LOZZ LR. 06 05 rada Tital litzu e En (fin Lug wX P.H. Beogu N 8488 stofu M un D dalo NYN oBit G vyn 4Ail hasti hearl ac Kue nates de uer naed 21. I P LAND Ed ar 11: Fel 35 18ch 804 July cor Jug-Vr sh. 71 ıh peord peord ilar Fight ila ĥ figil

2. St. Gall MS. 878

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

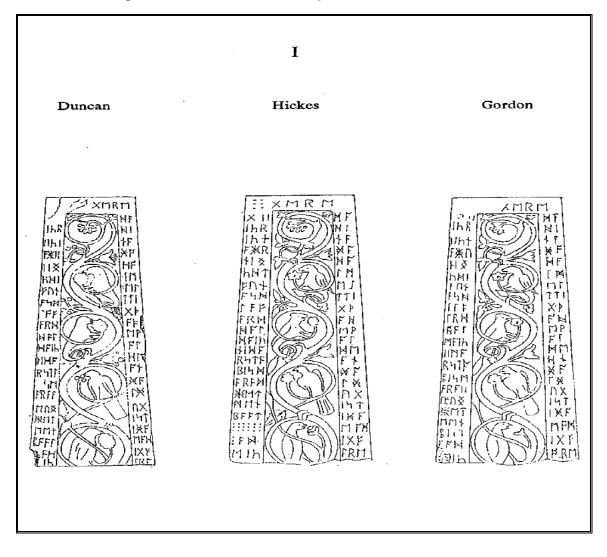




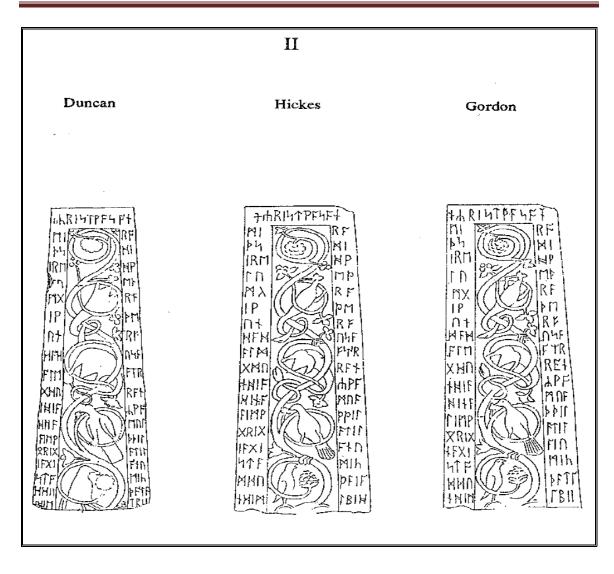
⁶⁴ Derolez, Runica Manuscripta, 80.

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.



RUNES



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,"⁶⁵ shows the 31 runes as found on the monument.



⁶⁵ M. D. Forbes and Bruce Dickins, "The Inscriptions of the Ruthwell and Bewcastle Crosses and the Bridekirk Font," *The Burlington Magazine for Connoisseurs* 25, No. 133 (1914): 26.

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, but as modern English phonology differs from Old English, Tolkien needed to make certain modifications. 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 Ψ . I and U are used for J and V. There was no rune for Q (use CW \mathbb{NP}); nor for Z (the dwarfrune \mathbb{A} may be used if required). It will be found, however, that some single runes stand for two modern letters: $th \triangleright$, $ng \aleph$, $ee \, \&$; other runes of the same kind (ea Υ and st \square) were also sometimes used.⁶⁶

As for spelling, except for a few instances, where special runes are used for two modern letters, described above, Tolkien 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" RIXRT by dropping the silent letters (although, historically they were pronounced) and writing the diphthong phonetically, thus, "Rait" Rint, but this looks also like it could be pronounced "rate." If using the correct diphthong, "rate" should probably be written "reit." Anyway, using phonetic spellings creates its own problems. In addition, it ignores historical developments, the etymology of words derived from Latin or Germanic, and historical pronunciations, which seems to be an absurd practice when trying to artificially write modern English using Anglo-Saxon runes. Secondly, for these same etymological reasons, I feel certain adaptations made by Tolkien either need to be explained or even amended.

⁶⁶J.R.R. Tolkien, *The Hobbit* (1937); reprint Allen & Unwin 3rd edition, 1966, 9.

Notes to Writing the English Alphabet

A

I have opted to use the graph $\not{\models}$ to represent both [æ] as in "cat" and [a] as in "father." In the Germanic *futhark*, the graph $\not{\models}$ *ansuz ([an] Æsir) was used for [a] (transliterated "a"). However, in the Anglo-Saxon *futhorc*, $\not{\models}$ was æsc (ash-tree) and was pronounced [æ] as in "cat" (transliterated "æ"), while the graph $\not{\models}$ ac (oak) was used to write the sound for [a] (transliterated "a"). The sound for [æ] in the Germanic *futharc* could apparently be expressed by using the graph $\not{\downarrow}$ *ī(h)waz/*ei(h)waz (yew-tree, transliterated "i" or "æ").

Tolkien made use of this distinction, using \mathbf{k} for [a], \mathbf{k} for [o], and \mathbf{k} for [\mathbf{x}]. In the younger Danish *futhark*, the graph $\$ was used for the sounds [a,o,æ] ($\$ **baurui** (O.N. Thyri) as written on the Jelling Stone DR42 (N.B. Jelling Stone DR41 only has $\forall NRN | \mathbf{burui}$), while the graph \dagger was used for $[\mathbf{x}]$ and $[a] (\mathbf{x} \uparrow R \dagger \Gamma R \mathbf{haraldr} as$ written on the Jelling Stone DR 42). Tolkien also uses this graph for the "long a" sound. The dipthong [ei], which makes the "long a" sound, could be rendered phonetically as **M**. Writing phonetically, the mane of a horse would be written "mein" **MMH**. However, in this respect, I have followed Tolkien, who for vowels, generally retained English spellings. These spellings can include the silent "e." Thus, "mane" MF+M, "fate" $\overline{\underline{PFTM}}$, "day" $\overline{\underline{MFR}}$, "pain" $\overline{\underline{KFII}}$, and "rein" $\overline{\underline{KIMI}}$ all use F for the "long a" as well. Tolkien on *Thror's Map* has "may" $\overline{M \vdash h}$ and "grey" $\overline{X \land M h}$. The sound of the letter "a" varies depending on dialect. As a native of Cleveland, OH, 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 [*x*] sound in "cat" gets pronounced something like "kyaat" (IPA [kɪət]). The F-rune is perfectly acceptable in this spelling as well – "cat" 瓦下个.

B

b – 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 **b** (\uparrow (\uparrow) \forall) \uparrow) **tanmarkaR** (O.N. *danmarkaR bot*), Jelling Stone DR41; \uparrow) \land)

С

CH

The sound for "ch" $[t\int]$ 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" $[t\int]$ using λ "c" + \aleph "h" in as \boxed{NMRRM} "cherry."

D

M also M – Germanic *futhark* – *dagaz (day); Anglo-Saxon *futhorc* – *dæg* (day). 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 ⊠ in the word "stand" \square ↑↑↑↑↓ as well as ⊠ in the word "day" \square ↑↑↑↑↓

E

M – Germanic *futhark* – *ehwaz (horse); Anglo-Saxon *futhorc* – *eh* (horse). In the younger Danish *futhark*, the graph I was used for both "i" and "e." The M-rune is used for "short e" [ɛ] as in "bed" BMN, as well as the schwa [ə] in "the" \triangleright M. Tolkien on *Thror's Map* follows this usage, where he has "hwen" (when) \aleph PMI and "the" \triangleright M. For the "long e" sound [i], when it is written "ee," Tolkien uses the character \hat{x} , see *Thror's Map*, "feet" $\nu \hat{x} \hat{T}$ and "three" $\triangleright \hat{R} \hat{x}$. The \hat{x} -rune in the Germanic *futhark* is transliterated "o" and pronounced [o], and in the Anglo-Saxon *futhorc*, it is transliterated "œ" and pronounced [ø(:)] which does not correspond well with Tolkien's usage for [i]. According to Barnes, the \hat{x} -rune represents the [ø] sound found in the French "people"

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(people) and German "schön" (beautiful).⁶⁷ Maybe Tolkien had in mind the [i] sound in words such as "phoenix" and "onomatopœia." In addition, on *Thror's Map*, Tolkien uses the **y**-rune also for the "long e" sound in "keyhole" **MARETM**. As words such as subpoena, diarrhœa or onomatopœia, which are all actually based on Latin and not Anglo-Saxon anyway, I have opted to follow the Germanic *futhark*, and use the graph \hat{X} for the [o] sound.

Therefore, I have generally retained English spellings including those with the silent "e." Thus, "bed" $\overline{\underline{BMM}}$, "the" $\overline{\underline{PM}}$, "happy" $\overline{\underline{BELCh}}$, "bee" $\overline{\underline{BMM}}$, "fleece" $\overline{\underline{PCMMMM}}$, and "meat" $\overline{\underline{MMET}}$.

F

However, in words with the letter "v" derived from Latin, Π "u" would be more appropriate. 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, for words derived from Latin, Tolkien's use of the **u**rune is etymologically correct. In addition, the graph \mathcal{V} can be used for "gh" and "ph" when they sound like [f].

G

X – Germanic *futhark* – *gebō (gift); Anglo-Saxon *futhorc* – *gyfu* (gift). In the younger Danish *futhark* where the difference between voiced and unvoiced consonants was no longer expressed in writing, the graph for both k] (and [g]) was written l' (transliterated "k" – l' h h l' l kununk R O.N. *konungR*, Jelling Stone DR41 and DR 42). For "hard g," [g], Tolkien uses the X-rune, as in "grey" l R h l. For "soft g" [d3] in words like "giraffe" see the footnote about the letter "j."

⁶⁷ Michael P. Barnes, *Runes: A Handbook* (Rochester: Boydell Press, 2012), 38.

Η

 \aleph also \aleph – Both the Germanic *futhark* and Anglo-Saxon *futhorc* have two forms for this graph \aleph and \aleph . Germanic *futhark* – *hagalaz (hail, as in precipitation); Anglo-Saxon *futhorc* – *hægl* (hail, as in precipitation). The younger Danish *futhark* uses the graph * (* \uparrow R \uparrow TR **haraldr** as written on the Jelling Stone DR 42). On *Thror's map*, Tolkien uses the double barred **h**-rune, e.g. "high" \aleph IX \aleph .

I

l – Germanic *futhark* – *īsaz (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*, l is used for the sounds [i] and [e]. On *Thror's Map*, Tolkien uses it for the diphthong [aɪ] "high" **NIXN**, the short-i sound [I] "with" **PID**. In addition, the long-e sound [i] as in "machine" **MPUNITM** (notice "sh" for "ch") can be written with l; Tolkien uses "ee" \hat{X} and "y" **h** 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*; Iason, Jason, Gr. *Iaowv*; Ioshua, Joshua, Heb. "*Y'hoshua*). Tolkien uses the graph l 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 \$ *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 'c3' N.B *wecgas* (Nom. Pl.) > *wedges*) could be approximated with "zh," "dg," "di," or "dy." Thus, "hedge" \overline{MMXM} (Old English heċġ), Chinese "Zhou" \overline{MXN} , and Egyptian "Djet" \overline{MMX} (King Djet, ca 2950 BCE).

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" XIREPPM or MXIREPPM. Another sound difficult to write in runes is [3] in *rouge* and *genre*, "zh" may suffice as in "Azure" either EXENDED or just EXDEM.

K

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

L

Μ

 \mathbb{M} – Germanic *futhark* – *mannaz (Man); Anglo-Saxon *futhorc* – *mann* (man). In the younger Danish *futhark*, the graph \mathbb{Y} is used to write the value [m], which looks similar to the Germanic **z**-rune. On *Thror's Map*, Tolkien uses the \mathbb{M} -rune to write the letter m, e.g. "may" $\mathbb{M} \mathbb{P} \mathbb{R}$.

Ν

+ - Germainc 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"**NPM**(for this spelling see, "wh" below). Thus, "Nightingale"**<u>HXHTHXFTM</u>**.

NG

0

 \hat{X} – Germanic *futhark* – *ōþila-/*ōþala- (heritage, estate, possession); Anglo-Saxon *futhorc* – éðel (estate) [œ]. F Anglo-Saxon *futhorc* – ós ([a] god) [ó]. In the younger Danish *futhark*, \hbar is used to represent [o] as well as [u], [y], [ø], 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 \hat{X} "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 $\bar{os} \not\in$, a derivation of $\not\in$ the "Ansuz rune," the graph \dot{x} became known as $\bar{e}\delta el$ and used to express an " α " sound [α , \emptyset]. It is attested only rarely in epigraphy.

For the "long e" sound [i] (but only when spelled "ee"), Tolkien used the character \hat{X} , see *Thror's Map* "feet" $\mathcal{V} \hat{X} \uparrow$ and "three" $\mathcal{V} \hat{X} \hat{X}$. However, on *Fimbulfambi's Map*, Tolkien writes "of" as $\hat{X} \mathcal{V}$, but in the later letter to Katherine Ferrar, he has "of" as $\mathcal{F} \mathcal{V}$. On *Thror's Map*, for the letter "o" Tolkien uses \mathcal{F} , thus "Door" $\mathcal{M} \mathcal{F} \hat{X}$.

One can follow Tolkien's us of \hat{X} , for [0] 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 $[\alpha, \emptyset]$ and in modern English the "oe" in "onomatopoeia" and "phoenix" is pronounced with the value of [i]. Using F for [0] would be just as sensible, but the graph F is close to P and F. Anyway, I have opted to use the graph \hat{X} for various "o" sounds [0, 0, a, 00] "orange" \overline{XKFXXM} , "of" \overline{XP} , "boat" \overline{FXFT} , "boy" \overline{FXFT} , "cow" \overline{KXF} , "cloth" \overline{KTXF} , "fork" \overline{PXRT} , "goose" (long double "oo" [u:]) \overline{XXXM} , "food" (short double "oo" [0]) \overline{PXXM} , "good" \overline{XXXM} , but if you so desire "onomatopoeia" $\overline{FFKMFTFXXF}$.

Р

 \mathcal{L} – Germanic *futhark* –?*perþ- (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 \mathcal{B} (\uparrow / \uparrow \forall \forall / \uparrow \land \mathcal{B} \uparrow "tanmarkaR but" (O.N. *danmarkaR bot*), Jelling Stone DR41; \uparrow \uparrow \mathbb{R} "knupu" (O.N. Gnupu), Sigtrygg Runestone DR4). On *Thror's Map*, Tolkien uses the \mathcal{L} -rune for [p^h] and [p], e.g. "upon" $\mathcal{D}\mathcal{L}\mathcal{F}$.

For "ph," sounding like [f], just use \mathcal{V} , although $\mathcal{L}\mathcal{H}$ may be less confusing for some words, "philosophy" $\mathcal{VICSUSPR}$ or $\mathcal{L}\mathcal{HCSUSCRR}$.

Q

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

R

R – Germanic *futhark* –*raidō (ride, journey); Anglo-Saxon *futhorc* – *rad* (ride). This usage is retained in the younger Danish *futhark*. (*†R†TTR PD+D+TA haraltr kununkR "Harald the King" as written on the Jelling Stone DR 42). N.B. In the younger Danish *futhark* the R r and A R sounds remained distinct. However, note the final R r sound in the name *†R†TTR haraltr, where one would expect A R. 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 A. Over time, however, the usual practice came to be the designating of the reflexes of both */r/ and */z/ after apicals with $R^{.68}$ In modern English the sounds represented by the graphs R and 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 colubris"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" $\triangleright R \hat{X}$ and "grey"

XRMM and "door" **MFR**. There is evidence Tolkien would have used a trilled r before vowels, and, in his own non-rhotic dialect, "dark is pronounced [da:k]. Anyway, the rolled r (trilled r) /r/ and alveolar approximant /1/ are used in the same place depending on dialect, and the orthography would be the same. Thus "rose" **R** $\mathcal{S}\mathcal{H}M$. The same applies to the rhotic r, non rhotic r, and rhotic trilled r following a vowel, thus, for "bird" (Middle English "bryd" pronounced [b.IId] or [brId]), we have [b31d], [b3:d], bIrd], all written as **BIRM**. Likewise, "car" ([ka1] and [ka:]), **KFR**, "deer" (Middle English "deor") ([di1], and [d1ə]) **MMMR**, "bear" ([b21] [b2:]) **BMFR**, and "horse" ([h5:s], [h5:s]), [h5:s]) **MFR** $\mathcal{H}M$ are all pronounced differently depending on dialect, but orthographically are written the same.

S

 \mathcal{U} – Germanic *futhark* –*sōwilō (Sun); Anglo-Saxon *futhorc* – *sigel* (Sun). The younger Danish *futhark* continues this use. On *Thror's Map*, Tolkien uses for the [s] sound in "setting sun" \mathcal{U} \mathcal{U} and the [z] in "Durin's day" \mathcal{U} \mathcal{U} .

⁶⁸ Antonsen, *Runes and Germanic Linguistics*, 306.

⁶⁹ Persius, Sat. 1, 109.

⁷⁰ Vergil, Aeneid VI 417-19.

⁷¹ Catullus, Carmina 42.

SH

[\int] is a combination of S+H \mathcal{M} , and Tolkien uses this combination on *Thror's Map* "thrush" \mathcal{P} R $\mathcal{M}\mathcal{M}$. This sound could also theoretically be rendered H+S $\mathcal{M}\mathcal{M}$ as in the Chinese Wade-Giles Romanization system's "hs" $\mathcal{M}\mathcal{M}$ (pinyin "x"), and can be used for the "sh" sound in Chinese "Xia" $\overline{\mathcal{M}\mathcal{M}\mathcal{E}}$. Also notice the Mayan Xibalba $\overline{\mathcal{M}\mathcal{M}\mathcal{E}\mathcal{F}\mathcal{B}\mathcal{E}}$ or Xbalanque $\overline{\mathcal{M}\mathcal{M}\mathcal{E}\mathcal{F}\mathcal{F}\mathcal{B}\mathcal{E}}$.

ST

The st-rune \square is found in *runica manusripta*, but is not attested in any epigraphic examples. Although Tolkien, in his introduction to *The Hobbit*, mentions the use of this rune, on *Thror's Map*, Tolkien uses "st" \square in the words "stand" \square \square and "stone" \square \square

Т

TH

 \triangleright – Germanic *futhark* –?*þurisaz (the god Thor, giant); Anglo-Saxon *futhorc* – *born* (thorn). The younger Danish *futhark* continues this usage. On *Thror's Map*, Tolkien uses \triangleright for both the [θ] (thing, teeth) sound in "three" $\triangleright R X$ and [ð] sound (this, breathe, father) in "the" $\triangleright M$.

U

$$\begin{split} & \bigcap_{i=1}^{n} - \text{Germanic } futhark - *\bar{u}ruz \text{ (aurochs), where it represents the [u] sound;} \\ & \text{Anglo-Saxon } futhorc - ur \text{ (aurochs). The younger Danish } futhark \text{ continues this usage, } \\ & \text{where it stands for [u] as well as [o], [y], [ø], and [w]. On Thror's Map, Tolkien uses} \\ & \square \text{ for } [\Lambda] \text{ "thrush" } PRNMM \text{ and } DCF1 \text{ "upon." In modern English, the } D \text{ graph would} \\ & \text{be used for } [\Lambda] \text{ "run" } RD1, [\Im-1] \text{ "nurse" } DRMM, [v] \text{ "put" } CD1, [u:] \text{ "true" } TRDM, \\ & [(j)u] \text{ "uniform" } DHP \text{ RMM, } [(j)vi] \text{ "cure" } NRM. \end{split}$$

V

For words with the letter "v" derived from Latin, one should probably use \hbar "u" (the **u**-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 **u**-rune in the words with "v" is etymologically sound. However, in words derived

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from the Germanic, the P-rune might be better, thus Valkyrie (O.N. *Valkyrja*, O.E. Wælcyrie) "Walcyrie PFTKMRIM.

On *Thror's Map*, Tolkien uses **u**-rune for the letter "v" where, based on Germanic etymology, he should have probably used an **f**-rune, e.g. "five" \mathcal{VIDM} (Old English fif; Proto-Germanic *fimfe). For words derived from Old English and not Latin, the graph \mathcal{V} is a more appropriate choice than using the **u**-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. *hræfn*).

W

 \triangleright – Germanic *futhark* – *wunjō (joy); Anglo-Saxon *futhorc* – *wynn* (joy), written as the letter wynn (\wp , p) in the Old English Alphabet. In the Germanic and Anglo-Saxon systems the \triangleright -rune represented the sound [w]. In the younger Danish futhark, the **u**-rune, \hbar , was used for the consonant sound [w]. On *Thror's Map*, Tolkien uses it for the sound [w], e.g. "with" \triangleright] \triangleright .

WH

On *Thror's Map*, Tolkien spells the word "when" as "hwen" \mathbb{RPM}^{+} , 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" \mathbb{RPF}^{+} and "narwhal" \mathbb{RRPF}^{-} .

Х

Originally, in the Germanic *futhark*, the graph Ψ (?*algiz, unclear, possibly "elk") stood for the value [z]. In the younger Danish system, due to phonological changes, this graph, now turned upside down λ , 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). In addition, in the younger Danish *futhark*, the graph Ψ was used to write the value [m]. However, in the Anglo-Saxon *futhorc*, the graph Ψ 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, \underline{PXH} or $\underline{PX\Psi}$, 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 Ψ ."

Y

A modified **u**-rune h (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 **l** and h.⁷² Tolkien uses **h** for both consonant y and vowel y, thus from the dustjacket of *The Hobbit*, Tolkien has "years journey" **h K H IF h K H h** (Notice Anglo-Saxon **ea**-rune **T** being used in years). However, in Anglo-Saxon, **h** 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" **h h**

Ζ

Originally, in the Germanic *futhark*, the graph Ψ (?*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 λ does appear as a variant of Ψ in some Germanic *futhark* inscriptions. In the Cotton MS Domitian A. ix, λ 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 \mathbb{NP}); nor for Z (the dwarf-rune λ 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" $\overline{\lambda M \mathbb{E} \mathbb{R} \mathbb{E}}$.

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 F[x, a, ei] "apple" **FLUM** b **B** [b] "bear" **<u>BMFR</u>** d M [d] "duck" MNKh e M [e, ε , ϑ , i] "elephant" MCMPFIT f Ѱ[f, v] "fox" <u>Ѱ҄҈ҳҺ</u>и or <u>Ѱ҄ҳ҇Ѱ</u> g X [g] "girl" $\overline{XIR\Gamma}$ h **ℵ** [h] "hen" **ℵ**M1 i **l**[1, i] "iguana" <u>IXNF1F</u> j [d3] "jaguar" **FXNFR** or **MXFXNFR** "giraffe" MXIRFYM or XIRFYM k h [k] "kangaroo" $\overline{\mathbf{hF}}$ 1 [1] "leopard" [MALFRM] m M [m] "mouse" **图 众 卜** 4 M n \dagger [n] "Nightingale" $\overline{\dagger IX \dagger 1} \overline{\star F} \overline{L}$ ng $[\eta]$ "thing" $\boxed{\boxed{\boxed{13}}}$ and "finger" $\boxed{\boxed{\boxed{23}}}$ o (\mathbf{F}) [o, o, a, ou] "orange" \mathbf{XRFXM} or \mathbf{FRFXM} p Γ [p] "purple" Γ

q hP $(hP) [0, \delta]$ "queen" \overline{hPMMt} or \overline{hPMMt}
r R [r] "rose" <u>R 农场</u>
s \mathcal{H} [s,z] "snake" <u>$\mathcal{H}FHM$</u>
sh 𝙌Ħ [∫] "shine" <u>𝔄ĦĦĦ</u>
t \uparrow [t] "turtle" $\overline{\underline{TNRTCM}}$
u \mathbf{n} [u, o, y, ø, w] "umbrella" $\mathbf{\overline{NMBRMFF}}$
v [v] "victory" <u>NIKTPR</u> and "raven" <u>RFPM</u>
w P [w] "water" \overline{PFTMR}
wh (hw) "narwhal" $\overline{\underline{+FRPHFT}}$ or $\overline{\underline{+FRHPFT}}$
х (Y, h4) [ks] "foxes" <u>Рхнини</u> or <u>Рхчин</u>
y 🕅 [j, i] "yak" <u>ĦFH</u> and "monkey" MXHMM
$z \mathbf{k}$ [z] "zebra" $\overline{\mathbf{AMBRF}}$

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