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On 2000-12-24 Olle Järnefors published on behalf of the ISORUNES Project in Sweden a proposal for ordering the Runes in the Common Tailorable Template (CTT) of ISO/IEC 14651. In my view this ordering is unsuitable for the CTT for a number of reasons.

Runic ordering in ISO/IEC 10646. The Runes are encoded at U+16A0–U+16FF, in a unified set of characters encompassing the four major traditions of Runic use: Germanic, Anglo-Frisian, Danish, and Swedish-Norwegian, and Medieval. The Runes are arranged in the code table agreed by ISO/IEC JTC1/SC2/WG2 in an order based on the the traditional positions of the Runes in abecedaries, namely, the fubark order. This order is known from hundreds of primary sources which list the Runes in sequence, often with no other text. Most scholarly texts refer to the fubark in one way or another. Nearly all secondary texts, whether popular introductions to the Runes or New-Age esoterica, give primacy to the traditional fubark sequence.

**Runic names in ISO/IEC 10646.** The names given to the Runes in the UCS may be a bit clumsy, but they are intended to serve the needs of scholars and amateurs alike; not everyone is familiar with Runic transliteration practices, and not everyone is conversant with the traditional names in Germanic, English, and Scandinavian usage. So the names concatenate those three together with the scholarly transliteration letter.

**Runic and Latin.** It should be noted that the ISORUNES position has always been to treat the Runes as though they were just glyph variants of the Latin script: their original proposals gave the Runes sequenced in the code table according to their Latin transliterations, and gave only the Latin transliteration equivalents as the character names. SC2/WG2 had not treated any other historical script in this way, and chose not to set a precedent with the Runes. It is suggested here that SC22/WG20 do likewise.

**Fuþark ordering.** On page 4 below, I print first the binary order of the Runes in the UCS (omitting the three punctuation characters), and a proposed fuþark ordering for the CTT. On page 5, the structure of this ordering is given showing primary and secondary weighting, and showing how the four traditions are reflected in their traditional order. Primacy is given to the Germanic Runes, with secondary unifications where applicable in the order Anglo-Frisian, Danish, Swedish-Norwegian, and Medieval. The Calendar Runes are decomposed into their source ligatures for ordering. The only point I consider contentious here is the possible ordering of RUNIC LETTER Q as a variant of RUNIC LETTER X as a variant of RUNIC LETTER SIGEL LONG-BRANCH-SOL S (which it clearly is).

**Latin ordering.** On page 6 below, I print first the ISORUNES proposal of 2000-12-24 (which follows the same conventions for primary and secondary weighting by tradition but which is based on the order of the characters according to their Latin transliteration), and a revision of this based on the actual order of Latin characters in the CTT. On page 7, the structure of this ordering is given showing primary and secondary weighting along with the Latin transliteration characters themselves. It is important to note that for at least some of the Runes, more than one transliteration is possible. While RUNIC LETTER CWEORTH is transliterated <q> here, it is very often expanded to the digraph <cw> in English contexts. Another example is RUNIC LETTER ALGIZ EOLHX, which can be transliterated <Z>, <R>, or <X>.

Note that a universally-acceptable ordering according to Latin transliteration is not really feasible. Consider the Latin tailoring required to ensure that æ, ø, and þ are ordered as used in English, Danish, Swedish, Norwegian, and Icelandic contexts.

**Sample orderings.** First, I give here a Runic song printed by Ole Worm in *Danica Litteratura Antiquissima* in 1636 from an original Norwegian manuscript subsequently lost; text normalized into Icelandic spelling by E. V. Gordon. Note the fupark order in vertical presentation (instead of the usual linear abecedary).

l' (fé) veldr frænda rógi; fæðisk úlfr í skógi.

N (úr) es af illu járni; opt hleypr hreinn á hjarni.

þ (þurs) veldr kvenna kvillu; kátr verðr fár af illu.

k (óss) es flestra ferða for, en skálpr er sverða.

R (reið) kveða hrossum versta; Reginn sló sverðit bezta.

ľ (kaun) es beygja barna; bol gørir mann folvan.

\* (hagall) es kaldastr korna; Kristr skóp heim inn forna.

† (nauð) gørir hneppa kosti; nøktan kelr í frosti.

l (ís) kollum brú breiða; blindan þarf at leiða.

∤ (ár) es gumna góði; getk at orr vas Fróði.

ነ (sól) es landa ljómi; lútik helgum dómi.

1 (Týr) es einhendr Ása; opt verðr smiðr at blása.

B (bjarkan)'s laufgrænstr líma; Loki bar flærðar tíma.

Ψ (maðr) es moldar auki; mikil es greip á hauki.

l' (logr)'s, es fellr ór fjalli, foss; en gull eru hnossir.

↓ (ýr) es vetrgrœnstr viða; vant's, es brennr, at svíða.

On pages 8 and 9 I present a list of Runic letternames ordered according to the two approaches. The fubark ordering is, in my view, superior because it unifies dotted Runes with other base characters, which in fact gives a more accurate result. From the final 1996-03-13 ISORUNES proposal to WG2 (N1330):

The dotted runes do not appear to have been counted as independent runes. They only seldom appear in inscriptions representing the *fupark*, and then as a rule just a few of them appear at the end.

Note that using Latin transliteration order, a name like *Pórgunn*, which could be written <code>PNRYN+</code> **purkun** or <code>PNRYN+</code> **purgun**, would be found in different parts of an ordered list. This could be finessed by unifying the dotted consonants with their base form, but then this rather sabotages the intended principle of following Latin transliteration.

It seems clear to me that following the traditional fupark ordering for the CTT, WG20 would be applying the same principles to Runic as are applied to other scripts. If for scholarly purposes a glossary of Runic terms were required, and Latin alphabetic order preferred, it would be far simpler to do as I have done on page 7, namely to begin each line in the glossary with the Latin transliteration itself, in which case the local Latintailored tables could apply. This reduces the burden on scholars, because they will be using English, Danish, Swedish, Norwegian, or Icelandic systems software which will order Latin as they prefer – and which will be provided by their software vendors as a matter of course. Requiring scholars in different countries to tailor Runic *as well* for local requirements (which the major software vendors are unlikely to do) will add unnecessary expense to their endeavours.

Fubark order. This is shown in expanded form on the following page.

۲	۲	<b>{</b>	<b>x</b>	r	Y	K	1
P	Y	Ч	<b>*</b>	۲	X	Υ	<b>♦</b>
Ŋ	X	I	*	Ŋ	<b>P</b>	{	×
N	×	1	1	$\Theta$	4	4	M
Ð	<b>P</b>	<b>\</b>	$\downarrow$	M	Н	4	<b>x</b>
M	Н	<b>↑</b>	*	Þ	Ħ	I	f
Þ	Ħ	1	×	Þ	*	Ţ	<b>F</b>
Þ	*	1	$\forall$	$\varphi_{(\flat\flat)}$	+	$\downarrow$	ľ
<b>F</b>	+	<b>B</b>	I	•	+	<b>↑</b>	<b>*</b>
۴	+	<b> </b>	<b>1</b>	۴	}	1	$\downarrow$
۴	<b> </b>	B	1	*	+	1	×
<b>F</b>	+	K	፟፟፟፟፟፟፟፟፟፟፟፟፟	<b>k</b>		<b>B</b>	*
*		M	1	4	+	ŧ	*
<b>k</b>	+	M	$^{\sharp}$	#	<b>\$</b>	B	1
4	<b>\$</b>	Υ	Ф	‡	<b>\rightarrow</b>	M	
*	<b>\$</b>	1		R	†	M	$\downarrow$
‡	ł	1		<	1	Ψ	ı
R	1	1		k	1 (11)	İ	1
<	1	<b>♦</b>		Y	1	$\mathbf{X}_{(YY)}$	
k	٢	×		۲	٢	1	
Y	Y	M					

Fubark order. Conventions used here: Each language group's letters are ordered traditionally with a superscript number showing the ranking; in the following hierarchy: G = Germanic, E = Anglo-Frisian, D = Danish, S = Swedish-Norwegian, I = Icelandic, M = Medieval. Dotted Runes and other variants follow next, marked here only by superscript  $^D$  and  $^V$ . The Calendar Runes have been ordered as ligatures.

P	$G^1 E^1 D^1 S^1$	Y	$M^D$	K	$M^V$	1	$M^{D}$
p	$M^D$	X	$G^7 E^7$	Υ	$ m G^{15}E^{15}$	<b>♦</b>	$G^{22}$
Ŋ	$G^2 E^2 D^2 S^2$	<b>P</b>	G <sup>8</sup> E <sup>8</sup>	{	$G^{16}$	×	$E^{22}$
Ð	$M^D$	1	M	Ч	$E^{16} D^{11}$	M	$G^{23}E^{23}$
W	$M^V$	Н	$G^9$	4	M	<b>x</b>	$G^{24} E^{24}$
Þ	$G^3 E^3 D^3 S^3$	Ħ	$\mathrm{E}^9$	I	S <sup>11</sup>	۴	$\mathrm{E}^{25}$
Þ	$M^D$	*	$\mathrm{D}^7$	I	$M^D$	۴	$E^{26}$
ф	( <b>ÞÞ</b> )	+	S <sup>7</sup>	$\downarrow$	$M^V$	ľ	$E^{27}$
•	$G^4$	+	$G^{10} E^{10} D^8$	$\uparrow$	$G^{17} E^{17} D^{12}$	<b>T</b>	$E^{28}$
۴	$E^4$	<b> </b>	S <sup>8</sup>	1	S <sup>12</sup>	$\downarrow$	$E^{29}$
*	$\mathrm{D}^4$	+	$M^D$	1	$M^D$	×	$E^{30}$
þ	$S^4$		$G^{11} E^{11} D^9 S^9$	8	$G^{18} E^{18} D^{13}$	*	$E^{31}$
1	$M^V$	+	$M^D$	ŧ	$S^{13}$	*	$E^{32}$
#	M	<b>\$</b>	$G^{12}$	B	$M^D$	1	$E^{33}$
‡	M	<b>\$</b>	$E^{12}$	Μ	$G^{19} E^{19}$		$E^{34}$
R	$G^5 E^5 D^5 S^5$	ł	$D^{10}$	M	$G^{20} E^{20}$	$\downarrow$	$D^{16}$
<	$G^6$	1	$S^{10}$	Ψ	$\mathrm{D}^{14}$	ı	S <sup>16</sup>
k	$E^6$	1	(11)	Ī	$S^{14}$	1	I
Y	$\mathrm{D}^6\mathrm{S}^6$	1	$G^{13} E^{13}$	$\mathbb{X}$	(44)		
۲	$M^{D}$	۲	$ m G^{14}E^{14}$	1	$G^{21} E^{21} D^{15} S^{15}$		

ISORUNES order as specified 2000-12-24

Latin order. This is shown in expanded form on the following page.

۴	$a^1$	Ħ	h	<b>♦</b>	$\mathfrak{y}^{24}$	<b>↑</b>	t <sup>36</sup>
۴	a	*	h	×	ŋ	1	s
ł	a	+	h	Y	ŋ	Þ	þ <sup>37</sup>
1	a		$i^{13}$	Ŷ	o{œ} <sup>25</sup>	N	$u^{38}$
*	$a^2$	1	ï { <b>i</b> } <sup>14</sup>	۴	$o^{26}$	p	$v^{39}$
8	$b^3$	*	(io) <sup>15</sup>	*	o {ą} <sup>27</sup>	<b>P</b>	$W^{40}$
ŧ	b	<b>\$</b>	$j^{16}$	k	o {ą}	W	w
K	$c^4$	<b></b>	j	1	$o^{28}$	乜	$x^{41}$
I	c	<	k <sup>17</sup>		p <sup>29</sup>	<b>\</b>	$y^{42}$
M	$d^5$	$\downarrow$	k	B	p	Ð	y
1	d	Y	k	K	p	1	y
1 Þ	_		k K <sup>18</sup>				
Þ	_	*		1	q {cw} <sup>30</sup>	Υ	z {R, x} <sup>43</sup>
Þ	$\mathfrak{g}_{e}$	<b>*</b>		\\ \f\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	q {cw} <sup>30</sup>	<b>↓</b>	z {R, x} <sup>43</sup>
<ul><li>M</li><li>+</li></ul>	$\delta^6$ $e^7$	¥ 1 1	K <sup>18</sup> l <sup>19</sup> L <sup>20</sup>	√ ¶ R	$q^{\{cw\}^{30}}$ $q^{31}$ $r^{32}$	Ψ ↓ ‡	$z_{\text{R},x}^{43}$ $z^{44}$ $\emptyset^{45}$
<ul><li>▶</li><li>M</li><li>→</li><li>↑</li></ul>	ð <sup>6</sup> e <sup>7</sup>	* 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1	K <sup>18</sup> l <sup>19</sup> L <sup>20</sup> m <sup>21</sup>	\ 1 R \ \	$q \text{ (cw)}^{30}$ $q^{31}$ $r^{32}$ $R^{33}$	Ψ ↓ ‡ ‡	$z_{\text{R},x}^{43}$ $Z^{44}$ $\emptyset^{45}$ $Q^{46}$
<ul><li>▶</li><li>↑</li><li>†</li><li>∤</li><li>⊭</li></ul>	ð <sup>6</sup> e <sup>7</sup> e (ea) <sup>8</sup>	* 1	K <sup>18</sup> l <sup>19</sup> L <sup>20</sup> m <sup>21</sup> m	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	$\begin{array}{c} {}_{q\text{(cw)}^{30}} \\ \\ q^{31} \\ \\ r^{32} \\ \\ R^{33} \\ \\ R \end{array}$	Y	$z_{\{R, x\}^{43}}$ $z^{44}$ $z^{44}$ $z^{45}$ $z^{46}$ $z^{46}$
<ul><li>▶</li><li>↑</li><li>†</li><li>∀</li><li>✓</li><li>X</li></ul>	ð <sup>6</sup> e <sup>7</sup> e (ea) <sup>8</sup> f <sup>9</sup>	*	K <sup>18</sup> l <sup>19</sup> L <sup>20</sup> m <sup>21</sup> m	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	$\begin{array}{c} {}_{q \text{ (cw)}^{30}} \\ q^{31} \\ r^{32} \\ R^{33} \\ R \\ s^{34} \\ \end{array}$	Y	$z_{\{R, x\}^{43}}$ $z^{44}$ $z^{45}$ $z^{46}$ $z^{46}$ $z^{47}$
P M + T P X P	$\delta^{6}$ $e^{7}$ $e$ $(ea)^{8}$ $f^{9}$ $g^{10}$	*		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	$\begin{array}{c} {}_{q \text{ (cw)}^{30}} \\ q^{31} \\ r^{32} \\ R^{33} \\ R \\ s^{34} \\ \end{array}$	Y	$z_{\{R, x\}^{43}}$ $z^{44}$ $z^{45}$ $z^{46}$ $z^{46}$ $z^{47}$

Latin order, based on usual transliterations and following the same order as given for Latin in the Default Tailorable Template. Note that the main problem with transliterations is that many characters have more than one transliteration according to different traditions.

<b>F</b>	a	۲	g {3}	*	(mm)	{	S
F	a	×	ğ	+	n	4	S
+	a	Н	h	}	n	I	S
1	a	Ħ	h	+	N		(st)
<b>*</b>	ą {o}	*	h	$\Diamond$	ŋ	1	t
<b> </b>	ą {o}	+	h	×	ŋ	1	t
1	(al)		i	Y	ŋ	D	u
<b>F</b>	æ	1	ï { <b>i</b> }	Ŷ	o {œ}	٣	v
<b>B</b>	b	*	(io)	۴	0	}	W
ŧ	b	<b>\$</b>	j	4	0	W	W
k	С	<b>\rightarrow</b>	j	‡	Q	4	X
1	c	<	k	#	Ø	ľ	y
M	d	$\downarrow$	k	٢	p	Ð	y
1	d	Y	k	B	p	<b>1</b>	y
Þ	ð	*	K	K	p	Y	z {R, x}
M	e	1	1	1	q {cw}	<b>\</b>	Z
+	e	1	L	1	q	Þ	þ
<b>Y</b>	(ea)	M	m	R	r	ф	(þþ)
r	f	Ψ	m	$\forall$	R		
X	g	1	m	ı	R		

## Runic names in fubark order.

PM         PMFH         PMHN         NR NY         PNR NY         PNR N         PR N         FY NY         FY NY         RF M         RM N         YAN+         VANB X	fe feoh fehu ur uruz purisaz purs purs porn ansuz algiz raido rad reid kaun kaun kaun cen gebo	\$MR         \$MRF+         \$R         \$PFY         \$MFRD         \$MFRD	ger jeran ar ar är ïwaz peorþ perþo sol sol siğel sowilo tir tir tiraz tyr biarkan biarkan beorc berkanan	<pre></pre>	dæğ oþalan oþel ac æsc yr ear kalc ğar Kealc ior qeorb stan yR yR
XMPN	gyfu	MFH	eoh		
PN+%\$	wunjo	MFLA	eolx		
14/19	wynn	MN	eh		
Y11X1H	haglaz	Y19HM	ehwaz		
*+14+11	hagall	MFH	man		
11111	hagall	MF++FY VLMD	mannaz		
1¥1H NU++	hæğl naud	Y+MR I+MR	madr madr		
F4DM	naud	Y1>//11	laukaz		
YIMN14	naudiz	rtr	lagr		
+ I/ M	nyd	r 1 m	lagr		
14	is	1 F X N	lagu		
Y1}1	isaz	IX	iŋ		
144	iss	10PFY	iŋwaz		
III	iss	Y1X1M	dagaz		

ac	fk	iss	144	tir	↑IR
algiz	Y1X11	iss	μ.	tir	1IR
ansuz	Y1341	ïwaz	1PFY	tiraz	TIRFY
ar	łR	jeran	411M¢	tyr	1 N R
ar	1R	kalc	1111	ur	NR
æsc	F4k	kaun	Y ł N ł	uruz	NRNY
beorc	BMFRL	kaun	Y 1 N F	wunjo	PN+%\$
berkanan	11117M8	kauna	1+11>	wynn	P
biarkan	BI+RY++	Kealc	11T ¥	yr	N R
biarkan	\$14RY4F	lagr	rtr	yR	<b></b> ↓ R
cen	LM+	lagr	1448	yR	ıR
dagaz	Y1X1M	lagu	1KX1	yR	<b>↑</b> R
dæğ	X1M	laukaz	Y1>N11	þorn	ÞFR+
ear	<b>T</b> R	madr	YłMR	þurisaz	P1317N4
eh	MĦ	madr	IAMR	þurs	ÞNR4
ehwaz	MHPFY	man	MF+	þurs	ÞNR'
eoh	MFH	mannaz	Y1++1M		
eolx	Y14M	naud	44NM		
fe	۲M	naud	FAUM		
fehu	MHN	naudiz	4 F N M I Y		
feoh	MFH	nyd	<b>∤</b>		
ğar	XFR	oþalan	+11148		
gebo	XMBX	oþel	1M4\$		
ger	<b>♦MR</b>	peorþ	LMFRÞ		
gyfu	XMMU	perþo	CMRÞ\$		
hagall	*+17+11	qeorþ	1M*RÞ		
hagall	111 111	rad	RFM		
haglaz	Y11X1H	raido	RFIM\$		
hæğl	1¥1#	reid	RMIM		
iŋ	IX	siğel	41XML		
iŋwaz	149FY	sol	411		
ior	*R	sol	111		
is	14	sowilo	\$111\$}		
isaz	Y1}1	stan	<b>11</b>		