THE CIRTH

The *Certhas Daeron* was originally devised to represent the sounds of Sindarin only. The oldest *cirth* were $_{1}$, $_{2}$, $_{5}$, $_{6}$; $_{8}$, $_{9}$, $_{12}$; $_{18}$, $_{19}$, $_{22}$; $_{29}$, $_{31}$; $_{35}$, $_{36}$; $_{39}$, $_{42}$, $_{46}$, $_{50}$; and a *certh* varying between $_{13}$ and $_{15}$. The assignment of values was unsystematic. $_{39}$, $_{42}$, $_{46}$ and $_{50}$ were vowels and remained so in all later developments. $_{13}$ and $_{15}$ were used for *h* or *s*, according as $_{35}$ was used for *s* or *h*. This tendency to hesitate in the assignment of values for *s* and *h* continued in later arangements. In those characters that consisted of a 'stem' and a 'branch', $_{1}$–$_{31}$, the attachment of the branch was, if on one side only, usually made on the right side. The reverse was not infrequent, but had no phonetic significance.

The extension and elaboration of this *certhas* was called in its older form the *Angerthas Daeron*, since the additions to the old *cirth* and their re-organization was attributed to Daeron. The principal additions, however, the introductions of two new series, $_{13}$–$_{17}$, and $_{23}$–$_{28}$, were actually most probably inventions of the Noldor of Eregion, since they were used for the representation of sounds not found in Sindarin.

In the rearrangement of the *Angerthas* the following principles are observable (evidently inspired by the Fëanorian system): (1) adding a stroke to a brance added a 'voice'; (2) reversing the *certh* indicated opening to a 'spirant'; (3) placing the branch on both sides of the stem added voice and nasality. These principles were regularly carried out, except in one point. For (archaic) Sindarin a sign for a spirant *m* (or nasal *v*) was required, and since this could best be provided by a reversal of the sign for *m*, the reversible $_{6}$ was given the value *m*, but $_{5}$ was given the value *hw*.

$_{36}$, the theoretic value of which was *z* was used, in spelling Sindarin or Quenya, for *ss*: cf. Fëanorian 31. $_{39}$ was used for either *i* or *y* consonant); $_{34}$, $_{35}$ were used indifferently for *s*; and $_{38}$ was used for the frequent sequence *nd*, although it was not clearly related in shape to the dentals.

In the Table of Values those on the left are, when seperated by –, the values of the older *Angerthas*. Those on the right are the value of the Dwarvish *Angerthas Moria*[1]. The Dwarves of Moria, as can be seen, introduced a number of unsystematic changes in value, as well as certain new *cirth*: $_{37}$, $_{40}$, $_{41}$, $_{53}$, $_{55}$, $_{56}$. The dislocation in values was due to mainly two causes: (1) the alteration in the values of $_{34}$, $_{35}$, $_{54}$ respectively to *h*, (the clear or glottal beginning of a work with an initial vowel that appeared in Khuzdul), and *s*; (2) the abandonment of the $_{14}$, $_{16}$ for which the Dwarves substitutde $_{29}$, $_{30}$. The consequent use of 12 for *r*, the invention of $_{53}$ for *n* (and its confusion with $_{22}$); the use of $_{17}$ as *z*, to go with $_{54}$ in its value *s*, and the consequent use of $_{36}$ as ŋ and the new *certh* $_{37}$ for *ng* may also be observed. The new $_{55}$, $_{56}$ were in origin a halved form of $_{46}$, and were used for vowels like those heard

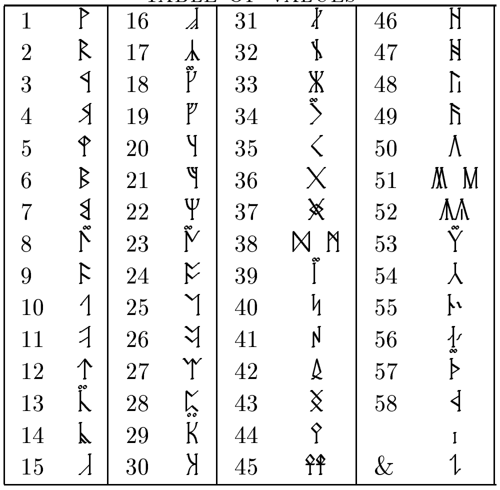
[1]Those in ( ) are values only found in Elvish use: ⋆ marks

in English *butter*, which were frequent in Dwarvish and in the Westron. When weak or evanescent they were often reduced to a mere stroke without a stem. This *Angerthas Moria* is represented in the tomb-inscription.

The Dwarves of Erebor used a further modification of this system, known as the mode or Erebor, and exmplified in the Book or Mazarbul. Its chief characteristics were: the use of $_{43}$ as *z*; of $_{17}$ as *ks* (*x*); and the invention of two new *cirth*, $_{57}$, $_{58}$ for *ps* and *ts*. They also reintroduced $_{14}$, $_{16}$ for the values *j*, *zh*; but used $_{29}$, $_{30}$ for *g*, *gh*, or as mere variants of $_{19}$, $_{21}$. These peculiarities are not included in the table, except for the special Ereborian *cirth*, $_{57}$, $_{58}$.

THE ANGERTHAS

TABLE OF VALUES



1	p	16	zh	31	l	46	e
2	b	17	nj–z	32	lh	47	ē
3	f	18	k	33	ng–nd	48	a
4	v	19	g	34	s–h	49	ā
5	hw	20	kh	35	s–'	50	o
6	m	21	gh	36	z–ŋ	51	ō
7	(mh)mb	22	ŋ–n	37	ng⋆	52	ö
8	t	23	kw	38	nd–nj	53	n⋆
9	d	24	gw	39	i(y)	54	h–s
10	th	25	khw	40	y⋆	55	⋆
11	dh	26	ghw,w	41	hy⋆	56	⋆
12	n–r	27	ngw	42	u	57	ps⋆
13	ch	28	nw	43	ū	58	ts⋆
14	j	29	r–j	44	w		+h
15	sh	30	rh–zh	45	ü		&

USING THE CIRTH FROM TeX

The name of the font, as distributed, is `cirth` and can be simply accessed by `\font\cirth=cirth`. The normal letters are mapped according to the older *Angerthas* where possible. The letter values and ligatures are indicated on the table below. Additionally the file `num.tex` is provided that allows the characters to be accesses by referenced to their numeric entry point in Tolkien's Table of Values. There are two interfaces for this. Firstly the macro `\c` takes a single paramer which should be a number and coresponds to the table entry. (for example `\c{24}` produces .) Alternatively you can type the english for the number preceded by a 'c' (e.g. `\ctwentyfour` produces ff). In the case where there are two *cirth* for a single entry `\c` takes the first and the english macros are suffixed by either an 'a' or a 'b'. For example `\c{38}` produces ⋈ and you must use `\cthirtyeighta` for ˇand `\cthirtyeightb` for ˘.

THE ANGERTHAS

	p		zh		l		e
	b		nj		lh		E
	f		k		33		a
	v		g		s		A
	hw		kh		S		o
	m		gh		z		O
	mb		N		37		52
	t		kw		nd		53
	d		gw		i		h
	th		khw		y		55
	dh		ghw		hy		56
	n		ngw		u		ps
	ch		nw		U		ts
	j		r		w		c
	sh		rh		38		&

The files `cirbf.mf`, `cirsl.mf`, and `cirss.mf` have also been provided that produce (respectively) boldface, slanted, and sans-serif Cirth fonts. The boldface fonts stands out well and can be used when inserting Cirth into normal text. For Cirth on its own I reccomend the normal font at 12 point. The Sans-serif font eliminates the serifs (as expected) and makes the pen round, giving very clear characters. (With the normal slanted pen the slanted strokes to the left are darker than to the right.) I can think of no use for the slanted font (but it was easy to do!). MetaFont hacks can easily combine the options and produce a slanted bold font without serifs if they so chose.

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