plqaD (Klingon) and its Usage

Back in the halcyon days of 1997, a proposal was made for encoding the "pIqaD" characters used for writing Klingon (**WWWW WWW**). The proposal was rejected, on the grounds that pIqaD was not actually used by its purported userbase, who instead used the standard Latin orthography for Klingon. The issue reared its head on the Unicode mailing list from time to time since then (links are to thread-headers, not necessarily to the most relevant messages therein). And there have been <u>blogs</u> entirely in pIqaD, and also usage in <u>dictionary sites</u> and <u>other websites</u> (click "pIqaD Lexicon" in the menu on the left and choose some options from that menu). There are pages <u>describing</u> how to use pIqaD (where to get fonts, etc). Note that some of these sites are quite old (and indeed are archived and no longer available at their original locations); this is not a new phenomenon. And yet the claim has always been that there is a lack of usage.

The years roll by as they always do, and more examples of pIqaD usage for Klingon have been coming to light. Does this still not count as usage?

- A comic book has recently been published (Johnson, Mike and Parrot, Ryan Star <u>Trek: X X X X (Manifest Destiny</u>] #1(Klingon Edition), 2016, IDW Publishing) whose text is entirely in pIqaD, even down to the titles of people credited on the title page (figs 1, 2).
- The book **XYEAGE CP: ATSSATT TEACTING *XYEAC XATISAT THERE 545** (Robinson, Ben, Rick Sternbach, and Robert Bonchune. *Klingon Bird of Prey I.K.S. Rotarran (B'rel Class) Owner's Workshop Manual.* Sparkford: Haynes, 2012.) clearly lists its Klingon title on its front cover and title page, and has pIqaD page and chapter headers, pIqaD page numbers, and pIqaD in its glossary (figs 3, 4, 5).
- pIqaD has been used in a <u>legal brief</u> filed with a U.S. court.
- Microsoft's Bing Translation tool has pIqaD as an option for inputting and outputting Klingon text (fig 6, showing output only. The text used is the wellestablished <u>PUA encoding of pIqaD</u> which has been mentioned in earlier discussions of this topic).
- Some years ago, a Klingon edition of Monopoly came out (figs 11, 12, 14, 15, 16) on which practically everything written on the box in English is also there in Klingon in pIqaD, and pIqaD is also found on its gameboard and cards.
- pIqaD can be found on wine bottle labels (fig 7) and on phone apps (figs 9, 13).

A set of "Quotable Klingon" cards was issued by Paramount, which show Klingon aphorisms in English and in Klingon in both Latin and pIqaD transcriptions (figs 8, 10), with plenty of better examples available via <u>Google image search</u>).

Can Meroitic show so much evidence of modern usage?

It is certainly true that many Klingonists use only the Roman orthography (I myself do not use pIqaD much, if at all). But then, some people write Sanskrit only with Devanagari characters, and never use other Bramhi scripts for it, yet we still encode Sanskrit-specific characters in those other scripts. The existence of an alternative does not invalidate other options. Nor does its artificiality (all writing systems are artificial, and several already-encoded ones are quite new on the world scene also); after all, the Unicode Consortium has recently recommended encoding other symbols associated with <u>mythical planets</u>. I think it is time for the issue of pIqaD to be revisited again, and resolved once and for all, by encoding it.

The content of <u>N1643</u> is reiterated below, with minor changes (including two additional characters listed in the <u>ConScript Unicode Registry</u>), as the current proposal, if only to serve as a starting point. I beg the pardon of Michael Everson, the original author of the work, for placing my name on it (as the current requester), and for leaving him on the hook for providing glyph shapes.

DOC TYPE:	Individual contribution	
TITLE:	Proposal to encode Klingon in Plane 1 of ISO/IEC 10646-2	
SOURCE:	Mark Shoulson (after Michael Everson (IE))	
STATUS:	Proposal.	
DISTRIBUTION:	Worldwide	

A. Administrative

1. Title	Proposal to encode Klingon in Plane 1 of ISO/IEC 10646-2
2. Requester's name	Mark Shoulson
3. Requester type	Individual request
6a. Completion	This is a complete proposal.
6b. More information to be provided?	No

B. Technical -- General

1a. New script? Name?	Yes. Klingon
1b. Addition of characters to existing block? Name?	No.
2. Number of characters	37
3. Proposed category	Category B.1
4. Proposed level of implementation and rationale	Level 1
5a. Character names included in proposal?	Yes
5b. Character names in accordance with guidelines?	Yes
5c. Character shapes reviewable?	Yes
6a. Who will provide computerized font?	Michael Everson,

	Evertype
6b. Font currently available?	Michael Everson, Evertype
6c. Font format?	ТгиеТуре
7a. Are references (to other character sets, dictionaries, descriptive texts, etc.) provided?	Yes.
7b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached?	No
8. Does the proposal address other aspects of character data processing?	No

C. Technical -- Justification

1. Contact with the user community?	Yes, with the Klingon Language Institute
2. Information on the user community?	Klingon enjoys both scholarly and popular use.
3a. The context of use for the proposed characters?	Used to write Шпgan ноl, the Klingon language.
3b. Reference	
4a. Proposed characters in current use?	Yes
4b. Where?	By scholars and enthusiasts.
5a. Characters should be encoded entirely in BMP?	No. Positions U+0001 CDD0 - U+0001 CD7F are proposed for the encoding.
5b. Rationale	Accordance with the Roadmap.
6. Should characters be kept in a continuous range?	Yes
7a. Can the characters be considered a presentation form of an existing character or character sequence?	No.
7b. Where?	
7c. Reference	

8a. Can any of the characters be considered to be similar (in appearance or function) to an existing character?	No
8b. Where?	
8c. Reference	
9a. Combining characters or use of composite sequences included?	No
9b. List of composite sequences and their corresponding glyph images provided?	No
10. Characters with any special properties such as control function, etc. included?	No

D. SC2/WG2 Administrative

To be completed by SC2/WG2

1. Relevant SC 2/WG 2 document numbers:

2. Status (list of meeting number and corresponding action or disposition)

3. Additional contact to user communities, liaison organizations etc.

4. Assigned category and assigned priority/time frame

Other Comments

This encoding at derives from the Linux kernel source code

("Documentation/unicode.txt" by H. Peter Anvin, <u>hpa@zytor.com</u>), from which some of the description here has been taken. This proposal differs from the Linux registration by including an additional character, KLINGON SYMBOL FOR EMPIRE at U+xxFF, as well as two punctuation characters.

Several glyph forms for the Klingon alphabet are extant. The Qo'noS font, designed for *Star Trek: The Motion Picture* by the Astra Image Corporation, is the standard font used by the Klingon Language Instutute and Paramount (though Paramount appears to use the characters unsystematically vis à vis the Klingon language). The Klinzhai font, derived from *The U.S.S. Enterprise Officer's Manual* (1980), predates Marc Okrand's *Klingon Dictionary* and does not have a standard relationship to *thingan Hol* or to the Qo'noS font.) Klingon has an alphabet of 26 characters, a positional numeric writing system with 10 digits, and is written left-to-right, top-to-bottom. Punctuation in the form of triangles for commas and full stops is attested in the examples. The standard Okrand transliteration for Klingon runs as follows:

abchDeghHIjlmnngopqQrSttlhuvwy'

In the names list below, "q" is written Q and "Q" is written QH.

This encoding has been endorsed by the Klingon Language Institute (<u>http://www.kli.org/</u>).

U+xxF9 KLINGON DIGIT NINE;Nd;0;L;;9;9;9;N;;;;; U+xxFD KLINGON COMMA;Po;0;L;;;;N;;;;; U+xxFE KLINGON FULL STOP;Po;0;L;;;;N;;;;; U+xxFF KLINGON SYMBOL FOR EMPIRE;Po;0;ON;;;;N;;;;;	U+xxD0 U+xxD1 U+xxD2 U+xxD3 U+xxD4 U+xxD5 U+xxD6 U+xxD7 U+xxD8 U+xxD9 U+xxD9 U+xxD0 U+xxD0 U+xxD0 U+xxD0 U+xxD0 U+xxD0 U+xxD0 U+xxE1 U+xxE2 U+xxE3 U+xxE3 U+xxE4 U+xxE5 U+xxE3 U+xxE4 U+xxE5 U+xxE7 U+xxE8 U+xxF1 U+xxF2 U+xxF3 U+xxF4 U+xxF5 U+xxF7 U+xxF8	KLINGON KLINGON	LETTER J;LO;0;L;;;;N;;;; LETTER L;LO;0;L;;;;N;;; LETTER M;LO;0;L;;;;N;;; LETTER M;LO;0;L;;;;N;;; LETTER NG;LO;0;L;;;;N;;; LETTER NG;LO;0;L;;;N;;; LETTER O;LO;0;L;;;N;;; LETTER Q;LO;0;L;;;N;;; LETTER Q;LO;0;L;;;N;;; LETTER QH;LO;0;L;;;N;;; LETTER R;LO;0;L;;;N;;; LETTER S;LO;0;L;;;N;;; LETTER T;LO;0;L;;;N;;; LETTER T;LO;0;L;;;N;;; LETTER U;LO;0;L;;;N;;; LETTER U;LO;0;L;;;N;;; LETTER V;LO;0;L;;;N;;; LETTER V;LO;0;L;;;N;;; LETTER V;LO;0;L;;;N;;; LETTER V;LO;0;L;;;N;;; LETTER QLOTTAL STOP;LO;0;L;;;;N;;;; DIGIT ZER0;Nd;0;L;;0;0;0;N;;;; DIGIT THREE;Nd;0;L;;2;2;2;N;;;; DIGIT THREE;Nd;0;L;;5;5;N;;;; DIGIT FOUR;Nd;0;L;;6;6;6;N;;;;; DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;
<pre>U+xxF7 KLINGON DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;; U+xxF8 KLINGON DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;; U+xxF9 KLINGON DIGIT NINE;Nd;0;L;;9;9;9;N;;;;; U+xxFD KLINGON COMMA;P0;0;L;;;;N;;;;;;;;;;;;;;;;;;;;;;;;;;;;</pre>			
U+xxF8 KLINGON DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;; U+xxF9 KLINGON DIGIT NINE;Nd;0;L;;9;9;9;N;;;;; U+xxFD KLINGON COMMA;P0;0;L;;;;N;;;;; U+xxFE KLINGON FULL STOP;P0;0;L;;;;;N;;;;;			DIGII SIX;N0;0;L;;6;6;6;N;;;;;
U+xxF9 KLINGON DIGIT NINE;Nd;0;L;;9;9;9;N;;;;; U+xxFD KLINGON COMMA;Po;0;L;;;;N;;;;; U+xxFE KLINGON FULL STOP;Po;0;L;;;;;N;;;;;			DIGII SEVEN;N0;0;L;;/;/;/;N;;;;;
U+xxFD KLINGON COMMA;Po;0;L;;;;N;;;;; U+xxFE KLINGON FULL STOP;Po;0;L;;;;;N;;;;;			
U+xxFE KLINGON FULL STOP;Po;0;L;;;;;N;;;;;			DIGIT NINE;Nd;0;L;;9;9;9;N;;;;;
U+xxFE KLINGON FULL STOP;Po;0;L;;;;;N;;;;; U+xxFF KLINGON SYMBOL FOR EMPIRE;Po;0;ON;;;;;N;;;;;	• • • • • •	KLINGON	COMMA;Po;0;L;;;;N;;;;;
U+xxFF KLINGON SYMBOL FOR EMPIRE;Po;0;0N;;;;;N;;;;;	U+xxFE	KLINGON	FULL STOP;Po;0;L;;;;N;;;;;
	U+xxFF	KLINGON	<pre>SYMBOL FOR EMPIRE;Po;0;ON;;;;;N;;;;</pre>

U+xxD0 U+xxD1	KLINGON LETTER A KLINGON LETTER B		F8D	F8E	F8F
U+xxD2	KLINGON LETTER CH				
U+xxD3	KLINGON LETTER D		_	_	
U+xxD4	KLINGON LETTER E	0	A	5	-
U+xxD5	KLINGON LETTER GH		, 1		
U+XXD6	KLINGON LETTER H	1	*	T	-
U+xxD7	KLINGON LETTER I	. '	7	F	1
U+xxD8	KLINGON LETTER J				
U+xxD9	KLINGON LETTER L	2		X	(
U+xxDA	KLINGON LETTER M			\sim	1
U+XXDA	KLINGON LETTER N			4	4
U+XXDB U+XXDC	KLINGON LETTER NG	3	A		•
U+XXDC U+XXDD	KLINGON LETTER O				
U+XXDD U+XXDE	KLINGON LETTER P	4		V	V
U+XXDE U+XXDF	KLINGON LETTER Q			X	
	KLINGON LETTER QH		<u> </u>		
U+xxE0 U+xxE1	KLINGON LETTER R	5	Τ	A	Ę
U+XXE1 U+XXE2	KLINGON LETTER R				٦
U+XXE2 U+XXE3	KLINGON LETTER T		•	1	`
	KLINGON LETTER TLH	6	9	H	П
U+xxE4 U+xxE5	KLINGON LETTER U			· · ·	
U+XXE5 U+XXE6	KLINGON LETTER V	7	9	T	*
U+XXE0 U+XXE7	KLINGON LETTER V		X	١.	
U+XXE7	KLINGON LETTER Y		_		
U+XXE0 U+XXE9	KLINGON LETTER GLOTTAL STOP	8	77	7	Ĭ
U+XXE9 U+XXEA	(This position shall not be used)				/=
U+XXEA	(This position shall not be used)			8	•
		9	4	•	I.
U+XXEB	(This position shall not be used)				
U+xxED U+xxEE	(This position shall not be used)	A	•		
	(This position shall not be used)		V		
U+XXEF	(This position shall not be used)				
U+xxF0	KLINGON DIGIT ZERO KLINGON DIGIT ONE	В	÷		
U+xxF1			```		
U+xxF2	KLINGON DIGIT TWO	с	T		
U+xxF3	KLINGON DIGIT THREE KLINGON DIGIT FOUR				
U+xxF4					
U+xxF5 U+xxF6	KLINGON DIGIT FIVE	D	7		-
	KLINGON DIGIT SIX		<u> </u>		
U+xxF7	KLINGON DIGIT SEVEN KLINGON DIGIT EIGHT	_	4		
U+xxF8 U+xxF9	KLINGON DIGIT EIGHT	E	2		-
			-		
U+XXFA	(This position shall not be used) (This position shall not be used)	F	1		
U+xxFB U+xxFC		'	ין		
	(This position shall not be used)	i	.ż		L
U+xxFD					
U+xxFE U+xxFF	KLINGON FULL STOP KLINGON SYMBOL FOR EMPIRE				



Illustration 1: Page from comic book



Illustration 2: Title page from comic. Note *piqap* for roles of *artists*.



Illustration 3: Front cover of book



Illustration 4: Title page



Illustration 5: Page of glossary

English 🗸 Klingon (pIqaD)	\diamond	Klingon (pIqaD) 🗸 English
Klingon	X	<i>₹₹₹₹</i> €
() ~	7/5000	Image: Second system Image: Second system In partnership with CBS, Paramount and KLI

Illustration 6: Bing translate (output shown)



Illustration 7: Klingon "Blood Wine" label





Illustration 8: Card from "Quotable Klingon"

Illustration 9: pIqaD app



Illustration 10: More "Quotable Klingon" cards



Illustration 11: Box of Klingon Monopoly





Illustration 13: *** 75/ F?**, a Klingon dictionary app, in pIqaD mode



Illustration 14: Property cards (front and back; the pIqaD shows the name of the property) and samples of money from Klingon Monopoly



Illustration 15: Part of Klingon Monopoly game board



Illustration 16: From the back of the Klingon Monopoly box