Proposal to encode the Elymaic script in Unicode

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1 Introduction

This proposal is a revision and expansion of "Preliminary proposal to encode the Elymaic script in Unicode" (L2/17-055). It contains additional background details, an expansion of the character repertoire, notes on letters, and several new specimens. It also addresses comments provided provided in:

- L2/17-255: Recommendations to UTC #152 July-August 2017 on Script Proposals
- L2/17-384: Recommendations to UTC #153 November 2017 on Script Proposals

The 'Elymaic' script was allocated to the "Roadmap to the Supplementary Multilingual Plane" (v. 3.0) in 2001. It was identified as a suitable candidate for encoding by Michael Everson in "Roadmapping early Semitic scripts" (N2311). Although no proposal to encode the script has been submitted in the past sixteen years, there is current and active scholarly interest in the script and the associated history, culture, and language of Elymais.

2 Background

The proposed script was used in the ancient state of Elymais, located in the southwestern region of modern Iran at the head of the Persian Gulf (see figure 1). It flourished from the 2nd century BCE to the early 3rd century CE as a semi-independent polity that was intermittently under the control of the Parthian empire (247 BCE – 224 CE). The name 'Elymais' is a romanization of the Hellenic designation 'Ελυμαίς' for the region known in Sumerian sources from the middle of the third millennium BCE as (NIM) elam; in Akkadian as elamū and elammatu; and in the indigenous ancient Elamite language as haltamti or hatamti (Poebel 1931). Known in English as 'Elam', the region lies in the present-day Iranian province of Khuzestan, the name of which derives from (T-): -K hūjiva, the Old Persian name for the area.

There is no attested native name for the script. It is referred to as 'Elymaic' and 'Elymaean' in English scholarly literature. It appears that 'Elymaic' is the more widespread name for the script today, cf. Naveh (1997), Häberl (2006), Gzella (2008); and 'Elymaean' was used earlier, cf. Henning (1952), Bivar and Shaked (1964). The term 'Elymaic' is also used in general works on writing systems, cf. Healy (1990), O'Connor (1996). Recent articles in the *Encyclopædia Iranica* offer a distinction between the two terms:

they refer to 'Elymaic' inscriptions (Humbach 2011), but 'Elymaean' people and coinage (Hansman 2011). Based upon the prevalence of 'Elymaic', it is proposed as the identifer for the script in Unicode.

Elymaic is a right-to-left, non-joining *abjad* derived from the Aramaic script used by the Achaemenid chancellery. Although there is no evidence that the Aramaic language was spoken in Elymais, the local administration developed a regional variety of the script for writing standard Achaemenid Aramaic (Gzella 2008: 127). The script is best attested on stone inscriptions produced by local ruling dynasties, from the 1st through 3rd centuries CE. Some important epigraphical records are:

- *Tang-e Sarvak* This "valley of the cypresses" in eastern Khuzestan is considered to be the most important archaeological site in Elymais. It is believed to be a sacred grove used for the coronation of Elymaean kings. The site contains four free-standing monuments, with rock reliefs consisting of thirteen panels (Haerinck 2005). The artefacts at the site are generally dated between the 1st century CE and the first quarter of the 3rd century. Six inscriptions are extant (see figures 7–13).
- *Tang-e Butan* There are five inscriptions on two large rock reliefs in the "valley of the idols" in the Shimbar valley in northeastern Khuzestan (see figures 14–18). The first relief depicts one individual and the second depicts twelve individuals (Bivar and Shaked 1964). The reliefs are dated between the 1st century BCE and the 3rd century CE.
- Tang-e Chilau A large triangular stone containing graffito written in carbon ink. Bivar and Shaked note that "Elymaean script of the first and second centuries A.D., similar to that of the Tang-i Butān was especially prominent" here and that "[s]everal examples seemed to mark a stage transitional in the development from chancery Aramaic to Elymaean, and may be of the first century B.C. or even earlier" (1964: 283). In addition to the Elymaic graffiti (figures 19–21), there are also ink texts in the Parthian and Pahlavi scripts.
- *Hong-e Kamalwand* A relief at Hong-e Kamalwand in Susiana, east of Elymais, has one inscription in a script that closely resembles Elymaic (see figure 22). The inscription has been dated to 100 CE (Gzella 2008: 121).
- Short inscriptions have been identified at Bard-e Neshandeh, Masjed-e Soleyman, and Hong-e Yaralivand.

The script is also attested on coinage. There are several types of numismatic records from Elymais, bearing inscriptions in Greek, Parthian, and Elymaic. Coins with Elymaic legends were minted during the Arsacid period. The inscription from a tetradrachm of Kamnaskires Orodes is shown in figure 23. The script on this coin differs from that used on small copper coins struck by Orodes II and Kamnaskires, shown in figures 24–25. It appears that two scripts were used for coinage in Elymais: that of the tetradrachms resembles those of the stone inscriptions, while that of the small coppers has letters similar to Parthian forms (compare the letters, respectively, of the 'grand module' and 'petit module' coins in figure 26).

Elymaic is related to other Aramaic-based scripts of southern Mesopotamia, mostly closely to Parthian and Mandaic, and also to Characenean (see Coxon 1970, Häberl 2005, Naveh 1997, Rezakhani 2012). A comparison of these scripts is shown in table 1. There is some debate regarding the relationship of Elymaic and Mandaic. Some scholars are of the opinion that Elymaic is the ancestor or sibling of Mandaic, while others state that it is a descendant of the latter.

3 Approach to the Encoding

There is no standard form of Elymaic. For purposes of the encoding, the representative 'Elymaic' script is based upon that of the stone inscriptions. While there are differences in the shapes of some letters across the inscriptions, they may be considered stylistic or local variations. On the whole, the scripts on the inscriptions exhibit uniformity and convey the sense of a single writing system.

- *Repertoire* The proposed character repertoire is based upon the inscriptions at Tang-e Sarvak, in which all 22 letters of the Elymaic *abjad* are attested.
- Ordering The alphabetic order for Elymaic follows that of Aramaic.
- Character names Indigenous names for Elymaic letters are not attested. Therefore, this proposal adopts the Unicode naming convention for the 'Imperial Aramaic' block, which has also been used for Parthian and Pahlavi scripts. These names differ slightly from scholarly names for Aramaic letters. In this document, names in italics refer to names for graphemes while names in small capitals refer to proposed Unicode characters, eg. m is aleph and Elymaic Letter Aleph. For sake of brevity, the descriptor 'Elymaic' is dropped when referring to Elymaic characters, eg. Elymaic Letter Aleph is referred to as Aleph. Characters of other scripts are designated by their full Unicode names. Latin transliteration of Elymaic letters follows scholarly convention.
- Letterforms The representative glyphs are normalizations of forms used at Tang-e Sarvak. With regard to the letterforms in the Tang-e Sarvak inscriptions, Henning notes: "The writing is simply the same as that found on the coins which the kings of Elymais issued in Parthian times" and may be "allocated to the first and second centuries" CE (Henning 1952: 163). With regard to the script of Tang-e Butan, Bivar and Shaked write, "the Shīmbār inscriptions are very close from the point of view of palaeography to the Elymaic script of Tang-i Sarvak" (1964: 271). Gzella writes: "The same script [as that of Tang-e Sarvak], with a few palaeographic differences which might be due to local variation, has also been used for five inscriptions accompanying rock sculptures from Tang-e Butan in the Shimbar Valley" (2008: 119). Similarly, the inscription at Hong-e Kamalwand, although outside of Elymais proper, has more archaic forms, but has a close resemblance to other Elymaic inscriptions (Gzella 2008: 121).

The proposed repertoire is certainly suitable for representing numismatic inscriptions, particularly those on tetradrachm coins. But, the script of some coins, particularly the small coppers, may be a separate script, perhaps Parthian or a form of it (see figure 27). For such coins, it may be practical to use the Inscriptional Parthian encoding.

The specific style of a particular inscriptions or coin is to be managed typographically through the selection of fonts designed specifically for each style.

4 Proposed repertoire

The proposed repertoire for Elymaic contains 23 characters: 22 letters and 1 ligature.

4.1 Letters

Glyph	Unicode character name	Variant	Aramaic	Latin
മ	ELYMAIC LETTER ALEPH	œ	ālap)
¥	ELYMAIC LETTER BETH		bēth	b
^	ELYMAIC LETTER GIMEL	>	gāmal	g
ኝ	ELYMAIC LETTER DALETH	3	dālath	d
91	ELYMAIC LETTER HE	૧૧ વ	hē	h
)	ELYMAIC LETTER WAW		waw	W
J	ELYMAIC LETTER ZAYIN	J	zain	Z
ų	ELYMAIC LETTER HETH		ḥēth	ķ
U	ELYMAIC LETTER TETH		ţēth	ţ
•	ELYMAIC LETTER YODH	1	yodh	у
9	ELYMAIC LETTER KAPH		kāp	k
ر	ELYMAIC LETTER LAMEDH	٢	lāmadh	1
×	ELYMAIC LETTER MEM	×	mem	m
J	ELYMAIC LETTER NUN	J	nun	n
Þ	ELYMAIC LETTER SAMEKH	Ъ	semkath	S
У	ELYMAIC LETTER AYIN		${}^{\varsigma}ar{e}$	(
ງ	ELYMAIC LETTER PE	c	$par{e}$	p
Jc	ELYMAIC LETTER SADHE		ṣādhē	Ş
т	ELYMAIC LETTER QOPH		qop	q
У	ELYMAIC LETTER RESH		rēsh	r
Δij	ELYMAIC LETTER SHIN	ות	shin	š
п	ELYMAIC LETTER TAW	н	taw	t

Notes on the letters:

- The letters y kaph and y resh have a similar structure, but they are distinguished by their terminals. The terminal of kaph is written with a long descender, which stretches below the baseline, while that of resh is shorter and does not cross the baseline. Even in texts where letters are wander from the baseline and letter heights are inconsistent, the kaph differs from resh on account of its elongated tail. Inscriptions #1 and #2 from Tang-e Sarvak show the letters distinctively in the word מעכענ (figures 8, 9). The difference is also clear in the word אַנאשי in Tang-e Butan inscription #2 (figure 15), as well as in אַנאשי kwmr in the inscription at Hong-e Kamalwand (figure 22).
- The letters y ayin and y resh may appear similar, but they have distinctive shapes. The basic stucture of both consists of one arc intersecting another. In ayin, the smaller left arc bisects the primary right arc; while in resh, the terminal of the left arc joins the origin of the right arc, or meets at a point close to the origin. Also, the terminal of the right stroke in ayin stops at the base line, while that of resh often curves at or along the baseline. The differences are apparent in Tang-e Butan inscription #4: compare the ayin in א עות א עליא with the resh in ye br and ישיבע 'yrsy (figure 17). See also Tang-e Sarvak inscription #3, in which the ayin in עליא are clearly different from the resh in ye br and עליא wrwd (figure 10). Here, the appearance of the letters is quite rigid, but there is a sense of a deliberate differentiation between the letters by inscribing ayin with a prominent angular stroke.
- The letters J zayin and J lamedh are similar, but the latter has a longer ascender. In some inscriptions, the ascender of lamedh has a slight curve or ripple at top, ie. J, and zayin may have no curve, ie. J.
- The letters J *lamedh* and J *nun* are also similar. The *nun* is written with an elongated descender and hook, while *lamedh* rests along the baseline.
- The letter *yodh* is represented in the majority of inscriptions using the dot form, but it occurs as an elongated stroke i in Tang-e Sarvak #3 (see figure 10). The form i occurs in coinage. It is treated as a glyphic variant.

4.2 Ligature

Glyph	Unicode character name	Variant	Aramaic	Latin
U	ELYMAIC LIGATURE ZAYIN-YODH	γh	zy	zy

In several inscriptions the Aramaic particle 'z zy is represented using the form u, a ligature of z zayin and 'yodh. As Elymaic is a non-joining script the zy ligature may be considered a special case. While it be may possible to represent the ligature using the control character $\begin{bmatrix} z & y \\ y & y \end{bmatrix}$ U+200D ZERO WIDTH JOINER, it is practical to consider the ligature as an atomic character on account of the structure of Elymaic: the zy ligature appears to be consistently joined while other letters are not. The proposed character is named after the letters that compose the ligature. This LIGATURE ZAYIN-YODH may correspond to $\angle U$ +0856 MANDAIC LETTER DUSHENNA.

4.3 Other features

Punctuation There are no special signs for punctuation. Word boundaries are generally not indicated, but in some inscriptions it appears that spaces are used between words.

Digits Digits are not attested.

Line-breaking There are no formal rules for the breaking of words at end of line. In some inscriptions lines appear to be broken at phrase boundaries. In digital layouts line-breaks may occur after any character.

Cursive writing In the majority of inscriptions the letters are freestanding. In some sources, the strokes of adjacent letters of a word may connect or overlap, eg. Tang-i Butan #5 (see figure 18). But the script does not possess intrinsic conjoining or cursive behavior. The only evidence of deliberate cursive writing is the ligature zy.

4.4 Collation

The sort order for Elymaic letters follows the encoded order:

```
м ALEPH < у BETH < м GIMEL < у DALETH < н HE < у WAW < у ZAYIN <

у НЕТН < и тЕТН < 'YODH < у КАРН < У LAMEDH < х МЕМ < у NUN <

р SAMEKH < у АУІN < р РЕ < у SADHE < т QОРН < у RESH < л SHIN <
л ТАЖ
```

The LIGATURE ZAYIN-YODH should be collated after the sequence <J ZAYIN, 'YODH>, for example:



5 Character Properties

5.1 UnicodeData.txt

```
10EC0; ELYMAIC LETTER ALEPH; Lo; 0; R;;;; N;;;; 10EC1; ELYMAIC LETTER BETH; Lo; 0; R;;;; N;;;; 10EC2; ELYMAIC LETTER GIMEL; Lo; 0; R;;;; N;;;; 10EC3; ELYMAIC LETTER DALETH; Lo; 0; R;;;; N;;;; 10EC4; ELYMAIC LETTER HE; Lo; 0; R;;;; N;;;; 10EC5; ELYMAIC LETTER WAW; Lo; 0; R;;;; N;;;; 10EC6; ELYMAIC LETTER ZAYIN; Lo; 0; R;;;; N;;;; 10EC7; ELYMAIC LETTER HETH; Lo; 0; R;;;; N;;;; 10EC8; ELYMAIC LETTER TETH; Lo; 0; R;;;; N;;;;
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10EC9;ELYMAIC LETTER YODH;Lo;0;R;;;;N;;;;
10ECA;ELYMAIC LETTER KAPH;Lo;0;R;;;;N;;;;
10ECB;ELYMAIC LETTER LAMEDH;Lo;0;R;;;;N;;;;
10ECC;ELYMAIC LETTER MEM;Lo;0;R;;;;N;;;;
10ECD;ELYMAIC LETTER NUN;Lo;0;R;;;;N;;;;
10ECF;ELYMAIC LETTER AYIN;Lo;0;R;;;;N;;;;
10ED0;ELYMAIC LETTER AYIN;Lo;0;R;;;;N;;;;
10ED1;ELYMAIC LETTER SADHE;Lo;0;R;;;;N;;;;
10ED1;ELYMAIC LETTER SADHE;Lo;0;R;;;;N;;;;
10ED2;ELYMAIC LETTER QOPH;Lo;0;R;;;;N;;;;
10ED3;ELYMAIC LETTER RESH;Lo;0;R;;;;N;;;;
10ED4;ELYMAIC LETTER SHIN;Lo;0;R;;;;N;;;;
10ED5;ELYMAIC LETTER TAW;Lo;0;R;;;;N;;;;
10ED5;ELYMAIC LETTER TAW;Lo;0;R;;;;N;;;;
```

5.2 LineBreak.txt

```
10EC0..10ED6; AL # Lo [23] ELYMAIC LETTER ALEPH..ELYMAIC LIGATURE ZAYIN-YODH
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6 References

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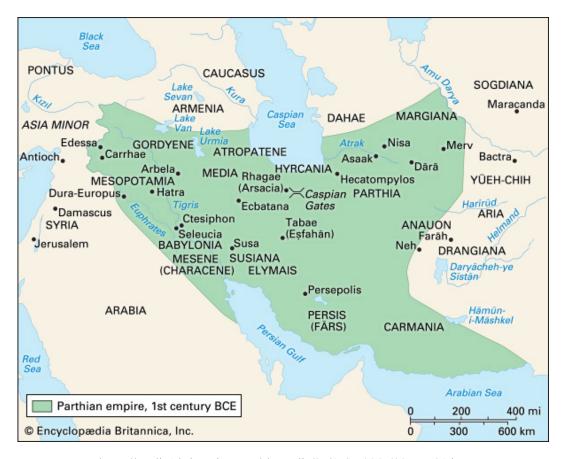
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7	10EC7	1925
8	10EC7	
9	10EC9	
Α	J	
В	10ECA	
С	10ECB	
D	10ECC	
E	JP	
F	10ECE Y 10ECF	

Letters

10EC0 🛎 ELYMAIC LETTER ALEPH 10EC1 **½** ELYMAIC LETTER BETH 10EC2 A ELYMAIC LETTER GIMEL 10EC3 x ELYMAIC LETTER DALETH 10EC4 94 ELYMAIC LETTER HE 10EC5 > ELYMAIC LETTER WAW 10EC6 J ELYMAIC LETTER ZAYIN 10EC7 → ELYMAIC LETTER HETH 10EC8 u ELYMAIC LETTER TETH 10EC9 · ELYMAIC LETTER YODH 10ECA y ELYMAIC LETTER KAPH 10ECB J ELYMAIC LETTER LAMEDH 10ECC x ELYMAIC LETTER MEM 10ECD J ELYMAIC LETTER NUN 10ECE **p** ELYMAIC LETTER SAMEKH 10ECF y ELYMAIC LETTER AYIN 10ED0 g ELYMAIC LETTER PE 10ED1 **Jc** ELYMAIC LETTER SADHE 10ED2 **T** ELYMAIC LETTER QOPH 10ED3 y ELYMAIC LETTER RESH 10ED4 m ELYMAIC LETTER SHIN 10ED5 **n** ELYMAIC LETTER TAW

Ligature

10ED6 **u** ELYMAIC LIGATURE ZAYIN-YODH • used for the Aramaic heterogram zy



https://media1.britannica.com/eb-media/25/1725-004-630DAE31.jpg

Figure 1: Map of the Parthian around the 1st century BCE showing the location of Elymais (near center). Source: *Encyclopædia Britannica*.

	Elymaic	Mandaic	Inscriptional Pahlavi	Inscriptional Parthian	Imperial Aramaic
aleph	മ	o	П	77	*
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Table 1: Comparison of Elymaic, Mandaic, Inscriptional Pahlavi, Inscriptional Parthian, and Aramaic. Mandaic letters have unique names that differ from Aramaic names. Parenthesis indicate that a letter has been unified with another in the respective encoding. In Inscriptional Pahlavi, *ayin* and *resh* are unified with *waw*, and *qoph* with *mem*.

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	3rdc.B.C Aśoka inscr.	Elymaic	Chara- cenian	book- hand	cursive*	Parallels	3nd c.B.C. (Egypt)	early	monu- mental	cursiv e
	* *	200	0	ے ہ	0 0	מ, פ, אי	Х	K	49	L
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Fig. 119. Development of the South Mesopotamian scripts (in comparison with Nabataean). Key to the parallels: (1) a bulla from Babylonia; (2) the Nash papyrus; (3) Hatra; (4) the Birecik inscription, Syriac of 6 A.D.; (4a) Syriac inscription of 165 A.D. from Samatar Harabesi (A raised x marks final forms)

Figure 2: Comparison of Elymaic, Mandaic, Nabataean, and other scripts (from Naveh 1997: 137).

A ARAMAIC	PARTHIAN	COI	f 4415		NG -	ı S	ARVA	ĸΚ	
Par. Strout	A B	SMALL COPPERS, (PHETH)	TETRA- DRADHIS (ARAH)	No. 1	No. 2	No. 3	No. 4	No.5	No. 6
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Figure 3: Comparison of Aramaic and Parthian with Elymaic (from Henning 1952: 168).

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Fig. 1. The script of the Shīmbār inscriptions. The column showing the Tang-i Sarvak forms is based on W. B. Henning's table in *Asia Major*, NS, II, 2, 1952, 168.

Figure 4: Comparison of Elymaic letters in the inscriptions at Tang-e Sarvak and Tang-e Butan (from Bivar and Shaked 1964: 270).

					ne nds		SU	slw.	almy	rene	Naba	tacan
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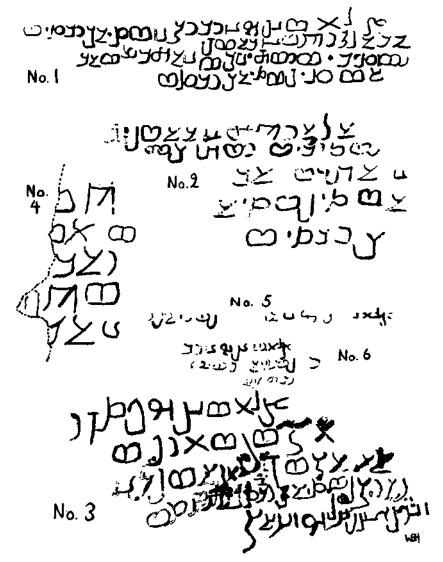
The columns showing the Tang-i Sarvak and Shimbar forms are based on Bivar and Shaked's table in B.S.O.A.S. XXVII (1964), 270; the Mandaic and Syriac bowl texts on Montgomery's table in Aramaic Incantation Texts from Nippur (1913), plates XXXIX and XL, and the Syriac inscription of the second century A.D. on Segal's table in B.S.O.A.S. XVI (1954), 32.

Figure 5: Comparison of Elymaic and other scripts (from Coxon 1970: 21).

TABLE 1. Comparison of Elymaic, Characenean, Parthian, and Mandaic Scripts

Нергем	Aramaic Values	Elymaic (Tang-e Sarvak)	Elymaic (Shimbār)	Characene Coins	Other Forms	Iranian Values	Nisa Ostraca	Parthian Inscriptions	Mandaic Values	Book Hand	Lead Amulets	Inca B	Incantation Bowls
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Figure 6: Comparison of Mandaic, Elymaic, and related scripts (Häberl 2006 : 57).



The Elymaean Inscriptions of Tang-i Sarvak

Figure 7: Renderings of Elymaic inscriptions at Tang-e Sarvak made by W. B. Henning (1952: 170). An analysis of inscriptions 1–3 is provided in the following figures.

אם סר המהגלרגאה משאר י מסתים הגלול האנגרק מאר בגד הלרעת האה אברנל המפרע באנגאים

անհոհենանինա Հահոսանուսանութա Հահոսանութանի հահոսանութանի ա.թոոհենանչոոսինա

slm, znh zy wrwd n, syb kwrsy,
br bldws, zy rb, ny
w, syry, w, tytk, zy btr, br
b, sy n, syb kwrs,

şalmā denā dī Worōd nāseb korsiyā bar Bēldōšā(?) dī rabbān wa-'Asīryā wa-'Attyōkā dī ba-tarʿā bar Bāsī nāseb kors<iy>ā

This image is the one of Worōd, holder of the throne, the son of Bēldōšā(?), who is (my) lord, and Asīryā(?) and Antiochus, who is at the gate, the son of Bāsī, holder of the throne.

Figure 8: Tang-e Sarvak inscription #1. Facsimile from Henning (1952: 170); transliteration, transcription, and translation from Gzella (2008: 113).

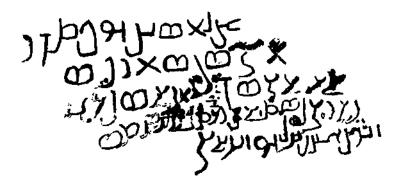
ביציצים מאל אבינה אל אבינה אל המינה אב א ארנים או

הנהלים אםלולם ליג חצע השמאר משליה שנשעי חלש אך לנעשח הצשלי

bldwš, zy rb, ny w, syry, w, tyk, zy btr, br b, sy n, syb kwrsy, Bēldōšā(?) dī rabbān wa-'Asīryā wa-'Attyōkā dī ba-tar<'>ā bar Bāsī nāseb korsiyā

Bēldōšā(?), who is (my) lord, and Asīryā(?) and Antiochus, who is at the gate, the son of Bāsī, holder of the throne.

Figure 9: Tang-e Sarvak inscription #2. Facsimile from Henning (1952: 170); transliteration, transcription, and translation from Gzella (2008: 114).



slm > znh psqw
md > n > m wp >
br bd > q mn b > n kz
wrwd n > syb kwrsy > š > ys >
yzwn gḥn < lyh y < bd</pre>

ṣalmā denā pasaq MD'N'M wa-Pā(?) bar BD'Q men Bān ka-d[ī] Worōd nāseb korsiyā Šēsā(?) zayūn gāḥen 'alēh(?) ye'bed

This image have cut MD'N'M and Pā(?) the son of BD'Q from Bān whe[n] Worōd, holder of the throne feeds Šēsā(?), bowing over him, performs (the ritual).

Figure 10: Tang-e Sarvak inscription #3. Facsimile from Henning (1952: 170); transliteration, transcription, and translation from Gzella (2008: 114).

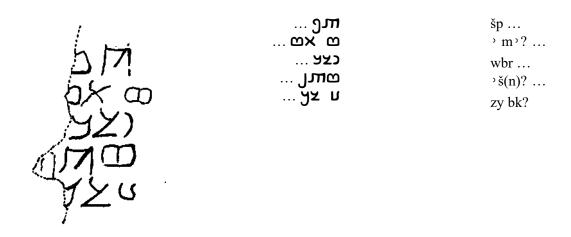


Figure 11: Tang-e Sarvak inscription #4 (Henning 1952: 170).

Figure 12: Tang-e Sarvak inscription #5 (Henning 1952: 170).

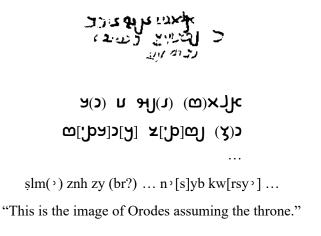
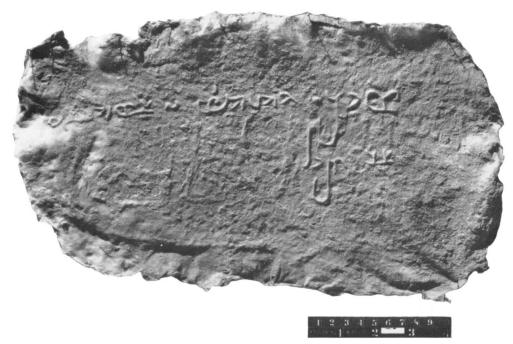


Figure 13: Tang-e Sarvak inscription #6 (Henning 1952: 170).



TANG-I BUTĀN, INSCRIPTION NO. I

גגאכך שכה אעריעש ח אשעיאא

$$\label{eq:controller} $$ `wky gšyš` (= qšyš` ?) zy b`šybh $$ `Ōk̄ē qaššīšã d̄ī Ŷāsīb̄a br ṣwl $$ bar Ṣōl $$$$

'Ōkē the priest (or elder), who is b'šybh (or: of \hat{B} ãš \bar{b} ã?) the son of \bar{S} ōl.

Figure 14: Tang-e Butan inscription #1 (Facsimile from Bivar and Shaked (1964: 273 & plate III); transliteration, transcription, and translation from Gzella (2008: 119).



1 2 3 4 5 6 7 8 9 10

Tang-i Butān, inscription no. II

ZONIED IK WKCK

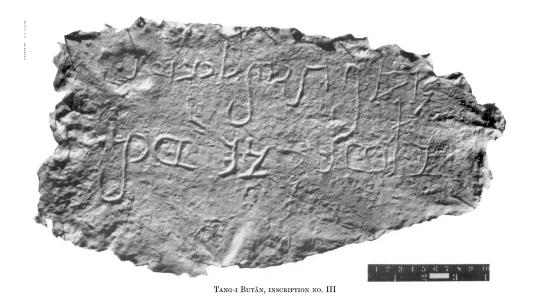
אסעריגא אג עאכא ערכלכ וי

šrwkw zy b ' šybh br šmwm Šorūķū dī <u>B</u>ãšība bar Šemon

Šorayku who is

b' $\check{s}ybh$ (or: of $\hat{B}\tilde{a}\check{s}\bar{i}b\tilde{a}$?), son of $\check{S}em$ $\check{o}n$ (?).

Figure 15: Tang-e Butan inscription #2 (Facsimile from Bivar and Shaked (1964: 273 & plate IV); transliteration, transcription, and translation from Gzella (2008: 119).



المرادم والمرس والمرادة

ארשהנ אה(.) שנה. ערטענ אחנהש ה

šptw stwr, zy
bl, rw br(x); wky

ŠPTW ṢŢWR ' dī bēl- 'ārō bar 'Ōkē

ŠPTW the stwr, who is (keeper of) the altar of Bēl(?), the son of 'Ōkē.

Figure 16: Tang-e Butan inscription #3 (Facsimile from Bivar and Shaked (1964: 274 & plate V); transliteration, transcription, and translation from Gzella (2008: 120).



TANG-I BUTĀN, INSCRIPTION NO. IV

ה.המ'. ערשעע אל ערטענ גה שרא ח ארי.ג אראים

slmy'
'lh zy 'tyd

šptw br
š'š mn
'yrsy

şalmayyā

› ellē dī 'atted

ŠPTW bar Šāš men

› Īrsē

These images are the ones which has prepared ŠPTW the son of Šāš from 'Īrsē(?).

Figure 17: Tang-e Butan inscription #4 (Facsimile from Bivar and Shaked (1964: 275 & plate VI); transliteration, transcription, and translation from Gzella (2008: 120).



Tang-i Butān, inscription no. V



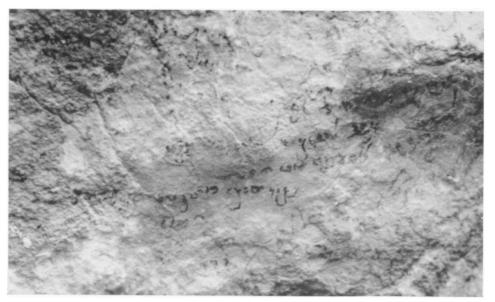
ח גשעריגא נהנג הגש

wrwd rb,
zy b, šybh

Worōd rabbā dī <u>B</u>ãšībã

Worōd the great, who is b' $\check{s}ybh$ (or: of \hat{B} āš $\bar{s}b$ ā).

Figure 18: Tang-e Butan inscription #5 (Facsimile from Bivar and Shaked (1964: 276 & plate VII); transliteration, transcription, and translation from Gzella (2008: 120).



ELYMAEAN GRAFFITO AT TANG-I CHILAU

Figure 19: Tang-e Chilau carbon ink graffiti #1 (Bivar and Shaked 1964: plate XI).



ELYMAEAN GRAFFITO AT TANG-I CHILAU

Figure 20: Tang-e Chilau carbon ink graffiti #2 (Bivar and Shaked 1964: plate XII).



ELYMAEAN GRAFFITO AT TANG-I CHILAU

Figure 21: Tang-e Chilau carbon ink graffiti #3 (Bivar and Shaked 1964: XIII).



J. Jryzy yz Oyxoy ha

שת עכאנם צב עצותעיב

[?]at kwmr br kbnšyr

[?]at komrā bar Kabnaškīr

[Phra]at(es), the priest, son of Kabnaškīr.

Figure 22: Hong-e Kamalwand stone inscription. Facsimile from Hinz (1963); transliteration, transcription, and translation from Gzella (2008: 121).

ציל אליל ולנץ א (לים דל ודוץ אוצים

הלאלגארהשגהנגלארלש

kbnškyr wrwd MLK' BR wrwd MLK'

"King Kamnaskires Orodes, son of King Orodes"

Figure 23: Elymaic legend on the tetradrachm of Kamnaskires Orodes (from Henning 1952: 164). The script differs from that on the small coppers shown in figures 24 and 25. It is of the type 'grand module' in figure 26.



wrwd MLK³ BRY wrwd King Orodes, Son of Orodes

Figure 24: Copper alloy coin of Orodes II, early 2nd to mid 2nd century CE. 16mm, 3.89g. British Museum. Registration number: 1900,0405.94. Department of Coins and Medals catalogue number: GC28p262.17.



knmkyr wrwd MLK' King Kamnaskires Orodes

Figure 25: Copper alloy coin of Kamnaskires Orodes, early 2nd to mid 2nd century CE. 16mm, 3.73g. British Museum. Registration number: 1909,0205.114. Department of Coins and Medals catalogue number: GC28p267.64.

	MONNAIRE	DE L'ÉLYMAÏDE		HADIL	ADAD	S			1	1000	
VALEUR	ORODE I ET ORODE II (petit module) CHALDÉO-PEHLVIES	ORODE I ET ORODE II (grand module) et monnaies postérieures MIXTES	BARBARES	снагово-рентут	PEHLVI-SASSANIDE CHELVI-SASSANIDE	PAPYRUS ARAMÉENS	ARAMÉEN (Epoque perse)	MONNAIES PERSÉPOLITAINES	DRACHMES ARSACIDES	MANDÉEN	ESTRANGHËLO.
Rab gdh uzh tiks nm n s ° p ç q	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			ションマサットル ノフィガノカ ム カ	スト つかんしゃい とりゃんしん	マラウタカットがらイケしろうろいつけや	キダイムハフードら十十七年ちずってやア	ユー 307 H 471 X 0	л 7 7 44 5) NИ 1 47 115 7x	在年春日日百年上人八八日日一日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日	エカノドモーコタトロコなり日かの
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Figure 26: Comparison of scripts on Elymaic coins with other scripts (from Allotte de la Fuye 1905: 53). The 'grand module' letters (column 2) resemble Elymaic forms, while the 'petit module' letters (column 1) resemble Parthian (see figure 27 for specimens of the latter).

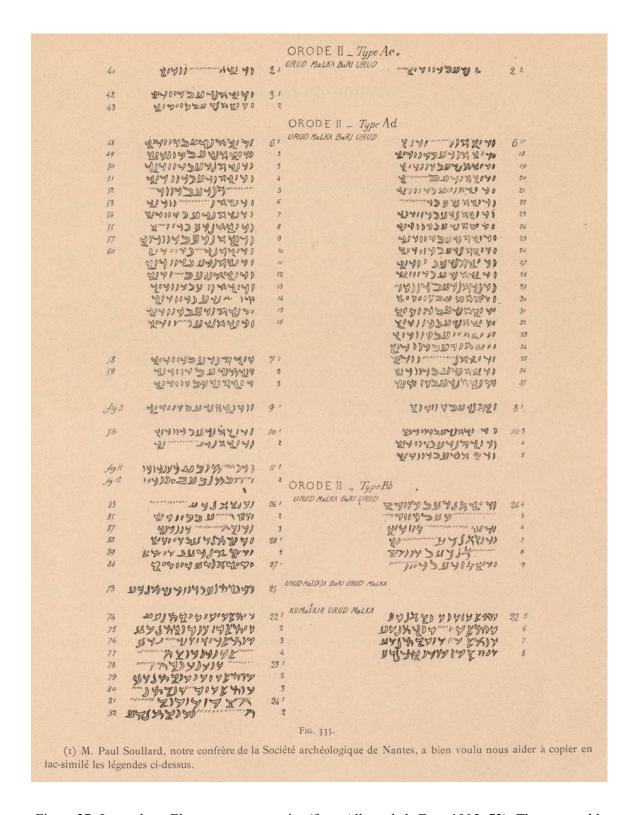


Figure 27: Legends on Elymaean copper coins (from Allotte de la Fuye 1905: 72). These resemble the Parthian script.

ISO/IEC JTC 1/SC 2/WG 2 PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 106461

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.

Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.

See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps.

A. Administrative

		e Elymaic script in Unicode	e
2. Requester's name:	Anshuman Pa	ndey <pandey @umich.edu=""></pandey>	
3. Requester type (Member body/Liaison/Ir	dividual contribution		
Submission date:		2017-10-2	23
5. Requester's reference (if applicable):			
Choose one of the following:			
This is a complete proposal:			Yes
(or) More information will be provide	ed later:		
B. Technical – General			
 Choose one of the following: 			
a. This proposal is for a new script (s	et of characters):		Yes
Proposed name of script:		Elymaic	
 b. The proposal is for addition of chain 	acter(s) to an existin	g block:	
Name of the existing block:			
2. Number of characters in proposal:			23
3. Proposed category (select one from belo	w - see section 2.2 o	of P&P document):	
	d (small collection)	B.2-Specialized (large of	collection)
C-Major extinct D-Attested ext		E-Minor extinct	X
F-Archaic Hieroglyphic or Ideographic		G-Obscure or questionable usa	age symbols
4. Is a repertoire including character names	s provided?	•	Yes
a. If YES, are the names in accordan		r naming quidelines"	700
in Annex L of P&P document?	oo wiiii iilo ollaraoto	Thaning galdonned	Yes
b. Are the character shapes attached	in a legible form suit	able for review?	Yes
5. Fonts related:	in a logible form can	able for review.	700
a. Who will provide the appropriate co	amputarized font to the	on Project Editor of 10646 for pul	bliching the
standard?	inputerized forit to ti	le Froject Editor of 10040 for pu	blishing the
Standard:	Anshuman F	Pandev	
b. Identify the party granting a license			-mail. ftp-site. etc.):
or racinary and party gramming a notice	Anshuman F		a, rip one, etc.).
6. References:			
a. Are references (to other character	sets, dictionaries, de	scriptive texts etc.) provided?	Yes
b. Are published examples of use (su			er sources)
of proposed characters attached?		Voo	, , , , , , , , , , , , , , , , , , , ,
7. Special encoding issues:			
Does the proposal address other asp	ects of character dat	a processing (if applicable) such	as innut
presentation, sorting, searching, inde			
processing, corming, coardining, made	7g,ao	() ee p.eaee e	
8. Additional Information:			
Submitters are invited to provide any additi	onal information abou	it Properties of the proposed Ch	aracter(s) or Script
that will assist in correct understanding of a			
Examples of such properties are: Casing in			
information such as line breaks, widths etc.			
Collation behaviour, relevance in Mark Up			
related information. See the Unicode stand			
see Unicode Character Database (http://w			
for information needed for consideration by			

 $^{^1 \ \}text{Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)}$

C. Technical - Justification

Has this proposal for addition of character(s) been submitted before?	No
If YES explain	
2. Has contact been made to members of the user community (for example: National Body,	Voo
user groups of the script or characters, other experts, etc.)? If YES, with whom? Charles Häberl <haberl@rutgers.edu></haberl@rutgers.edu>	Yes
If YES, with whom? Charles Häberl <haberl @rutgers.edu=""> Davide Salaris <davide.salaris@hdr.mq.edu.au></davide.salaris@hdr.mq.edu.au></haberl>	
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	Yes
Reference: See text of proposal	
4. The context of use for the proposed characters (type of use; common or rare)	Rare
Reference: See text of proposal	
5. Are the proposed characters in current use by the user community?	Yes;
If YES, where? Reference: Currently used by scholars of Eymais and Aramaic studies	ies
6. After giving due considerations to the principles in the P&P document must the proposed characters be	entirely
in the BMP?	N/A
If YES, is a rationale provided?	
If YES, reference:	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	Yes
8. Can any of the proposed characters be considered a presentation form of an existing	
character or character sequence?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either	
existing characters or other proposed characters?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
10. Can any of the proposed character(s) be considered to be similar (in appearance or function)	
to, or could be confused with, an existing character?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	No
If YES, is a rationale for such use provided?	
If YES, reference:	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	
If YES, reference:	
12. Does the proposal contain characters with any special properties such as	
control function or similar semantics?	No
If YES, describe in detail (include attachment if necessary)	
12. Doos the proposal contain any Ideographic competibility sharesters?	Mo
13. Does the proposal contain any Ideographic compatibility characters?	No
If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference:	
II 1 LO, I GIEI GII CE.	