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Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation Internationale de Normalisation Международная организация по стандартизации

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It has been suggested that the Coptic script characters presently encoded in the UCS be supplemented with the full set of additional Coptic characters presently missing from the standard. Essentially this is a disunification of the Coptic script from the Greek script.

While the Coptic and Greek scripts are closely related (Coptic having been derived from Greek), they are not identical, and Coptic is not normally printed in the kinds of normal Times- and Helvetica-style fonts used for Greek. The Gothic script was also derived from Greek, and it has been separately encoded in the SMP of the UCS. Likewise Cyrillic is derived from Greek. Old Italic is also derived from Greek, and Latin from Old Italic.

The derivation of Coptic and Gothic and Cyrillic is well-known. Coptic derives from Greek uncial hands, ca. fourth century CE; Gothic also derives from fourth century uncial hands (devised by Bishop Wulfila, who died in 383 CE); Cyrillic derives directly from eighth-century Greek manuscript hands (traditionally held to have been devised by St Cyril in the 890s).

The first question which must be asked is: What advantage is there in the unification of Coptic with Greek, especially in comparison with Gothic and Cyrillic, which have not been unified with Greek? Coptic, Gothic, and Old Church Slavonic alike use Greek loanwords, but they do not decline or conjugate them as is done in Greek, and so any significant advantage for sorting or searching does not obtain. Coptic, Gothic, and Cyrillic alike have added letters to the basic repertoire, and have deleted some letters as well. A comparison of the Greek, Coptic, Gothic, and Cyrillic alphabets as they are normally presented proves most interesting:

αβγδε (F) ζηθικλμνξοπ (q) Q στυφχψω [ω 4 2 Δ δ †] авгде ξ z н ↔ ι к λ м м з оп [-] P С т ү ф х † ω ω q 2 х σ † **АВГ З Є U Z h Θ I К λ М N G n п ц к S т у F х ψ Q** [ω q 2 х σ][†] авгде [-] з и [θ] і к л м н [ξ] оп (q) р с т у ф х ψ ∞ [щ][q 2 х σ †]

Interestingly, Gothic is the closest to the original Greek in its repertoire. For presentation purposes we have omitted the additional Cyrillic characters бжйцчшъыьюя. We have used щ artificially to represent Coptic shel. The characters additional to each script are given in square brackets. Characters missing from a script are given as [-]. We have included archaic Greek and Cyrillic characters in round brackets.

It is instructive to make a comparison of the relation between Coptic and Greek with the relation of the "Gaelic script" and the "Fraktur script", which have correctly been unified with the "Roman script" – these are all proper variants of the Latin script. Languages like Irish and German, which are often found written in Gaelic and Fraktur fonts, are also commonly written in Roman fonts. This is not the case for Coptic, which is normally presented to the user *only* in its native garb.

Unification of scripts should imply that readers of a language are able to make sense, with relative ease, of a text written in a variant of the script. For Latin, it is easy to show this. Examples from of a German and an Irish text in Roman, Gaelic, and Fraktur variants of the Latin script.

In alten, alten Zeiten, als die Menschen noch in ganz anderen Sprachen redeten, gab es in den warmen Ländern schon große und prächtige Städte.

In alten, alten Zeiten, als die Menschen noch in zanz anderen Sprachen redeten, zab es in den warmen ländern schon zrojse und prächtize Städte.

In alten, alten Zeiten, als die Menschen noch in ganz anderen Sprachen redeten, gab es in den warmen Ländern schon große und prächtige Städte.

Ós í an Ghaeilge an teanga náisiúnta is í an phríomhtheanga oifigiúil í. Glactar leis an Sacs-Bhéarla mar theanga oifigiúil eile.

Ós í an Shaeilse an ceansa náisiúnca is í an phríomhcheansa oirisiúil í. Slaccar leis an Sacs-bhéarla mar cheansa oirisiúil eile.

Ós í an Ghaeilge an teanga náisiúnta is í an phríomhtheanga oifigiúil í. Glactar leis an Sacs-Bhéarla mar theanga oifigiúil eile.

The Gaelic and Fraktur styles may be unfamiliar to some readers, but it is not difficult for them to recognize the unfamiliar script. Compare also Syriac, where representation in Nestorian, Jacobite, and Estrangelo variants can be normal for any text. For sorting and searching, it is correct to represent the Irish or German languages in an underlying Latin script.

A comparison of the Coptic Logion 3 of the Gospel of Thomas shows that it is quite illegible to a reader of Coptic when printed in normal modern Greek typography. Surprisingly, the Logion *is* legible when printed in Gothic and Cyrillic, scripts derived from Greek but not unified with Greek in UCS. This is because the three scripts derived from uncial Greek of 1600 years ago; but the Greek script has continued to develop and is no longer suitable to represent Coptic, Gothic, or Cyrillic text. (One must admit that the Logion is not *very* legible in Gothic, but perhaps more so than in modern Greek. It is true that a number of the Gothic letter shapes are rather different from their fourth-century uncial equivalents, but *cf.* the illustration taken from Haarmann 1990 below.) Samples are given in modern Greek, Coptic, Gothic, modern Cyrillic, and in the Old Church Slavonic variant of Cyrillic.

αλλα τμντέδο σμπετύζουν αυω σμπετύβαλ' ζοταν ετετύωαν σουων τηυτύ τοτε σενασουώ τηνε αυω τετναειμε δε ύτωτύ πε ύωηδε μπειωτ' ετούζ.

αλλα τμήτερο сμπετή2ογη αγω сйπετήβαλ' 20ταη ετετήφαη сογωή τηγτή τότε сенасоүй τηνε αγω τετηαείμε δε ήτωτή πε ήφηρε Ππειωτ' ετόη2.

λλλ τημτέκυ εμπετήμυλη γλό εμπετήβλη, μυτήν ετέτηωνη ευλόν τιλτή τυτε εεννευλό τινε γλό τετηγείμε γε μτότη με μώικε μπείδι, ετύνη.

алла тмітеро смпетівоун аусо сі смпетівал' зотан ететіщан соусон тиуті тоте сенасоусо тине аусо тетнае де і тсоті пе і щире і мпе і сот' етонь.

алла тмптеро смпетпзоун ауш смпетпвал' зотан ететпщан соушн тиутп тоте сенасоуш тине ауш тетнаесме де птштп пе пщире мпесшт' етонѕ.

Let's take another example, this time in the Russian language:

Ποηβετ, Βαδιμ. Κακ δελα; Δοβοο, σπασηβο. привет вадим. Как дела; довро спасиво. Привет, вадим. Как дела; довро, спасиво. привет, вадим. Как дела; добро, спасибо. Привет, Вадим. Как дела; Добро, спасибо. Привет, Вадим. Как дела? Добро, спасибо.

The examples above show that there is a greater potential legibility for Coptic readers of Coptic texts presented in Gothic and Cyrillic than there is for Coptic when written in a modern Greek font. There is no evidence that Coptic, unlike the examples of Irish and German (which are commonly typeset in glyph variants of Latin), is ever shown in a normal modern Greek font – surely the litmus test of whether one script can be unified with another or not.

Coptic, Gothic, and Cyrillic derive from Greek uncial hands; it makes no sense to encode two of these as separate from Greek while unifying the third. In September 2000, Coptic specialists indicated their desire for disunification:

Subject: Coptic: Disunification from Greek Date: Thu, 5 Oct 2000 14:02:03 +0200

From: "Stephen Emmel" <emmstel@nwz.uni-muenster.de>

Ms. Lisa Moore Vice-President, Unicode

Dear Ms. Moore,

At its business meeting on 2 September 2000, at the end of the Seventh International Congress of Coptic Studies, held at the University of Leiden, in The Netherlands, the International Association for Coptic Studies passed the following resolution unanimously:

"Coptic is a writing system that developed from the Greek script, but claims script status of its own and therefore also deserves disunification from Greek in ISO/IEC 10646-1, for the following reasons:

- "1. Coptic is the language and writing system of a living religious community, the Coptic community, whose diaspora now extends from Egypt southward into Africa and north and west throughout Europe and into the Americas. The Coptic church is autocephalous. A very active scholarly community investigates the language, literature, history, etc. of Coptic civilization in Egypt, and produces editions and studies of Coptic texts in ever increasing numbers.
- "2. Over seventeen centuries, a rich and flourishing tradition of graphic representation of Coptic, independent of Greek, came to characterize Coptic document-production, in manuscripts as well as in print. Coptic typography started in Europe as early as 1629, distinct from Greek in layout and typeface.
- "3. The Coptic writing system uses glyphs such as cannot be found in any reasonable Greek font.
- "4. The Coptic writing system has features that are alien to Greek. Especially the superlinear elements of the system behave differently from Greek accent and breathing marks. Therefore, it is impossible to administer Coptic text by means of Greek characters.
- "5. The Coptic community, both religious and secular, and the international community of scholarship dedicated to Coptic studies (Coptology), have been engaged in the electronic processing of textual data for many years already. There is an increasing number of projects worldwide that create and maintain textual databases in Coptic and are interested in exchanging textual data on the basis of the Universal Character Set, such as:

Corpus dei Manoscritti Copti Letterari: http://rmcisadu.let.uniromal.it/~cmcl Packard Humanities Institute: http://www.perseus.tufts.edu/Texts/papyrus.html Bibliothèque Copte de Nag Hammadi: http://www.ftsr.ulaval.ca/bcnh/ St. Shenouda the Archmimandrite Coptic Society: http://www.stshenouda.com

[&]quot;6. Coptic authors and writers lived in a shared environment together with Greek authors, and so Coptic

literature developed in close contact with the Greek-speaking people of ancient Egypt. Therefore it is natural and unavoidable that in Coptic text editions and in studies in the field of Coptology, quotations of Greek text form an integral part; technically, Coptic is processed contiguously with Greek. Coptic text-processing requires, by definition, a clear-cut distinction between Coptic and Greek passages within the same context, which is best realized by a distinction of coded characters on plain text level.

"Therefore, the International Association for Coptic Studies (IACS) requests the Unicode Technical Committee and the Working Group 2 in ISO/IEC JTC1/SC2 to disunify Coptic from Greek in the Universal Character Set. The IACS is prepared to provide expert advice and guidance in the matter of defining a Coptic character set, for the mutual benefit of Unicode and Coptic studies."

If you have any questions or comments, please do not hesitate to contact me. Although my four-year term as president of the IACS came to its prescribed end at the recent IACS business meeting, I was immediately elected to serve as secretary for the next four years, probably with extensions for many years thereafter. Hence I will remain your appropriate contact person at the IACS at least for the next decade. I am also one of the authors of the resolution quoted above, and I have long been in the forefront of efforts among Coptologists to set standards for the electronic processing of Coptic texts.

Sincerely yours, Stephen Emmel

Secretary, International Association for Coptic Studies
Professor für Koptologie, Westfälische Wilhelms-Universität Münster,
Institut für Ägyptologie und Koptologie, Schlaunstrasse 2, D-48143 Münster, Germany
Editor, Nag Hammadi and Manichaean Studies (Leiden: E. J. Brill); Sprachen und Kulturen des
Christlichen Orients (Wiesbaden: Reichert Verlag); Journal of Coptic Studies (Leuven: Peeters Press)

It should be noted that Stephen Emmel has seen a draft of the present paper, and has said "You may indicate that it has my full endorsement on behalf of the International Association for Coptic Studies."

Font designers we have discussed the issue with have not found the unification useful either, because it implies that unusual and unfamiliar Greek letterforms have to be devised for the Coptic "additions" in order to represent Coptic text in ordinary Greek fonts – which users do not wish to do. (Michael Everson made the Coptic additions to the Times Greek letters in the samples above specially for this paper; we find them artificial and irritating.)

A concrete example showing the preference of Coptic scholars: in the *Coptic Encyclopedia* (Ed. Aziz S. Atiya, Macmillan Publishing Co., New York, 1991), articles which discuss the relationship between Greek and Coptic vocabulary all use two distinct typefaces: Monotype Coptic for Coptic words and a typeface similar to Monotype Greek 91 for Greek words.

The UCS does not encode *GREEK CAPITAL LETTER COPTIC HORI. It encodes COPTIC CAPITAL LETTER HORI. The missing Coptic letters should be added to the UCS as supplements to the Coptic character set already encoded.

наш SB, кещ AF, кещ- B nn m f (rare vsf), reed: Job 40 16 SB, Ps 67 31 B (S and IIR.), Is 35 7 SBF, Mt 11 7 SB κάλαμος; Is 1 31 S (Β ρωογι) καλάμη; as stalk: ShIF 188 S οκγ. suage; as measure (5 cubits, BMOr 8781 Β ادرع), Ez 40 3 SB, Ap 11 1 SBF, BMis 570 S each side of paradise measures 240,400 as pen: Ps 44 2 SB, 3 Jo 13 SB κάλ., ShP 1303 15 those that take gendarme nr. that they may write, TT 9 S lay κ. in καλαμάριον, AM 310 В пін. пемпімель, Miss 4 188 В І took н. & subscribed, K 125 B n. عوسه قلم الشعر; shin-bone: LMis 467 S break κ. πρατογ, cf 468 as staff to lean on: CIPr 29 244 S walking ечтахри γ ехпо γ к., Va 62 187 B к. in his hand eqογης (sic l) επως; as plough-pole: Glos 390 S ίστοβοεύς · πκ. sant..[; as stem (of candelabra): Nu 8 4 B(S = Gk) καυλός; spike (? metal): C 86 278 B wheel with nails & εδιικ. εγφογζ τρυπανίσκος, ib 220 sim; paling: Si 22 19 S, Is 29 3 B (S ωωλε) χάραξ, or plantation: P 44 80 S nr. · фοιτεγεια قصبة; large quantity: Ryl 355 S 40,000 reeds. bundles: BM 1045 S maap nr. nhupe...nac, C as adj; Is 36 6 SBF, Ez 86 220 B MHIDI RK.; 29 6 SB καλάμινος.

MA NH. SA, bed, plantation of reeds: Nah 1 10 SA (Β ρωογι) καλάμη, Ρ 1311 32 S ογω. εφογετογωτ πόα, Ps 67 31 S sim (B R.).

The example to the left is taken from p. 130 of W. E. Crum's *Coptic Dictionary*, Oxford University Press, 1939, reprinted 2000, ISBN 0-19-864404-3. This 950-page dictionary is still the standard reference work. Note that in the scholarly apparatus of the text, Latin text in English appears in plain and italic styles; Coptic text appears in lower-case Coptic; Greek text appears in lower-case Greek; Arabic text appears in Arabic. It is obvious that users of an online or CD-ROM version of this dictionary would require to search it by looking for specific strings of text – *plain text*. One passage about two-thirds down in the text reads:

С 86 278 B wheel with nails & Эанк. €У ФОУЗ τουπανίσκος, *ib* 220 sim.

If written in an ordinary Times font, the Coptic in the passage is illegible, as the clear distinction between Greek and Coptic is obliterated, and as the Greek letterforms are inappropriate for Coptic:

C 86 278 B wheel with nails & $\geq \alpha v \lambda$. $\epsilon v \theta o v \xi$ τουπανίσμος, ib 220 sim.

Almost all Coptic scholarly materials make use of both Coptic and Greek routinely. From the The Gospel according to Thomas, Coptic text established and translated by A. Guillaumont, H.-Ch. Puech, G. Quispel, W. Till, and Yassah 'Abd al Masīḥ, Leiden: E. J. Brill, 1959.

- нечжавитис же невікотеі етмі ерю 22 те сттитын анствик. сооти атми
- теро пехат нац же еег ено нкотег ти 24 навык' ероти етмитеро пеже тис нат
- же ротан ететншар пснат ота атш € 26 тетншар пса ноотн ное жпса нвой
- arw nea nbod noe anca nooth arw nea
- 28 тпе ное жпса жпіти ато щіна ете тнастре жфо'отт' жи тсогже жптота
- 30 OTWT XERAAC HEDOOTT P GOOTT HTE TEOINE D COINE OUTAH ETETHINACIPE
- 32 Houpay Euwa Horpay, arm orgiz, епма инотога, оденье епма 34 norephte orgikun' enaa norgiku

- 20 (22) arc har aphrote etal epute πέχαι η 20 (22) Jesus saw children who were being suckled. He said to his disciples (μαθητής): These children who are being suckled
 - 22 are like those who enter the Kingdom.
 - They said to Him: Shall we then, being children,
 - 24 enter the Kingdom? Jesus said to them: When (ὅταν) you make the two one, and
 - 26 when you make the inner as the outer and the outer as the inner and the above
 - 28 as the below, and when (ἴνα)
 - you make the male and the female into a single one, 30 so that the male will not be male and
 - the female (not) be female, when (δταν) you make 32 eyes in the place of an eye, and a hand in the place of a hand, and a foot in the place
 - 34 of a foot, (and) an image (εἰκών) in the place of an image (εἰκών),

Here we see a number of Greek words borrowed into Coptic, indicated in parentheses in the English translation. But there is not a one-to-one relation between the Coptic and the Greek, as the Greek words are naturalized into the Coptic, taking Coptic grammatical particles, avoiding modern Greek accents, and making use of the Coptic macron (DJINKIM) not ever used in Greek: ηείμα-θητής, μαθητής, 20ταν όταν, ωινα ίνα, ουγικον ειχών, νογρικώ ειχών. Note too, Coptic makes no distinction between σ and ζ.

From a handwritten glossary in L'Evangile selon Thomas, ed. Philippe de Suarez, Montélimar: Éditions Métanoïa, 1974. Note that both the Coptic and Greek are written in lower-case (there being no upper-case letters in the 52 AITEW, airew, demander. Coptic text of the Gospel of 37 Anaparoc, nais, sauf Thomas); it is clear that the 118 ANATKH, avayky, necessaire. editor considered the scripts 133 ANAHAYCIC, avanausis, nepos. to be different – otherwise, why would he not have used 195 AZIOC, akios, digne. Greek lower-case throughout?

Lexique des mots grecs

- 4 APABOC, Nayabos, v bon, 7 APPENIA, ayyexia, ange, messager; cf 824.
- 57 AKEPATOC, akepaios, pur.
- - ANAXW DEW, avax wpew, se retirer.
- 272 APNEOMAI, apréonai, renoncer.
- APXH, apxy, commencement.
- 283 APXW, apxw, commencer.
- 288 ACKOC, ackos, outre.

- 525 DIWKW, SIWKW malmener,
- 542 DYNAMIC, SUVALUS Force, nuissance.

ϵ E

- 581 El MH TI, El jun Ti a moins que.
- 588 EIKWN EIKWV image, mo dèle.
- 595 EIPHNH, EIPMUM Raix.
- 642 EXEHMOCYNH EXETHOGUVT aumone.
- 660 EMMODOL EMMODOS man chand.
- 726 ETTEL, ETTEL car comme.
- 450 ETIBYMEW ENIBUMEW de'-

Two charts showing Gothic and Coptic with the Greek uncial forms from which they were derived. From Harald Haarmann. 1990. *Universalgeschichte der Schrift.* Frankfurt/Main; New York: Campus. ISBN 3-593-34346-0.

(296) Die Herkunft der Zeichen der westgotischen Schrift

Zahlenwert	Lautwert	Gotische Unziale	Vorbild	Schriftart des Vorbildes	Kursive der Urk, v. Neapel
1	a	y	A	gr.	n a
2	ь	В	R	gr.	KB
3	g	Г	۲	gr.	rr
4	d	d	۵	gr.	20
5	ē	ϵ	ϵ	gr.	KB rr 2a Eb
6	q	р В Г и С и С и С и С и и	ABLY60NVA	lat.	
7	z	Z	Z	gr.	Z
8	h	h	h	lat.	Irh
9	þ	ቃ	Ψ	gr.	\mathcal{S}
10	i	ŀ	1	gr.	4 A 1 1 KK
20	k	1 K A H N G	K	gr.	$\mathcal{K}\mathcal{K}$
30	ı	λ	λ	gr.	a
40	m	H	M	gr.	HM
50	n	И	N	gr.	NN GG U H
60	j	G	ς	lat.	49
70	u	ń	V	Run.	u
80	p	Π	Π	gr.	\mathcal{H}
90	-	ч	ς	gr.	
100	r	K	R	lat.	RR
200	8	S	5	lat.	23
300	t	Ť	AMNSCHURST	gr.	2 E TT Y E k
400	w	Ÿ	Y	gr.	タソ
500	f	F	F	lat.	FR
600	x	×	YFXB	gr.	
700	hw	0	9	gr.	
800	ō	ō	8	Run.	28
900	-	nnukstyfxog+	个	gr.	
		-			

(300) Das koptische Alphabet im Vergleich zur griechischen Unzialschrift

Zahlen- wert	Laut- wert	Name	Koptisch	Griech. Unziale
1	а	alfa	2	λ
2	b, v	vēda	В	В
3	g	gamma	7	r
4	d	dalda	λ	S
5	$ar{e}$	ēje	E	€ .
6	_	sou	3	Ç,
7	z	zā d a	3	Z
8	ē	hāda	н	Н
9	t-h	tutte	θ	ө
10	j, i	jōda	ı	1
20	k	kabba	ĸ	K
30	1	lõla	λ	λ
40	m	mēj	u	M
50	n	ni	Ħ	N
60	ks	eksi	Z	3
70	ŏ	ou	0	0
80	p	bej	п	π
100	r	rou	Р	Р
200	s	samma	C	Ċ
300	t	daū	T	Т
400	i	he	Y	Y
500	p-h	fīj	ф	ф
600	k-h	kij	\boldsymbol{x}	x
700	ps	ebsi	ф	4
800	ō	õ	ш	w
900	-	-	₽.₽	

TABLE XX - Row xx: COPTIC

	xx0	xx1	xx2	xx3	xx4	03E0
0	A	Π	a	π		:
1	В	P	В	p		: ·
2	2	C	5	С		W
3	λ	T	λ	J		ವಿ
4	ϵ	r	€	r		વ
5	3	Ф	٣	Ф		व
6	ζ	X	て	×		Ъ
7	H	4	H	Ψ		₹
8	θ	w	0	w		ક
9	1	ક	ı	ર		હ
Α	К	₽	K	p		x
В	a		У	.p.	৾	×
С	u		u	clc	े	6
D	И		N		િ	6
Е	Z.		ξ		v	为
F	0		0		"	4

Chart proposed in N1658. The grey column on the right indicates Coptic characters already encoded in the UCS. Further research needs to be done to finalize the proposal, but what we are asking WG2 and the UTC for is an acknowledgement that Coptic be disunified from Greek.

Stephen Emmel has said regarding this table: "I should go on record as observing that [Michael Everson's] 'proposal for the Universal Character Set' (pp. 8-9, chart proposed in N1658) is incomplete. The IACS proposal wil include more alphabetic characters (from dialects other than Sahidic, Bohairic, and Achmimic) as well as a larger repertoire of diacritical and punctuation marks (even though I am aware that some of these might be rejected as being represented already elsewhere in the UCS). [The N1658] table is fine so far as it goes. [But] the Unicode people should understand that what it shows is just the most basic core of the character set, which as a whole is in fact somewhat larger, and hence will require more space in the UCS."

G = 00 P = 00

TABLE XX - Row xx: COPTIC

dec	hex	Name	ded	hex	Name
000 001 002 003 004 005 006 007 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 041 042 043 044 045 046 047 048 049 050 060 060 071 071 072 073 074 075 076 077 077 078 079 070 070 070 070 070 070 070	hex 0012334566789ABCDEF01123456789ABCDEF02234566789ABCDEF03133333333333333333333333333333333333	Name COPTIC CAPITAL LETTER ALFA COPTIC CAPITAL LETTER ALFA COPTIC CAPITAL LETTER ALFA COPTIC CAPITAL LETTER SOM COPTIC CAPITAL LETTER BAMMA COPTIC CAPITAL LETTER BALDA COPTIC CAPITAL LETTER BALDA COPTIC CAPITAL LETTER SOU COPTIC CAPITAL LETTER SOU COPTIC CAPITAL LETTER HATE COPTIC CAPITAL LETTER HATE COPTIC CAPITAL LETTER HATE COPTIC CAPITAL LETTER HATE COPTIC CAPITAL LETTER HADA COPTIC CAPITAL LETTER HADA COPTIC CAPITAL LETTER WIN COPTIC CAPITAL LETTER NI COPTIC CAPITAL LETTER NI COPTIC CAPITAL LETTER NI COPTIC CAPITAL LETTER NI COPTIC CAPITAL LETTER SIM COPTIC CAPITAL LETTER SI COPTIC SAMAL LETTER SI COPTIC SMALL LETTER SI COPTIC SMAL	089 090 091 092 093 095	E9 EA EB EC ED ED	Name COPTIC SMALL LETTER SHEI COPTIC SMALL LETTER FEI U+03E3 COPTIC SMALL LETTER KHEI U+03E7 COPTIC SMALL LETTER HORI U+03E9 COPTIC SMALL LETTER GANGIA U+03EB COPTIC SMALL LETTER SHIMA U+03ED COPTIC SMALL LETTER DEI U+03EF
088	E8	COPTIC CAPITAL LETTER DEI → U+03EE			