# UC Irvine Unicode Project

### Title

A proposal to encode the Ancient Greek Numerical System in UCS

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#### PROPOSAL SUMMARY FORM

#### A. Administrative

 Title: Proposal for encoding Greek numerical characters in the UCS
 Requester's name: Thesaurus Linguae Graecae Project (University of California, Irvine)
 Requester type: Expert contribution
 Submission date: 2003-02-28
 Requester's reference
 Completion
 This is a complete proposal.

#### **B.** Technical - General

1a. The proposal is for addition of character(s) to a new block:
Name of the block:
Ancient Greek Numerical Characters
2. Number of characters in proposal:
73
3. Proposed category
Category C
4. Proposed Level of Implementation (1, 2 or 3):
Level 1
5a. Character names provided?
Yes.
5b. Character names in accordance with guidelines
Yes.
5c. Character shapes reviewable?
Yes
6a. Who will provide the appropriate computerized font for publishing the standard?
TLG Project and David Perry
6b. Fonts currently available.
Yes.
6c. Font format
True Type
7a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?
Yes
7b. Are published examples of use of proposed characters attached?
Yes.
8. Does the proposal address other aspects of character data processing?
No.

#### C. Technical - Justification

# **1.** Has this proposal for addition of character(s) been submitted before?

No.

#### 2. Has contact been made to members of the user community?

Yes. The TLG has been in contact with experts in the field of Classics. Earlier versions of this proposal have been posted online and received comments by members of the profession. Proposal was reviewed by Dr. John Mansfield, Cornell University, Professor Jeffrey Rusten, Cornell University, Professor Roger Bagnall, Columbia University and Dr. Deborah Anderson, UC Berkeley.

#### 3. Information on the user community for the proposed characters

Scholarly community.

**4.** The context of use for the proposed characters (type of use; common or rare) Use varies.

#### 5. Are the proposed characters in current use by the user community?

Yes. Characters are present primarily in ancient papyri and inscriptions and their modern editions. Used extensively by scholars of Greek.

# 6. After giving due considerations to the principles in *Principles and Procedures document*, must the proposed characters be entirely in the BMP?

No.

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.

9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No.

**10.** Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

A few characters are similar but not identical.

11a. Does the proposal include use of combining characters and/or use of composite sequences

No.

12. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

**13. Does the proposal contain any Ideographic compatibility character(s)?** No.

### Introduction

Ancient Greeks used primarily alphabetic characters to represent numbers. A number of non-alphabetic symbols were also used and those are not currently present in the Unicode Standard. This proposal contains 73 Greek Numerical (non-alphabetic) characters. A transcribed papyrus which utilizes many of the characters proposed is appended to the end of this document.

Numerical characters appear in a large number of ancient sources (papyri and inscriptions). They are the standard symbols used for the representation of numbers, fractions, weights and measures and have consistently been used in modern editions of Greek papyri and inscriptions as well as various publications related to the study and interpretation of ancient documents. The proposed characters are already present in existing non-Unicode Greek fonts and used consistently by the scholarly community.

The proposed characters fall into 2 categories:

- 1. Standard Ancient Greek Numerical Symbols and
- 2. Ancient Greek Acrophonic Numerals

The property for all characters is "Number, other" (No).

# **1. Standard Ancient Greek Numerical Symbols**

#### Fractions

Name		Unicode	Glyph Variants, Notes, and Examples
Greek Half Symbol			Glyph variants: $2, C, \cdots, \mathbf{c}, \mathbf{c}, \mathbf{c}, \mathbf{s}, s$
Greek Two-Thirds Symbol	w		Example: Hultsch 1.154
Greek Three-Quarters Symbol	В		Example: Kenyon 1.143

#### Weights, Measures and Money: Standard Greek Measure of Time

Greek Year Symbol	L	May also be used as number signifier, half (but not in texts with Greek Half Symbol) or Drachma (but not in texts with Greek Drachma Symbol). Very commonly appears in texts with Greek Half Symbol and Greek Drachma Symbol, therefore not a glyph variant. Example: Kenyon 2.122
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#### Weights, Measures and Money: Standard Greek Weights and Money<sup>1</sup>

The ancient Greeks had two systems of measurement: one for wet, and one for dry products. The *kotyle*, which is the basic measure in both wet and dry systems, is made up of six *kyathoi* or four *oxybapha*. Its value is different depending on local variations, but it is roughly 1/41.<sup>2</sup>

Greek Talent Symbol			Glyph variants: $C$ and $S'_{.22BC}$ and 2305 are similar to $$ , however these two characters have mathematical properties.1 Talent is <i>c</i> .25.75kg and 6,000 Drachmas. Example: Bilabel 2315
Greek Large Stater Symbol	Σ	03A3	1 Large Stater is c. 860g and 200 Drachmas
Greek Mna	-	-	No standard Character. 1 Mna is c. 430g and 100 Drachmas.
Greek Small Stater Symbol	Σ	03A3	1 Small Stater is c. 8.6g and 2 Drachmas
Greek Drachma Symbol	۷		Glyph variants: <, ∧ . 22D6, 003C and 039B are similar to three of the glyph variants; however 22D6 has mathematical properties. 1 Drachma is <i>c</i> .4.3g. Example: Heiberg 2.29

<sup>2</sup> Pryce, F.N., Lang, M.L. & Vickers, M. in OCD<sup>3</sup> (1996) 943

<sup>&</sup>lt;sup>1</sup> Ancient Greeks used the same terminology for weights and currency. Many local variations existed but the Attic-Euboic system appears to have been dominant and this is the system presented in the table below.

Greek Obol Symbol	~	Glyph variants: ~, ∽ and \. Kenyon also records a fourth: –. (Kenyon 1974: 129) 007E, 223D, 005C and 2013 are similar to four out of the five glyph variants; however, 223D has mathematical properties. 1 Obol is c. 0.7g and one sixth of a Drachma. Example: Hultsch 1.220
Greek Two Obols Symbol	\$	Glyph variants: $\leftrightarrows$ , $\approx$ , $=$ . 2248 is similar to one glyph variant, however, this character has mathematical properties. Example: Hultsch 1.226
Greek Three Obols Symbol	ſ	Glyph variants: $\Gamma$ , $\Gamma$ , $f$ , $\Gamma$ and $\vee$ (Bilabel 1923:2308, 2314) 0393, 03A4 and 223F are similar to three glyph variants, however, 223F has mathematical properties. Example: Kenyon 1.142
Greek Four Obols Symbol	F	Example: Kenyon 1.142
Greek Five Obols Symbol	F	Example: Kenyon 1.142

#### Weights, Measures and Money: Standard Greek Measures of Capacity

Greek Metretes Symbol	F		This is a liquid measure. 1 Metretes is <i>c</i> . 351 and 144 liquid Kotyles. Example: Kenyon 1.153
Greek Chous Symbol	χ°	03C7 <superscript> 03BF</superscript>	This is a liquid measure. 1 Chous is <i>c</i> .31 and 12 liquid Kotyles.
Greek Hemichous Symbol	I	-	This is a liquid measure. 1 Hemichous is <i>c</i> .1.51 and 12 liquid Kotyles.
Greek Medimnos Symbol	-	-	This is a dry measure. 1 Medimnos is <i>c</i> . 1801 and 768 dry Kotyles.
Greek Hekteus Symbol	-	-	This is a dry measure. 1 Hekteus is <i>c</i> . 30l and 128 dry Kotyles.
Greek Choinix Symbol	-	-	This is a dry measure. 1 Choinix is <i>c</i> . 11 and 4 dry Kotyles
Greek Kotyle Symbol	K <sup>o</sup>	See note	Formed with Greek Kyathos Base Symbol + <superscript> 03BF This is both a liquid and a dry measure. 1 Kotyle is <i>c</i>. 250ml.</superscript>
Greek Oxybaphon Symbol	-	-	This is both a liquid and a dry measure. 1 Oxybaphon is <i>c</i> . 60ml and <sup>1</sup> / <sub>4</sub> Kotyle.
Greek Kyathos Base Symbol	K		Often written with $\langle superscript \rangle 03C5$ after it. This is a dry measure. 1 Kyathos is <i>c</i> . 40ml and $1/6$ Kotyle. Example: Hultsch 1.218

#### Weights, Measures and Money: Greek Characters for Roman Weights and Measures

Three Greek characters were used to represent weights (and occasionally measures) in the Roman system. The Roman system is based on the Libra or As, of 327.45g. This is divided into 12 Unciae. The Greek translations for these terms are Litra for Libra, and Ounkia<sup>3</sup> for Uncia.

Greek Litra Symbol	s	Glyph variant: づ. Example: Raeder 1.152
Greek Ounkia Symbol	Г	Example: Hultsch 1.220
Greek Xestes Symbol	ф	Glyph variants: $\xi, \xi, \gamma, \gamma, \xi, \xi, \gamma, \gamma, \gamma, \gamma, \gamma$ Example: Hultsch 1.228

<sup>&</sup>lt;sup>3</sup> Also *Onkia*. See LSJ 1268

### Weights, Measures and Money: Greek Characters for non-Graeco-Roman Measures

Greek Artabe Symbol	0 <b>0</b>	Other glyph variants: $<, \leq, -, -, \div$ and $\sim$ . Notes: 00F7 is similar to one glyph variant. Example: Kenyon 2.142
Greek Aroura Symbol	Ъ	Example: Kenyon 1.143

### Weights, Measures and Money: Ancient Greek Medical Measures

Greek Gramma Symbol	Γp	Example: Hultsch.1.220	
Greek Tryblion Base Symbol	৵	Example: Hultsch.1.221	

## 2. Ancient Greek Acrophonic Numerals

### Introduction

In addition to the alphabetic numerical system, ancient Greeks also used a series of characters known as the acrophonic numerals.<sup>4</sup> Acrophonic numerals are found primarily in ancient Greek inscriptions in Athens and other city states.<sup>5</sup> The Attic system (Attica is the greater geographic area which includes the city of Athens) is the most common and well-documented. A transcribed inscription from Athens (ca. 451/0 BC) showing a number of acrophonic numerals is appended at the end of this document.<sup>6</sup>

The table *Complete Outline of Ancient Greek Acrophonic Numerals* below shows all 76 characters required to represent acrophonic numerals in Unicode. Twenty-one of these characters already exist in the Unicode standard. The proposal includes the characters needed for the encoding of the *Attic* acrophonic system, namely characters used in Athens and the surrounding area (Attica) and non-Attic characters which cannot be considered as glyph variants of Attic.

<sup>&</sup>lt;sup>4</sup> The name 'acrophonic' from the Greek word "akron" which means 'extreme' or 'farthest point.' The term implies that the initial letter of the word by which the number is called, represents the number itself. E.g.  $\Delta$  (=10) is used for  $\Delta$ EKA, the Greek word for 'ten.'

<sup>&</sup>lt;sup>5</sup> Heath & Toomer (1996) 1052

<sup>&</sup>lt;sup>6</sup> Hiller von Gaertringen, F., Inscriptiones Graecae I Editio Minor (Berlin, 1924) 83

# **Complete Outline of Ancient Greek Acrophonic Numerals**

			Additional Character Names, Glyph Variants, Notes,
Name		Unicode	Examples
Attic Acrophonic <sup>1</sup> / <sub>12</sub> Unit	/	002F	• Attic Acrophonic <sup>1</sup> / <sub>12</sub> Obol Example: <i>IG</i> ( <i>Inscriptiones Graecae</i> ) I.43
Attic Acrophonic 1 Chalkous	x	03A7	<ul> <li>Attic Acrophonic <sup>1</sup>/<sub>8</sub> Unit</li> <li>Attic Acrophonic <sup>1</sup>/<sub>8</sub> Obol</li> <li>Attic Acrophonic 1,000 Units</li> <li>Attic Acrophonic 1,000 Drachmas</li> <li>Cyrenaic Acrophonic 20 Drachmas</li> <li>Example: <i>IG</i> 1.85</li> </ul>
Attic Acrophonic <sup>1</sup> / <sub>4</sub> Unit	)		• Attic Acrophonic <sup>1</sup> / <sub>4</sub> Obol Example: <i>IG</i> I.151
Attic Acrophonic <sup>1</sup> / <sub>2</sub> Unit	C		Attic Acrophonic <sup>1</sup> / <sub>2</sub> Obol     Troezenian Acrophonic 1 Drachma     Example: <i>IG</i> I.151
Attic Acrophonic 1 Unit	1	0399	<ul> <li>Attic Acrophonic 1 Obol</li> <li>Troezenian Acrophonic <sup>1</sup>/<sub>4</sub> Unit</li> <li>Orchomenus, Carystus Acrophonic 1 Drachma Example: <i>IG</i> I.82</li> </ul>
Attic Acrophonic 1 Drachma	F		Example: <i>IG</i> I.82
Attic Acrophonic 5 Units	Г		<ul> <li>Attic Acrophonic 5 Drachmas</li> <li>Heraeum Acrophonic 1 Plethron</li> <li>Epidauran Acrophonic 5 Chalkoi</li> <li>Argive, Heraeum, Epidauran, Troezenian Acrophonic 50 Units</li> <li>Cyrenaic Acrophonic 5 Mnas</li> <li>Example: <i>IG</i> I.82</li> </ul>
Attic Acrophonic 10 Units	Δ	0394	<ul> <li>Attic Acrophonic 10 Drachmas</li> <li>Thespian Acrophonic 1 Drachma (&gt;)</li> <li>Orchomenian Acrophonic 10 Drachmas (&gt;)</li> <li>Cyrenaic Acrophonic <sup>1</sup>/<sub>50</sub> Drachma Example: <i>IG</i> I.82</li> </ul>
Attic Acrophonic 50 Units	₽		Attic Acrophonic 50 Drachmas <i>Glyph variants:</i> Naxos: □ Example: <i>IG</i> I.82
Attic Acrophonic 100 Units	н	0397	<ul> <li>Attic Acrophonic 100 Drachmas</li> <li>Thespian, Orchomenian Acrophonic <sup>1</sup>/<sub>2</sub> Unit <i>Glyph variants:</i> Argos, Nemea, Epidaurus, Troezen: □ (archaic glyph variant) Example: <i>IG</i> 1.82</li> </ul>
Attic Acrophonic 500 Units	Я		Attic Acrophonic 500 Drachmas <i>Glyph variants:</i> Epidaurus: Cos: Example: <i>IG</i> I.83
Attic Acrophonic 5,000 Units	×		Attic Acrophonic 5,000 Drachmas Example: <i>IG</i> I.83
Attic Acrophonic 10,000 Units	Μ	039C	Attic Acrophonic 10,000 Drachmas     Attic Acrophonic 1 Mna     Example: <i>IG</i> I.170
Attic Acrophonic 50,000 Units	M		Attic Acrophonic 50,000 Drachmas     Attic Acrophonic 5 Mnas     Example: <i>IG</i> I.170
Attic Acrophonic 1 Talent	Τ	03A4	<ul> <li>Epidauran, Hermionian, Tegean, Delphi Acrophonic <sup>1</sup>/<sub>4</sub> Unit</li> <li>Thespian, Naxan, Andanian Acrophonic 3 Units Example: <i>IG</i> I.132</li> </ul>
Attic Acrophonic 5 Talents	Ţ		Example: IG I.130

		T	E 1 IGL100
Attic Acrophonic 10 Talents	Ą		Example: <i>IG</i> I.130
Attic Acrophonic 50 Talents	<b>P</b>		Example: IG I.132
Attic Acrophonic 100 Talents	Н		Example: IG I.130
Attic Acrophonic 500 Talents	티		Example: IG I.152
Attic Acrophonic 1,000 Talents	¥		Example: IG I.152
Attic Acrophonic 5,000 Talents	Ϋ́Τ		Example: <i>IG</i> I <sup>2</sup> .342
Attic Acrophonic 1 Stater	1	03A3	Epidauran Acrophonic 1 Chalkous
	٤		Glyph Variants: Thespiae: 5
			Example: <i>IG</i> I.135
Attic Acrophonic 5 Staters	Į		Example: <i>IG</i> I.163
Attic Acrophonic 10 Staters	Å		Example: IG I.163
Attic Acrophonic 50 Staters	A.		Example: IG I.163
Attic Acrophonic 100 Staters	Σ		Example: IG I <sup>2</sup> .347
Attic Acrophonic 500 Staters	Ē۲		Example: IG I <sup>2</sup> .347
Attic Acrophonic 1,000 Staters	X		Example: IG I <sup>2</sup> .347
Attic Acrophonic 10,000 Staters	M		Example: <i>IG</i> I <sup>2</sup> .347
Attic Acrophonic 50,000 Staters	M		Example: <i>IG</i> I <sup>2</sup> .347
Attic Acrophonic 10 Mnas	1		Thespian Acrophonic 10,000 Units
	^		Glyph Variants:
	Â		Tegea: A Messene: A
			Andania, Stratus: Ä
			Example: IG I.163
Heraeum Acrophonic 1	•		Epidauran Acrophonic 5 Units
Plethron		0.000	Example: IG IV.336
Andanian Acrophonic 1 Kollybos	K	039A	Example: <i>IG</i> V.1.#1532
Troezenian Acrophonic <sup>1</sup> / <sub>8</sub>		25EF	Thespian, Orchomenian, Carystian Acrophonic 1 Unit
Unit	0	20121	Argos Acrophonic 10 Units     Example: <i>IG</i> 4.162
Andanian Acrophonic <sup>1</sup> / <sub>4</sub> Unit	1	003E	• Cyrenaic Acrophonic <sup>1</sup> / <sub>5</sub> Drachma
	>		• Cyrenaic Acrophonic 10 Mnas
			Example: properly a glyph variant of Attic Acrophonic $^{1}/_{4}$ Unit. See. <i>IG</i> V.2.11
Andanian Acrophonic <sup>1</sup> / <sub>2</sub> Unit		003C	Also found in Epidaurus, and Thespiae
	<		• Tegean Acrophonic 1 Drachma Example: properly a glyph variant of Attic Acrophonic <sup>1</sup> / <sub>2</sub> Unit See
			Example: property a gryph variant of Attic Acrophonic $7_2$ Onit See $IG V.1.#1532$
Naxian Acrophonic <sup>1</sup> / <sub>2</sub> Unit	Γ	0393	Example: IG V.2.11
Tegean Acrophonic <sup>1</sup> / <sub>2</sub> Unit	E	0395	Example: IG V.2.11
Troezenian Acrophonic <sup>1</sup> / <sub>2</sub> Unit	٦	1D215	Carystian, Acrophonic 100 Units Example: <i>IG</i> 4.162
Nemean Acrophonic <sup>1</sup> / <sub>2</sub> Unit	-	039E	Note: Archaic glyph variant of 039E.
-	Ŧ		Example: <i>IG</i> IV.67

		10110	Also found at Nemes on 1 Torresson
Argive Acrophonic 1 Unit		10110	<ul> <li>Also found at Nemea and Troezen</li> <li>Hermionian Acrophonic <sup>1</sup>/<sub>2</sub> Unit</li> </ul>
			Hermionian Actophonic 7 <sub>2</sub> Onit     Heraeum, Troezenian, Carystian Acrophonic 10 Units
			• Cyrenaic Acrophonic $^{1}/_{10}$ Drachma
			Cyrenaic Acrophonic 1 Mna
			Example: IG 4.162
Argive Acrophonic 1 Unit	•	00B7	• Also found at Heraeum and Nemea
			Example: IG IV.316
Thespian Acrophonic 1 Unit	₽		Example: IG VII.301
Hammianian Assembania 1 Hait			Example: IG IV.137
Hermionian Acrophonic 1 Unit	P		Example. TO IV.157
Epidaurean Acrophonic 2	[		<i>Note:</i> Not same as 003A. Top dot level with top of uppercase letters.
Units	•		Design to match 00B7.
C IIIIS	•		Example: IG IV.316
Epidaurean Acrophonic 3	_	See note	Note: Accepted by UTC as part of extended Greek punctuation. No
Units	1		codepoint yet assigned. Design to match 00B7.
			Example: IG IV.316
Thespian Acrophonic 2 Units	~		Example: IG IV.299
	$\geq$		
Cyrenaic Acrophonic 1	Ζ	0396	Cyrenaic Acrophonic 50 Mnas
Drachma	<b>_</b>		Example: Tod (1936-7) 257
Cyrenaic 2 Drachmas Symbol			Cyrenaic Acrophonic 100 Mnas
			Example: Tod (1936-7) 257
Epidaurean Acrophonic 2	_		<i>Note</i> : Top line level with top of uppercase letters. Example: <i>IG</i> IV.316
Drachmas	—	10110	1
Epidaurean Acrophonic 3	_	10112	<i>Note</i> : Top line level with top of uppercase letters. Example: <i>IG</i> IV.162
Drachmas	Ξ		-
Troezenian Acrophonic 5			• Also found at Tegea Example: <i>IG</i> 4.163
Units		2(00	Also found at Nemea and Heraeum
Argive Acrophonic 10 Units	$\odot$	2609	Example: <i>IG</i> IV.79
Troezenian Acrophonic 10	Ċ		Cyrenaic Acrophonic 4 Drachmas
Units	>		Cyrenaic Acrophonic 200 Mnas
Units	$\geq$		Example: <i>IG</i> 4.162
Troezenian Acrophonic 10			Example: IG IV.176
Units	Χ		Notes: Not glyph variant of Troezenian Acrophonic 10 Units/
			Cyrenaic Acrophonic 4 Drachmas above
Hermionian Acrophonic 10	٨		Example: IG IV.137
Units Magazian Association 10	$\wedge$		Example: <i>IG</i> V.1.2.288
Messenian Acrophonic 10 Units	$\sim$		Елапри. 10 у.1.2.200
Thespian Acrophonic 10 Units			Example: IG VII.301
r nespian Acrophonic To Units	Ð		Example. 10 VII.301
Thespian Acrophonic 30 Units			Also found at Orchomenus
			Glyph Variants:
	Ð		Thespiae: D, D, P, P, D
	D		Orchomenus: P
			Example: IG VII.299
Troezenian Acrophonic 50	Г		Epidauran Acrophonic 500 Units Example: <i>IG</i> IV.337
Units			Example. 16 1V.557
Troezenian Acrophonic 50			Example: IG 4.163
Units	3		<i>Notes</i> : Not glyph variant of Troezenian Acrophonic 50 Units/
	l'		Epidauran Acrophonic 500 Units above.
Hermionian Acrophonic 50			Example: IG IV.136
Units	Ν		
Thespian Acrophonic 50 Units			Also found at Orchomenus
	Æ		Example: IG VII.300

	T T	
Thespian Acrophonic 100		Also found at Orchomenus
Units	ΗE	Example: IG VII.304
Thespian Acrophonic 300		Example: IG VII.300
Units	TE	
Epidaurean Acrophonic 500		Example: IG IV.335
Units		
Troezenian Acrophonic 500		Example: IG 4.165
Units	ГЛ	
Thespian Acrophonic 500		Also found at Orchomenus
Units		Glyph Variants:
	INE	• Thespiae: $\Box \in, \Gamma \leftarrow$
		Example: IG VII.299
Carystian Acrophonic 500		Example: Tod (1911-12) 113
Units	F	
Naxian Acrophonic 500 Units		IG XII.supp.104
-	Ħ	
Thespian Acrophonic 1,000		Also found at Orchomenus
Units	¥	Example: IG VII.299
Thespian Acrophonic 5,000		Also found at Orchomenus
Units	ſ	Example: IG VII.575
Delphic Acrophonic 5 Mnas		Example: <i>IG</i> V.1.2.288
-	Γ	
Stratian Acrophonic 50 Mnas	تظ	Example: IG IX.1.2.41

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### TABLE xx01-3F: GREEK NUMERICAL CHARACTERS

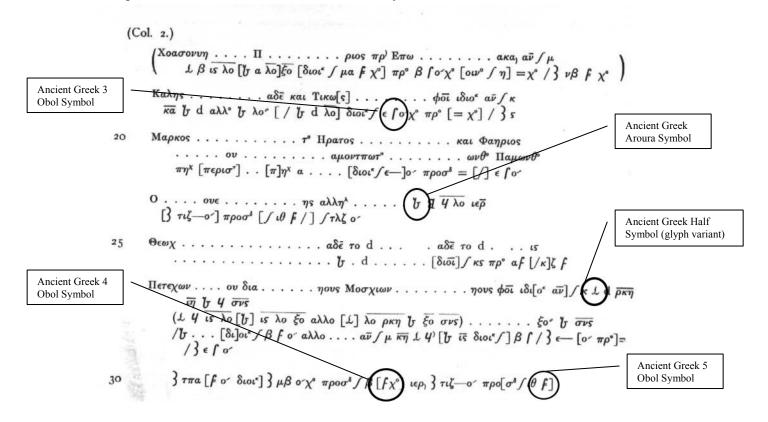
	xx0	xx1	xx2	xx3	xx4
0	Ĺ	0	ᆈ	$\geq$	ſĿ
1	60,	Ċ	¥		ГЦ
2	В	Lb	X <sub>T</sub>		ΠÆ
3	L	<b>উ</b>	হ	٦	F.
4	$\overline{}$	С	Å	≥	Ħ
5	۷	C	AV V	X	¥
6	~	F	Ŧ	$\wedge$	ſ
7	\$	Г	۴	$\uparrow$	ĥ
8	$\cap$	₽	X	₽	南
9	F	Ы	M	Þ	
A	Ē	R	M	Г	
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### TABLE xx01-3F: GREEK NUMERICAL CHARACTERS

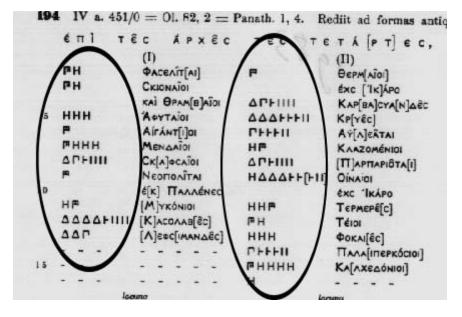
hex	Name
xx00	ANCIENT GREEK HALF SIGN
xx01	ANCIENT GREEK TWO-THIRDS SIGN
xx02 xx03	ANCIENT GREEK THREE-QUARTERS SIGN ANCIENT GREEK YEAR SIGN
xx04	ANCIENT GREEK TALENT SIGN
xx05	ANCIENT GREEK DRACHMA SIGN
xx06	ANCIENT GREEK OBOL SIGN
xx07 xx08	ANCIENT GREEK TWO OBOLS SIGN ANCIENT GREEK THREE OBOLS SIGN
xx09	ANCIENT GREEK FOUR OBOLS SIGN
xx0A	ANCIENT GREEK FIVE OBOLS SIGN
xx0B xx0C	ANCIENT GREEK METRETES SIGN ANCIENT GREEK KYATHOS BASE SIGN
xx0D	ANCIENT GREEK LITRA SIGN
xx0E	ANCIENT GREEK OUNKIA SIGN ANCIENT GREEK XESTES SIGN
xx0F xx10	ANCIENT GREEK ARTABE SIGN
xx11	ANCIENT GREEK AROURA SIGN
xx12	ANCIENT GREEK GRAMMA SIGN
xx13 xx14	ANCIENT GREEK TRYBLION BASE SIGN ATTIC ACROPHONIC 1/4 UNIT
xx15	ATTIC ACROPHONIC 1/2 UNIT
xx16	ATTIC ACROPHONIC 1 DRACHMA
xx17 xx18	ATTIC ACROPHONIC 5 UNITS ATTIC ACROPHONIC 50 UNITS
xx19	ATTIC ACROPHONIC 500 UNITS
xx1A	ATTIC ACROPHONIC 5,000 UNITS
xx1B xx1C	ATTIC ACROPHONIC 50,000 UNITS ATTIC ACROPHONIC 5 TALENTS
xx1D	ATTIC ACROPHONIC 5 TALENTS
xx1E	ATTIC ACROPHONIC 50 TALENTS
xx1F xx20	ATTIC ACROPHONIC 100 TALENTS ATTIC ACROPHONIC 500 TALENTS
xx20 xx21	ATTIC ACROPHONIC 500 TALENTS ATTIC ACROPHONIC 1,000 TALENTS
xx22	ATTIC ACROPHONIC 5,000 TALENTS
xx23	ATTIC ACROPHONIC 5 STATERS ATTIC ACROPHONIC 10 STATERS
xx24 xx25	ATTIC ACROPHONIC 10 STATERS
xx26	ATTIC ACROPHONIC 100 STATERS
xx27 xx28	ATTIC ACROPHONIC 500 STATERS ATTIC ACROPHONIC 1,000 STATERS
xx29	ATTIC ACROPHONIC 1,000 STATERS
xx2A	ATTIC ACROPHONIC 50,000 STATERS
xx2B xx2C	ATTIC ACROPHONIC 10 MNAS HERAEUM ACROPHONIC 1 PLETHRON
xx2D	THESPIAN ACROPHONIC 1 UNIT
xx2E	HERMIONE ACROPHONIC 1 UNIT
xx2F	EPIDAUREAN ACROPHONIC 2 UNITS
xx30 xx31	THESPIAN ACROPHONIC 2 UNITS CYRENAIC ACROPHONIC 2 DRACHMAS
xx32	EPIDAUREAN ACROPHONIC 2 DRACHMAS
xx33	TROEZENIAN ACROPHONIC 5 UNITS TROEZENIAN ACROPHONIC 10 UNITS 1
xx34 xx35	TROEZENIAN ACROPHONIC 10 UNITS 1 TROEZENIAN ACROPHONIC 10 UNITS 2
xx36	HERMIONIAN ACROPHONIC 10 UNITS
xx37	MESSENIAN ACROPHONIC 10 UNITS
xx38 xx39	THESPIAN ACROPHONIC 10 UNITS THESPIAN ACROPHONIC 30 UNITS
xx3A	TROEZENIAN ACROPHONIC 50 UNITS 1
xx3B	TROEZENIAN ACROPHONIC 50 UNITS 2
xx3C xx3D	HERMIONIAN ACROPHONIC 50 UNITS THESPIAN ACROPHONIC 50 UNITS
xx3E	THESPIAN ACROPHONIC 100 UNITS
xx3F	THESPIAN ACROPHONIC 300 UNITS
xx40 xx41	EPIDAUREAN ACROPHONIC 500 UNITS TROEZENIAN ACROPHONIC 500 UNITS
xx42	THESPIAN ACROPHONIC 500 UNITS
xx43	CARYSTIAN ACROPHONIC 500 UNITS
xx44 xx45	NAXIAN ACROPHONIC 500 UNITS THESPIAN ACROPHONIC 1,000 UNITS
xx45 xx46	THESPIAN ACROPHONIC 1,000 UNITS
xx47	DELPHIC ACROPHONIC 5 MNAS
xx48	STRATIAN ACROPHONIC 50 MNAS

# Appendix

Example of standard ancient Greek numerical symbols.<sup>7</sup>



Example of Ancient Greek Acrophonic numbers.<sup>8</sup>



<sup>&</sup>lt;sup>7</sup> Kenyon, F.G., Greek *Papyri in the British Museum* I (London, 1893) 143. Characters found in this image but not in the table below are glyph variants of existing Greek letters or characters proposed below.

<sup>&</sup>lt;sup>8</sup> Hiller von Gaertringen, F., Inscriptiones Graecae I Editio Minor (Berlin, 1924) 83