TLG Unicode Proposal (draft).

1. Signs not covered by Unicode, or covered with arguable semantic differences.

Beta Sign Count Definition Comment Pre-existing Unicode Name

Modern Editorial Punctuation

%15	1	2025 instances,	Prominent in use in Pindar and a few	Short vertical bar; used as	TOP HALF VERTICAL BAR
		27 authors	other texts, indicates line breaks in	punctuation. The short	
			(papyrological) source text.	vertical bar presumably has	
				wide applicability in	
				various contexts, and	
				should be considered in	
				other fields as well.	
[14		732 instances,	Encloses the hymnal refrain in Romanus	Intended to resemble	LEFT REFRAIN BRACKET, RIGHT
		1 author	Melodus.	U+1d106, U+1d107:	REFRAIN BRACKET
	1 1			musical repeat signs. If the	
				musical signs can be	
				intermingled with text,	
				there may be no real need	
				for this as a separate	
				codepoint.	

Metrical

Symbols which constitute editorial reuse of established symbols elsewhere are not proposed separately. Thus, the open circle used by Maas to denote anaclasis, and by West to denote "two positions of which at least one must be long" is regarded as being a reuse of 00b0 DEGREE SIGN or 2218 RING OPERATOR; West's "beginning or end of composition" (rendering the Ancient coronis) is a reuse of 2297 CIRCLED TIMES, and so on. Other symbols may be obtained by straightforward combinations: long with ictus is merely 02c9 0300, contracted biceps is 02c9 0308 (a sign already used in other scholarly domains), and long syllable in anceps position is METRICAL ANCEPS 0304 (if ANCEPS is accepted) or 00d7 0304 (if not.)

%42)	55 instances,	A part of the foot which may consist of		METRICAL TWO SHORTS OVER LONG
		13 authors	either a long or two shorts; Maas'		
			(1962:25) biceps. (The two shorts are		
			more frequent than the long.)		
%44		158 instances,	A usually short anceps (Maas 1962:28)	02d8	METRICAL LONG OVER SHORT
		20 authors		0304	

%45	<u>)</u>	111 instances, 26 authors	A usually long anceps (Maas 1962:28)		02c9 0306	METRICAL SHORT OVER LONG
%43	×	1642 instances, 31 authors	Denotes a syllable ambiguous between long and short. (Maas 1962:24)	Arguably simply a reuse of 00d7. The diacritic version's glyph already exists in Unicode as 033d COMBINING X ABOVE.	00d7	METRICAL ANCEPS
%46		156 instances, 13 authors	A part of the foot which may consist of either a long or two shorts; Maas' (1962:25) <i>biceps</i> . (The long is more frequent than the two shorts.)			METRICAL LONG OVER TWO SHORTS
%47	=	10 instances, 1 author		May be regarded as U+02c9 U+0304	003d	METRICAL LONG OVER LONG
%48))	11 instances, 2 authors		May be regarded as U+02d8 U+0306		METRICAL SHORT OVER SHORT
%49)))	3 instances, 1 author				METRICAL TRIPLE SHORT
%140	=	3 instances, 1 author			2261	METRICAL TRIPLE LONG
%141	~	8 instances, 1 author				METRICAL TWO SHORTS JOINED
%144	~	1 instance, 1 author	The final syllable of a metre, "made prosodically long by the presence of a pause after it". (Maas 1962:29)			METRICAL BREVE IN LONGO
#563	L	57 instances, 1 author	Musical three beats (short-long)			METRICAL SHORT-LONG TRISEME
		0 instances	Musical three beats (long-short); included in West (1982:xi). The distinction between the two kinds of trisemes is West's, and not Ancient; he exploits the fact that the two are glyph variants in antiquity, the foregoing being Bellerman's Anonymous (included in the			METRICAL LONG-SHORT TRISEME

			TLG corpus), while this is in the Seikilos inscription (not in the TLG.)		
#564	ш	4 instances, 1 author	Four beats (long + long)		METRICAL TETRASEME
Archaic .	Letters				
#711		4 instances, 3 authors	The archaic letter; appears in discussions of horse branding (SAMFO/RAS). In 0008, 0088, rendered as lunate sigma. For discussion, see Gartdhausen (1913:II 39).	Various glyph variants of the archaic letter san. This letter would also be required by epigraphists. The letter survives as the numeral sampi (U+03e1), but their identity is only historical, just as is the case for digamma and stigma (U+03dd, U+03db).	GREEK LETTER SAN
*S3	С	1470 instances, 50 authors		Capital lunate sigma (uppercase version of 03f2)	GREEK CAPITAL LETTER LUNATE SIGMA, GREEK SMALL LETTER LUNATE SIGMA
Ancient	Editorial/P	unctuation			
%11	•	57 instances, 5 authors	Aristarchean editorial sign in 0012 and 0013, presumably also 0533. Sentential punctiation (<i>überlieftes Satzzeichen</i>) in 1804. Mathematical symbol in 5022.	2022	GREEK ARISTARCHEAN DOT
%93	.\r'	1 instance, 1 author	Unglossed papyrological editorial symbol. According to McNamee (1992:18) a "ghost" of the dotted obelus (#523), which is likelier to be an acute or grave marked with dots ([9]9) "to draw attention to a diacritical mark he was adding or to expunge an erroneous one."		GREEK DOT BACKSLASH DOT DIACRITIC

%95	7.	5 instances, 4 authors	Unglossed papyrological editorial symbol. According to McNamee (1992:18) a "ghost" of the dotted obelus (#523), which is likelier to be an acute or grave marked with dots ([9]9) "to draw attention to a diacritical mark he was adding or to expunge an erroneous one."			GREEK DOT SLASH DOT DIACRITIC
%96	C	9 instances, 4 authors	Symbol used in papyri (with no spacing between words) to denote that the letters it encompassed were all part of the same word, and there was no word break at that point.	Ancient word joiner; is routinely resolved in modern editions. see also #531	2282	GREEK PAPYROLOGICAL HYPHEN
#6		3525 instances, 61 authors	Ancient editorial sign, indicating new paragraph, new stanza, or speaker change. Du Cange: "ponitur ad separandas res a rebus quae in connexu concurrunt, quemadmodum in catalogo loca a locis, & regiones a regionibus, in agone praemia a praemiis, certamina a diversis certaminibus separantur" (i.e. used as a comma, to separate entities.) This is not reflected in our texts.	A non-spacing underline (or overbar, the way the TLG encodes it); used as a section delimiter. see also #1516	2014?	GREEK PARAGRAPHOS
#8	>—	212 instances, 8 authors	In 1128.001, is somehow associated with quotations (perhaps a diple qua quotation mark next to a paragraphos?) In 0643.001, it delimits chapters ("capitis clausula"). Seems to denote subsections in 1429.001; the editor explicitly calls it a paragraphos. Denotes stanza in 0033.002. All these are the functions of a paragraphos, and this sign should thus be taken as a variant of a paragraphos (its function does not correspond to that of the diple obelismene, #452.) In some instances, this may be a modern	Like the paragraphos (#6) it is a modification of, this glyph is sublinear. By contrast, #452 is a variant of the obelus (#12), and thus appears at the same height as normal lowercase.		GREEK PARAGRAPHOS WITH DIPLE

		editorial replacement for an Ancient coronis.			
#10, #114, #512	22 instances, 11 authors	Ancient editorial sign. In 1312.003, the ancient equivalent of a footnote marker to a marginalium where the scribe queries a form in the text. In the Aristarcheian system (Homer), indicates corruptions (cf. %, Crux.) In Du Cange: "ponitur ad eos versus quorum ordo permutandum est, sicut & in antiquis auctoribus positum invenitur" (placed by those verses whose order is to be changed, as may be found proposed in the ancient authors). According to Anecdotum Romanum (Gardthausen 1913:II 412), TO\ DE\ A)NTISI/GMA KAQ' E(AUTO\ PRO\S TOU\S E)NHLLAGME/NOUS TO/POUS KAI\ A)PA/ DONTAS. McNamee (1992:14): "The antisigma and a handful of lunate signs possibly intended for antisigmas were the appropriate marks for introducing textual revisions, especially variants and textual comments An antisigma beside the text may be matched by a similar sign beside the revision. Typically, then, the sign was a sort of localized reference mark, guiding the reader's eye elsewhere in the vicinity of the column As for the ancora, the work of the antisigma extended beyond the flagging of textual variants. It sometimes accompanies errors or corrections or even informational notes, and at least once (in P. Oxy. 1.12) it marks factual errors Where it can be	Greek script version of 0186, reverse lunate sigma. Distinction between editorial mark, abbreviation marker, weight (hemiobolon) and musical sign is a matter of markup.	0186	GREEK ANTISIGMA

			explained, the antisigma of papyri clearly has only a tenuous relation (namely shape and an association with textual problems) to the Aristarchan antisigma described in scholia and ancient testimonia, although the sources are in conflict even of that sign."			
#11	Э	2 instances, 1 author	Ancient editorial sign. The antisigma periestigmenon indicates tautologies in the Aristarcheian system. In Du Cange, "ponitur in iis locis ubi in eodem sensu duplices versus sunt, & dubitatur qui potius eligendus sit" (placed where two verses duplicate the same sense, and it is uncertain which is to be selected) (i.e. variant readings) According to Anecdotum Romanum (Gardthausen 1913:II 412), TO\ DE\ A)NTISI/GMA PERIESTIGME/NON PARATI/QETAI, O(/TAN TAUTOLOGH= KAI\ TH\N AU)TH\N DIA/NOIAN DEU/TERON LE/GH . Abbreviation marker in the codex in 0057 and 5022, appearing in print only because it is unresolved in both cases. On the use of a symbol like the antisigma (or spiritus lenis) for abbreviation, cf. Avi-Yonah (1974 [1940]:39)			GREEK ANTISTIGMA PERIESTIGMENON
#12		524 instances, 1 author	Ancient editorial sign indicating editorial deletion. In Origen's <i>Hexapla</i> , denoted a line present in the Septuagint but absent in the Hebrew original, which Origin therefore rejected. In the Aristarcheian system, indicated editorial deletions (lines regarded as spurious).	see also #704, #1514. Appears as a marginal sign, should not be conflated typographically with punctuation dashes.	2014	GREEK OBELUS

#14	÷	299 instances, 2 authors	Du Cange: "apponitur in rebus vel sententiis superflue iteratis, sive in iis locis ubi lectio aliqua falsitate notata est, ut quasi sagitta jugulet supervacua, atque falsa confodat." (Placed by things or sentences redundantly repeated, or in places where another false reading is noted, so that it may slay the redundant like an arrow (O)/BELOS), and pierce through the false." According to Anecdotum Romanum (Gardthausen 1913:II 411), O(DE\ O)BELO\S PRO\S TA\ A)QETOU/MENA E)PI\ TOU= POIHTOU=, H)/GOUN NENOQEUME/NA H)\ U(POBEBLHME/NA. In combination with the asteriskos, indicated lines Aristarchus regarded as transposed. In the Aristarcheian system (Homer), indicated corrections owed to Zenodotus. Du Cange (Isidore): "Hanc antiqui iis apponebant, quae Zenodotus Enbesius non recte adiecerat, aut			GREEK DIPLE PERIESTIGMENE
			Ephesius non recte adjecerat, aut detraxerat, aut permutaverat. In iis nostri ea usi sunt." According to Anecdotum Romanum (Gardthausen 1913:II 411), H(DE\ PERIESTIGME/NH DIPLH= PRO\S TA\S GRAFA\S TA\S *ZHNODOTEI/OUS KAI\ KRA/THTOS KAI\ AU)TOU= *)ARISTA/RXOU KAI\ TA\S DIORQW/SEIS AU)TOU=.			
#15, #1512	>	5203 instances, 14 authors	Ancient editorial sign; also called diple aperistiktos (undotted). In the Aristarcheian system, indicated sundry points of interest: hapax legomena,	Is an editorial, marginal sign; while it looks just like GREATER THAN, it is by no means a	003e	GREEK DIPLE

figures of speech, and points of mathematical operator. disagreements in interpretation. ("a The distinction between general-purpose symbol indicating that a the diple proper and the line contained some noteworthy point line-filler is a matter of linguistic, historical, or otherwise" markup; indeed, in most usually cross-referencing to a markup the line-filler hypomnema: McNamee 1992:8-11.) would not even be treated According to Anecdotum Romanum as a textual character. (Gardthausen 1913:II 411), H(ME\N OU)=N DIPLH= A)PERI/STIKTOS PARATI/QETAI PRO\S TOU\S GLWSSOGRA/FOUS H)\ E(TERODO/CWS E)KDECAME/NOUS TA\ TOU= POIHTOU= KAI\ MH\ KALW=S: H)\ PRO\S TA\S A(/PAC EI)RHME/NAS LE/CEIS, H)\ PRO\S TA\ E)NANTI/A KAI\ MAXO/MENA, KAI\ E(/TERA SXH/MATA PA/MPOLLA KAI\ ZHTH/MATA. In Theological texts, a quotation marker (Gardthausen 1913:II 406); Du Cange: "hanc Scriptores nostri apponunt in libris Ecclesiasticorum virorum, ad separanda vel demonstranda testimonia sanctuarum Scripturarum" (this our scribes place in book of churchmen, to separate or point out the testimony of the Holy Scriptures.) In 2102.001, a single diple denotes a line with a biblical citation, and a double diple the lemma actually under discussion. Similarly in the Platonic commentary in 1128.001. McNamee (1992:15) believes the diple in non-Homeric texts "were used in much the same way that Aristarchus used the diple, namely to indicate

			something worthy of comment in a line." However, papyri "do provide abundant evidence for the use of the diple as a punctuator marking new sections in texts of prose as well as poetry. Presumably the rightward point of the usual form made it a convenient divider. It was also the standard symbol for marking quotations, and when so used appears at the left of each line quoted. Once or twice, like antisigma, it marks erroneous text. Occasionally it introduces or concludes a marginal note, and there it may reflect the punctuation of the source-commentary. In one or two papyri finally, there is concrete evidence to support Turner's suggestion that it served as a reference mark to hypomnemata." (McNamee 1992:16-17) McNamee (1992:24-25) and Wattenbach (1895:120) also notes the tendency in Herculaneum to use diplai where Egyptian scribes used paragraphoi. Also used as a line-filler.			
#18, #323	<	981 instances, 6 authors	Ancient editorial sign; see #15. Named by Hephaestion DIPLH= E)/SW NENEUKUI=A or BLE/POUSA, in contrast to #15 E)/CW NENEUKUI=A; McNamee (1992:16), however, finds the siglum is extremely infrequent in use, and suspects it to have often been written in error for the normal diple. Also used as line-filler. In 1559 001 app. crit. notes final verse left out by scribe. The function appears to be primarily as a line filler (so Gardthausen 1913:II 406);	Is an editorial, marginal sign; while it looks just like LESS THAN, it is by no means a mathematical operator. The distinction between the reverse diple proper and the line-filler is a matter of markup; indeed, in most markup the line-filler would not even be treated as a textual character.	003c	GREEK REVERSE DIPLE

			see also #15. McNamee (1992:25) lists among the space-fillers of Herculaneum chi, the asteriscus, and the dotted diple."			
#55	:::	0 instances		Papyrological: information required		GREEK QUINCUNX
#70		0 instances		Information required.		GREEK LOW PUNCTUS
#71	•	0 instances		Information required.		GREEK MID PUNCTUS
#72	•	0 instances		Information required.		GREEK HIGH PUNCTUS
#73	:	25 instances, 7 authors	As papyrological punctuation, distinct from Modern dicolon (%10) in ill-defined manner (see Gardthausen 1913:II 400.) In 1738.003, a musical or editorial marginal symbol.	Semantics is presumably not that of the modern colon. Information required.	003a	GREEK DIPUNCT
#74	i	1138 instances, 11 authors		Information required.		GREEK TRIPUNCT
#306		3 instances, 3 authors	In 0232 this double paragraphos marks a new strophe, with a single paragraphos marking a sub-division every three lines; in 1471 the fragment is too short to tell.	Distinct from #6 (so used in Archilocus)		GREEK DOUBLE PARAGRAPHOS
#452	>	77 instances, 15 authors	Interlineal sign is a paragraphos, indicating a change of speaker. Du Cange (Isidore on Origen): "interponitur ad separandas in Comoediis vel tragoediis periodos".	See note to #8.		GREEK DIPLE OBELISMENE
#453	—	3 instances, 2 authors	Cf. #452.			GREEK REVERSED DIPLE OBELISMENE
#454		17 instances, 5 authors	In 5026.001 (9 instances, grouped in one particular section) this critical sign appears to mark a quotation from the Iliad. In the other texts, it perhaps functions as a paragraphos.	Sublinear.		GREEK FORKED PARAGRAPHOS

#455	_	0 instances		Sublinear. Information required: is this sign actually used anywhere?	GREEK REVERSED FORKED PARAGRAPHOS
#457		1 instance, 1 author	A plain paragraphos is 14 lines below this mark in the fragment where it occurs uniquely.	Sublinear.	GREEK PARAGRAPHOS WITH STROKE ABOVE
#506		2 instances, 2 authors	Editorial sign. "At 48 a marginal 'anchor' sign indicated an omitted verse, perhaps supplied at the foot". Du Cange (Isidore): "A)/GKURA superior ponitur, ubi aliqua res magne omnino est. A)/GKURA inferiot, ubi aliquid vilissime aut inconvenientius denuntiatum est." McNamee (1992:11): "The ancora was used almost exclusively to mark a place where text had been omitted and (or) to draw attention to the necessary restoration in the top or bottom margin. It may appear with a diagonal penstroke, particularly to mark the two lines between which an omission has occurred Interestingly, although the sign may strike the eye as having the shape of an arrow, its "business end"—the directional pointer—was normally the open part of its central shaft. Thus typically served as a pointer upward, down Nor did the conventional role of the symbol as a caret mark keep scribes from dragooning it for other purposes when they saw a parallel need. Thus ancorae ocassionally mark errors and variant readings."		GREEK ANCORA

#507		135 instances,	Editorial sign. Du Cange (Isidore):			GREEK KERAUNION
π307		1 author	"ponitur quoties multi versus			GREEK KERAUNION
	X	1 author	improbantur, nec per singulos			
			1 0			
			obelantur." According to Anecdotum			
			Romanum (Gardthausen 1913:II 412),			
			TO\ DE\ KERAU/NION E)STI\			
			ME\N TW=N SPANI/WS			
			PARATIQEME/NWN, DHLOI= DE\			
			KAI\ AU)TO\ POLLA\S			
			ZHTH/SEIS PRO\S TAI=S			
			PROEIRHME/NAIS. Has been			
			misapplied in the past for #109.			
#523	. /	154 instances,	Normally used as E)STI/ abbreviation.	Proposed here as an	cf.	GREEK INCLINED DOTTED OBELUS
	·/.	9 authors	Explication of the abbreviation in	editorial sign, rather than	music	
			7051.001. In 0738.002, #523%17 is	as an abbreviation for esti	al	
			expanded in app. crit. to E)STIN	(cf. #1317, #1318)	1d10e	
			O)BOLOI\. Part of unresolved			
			abbreviation in 5022.001.			
			Editorial sign in antiquity (0019.016,			
			0383.001, 0461.004); termed by			
			McNamee (1992:18) a dotted obelus.			
			Used in 5014 to indicate a scholion			
			linked to the text it refers to by a			
			footnote marker or number, rather than			
			as a marginalium. Used in 1147.003 to			
			note problematic accent in papyrus:			
			"TA\UTA Pap., den Akzent scheint			
			•			
			#523 am Rand als fraglich bezeichnen."			
			According to McNamee (1992:18), "its			
			meaning is unclear in the majority of			
			cases there are indications, not			
			individually persuasive but suggestive in			
			combination, that it too served as a			
			reference mark linking commentaries			
			and literary texts."			
			The diacritic equivalent is %95.			

#532)	9 instances, 3 authors	Used as word separator in running text; normally resolved in modern editions. Used as such (it seems) in 0521.		GREEK PAPYROLOGICAL HYPODIASTOLE
#700	•	8 instances, 1 author	Papyrological punctuation; cf. #53.	Information required.	GREEK QUADRUPLE INTERPUNCT

Ancient Numeric

Acrophonic numerals are not included in this proposal, as a proposal has been made independently.

#20		7861 instances,	Sign for the fraction 1/2 (Gardthausen	Has abundant glyph	2220	GREEK HALF SIGN
	_	24 authors	1913:II 373).	variants: #21, #24, #25,		
				#161, #172, #689. These		
				will not be differentiated		
				unless there is clear		
				evidence that there exist		
				texts in which they can be		
				differentiated (e.g. numeral		
				versus unit—as implied by		
				DuCagne for #21 as a		
				measure.)		
#130	O	991 instances, 3 authors	In 2032, contrast between RP = 180	Though arguably this is merely an abbreviation, it	00b0	GREEK DIGIT ZERO
		5 audiois	degrees and #130 implies this is zero.	is rendered so		
			In 2033, editor explicitly has made it	multifariously (degree		
			zero. According to Gardthausen (1913:II	sign, Arabic zero, small		
			377), O stands for OU) DEMI/A	case omicron), and at such		
			MOI=RA.	risk of conflation with		
				other signs, that it should		
				be assigned its own		
				codepoint.		
#131		81 instances, 4		Glyph variants: #132, #133		GREEK TWO THIRDS SIGN
	W	authors				
#165	א	198 instances,	1/x; e.g. Q#165 = $1/9$.			GREEK FRACTION SIGN
		1 author				

#166	\wedge	623 instances, 2 authors				GREEK DIOPHANTINE MINUS SIGN
#171	\cup	18 instances, 1 author	Means one half plus the number following: $#171D = \frac{1}{2} + \frac{1}{4} = \frac{3}{4}$. Cf. Gardthausen (1913:II 373).	Not a variant of #20, since it acts as a premodifier	25e1	GREEK CUP-LIKE HALF SIGN
#1513	Ş	2329 instances, 2 authors	Mathematical sign indicating the variable to be found, equivalent to Western use of <i>x</i> .	Glyph looks identical to #25 in one text, but has distinct meaning; in the other text, it looks different. (Since both texts are derived from the same codex—text and marginal commentary—the discrepancy in glyph is puzzling, and may reflect editorial convenience in the latter case.)		GREEK DIOPHANTINE VARIABLE SIGN

Ancient Abbreviations

These glyphs may not fall under the scope of Unicode.

	01		1	
#87	Λ	1 instance, 1	Abbreviation for 'so-and-so'.	GREEK DEINA ABBREVIATION SIGN
	T	author		

Ancient Measures

Many of these measures have variant glyphs, listed separately in Appendix B.

#100	÷	269 instances, 3 authors	See Pauly, s.v. sigla.		00f7	GREEK ARTABE SIGN
#101	<	11872 instances, 19 authors	Can also be Artabe (Kenyon 1899:129)	Provisionally, this is kept distinct from the Diple, which is a marginal sign. Has glyph variant #129 (which the diple does not.).	003c	GREEK DRACHMA SIGN
#106	I _o	4048 instances, 22 authors		Strictly speaking a gamma- omicron ligature, in which the gamma can be capital or lower-case. Has		GREEK OUNCE SIGN

				extremely frequently in the TLG corpus been 'spelled out' as *GO, GO or G <o>.</o>		
#109	ĸ	78 instances, 10 authors		see also #104		GREEK KOTYLE SIGN
#111	K	17 instances, 3 authors				GREEK KERATION SIGN
#112	L_{δ}	18 instances, 1 author	Gramma = Two oboli.	see also #128		GREEK GRAMMA SIGN
#115	φ	2 instances, 1 author		The trublion is properly represented by #115 followed by an upsilon		GREEK TRUBLION SIGN
#116	~	3 instances, 3 authors	Obolos. Also Artabe (Pauly <i>s.v. sigla</i> p. 2306).	see also #113, #123. Has glyph variants quite unlike tilde.	007e	GREEK OBOLOS SIGN
#117	s	686 instances, 3 authors		see also #103, #118, #127		GREEK LITRE SIGN
#121	de	430 instances, 8 authors		see also #105, #515, #517		GREEK SEXTARY SIGN
#122	×	2 instances, 2 authors	Two oboli.	see also #119		GREEK DIOBOLON SIGN
#125	\mathbf{K}^{v}	68 instances, 3 authors		see also #102		GREEK KYATHOS SIGN
#133	χ°	6 instances, 1 author		Strictly speaking chi- omicron ligature		GREEK CHOUS SIGN
#136	ſ	46 instances, 1 author	Can also be Drachma (Kenyon 1899:129)	opposed to typographically convenient shape) should be investigated.	222b	GREEK STATER SIGN
#1337	<	3 instances, 2 authors		Should not be conflated with Reverse Diple; see Drachma.	003c	GREEK HALF DRACHMA SIGN

#1338		1 instance, 1	Three oboli.		GREEK TRIOBOLON SIGN
		author			
	•				

Ancient Musical

Many of these overlap with existing letters or signs, but they form a set, so that provisionally the existing letters have been kept here. Note that only two of the three major surviving musical theoretical tractates have been entered at the TLG; the third (Alypius) should be scrutinized before any final proposal.

The names of the symbols are taken from Alypius (although archaic letter names have been normalized, e.g. OU becomes OMICRON.) The signs as attested in the manuscripts are often confused, and inconsistent with the names; we are following the editorial normalized forms of the symbols, rather than what is actually attested in the individual manuscripts.

In the following listing, canonical Greek letters are included for completeness, but will not be included in any final Unicode proposal; they should be considered unified with the normal Greek alphabetic letters.

#562		5 instances, 1 author			2014	GREEK MUSICAL TWO BEATS
#565	ш	6 instances, 2 authors	In 1127, a five-beat long marker (pentaseme).	There may be a call for distinguishing the duration marker from the musical note; however, Quintilian's is the only instance recorded, and the sign seems to have existed as a 5-beat indicator only in music theory.		GREEK MUSICAL EPSILON TETRAGONON ANESTRAMMENON
#566	S	61 instances, 2 authors				GREEK MUSICAL SIGMA ANESTRAMMENON
#567	F	149 instances, 2 authors			03dc	GREEK MUSICAL DIGAMMA*
#568	П	75 instances, 2 authors				GREEK MUSICAL PI KATHEILKUSMENON
#569	<	76 instances, 2 authors				GREEK MUSICAL LAMBDA PLAGION
#570	С	103 instances, 3 authors	Indicates "semel duplex diastole" (double rest) when preceded by #624:		03f2	GREEK MUSICAL LUNATE SIGMA*

			author 1738.		
#571	Г	1 instance, 1 author			GREEK MUSICAL SHORTENED PI
#572	Н	44 instances, 2 authors			GREEK MUSICAL TAU PLAGION
#573	7	10 instances, 2 authors			GREEK MUSICAL ZETA ELLEIPES
#574	Γ	58 instances, 2 authors		0393	GREEK MUSICAL GAMMA*
#575	٦	17 instances, 2 authors			GREEK MUSICAL GAMMA APESTRAMMENON
#576	В	11 instances, 2 authors			GREEK MUSICAL BETA ELLEIPES
#577	Φ	11 instances, 2 authors		03a6	GREEK MUSICAL PHI*
#578	Р	11 instances, 2 authors		03a1	GREEK MUSICAL RHO*
#579	M	16 instances, 2 authors		039c	GREEK MUSICAL MU*
#580		17 instances, 2 authors		0399	GREEK MUSICAL IOTA*
#581	Θ	7 instances, 2 authors		0398	GREEK MUSICAL THETA*
#582	V	18 instances, 2 authors			GREEK MUSICAL LAMBDA ANESTRAMMENON
#583	N	13 instances, 2 authors		039d	GREEK MUSICAL NU*
#584	П	15 instances, 2 authors			GREEK MUSICAL OMEGA TETRAGONON HUPTION
#585	Z	52 instances, 2 authors		0396	GREEK MUSICAL ZETA*

#586		30 instances, 2 authors				GREEK MUSICAL PI PLAGION
#587	Е	16 instances, 2 authors		Called "tetragonon" (square) because the default was uncial.	0395	GREEK MUSICAL EPSILON TETRAGONON*
#588	Ц	41 instances, 2 authors				GREEK MUSICAL PI ANESTRAMMENON
#589	0	9 instances, 2 authors				GREEK MUSICAL PHI PLAGION
#590	Ч	33 instances, 2 authors				GREEK MUSICAL PARTIAL REVERSED ETA
#591	Т	5 instances, 2 authors				GREEK MUSICAL STRAIGHT UPSILON INVERTED
#592	<	22 instances, 2 authors				GREEK MUSICAL INVERTED SMALL LAMBDA
#593	Λ	25 instances, 2 authors			039b	GREEK MUSICAL LAMBDA*
#594	0	3 instances, 1 author				GREEK MUSICAL REVERSED HORIZONTAL KOPPA
#595	6	2 instances, 1 author				GREEK MUSICAL DIGIT SIX
#596	9	2 instances, 1 author				GREEK MUSICAL DIGIT NINE
#597	L	2 instances, 1 author				GREEK MUSICAL INVERTED GAMMA
#598	7	2 instances, 1 author				GREEK MUSICAL REVERSED HORIZONTAL ALPHA
#599	∇	6 instances, 1 author				GREEK MUSICAL INVERTED DELTA

#600	3	6 instances, 1 author			GREEK MUSICAL EPSILON TETRAGONON APESTRAMMENON
#601	0-	3 instances, 1 author			GREEK MUSICAL HORIZONTAL KOPPA
#602	>	9 instances, 1 author			GREEK MUSICAL LAMBDA PLAGION APESTRAMMENON
#603	П	9 instances, 1 author		03a0	GREEK MUSICAL PI*
#604	上	2 instances, 1 author	aka Eta Elleipes Huption (Alypius p. 385)		GREEK MUSICAL ETA ELLEIPES PLAGION
#605		5 instances, 1 author			GREEK MUSICAL HORIZONTAL SQUARE H
#606	4	1 instance, 1 author			GREEK MUSICAL INVERTED SQUARE H
#607	\in	3 instances, 1 author		03f5	GREEK MUSICAL UNCIAL EPSILON*
#608	Э	3 instances, 1 author		03f6	GREEK MUSICAL REVERSED UNCIAL EPSILON*
#609	ľ	3 instances, 1 author			GREEK MUSICAL IOTA WITH RIGHT STROKE
#610	γ	2 instances, 1 author			GREEK MUSICAL IOTA WITH LEFT STROKE
#611	∞	1 instance, 1 author			GREEK MUSICAL REVERSED HORIZONTAL OU LIGATURE
#612	У	3 instances, 1 author			GREEK MUSICAL REVERSED INVERTED SMALL LAMNDA
#613	Н	1 instance, 1 author			GREEK MUSICAL REVERSED INVERTED SQUARE H
#614	∞	1 instance, 1 author			GREEK MUSICAL HORIZONTAL OU LIGATURE

#615	7	5 instances, 1 author			GREEK MUSICAL DIGAMMA APESTRAMMENON
#616		4 instances, 1 author			GREEK MUSICAL REVERSED HORIZONTAL PSI
#617	U	1 instance, 1 author			GREEK MUSICAL SERIFED U
#618		1 instance, 1 author			GREEK MUSICAL HORIZONTAL IOTA WITH STROKE ABOVE
#619	λ	2 instances, 1 author			GREEK MUSICAL SMALL LAMBDA
#620	٦	1 instance, 1 author			GREEK MUSICAL SLASH C
#621	-	7 instances, 1 author			GREEK MUSICAL TAU PLAGION APESTRAMMENON
#622)	5 instances, 1 author			GREEK MUSICAL REVERSED HORIZONTAL PSI
#623	U	1 instance, 1 author			GREEK MUSICAL SERIFED U
#624	Э	13 instances, 2 authors	Indicates "semel diastole" (single rest) in 1738.	Can be conflated with Greek Antisigma	GREEK MUSICAL SIGMA APESTRAMMENON*
#625	_	1 instance, 1 author			GREEK MUSICAL HORIZONTAL IOTA WITH STROKE BELOW
#626	3	1 instance, 1 author			GREEK MUSICAL INVERTED SLASH C
#627	A	7 instances, 1 author			GREEK MUSICAL INVERTED ALPHA
#628	0	8 instances, 1 author		03	Of GREEK MUSICAL OMICRON*
#629	=	5 instances, 1 author		03	9e GREEK MUSICAL XI*
#630	Δ	6 instances, 1 author		03	94 GREEK MUSICAL DELTA*

#631	K	13 instances, 1 author			039a	GREEK MUSICAL KAPPA*
#632	~	8 instances, 1 author				GREEK MUSICAL KAPPA ANESTRAMMENON
#633	К	6 instances, 1 author		Alypius p. 385 calls it Anestrammenon		GREEK MUSICAL KAPPA APESTRAMMENON
#634		6 instances, 1 author				GREEK MUSICAL REVERSED HORIZONTAL PI
#635		4 instances, 1 author				GREEK MUSICAL REVERSED SQUARE HORIZONTAL OMEGA
#636	Р	3 instances, 1 author				GREEK MUSICAL HEMIPHI PLAGION APESTRAMMENON
#637	3	7 instances, 1 author				GREEK MUSICAL SIGMA DIPLOUN APESTRAMMENON
#638	P	4 instances, 1 author				GREEK MUSICAL OMICRON KATO GRAMMEN ECHON
#639	M	4 instances, 1 author				GREEK MUSICAL MU ANESTRAMMENON
#640	Н	6 instances, 1 author				GREEK MUSICAL ETA ELLEIPES APESTRAMMENON
#641	Ω	4 instances, 1 author			03a9	GREEK MUSICAL OMEGA*
#642	Н	11 instances, 1 author			0397	GREEK MUSICAL ETA*
#643	П	3 instances, 1 author				GREEK MUSICAL HORIZONTAL SQUARE OMEGA
#644	۵	3 instances, 1 author				GREEK MUSICAL HEMIPHI PLAGION
#645	3	4 instances, 1 author				GREEK MUSICAL SIGMA DIPLOUN
#646	Н	4 instances, 1 author				GREEK MUSICAL ETA ELLEIPES

#647	h	4 instances, 1 author		GREEK MUSICAL INVERTED REVERSED ROUND H
#648	λ	5 instances, 1 author		GREEK MUSICAL HEMIDELTA KATHEILKUSMENON
#649	И	4 instances, 1 author		GREEK MUSICAL ANTINU
#650	\	9 instances, 1 author		GREEK MUSICAL BAREIA
#651	X	4 instances, 1 author	03a7	GREEK MUSICAL CHI*
#652	Т	6 instances, 1 author	03a4	GREEK MUSICAL TAU*
#653	Ж	4 instances, 1 author		GREEK MUSICAL CHI DIEPHTHOROS
#654	1	6 instances, 1 author		GREEK MUSICAL TAU ANESTRAMMENON
#655	×	4 instances, 1 author		GREEK MUSICAL CHI WITH HORIZONTAL BAR
#656	R	4 instances, 1 author		GREEK MUSICAL PI DIPLOUN
#657	Ч	4 instances, 1 author		GREEK MUSICAL INVERTED ROUND H
#658	7	4 instances, 1 author		GREEK MUSICAL HEMIALPHA ARISTERON ANO NEUON
#659	7	4 instances, 1 author		GREEK MUSICAL HEMIALPHA ARISTERON KATO NEUON
#660	Α	6 instances, 1 author	0391	GREEK MUSICAL ALPHA*
#661	В	4 instances, 1 author	0392	GREEK MUSICAL BETA*

		1	
#662	Y 3 instances, 1 author	03a5	GREEK MUSICAL UPSILON*
#663	Ψ 3 instances, 1 author	03a8	GREEK MUSICAL PSI*
#664	/ 4 instances, 1 author		GREEK MUSICAL OXEIA
#665	4 instances, 1 author		GREEK MUSICAL HEMIDELTA HUPTION
#666	3 instances, 1 author	Alypius p. 376 calls it Anestrammenon, which is used for both rotation and inversion.	GREEK MUSICAL DIGAMMA HUPTION
#667	3 instances, 1 author		GREEK MUSICAL HORIZONTAL REVERSED INVERTED ROUND H
#668	3 instances, 1 author	Alypius p.396 has a Hemitheta Kato Neuon (pointing downwards) pointing up; presumably this is a typographical error.	GREEK MUSICAL HEMITHETA KATO NEUON
#669	3 instances, 1 author		GREEK MUSICAL XI DIPLOUN ANESTRAMMENON
#670	b 3 instances, 1 author		GREEK MUSICAL RHO ANESTRAMMENON
#671	2 instances, 1 author		GREEK MUSICAL UPSILON KATO NEUON
#672	3 instances, 1 author		GREEK MUSICAL PSI KATO NEUON
L			1

#673	3 instances, 1 author	GREEK MUSICAL PI DIPLOUN ANESTRAMMENON
#674	2 instances, 1 author	GREEK MUSICAL SIGMA DIPLOUN ANESTRAMMENON
#675	3 instances, 1 author	GREEK MUSICAL HEMIALPHA DEXION KATO NEUON
#676	7 3 instances, 1 author	GREEK MUSICAL HEMIALPHA DEXION ANO NEUON
#677	1 instance, 1 author	GREEK MUSICAL TRUNCATED SMALL MU
#678	2 instances, 1 author	GREEK MUSICAL HORIZONTAL UPSILON
#679	2 instances, 1 author	GREEK MUSICAL REVERSED HORIZONTAL UPSILON
#680	1 instance, 1 author	GREEK MUSICAL ANGULAR S
#681	1 instance, 1 author	GREEK MUSICAL HORIZONTAL SQUARE ALPHA
#682	1 instance, 1 author	GREEK MUSICAL REVERSED HORIZONTAL SQUARE ALPHA
#683	1 instance, 1 author	GREEK MUSICAL ASTERISK

#684	9 instances, 1 author	GREEK MUSICAL GAMMA ANESTRAMMENON
#685	1 instance, 1 author	GREEK MUSICAL REVERSED HORIZONTAL KAPPA
#686	1 instance, 1 author	GREEK MUSICAL HORIZONTAL ETA
#687	2 instances, 1 author	GREEK MUSICAL V PAREN

Signs outside Beta Code which may need to be assigned (further investigation required):

M	Alypius, p. 369; same as "Greek Musical V Paren" in Aristides Quintilian?		GREEK MUSICAL ETA AMELETIKON KATHEILKUSMENON 1
4	Alypius p. 370; same as "Greek Musical Partial Reversed Eta"?		GREEK MUSICAL ETA AMELETIKON KATHEILKUSMENON 2
∇	Alypius p. 372. Not the same as Inverted Delta.		GREEK MUSICAL DELTA ANESTRAMMENON
4	Alypius, p. 377 (the manuscript calls it Hemidelta; presumably the editor disagrees, given the symbol used.)		GREEK MUSICAL DELTA HUPTION
7	Alypius, p. 372; same as "Greek Musical V Paren" or "Greek Musical Inverted Round H"?		GREEK MUSICAL HEMIMU DEXION
	Alypius, p. 375; same as "Greek Musical Truncated Small Mu", "Greek Musical Inverted Reversed Round H", "Greek Musical Slash C"?	Hemimu dexion ("right half mu") and Hemimu aristeron ("left half mu") should be mirror images of each other; that they are	GREEK MUSICAL HEMIMU ARISTERON

		not is probably modern typographical slovenliness.	
7	Alypius p. 381; same as "Greek Musical Horizontal Reversed Inverted Round H"?		GREEK MUSICAL HEMIMU HUPTION
_	Alypius p. 375; a musical note, distinct from "Greek Musical Two Beats", which is a duration sign.		GREEK MUSICAL IOTA PLAGION
A	Alypius p. 384	Presumably the following stroke-modified signs should be decomposed to musical sign plus U+0338	GREEK MUSICAL ALPHA ANESTRAMMENON GRAMMEN ECHON
七	Alypius p. 384		GREEK MUSICAL DIGAMMA ANESTRAMMENON GRAMMEN ECHON
竹	Alypius p. 384		GREEK MUSICAL PI GRAMMEN ECHON
3	Alypius p. 384		GREEK MUSICAL SIGMA APESTRAMMENON GRAMMEN ECHON
书	Alypius p. 384		GREEK MUSICAL ETA GRAMMEN ECHON
>	Alypius p. 384		GREEK MUSICAL LAMBDA PLAGION APESTRAMMENON GRAMMEN ECHON
2	Alypius p. 384		GREEK MUSICAL PI PLAGION APESTRAMMENON GRAMMEN ECHON
L	Alypius p. 387		GREEK MUSICAL DIGAMMA ANESTRAMMENON

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