

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

**Doc Type:** Working Group Document  
**Title:** Revised proposal to encode Unifon characters in the UCS  
**Source:** Michael Everson  
**Status:** Individual Contribution  
**Replaces:** N4262  
**Date:** 2014-02-24

**0. Preliminaries.** Unifon was developed as a set of Latin extensions to assist in the acquisition of English-language literacy. It was also used as a practical orthography for the Hupa, Yurok, Tolowa, and Karok languages. This document proposes only to encode those characters required for modern English use; the other characters require further study.

**1. Introduction to Unifon.** Unifon was developed as an auxiliary “phonetic” alphabet designed to facilitate access to literacy to English-speaking children, by presenting to them a writing system that worked by sound. Tests showed that children were able to learn to read rather quickly using this system, and, having made that breakthrough, were able to transition to traditional English orthography relatively easily. Unifon was developed in the 1950s by Dr John R. Malone, an economist and newspaper equipment consultant who became interested in phonetic writing while consulting with the Bendix Corporation, which was interested in questions of aviation communication. That work was abandoned when the International Air Transport Association selected English as the language of international airline communications in 1957. But Malone’s interest in phonetic writing resurfaced when his young son complained about difficulties learning to read. From about 1960 to the 1980s, Margaret S. Ratz used Unifon to teach first-graders at Principia College in Elsah, Illinois. A variety of teaching materials exist using Unifon. From the 1974 to his death in 1993 John M. Culkin, a specialist in media studies, also promoted Unifon. Also significant is the use made of Unifon in the 1970s and 1980s to write Native American languages. Unifon was adapted principally by Tom Parsons of Humboldt State University to provide a practical orthography for several the Hupa, Yurok, Tolowa, and Karok languages. These orthographies were used for a number of years and although other orthographies are used for these languages now, many valuable documents using Unifon exist which should be able to take advantage of UCS encoding.

**2. Structure.** Unifon is set of extensions to the Latin script. Much Unifon text is written in ALL CAPITAL LETTERS, but the system as developed and described permits the use of casing pairs; when casing is used, the lower-case forms are conventionally (that is, *always*) written in SMALL CAPITAL LETTERS. Unifon uses 40 characters when used for writing English; a number of additional characters were used for the Native American languages, and a few characters were used in earlier versions of Unifon but were later replaced by other characters.

**3. Encoding model.** Because of the considerable overlap between many Unifon letters and the Latin script, Unifon should be treated as a set of extensions to the Latin script. Most Unifon characters can and should be unified with existing Latin characters. As noted above, when Unifon is used as a

casing script, it is always intended to be displayed as styled text, THAT IS, IN SMALL-CAPS. This has some implications for the design of lower-case letters for the code charts, but that should not be particularly problematic if standard design principles are applied.

**4. Unifon characters as used for English.** The 40-letter alphabet presently used for English is as follows.

AΔΛBÇDEËRFGHI±JKLMNŃOQŒŒPRŠTŦHŪŪVWYSZ

**4.1 Unifon letters unified with existing characters.** Of the 40 letters used in the modern Unifon alphabet for English, 24 of them—60%—can be unified with existing letters. Note that *none* of the small-cap letters shown below are encoded modifier letters: they are small-caps styled forms of ordinary small letters.

Letter name	Capital	small	SMALL-CAP	UNIFON
LATIN LETTER A	A	a	A	[æ]
LATIN LETTER TURNED V	Λ	Λ	Λ	[v]
LATIN LETTER B	B	b	B	[b]
LATIN LETTER C WITH STROKE	Ç	ç	Ç	[tʃ]
LATIN LETTER D	D	d	D	[d]
LATIN LETTER E	E	e	E	[e]
LATIN LETTER F	F	f	F	[f]
LATIN LETTER G	G	g	G	[g]
LATIN LETTER H	H	h	H	[h]
LATIN LETTER J	J	j	J	[dʒ]
LATIN LETTER K	K	k	K	[k]
LATIN LETTER L	L	l	L	[l]
LATIN LETTER M	M	m	M	[m]
LATIN LETTER N	N	n	N	[n]
LATIN LETTER O	O	o	O	[ɔ]
LATIN LETTER P	P	p	P	[p]
LATIN LETTER R	R	r	R	[r]
LATIN LETTER S	S	s	S	[s]
LATIN LETTER T	T	t	T	[t]
LATIN LETTER U	U	u	U	[ʌ]
LATIN LETTER V	V	v	V	[v]
LATIN LETTER W	W	w	W	[w]
LATIN LETTER Y	Y	y	Y	[j]
LATIN LETTER Z WITH STROKE	Z	z	Z	[ʒ]

**4.2. New characters for Unifon.** A number of Unifon letters should be added in order to support Unifon as presently used to represent the English language. See Figures 4 and 5.

Letter name	Capital	small	SMALL-CAP	
LATIN LETTER CLOSED TURNED V	Δ	Δ	Δ	[eɪ]
LATIN LETTER SMALL CAPITAL I WITH STROKE	Ǝ	ɪ	Ǝ	[i:]
LATIN LETTER TURNED-E R	Ŕ	æ	Ŕ	[æ]
LATIN LETTER SMALL CAPITAL I	Ɔ	i	Ɔ	[i]

LATIN LETTER I WITH STROKE AND BASELINE	Ɀ	ı̇	Ɀ	[aɪ]
LATIN LETTER REVERSED N WITH BENT RIGHT LEG	Ń	ɱ	Ń	[ɲ]
LATIN LETTER O WITH BASELINE	Ɔ	ɔ	Ɔ	[oʊ]
LATIN LETTER O WITH VERTICAL BAR	⓪	⓪	⓪	[ɔ]
LATIN LETTER O WITH LOW VERTICAL BAR	⓪	⓪	⓪	[aʊ]
LATIN LETTER O WITH HIGH VERTICAL BAR	⓪	⓪	⓪	[ɔɪ]
LATIN LETTER S WITH STROKE	Ŧ	ŧ	Ŧ	[ʃ]
LATIN LETTER THE	Ƨ	Ƨ	Ƨ	[θ]
LATIN LETTER DHE	Ƨ	Ƨ	Ƨ	[ð]
LATIN LETTER U WITH BASELINE	Ʊ	Ʊ	Ʊ	[u:]
LATIN LETTER CLOSED U	Ʊ	Ʊ	Ʊ	[ju]
LATIN LETTER REVERSED Z	Ʒ	Ʒ	Ʒ	[z]

**5. Discussion of individual characters.** The characters listed below are requested for encoding here. Comments are given where relevant; code positions and annotations are as suggested for encoding.

**Ɀ** A7AE LATIN CAPITAL LETTER SMALL CAPITAL I  
x 026A I LATIN LETTER SMALL CAPITAL I  
• used in Unifon and Gabonese orthographies

**5.1. LATIN LETTER SMALL CAPITAL I** is U+026A; this is the capital for it. It represents [ɪ] and is also used in several Kulango language publications from Bondoukou, where Ɀ/ɪ contrasts with I/i. This example (from Psalm 118) comes from *Ɔ de bĩ dali bitɛɛ*, p 10:

Alleluya!  
Ɀ kprɛ Yego bɔ gyasole, gyɪgaleɪ hɔ̃ kyɛɛ,  
gyɪgaleɪ bɔ korigyo tuben haa ti-ɪ.  
Izraɛl bɔ yɔgɔɔɪyɔgɔ, ɪ dɔ-kɛ:  
bɔ korigyo tuben haa ti-ɪ.

Note should be made of the confusability of I/i and Ɀ/ɪ, though it is clear that in fonts they should be quite distinct. In a sans-serif font even where I/i (Ariel) is written I/ı̇ (Andale Mono), the upper case of SMALL CAPITAL I should have longer T-like horizontals: Ɀ/ɪ, similar to the example given above in Kulango.

**Ʊ** A7AF LATIN CAPITAL LETTER SMALL CAPITAL I WITH STROKE  
x 1D7B Ʊ LATIN SMALL CAPITAL LETTER I WITH STROKE

**5.2. LATIN LETTER SMALL CAPITAL I WITH STROKE.** In N4262 it was suggested that the ligature was of ə and e, rather than of ə and e, since the intended sound is ee [i:]:

ee ≠ æ

Given the discussion about SMALL CAPITAL I above, however, it is likely that a unification with U+1D7B LATIN SMALL CAPITAL LETTER I WITH STROKE would be more advantageous in the context of the UCS, since its glyph behaviour would have to be the same as U+A7AE as discussed above.

Δ	A7BA	LATIN CAPITAL LETTER CLOSED TURNED V
Δ	A7BB	LATIN SMALL LETTER CLOSED TURNED V

**5.3. LATIN LETTER CLOSED TURNED V** Although this character looks superficially like a capital Greek delta Δ δ, in origin it is clearly a vowel (it represents [eɪ]), and should best be analysed either as a CLOSED TURNED V, or a CLOSED A WITHOUT HORIZONTAL MIDBAR. Unification with the Greek letter would be undesirable due to the script property. If it were *really* desired to save a code point, one could unify the lower case here with δ U+1E9F LATIN SMALL LETTER DELTA (which otherwise has no capital), though the default sort for that character would be after ɔ̣ U+A771 LATIN SMALL LETTER DUM and before LATIN LETTER E (which would not be particularly desirable).

Ɔ	A7BC	LATIN CAPITAL LETTER TURNED-E R
Ɔ	A7BD	LATIN SMALL LETTER TURNED-E R

x 025A ə latin small letter schwa with hook

**5.4. LATIN LETTER TURNED-E R.** In N4262 it was suggested that one option of encoding this would be by unifying it with LATIN LETTER SCHWA WITH HOOK, adding the capital letter of the already-encoded ə. But strictly speaking, since Ɔə TURNED E and Ɔə SCHWA are distinct, one might expect a case pair Ɔə ə for SCHWA WITH HOOK. It seems preferable to encode TURNED-E R Ɔ; regarding the lower case, the form chosen here, avoiding the rhotic hook, seems more accurate and distinctive than the others proposed previously in N4262 (shown here for comparison):

Ɔə ≠ Ɔə ≠ ƆəƆəƆəƆə

Ɔ	A7BE	LATIN CAPITAL LETTER I WITH STROKE AND BASELINE
Ɔ	A7BF	LATIN SMALL LETTER I WITH STROKE AND BASELINE

**5.5. LATIN LETTER I WITH STROKE AND BASELINE.** This character is best encoded following the glyph logic of Ɔ/Ɔ and Ɔ/Ɔ above; it represents [aɪ].

Ɔ	A7C0	LATIN CAPITAL LETTER REVERSED N WITH BENT RIGHT LEG
Ɔ	A7C1	LATIN SMALL LETTER REVERSED N WITH BENT RIGHT LEG

x 014B η latin small letter eng

**5.6. LATIN LETTER REVERSED N WITH BENT RIGHT LEG.** While this character is somewhat reminiscent of LATIN LETTER ENG, and is used to indicate the velar nasal [ŋ], it is clear from the earliest glyphs used for it that it was based upon a modified reversed N with an angled right leg—not upon a regular N with a kind of tail, as eng proper is.

Ɔŋ ~ Ɔŋ ≠ Ɔŋ

It would be a pretty bad idea to add this glyph as a variant of the letter presently used by both the Sami or the African traditions, since one may be fairly certain that this glyph would be rejected by both communities. For Unifon, the character should be encoded explicitly.

Ō A7C2 LATIN CAPITAL LETTER O WITH BASELINE

ō A7C3 LATIN SMALL LETTER O WITH BASELINE

**5.7. LATIN LETTER O WITH BASELINE.** This character, which represents [ō], is related to other “long” vowels with baselines, namely Δ [ē], Æ [ā], and Ū [jū].

⓪ A7C4 LATIN CAPITAL LETTER O WITH VERTICAL BAR

⓪ A7C5 LATIN SMALL LETTER O WITH VERTICAL BAR

**5.8. LATIN LETTER O WITH VERTICAL BAR.** This character, which represents [ɔ̄], is probably derived conceptually from a ligature, similar to OO∞ LATIN LETTER OO. It is, however, different from that ligature, and should be encoded separately.

⓪ A7C6 LATIN CAPITAL LETTER O WITH LOW VERTICAL BAR

⓪ A7C7 LATIN SMALL LETTER O WITH LOW VERTICAL BAR

**5.9. LATIN LETTER O WITH LOW VERTICAL BAR.** This character represents [āɔ̄].

⓪ A7C8 LATIN CAPITAL LETTER O WITH HIGH VERTICAL BAR

⓪ A7C9 LATIN SMALL LETTER O WITH HIGH VERTICAL BAR

**5.10. LATIN LETTER O WITH HIGH VERTICAL BAR.** This character represents [oi].

Œ A7CA LATIN CAPITAL LETTER S WITH STROKE

Œ A7CB LATIN SMALL LETTER S WITH STROKE

x A7A9 s latin small letter s with oblique stroke

**5.11. LATIN LETTER S WITH STROKE.** Alongside the already-encoded Œ c WITH STROKE, which Unifon uses for [tʃ], this character is used to represent [ʃ].

Ɔ A7CC LATIN CAPITAL LETTER THE

Ɔ A7CD LATIN SMALL LETTER THE

**5.12. LATIN LETTER THE.** The origin of this character, which represents [θ], is slightly obscure, though it is most likely based simply on Latin capital H, since there is always a hard right-angle to the right part of the glyph. There is also always a rightward-facing angled hook on the left ascender:

Ɔ

**Ƨ** A7CE LATIN CAPITAL LETTER DHE  
**ħ** A7CF LATIN SMALL LETTER DHE  
 x 045B cyrillic small letter tshe

**5.13. LATIN LETTER DHE.** This character represents [ð] and is in origin a ligature of Latin *T* and *h*. Although it looks superficially like a CYRILLIC CAPITAL LETTER TSHE Ƨ, that character has a completely different origin (it was introduced in the 1818 Serbian dictionary of Vuk Stefanović Karadžić, on the basis of the old Cyrillic letter djerv Ǧ). The left-hand bar of the T on the Unifon DHE is also quite short (Ƨ), mirroring that on the ascender of the Unifon THE (Ƨ). The lower case of Cyrillic Ƨ is ħ, which is confusable with Latin H WITH STROKE Ƨ ħ, used in Maltese. For Unifon, a ligature of *t* and *h* (ħ) has been used for the lower-case Ƨ, in keeping with the true derivation of the character, and helping to prevent confusability with the Maltese letter.

**U** A7D0 LATIN CAPITAL LETTER U WITH BASELINE  
**u** A7D1 LATIN SMALL LETTER U WITH BASELINE

**5.14. LATIN LETTER U WITH BASELINE.** This character, which represents [u:], is related to other “long” vowels with baselines, namely Δ [ei], Ƨ [ai], and Ω [oɔ].

**U** A7D2 LATIN CAPITAL LETTER CLOSED U  
**u** A7D3 LATIN SMALL LETTER CLOSED U

- also used in Swedish dialectology

**5.15. LATIN LETTER CLOSED U.** This character, which represents [ju], is also used in Swedish dialectology, where it represents a sound similar to [ɛ] (Lundell 1929).

**Table of Vowels.**

If adopting the English rectangular system of classification (Bell-Sweet) the vowels of Swedish and most other languages might be placed as follows:

		front	intermediate	back
high	{	<i>ɪ</i> <i>y</i> <sup>2</sup> <i>u</i> <sup>2</sup>	<i>ʉ</i>	<i>u</i> <sup>2</sup> <i>u</i> <sup>1</sup>
		<i>ɨ</i> <i>y</i> <sup>1</sup>	<i>ɤ</i>	
mid	{	<i>e</i> <i>ø</i> <sup>1</sup>	<i>ə</i>	<i>ø</i> <i>o</i> <sup>2</sup>
		<i>é</i> <i>ø</i> <sup>2</sup>	<b><i>u</i><sup>1</sup></b>	<i>o</i> <sup>1</sup>
low	{	<i>æ</i> <i>ø</i> <sup>1</sup>		<i>a</i> <i>o</i> <sup>1</sup> <i>æ</i> <sup>2</sup>
		<i>a</i> <i>ɛ</i>	<i>θ</i>	<i>ɒ</i>

Ʒ	A7D4	LATIN CAPITAL LETTER REVERSED Z
Ʒ	A7D5	LATIN SMALL LETTER REVERSED Z

**5.16. LATIN LETTER REVERSED Z.** This character, which represents [ʒ] (in Unifon Z represents [z]), is simply a reversed z. Interestingly, this letterform was also used for [ʒ] in the Phonotypic Alphabet No. 7 devised by Pitman. (Alphabets 8 and 9 replaced Ʒ with a reversed Sigma Ʒ, and the 1847 Alphabet used that with a lower case ezh Ʒ.)

## 6. Bibliography.

Anderson, Kenneth C. 2007. *The Case for a Sensible Alphabet*.

<http://www.unifon.org/documents/The%20Case%20for%20a%20Logical%20Alphabet.pdf>

Anderson, Kenneth C. 2007. *Learn Unifon—Spell the Sounds!*.

<http://www.unifon.org/documents/The%20Spelling%20Revolution.pdf>

Carroll, Lewis. [2014, in press]. *Alice’s Adventures in Wonderland in the Unifon Alphabet: ALISIZ ADVENÇERZ IN WUNDERLAND*. Cathair na Mart: Evertime.

Lundell, J. A. 1929. “The Swedish Dialect Alphabet”, in *Studia Neophilologica: A Journal of Germanic and Romanic Philology*. Vol. I. Uppsala.

Malone, John R. 1960. “Do we need a new alphabet?” in *Chicago Sunday Sun-Times*, 1960-05-29.

**7. Acknowledgements.** This project was made possible in part by a grant from the U.S. National Endowment for the Humanities, which funded the Universal Scripts Project (part of the Script Encoding Initiative at UC Berkeley) in respect of the Unifon encoding. Any views, findings, conclusions or recommendations expressed in this publication do not necessarily reflect those of the National Endowment for the Humanities.

Figures.

1 symbol per sound UNIFON ALFUBET John Malone									
A <sup>a</sup> and AND	Δ <sup>A</sup> Ap ΔP APE	Λ <sup>z</sup> xl ΛL ALL	B <sup>b</sup> bO BQ BOW	∅ <sup>K</sup> KiK CHICK	D <sup>d</sup> dU DQ DO	E <sup>e</sup> eIf ELF	Ǝ <sup>E</sup> Et ƎT EAT	Ɔ <sup>c</sup> uDc OTHER	F <sup>f</sup> foks FOX
G <sup>g</sup> gO GO	H <sup>h</sup> hot HOT	I <sup>i</sup> in IN	± <sup>I</sup> Iz ±Z EYES	J <sup>j</sup> jx JA JAW	K <sup>k</sup> kid KID	L <sup>l</sup> lO lQ LOW	M <sup>m</sup> man MAN	N <sup>n</sup> nO nQ NO	∩ <sup>N</sup> riN RING
O <sup>o</sup> on ON	Q <sup>Q</sup> Old OLD	∅ <sup>C</sup> hCk HOK HOOK	Q <sup>q</sup> qt QT OUT	∅ <sup>Q</sup> Ql QL OIL	P <sup>p</sup> pIp P±P PIPE	R <sup>r</sup> run RUN	S <sup>s</sup> sis SIS	§ <sup>S</sup> sO §Q SHOW	T <sup>t</sup> tO tQ TOW
Ɔ <sup>D</sup> Du ƆU THE	Ɔ <sup>T</sup> Tin ƆIN THIN	U <sup>u</sup> up UP	∩ <sup>U</sup> hUp HOP HOOP	∩ <sup>Y</sup> Y U YOU	V <sup>v</sup> vest VEST	W <sup>w</sup> wig WIG	Y <sup>y</sup> yes YES	Σ <sup>Z</sup> aZc ASR AZURE	Z <sup>z</sup> zip ZIP

Figure 1. Example of the final version of Unifon. The alphabet given is: ΔΔΛΒ∅DEƎƆFRFGHI±JKLMN∩OQ∅∅OPRS§TƆH∩U∩∩VWYΣZ

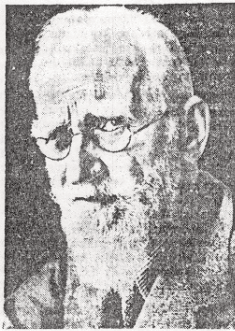
UNIFON ALFUBET TABL									
<a href="http://www.unifon.org">www.unifon.org</a> <a href="http://www.foolswisdom.com/~sbett/unifon.htm">www.foolswisdom.com/~sbett/unifon.htm</a>									
A AND AND	Δ MAKE MΔK	Λ ALL ΛL	B BAT BAT	∅ CHEN ∅IN	D DO DU	E EGG EG	Ǝ FEED ƎID	Ɔ EARTH ƆRƎ	F FAN FAN
G GET GET	H HE HE	I IT IT	± ICE ±S	J JUST JUST	K KEY KE	L LIKE L±K	M MANY MENE	N NO NQ	∩ LONG LOW
O POT POT	Q POLE PQL	∅ LOOK LOK	Q OUCH Qc	∅ OIL ON	P PART PORT	R RACE RΔS	S SO SQ	§ SHE §E	T TIME T±M
Ɔ THE ƆU	Ɔ THING ƆIN	U UP UP	∩ FEW ƆU	∩ TO TU	V VERY VERE	W WAS WUZ	Σ MEASURE MESR	Y YOU U	Z ZOO ZU

Figure 2. Example of the final version of Unifon. The alphabet given is: ΔΔΛΒ∅DEƎƆFRFGHI±JKLMN∩OQ∅∅OPRS§TƆH∩U∩∩VWYΣZ



## MY FAIR LANGUAGE

# Do We Need A New Alphabet?



GEORGE BERNARD SHAW  
*A legacy for reform of the language*

### G. B. SHAW'S WILL —THE BACKGROUND

Influriated by such manifest absurdities as pronouncing ph to sound like f, George Bernard Shaw, the great Irish playwright and critic applied his trenchant wit to our alphabetical aggravations and came up with a characteristically iconoclastic solution: Invent a written language with enough characters so that each letter would designate a specific invariable sound. To this end he willed that much of his estate go toward an award for a more adequate, economical and forthright orthography of the English language. The probate court allowed \$23,240 for prizes to contestants and the expense of cutting type and setting up an edition of Shaw's "Androcles and the Lion" in a doubly typeset volume—half new alphabet and half the orthodox English. This, in the proviso of Shaw's will, is to be distributed to 13,000 public libraries in English-speaking lands.

Among the ten finalists in this competition was one of the 60 Americans who were among the 467 entrants from all over the world. He is a Chicago advertising executive whose background includes wide experience as newspaperman, magazine contributor, consulting economist, Army captain with overseas service and assistant professor at his alma mater, the University of Kansas. He is working on his doctorate at the University of Chicago. He is John R. Malone, 46, whose many hobbies encompass computing equipment, the mathematics of information, communications and invention. His success in the Shavian competition has stimulated wide interest in his proposed world alphabet (described in these pages) and a nonprofit Foundation for a Compatible and Consistent Alphabet has been set up and located at 333 N. Michigan Av. Malone resides with his wife and four children in Park Forest.

By John R. Malone

Two and a half years ago, I spent one of the pleasantest evenings of my life listening to and looking at the delights of "My Fair Lady" . . . written over George Bernard Shaw's "Pygmalion." As I'm sure you all know, the story turns on the efforts of a phonetics professor, Henry Higgins, to change the language structure of a little Cockney flower girl to that of "upper class" Albertian English—and the cultural transformation which this brings about for her.

Early in the show Prof. 'Enry 'iggins sings his plaintive lament: "Oh why can't the English learn to speak?" while his precious guttersnipe, Eliza Doolittle, distorts the noble tongue beyond recognition. I believe he knows why.

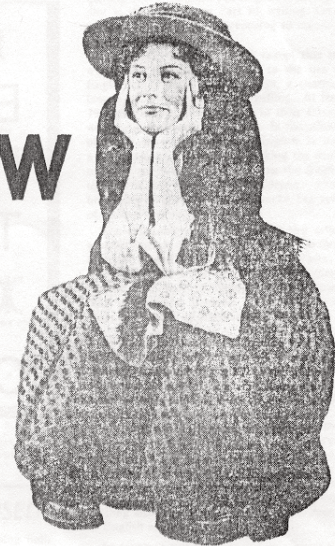
Being of Irish extraction and having something of a sympathy for the Shavian disdain of doing things the same way as others do because that is the custom of the past, the complaint of Prof. Higgins set me to thinking . . . right out there in the theater in plain sight of the beautiful stage sets.

AND WHILE THE beautiful, lilting music-hall tunes filled the evening, my mind went back to the 6-year-old at home who was having all sorts of trouble with spelling English words. It was neither consistent nor logical as his numbers were. Sometimes he could "sound out" a word; but mostly spelling was a grab bag. Getting the proper letters for a word was pure chance.

"Why can't the English . . . ?" Suddenly I saw clearly the answer to the professor's rhetorical question. Obviously they couldn't learn to speak because they hadn't learned to spell. And they hadn't learned to spell because they couldn't. They didn't have their own adequate alphabet and there weren't enough letters in the Latin alphabet with which they had been burdened. Eureka!

As the English are a hybrid people made up of Celts, Druids, Romans, Jutes, Saxons, Angles, Normans, Danes and Norsemen, their language is made up of elements of all these with remnants of Gaelic, Flemish and Platt-deutsch (a low German tongue) and spelled with the leftovers of an alphabet left by Julius Caesar before the time of Christ. This alphabet was later reimposed upon them by way of the Latin-based Christian church.

SINCE EARLY HEBREW and Phoenician times, the written language has generally been related rather closely to the sounds of the language. And the Phoenician and classic Greek languages were excellent examples of this. However, these languages used basically 20 to 25 or so sounds or phonemes, and their alphabets or language symbols had to be within this range. The Latin adaptation made a few ground rules for sounding vowels in one of two ways, and using some letters such as



Poor Eliza Doolittle! The winsome Cockney flower girl of "My Fair Lady," waged a desperate and delightful struggle to master the King's English for Prof. 'Enry 'iggins. Anne Rogers played role in Chicago.

ØR FOÆR, HO ORT +N HEVEN, HALOED BI LÆ NÆM.  
LÆ K+HODUM KUM. LÆ W+L BI DUN. AN ERG AZ +T +Z +N HEVEN.  
G+V UC L+FC DÆ ØR DÆL+ BRED. AND FARG+V UC ØR TRECPEAGEZ.  
AZ WI FARG+V LØZ HO TRECPEAC UGENCT UC. AND LID UC NOT  
+NTO TEMPTÆSUN, BUT DIL+VÆR UC FRUM IY+L. FAR LÆN +Z LU  
K+HODUM, AND LU PØER, AND LU GLØR+. FAREVÆR AND EVÆR, OMEN.

The familiar as it looks in alphabet proposed by John R. Malone. This, of course, is the Lord's Prayer, King James version.

I and V for both vowels and consonants; but Latin, too, was relatively simple, using 22 letters to represent from 26 to 28 sounds.

But English! As a problem in linguistics it is plenty tough. First, it is made up of from 39 to 44 sounds coming from some of the sources indicated above, many of which are not Latin or Greek at all. Using the already inadequate Latin alphabet of 22 letters to represent these sounds made it even tougher. To do this at all satisfactorily at least four letters (J, U, W and Y) have been added. And all sorts of consistent and inconsistent ground rules have been made for giving different letters and combinations of letters different sounds in different words. This was done hundreds of years ago, with or without good cause.

and today we are stuck with the whole kaboodle of them.

IN THE OLDEN DAYS every scribe or clerk had his own feelings about spelling because there were few dictionaries and no printers. A big stew pot of inconsistent rules grew up to cover the sonorous, expressive collection of words from all Europe and elsewhere, which became known as "English." Only a people so patient and stubborn as the English would have even tried to make a pattern of spelling out of such a mixed-up situation. But "muddling through" solved it . . . in a way.

Then the typesetters were brought to English shores by William Caxton, the first English printer. From Holland and Flanders he brought them and their type fonts to put "Reynard the Fox" into print—the first English typeset work. At that time, they used a Latin alphabet with 24 letters and had no fixed rules for setting up English. So these Dutch and Flemish printers made their own rules as they went or tried to use the continental rules if

### TWO MORE SECTIONS INSIDE

Section Three, covering leisure activities, and Section Four, Feminine Angle and Your Home, are folded inside this section.

Continued on Next Page

Figure 3a. Article from the *Chicago Sunday Sun-Times*, dated 1960-05-29, discussing Unifon.

PROPOSED NEW ALPHABET

# The Learning Time Is Reduced

Continued from Preceding Page  
 type machines are rapidly replacing typesetting machines and metal foundry type. Also, through use of photo platemaking and photo-offset printing, typewriter-like composing machines are being utilized more and more as the means of setting up large areas of printed material. The cost of resetting or recomposing the millions of words in contemporary English could be done in overseas areas to help build up the graphic arts industries in such countries as India, Africa and South America, just as Germany and America are helping to do in Taiwan and Japan at the present.

**THE COST OF SUCH** transfiguration would be small indeed compared with the benefits that would accrue to the world by getting a common language.

And why not convert to a form of English which will help you gain access to the knowledge of other nations as well as to their contributions to knowledge. Much of the conversion during the next decade or so could be handled through the United Nations Educational Scientific and Cultural Organization or the International Documentary Center.

And for those who can already read English, it takes less than 45 minutes to retrain yourself to read this—even an older dog can learn this new trick.

**WITHIN A FEW WEEKS** it is possible to teach most 5- or 6-year-olds to write English with this alphabet! There are no rules or exceptions. It is ideal for teaching English to adults from non-English countries. Once confidence and facility is attained, the problem of converting to the older spelling forms is relatively easy, because of the compatibility feature, and memory devices built into this alphabet.

So far this alphabet has been tested in teaching children. It is also being used in a test class of Puerto Ricans. In each case the rate of learning is surprising. It is very much like teaching a person to count by means of Arabic numbers.

It may take a generation to get general concurrence for this type of alphabet for English, but given the long history of humanity this is

a relatively short time, and the economies possible with it are great. For instance, from 12 to 25 per cent fewer characters are needed to write a given piece of material in the simpler 40-character alphabet. The cost in reduced learning time for youngsters should enable all nations to upgrade their school systems, whether in America or abroad.

**MANY TECHNICAL** developments, such as machines for computing, accounting, check reading and for bibliographic listing and cataloging await adoption of this type of alphabet. So does the dictating typewriter, which takes the spoken word and types it out directly.

It is hardly needed to point out the commercial and political value in having a world speak English, as its common tongue. But the value is greatest to the poorer nations which would thereby have access to American-English techniques and scientific competence. The people of these countries could then live freely in our world, via the use of our methods and devices.

Now let's look at the alphabet itself a moment. For technical reasons all the letters have been designed with the same width, as typewriter letters generally are. To do this, some of the letters have been basically redesigned so that never again will I, l, or No. 1 be confused. There is no "lower case" or small letters as such. There is simply a flattened version of the same design. In this way needless configurations are eliminated.

**FIRST WE HAVE** added 11 vowel symbols to the A, E, I, O and U (and we have dispensed with the Y vowel usage). We have turned the 16 new vowels into five basic families, called the A, E, I, O and U families. The old letters are used to designate the "short" sounds of the letters as they are today: as cat, pet, bit, hot and but. Then there are added five new "long vowels" for each of these as shown in the following chart.

Each of these long vowels is characterized by a full width horizontal member Δ I Δ Ω U which helps you remember. Then there is an aw A, an e as in her E, a double o as in look O, an ou as in couch Q, and ay as in boy Q and a yu sound as in you, or use: W "Heff" is the way to five families look:

See 1983 version  
 A: A Δ Δ  
 E: E Δ Δ  
 I: I Δ Δ  
 O: O Δ Δ  
 U: U Δ Δ

In the consonant list the Cyrillic chay Ч has been added for the "ch" sound as in "chair"; the J has been broadened to fit our rectangle, "ng" as in sing has been turned into a single character N; x has become "sh" as in sure or shirt, while c has been made uniformly the "soft s" or "hiss" sound as in "cell" or "sin." The voiceless "th" of "thin" is represented by the Greek theta stylized to our purpose (neither the Romans or the later day Brooklyn citizens thought much of this sound). The voiced "th" as in "they" is represented by an upside down "T" L. The modification of the W was made to keep it from filling up with ink or dirt as it does today on the typewriter or printing press. The Z has been crossed in the European fashion to distinguish it from a carelessly made 2. A modification of the Cyrillic zh sound character has been made for the most infrequently used sound in English, that found at the s in leisure, or the z in azure, and in many words of French-origin, such as rouge, beige, etc.

**A FEW REMINDERS** are needed: the G is always hard as in "get"; only K has the hard "c" sound now found in "crow." All buzzing "s" sounds as in business or glasses use Z. Dropped entirely out are x and q which can be replaced by combinations of other letters.

Below are the 24 consonants and what they sound like:

B (b)	C (ss)	Ch (ch)	D (d)
F (f)	G (gg)	H (h)	J (j)
K (k)	L (l)	M (m)	N (n)
Ng (ng)	P (p)	R (r)	S (sh)
T (t)	Th (th)	U (u)	V (v)
W (w)	Y (yet)	Z (z)	Σ (sh)

Now there is an added plus to this alphabet, besides such designed-in features as being use-



John R. Malone explains his 40-character alphabet and compatible number system. Lower case letters simply are smaller versions of the capital letters.

ful for computers and dictatable typewriters. It is sufficiently broad in phoneme representation so that it can be used for transcribing Russian, Hebrew, Arabic, German, Italian and Spanish phonetically.

With a few conventions or marks it can be used for French and Portuguese. The Romaji version of Japanese can go into it very easily and consistently with the present orthographic treatment.

**OTHER PHONETIC** alphabets have been proposed before, but this one is sufficiently comprehensive and practical for immediate use in primary schools at home, and in English training and technical schools at home and abroad. The technological conditions are ripening rapidly; the political, commercial and communication imperatives are clear and demanding.

You can start writing this way tomorrow. You will find you can learn it easily, rapidly. Write as you speak. English will never be the same for you again—and lots easier to spell. You, American, will be considered among the most thoughtful people on earth—for you will have changed your ways so others can enjoy your movies, books, technics, riches and general cultural bounty and best of all, you can make your speech and language habits those of the world.

Figure 3b. Article from the *Chicago Sunday Sun-Times*, dated 1960-05-29, discussing Unifon.

ØR FOLER, HO ORT +N HEVEN, HALOED BI Δ Δ NAM.  
 Δ Δ K+NDUM KUM. Δ Δ WHL BI DUN, AN ERØ AZ +T +Z +N HEVEN.  
 G+V UC Δ+C DΔ ØR DΔL+ BRED. AND FARG+V UC ØR TRECSPACEZ.  
 AZ WI FARG+V ΔQZ HO TRECPCAC UGENCT UC. AND LID UC NOT  
 +NTO TEMPTΔSUN, BUT DIL+VØR UC FRUM IV+L: FAR ΔN +Z ΔU  
 K+NDOM, AND ΔU PØER, AND ΔU GLØR+, FAREVØR AND EVØR, OMEN.

Figure 4. Example of an early version of Unifon (the alphabet as in Figure 1) set using upper- and lower-case. The alphabet given is: AΔABCYDEIEFGH+ΔJKLMNØOQOØØPRSTØΔUUVVWYXZ; several letters (YJØØWYX) do not appear in the text.

IF MĒ HED WƆD GO ĤRU,” ĤAT PƆR ALIS, “IT WƆD BĒ UV VERI LITUL US WĪƆT MĒ ŠOLDRZ. Ō, HƆ Ĥ WIŠ Ĥ KƆD ŠUT UP LĚK U TELUSKOP! Ĥ ĤĪK Ĥ KƆD, IF Ĥ ONLI NU HƆ TU BIGIN.” FĀR, U ŠĒ, SO MENI ƆT-UV-ƆU-WĀ ĤIŪZ HAD HAPUND LATLI, ƆAT ALIS HAD BIGUN TU ĤĪK ƆAT VERI FU ĤIŪZ INDĒD WĒ RĒULI IMPOSUBUL.

ƆĒR SĒMD TU BĒ NƆ US IN WATIŪ BĒ ƆU LITUL DAR, SO ŠĒ WENT BAK TU ƆU TABUL, HAF HƆPIŪ ŠĒ MĒT FĒND UNUƆĒR KĒ ON IT, ĀR AT ENI RĀT U BƆK UV RULZ FĀR ŠUTIŪ PĒPUL UP LĚK TELUSKOPS: ƆIS TĒM ŠĒ FƆND U LITUL BOTUL ON IT, (“HWIƆ SRTUNLI WUZ NOT HIR BIFĀR,” SED ALIS,) AND RƆND ƆU NEK UV ƆU BOTUL WUZ U PĀPĒ LABUL, WĪƆ ƆU WĒRƆZ “DRĪIK MĒ” BUTUFULI PRINTID ON IT IN LƆRJ LETRZ.



**Figure 5.** Example from Carroll [2014; in press], showing Unifon in a casing orthography. Carroll’s English original likewise writes “DRINK ME” in all caps.

	A72	A73	A74	A75	A76	A77	A78	A79	A7A	A7B	A7C	A7D	A7E	A7F
0	ƒ A720	F A730	Ƒ A740	Ɛ A750	Ɔ A760	Ǝ A770	Ƨ A780	ƨ A790	Ʃ A7A0	ƪ A7B0	Ƭ A7C0	Ʈ A7D0		
1	ƒ A721	Ƒ A731	Ƒ A741	Ɛ A751	Ɔ A761	Ǝ A771	Ƨ A781	ƨ A791	Ʃ A7A1	ƪ A7B1	Ƭ A7C1	Ʈ A7D1		
2	Ǝ A722	Ƒ A732	Ƒ A742	Ɛ A752	Ɔ A762	Ǝ A772	Ƨ A782	ƨ A792	Ʃ A7A2	ƪ A7B2	Ƭ A7C2	Ʈ A7D2		
3	Ǝ A723	Ƒ A733	Ƒ A743	Ɛ A753	Ɔ A763	Ǝ A773	Ƨ A783	ƨ A793	Ʃ A7A3	ƪ A7B3	Ƭ A7C3	Ʈ A7D3		
4	ƒ A724	Ƒ A734	Ƒ A744	Ɛ A754	Ɔ A764	Ǝ A774	Ƨ A784	ƨ A794	Ʃ A7A4	ƪ A7B4	Ƭ A7C4	Ʈ A7D4		
5	ƒ A725	Ƒ A735	Ƒ A745	Ɛ A755	Ɔ A765	Ǝ A775	Ƨ A785	ƨ A795	Ʃ A7A5	ƪ A7B5	Ƭ A7C5	Ʈ A7D5		
6	Ƒ A726	Ƒ A736	Ƒ A746	Ɛ A756	Ɔ A766	Ǝ A776	Ƨ A786	ƨ A796	Ʃ A7A6	ƪ A7B6	Ƭ A7C6			
7	Ƒ A727	Ƒ A737	Ƒ A747	Ɛ A757	Ɔ A767	Ǝ A777	Ƨ A787	ƨ A797	Ʃ A7A7	ƪ A7B7	Ƭ A7C7			Ƒ A7F7
8	Ƒ A728	Ƒ A738	Ƒ A748	Ɛ A758	Ɔ A768	Ǝ A778	Ƨ A788	ƨ A798	Ʃ A7A8		Ƭ A7C8			Ƒ A7F8
9	Ƒ A729	Ƒ A739	Ƒ A749	Ɛ A759	Ɔ A769	Ǝ A779	Ƨ A789	ƨ A799	Ʃ A7A9		Ƭ A7C9			Ƒ A7F9
A	Ƒ A72A	Ƒ A73A	Ƒ A74A	Ɛ A75A	Ɔ A76A	Ǝ A77A	Ƨ A78A	ƨ A79A	Ʃ A7AA	ƪ A7BA	Ƭ A7CA			Ƒ A7FA
B	Ƒ A72B	Ƒ A73B	Ƒ A74B	Ɛ A75B	Ɔ A76B	Ǝ A77B	Ƨ A78B	ƨ A79B	Ʃ A7AB	ƪ A7BB	Ƭ A7CB			Ƒ A7FB
C	Ƒ A72C	Ƒ A73C	Ƒ A74C	Ɛ A75C	Ɔ A76C	Ǝ A77C	Ƨ A78C	ƨ A79C	Ʃ A7AC	ƪ A7BC	Ƭ A7CC			Ƒ A7FC
D	Ƒ A72D	Ƒ A73D	Ƒ A74D	Ɛ A75D	Ɔ A76D	Ǝ A77D	Ƨ A78D	ƨ A79D	Ʃ A7AD	ƪ A7BD	Ƭ A7CD			Ƒ A7FD
E	Ƒ A72E	Ƒ A73E	Ƒ A74E	Ɛ A75E	Ɔ A76E	Ǝ A77E	Ƨ A78E	ƨ A79E	Ʃ A7AE	ƪ A7BE	Ƭ A7CE			Ƒ A7FE
F	Ƒ A72F	Ƒ A73F	Ƒ A74F	Ɛ A75F	Ɔ A76F	Ǝ A77F	Ƨ A78F	ƨ A79F	Ʃ A7AF	ƪ A7BF	Ƭ A7CF			Ƒ A7FF

**Additions for UPA**

A720	𐀀	MODIFIER LETTER STRESS AND HIGH TONE
A721	𐀁	MODIFIER LETTER STRESS AND LOW TONE

**Egyptological additions**

A722	𐀂	LATIN CAPITAL LETTER EGYPTOLOGICAL ALEF
A723	𐀃	LATIN SMALL LETTER EGYPTOLOGICAL ALEF
A724	𐀄	LATIN CAPITAL LETTER EGYPTOLOGICAL AIN
A725	𐀅	LATIN SMALL LETTER EGYPTOLOGICAL AIN • this is a case pair → 1D25 𐀆 latin letter ain → 1D5C 𐀇 modifier letter small ain

**Mayanist additions**

A726	𐀆	LATIN CAPITAL LETTER HENG
A727	𐀇	LATIN SMALL LETTER HENG
A728	𐀈	LATIN CAPITAL LETTER TZ
A729	𐀉	LATIN SMALL LETTER TZ
A72A	𐀊	LATIN CAPITAL LETTER TRESILLO
A72B	𐀋	LATIN SMALL LETTER TRESILLO
A72C	𐀌	LATIN CAPITAL LETTER CUATRILLO
A72D	𐀍	LATIN SMALL LETTER CUATRILLO
A72E	𐀎	LATIN CAPITAL LETTER CUATRILLO WITH COMMA
A72F	𐀏	LATIN SMALL LETTER CUATRILLO WITH COMMA

**Medievalist additions**

A730	F	LATIN LETTER SMALL CAPITAL F
A731	s	LATIN LETTER SMALL CAPITAL S
A732	AA	LATIN CAPITAL LETTER AA
A733	aa	LATIN SMALL LETTER AA
A734	AO	LATIN CAPITAL LETTER AO
A735	ao	LATIN SMALL LETTER AO
A736	AU	LATIN CAPITAL LETTER AU
A737	au	LATIN SMALL LETTER AU
A738	AV	LATIN CAPITAL LETTER AV
A739	av	LATIN SMALL LETTER AV
A73A	AV̄	LATIN CAPITAL LETTER AV WITH HORIZONTAL BAR
A73B	av̄	LATIN SMALL LETTER AV WITH HORIZONTAL BAR
A73C	AY	LATIN CAPITAL LETTER AY
A73D	ay	LATIN SMALL LETTER AY
A73E	ᶑ	LATIN CAPITAL LETTER REVERSED C WITH DOT
A73F	ᶒ	LATIN SMALL LETTER REVERSED C WITH DOT
A740	K̄	LATIN CAPITAL LETTER K WITH STROKE
A741	k̄	LATIN SMALL LETTER K WITH STROKE
A742	K̅	LATIN CAPITAL LETTER K WITH DIAGONAL STROKE
A743	k̅	LATIN SMALL LETTER K WITH DIAGONAL STROKE
A744	K̆	LATIN CAPITAL LETTER K WITH STROKE AND DIAGONAL STROKE
A745	k̆	LATIN SMALL LETTER K WITH STROKE AND DIAGONAL STROKE
A746	L̄	LATIN CAPITAL LETTER BROKEN L
A747	l̄	LATIN SMALL LETTER BROKEN L
A748	L̅	LATIN CAPITAL LETTER L WITH HIGH STROKE
A749	l̅	LATIN SMALL LETTER L WITH HIGH STROKE
A74A	Ō	LATIN CAPITAL LETTER O WITH LONG STROKE OVERLAY
A74B	ō	LATIN SMALL LETTER O WITH LONG STROKE OVERLAY
A74C	Ŏ	LATIN CAPITAL LETTER O WITH LOOP
A74D	ȯ	LATIN SMALL LETTER O WITH LOOP

A74E	OO	LATIN CAPITAL LETTER OO
A74F	oo	LATIN SMALL LETTER OO
A750	P̄	LATIN CAPITAL LETTER P WITH STROKE THROUGH DESCENDER
A751	p̄	LATIN SMALL LETTER P WITH STROKE THROUGH DESCENDER
A752	P̅	LATIN CAPITAL LETTER P WITH FLOURISH
A753	p̅	LATIN SMALL LETTER P WITH FLOURISH
A754	ᶔ	LATIN CAPITAL LETTER P WITH SQUIRREL TAIL
A755	ᶕ	LATIN SMALL LETTER P WITH SQUIRREL TAIL
A756	Q̄	LATIN CAPITAL LETTER Q WITH STROKE THROUGH DESCENDER
A757	q̄	LATIN SMALL LETTER Q WITH STROKE THROUGH DESCENDER
A758	Q̅	LATIN CAPITAL LETTER Q WITH DIAGONAL STROKE
A759	q̅	LATIN SMALL LETTER Q WITH DIAGONAL STROKE
A75A	Ꝛ	LATIN CAPITAL LETTER R ROTUNDA
A75B	ꝛ	LATIN SMALL LETTER R ROTUNDA
A75C	Ꝝ	LATIN CAPITAL LETTER RUM ROTUNDA
A75D	ꝝ	LATIN SMALL LETTER RUM ROTUNDA
A75E	V̄	LATIN CAPITAL LETTER V WITH DIAGONAL STROKE
A75F	v̄	LATIN SMALL LETTER V WITH DIAGONAL STROKE
A760	VY	LATIN CAPITAL LETTER VY
A761	vy	LATIN SMALL LETTER VY
A762	Ŷ	LATIN CAPITAL LETTER VISIGOTHIC Z
A763	ŷ	LATIN SMALL LETTER VISIGOTHIC Z
A764	Þ̄	LATIN CAPITAL LETTER THORN WITH STROKE
A765	þ̄	LATIN SMALL LETTER THORN WITH STROKE
A766	Þ̅	LATIN CAPITAL LETTER THORN WITH STROKE THROUGH DESCENDER
A767	þ̅	LATIN SMALL LETTER THORN WITH STROKE THROUGH DESCENDER
A768	V̅	LATIN CAPITAL LETTER VEND
A769	v̅	LATIN SMALL LETTER VEND
A76A	Ʒ	LATIN CAPITAL LETTER ET
A76B	Ʒ	LATIN SMALL LETTER ET
A76C	Ɔ	LATIN CAPITAL LETTER IS
A76D	ɔ̇	LATIN SMALL LETTER IS
A76E	ᶒ	LATIN CAPITAL LETTER CON
A76F	ᶓ	LATIN SMALL LETTER CON
A770	ᶔ	MODIFIER LETTER US ≈ <super> A76F ᶒ
A771	ᶕ	LATIN SMALL LETTER DUM
A772	ᶖ	LATIN SMALL LETTER LUM
A773	ᶗ	LATIN SMALL LETTER MUM
A774	ᶘ	LATIN SMALL LETTER NUM
A775	ᶙ	LATIN SMALL LETTER RUM
A776	ᶚ	LATIN LETTER SMALL CAPITAL RUM
A777	ᶛ	LATIN SMALL LETTER TUM
A778	ᶜ	LATIN SMALL LETTER UM

**Insular and Celticist letters**

A779	Ɔ	LATIN CAPITAL LETTER INSULAR D
A77A	ᵹ	LATIN SMALL LETTER INSULAR D
A77B	Ɔ	LATIN CAPITAL LETTER INSULAR F
A77C	ᶑ	LATIN SMALL LETTER INSULAR F
A77D	ᶒ	LATIN CAPITAL LETTER INSULAR G • lowercase is 1D79 ᶓ
A77E	ᶔ	LATIN CAPITAL LETTER TURNED INSULAR G
A77F	ᶕ	LATIN SMALL LETTER TURNED INSULAR G
A780	ᶖ	LATIN CAPITAL LETTER TURNED L
A781	ᶗ	LATIN SMALL LETTER TURNED L
A782	ᶘ	LATIN CAPITAL LETTER INSULAR R
A783	ᶙ	LATIN SMALL LETTER INSULAR R

A784	Ɔ	LATIN CAPITAL LETTER INSULAR S
A785	ɟ	LATIN SMALL LETTER INSULAR S
A786	Ƨ	LATIN CAPITAL LETTER INSULAR T
A787	ɧ	LATIN SMALL LETTER INSULAR T

### Modifier letters

A788	ˆ	MODIFIER LETTER LOW CIRCUMFLEX ACCENT → 02C6 ˆ modifier letter circumflex accent → 2038 ˆ caret
A789	:	MODIFIER LETTER COLON • used as a tone letter in some orthographies • Budu (Congo), Sabaot (Kenya), and several Papua New Guinea languages → 003A : colon
A78A	=	MODIFIER LETTER SHORT EQUALS SIGN • used as a tone letter in some orthographies • Budu (Congo) → 003D = equals sign

### Orthographic letters for glottals

A78B	ʔ	LATIN CAPITAL LETTER SALTILLO • Me'phaa (Mexico)
A78C	ʔ	LATIN SMALL LETTER SALTILLO • saltillos are used as a casing pair for glottal stop in some orthographies • the lowercase is widely used in many languages in Mexico and other regions, including Izere in Nigeria → 0027 ʔ apostrophe → 0242 ɔ latin small letter glottal stop → 0294 ʔ latin letter glottal stop → 02BC ʔ modifier letter apostrophe → 02C0 ʔ modifier letter glottal stop

### Additional letter

A78D	Ꞥ	LATIN CAPITAL LETTER TURNED H • used in the Dan/Gio orthography in Liberia • lowercase is 0265 ꞥ
------	---	--

### Phonetic symbol

A78E	ɬ	LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT • voiceless lateral retroflex fricative • used to transcribe Toda
A78F	⋅	LATIN LETTER SINOLOGICAL DOT • used for transliteration of Phags-Pa and phonetic transcription of Tangut → 00B7 ⋅ middle dot

### Additional letters

A790	Ꞥ	LATIN CAPITAL LETTER N WITH DESCENDER
A791	ꞥ	LATIN SMALL LETTER N WITH DESCENDER • Janalif
A792	Ɔ	LATIN CAPITAL LETTER C WITH BAR = Cambrian symbol
A793	ɟ	LATIN SMALL LETTER C WITH BAR • Nanai

### Additions for Lithuanian dialectology

A794	ꞥ	LATIN SMALL LETTER C WITH PALATAL HOOK
------	---	--

A795	ħ	LATIN SMALL LETTER H WITH PALATAL HOOK → A727 ħ latin small letter heng
------	---	--

### Letters for Middle Vietnamese

A796	Ɔ	LATIN CAPITAL LETTER B WITH FLOURISH → 0191 Ɔ latin capital letter f with hook
A797	ɔ	LATIN SMALL LETTER B WITH FLOURISH • old Ewe orthography • also used in German dialectology

### Archaic letters for Ewe

A798	Ɔ	LATIN CAPITAL LETTER F WITH STROKE
A799	ɟ	LATIN SMALL LETTER F WITH STROKE
A79A	Ɔ	LATIN CAPITAL LETTER VOLAPUK AE
A79B	ɟ	LATIN SMALL LETTER VOLAPUK AE
A79C	Ɔ	LATIN CAPITAL LETTER VOLAPUK OE
A79D	ɟ	LATIN SMALL LETTER VOLAPUK OE
A79E	Ɔ	LATIN CAPITAL LETTER VOLAPUK UE
A79F	ɟ	LATIN SMALL LETTER VOLAPUK UE

### Archaic letters for Volapük

### Latvian letters for pre-1921 orthography

A7A0	Ģ	LATIN CAPITAL LETTER G WITH OBLIQUE STROKE
A7A1	ģ	LATIN SMALL LETTER G WITH OBLIQUE STROKE
A7A2	Ķ	LATIN CAPITAL LETTER K WITH OBLIQUE STROKE
A7A3	ķ	LATIN SMALL LETTER K WITH OBLIQUE STROKE
A7A4	Ņ	LATIN CAPITAL LETTER N WITH OBLIQUE STROKE
A7A5	ņ	LATIN SMALL LETTER N WITH OBLIQUE STROKE
A7A6	Ŗ	LATIN CAPITAL LETTER R WITH OBLIQUE STROKE
A7A7	ŗ	LATIN SMALL LETTER R WITH OBLIQUE STROKE
A7A8	Š	LATIN CAPITAL LETTER S WITH OBLIQUE STROKE
A7A9	š	LATIN SMALL LETTER S WITH OBLIQUE STROKE • also used in pre-1950 Lower Sorbian orthography → 1E9C ƒ latin small letter long s with diagonal stroke

### Additional letters

A7AA	Ɔ	LATIN CAPITAL LETTER H WITH HOOK • lowercase is 0266 ħ • used in Chad
A7AB	Ɔ	LATIN CAPITAL LETTER REVERSED OPEN E • lowercase is 025C ɜ
A7AC	Ɔ	LATIN CAPITAL LETTER SCRIPT G • lowercase is 0261 g
A7AD	Ɔ	LATIN CAPITAL LETTER L WITH BELT • lowercase is 026C ɬ

### Additions for Unifon

A7AE	Ɔ	LATIN CAPITAL LETTER SMALL CAPITAL I
A7AF	Ɔ	LATIN CAPITAL LETTER SMALL CAPITAL I WITH STROKE

**Letters for Americanist orthographies**

- A7B0 **X̣** LATIN CAPITAL LETTER TURNED K  
 • lowercase is 029E **x̣**
- A7B1 **Ț** LATIN CAPITAL LETTER TURNED T  
 • lowercase is 0287 **ț**  
 • also used in Unifon

**Letter for African languages**

- A7B2 **Ț** LATIN CAPITAL LETTER J WITH CROSSED TAIL  
 • lowercase is 029D **Ț**

**Letter for German dialectology**

- A7B3 **Χ̣** LATIN CAPITAL LETTER CHI  
 • lowercase is AB53 **χ̣**

**Letters for African languages**

- A7B4 **β** LATIN CAPITAL LETTER BETA  
 A7B5 **β** LATIN SMALL LETTER BETA  
 A7B6 **Ω̣** LATIN CAPITAL LETTER OMEGA  
 A7B7 **ω̣** LATIN SMALL LETTER OMEGA

**Additions for Unifon**

A7BA	<b>Δ̣</b>	LATIN CAPITAL LETTER CLOSED TURNED V
A7BB	<b>Δ̣</b>	LATIN SMALL LETTER CLOSED TURNED V
A7BC	<b>℞</b>	LATIN CAPITAL LETTER TURNED-E R
A7BD	<b>℞</b>	LATIN SMALL LETTER TURNED-E R
A7BE	<b>Ț̣</b>	LATIN CAPITAL LETTER I WITH STROKE AND BASELINE
A7BF	<b>Ț̣</b>	LATIN SMALL LETTER I WITH STROKE AND BASELINE
A7C0	<b>ℕ̣</b>	LATIN CAPITAL LETTER REVERSED N WITH BENT RIGHT LEG
A7C1	<b>ℕ̣</b>	LATIN SMALL LETTER REVERSED N WITH BENT RIGHT LEG
A7C2	<b>Ō</b>	LATIN CAPITAL LETTER O WITH BASELINE
A7C3	<b>o</b>	LATIN SMALL LETTER O WITH BASELINE
A7C4	<b>Ọ̄</b>	LATIN CAPITAL LETTER O WITH VERTICAL BAR
A7C5	<b>ọ</b>	LATIN SMALL LETTER O WITH VERTICAL BAR
A7C6	<b>Ọ̄</b>	LATIN CAPITAL LETTER O WITH LOW VERTICAL BAR
A7C7	<b>ọ</b>	LATIN SMALL LETTER O WITH LOW VERTICAL BAR
A7C8	<b>Ọ̄</b>	LATIN CAPITAL LETTER O WITH HIGH VERTICAL BAR
A7C9	<b>ọ</b>	LATIN SMALL LETTER O WITH HIGH VERTICAL BAR
A7CA	<b>Œ̣</b>	LATIN CAPITAL LETTER S WITH STROKE
A7CB	<b>Œ̣</b>	LATIN SMALL LETTER S WITH STROKE
A7CC	<b>Ɔ</b>	LATIN CAPITAL LETTER THE
A7CD	<b>Ɔ</b>	LATIN SMALL LETTER THE
A7CE	<b>Ɔ̣</b>	LATIN CAPITAL LETTER DHE
A7CF	<b>Ɔ̣</b>	LATIN SMALL LETTER DHE
A7D0	<b>Ū</b>	LATIN CAPITAL LETTER U WITH BASELINE
A7D1	<b>u</b>	LATIN SMALL LETTER U WITH BASELINE
A7D2	<b>Ū</b>	LATIN CAPITAL LETTER CLOSED U
A7D3	<b>u</b>	LATIN SMALL LETTER CLOSED U
A7D4	<b>Ʒ</b>	LATIN CAPITAL LETTER REVERSED Z
A7D5	<b>Ʒ</b>	LATIN SMALL LETTER REVERSED Z

**Additional letter**

- A7F7 **ↀ** LATIN EPIGRAPHIC LETTER SIDEWAYS I  
 • Celtic inscriptions

**Additions for Extended IPA**

- A7F8 **ʰ** MODIFIER LETTER CAPITAL H WITH STROKE  
 • faucalized  
 ≈ <super> 0126 **ʰ**
- A7F9 **œ̥** MODIFIER LETTER SMALL LIGATURE OE  
 • labialized: open-rounded  
 ≈ <super> 0153 **œ̥**

**Addition for UPA**

- A7FA **𐌆** LATIN LETTER SMALL CAPITAL TURNED M

**Ancient Roman epigraphic letters**

- A7FB **Ɔ̣** LATIN EPIGRAPHIC LETTER REVERSED F  
 A7FC **Ɔ̣** LATIN EPIGRAPHIC LETTER REVERSED P  
 A7FD **𐌆** LATIN EPIGRAPHIC LETTER INVERTED M  
 A7FE **𐌇** LATIN EPIGRAPHIC LETTER I LONGA  
 A7FF **𐌆** LATIN EPIGRAPHIC LETTER ARCHAIC M

## A. Administrative

1. Title

**Revised proposal to encode Unifon characters in the UCS.**

2. Requester's name

**Michael Everson**

3. Requester type (Member body/Liaison/Individual contribution)

**Liaison contribution.**

4. Submission date

**2014-02-24**

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

**No.**

6b. More information will be provided later

**Yes.**

## B. Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

**No.**

Proposed name of script

1b. The proposal is for addition of character(s) to an existing block

**Yes.**

1c. Name of the existing block

**Latin Extended D.**

2. Number of characters in proposal

**30.**

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

**Category A.**

4. Is a repertoire including character names provided?

**Yes.**

4a. If YES, are the names in accordance with the "character naming guidelines"

**Yes.**

4b. Are the character shapes attached in a legible form suitable for review?

**Yes.**

5. Fonts related:

5a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?

**Michael Everson.**

5b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

**Michael Everson, Fontlab and Fontographer.**

6. References:

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

**Yes.**

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

**Yes.**

7. Special encoding issue: Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

**Yes.**

8. Additional Information: Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script.

**See above.**

## C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES explain

**No.**

2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

**Yes.**

2a. 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?

**Linguists, teachers, educationists.**

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

**Relatively rare.**

4b. Reference



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

**Yes.**

5b. If YES, where?

**Chiefly in the US.**

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

**If possible, yes.**

6a. If YES, is a rationale provided?

**Keep with other Latin letters.**

6b. If YES, reference

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

**Not necessarily.**

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

**No.**

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

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

**No.**

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

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

**No.**

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

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

**Yes.**

11b. If YES, is a rationale for such use provided?

**No.**

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

**No.**

11e. If YES, reference

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

**No.**

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

**No.**

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?