

## Fifth Revised Proposal to encode characters for the English Phonotypic Alphabet (EPA) in the UCS

Author: Karl Pentzlin ([karl-pentzlin@acssoft.de](mailto:karl-pentzlin@acssoft.de))

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Main changes compared with L2/24-136:

- Some letters are unified with already encoded letters according to comments on the previous revision.
- Some casing pairs are reassigned according to comments on the previous revision.
- Code positions are changed to prevent overlap with other Latin letter proposals appeared in the meanwhile.
- The representative glyph of the small phonotypic *th* is changed to the EPA 1855 (Cincinnati alphabet) form.
- Some figures are added; fig. 1855b is revised.
- Information regarding use of EPA letters for the Yahgan language is added (see fig. 1865a, 1881a, 1894a).
- Section 2 and 3 are swapped, to show the set of proposed letters first before the discussion of single issues.

### 1. Introduction

The English Phonotypic Alphabet is one attempt to give the English language a phonetic spelling and an alphabet which accomplishes this in a way that every sound is represented by a single letter (the words "phonetic" and "sound" translate in today's language roughly as "phonemic" and "phoneme"). The English language has experienced many of such experiments, e.g. William Bullokar's "Booke at Large" (London 1580), or Unifon (1957, <https://www.unifon.org>). Some prominent examples, having their alphabets encoded in Unicode, are Deseret and Shavian.

The "English Phonotypic Alphabet", shortly referenced in the following as "EPA", stands out of these numerous experiments by these facts:

- It was propagated and used for more than 40 years, at least from 1847 to 1888. Thus, it is a scientific source for the English pronunciation and its perception during that era.
- Especially, it was used in one of the earliest systematic phonetic dictionaries of the English language (see fig. 1855d–1855f).
- Besides that, there were several other thousands of pages of text published using it.
- It is closely related to the widely used Pitman Shorthand (being based on the same phonemes, as its inventor was also one of the main contributors and propagators of EPA).
- It played a role in the history of IPA.

The EPA is an extension of the Latin alphabet, including some special punctuation marks. It also assigns special meanings of existing Latin characters and punctuation marks when used in its domain.

It was developed by Isaac Pitman (who also developed the Pitman shorthand) and Alexander Ellis in England since 1844; the first stable version was published 1847. Unlike today's phonetic alphabets like IPA, it was not only designed to represent phonemes scientifically, but also it was intended to provide a new everyday orthographic system of the English language. In addressing phonemes, it resembles the Deseret alphabet, which in fact was modelled on an early version of the EPA.

The term "phonotypic" was coined to distinguish the project from "phonographic" which then was used for the shorthand, referring to its design for lead *types* (while the other was designed for "graphics" done by hand). While the "English phonotypic alphabet" was called later "English phonetic alphabet" by its propagators, the original wording seems more appropriate now to name the alphabet, as the alphabet is not "phonetic" in the sense this term is used today.

Besides some hobbyist usage, texts published in the EPA are referenced and cited in discussions of details of English pronunciation of the 19th century (see especially fig. 1855d-1855f; see also fig. 1996b for a modern bibliographic reference using EPA in the naming of the cited work).

While EPA is (as outlined above) not phonetic in the modern sense, nevertheless the texts (which include self-referencing discussion texts) give hints for such pronunciation details.

Four main stages can be identified, by considerably different use of some single characters (however, the special punctuation marks devised for EPA were used unchanged throughout all EPA versions, see fig. 1848a, 1848e, 1848f).

## 1.1 EPA 1847

The 1847 version of EPA (shortly referenced as "EPA 1847" in the following text; see fig. 1847a) contained 40 letters, distinguishing between long and short vowels, but does not address the sound differences for stressed and unstressed syllables (thus, e.g. it ignores the schwa as an English phoneme). In this, it matches the Deseret alphabet, which was developed at the same time and possibly was in fact modeled according to the EPA 1847 version.

Together with the publishing of EPA 1847, some additional letters and many diacritical combinations were devised to write other languages than English (see fig. 1848a, 1848c).

## 1.2 EPA 1855 (the "Cincinnati alphabet")

The EPA was adopted in the USA by a group of promoters mainly situated in Cincinnati, acting independent from Isaac Pitman. In 1855, they published the "Cincinnati alphabet" (referenced as "EPA 1855" in the following, see fig. 1855a), which retained the consonants and diphthongs (except a letter form change for the "th" sound) but had revised the vowels, resulting in a total of 43 letters. This alphabet was in use at least until 1864 (see fig. 1864b).

## 1.3 EPA 1856

Independent of the USA use, in England from 1852 on, Isaac Pitman tried to "improve" the EPA (see fig. 1852a) and started to publish several short-lived new versions. From 1856 on, a reduced version was used ("EPA 1856"; see fig. 1856b, 1860a) which lacked the diphthongs and characters for the compound consonants [tʃ] and [dʒ].

## 1.4 EPA 1868

However, from 1868 on, a version ("EPA 1868"; see fig. 1868a, 1871a) was used which had restored most of the diphthongs and the consonant inventory from earlier versions (with the exception of replacing "c" by "k"). In 1888, the diphthongs are dropped again (see fig. 1888a).

## 1.5 Adaptions for other languages

EPA letters were used to create orthographies for other languages during the late 19<sup>th</sup> and the early 20<sup>th</sup> century, especially to enable printed translations of the Bible.

### 1.5.1 Mi'kmaq

EPA letters were used to write the Mi'kmaq language (see fig. 1853a). In *The Gospel According to Saint Matthew, in the Micmac Language* (British and Foreign Bible Society, Charlottetown: G. T. Haszard, 1853), a letter is used which occurs in experimental versions of EPA (which otherwise are not subject of this proposal; see fig. 1848c), which is included in this proposal as U+1DF71 LATIN SMALL LETTER STRETCHED I.

## 1.5.2 Yahgan

Also, starting about 1865, EPA letters were used by the Anglican missionary and linguist Thomas Bridges to establish an orthography of the (now extinct) Yahgan language, then spoken in Tierra de Fuego (southern Chile). In the 1880s, some books of the New Testament were printed using this orthography (see fig. 1881a).

That EPA version (see fig. 1866a) uses four additional case pairs. One is a “phonotypic er” for “er as in herd”, looking like a S/s with closed curls at top and bottom. The others are L/l N/n R/r with a ring attached on their left edge; see fig. 1894a. These may be provided by encoding a single character “combining ring attached left”.

However, these additional characters are not included in this proposal. A separate supplementary proposal for these letters may be expected.

(Thanks to Prof. Benjamin Molineaux from the University of Edinburgh for detailed information on this topic. He currently is conducting research on the Yahgan language, which requires the digitalization of handwritten material left behind by Thomas Bridges, see fig. 1865a).

## 1.5.3 Malayalam

Some EPA vowel letters were used in a transliteration attempt for the Malayalam language (see fig. 1909a/b). (The consonant letters for this orthography are contained in the proposal [L2/21-156](#) and are encoded already). There, an additional letter (LATIN SMALL LETTER SCHWA WITH RIGHT HOOK) is used, which is intended to be a subject of a separate proposal. (Thanks to Kirk Miller for detailed information on this topic.)

## 1.6 Scope of this proposal

The proposal intends to include all EPA variants which were stable for at least some years, and which were used for publications beyond publishing the alphabet version itself.

These are the aforementioned versions "EPA 1847", "EPA 1855", "EPA 1856", and "EPA 1868".

Not included are therefore:

- any experimental versions. These include the alphabets published by Pitman/Ellis before the final 1847 versions, and the "improvements" published by Isaac Pitman from 1852 on before there was stability again (the EPA 1856).
- any characters found only in discussions of the character forms themselves (a lot of such are found in the "Plowshare", see also fig. 1852b).
- any competing alphabets designed in the same era (one of the more remarkable ones is the Comstock alphabet, see fig. 1855g).

However, such characters can be in principle subject of later proposals.

## 1.7 Encoding principles

Some letters which have modern equivalents (especially being derived from these letters during the history of IPA) are unified with these, even if the glyphic appearance is somewhat different.

Also, for letters which have changed their shape during the history of EPA but are obviously glyph variants of the same letter, a single representative glyph is used.

Therefore, if EPA material is digitized using letters proposed here, unique representations are enabled here which are compatible with material based on other phonetic alphabets like IPA.

However, if the exact visual appearance of an EPA text according to a specific EPA version is wanted, dedicated fonts or font technologies have to be used.

## 2. Proposed characters

All letters (except when noted) are found in at least one of the figures:

EPA 1847 – fig. 1847a

EPA 1855 – fig. 1855a

EPA 1856 – fig. 1856b

EPA 1868 – fig. 1868a

(and thus are listed in section 2.6 “EPA tables using the proposed letters”).

Italic forms for some letters are found in fig. 1888a.

One capital letter, U+A7DD LATIN CAPITAL LETTER CLOSED OMEGA, is the obvious counterpart of the already encoded lowercase IPA letter 0277 LATIN SMALL LETTER CLOSED OMEGA. Therefore, it is proposed in the BMP (in Block *Latin Extended-D*), to avoid case pair spanning over BMP/SMP.

All other letters are proposed in the SMP (in Block *Latin Extended-G*). There, they start at U+1DF69 to avoid overlapping letters proposed in other current UTC documents.

	A72	A73	A74	A75	A76	A77	A78	A79	A7A	A7B	A7C	A7D	A7E	A7F
0														
1														
2														
3														
4														
5														
6														
7														
8														
9														
A														
B														
C														
D												Ω A7DD		
E														
F														

	1DF0	1DF1	1DF2	1DF3	1DF4	1DF5	1DF6	1DF7	1DF8	1DF9	1DFA	1DFB	1DFC	1DFD	1DFE	1DFF
0							ı	Ā								
							ı	Ā								
1							ı	Ē								
							ı	Ē								
2							Œ									
							Œ									
3							ſ									
							ſ									
4							Ɔ									
							Ɔ									
5							Ɔ									
							Ɔ									
6							Ɔ									
							Ɔ									
7							Ɔ									
							Ɔ									
8							Ā	Ē								
							Ā	Ē								
9							ā	ē								
							ā	ē								
A							Ā	Ū								
							Ā	Ū								
B							ſ	ŭ								
							ſ	ŭ								
C							Ɔ	Ɔ								
							Ɔ	Ɔ								
D							Ɔ	Ɔ								
							Ɔ	Ɔ								
E							Ɔ	Ɔ								
							Ɔ	Ɔ								
F							ı	ŭ								
							ı	ŭ								

	2E0	2E1	2E2	2E3	2E4	2E5	2E6	2E7
0							⋮ 2E60	
1							⋮̇ 2E61	
2							⋮̂ 2E62	
3							⋮̃ 2E63	
4								
5								
6								
7								
8								
9								
A								
B								
C								
D								
E								
F								

Annotations in parentheses address special issues for a character, or reference to figures where such special issues are discussed. These annotations are not intended to be retained in the character listings in the Unicode tables.

### **Block: Latin Extended-D**

#### **Addition for the English Phonotypic Alphabet**

Ω U+A7DD LATIN CAPITAL LETTER CLOSED OMEGA  
· lowercase is 0277 latin small letter closed omega

### **Block: Latin Extended-G**

#### **Additions for the English Phonotypic Alphabet**

Ɽ U+1DF68 LATIN CAPITAL LETTER PHONOTYPIC A WITH SWASH

ⱥ U+1DF69 LATIN SMALL LETTER PHONOTYPIC A WITH SWASH  
= latin small letter a with hook tail  
· glyphic variants may show a top loop instead of a hook tail  
(see fig. 1855g)  
→ 1D8F latin small letter a with retroflex hook

ⱦ U+1DF6A LATIN CAPITAL LETTER PHONOTYPIC ROUNDTOP A

Ⱨ U+1DF6B LATIN SMALL LETTER PHONOTYPIC ROUNDTOP A  
· italic and handwriting forms usually do not show a reversed a  
· also used for Malayalam transliteration

ⱨ U+1DF6C LATIN CAPITAL LETTER REVERSED SCRUPLE  
→ 0404 cyrillic capital letter ukrainian ie  
→ 2108 scruple  
→ A792 latin capital letter c with bar  
· denotes the sound [tʃ] in the English Phonotypic Alphabet  
· denotes the sound [e] in the Slovene Metelko alphabet

Ⱪ U+1DF6D LATIN SMALL LETTER REVERSED SCRUPLE  
→ 03F5 greek lunate epsilon symbol

ⱪ U+1DF6E LATIN CAPITAL LETTER PHONOTYPIC DIPHTHONG AI  
→ 0197 latin capital letter i with stroke  
→ 2629 cross of jerusalem  
→ 2720 maltese cross  
· denotes the diphthong [ai] in the English Phonotypic Alphabet  
(see fig. 1848b)

Ⱬ U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI  
· also used for Malayalam transliteration  
· glyphic variants may show a hook tail instead of a curved descender  
· handwritten forms may show a large crossbar like the capital form  
(see fig. 1854a)



ı	U+1DF70	LATIN SMALL LETTER I WITH PIGTAIL AT BOTTOM · the italic form may show the pigtail at bottom to the right → 0279 latin small letter turned r (see fig. 1848c, 1873a, 1880a)
ı̇	U+1DF71	LATIN SMALL LETTER STRETCHED I · also used in the Dania phonetic alphabet
Œ	U+1DF72	LATIN CAPITAL LETTER O WITH CURL · the italic form may have the curl directed to the left (see fig. 1888b)
œ	U+1DF73	LATIN SMALL LETTER O WITH CURL · also used for Malayalam transliteration
Ɔ	U+1DF74	LATIN CAPITAL LETTER CLOSED OMEGA WITH LONG STEM → A74E latin capital letter oo → A7DD latin capital letter closed omega
ɔ	U+1DF75	LATIN SMALL LETTER CLOSED OMEGA WITH LONG STEM
Ɔ̇	U+1DF76	LATIN CAPITAL LETTER TURNED CLOSED OMEGA (see fig. 1848d, 1848i, 1849a)
ɔ̇	U+1DF77	LATIN SMALL LETTER TURNED CLOSED OMEGA (see fig. 1848a, 1848d, 1848h, 1848i, 1849a)
Ɔ̈	U+1DF78	LATIN CAPITAL LETTER PHONOTYPIC TH
ɔ̈	U+1DF79	LATIN SMALL LETTER PHONOTYPIC TH
Ɔ̇	U+1DF7A	LATIN CAPITAL LETTER U WITH HOOK TAIL · the hook tail may take the shape of the tail of a capital Q (see fig. 1848a vs. the Q in fig. 1848d No. 21)
ɔ̇	U+1DF7B	LATIN SMALL LETTER U WITH HOOK TAIL → 1D99 latin small letter u with retroflex hook · also used for Malayalam transliteration
Ɔ̈	U+1DF7C	LATIN CAPITAL LETTER U WITH NOTCH AT BOTTOM
ɔ̈	U+1DF7D	LATIN SMALL LETTER U WITH NOTCH AT BOTTOM → AB50 latin small letter ui
Ɔ̇	U+1DF7E	LATIN CAPITAL LETTER REVERSED ENLARGED SMALL U (see fig. 1856b)
ɔ̇	U+1DF7F	LATIN SMALL LETTER REVERSED U (see fig. 1856b, 1856d)

### Capital letter additions for the English Phonotypic Alphabet

These letters are not paired with any encoded lowercase letter.

Ɔ̈	U+1DF80	LATIN CAPITAL LETTER A WITH TOPBAR (≈ MUFI PUA U+F13A LATIN CAPITAL LETTER A SQUARE FORM)
Ɔ̈	U+1DF81	LATIN CAPITAL LETTER E WITH BENT TOPBAR

## Block: Supplemental Punctuation

### Punctuation used with the English Phonotypic Alphabet

Ꞇ	U+2E60	WIGGLY EXCLAMATION MARK = smile mark, mirth mark, laughter mark · wiggles are broader at top than at bottom (see fig. 1848e, 1851b, 1852b, 1855c, 1858a)
ꞇ	U+2E61	INVERTED WIGGLY EXCLAMATION MARK · may indicate sarcasm when used in sequence with U+2E60 · used at the end of sentences, unlike U+00A1 inverted exclamation mark (see fig. 1852c)
ꞈ	U+2E62	LEFT PARENTHESIS WITH MIDDLE RING → FD2E ornate left parenthesis (see fig. 1848f, 1849b, 1855c, 1860d, 1868a)
꞉	U+2E63	RIGHT PARENTHESIS WITH MIDDLE RING

#### 2.1 Annotations to be added for already encoded characters

Ꞑ	U+024B	LATIN SMALL LETTER Q WITH HOOK TAIL ADD: = latin small letter alpha with hook tail
ꞑ	U+0277	LATIN SMALL LETTER CLOSED OMEGA ADD: · uppercase is A7DD latin capital letter closed omega ADD: → 1DF75 latin small letter closed omega with long stem
Ꞓ	U+A79A	LATIN CAPITAL LETTER VOLAPUK AE ADD: · also used for the English Phonotypic Alphabet (this informative note seems appropriate as the character name suggests a specific use)
ꞓ	U+A79B	LATIN SMALL LETTER VOLAPUK AE ADD: · also used for the English Phonotypic Alphabet

#### 2.2 Properties for the proposed characters

2E60;WIGGLY EXCLAMATION MARK;Po;0;ON;;;;;N;;;;;  
2E61;INVERTED WIGGLY EXCLAMATION MARK;Po;0;ON;;;;;N;;;;;  
2E62;LEFT PARENTHESIS WITH MIDDLE RING;Ps;0;ON;;;;;Y;;;;;  
2E63;RIGHT PARENTHESIS WITH MIDDLE RING;Pe;0;ON;;;;;Y;;;;;  
A7DD;LATIN CAPITAL LETTER CLOSED OMEGA;Lu;0;L;;;;;N;;;;;0277;  
1DF68;LATIN CAPITAL LETTER PHONOTYPIC A WITH SWASH;Lu;0;L;;;;;N;;;;;1DF69;  
1DF69;LATIN SMALL LETTER PHONOTYPIC A WITH SWASH;Ll;0;L;;;;;N;;;;;1DF68;;1DF68  
1DF6A;LATIN CAPITAL LETTER PHONOTYPIC ROUNDTOP A;Lu;0;L;;;;;N;;;;;1DF62;  
1DF6B;LATIN SMALL LETTER PHONOTYPIC ROUNDTOP A;Ll;0;L;;;;;N;;;;;1DF6A;;1DF77  
1DF6C;LATIN CAPITAL LETTER REVERSED SCRUPLE;Lu;0;L;;;;;N;;;;;1DF6D;  
1DF6D;LATIN SMALL LETTER REVERSED SCRUPLE;Lu;0;L;;;;;N;;;;;1DF6C;;1DF6C  
1DF6E;LATIN CAPITAL LETTER PHONOTYPIC DIPHTHONG AI;Lu;0;L;;;;;N;;;;;1DF6F;  
1DF6F;LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI;Ll;0;L;;;;;N;;;;;1DF6E;;1DF6E  
1DF70;LATIN SMALL LETTER I WITH PIGTAIL AT BOTTOM;Ll;0;L;;;;;N;;;;;

1DF71;LATIN SMALL LETTER STRETCHED I;Ll;0;L;;;;;N;;;;;  
 1DF72;LATIN CAPITAL LETTER O WITH CURL;Lu;0;L;;;;;N;;;;;1DF73;  
 1DF73;LATIN SMALL LETTER O WITH CURL;Ll;0;L;;;;;N;;;;;1DF72;;1DF72;  
 1DF74;LATIN CAPITAL LETTER CLOSED OMEGA WITH LONG STEM;Lu;0;L;;;;;N;;;;;1DF75;  
 1DF75;LATIN SMALL LETTER CLOSED OMEGA WITH LONG STEM;Ll;0;L;;;;;N;;;;;1DF74;;1DF74  
 1DF76;LATIN CAPITAL LETTER TURNED CLOSED OMEGA;Lu;0;L;;;;;N;;;;;1DF77;  
 1DF77;LATIN SMALL LETTER TURNED CLOSED OMEGA;Ll;0;L;;;;;N;;;;;1DF76;;1DF76  
 1DF78;LATIN CAPITAL LETTER PHONOTYPIC TH;Lu;0;L;;;;;N;;;;;1DF79;  
 1DF79;LATIN SMALL LETTER PHONOTYPIC TH;Ll;0;L;;;;;N;;;;;1DF78;;1DF78  
 1DF7A;LATIN CAPITAL LETTER U WITH HOOK TAIL;Lu;0;L;;;;;N;;;;;1DF7B;  
 1DF7B;LATIN SMALL LETTER U WITH HOOK TAIL;Ll;0;L;;;;;N;;;;;1DF7A;;1DF7A  
 1DF7C;LATIN CAPITAL LETTER U WITH NOTCH AT BOTTOM;Lu;0;L;;;;;N;;;;;1DF7D;  
 1DF7D;LATIN SMALL LETTER U WITH NOTCH AT BOTTOM;Ll;0;L;;;;;N;;;;;1DF7C;;1DF7C  
 1DF7E;LATIN CAPITAL LETTER REVERSED ENLARGED SMALL U;Lu;0;L;;;;;N;;;;;1DF7F;  
 1DF7F;LATIN SMALL LETTER REVERSED U;Ll;0;L;;;;;N;;;;;1DF7E;;1DF7E  
 1DF80;LATIN CAPITAL LETTER A WITH TOPBAR;Lu;0;L;;;;;N;;;;;  
 1DF81;LATIN CAPITAL LETTER E WITH BENT TOPBAR;Lu;0;L;;;;;N;;;;;

The following characters have to get the “soft-dotted” property:

U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI  
 U+1DF70 LATIN SMALL LETTER I WITH PIGTAIL AT BOTTOM  
 U+1DF71 LATIN SMALL LETTER STRETCHED I

## 2.3 Properties to be changed for already encoded characters

0277;LATIN SMALL LETTER CLOSED OMEGA;Ll;0;L;;;;;N;;;;;A7DD;;A7DD

## 2.4 Line breaking and text delimitation properties of punctuation marks

U+2E60 WIGGLY EXCLAMATION MARK and

U+2E61 INVERTED WIGGLY EXCLAMATION MARK both behave like:

U+0021 EXCLAMATION MARK, as both terminate sentences (U+2E61 is not a “Spanish counterpart” of U+2E60; both are terminating sentences, exploiting different meanings.)

U+2E62 LEFT PARENTHESIS WITH MIDDLE RING and

U+2E63 RIGHT PARENTHESIS WITH MIDDLE RING behave like other recently encoded parenthesis pairs (like e.g. U+2E28/U+2E29 LEFT/RIGHT DOUBLE PARENTHESIS).

## 2.5 Collation and sorting

As the different versions of EPA specify differing “systematical” alphabet orders, in any case strongly deviating from the standard Latin ABC... order, these have to be handled by special tailoring.

Thus, for default collation and sorting, the characters are to be treated in the common way for Latin characters, without special exceptions. U+1DF30/1DF31 LATIN CAPITAL/SMALL LETTER REVERSED SCRUPLE may be treated as a variant of the letter “C”.

## 2.6 Confusability issues

The following confusables exist:

(The first line of each paragraph shows a proposed letter, followed by lines containing similar already encoded letters.)

1DF75 LATIN SMALL LETTER CLOSED OMEGA WITH LONG STEM  
 0277 LATIN SMALL LETTER CLOSED OMEGA

1DF7D LATIN SMALL LETTER U WITH NOTCH AT BOTTOM  
 026F LATIN SMALL LETTER TURNED M

The proposed capital letters without formal lowercase counterparts (U+1DF80...U+1DF81) are explicitly not intended for use in identifiers and IDNs. Therefore, they cannot raise any confusability issues.

## 2.7 EPA tables using the proposed letters

The second columns either show the headline used in the original figure (in italics), or the example word(s) like in the original figure, or a remark within parentheses.

The first column shows the letter pair using the glyphs found in the according EPA variant.

If the representative glyph of a character deviates considerably from the glyph shown in the first column, it is shown before the Unicode value.

Column “C.” (“Casing”) shows “X” if the capital and small letter in this row are not formally case paired.

### EPA 1847 (fig. 1847a)

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: Name LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: Name LATIN SMALL LETTER ...</i>	<i>C.</i>
	<i>Vowels – Long.</i>					
Ǝ ɛ	eel	0190		025B		
Ɑ a	ale	1DF6A	phonotypic roundtop a	0061		X
Ɱ q	alms	1DF80	a with topbar	024B		X
Θ θ	all	019F		0275		
Ω ω	ope	A7DD	closed omega	0277		
Ʊ ʉ	food	Ʊ 019C		026F		
	<i>Short.</i>					
Ɔ ɪ	ill	0049		0069		
Ǝ e	ell	0045		0065		
Ɱ a	am	0041		0251		X
Ɔ o	olive	004F		006F		
Ɔ u	up	0055		0075		
Ʊ ʉ	foot	1DF7C	u with notch at bottom	1DF7D	u with notch at bottom	
	<i>Diphthongs.</i>					
Ɱ i	isle	1DF6E	phonotypic diphthong ai	1DF6F	phonotypic diphthong ai	
Ɱ o	oil	1DF72	o with curl	1DF73	o with curl	
Ɔ ɔ	owl	Ɔ A7CB		Ɔ 0264		
Ʊ u	mule	1DF7A	u with hook tail	1DF7B	u with hook tail	
	<i>Coalescents.</i>					
Ɔ y	yea	0059		0079		
Ɔ w	way	0057		0077		
	<i>Aspirate.</i>					

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: Name LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: Name LATIN SMALL LETTER ...</i>	<i>C.</i>
H h	hay	0048		0068		
	<i>Consonants.</i>					
P p	rope	0050		0070		
B b	robe	0042		0062		
T t	fate	0054		0074		
D d	fade	0044		0064		
Ɔ ɔ̥	etch	1DF6C	reversed scruple	A794		X
J j	edge	004A		006A		
C c	leek	0043		0063		
G g	league	0047		0067		
F f	safe	0046		0066		
V v	save	0056		0076		
Ƨ Ƨ̥	wreath	A780		† 1DF79	phonotypic th	X
ɖ ɖ̥	wreathe	018B		ɖ̥ 0111		X
S s	hiss	0053		0073		
Z z	his	005A		007A		
Σ ʃ	vicious	01A9		0283		
Ʒ ʒ	vision	Ʒ 01B7		0292		X
R r	for	0052		0072		
L l	fall	004C		006C		
M m	seem	004D		006D		
N n	seen	004E		006E		
Œ œ	sing	Œ 014A		014B		
	<i>(additions:)</i>					
Ɔ ɔ̥	<i>(french) bonne (see fig. 1848a)</i>	1DF76	turned closed omega	1DF77	turned closed omega	
Ǝ ɛ̥	tit le, taken <i>(see fig. 1851c)</i>	Ǝ 018F	e without middle bar	0259		

### EPA 1855 (Cincinnati alphabet; fig. 1855a)

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: LATIN SMALL LETTER ...</i>	<i>C.</i>
	<i>Long vowels.</i>					
Ǝ ɛ̥	eel	0190		025B		

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: LATIN SMALL LETTER ...</i>	<i>C.</i>
Ǝ ɛ	earth	1DF81	e with bent topbar	1EB9		X
Ɔ ɔ	ale	A79A		A79B		
Ɔ ɑ	alms	1DF68	phonotypic a with swash	1DF69	phonotypic a with swash	
Ɔ ɑ	ale	1DF6A	phonotypic roundtop a	024B		X
Ɔ ɐ	all	019F		0275		
Ɔ ɔ	oak	A7DD	closed omega	0277		
Ɔ ɔ	ooze	1DF74	closed omega with long stem	1DF75	closed omega with long stem	
	<i>Short vowels.</i>					
Ɔ i	ill	0049		0069		
Ɔ e	ell	0045		0065		
Ɔ a	am	0041		0061		
Ɔ ɑ	ask	2C6D		0251		
Ɔ o	on	004F		006F		
Ɔ u	up	0055		0075		
Ɔ u	wood	1DF7C	u with notch at bottom	1DF7D	u with notch at bottom	
	<i>Diphthongs.</i>					
Ɔ i	ice	1DF6E	phonotypic diphthong ai	1DF6F	phonotypic diphthong ai	
Ɔ ɔ	oil	1DF72	o with curl	1DF73	o with curl	
Ɔ ɔ	owl	Ɔ A7CB		Ɔ 0264		
Ɔ u	dupe	1DF7A	u with hook tail	1DF7B	u with hook tail	
	<i>Coalescents.</i>					
Ɔ y	yea	0059		0079		
Ɔ w	way	0057		0077		
	<i>Aspirate.</i>					
Ɔ h	hay	0048		0068		
	<i>Explodents.</i>					
Ɔ p	pale	0050		0070		
Ɔ b	bale	0042		0062		
Ɔ t	tame	0054		0074		
Ɔ d	dame	0044		0064		
Ɔ ɔ	cheer	1DF6C	reversed scruple	A794		X
Ɔ j	jeer	004A		006A		
Ɔ k	came	004B		006B		
Ɔ g	game	0047		0067		

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: LATIN SMALL LETTER ...</i>	<i>C.</i>
	<i>Continuants.</i>					
<b>F f</b>	fain	0046		0066		
<b>V v</b>	vain	0056		0076		
<b>Ɔ ɔ̃</b>	thigh	1DF78	phonotypic th	1DF79	phonotypic th	
<b>ḏ ḑ</b>	thy	018B		ḑ 0111		X
<b>S s</b>	seal	0053		0073		
<b>Z z</b>	zeal	005A		007A		
<b>Σ ς</b>	shall	01A9		0283		
<b>Ʒ ʒ</b>	vision	Ʒ 01B7		0292		X
	<i>Liquids.</i>					
<b>L l</b>	lull	004C		006C		
<b>R r</b>	rare	0052		0072		
	<i>Nasals.</i>					
<b>M m</b>	maim	004D		006D		
<b>N n</b>	nine	004E		006E		
<b>Ū ŋ</b>	sing	Ū 014A		014B		

**EPA 1856 (fig. 1856b)**

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: LATIN SMALL LETTER ...</i>	<i>C.</i>
	<i>Consonants – Guttural.</i>					
<b>K k</b>	leek, cane	004B		006B		
<b>G g</b>	league, gain	0047		0067		
<b>H h</b>	hay, house	0048		0068		
<b>Y y</b>	yet, use	0059		0079		
	<i>Lingual.</i>					
<b>T t</b>	fate, tip	0054		0074		
<b>D d</b>	fade, dip	0044		0064		
<b>C c</b>	vicious, etch, she	0043		0063		
<b>J j</b>	vision, edge	004A		006A		
<b>S s</b>	hiss, seal	0053		0073		
<b>Z z</b>	his, zeal	005A		007A		
<b>Ĥ ĥ</b>	wreath, thigh	1DF78	phonotypic th	1DF79	phonotypic th	
<b>Ȧ ȧ</b>	wreathe, thy	018B		ȧ 0111		X
	<i>Liquids.</i>					
<b>P p</b>	rope, post	0050		0070		
<b>B b</b>	robe, boast	0042		0062		
<b>F f</b>	safe, fat	0046		0066		
<b>V v</b>	save, vat	0056		0076		
<b>W w</b>	wet, quit	0057		0077		
	<i>Labial.</i>					
<b>L l</b>	fall, light	004C		006C		
<b>R r</b>	more, right	0052		0072		
<b>Ŵ ŵ</b>	sing, long	Ŵ 014A		014B		
<b>N n</b>	seen, net	004E		006E		
<b>M m</b>	seem, met	004D		006D		
	<i>Vowels – Guttural.</i>					
<b>A a</b>	am, fast, far	0041		0061		
<b>Ȧ ȧ</b>	alms, father	1DF6A	phonotypic roundtop a	1DF6B	phonotypic roundtop a	
<b>E e</b>	ell, head, any	0045		0065		
<b>Ǝ ɛ</b>	ale, fair, bear	0190		025B		



	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: LATIN SMALL LETTER ...</i>	<i>C.</i>
I i	ill, pity, filial	0049		0069		
Ɔ i	eel, eat, mere	1DF6E	phonotypic diphthong ai	1DF70	i with pigtail at bottom	X
	<i>Labial.</i>					
O o	on, not, nor	004F		006F		
Ω ω	all, law, ought	A7DD	closed omega	0277		
U u	up, son, cur	1DF7E	reversed enlarged small u	1DF7F	reversed u	
Ɔ σ	ope, coat, pour	1DF72	o with curl	1DF73	o with curl	
U u	full, foot	0055		0075		
W w	do, food, tour	U 019C		026F		

### EPA 1868 (fig. 1868a)

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: LATIN SMALL LETTER ...</i>	<i>C.</i>
	<i>Consonants – Mutes.</i>					
P p	rope, post	0050		0070		
B b	robe, boast	0042		0062		
T t	fate, tip	0054		0074		
D d	fade, dip	0044		0064		
Ɔ ċ	cheap, fetch	1DF6C	reversed scruple	A794		X
J j	jump, bridge	004A		006A		
K k	leek, cane	004B		006B		
G g	league, gain	0047		0067		
	<i>Continuants.</i>					
F f	safe, fat	0046		0066		
V v	save, vat	0056		0076		
Ɔ †	wreath, thigh	1DF78	phonotypic th	† 1DF79	phonotypic th	
ǣ ð	wreathe, thy	018B		ð 0111		X
S s	hiss, seal	0053		0073		
Z z	his, zeal	005A		007A		
Σ ſ	vicious, she	01A9		0283		
3 3	vision, preasure	3 01B7		0292		X
	<i>Nasals.</i>					
M m	seem, met	004D		006D		
N n	seen, net	004E		006E		

	<i>Headlines; example words</i>	<i>Unicode (capital) U+...</i>	<i>If proposed: LATIN CAPITAL LETTER ...</i>	<i>Unicode (small) U+...</i>	<i>If proposed: LATIN SMALL LETTER ...</i>	<i>C.</i>
Ū ū	sing, long	U+014A		014B		
	<i>Liquids.</i>					
L l	fall, light	004C		006C		
R r	more, right	0052		0072		
	<i>Coalescents.</i>					
W w	wet, quit	0057		0077		
Y y	yet, young	0059		0079		
	<i>Aspirate.</i>					
H h	hay, house	0048		0068		
	<i>Vowels – Guttural.</i>					
A a	am, fast, far	0041		0061		
ⱱ Ⱳ	alms, father	1DF6A	phonotypic roundtop a	1DF6B	phonotypic roundtop a	
E e	ell, any, her	0045		0065		
Ǝ ɛ	ale, fair, bear	0190		025B		
I i	ill, pity, filial	0049		0069		
ɪ i	eel, eat, mere	U+0196		1DF70	i with pigtail at bottom	X
	<i>Labial.</i>					
O o	on, not, nor	004F		006F		
Ω ω	all, law, ought	A7DD	closed omega	0277		
Ɔ ɔ	up, son, cur	U+0244		0252		X
Ɔ ɔ	ope, coat, pour	1DF72	o with curl	1DF73	o with curl	
U u	full, foot	0055		0075		
W w	do, food, tour	U+019C		026F		
	<i>Diphthongs.</i>					
ɥ i	by	1DF6E	phonotypic diphthong ai	1DF6F	phonotypic diphthong ai	X
Ƴ ƴ	now	A7CB		U+0264		
Ʊ u	new	1DF7A	u with hook tail	1DF7B	u with hook tail	

## 3. Encoding considerations

### 3.1 Character identity

During the history of EPA, some of the glyphs developed for the EPA as well as some standard Latin characters were used to denote different sounds/phonemes.

On the other hand, the used glyphs show a high grade of stability during their use in any EPA versions (compare fig. 1847a, 1855a, 1860a, 1868a, 1871a, 1888a).

This includes the italic forms which were deliberately designed, not simply being skewed forms of the Roman ones (see e.g. fig. 1888b for the lowercase a, i, and o forms).

Therefore, the character identities were devised primarily by their glyphic appearance, rather than by the sounds/phonemes they denote. This is in accordance with the general encoding principle of Latin letters (e.g. the W/w is U+0057/0077 whether it denotes [w] in English, [v] in German, or [u] in Welsh).

Only for case pairs where the design of the uppercase and lowercase letter differs, names were used to denote the main function of these letters, to provide meaningful names which differ only in “CAPITAL”/“SMALL”. In these cases, the names contain the term “PHONOTYPIC”.

### 3.2 Casing issues

A special characteristic of EPA is that the combination of uppercase and lowercase letters is peculiar in EPA, and changes between the different EPA stages.

Especially in EPA 1847, the standard letter A and the already encoded small Latin alpha are involved in this:

- the uppercase A is paired with the lowercase Latin alpha;
- the lowercase a is paired with the uppercase "roundtop A" (included in this proposal).

Therefore, the “canonical” casing mechanism of Unicode, defining a fixed casing counterpart in the character properties, cannot be employed in full on EPA text.

Therefore, special casing rules are to be used anyway for each EPA variant, similar to those defined in the Unicode data file "special-casing.txt" for Turkish to accomplish the casing I/İ İ/i).

The EPA case pairings can be seen in the tables in section 2.7 “EPA tables using the proposed letters”. There, case pairings deviating from the “canonical” pairings are marked by an “X” in the last column of the tables

For formal casing in this proposal, the following principles are applied:

- ▶ A formal case pairing in the character properties is given if the forms (of the representative glyph) of the capital and small letter correspond.
- ▶ If such a pairing is found, this has precedence over an actual case pairing found in a specific historical use, like EPA or only a specific variant of EPA.
- ▶ Otherwise, if both letters of a casing pair are specific designs for EPA and unlike to be paired with other letters in other environments, they are formally paired and given names containing the term “PHONOTYPIC”.
- ▶ Otherwise, no formal pairing is given.

Another fact to be regarded is a consequence of the current Unicode stability policies:

- ▶ Whenever a capital letter is encoded, a lowercase counterpart (by “canonical” casing reflected in the Unicode character properties) cannot be encoded later.

*(This does not apply vice versa: for a lowercase letter, a capital counterpart in fact can be encoded later.)*

Based on this, the following rules were followed:

- Whenever a capital and a lowercase letter are found which match by form, they are proposed as “canonical” case pair, without regarding the actual use in any EPA variant.
- Whenever a lowercase letter is found without a capital letter matching by form, this letter is proposed as an unpaired lowercase letter.
- Whenever a capital letter is found without a lowercase letter matching by form in EPA, the following is proposed:
  - If an appropriate matching lowercase letter and the actual use as a case pair was found in an area otherwise not in the scope of this proposal (but which is not complete unlikely to be proposed for encoding later), that lowercase letter is included, and the complete “canonical” case pair is proposed. In this proposal revision, this is only the case for:  
U+1DF6C/1DF6D LATIN CAPITAL/SMALL LETTER REVERSED SCRUPLE  
(see fig. 1825a/1825b).
  - Otherwise, if there is no form of a lowercase letter which is obviously matching by form (and thus being its "natural" lowercase matching independent of any use in a special EPA variant), the capital letter is proposed unpaired.  
These capital letters will never get a lowercase counterpart (due to the aforementioned Unicode stability policies), and as they cannot be lowercased independent of a special tailoring, they are excluded from the use in IDNs and identifiers.
- The case pairings deviating from the “canonical” pairings can be derived from the tables given in section 3.7 “EPA tables using the proposed letters”. There, they are marked by an “X” in the last column of the tables.

### 3.3 Special notes on single proposed characters

- A typical feature for some lowercase EPA letters is the "hook tail", which always displays a 180° bend upward, of about half the length of the tail (see the proposed U+1DF69 LATIN SMALL LETTER PHONOTYPIC A WITH SWASH / U+1DF7B LATIN SMALL LETTER U WITH HOOK TAIL, the already encoded U+024B LATIN SMALL LETTER Q WITH HOOK TAIL used here as “alpha with hook tail”, and the italic form of the proposed U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI; see fig. 1888b). These tails are straight prolongations of the right stem of the letter replacing the usual bend or serif at the bottom line, thus differing from an appended ogonek or an appended retroflex hook (which usually is deferred by a horizontal extension of the baseline):

ā – ā ā<sub>h</sub>    a – a a<sub>h</sub>    ĩ – ĩ ĩ<sub>h</sub>    u – u u<sub>h</sub>

As the alpha with hook tail is visually indistinguishable from the already encoded U+024B LATIN SMALL LETTER Q WITH HOOK TAIL, and as the letter Q itself or any variants of it do not occur in any version of the EPA, it is unified with that letter.

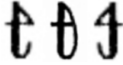
In fact, the lowercase forms other three letters could be considered as allographs of the old IPA letters a, i, u, but their EPA capital letter forms **Ā** **Ī** **Ū** are not appropriate capital letters of these glyph shapes. Therefore, it seems appropriate to encode as separate letters which are part of the appropriate case pairs.

- **Ɔ** proposed as U+1DF6E LATIN CAPITAL LETTER PHONOTYPIC DIPHTHONG AI: This is not U+0197 LATIN CAPITAL LETTER I WITH STROKE. It always has a cross-like appearance, with the shape of the crossbar (thickness, serifs, length) resembling the one of the stem. Also, contrastive evidence to I with stroke is found (see fig. 1848b).
- **ı̇** proposed as U+1DF70 LATIN SMALL LETTER I WITH PIGTAIL AT BOTTOM: This appears as an allograph of **ı̇** proposed as U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI in EPA 1856 but shows contrastive use to this letter in EPA 1868 (see fig. 1868a, 1871a). Therefore, it cannot be unified as a glyph variant with it.
 

Moreover, as glyph variants of it (especially the italic form) are different from U+0279 LATIN SMALL LETTER TURNED R, and it denotes definitely not any kind of a “r” sound, and it would require special treatment of that letter when applying a 0307 COMBINING DOT ABOVE (as the “r” stem is not the vertical center of the letter), it is not unified with the combination U+0279 LATIN SMALL LETTER TURNED R + 0307 COMBINING DOT ABOVE.

Also, fig. 1848c shows an uppercase form of this letter (albeit outside of the scope of the current proposal) which is completely different from a turned R.

- **Ƨ** proposed as U+1DF79 LATIN SMALL LETTER PHONOTYPIC TH:

This letter occurs in three similar forms: 

As all are based on a uniquely recognisable t with trigonal top (the second one with an additional bow, the third one mirrored), they are unified into a single character. The second form is selected as the representative glyph, as it is most distinctive and used in the majority of the EPA variants, especially in EPA 1855 (the Cincinnati alphabet).

### 3.4 Special notes on EPA characters proposed to be unified with existing letters

- **Ƨ̇**: This could be proposed as a separate letter LATIN SMALL LETTER D WITH TRIGONAL TOP. In EPA, the distance between the lower horizontal bar and the upper bow of the left “d belly” differs in various examples, showing specimens where it is visible: **Ƨ̇** or where it is zero: **Ƨ̇** (see fig. 1855a, 1873a), even showing a round form like **Ƨ̇** (see fig. 1864a, 1868a). Also, some longhand forms show a closed loop top like **Ƨ̇** (see fig. 1860c, 1880a, 1888c).
 

The function of this letter (denoting the phoneme ⟨ð⟩) is the same as the use in of the similar letter **ð** U+0111 LATIN SMALL LETTER D WITH STROKE in several modern orthographies. (This letter only lacks the diagonal connection of the horizontal bar to the letter top). Therefore, following comments received on previous versions of this document, a unification of the EPA form with U+0111 is considered appropriate. According to one of these comments, it would be different if it were in modern use, and a contrast between an EPA 4-top d and a regular d with stroke in print is seen occasionally. This comment also points out that the EPA can always be encoded in stages, with the obvious needs handled first.

Following such comments, this letter is proposed to be unified with U+0111 **ð** at this time.
- **E**: This could be proposed as separate uppercase letter LATIN CAPITAL LETTER E WITHOUT MIDDLE BAR, with no lowercase counterpart. It resembles the U(PUA)+F106 LATIN CAPITAL LETTER C SQUARE FORM listed by MUFI (see

<https://mufi.info/q.php?p=mufi/chars/unichar/61702> ), for which there also no lowercase form is listed, and which is not proposed for Unicode until now.

As shown in fig. 1851c, it is used by one author as a capital form of “ə”, to mark liquids being syllabic. In this proposal, it is considered as a glyph variant of the already encoded capital form of the small ə listed there (Ə, U+018F LATIN CAPITAL LETTER SCHWA). This is supported by the fact that the handwritten forms of the capital and small letter resemble.

- **Ū ū**: These could be proposed as LATIN CAPITAL/SMALL LETTER I WITH U-TURN AT BOTTOM, as the U-turn at the bottom may be even more prominent than that of a J/j in the same font (see fig. 1852a, middle part). However, here they are unified with U+0196/U+0269 LATIN CAPITAL/SMALL LETTER IOTA, the small letter to be combined with U+0307 COMBINING DOT ABOVE, due to their superficial similarity.
- **Ū**: This could be proposed as a separate letter LATIN CAPITAL LETTER REVERSED N WITH INWARDS HOOK, which is not done at this time. Instead, it is unified with U+014A LATIN CAPITAL LETTER ENG, which already includes several different glyph variants.
- **Ƴ ƴ**: These letters, which denote the diphthong /au/ as in “now”, could be proposed as LATIN CAPITAL/SMALL LETTER SHORT GAMMA WITH LARGE LOOP, as their shape is equidistant to the similar letters in the following list:
  - Shape used in the English Phonotypic Alphabet: Normal letter height; arms are straight, loop is large (at least half of the letter height) and broad. It never extends below the baseline.
  - U+0222/0223 LATIN OU: Small letter has full caps height; arms bend about 90° inwards, almost touching.
  - U+0194/0263 LATIN GAMMA: Extends below the baseline; arms are straight, loop is narrow.
  - U+A7CB/0264 RAMS HORN: Normal height; arms bend about 90° outwards (see fig. 1996a).
  - Pullum & Ladusaw’s “baby gamma” (not yet encoded, see fig. 1996a): Similar to the small EPA letter, except that the loop is considerable smaller.

Ƴ ƴ	Ū ū	Ƴ ƴ	Ū ū	Ƴ
Shape used in EPA	U+0222/0223 Latin OU	U+0194/0263 Latin Gamma	U+A7CB/0264 Rams Horn	Baby Gamma by Pullum&Ladusaw

Thus, no one of the three encoded letter pairs shows an immediately striking evidence to be unified with the EPA letter pair.

However, the EPA letters are unified with the Rams Horn.

Such a unification was requested in comments to earlier versions of this proposal.

The Rams Horn resembles the EPA letters in height of the capital as well as the small letter, and it denotes a vowel in modern phonetics and orthographies, unlike the Latin Gamma which always extends below the baseline and denotes a consonant.

Also, the Rams Horn can be viewed as a descendant (and thus as a glyph variant in the broadest sense) of the EPA letter, as the EPA letter possibly was the model for the Baby Gamma as a phonetic character, which subsequently was modified into the small Rams Horn to prevent confusion with the similar Latin Gamma.

- **Ʒ**: This could be proposed as a separate letter LATIN CAPITAL LETTER REVERSED SIGMA, as it differs optically considerably from U+01B7 LATIN CAPITAL LETTER EZH which is the uppercase form of the lowercase U+0292 LATIN SMALL LETTER EZH which is in fact used in EPA. However, the Ezh form corresponds to the handwriting and broken letter forms shown in some listings, and is used in EPA since 1865 in print: In “The Phonetic Journal, 15 April 1865, vol. 24, p. 179” is stated:

*As for "Ʒ" [with reversed-Sigma shape], seeing that it is not required except when one of the few words in the measure, treasure; vision, collision" classes occurs in a line of capitals, we shall be content to continue the use of "Ʒ" in the phonetic fonts already prepared, and introduce the improved "3" in new fonts.*

Therefore, the capital reversed sigma is proposed here to be unified with the capital Ezh. This corresponds to the fact that it is also an allograph of U+01B7 <Ʒ> in some African orthographies, and it is an option in SIL fonts such as Gentium.

### 3.5 Notes on handwritten forms of EPA letters

Handwritten letters for some EPA variants are listed in fig. 1854a, 1855b, 1873a, 1866a, 1888a.

When digitizing any handwritten EPA material, first, it is taken into consideration which EPA version is used. Then, based on the encoded characters representing that EPA version, the handwritten letter forms are to be mapped to these characters. This is not a trivial task in some cases, as (based on the handwriting style of the author) sometimes such letter forms resemble different letters (EPA letters or other Latin letters).

When the author himself provides a list like in fig. 1866a, this can be referred to; otherwise, lists as in fig. 1855b are helpful, but any individual author may use other forms.

E. g, the handwritten capital form of q (“alpha with hook tail”, unified with U+024B LATIN SMALL LETTER Q WITH HOOK TAIL) may resemble the proposed U+1DF80 LATIN CAPITAL LETTER A WITH TOPBAR or Q U+024A LATIN CAPITAL LETTER Q WITH HOOK TAIL, even if the proposed U+1DF6A LATIN CAPITAL LETTER PHONOTYPIC ROUNDTOP A would be the correct character (as in EPA 1855).

Especially, when intermediate or derivative EPA versions are used, the mappings are to be selected with care. For such EPA versions, if they will be subject of a digitization project, it cannot be excluded that additional EPA letters have to be encoded by future proposals.

## 4. Acknowledgements

Special thanks for Google and Microsoft for providing scans of numerous 19th century books and publications accessible on the Internet. Without access to these sources, this proposal could not have been made within considerable time.

In fact, only fig. 1880a and fig. 1888a/b/c were made from original paper material. All other figures are excerpts from scans found by Internet search.

Special thanks also to Andreas Stötzner for his insightful comments regarding typographical questions, and for drawing most of the glyphs for the characters proposed here.

Special thanks also to Kirk Miller and Denis Moyogo Jacquerye for their comprehensive and insightful comments on earlier versions of this proposal.

## 5. Examples and figures

The figures are numbered by the year of the publication of the book from where the scan is taken, following by a letter.

Remarkable occurrences of characters mentioned in the figure descriptions are marked by a colored circle.

### *Disclaimer:*

The religious, philosophical, or ideological views expressed in some of the text specimens are not necessarily the ones of the author of this proposal.



**Fig. 1825a:** Metelko, Franz Seraph: Lehrgebäude der slowenischen Sprache im Königreiche Illyrien und in den benachbarten Provinzen. Laibach (now Ljubljana) 1825. Showing a Slovene alphabet used at that time in relation to contemporary Latin alphabets (referred as "Neu-Krain.", i.e. "new Slovene"), containing LATIN CAPITAL/SMALL LETTER REVERSED SCRUPLE as a case pair. (Otherwise, this alphabet is not subject of this proposal.)

**Krainische und aus andern Alphabeten gleichbedeutende Schriftzeichen:**

Neu-Krain. Alt-Krain. Kroatische, Deutsche, Französ. Italienische.

A	a	a	a	a	a
B	b	b	b	b	b
D	d	d	d	d	d
E	e	e	e	e	e aperto
↔ E	↔ e	— (?)	e	é	e chiuso(?)
F	f	f	f	f	f
G	g	g	g	g	g: gant g: gara
H	h	— h	— h	— h	—
H	h	h	h	—	—
I	i	i	i	i	i
2	e	l, ù, e	— (?)	— e	e: que
J	j	j	j	i	i: mien j
K	k	k	k	c	c: car ch
L	l	l	l	l	l
L	l	lj	ly	—	il: ail gl: gli
M	m	m	m	m	m
N	n	n	n	n	n
N	n	nj	ny	—	gn gn
O	o	o	o	o	o chiuso
O	o	ò	—	—	oi (?) o aperto (?)
P	p	p	p	p	p
R	r	r	r	r	r
S	s	f	sz	s	s: son s: sono
U	u	fh	ss, sh	sch	che sce
U	u	fhzh	sch	schtsch	—
3	3	s	z	f: lesen z	s: rosa
3	3	sh	s	—	—
T	t	t	t	t	t
U	u	u	u	ou	u
V	v	v	v	v	v
ŋ	ŋ	z	cz	—	z: zio
ŋ	ŋ	zh	ch	tsch	c: ciò

**Fig. 1825b:** ibid., p.283, showing a text specimen containing LATIN SMALL LETTER REVERSED SCRUPLE.

**7. Sraka ine pávovo perje.**

Sraka je pavovega perja nabrala, ine se se nim ozalwa  
ine navepíre. Ta posójena lepotína jo je takó prevzela, de je

Fig. 1847a: The Gospel according to Matthew, in Phonotypy and Heterotypy. Interlinear Edition; London/Bath, 1847; p.4, showing the EPA 1847.

THE ENGLISH PHONOTYPIC ALPHABET.

VOWELS.				CONSONANTS.			
No.	Type.	Example of its sound.		No.	Type.	Example of its sound.	
LONG.							
1	Ɛ ε	eel	el	20	P p	rope	rop
2	ʌ a	ale	al	21	B b	robe	rob
3	ʌ q	alms	qmz	22	T t	fate	fat
4	Θ e	all	el	23	D d	fade	fad
5	Ω o	ope	op	24	Ɔ ç	etch	eg
6	U u	food	fud	25	J j	edge	ej
SHORT.							
7	I i	ill	il	26	C c	leek	lɛc
8	E e	ell	el	27	G g	league	lɛg
9	A a	am	am	28	F f	safe	saf
10	O o	olive	oliv	29	V v	save	sav
11	U u	up	up	30	T t	wreath	ret
12	U u	foot	fut	31	Ɔ ɔ	wreathe	ret
DIPHTHONGS.							
13	ʃ j	isle	ɨl	32	S s	his	his
14	Ɔ ɔ	oil	el	33	Z z	his	hiz
15	ʒ ʒ	owl	ɔl	34	Σ f	vicious	viʃus
16	U u	male	muɨ	35	Ʒ ʒ	vision	viʒun
COALESCENTS.							
17	Y y	yea	ya	36	R r	for	fɛr
18	W w	way	wa	37	L l	fall	fɛl
ASPIRATE.							
19	H h	hay	ha	38	M m	seem	sem
				39	N n	seen	sen
				40	Ŷ ŷ	sing	siŋ

Fig. 1847b: ibid., excerpt from p.10.

МАТѸ 3.14—4.9.

MATU.

MATTHEW 3.14—4.9.

him. <sup>14</sup> But Jon forbad him, sayŋ, Ɔ hav ned tu be baptjzd ov ɔɛ, and him. <sup>14</sup> But John forbad him, sayŋ, I have need to be baptized of thee, and Ɔ cumest ɔɛ tu me? <sup>15</sup> And Jezus anseriŋ sed untu him, Sufer it tu be comest thou to me? <sup>15</sup> And Jesus answering said unto him, Suffer it to be so nɛ: for ɔus it becomet us tu fulfil el rjɛtusnes. ɔen he suferd him. so now; for thus it becometh us to fulfil all righteousness. Then he suffered him. <sup>16</sup> And Jezus, hwen he woz baptjzd, went up stratwa ɛt ov ɔɛ weter: and, <sup>16</sup> And Jesus, when he was baptized, went up straightway out of the water: and, lo, ɔɛ hev'nz wer op'nd untu him, and he se ɔɛ Spirit ov God ɔsɛndiŋ lo, the heavens were opened unto him, and he saw the Spirit of God ɔsɛndiŋ hɛ a duv, and ljtŋ upon him: <sup>17</sup> and lo a vɛs from hev'n, sayŋ, ɔis iz mj like a dove, and lighting upon him: <sup>17</sup> and lo a voice from heaven, saying, This is my

Fig. 1848a: The Phonetic Journal (Vol. 7) from 1848, ed. by Alexander Ellis, London 1848. Inner cover page; showing the EPA 1847, additional special letters devised for foreign language and dialect writing use (marked by red circles, e. g. U+AB30 LATIN SMALL LETTER BARRED ALPHA), and special punctuation marks.

AN EXPLANATION OF  
THE ENGLISH PHONETIC ALPHABET,

FOR THE USE OF THOSE WHO CAN READ THE HISTORICAL ORTHOGRAPHY.

[Columns 1 and 2 contain the phonotypic letters, capital and small, each representing a certain sound, or modification of sound, which constitutes the *power* of the letter; the other columns show what that power is. For further information, see *January Journal*, pages 17—20.]

LONG VOWELS.		STOPPED VOWELS.		EXPLODENTS.		CONTINUANTS.	
Sounded as		Sounded as		Sounded as		Sounded as	
Ɛ	ε ee in eel	I	i i in ill	P	p p in rope	F	f f in safe
Α	a a .. ale	E	e e .. ell	B	b b .. robe	V	v v .. save
Λ	q a .. alms	A	a a .. am	T	t t .. fate	Ƨ	th th .. wreath
Θ	ə a .. all	O	o o .. olive	D	d d .. fade	Ƨ	th th .. wreath
Ω	ω o .. ope	U	u u .. up	Ϟ	ç ch .. cheer	S	s ss .. hiss
W	w oo .. food	W	w oo .. foot	J	j j .. jeer	Z	z s .. his
DIPHTHONGS.				C	c c .. came	Σ	ʃ sh .. mesh
Ƨ	i in isle	Ƨ	ow in owl	G	g g .. game	Ƨ	ʒ s .. measure
Ϟ	oi .. oil	U	u .. mule	LIQUIDS.			
COALESCENTS.				R	r r in for	L	l l in fall
Y	y y in yea	W	w w in way	NASALS.			
ASPIRATE.				M	m m in seem	Ƨ	ŋ ng in sing
II	h h in hay			N	n n .. seen		

The sign (') is prefixed to *l, m, n*, to shew when they form syllables by themselves; as, *dub'l, dubliŋ; rit'm, ritmic; ev'n, evniŋ*; and the compound symbols 'l, 'm, 'n, are then called "vocals."

*Additional Symbols* are used for foreign sounds, as may be seen by the following examples. See p. 21.

*French.*—fän, pät, pat, bon, vü, hüt, zön, zön, zë  
chéne, päte, patte, bonne, vü, hutte, jeüne, jeune, je  
fan, fon, ocun, bon, felj, ranj  
fin, champ, aucun, bon, fille, règne

*German.*—cünste, cünste, Göte, böce, ik, ak, zeq, taq, ven  
kühnste, künste, Goethe, böcke, ich, ach, sieg, tag, wann

*New Orthographical Signs*:—(‡) *query*, placed at the commencement of interrogative clauses; (‡) *sigh*; (‡) *smile*; { } *obsolescent parentheses*, used to inclose words which are not spelt phonetically. See pp. 24, 25.

**Fig. 1848b:** *ibid.*, excerpt from p.10.

*This shows an earlier development stage of the EPA 1847. This stage is not subject of this proposal. However, it proves that the U+1DF6E LATIN CAPITAL LETTER PHONOTYPIC DIPHTHONG AI was considered different from U+0197 LATIN CAPITAL I WITH STROKE, as these letters are both included in that draft as different letters (see circle markings).*

### 5. August, 1844.

**I** I, **E** E, **A** A, **O** O, e u, **U** U; **F**, **S**, **W**; Y, W, H,  
=*e i, a e, q a, o o, [ë]u, u u; i, s, u; y, w, h*, ov 1847.

**P** B, **T** D, **C** J, **G** G; **F** V, **I** A, **S** Z, **Σ** Z; L, R; **M**, N, **H**,  
=*p b, t d, g j, c g; f v, t d, s z, f z; l, r; m, n, η*, ov 1847.

**Dis woz avædli onli a temporeri alfabet.**

**Fig. 1848c:** *ibid.*, excerpt from p.10.

*This shows another earlier development stage of the EPA 1847. This stage also is not subject of this proposal. However, it shows U+1DF70 LATIN SMALL LETTER I WITH PIGTAIL AT BOTTOM together with an uppercase form which is not included in later stages of the EPA development (and therefore not proposed here).*

*This form, together with the asymmetric serif at the top below the dot of U+1DF70 itself, which is typical for the small letter i, proves that that an unification of that letter with 0279 0307 "small letter turned r with dot above" would be inappropriate.*

*Also, it shows U+1DF71 LATIN SMALL LETTER STRETCHED I which is included in this proposal due to its Mi'kmaq use (see fig. 1853a).*

### 7. October, 1844.

**I** I, **E** E, **A** A, **O** O, **U** U, **U** U; **F**, **Φ**, **H**, **W**; Y, W, H,  
**i** i, **e** e, **a** a, **o** o, **c** u, **u**, **u**; **j**, **q**, **n**, **u**; y, w, h,  
=*e i, a e, q a, o o, [ë]u, u u; i, v, s, u; y, w, h*, ov 1847.

**P** B, **T** D, **C** J, **K** G; **F** V, **I** A, **S** Z, **Σ** Z; L, R; **M**, N, **W**,  
**p** b, **t** d, **g** j, **k** g; **f** v, **t** d, **s** z, **f** z; l, r; m, n, η,  
=*p b, t d, g j, c g; f v, t d, s z, f z; l, r; m, n, η*, ov 1847.

**Dis iz ðe ferst "løer-cas" er smøl-leter alfabet, and it wil bæ sæn ðat ðe cónsonants wer nð priti wel set'ld. Prjúr tu ðe adopfun ov ðis alfabet,**

Fig. 1848d: *ibid.*, excerpt from p.21.

Part of the list of additional symbols for foreign sounds.

Mostly, diacritical marks are used which are already encoded. For the right dot on small u and o (No. 15 and 16), U+0358 COMBINING DOT ABOVE RIGHT seems appropriate.

No. 14 (marked red) shows the letter pair U+1DF76/1DF77 LATIN CAPITAL/SMALL LETTER TURNED CLOSED OMEGA, which is not listed in the alphabet shown in fig. 1848a.

§ 8. II. ADIEUNAL SIMBULZ FØR FOREN SØNDZ.

- 1 ʼI i ʼÆ Pøliſ y; it iz ʼæ proper loſ vſel ov Inſliſ 7.
- 2 ʼH ä ʼÆ Jerman ä, Freng é; ʼæ proper sænd ov Inſliſ 2<sup>3</sup>.
- 3 ʼH ā ʼÆ Friſ a, az diſtingwiſt from æder q er a; it iz ʼæ tru loſ vſel ov Inſliſ 9.
- 4 ʼH â ʼFreng a; muç breder ðan Inſliſ 3, but not ſo bred az Inſliſ 4.
- 5 ʼO ô Italian o *opârto*; not cwjt ſo bred az Inſliſ 4, but breder ðan â.
- 6 ʼO o Italian o *oçzo*; betwen Inſliſ 5 and 6, but incljnd tu ʼæ later.
- 7 ʼU ü Loſ Jerman ü, Freng u; fermd bj an atemt tu prønſns Inſliſ 1 and 6 ſimultaniusli. Inſliſmen hu can not caç ʼæ sænd, ma ſubſtitut ʼy in Freng, and e in Jerman wurdz.
- 8 ʼO ö Loſ Jerman ö, Freng eu; fermd bj atemtiſ tu prønſns Inſliſ 2 and 5 ſimultaniusli. Inſliſmen hu can not caç ʼæ sænd, ma ſubſtitut ë.
- 9 ʼE ë Freng e *müü* (muet); jenerali a bref vſel. ʼÆ Inſliſ 9 bref haz veri nerli ʼæ ſam sænd. Sum Fønetiſanz conſider ðat Inſliſ 36<sup>3</sup> and 36<sup>4</sup> wud be mør corectli rit'n *ër*.
- 10 ʼI ĩ ʼÆ Freng ſtopt i; a muç brjter sænd ðan ʼæ Inſliſ 7. Inſliſmen, hwen ſpeciſ Freng, jenerali uz "e" er "i" inſted ov ĩ. We haz herd it prønſnt in ʼæ wurd (been) = "bin," inſted ov "ben."
- 11 ʼE ě ʼÆ Freng é; raçter tiner, and mør ljç 7 ðan 8. Inſliſmen jenerali uz e inſted ov it.
- 12 ʼA a Stopt a in el Foren lagwejez, hwar it replazez ʼr Inſliſ 9. ʼÆ sænd ljz betwen Inſliſ 9 and 10, and aprøez ʼæ later veri nerli. It iz herd in ʼæ nert ov Inſland and Scotland in plas ov Inſliſ 9. It iz elſo veri nerli ʼæ sænd hwiç meni Inſliſ ſpecerz giv tu ʼæ Inſliſ 3<sup>2</sup>, tu avød a çans ov prønſniſ "â" er "ar" fer q.
- 13 ʼO ǒ Stopt Italian o *opârto*; ſcarſli diſtingwiſab'l from Inſliſ 10.
- 14 ʼO Ɔ ʼÆ tru fert vſel ov Inſliſ 5, az in Freng (bonne) = "bon." It iz ſtil herd in America, hwar (stone) = "ſton;" but it iz elwaz replaſt in Inſland bj "o" er "u," ðus "a ſton, tre ſton wat."
- 15 ʼU ü Stopt Jerman ſ, Freng u, ðus (künſte, hutte) = "cünſtë, hüt."
- 16 ʼO ó Stopt Jerman "ö," Freng eu, ðus (böcke, jeune) = "böčë, zön."
- 17 ʼO ɔ ʼÆ Oriëntal comprefun, az "oçin."
- 18 ʼX x ʼÆ Oriëntal çlef-hamza, er ſoft breðiſ.
- 19 ʼV v ʼÆ Jerman w, intermediet tu ʼæ Inſliſ "w" and Inſliſ "v;" ʼæ løer lip ðaz not tuç ʼæ tet az fer "v," but prezez ʼæ uper lip mør flatli ðan fer "w."
- 20 ʼK k ʼÆ Jerman *ch*, aſter paletal vſelz er licwidz, ðus (ich) = "ik;" hwen printed in italics, it reprezents ʼæ harſ sænd ov Jerman *ch*, herd aſter el uder vſelz, az (auch, ach) = "auak, ak." Inſliſmen hu can not caç ʼæ sænd, ma uz ʼæ hwiſperd y fer "k," and c fer k.
- 21 ʼQ q ʼÆ Jerman g fiſnal aſter paletal vſelz, ðus (siege) = "zeq," er mør acuretli = "ſzeqk," and veri frøewentli = "ſzek" onli; hwen printed in italics, it haz ʼæ harſer sænd ov ʼæ Duç g and ʼæ fiſnal Jerman g aſter uder vſelz, az (tag) = "taç." Inſliſmen hu can not caç ʼæ sænd, ma uz "y" fer "q," and "g" fer "q."

2. Egzilyeri Sjnz.

[ Tu prevent ʼæ neſeſiti ov çaçtiſ a number ov nſ tjpz, a fu egzilyeri ſjnz qç emplød, tu modifj ʼæ non valuz ov ʼæ leterz tu hwiç ða qç ſubjønð er præfiçt.]

- 22 ñ Sjn ov *nazãiti*. Hwen jønð tu eni vſel, it foz ðat it muſt be ſpøc'n

Fig. 1848e: *ibid.*, excerpt from p.24.

Showing the "Expressional Signs" (i.e. punctuation marks).

Note that No. 11 ("the Query", red) is not an exact mirror image of No. 12 (it is narrower, and the kink at the vertical stem is about 135°, while the kink at No. 12 ("the Doubt", obviously a reuse of U+003F QUESTION MARK) is below 90°. However, UTC #126 requested the unification with U+2E2E REVERSED QUESTION MARK, thus this character is not proposed separately at this time.

No. 13 ("Call") and 14 ("Sigh") obviously are the exclamation marks U+0021 and U+00A1.

No. 14 ("Smile", green) shows U+2E60 WIGGLY EXCLAMATION MARK (in a bad type).

### 3. ECSPREUNAL S\*NZ.

- 11 (¶) Æ *Qveri*. Æis iz plast befor eni wurdz er clezez bj hwiç a cwesçun iz çsct.
- 12 (?) Æ *Dst*. Æis iz plast qfter eni wurd er statment, consernij hwiç ðe rjter felz sum ðst, er hwiç he wifez tu çel in cwesçun. Obzerv ðe diferens betwen ðe ðstfial incwçri "U çam lqst njt?" and ðe uçual interrogaçun "¶ Did u çum lqst njt."
- 13 (!) Æ *Çel*; a mçre ov ecslamaçun, er simpli surprjz. Dub'ld (!), it indicats grat astoniçment.
- 14 (¡) Æ *Sç*; a mçre ov gref er sorø: plast qfter a statment hwiç givz ðe rjter pan. Dub'ld (¡), it indicats grat affliçun.
- 15 (!) Æ *Smjç*; a mçre ov mert er pleçur: plast qfter a statment hwiç givz ðe rjter pleçur, er proðuçez in him a felij ov amuçment; and hens uzd in plas ov ðat ecsprefun in ðe specer hwiç in comun intercørns iz ment tu indicat "¡ woz ønli in çoc." Æe dub'l smjç (!!) iz a ðærçit lqf.  
[ Øl ðez sijnz qr uzd tu indicat ðe felij ov ðe rjter er specer: ða hav nø referens tu ðe reder, hu iz çwjt at liberti tu sj over a smjç, er smjç over a sj.]

Fig. 1848f: *ibid.*, excerpt from p.25.

Showing the "Obsolescent Parentheses" as No. 19 (U+2E62 LEFT PARENTHESIS WITH MIDDLE RING and its right counterpart).

### 4. PARENTETICAL S\*NZ.

- 16 ( ) Æ *Paréntesis*, er in ðe plural *Paréntesez*; uzd tu incløz eni wurd er cløz hwiç iz inserted in ðe bodi ov a sentens, wið huuz gramatical construçun it sumhwot interferz. It iz ølsø uzd tu incløz eni lit'l mçres er sijnz hwiç mjt uderwijnz be overluact, er not hav sufifent impørtans giv'n tu ðem bj ðe reder. Føer ínstans, we hav fer ðis rez'n, incløzd ðe ørtografical sijnz l tu l5 in ðe mçrjin ov ðe abuv ecspianaçunz betwen parentesez.
- 17 { } *Bracez*, uzd az a variaçun ov ðe parenthesis; ðe ferst hqf { iz ølsø uzd tu conect er liçç tuçedøer several ljnz.
- 18 [ ] *Bracets*; uzd az a variaçun ov parenthesis, and ølsø tu incløz høl sentencez hwiç interfér wið ðe jeneral arançment ov a paragraf, and consecwentli hav røder ðe aperans ov nots. Obzervaçunz mað bj ðe sçter, in ðe çors ov a sçtaçun, qr jenerali sø incløzd, tu distijnçwiç ðem from ðe wurdz ov ðe øtur sçted.
- 19 { } *Obsolesent Parentesez*; uzd tu incløz wurdz hwiç qr not egzibited Føneticali.
- 20 ( " ") *Inverted Comaz er Mçres ov Sçtaçun*, incløz wurdz cwøted from anuðer øtur, er put intu ðe mst ov ðe specer. Wurdz tu hwiç particuler impørtens iz ataçt, technical ecsprefunz, øts., qr of'n sø incløzd.

Fig. 1848g: *ibid.*, excerpt from p.122.  
 Showing an example of the “Obsolescent Parentheses”.

1. **Dis** lit'l pœm iz a translafun ov *Clopstocs* “Fürst und zjn Cebzvjb” **(F) Fürst und sein Keksweib**, hwiç woz compozd in 1789, wið referens tu ðe ferst Freng revølfun.

Fig. 1848h/i: *ibid.*, excerpts from p.276/280.  
 Excerpt from an article “The Pronunciation of Lowland Scots”, showing the letters not listed in the alphabet table in fig. 1848a: U+1DF77 LATIN SMALL LETTER TURNED CLOSED OMEGA (and the encoded U+AB30 LATIN SMALL LETTER BARRED ALPHA).  
 The second figure shows an interlinear sample, (F) being the claimed Scots pronunciation, (E) the claimed Standard English one.

Ðe complét Scoç alfabet apérs tu bæ :

<i>Loç Vselz</i>	e — a ä q e ô o u ü ö
<i>Sert Vselz</i>	ï i ë e <b>a</b> o — <b>o</b> u ú ó u
<i>Diftoz</i>	uï, ai, oi <b>au</b> , èu
<i>Coalésents and Bredin</i>	y w, h
<i>Ecsplodents</i>	p b, t d, çj —, ç g
<i>Continuants</i>	f v, t ð, s z, f ʒ, k —, k
<i>Licwidz</i>	r l, m n ŋ.

Ðe çef pønts tu bæ noted bj an Ingliſman ar :

Ðe prezens ov ðe vselz *ó, ü, ö, ý, ž, a, o, ú, ô*, hwiç ðu not ocúr in Ingliſ ; ðe natur ov ðe diftoz, eſpeſali ðe diftoz *uï, ai*, neðer ov hwiç ocúr in Ingliſ, and hwiç replás ðe Ingliſ *i* at diferent tÿmz. Ov ðis, *uï* iz veri nerli ðe tru Ingliſ *i*, and Ingliſmen ma ðarfør substitut *i* for it, hwjl *ai* veri nerli = *qi*, ðe sænd giv'n in Ingland tu ðe ſing'l wurd (*aye*). Ðe Scoç,

*Duncan Gray came here to woo,*

(F) **dunçan** gra **cam** her tu wuu,

(E) Dunçan Gra cam her tu wuu,

*On blithe yule night when we were fou,*

(F) **on** **blait** yul nëkt hwen wè wer fu,

(E) **On** blait yul nikt hwen wè wer fu,

Fig. 1848j: Charlie's house - a tale for young children. Alexander John Ellis, London 1848: Title page; p.39 (as an example for a publication printed in EPA 1847).

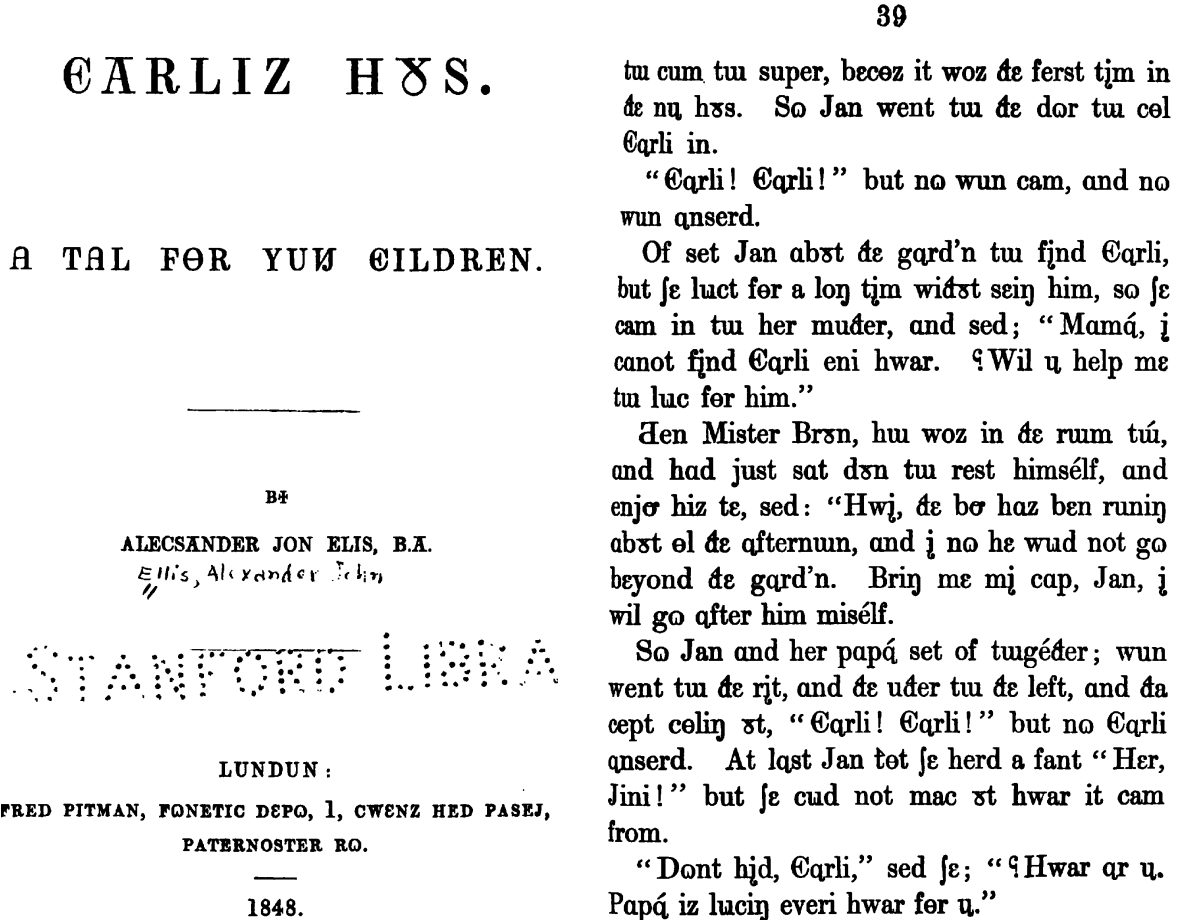


Fig. 1848k: Shakespeare, Macbeth, phonetic edition London 1848, excerpt from p.11/12:

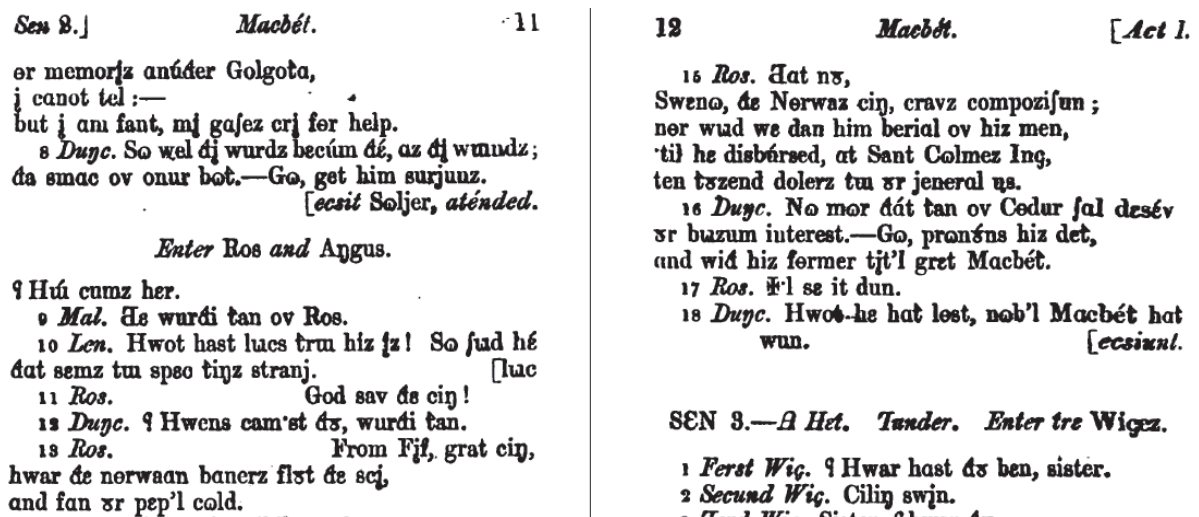




Fig. 1849a: The Phonetic Reader. Bond, Robert; London 1849, p.vii.  
 Showing example of U+1DF76/U+1DF77 LATIN CAPITAL/SMALL LETTER TURNED CLOSED OMEGA.

*Adifunal leters for foren ssnðz hwic ðu not ocúr in inglis.*

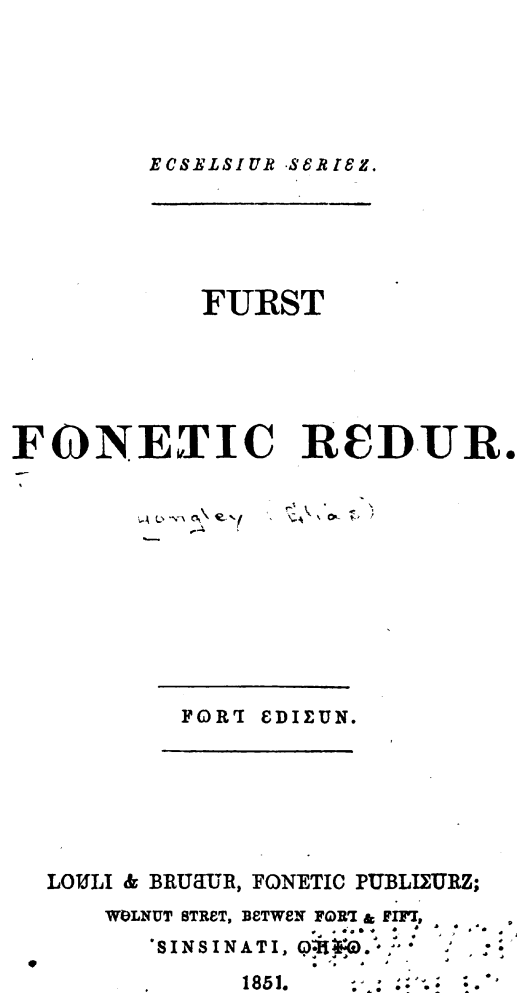
ðe leter		iz olwaz		ðe leter		iz olwaz	
rit'n	prntd	sñnded	az	rit'n	printd	sñnded	az
Ä ä	··A ä	freng	{éy}	Hl hl	-Hl hl	welf	{ll}
À à	··A à	freng	{áy}	Hr hr	-Hr hr	welf	{rh}
Ü ü	··U ü	freng	{úy}	Lj lj	Lj lj	italyan	{gl}
Ö ö	··O ö	freng	{éúy}	Nj nj	Nj nj	italyan	{gn}
Ë ë	··E ë	freng	{éy}	K k	K k	jerman	{ch}
À à	·A a	fr. fært	{a}	Q q	Q q	duç	{g}
Ø ø	⊙ ⊙	fr. fært	{o}	Ɔ ɔ	Ɔ ɔ	árabic	oqin
U u	·U u	fr. fært	{u}	Ƀ Ƀ	Ƀ Ƀ	polif	{rz}
Ö ö	·O ó	fr. fært	{eu}				
an	an	freng	{in}	ðe strophi pronstnðt árabic leters ar indicated in rjtig, bj subscriþip, and in print bj prefixin, a dot; ðus, <i>Mu.ámmud o'Ále</i> (Mehemet Ali). Cj, gj, kj, qj ar uzd fer palatal varjetiz ov c, g, k, q; compár tkj, ak, {ich, ach}.			
on	on	freng	{an}				
on	on	freng	{on}				
un	un	freng	{un}				

ðoz ignorant ov foren langwejez ar advjrd tu pronstns  
 ä, á, é, a, ⊙, ú, j, k, q, Ƀ,  
 az a, q, u, a, o, y, y, c, g, Ƀ,  
 respectivli, tu omít o, and tu disregárd ðe márc ov stroy leters, untl ða can  
 lern ðe tru ssnðz. In freng, ö, ü ma be pronstnt az ur, u, and ó, ú as u, í;  
 in jerman, ö, ó ma be spoc'n ljic a, e, and ü, ú ljic e, i.

Fig. 1849b: The Phonetic Reader. Bond, Robert; London 1849, p. 134.  
 Showing a use of the Capital Reversed Sigma, several uses of the trema and the dot above  
 to denote French sounds (according to the table in Fig. 1849a), and several examples of  
 the "Obsolescent Parentheses" (U+2E62 LEFT PARENTHESIS WITH MIDDLE RING and  
 its right counterpart).

In april 1818, sum persunz went up ðe vali tu aser-  
 tán ðe cöz ov ðe ðefjensi ov weter, and ða discúverd ðat  
 vqst mqsez ov ðe glasierz ov Zétroz {Getroz} and aval-  
 onsez ov snö, had fel'n intu a narö part ov ðe vali,  
 betwén mænt Plörör {Pleureur} and mænt Møvuqzan  
 {Mauvoisin}, and færd a djc ov js and snö 600 fet wjd

**Fig. 1851a:** First phonetic reader, Cincinnati 1851. Title page; p.6.  
 Showing that the EPA 1847 alphabet was used unchanged in Cincinnati for a time.



**PHONETIC ALPHABET.**

*Phonetically Arranged.*

The Phonetic letters have the value of the *italicized* letters in the illustrative words.

Letters.	Illustrative words.	Names.	Letters.	Illustrative words.	Names.
<i>Long Vowels.</i>					
Ɛ	<i>ε</i> . . . eel . . . . .	ε	P	<i>p</i> . . . pole . . . . .	pε
ʌ	<i>a</i> . . . ale . . . . .	a	B	<i>b</i> . . . bowl . . . . .	bε
Ǽ	<i>q</i> . . . arms . . . . .	q	T	<i>t</i> . . . toe . . . . .	tε
Ɔ	<i>e</i> . . . all . . . . .	e	D	<i>d</i> . . . doe . . . . .	dε
Ɔ	<i>o</i> . . . oak . . . . .	o	Ɔ	<i>ç</i> . . . cheer . . . . .	çɑ
W	<i>u</i> . . . ooze . . . . .	u	J	<i>j</i> . . . jeer . . . . .	ja
<i>Short Vowels.</i>					
I	<i>i</i> . . . ill . . . . .	it	C	<i>c</i> . . . came . . . . .	ca
E	<i>e</i> . . . ell . . . . .	et	G	<i>g</i> . . . game . . . . .	ga
A	<i>a</i> . . . am . . . . .	at	<i>Continuants.</i>		
O	<i>o</i> . . . on . . . . .	ot	F	<i>f</i> . . . fear . . . . .	ef
U	<i>u</i> . . . up . . . . .	ut	V	<i>v</i> . . . veer . . . . .	ve
W	<i>u</i> . . . wood . . . . .	ut	T	<i>t</i> . . . thigh . . . . .	it
<i>Diphthongs.</i>					
Ɔ	<i>i</i> . . . ice . . . . .	ij	Ɔ	<i>d</i> . . . thy . . . . .	dε
Ɔ	<i>o</i> . . . oil . . . . .	oσ	S	<i>s</i> . . . seal . . . . .	es
Ɔ	<i>o</i> . . . owl . . . . .	oσ	Z	<i>z</i> . . . zeal . . . . .	ze
U	<i>u</i> . . . use . . . . .	u	Σ	<i>j</i> . . . shall . . . . .	ij
<i>Coalescents.</i>					
Y	<i>y</i> . . . yea . . . . .	ya	Ɔ	<i>z</i> . . . vision . . . . .	zε
W	<i>w</i> . . . way . . . . .	wa	<i>Liquids.</i>		
<i>Breathing.</i>					
H	<i>h</i> . . . hay . . . . .	ha	R	<i>r</i> . . . rare . . . . .	ar
<i>Nasals.</i>					
			L	<i>l</i> . . . lull . . . . .	el
			M	<i>m</i> . . . mum . . . . .	am
			N	<i>n</i> . . . nun . . . . .	en
			Ɔ	<i>ŋ</i> . . . sing . . . . .	inj

(\*) *vocal*, showing when *l, m, n*, make syllables of themselves.

**Fig. 1851b:** *ibid.*, excerpt from p.53.  
 Showing an example of U+2E60 WIGGLY EXCLAMATION MARK (encircled).  
 Also, this book being a primer using large types, shows a good example for U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI, displaying clearly its unique descender.

Mj Slat.

Pra giv me mj nu slat, j  
 wij tu dre on it. Mj slat  
 haz a fin red ej. Ɔ wil dre  
 a bε. Hwot a loj nōz hε  
 haz, and but wun qrm **?** Nσ  
 j wil dre a cσ, and a milc

**Fig. 1851c:** Cubi i Soler, Mariano: Nuevo Sistema (Bath 1851), p. 8.  
 Showing a variation of the EPA 1847. Presumably, the use of “E”/“ε” for [i:] seemed not acceptable for a Spanish audience, thus a l with hook (proposed to be unified with Latin iota; marked red) was introduced to indicate that phoneme.  
 Also, the “ə” was used to mark liquids being syllabic, using a special form as capital letter (resembling a capital E without middle bar). However, this is considered as a glyph variant of the already encoded Θ (U+018F LATIN CAPITAL LETTER SCHWA) in this proposal.

## ALFABETO FONÉTICO INGLES.

En la primera columna se hallan las letras mayúsculas i minúsculas. En la segunda columna hai el modo de pronunciarlas segun se suenan las letras cursivas en las palabras inglesas que siguen. En la tercera, está su correspondiente sonido, segun pronunciamos nosotros los españoles, las letras cursivas en las voces castellanas adjuntas: donde este sonido no es exacto, o al ménos mui apocsimado, se pone una señal de referencia a la página inmediata, en que se dan esplicaciones claras i terminantes. En la cuarta i última columna, se halla el nombre de las letras del alfabeto fonético, escrito, donde es posible, en ortografía castellana; i, donde no, en ortografía fonética.

VOCALES.	CONSONANTES.
<p style="text-align: center;"><i>Largas.</i></p> <p>Ⓛ i . . eel . . . . . ír . . . . i            E e . . ale . . . . . él . . . . é            A q . . air . . . . . (1) . . . q            H a . . alms . . . . . (2) . . . aáh            O o . . all . . . . . (3) . . . o            W w . . ope . . . . . oro . . . ó            U u . . food . . . . . ñudo . . ú</p> <p style="text-align: center;"><i>Cortas.</i></p> <p>I i . . ill . . . . . (4) . . . it            E e . . ell . . . . . (5) . . . et            A a . . am . . . . . (6) . . . at            A a . . are, pass . ama . . . a            O o . . olive . . . . . (7) . . . ot            U u . . up . . . . . (8) . . . ut            U u . . fall . . . . . (9) . . . ut            Ⓛ ə . . tit, le, taken (10) . . əl</p> <p style="text-align: center;"><i>Diptongos.</i></p> <p>H i . . eye . . . . . (11) . . . i            O o . . owl . . . . . (12) . . . o            U u . . you . . . . . yugo . . . yu</p> <p style="text-align: center;"><i>Ligantes. (Coalescents.)</i></p> <p>W w . . way . . . . . (13) . . . we            Y y . . yea . . . . . rayita . . yé</p> <p style="text-align: center;"><i>Aspirante.</i></p> <p>H h . . hay . . . . . (14) . . . heq</p>	<p style="text-align: center;"><i>Prorumpientes. (Explodents.)</i></p> <p>P p . . rope . . . . . pan . . . pi            B b . . robe . . . . . bobo . . . bi            T t . . fate . . . . . (15) . . . ti            D d . . fade . . . . . (16) . . . di            C c . . etch . . . . . charro . . ché            J j . . edge . . . . . (17) . . . je            C c . . leek . . . . . cacao . . qué            G g . . league . . . . . legua . . gué</p> <p style="text-align: center;"><i>Continuantes.</i></p> <p>F f . . safe . . . . . fuego . . ef            V v . . save . . . . . vivo . . . vi            Θ θ . . thigh . . . . . zierzo . . iθ            H h . . thy . . . . . deidad . . di            S s . . seal . . . . . sesos . . es            Z z . . zeal . . . . . (18) . . . zi            Σ σ . . mesh . . . . . (19) . . . if            Z z . . measure . . . . . (20) . . . zi</p> <p style="text-align: center;"><i>Líquidas.</i></p> <p>L l . . fall . . . . . (21) . . . el            R r . . rare . . . . . (22) . . . ar</p> <p style="text-align: center;"><i>Nasales.</i></p> <p>M m . . seem . . . . . mamá . . am            N n . . seen . . . . . (23) . . . en            W w . . sing . . . . . (24) . . . iy</p>

**Fig. 1851d:** Cubi i Soler, Mariano: Nuevo Sistema (Bath 1851), p. 66.  
 Showing (3<sup>rd</sup> column) the handwriting form of the “latin capital letter E without middle bar” resembling the small letter, supporting the unification with Θ).

*Half Vowel.*

Ⓛ ə | Ⓛ ə | 2 2 | 
 { *bottle*  
*cotton* } | əl

**Fig. 1852a:** The Phonetic Journal, Vol. 7, London 1852. Excerpts from p.5 and p.23. In 1852, Isaac Pitman began to try to "improve" the EPA, changing letterforms several times (the forms beyond Jan. 1852 not shown here). These letterforms are not subject of this proposal.

No. 4, Jan., 1847.	No. 5, Proposed Jan., 1852.	No 6, Romanic Alphabet.
<p>æ a q e o u, i e a o u u, j s r u, w y h, p b t d q j c g, f v t d s z ʃ z, l r, m n ŋ.</p>	<p>i e a o s u, i e a o u u, j s m, w y h, p b t d q j c g, f v θ d s z ʃ z, l r, m n ŋ.</p>	<p>aa, bb, cc, dd, ee, ff, gg, hh ii, jj, kc, ll, mm, nn, oo, pp, qc, rr, ss, tt, uu, vv, ww, xcs, yy, zz.</p>
<i>Specimen.</i>	<i>Specimen.</i>	<i>Specimen.</i>
<p>Nutiŋ hwotever iz mōr tu be deziŋd, or mōr deliŋtful, dan de liŋt ov trut: for it iz de sors ov wiz- dum. Hwen de mīnd iz harast wiŋd obscŋriti, distractēd bi dōsts, renderd torpid or sad'nd bi igno- rans or folsitiz, and trut emerjez az from a dare abis, it sīnz fort instantaniusli, liŋc de sun dispersiŋ mists and vapurz, or liŋc de den dispeliŋ de sadz ov darcnes.</p>	<p>Nuōiŋ hwotever iz mēr tu bi deziŋd, or mēr deliŋtful, dan de liŋt ov truθ: for it iz de sors ov wiz- dum. Hwen de mīnd iz harast wiŋd obscŋriti, distractēd bi dōsts, renderd torpid or sadend bi igno- rans or folsitiz, and truθ emerjez az from a dare abis, it sīnz forθ instantaniusli, liŋc de sun dispersiŋ mists and vapurz, or liŋc de den dispeliŋ de sedz ov darcnes.</p>	<p>Nothing whatever is more to be desired, or more delightful, than the light of truth: for it is the source of wisdom. When the mind is harassed with obscurity, dis- tracted by doubts, rendered torpid or saddened by ignorance or falsi- ties, and truth emerges as from a dark abyss, it shines forth instan- taneously, like the sun dispersing mists and vapours, or like the dawn dispelling the shades of darkness.</p>

**Fig. 1852b:** The American Reporter, Vol. 5, No. 26; Washington (DC) Nov. 1852; excerpt from p.40. This was one of the magazines which used and discussed the EPA, including proposals for change of letterforms. In doing so, the letterforms changed between single issues and even between articles within the same issue. These letterforms are not subject of this proposal. However, this excerpt shows one of the rare examples of U+2E60 WIGGLY EXCLAMATION MARK in a context not addressed to children.

44

**PHONETICAL**

Æ wil lev Dr Ston tu tæc cær ov hiz on reputæsen. It wud be  
lqfabl fœr ms tu testifi dat j hav sen him rjt 120 wurdz a minit ¶  
Æ hav ritn 201 wurdz in a minit wiŋd ez, befœr witnesez, but did  
not tæc de trubl tu get a sertificat dærfœr, fœr de simpl rezn dat  
an abiliti tu rjt rapidli duaz not prœv an abiliti tu report wel.

**Fig. 1852c:** The American Reporter, Vol. 5, No. 16; Washington (DC) 1852; p.43. Showing U+2E61 INVERTED WIGGLY EXCLAMATION MARK to denote different levels of sarcasm.

upon mj cœr, wiŋd de asurans dat de cud rjt 60 wurdz per minit,  
and after mœr practis cud undowtedli rjt faster ¶½ A jentlman  
woz introdust to me bi Mr Lœyli az bein wun ov dær fastest rjterz  
hwjl he cud not rjt mœr dan 60 œr 70 wurdz per minit !!¶½ A  
western fœnografer woz told bi wun ov de lœdiŋ fœnograferz oy de

**Fig. 1853a:** British and Foreign Bible Society, *The Gospel According to Saint Matthew, in the Micmac Language*, Charlottetown: G. T. Haszard, 1853, available at <https://digitalarchive.tpl.ca/objects/344247> . Showing U+1DF71 LATIN SMALL LETTER STRETCHED I (red arrow) in contrast to the ordinary I and to U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI (green arrows).

## KEY.

The CONSONANTS are sounded as in English; *c*, and *g*, being always *hard*, and *h* being somewhat more strongly *aspirated*, when following a vowel, or ending a syllable, than when it precedes a vowel. *W*, ending a word, has its usual *consonant* sound.

The “liquids” *m* and *n*, when *doubled* at the end of words, simply *prolong* their sound.

The VOWELS are sounded as in the following scale :

<i>Short vowels.</i> —	Ii,	Ie,	Aa,	Oo,	Uu,	u.
	it,	edge,	am,	not,	up,	foot.
<i>Long vowels.</i> —	j,	e,	a,	o,	u.	
	eat,	age,	alms,	ope,	food	
<i>Diphthongs.</i> —	i	o	u.			
	mine,	house,	mule.			

The sound of the *long* vowels, *j*, *e*, *a*, *o*, *u*, when there are *doubled*, is to be simply *prolonged*. When the *short* vowels are *doubled*, they form distinct syllables.

“Different renderings,” and such “explanatory words,” as usually appear in the *Margin*, are in this work indicated by a Parenthesis, ( ). “Supplied Words,” are enclosed in Brackets, [ ].

N. B. The “Phonetic Alphabet” is used ; and the above KEY will enable any one, with very little trouble, to read and pronounce the Micmac with sufficient correctness to be understood by an Indian.

**Fig. 1854a:** American Manual of Phonography (Elias Longley; Cincinnati 1854): excerpt from p.10. The alphabet shown here resembles EPA 1855 (the "Cincinnati alphabet"; see fig. 1855a), only missing some letters, and using one letterform (for [u:]) from EPA 1847 which was replaced in EPA 1855. Regarding the case pairing, this alphabet version is compatible with EPA 1855.

### THE ENGLISH PHONETIC ALPHABET.

The letter written		The letter prntd	is always sounded as	The letter written		The letter prntd	is always sounded as
<i>E</i>	<i>e</i>	<i>E e</i>	<i>ee</i> in <i>eel</i>	<i>P</i>	<i>p</i>	<i>P p</i>	<i>p</i> in <i>pole</i>
<i>A</i>	<i>a</i>	<i>A a</i>	<i>a</i> .. <i>ale</i>	<i>B</i>	<i>b</i>	<i>B b</i>	<i>b</i> .. <i>bowl</i>
<i>H</i>	<i>h</i>	<i>H h</i>	<i>a</i> .. <i>alms</i>	<i>T</i>	<i>t</i>	<i>T t</i>	<i>t</i> .. <i>toe</i>
<i>O</i>	<i>o</i>	<i>O o</i>	<i>a</i> .. <i>all</i>	<i>D</i>	<i>d</i>	<i>D d</i>	<i>d</i> .. <i>doe</i>
<i>W</i>	<i>w</i>	<i>W w</i>	<i>o</i> .. <i>ope</i>	<i>C</i>	<i>c</i>	<i>C c</i>	<i>ch</i> .. <i>cheer</i>
<i>U</i>	<i>u</i>	<i>U u</i>	<i>oo</i> .. <i>food</i>	<i>J</i>	<i>j</i>	<i>J j</i>	<i>j</i> .. <i>jeer</i>
<i>I</i>	<i>i</i>	<i>I i</i>	<i>i</i> .. <i>ill</i>	<i>K</i>	<i>k</i>	<i>K k</i>	<i>c</i> .. <i>came</i>
<i>E</i>	<i>e</i>	<i>E e</i>	<i>e</i> .. <i>ell</i>	<i>G</i>	<i>g</i>	<i>G g</i>	<i>g</i> .. <i>game</i>
<i>A</i>	<i>a</i>	<i>A a</i>	<i>a</i> .. <i>am</i>	<i>F</i>	<i>f</i>	<i>F f</i>	<i>f</i> .. <i>fear</i>
<i>O</i>	<i>o</i>	<i>O o</i>	<i>o</i> .. <i>olive</i>	<i>V</i>	<i>v</i>	<i>V v</i>	<i>v</i> .. <i>veer</i>
<i>U</i>	<i>u</i>	<i>U u</i>	<i>u</i> .. <i>up</i>	<i>Th</i>	<i>th</i>	<i>Th th</i>	<i>th</i> .. <i>thigh</i>
<i>U</i>	<i>u</i>	<i>U u</i>	<i>oo</i> .. <i>foot</i>	<i>Th</i>	<i>th</i>	<i>Th th</i>	<i>th</i> .. <i>thy</i>
<i>I</i>	<i>i</i>	<i>I i</i>	<i>i</i> .. <i>isle</i>	<i>S</i>	<i>s</i>	<i>S s</i>	<i>s</i> .. <i>seal</i>
<i>O</i>	<i>o</i>	<i>O o</i>	<i>oi</i> .. <i>oil</i>	<i>Z</i>	<i>z</i>	<i>Z z</i>	<i>z</i> .. <i>zeal</i>
<i>O</i>	<i>o</i>	<i>O o</i>	<i>ow</i> .. <i>owl</i>	<i>J</i>	<i>j</i>	<i>J j</i>	<i>c</i> .. <i>vicious</i>
<i>U</i>	<i>u</i>	<i>U u</i>	<i>u</i> .. <i>mule</i>	<i>Z</i>	<i>z</i>	<i>Z z</i>	<i>s</i> .. <i>vision</i>
<i>Y</i>	<i>y</i>	<i>Y y</i>	<i>y</i> .. <i>yea</i>	<i>R</i>	<i>r</i>	<i>R r</i>	<i>r</i> .. <i>rar</i>
<i>W</i>	<i>w</i>	<i>W w</i>	<i>w</i> .. <i>way</i>	<i>L</i>	<i>l</i>	<i>L l</i>	<i>l</i> .. <i>lull</i>
<i>H</i>	<i>h</i>	<i>H h</i>	<i>h</i> .. <i>hay</i>	<i>M</i>	<i>m</i>	<i>M m</i>	<i>m</i> .. <i>mum</i>
				<i>N</i>	<i>n</i>	<i>N n</i>	<i>n</i> .. <i>nun</i>
				<i>Ng</i>	<i>ng</i>	<i>Ng ng</i>	<i>ng</i> .. <i>sing</i>

**Fig. 1855a:** American Phonetic Journal (ed. Randall P. Prosser), Cincinnati (Ohio) 1855, p.12. This is the first complete listing of EPA 1855 (the "Cincinnati alphabet"), the version which was propagated by a group of supporters in Cincinnati, independent from (and possibly in competition to) Isaac Pitman. This alphabet was used there without any changes at least until 1864 (see fig. 1864b). The punctuation marks are the same as in EPA 1847 (see again the "mark of interrogation" not only being not a mirror image of the "ordinary" question mark, but showing a closed form). The elision dot is called here "inverted period", which obviously refers to the application of the lead type. The missing uppercase form for  $\eta$  (last line of the table, right part) obviously is a typo, as the usual EPA form is found in other documents using the Cincinnati alphabet (see fig. 1864b). Also, it is corrected in the repeated reproduction of the table in American Phonetic Journal vol. II p. 48.

12			AMERICAN PHONETIC JOURNAL.		
<b>THE PHONETIC ALPHABET.</b>					
<i>The Phonetic letters in the first column are pronounced like the italic letters that follow. The last column contains the names of the letters.</i>					
LETTERS	ILLUSTRATIVE WORDS	NAME	LETTERS	ILLUSTRATIVE WORDS	NAME
<i>Long Vowels.</i>			<i>Explodents.</i>		
E e	.....eel	.....e	P p	.....pale	.....pe
E e	.....earth	.....er	B b	.....bale	.....be
A a	.....ale	.....a	T t	.....tame	.....te
A a	.....air	.....ar	D d	.....dame	.....de
A a	.....arms	.....a	C c	.....cheer	.....ca
O o	.....all	.....o	J j	.....jeer	.....ja
O o	.....oak	.....o	K k	.....came	.....ka
O o	.....ooze	.....o	G g	.....game	.....ga
<i>Short Vowels.</i>			<i>Continuants.</i>		
I i	.....ill	.....it	F f	.....fain	.....ef
E e	.....ell	.....et	V v	.....vain	.....ve
A a	.....am	.....at	H h	.....thigh	.....ih
A a	.....ask	.....at	H h	.....thy	.....de
O o	.....on	.....ot	S s	.....seal	.....es
U u	.....up	.....ut	Z z	.....zcal	.....ze
U u	.....wood	.....ut	S s	.....shall	.....if
<i>Diphthongs.</i>			K k	.....vision	.....ze
F f	.....ice	.....i	<i>Liquids.</i>		
C c	.....oil	.....c	L l	.....tull	.....el
S s	.....owl	.....s	R r	.....rare	.....ar
U u	.....dupe	.....u	<i>Nasals.</i>		
<i>Coalescents.</i>			M m	.....mair	.....am
Y y	.....yea	.....ya	N n	.....nine	.....en
W w	.....way	.....wa	N n	.....sing	.....ip
<i>Breathing.</i>					
H h	.....hay	.....ha			
<p>☞ The marks of punctuation are the same as in the Romanic orthography, excepting the following changes and additions: the mark of interrogation <math>\text{?}</math> is placed before the first word of a question; <math>\text{?}</math> is placed at the end of a sentence, and indicates doubt; <math>\text{f}</math> indicates laughter; <math>\text{!}</math> surprise; <math>\text{j}</math> sorrow; the inverted period <math>\text{.}</math> signifies the omission of a letter.</p>					

Fig. 1855b: Elias Longley: American Manual of Phonography, Cincinnati (Ohio) 1855, p.17. Showing the "Cincinnati alphabet" by another author, together with letterforms to be handwritten.

### The Phonetic Alphabet.

The letter		is always sounded as	The letter		is always sounded as
written	printed		written	printed	
<i>ℰ</i>	ℰ ε	ee as in eel	<i>P</i>	P p	p as in rope
<i>ℰ</i>	ℰ ε	ea .. earth	<i>B</i>	B b	b .. robe
<i>ℰ</i>	ℰ a	a .. ale	<i>T</i>	T t	t .. fate
<i>A</i>	A a	a .. air	<i>D</i>	D d	d .. fade
<i>A</i>	A a	a .. arm	<i>ℰ</i>	ℰ g	ch .. etch
<i>ℰ</i>	ℰ e	a .. all	<i>J</i>	J j	g .. edge
<i>ℰ</i>	ℰ o	o .. ope	<i>K</i>	K k	k .. lock
<i>ℰ</i>	ℰ oo	oo .. food	<i>G</i>	G g	g .. log
<i>I</i>	I i	i .. ill	<i>F</i>	F f	f .. safe
<i>E</i>	E e	e .. ell	<i>V</i>	V v	v .. save
<i>A</i>	A a	a .. am	<i>ℰ</i>	ℰ th	th .. wreath
<i>A</i>	A a	a .. ask	<i>ℰ</i>	ℰ th	th .. wreathe
<i>O</i>	O o	o .. odd	<i>S</i>	S s	s .. buss
<i>U</i>	U u	u .. up	<i>Z</i>	Z z	z .. buzz
<i>U</i>	U u	oo .. foot	<i>ℰ</i>	ℰ c	c .. vicious
<i>I</i>	ℰ i	i .. isle	<i>ℰ</i>	ℰ s	s .. vision
<i>ℰ</i>	ℰ oi	oi .. oil			
<i>ℰ</i>	ℰ ow	ow .. owl	<i>R</i>	R r	r .. for
<i>U</i>	U u	u .. mule	<i>L</i>	L l	l .. fall
<i>Y</i>	Y y	y .. yea	<i>M</i>	M m	m .. seem
<i>W</i>	W w	w .. way	<i>N</i>	N n	n .. seen
<i>H</i>	H h	h .. hay	<i>ℰ</i>	ℰ ng	ng .. sing



Fig. 1855c: *ibid.*, p.31, 151, 153. Showing samples of the use of the Cincinnati Alphabet (EPA 1855), the first and third example showing the use of the special punctuation marks.

## J E R M A N S I L V E R .

Fu ov sr rederz qr probabli awar hz meni aplikafonz qr nɔ-a-daz mad ov dis yusful kompøzifon. We kel it kompøzifon, eldo de majoriti ov de pepl imajin dat it iz a metal (*sui generis*)—but suq iz not de fakt. It iz kompøzd ov wun pqrt nikel, wun pqrt ov spelter ov zink, and tre pqrts ov koper; but el dez substansez hav tu be pur, and ekspøzd tu a grat het befør da miks amug demselvz. De zink metal, hwiq iz ov a volatil natyur, iz not put in de pot until de ferst tø qr wel yunjtet tageder. De refraktøri natyur ov de nikel,

### GOST STORIZ.

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### GOST STORIZ — A YUMORUS SKEE.

REV. E. STEVENZ, A. M.

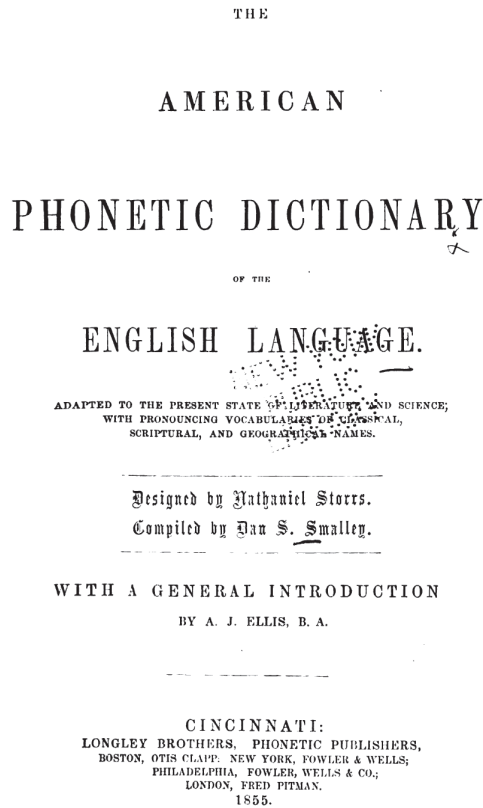
Hapksgivipz diner woz øver, and de kumpani returnip tu de pqlorz, de yugger memberz, bj aksident ør natyural afiniti, gæferd in wun, hwjl de senyørz remand in de ufer. Tø ov de later, høever, søn folød de yug pepl; wun ov kors woz Jonatan Pebodi, høz hqrt had never øtgrøn its yøð; de ufer woz Peleg

“Hwot’s dat yø sà, Mr. Pebodi,” inkwjrð ‘Ant Kezja,’ wif solem emfasis. “Dø yø, a Kristyan man, sà ðar qr nø gøsts. Hava’t j sen wun wif mj øn jz.”

“Hq? hq? Hwot! Janufer wun.” eksklamd Jonatan. “Gøsts must be plenti abst dez rejonz. His must be a veri spirityual vilaj. F wif j kiad kac wun ov ðem; d’ys se, Kezja, j’d jist kari him øl trow de Stats, and tu de øld kuntri, and kum hom wif a fertyun?”

“Wel Mr. Pebodi,” kontinyud ‘Ant Kezja,’ hukip at him øver her spektaklz, most gravli, “it iz nutip tu jøk at, j kan afor yø — gøsts hav bin sen, and j hav sen wun;” and de øld ladi tuk anufer ping ov snuf.

**Fig. 1855d:** The American Phonetic Dictionary of the English Language. Designed by Nathanael Storrs, compiled by Dan S. Smalley. Cincinnati 1855. Showing the title page, p.iii claiming this being the first phonetic dictionary of the English language, and an excerpt from p.xxxi showing EPA 1855 (the Cincinnati alphabet).



P R E F A C E .

In presenting to the world its first Phonetic Dictionary, the Compiler feels confident that the simple, but appropriate dress, with which he has clothed the spoken language, cannot fail to commend itself to the favorable consideration of every friend of human progress. Owing to the inherent defects of our common orthography, lexicographers have been compelled to employ a notation more or less complicated and indefinite, which has made the study of pronunciation, by means of dictionaries, distasteful and unsatisfactory. All diacritic marks are more or less objectionable on account of their obscurity and necessary multiplicity, resulting from the use of different letters marked to represent the same sound.

The object of the present work is to correctly represent, by means of a Phonetic alphabet, that pronunciation of the English language which is supported by the greatest number of competent authorities, and to define and explain the words as they are generally employed by standard writers. The common alphabet being defective, in not having a sufficient number of letters to represent accurately the pronunciation of the language, new ones have been added to make up the deficiency, harmonizing in form and proportion with the old letters. Each letter represents but one sound, consequently its power is always known when it has once been learned, and no doubt or difficulty will be experienced in spelling or pronouncing the words of the English language written in this new orthography.

Much attention has been given to *pronunciation*; and the most reliable authorities have been consulted. The Compiler has received valuable information from the writings of Walker, Webster, Worcester, B. H. Smart, and Alexander Melville Bell, all of whom are well known for their critical knowledge of orthoepy. With respect to words variously pronounced, that pronunciation is placed first which is supported by the greatest number of competent authorities.

An attempt has been made to correctly represent the obscure vowels in unaccented syllables, the quality of which is not indicated in the dictionaries  
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the vowel is short the accent falls upon the following consonant, and they would therefore accent be'p'ig, hap'i. This is an error which may be traced to the inconsistencies of romanian spelling.

43. Order of the Letters in the American Phonetic Alphabet. As it is impossible to enter fully into the subject of phonetics in this introduction, the above may suffice as an explanation of the principles on which the alphabet is constructed. The order of the letters must next be considered. It is obvious that even if the inventors of the alphabet had been at the time in possession of the systematic explanation which has now been given, it would not have been advisable to arrange the letters of the alphabet in the order which a consideration of other languages besides the English has shown to be correct. Hence the alphabet required a thoroughly English arrangement. For this purpose the long vowels were arranged in a single series, commenced with the palatal, proceeding to the guttural, and ending with the labial, thus, e, a, q, o, w, and when the Americans introduced e and a they considered it best to place the first immediately before and the second immediately after a, so that the series became e, e, a, q, o, w,

**American Phonetic Alphabet.**

Each letter has the sound of the *italicised* letter or letters in the illustrative words.

<i>Long Vowels.</i>		<i>Explosives.</i>	
E e as in eel, Name e	P p as in pole, Name pe	B b . . . bowl . . . be	T t . . . toe . . . te
E e . . . earth . . . e	D d . . . doo . . . de	C c . . . cheer . . . ca	J j . . . jeer . . . ja
A a . . . ale . . . a	K k . . . king, can . ka	G g . . . game . . . ga	
A a . . . air . . . a			
A q . . . arm . . . q			
O o . . . all . . . o			
O w . . . oak . . . w			
O w . . . ooze . . . w			
<i>Short Vowels.</i>		<i>Continuants.</i>	
I i . . . ill . . . it	F f . . . fear . . . ef	V v . . . veer . . . ve	H h . . . thigh . . . it
E e . . . ell . . . et	H h . . . thy . . . da	S s . . . seal . . . es	Z z . . . zeal . . . ze
A a . . . am . . . at	S s . . . shall . . . if	Z z . . . vision . . . za	
A a . . . ask . . . at			
O o . . . on . . . ot			
U u . . . up . . . ut			
U w . . . wood . . . ut			
<i>Diphthongs.</i>		<i>Liquids.</i>	
F f . . . ice . . . i	R r . . . rare . . . ur	L l . . . lull . . . el	
O o . . . oil . . . o			
O o . . . oel . . . o			
U u . . . dupe . . . u			
<i>Coalescents.</i>		<i>Nasals.</i>	
Y y . . . yea . . . ya	M m . . . main . . . em	N n . . . none . . . en	W w . . . sing . . . ip
W w . . . way . . . wa			
<i>Breathing.</i>			
H h . . . hay . . . ha			

## FONETIK DIKSONARI

OV 82

## I W G L I S L A W G W B J.

## ABB

**A**, *æz* indefinit qrtikl, plast befór wurdz **A**, beginiug wið *æz* sýnd ov a kónsonant. Befór wurdz beginiug wið *æz* sýnd ov a vsel, it iz ritn *æz*.

ABACIST, Ab'a-sist, *n.* an akéntant.

ABACK, A-bák, *ad.* bak; bakward; behjnd.

ABACOT, Ab'a-kot, *n.* kap ov stat fermerli yuzd in Iuggland.

ABACTOR, A-bák-tor, *n.* [*L.*] wun hæ stels a herd ov katl. [kolum.

ABACUS, Ab'a-kus, *n.* a kntiug tabl; a part ov a

ABAST, A-bást, *ad.* toard *æz* stern ov a sip.

ABAISANCE, A-bá-sans, *n.* obasans.

ABALIKNATE, Ab-úl-yen-at, *v. t.* tu estránj; tu transfér from eni wun.

ABALIENATION, Ab-al-yen-á-son, *n.* *æz* transférug *æz* tjił tu properti. [tu forsák.

ABANDON, A-bán-don, *v. t.* tu giv up; tu kwit;

ABANDONED, A-bán-dond, *p. a.* forsakn; dezerted; veri wiked.

ABANDONER, A-bán-don-er, *n.* wun hæ abándons.

ABANDONING, A-bán-don-ig, *n.* levig er forsakiug.

ABANDONMENT, A-bán-don-ment, *n.* *æz* akt ov forsakiug.

ABANDONER, A-bán-don-é, *n.* wun tu hæm a biug iz abándond.

ABARTICULATION, Ab-ar-tik-yu-lá-son, *n.* a kjnd ov qrtikyulaşon hwiç admits ov manifest mofon.

ABASE, A-bás, *v. t.* tu humbl; deprés; briug lo.

ABASEMENT, A-bás-ment, *n.* *æz* akt ov humblig; lo stat.

ABASH, A-báf, *v. t.* tu mak a sámđ; tu konfnd.

ABASHMENT, A-báf-ment, *n.* jam; konfuzon.

ABATABLE, A-bát-a-bl, *a.* *æt* ms be abated.

ABATE, A-bát, *v. t.* tu lesn; tu diminiş; in lo, tu defét, tu overtró. [diskent.

ABATEMENT, A-bát-ment, *n.* *æz* akt ov abatiug;

ABATER, A-bát-er, *n.* *æz* person er biug *æt* abáts.

ABATIS, Ab'a-tis, *n.* tres kut døn for militari

ABE, Ab, *n.* *æz* yqrn for a wevers werp. [deféns.

ABBA, Ab'a, *n.* a Siriak wurd, hwiç signişis fçder.

ABBACY, Ab'a-si, *n.* *æz* rjts and posejons ov an

ABBATIAL, Ab-á-jal, *a.* relatiug tu an aba. [abot.

ABBE, Ab'a, *n.* an abot; an eklesiastikal tjił wið-*æt* ofis er dçti anekt.

ABBESS, Ab'ee, *n.* *æz* guvernes ov a nuneri.

ABBEY, Ab'i, *n.* *æz* residens ov an abot er munk.

ABBOT, Ab'ot, *n.* *æz* çef ov an abi er konvent.

ABBOTSHIP, Ab'ot-şip, *n.* *æz* stat ov an abot.

ABBRVIATE, A-bré-vi-at, *v. t.* tu fertn; tu abrij.

ABBRVIATION, A-bré-vi-á-son, *n.* akt ov fertniug; kontráktiug.

1

## ABI

ABREVIATOR, A-bré-vi-a-tor, *n.* wun hæ abrijes er redçsez tu a smeler kumpas. [tráktiug.

ABREVIATORY, A-bré-vi-a-tó-ri, *a.* fertniug; kon-

ABREVIATURE, A-bré-vi-a-tur, *n.* abreviaşon; abrijment.

ABDICANT, Ab'di-kant, *a.* ábdikatiug; renşnşip.

ABDICANT, Ab'di-kant, *n.* a person hæ ábdikats.

ABDICATE, Ab'di-kat, *v. t.* tu rezjn; tu renşns; tu giv up; tu deprjv ov rjt.

ABDICATION, Ab-di-ká-son, *n.* *æz* dezertiug ov a publik trust wið *æt* a formal surénder.

ABDICATIVE, Ab'di-ka-tiv, *a.* ábdikatiug.

ABDITIVE, Ab'di-tiv, *a.* haviug *æz* kwoliti ov hjdiug.

ABDITORY, Ab'di-tó-ri, *n.* a plas tu hjd gudş in.

ABDOMEN, Ab-dó-men, *n.* *æz* loer part ov *æz* beli.

ABDOMINAL, Ab-dóm-i-nal, *a.* relatiug tu *æz* abdomen. [fişez.

ABDOMINAL, Ab-dóm-i-nal, *n.* wun ov an erder ov

ABDOMINOUS, Ab-dóm-in-us, *a.* lqrij-belid; abdom-

inal.

ABDUCE, Ab-dúç, *v. t.* tu separat; tu dre from; yuzd in anátomi.

ABDUENT, Ab-dú-sent, *a.* droiug er puliug bak.

ABDUCTION, Ab-dúk-son, *n.* a kariug awá a person bj fors.

ABDUCTOR, Ab-dúk-tor, *n.* a must *æt* drez bak.

ABEERANCE, A-bár-ans, *n.* behavyor.

ABECEDARIAN, E-bé-se-dá-ri-an, *n.* a teger er lerner ov *æz* alfabet.

ABED, A-béd, *ad.* in bed; on *æz* bed.

ABELE, A-bél, *n.* *æz* hwjt poplar.

ABERRANCE, Ab-ér-ans, } *n.* a wonderiug from

ABERRANCY, Ab-ér-an-si, } *æz* rjt wa.

ABERRANT, Ab-ér-ant, *a.* déviatiug from *æz* rjt wa.

ABERRATION, Ab-or-á-son, *n.* *æz* akt ov wonderiug.

ABERRING, Ab-ér-ig, *a.* wonderiug; goiug astrá.

ABET, A-bét, *v. t.* tu enkúraj; tu set on; tu ad.

ABETMENT, A-bét-ment, *n.* *æz* akt ov abétiug.

ABETTER, A-bét-er, } *n.* wun hæ abéts; an akóm-

ABETTOR, A-bét-or, } plis.

ABEYANCE, A-bá-ans, *n.* reverşon; ekspektaşon ov posejon. [æz flok.

AGGREGATION, Ab-gré-gá-son, *n.* a separaşon from

ABHOR, Ab-hór, *v. t.* tu hat biterli; tu dstéet; tu abominat. [hatred.

ABHORRENCE, Ab-hór-ens, *n.* detestaşon; grat

ABHORRENT, Ab-hór-ent, *a.* struk wið abhórens; odius; kóntrari tu; inkonsistent wið.

ABHORRENTLY, Ab-hór-ent-li, *ad.* in an abhórent mader.

ABHORREY, Ab-hér-er, *n.* wun hæ abhérş.

ABIB, E'bib, *n.* *æz* fçrst munt ov *æz* Jujiş yer.

(1)

PRONUNSIÆON  
ov  
JEOGRAFIKAL NEMZ.

Aachen, A'ken.	Adel, A-dél.	Ajaa, A-gán.
Aalborg, Ol'borg.	Aden, A'den, or A'dem.	Ajalon, Aj'a-lon.
Aargau, A'rgu,	Adigo, Ad'i-je, [It.] A'di-ja.	Ajmeer, Aj-mér.
Argovie, Ar-go-vé, [Fr.]	Adirondack, Ad-i-rón-dak.	Akaba, A'kq-bq.
Aarhus, Or'hæs.	Adlerberg, A'dler-berg.	Akerman, A'ker-mqn.
Abaco, A'bq-ko.	Adour, Ad-ór.	Akhaf, A'kqf.
Abakan, A-bq-kqn.	Adowah, A'do-wq, or	Akhissar, Ak-his-ár.
Abancay, A-bqn-kj.	Adova, A'do-vq.	Akshehr, Akohehr, or Aksohe-
Abano, A-bq-no.	Adramiti, A-drq-má-ta.	her, Ak-jár, or Ak-já-her.
Abassia, or Abassia, A-báf-i-a.	Adria, A'dre-q.	Aksoo, Aksou, or Aksu, Ak-só.
Abbeville, Ab'e-vil, [Fr.] A-b-vél.	Adrianople, Ad-re-an-ó-pl.	Alabama, Al-a-bám-a.
Abbetibbie, or Abbetibbe, Ab-	Adriatic, Ad-ri-át-ik.	Alachua, Al-éq-u-a.
e-tib-e.	Egean, E-jé-an.	Aladulia, Al-a-dó-li-a.
Abd-el-Curia, Ab-del-ká-re-q.	Egina, E-ji-na.	Alagoas, A-lq-gó-qs.
Ritn elsó (Kooree, or Kouri.)	Eroo, E'ro, or E'ro-a.	Alais, A-lá.
Aberdeen, Ab-er-dén.	Etna, Et'na.	Alamo, A'lq-ma.
Abergavenny, Ab-er-gá-ne.	Afghanistan, Af-gqn-is-tqn.	Aland, A'land.
Aberistwith, Ab-er-ist-wit.	Afioom, Afioum, or Afium,	Alashehr, or Alaschehr, A-lq-
Abernethy, Ab'er-net-i.	A-fi-óm.	jár, or A-lq-já-her.
Abax, A'beks.	Afragola, A-frq-gó-lq.	Alaska, A-lás-ka.
Abington, Ab'iq-ton.	Africa, A'fri-ka.	Alatamaha, Ol-ta-ma-hó.
Abó, A'bo.	Agably, or Aghably, A-gq-blá.	Alba, A'lba.
Abomey, Ab-ó-má.	Agadir, A-gq-dér.	Al Baab, Al Bqab.
Abookeer, Aboukir, or Abukir,	Agdas, A-g-dqs, or	Albacete, Al-bq-tá-ta.
A-bó-kér.	Aghades, A'gq-des.	Albania, Al-bá-ni-a,
Abootish, Aboutige, or Aboutij,	Agde, A-gd.	Arnaootleek, or Arnaoutlik,
A-bó-tig.	Agen, A-ján.	Ar-nq-ót-isk, [T.]
Ahrantes, A-brqn-tes.	Aghrim, Óg'rim, or Óh'rim.	Albano, Al-bá-ma.
Abrothos, A-bról-yos.	Agincourt, Aj'in-kort, or Aj-	Albans, St., Sant Ól'bens.
Abruzzo Citra, A-brót-so Ó-	in-kort.	Albany, Ól'ban-i.
trq.	Agnone, A-n-yó-na.	Albemarle, Al'be-mqri, (Beg.)
Abruzzo Ultra, A-brót-so Ól'	Agosta, A-gó-tq.	Albemarle, Al-be-mqri, (U. S.)
Absecum, or Absecombe, Ab-	Agra, A'gra.	Albufera, Al-bu-fá-ra.
sé-kum.	Agram, A'grqm.	Albula, A'l'bo-lq. [bé.
Abukir, A-bó-kér. Se (Abco-	Agudilla, A-gwq-dél-yq.	Alby, or Albi, A'l'bi, [Fr.] A-
Abutige, or Abutisch, A-bó-tig.	Agua Nueva, A'gwq Nwá-vq.	Alcala, A-lq-lq.
Se (Abotiah.)	Aguas Calientes, A'gwqs Kq-li-	Alcala de Henares, A-lq-lq da
Abyssinia, Ab-is-in-i-a.	én-tes.	En-q-res.
Acadia, A-ká-di-a.	Aguayo, A-gwí-ó.	Alcamo, A'l'kq-ma.
Acapulco, A-kq-pól-ka.	Agulhas, A-gól-yqs.	Alcaniz, A-lkqn-yéð.
Acaray, A-kq-rj.	Ahanta, A-hán-tq.	Alcaniara, A-lkqn-tq-rq.
Accoomack, Ak'ó-mak.	Ahgrim, A'grim.	Alcarria, Al-ka-ré-a.
Aocra, Ak'ra.	Ahmedabad, A-méd-a-bqd.	Alekmaer, A-lk-mqr. Se (Alk-
Aohmim, or Akhmyim, Ak-mém.	Aichstadt, Ák'stet.	maer.)
Aoqs, Aks.	Aigle, A'gl.	Alcona, Al-kó-na.
Aoqui, or Aqoi, A'kwe.	Aigues Mortes, A-g Mért.	Aleoy, A-ló-e.
Acra, or Aocra, Ak'ra.	Ain, An.	Aldabra, A-l-dq-brq.
Acre, A'ker, or A'ker.	Aintab, Án-tqb.	Aldan, A-l-dqn.
Adair, A-dár.	Aisne, Án.	Alden, Ól'den.
Adalia, A-dq-li-q, or	Aix Eks.	Alderney, Ól'der-ni.
Satalia, Sq-tq-li-q.	Aix-la-Chapelle, Áks-lq-Sq-pél.	Alem-Tejo, or Alen-Tejo, A-
Adana, A-dq-nq.	Ajaccio, A-yqt-qo, or	lep-Tá-jo. [lón-són.
Adda, Ad'q.	Ajazzo, A-yqt-so.	Alencon, A-lén-son, [Fr.] A-

De onli nq notaþon emþléð in ðis list is ðe yqs ov an itálik r fer ðe tril ov ðat leter. Nams ðat, bj jeneral yqs in ðis kuntri, hav þekúm Angliæsd, qv mqrkt wið ðe Iyglj þronunsiæjon ruðer ðan ðe Yþroþeþan.

(741)

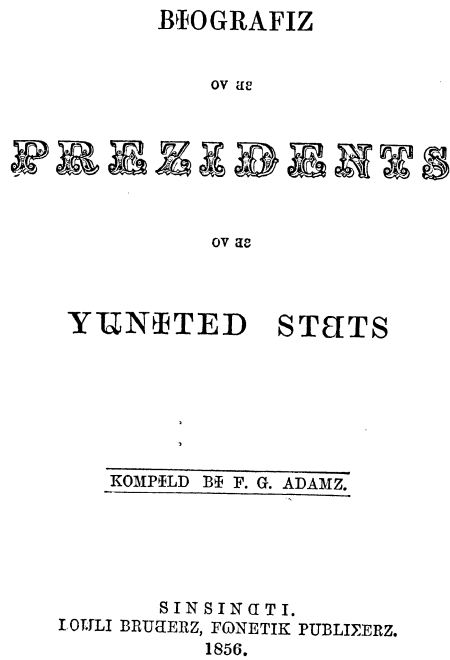
**Fig. 1855g:** Andrew Comstock: A Treatise on Phonology; Philadelphia (PA)1855; p.16  
*The alphabet shown here is one of the competitors of the EPA, published in the same era (promoted by the author in exactly this form at least from 1846 to 1858). While this alphabet is not subject of this proposal, it shows a glyph variant of U+1DF69 LATIN SMALL LETTER PHONOTYPIC A WITH SWASH with a closed top bow like the capital letter, instead of a hook tail.*  
*(An enlarged excerpt from this table, containing that letter, is shown at the lower right.)*

A PHONETIC ALPHABET FOR THE ENGLISH LANGUAGE.								
BY ANDREW COMSTOCK, M. D.								
<p>In this Table there is a letter for each of the 38 elementary sounds of the English Language; and, for the sake of brevity, there are 6 compound letters, each to be used, in particular instances, to represent two elementary sounds. There are also tone-marks, to represent accent, inflection, and intonation.</p>								
THE 38 SIMPLE LETTERS.								
15 Vowels.			14 Subvowels.			9 Aspirates.		
E	e	ale	B	b	bow	P	p	pit
A	a	arm	D	d	day	T	t	tin
Ω	ω	all	G	g	gay	K	k	kite
Α	Ⓐ	an	V	v	vile	F	f	fame
I	i	eve	Δ	δ	then	Θ	θ	thin
Ε	ε	end	Z	z	zone	S	s	sin
I	i	ile	J	j	azure	C	c	shade
I	i	in	L	l	light	H	h	hut
Ω	ω	old	R	r	roll	Q	q	what
Υ	υ	lose	M	m	met	<p>Tone-marks to represent Accent, Inflection, and Intonation.</p>		
O	o	on	N	n	not			
W	w	tube	IJ	ij	song			
U	u	up	W	w	wo			
U	u	full	Y	y	yoke			
Φ	φ	out						
THE 6 COMPOUND LETTERS.								
Α	α	oil	D	d	job	Υ	υ	etch
Θ	θ	air	G	g	tugs	X	x	oaks



(16)

Fig. 1856a: Biographies of the Presidents of the United States (F. G. Adams); Cincinnati (Ohio) 1856; title and p.13 (showing another publication using EPA 1855).



JØRJ WOZINGTON. 13

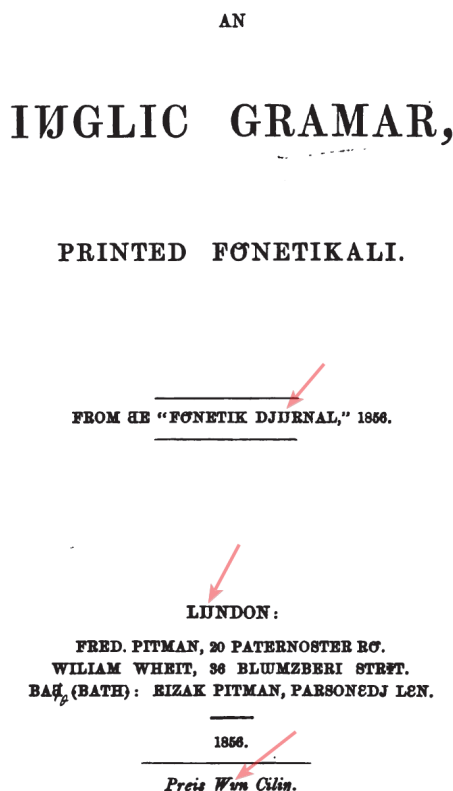
n̄ and ðen yø f̄ind wun. "Trøt, Jøry," sed Øgústin Wøjington, "iz ðe luvliet kwoliti ov yøt. ð wud r̄id fifti mjz, mj sun, tu se ðe b̄ø høz h̄art iz so *onest*, and hiz lips s̄o *pyr*, ðat we ma dep̄end on everi wurd he sez."

"Pa," sed Jøry, veri seriusli, "ðø j ever tel l̄iz."

"No, Jøry, j ðanj God yø ðø not, mj sun; and j rejøs in ðe h̄op ðat yø never wil. At lest yø jal never, from me, hav køz tu be ḡilti ov so samful a ðij. Meni p̄arents, ind̄ed, ðø ðriv ðar ḡildren tu ðis v̄il praktis, bj b̄arbarusli bet̄ij ðem f̄er everi litl f̄elt; hens, on ðe nekst of̄ns, st̄ kumz a fib tu h̄jð it, and tu esk̄ap a tr̄ensij. But az tu m̄js̄elf, Jøry, yø no j hav olwaz told yø, and n̄ tel yø aḡen, ðat hwen̄ever bj aksident, ør f̄er eni rezn, yø ðø enit̄ij r̄on, hwiç must ofn be ðe kas, az yø qr but a litl b̄ø yet, wid̄st muç eks̄periens or nolej, yø must never tel a folshud tu kon̄s̄el it; but kum bravli up, mj sun, lj̄k a *lill man*, and tel me ov it; and, inst̄ed ov bet̄ij yø, Jøry, j wil but ðe mor onor and luv yø f̄er it, mj b̄ø."

ðe sun ov Øgústin Wøjington bek̄am ðe "*Fq̄der ov hiz Kuntri*." (ðot not he hø planted ðe sedz ov gratnes in ðe h̄art ov ðat sun tu s̄ar a litl ov ðe onorz best̄od on him. Sertenli. If ðar iz eni gud in Forð ov Julj orafonz, let a f̄u ov ðem be ḡivn in praz ov ðe fq̄der

Fig. 1856b: An English Grammar, printed phonetically (London 1856); title page and p. 4. Showing EPA 1856. The letter pair U+1DF7E LATIN CAPITAL LETTER REVERSED ENLARGED SMALL U / U+1DF7F LATIN SMALL LETTER REVERSED U) is unique to it.



THE PHONETIC ALPHABET.

The phonetic letters in the first column are pronounced like the italic letters in the words that follow. The last column contains the names of the letters.

CONSONANTS.

*Guttural.*

K k...leek, cane.....ks  
G g...league, gain.....ge  
H h...hay, house.....hæc  
Y y...yet, use (yus)....ye

*Lingual.*

T t...fate, tip.....ti  
D d...fade, dip.....di  
C c...vicious, etch, she...ic  
J j...vision, edge.....ji  
S s...hiss, seal.....es  
Z z...his, seal.....ze  
H ð...wreath, thigh.....ið  
ð ð...wreath, thy.....ði

*Labial.*

P p...rope, post.....pi  
B b...robe, boast.....bi  
F f...safe, fat.....ef  
V v...save, vat.....ve  
W w...wet, quit.....we

LIQUIDS.

L l...fall, light.....el  
R r...more, right.....er  
Ŵ ŵ...sing, long.....ig  
N n...seen, net.....en  
M m...seem, met.....am

VOWELS.

*Guttural.*

A a...am, fast, far.....at  
H h...alma, father.....s  
E e...ell, head, any....et  
ɛ ɛ...ale, fair, bear.....ɛ  
I i...ill, pity, filial....it  
ɪ ɪ...eel, eat, mere.....i

*Labial.*

O o...on, not, nor.....ot  
Ō ō...all, law, ought...ō  
U u...up, son, cur.....ut  
Ū ū...ope, coat, pour...ū  
U u...full, foot.....ut  
W w...do, food, tour....uw

DIPHTHONGS: ei, ai, oi, ou, iu.  
as heard in by, aye, voice, now, new.

Fig. 1856c: The Phonetic Journal (ed. Isaac Pitman, London 1856); excerpt from p.334. This shows a text specimen using EPA 1856, with the character meanings like shown in fig. 1856b. One occurrence of U+1DF7F LATIN SMALL LETTER REVERSED U is marked.

**DJUUVENIL DEPARTMENT.**

**GOLDEN RUL.**

“But it iz sɔ kruel, sɔ cɛmfuɫi kruel, mams, and sɔ wiked, and sɔ gud-for-nɔbiŋ,” kreid litel Hari Lester, pantij wið rɛdj, and stampij hiz fut bitwin ite paconet wurd. “And ei:l never luv him agen,—never,—never.”

“O yes yuu wil, Hari.”

“Nɔ ei cɛnt—ei nɔ ei cɛnt. Ei cal het him ɔl mei: leif, and ei:l gɔ up tu ðe Hɔl and let hiz rabbits out direktli, ðát ei wil.”

“But ei woz veri **U̯**nhapi, mams, and ei am sori. Du, du forgiv mi.”

“Wiliŋli, when yuu kan tel mi ðat from yur hart yuu hav forgiven Arður, and hav truɫi repented ov yur revenjful filiŋz tɔrdz him.”

Agen ðer woz a seilens, for Hari woz an onest boi, hu wud not, iven tu ġen hiz muð-er'z pardon, tel her a fɔlshud, and ci had askt him a hard biŋ, harder ðan eni task or lesɔn hi had ever yet lernd, and wun white it simd imposibel for him tu perform. Had it bin enibiŋ ðat hi had lost, or had eniwun

Fig. 1858a: American Phonetic Journal, vol. 5, no. 7, July 1858: excerpt from p.106. Showing the use of U+2E60 WIGGLY EXCLAMATION MARK in EPA 1855.

ġerl ov siksten sumerz.

Σs woz dijŋ ov Skrofyula. It had fasnd itself on ðs ɔrgan ov Nɔtrifɔn, and ðs woz beip stɔrvd tu ðet ðə her

beloŋij tu ðe sɔlar sistem. Eġ iz tu be ðe tɛrminus ov an ɔr-ljɔ ral-rɔd, run-ij tu el uðer pɔrts ov ðe kreated yunivɛrs and ðe mɔn? Eġ iz lɔrjer ðan

Fig. 1860a: The Phonetic Journal (ed. Isaac Pitman, London 1860); excerpt from p.1. Showing a variant of EPA 1856 (the letter used for [ʌ] is exchanged).

**VOWELS.**

<i>Name.</i>	aʌ, ɛh, ɔo; awe, oh, oo; ut:
<i>Phonotype.</i>	A s, E e, F i; O o, G g, U u; X x:
<i>Script.</i>	A a L e I i O o P o W u X x
<i>Example.</i>	alms, age, air, eat; all, ope, food; son, but
<i>Phonetic form.</i>	sms, edj, er, it; ol, ɔp, fuɫ; sɛn, bɛt

**DIPHTHONGS.**

ai,	i,	oi,	ow.
si,	ei,	oi,	ou.
ai	ei	oi	ou
ay,	by,	boy,	now.
si,	bei,	boi,	nou.

**CONSONANTS.**

ith,	thee,	ing.
H ð,	T t,	W ŋ.
h	t	w
thin,	then,	sing.
ðin,	ðen,	sij.

U, as in unit, unite, duty, value, is a double letter, and is written thus: “yunit, yuneit, diunti, valiu.”

Fig. 1860b/c: *ibid.*, excerpts from p.15 and p.24.  
 Showing sample texts of EPA 1856, one of them in a script font.

inventer hu iz dis ivniġ amŕy ʒs—Mr Eizak Pitman ov Bað—iz az wʒrdi ov de onor and de respekt ov de men ov everi edj, az de inventerz ov de elektʒo-telegrafi and fotografi.

And ʒ hwei. Bikoz hiz art, tu de sem degri az derz, mits dis wont ov humaniti in everi edj. It parteks indad ov de netiur ov beb elektʒo-telegrafi and fotografi, and der iz a konsiderabel amount ov analodji bitwin it and dem, az tu its histori az an invencon, mauer ov its operaconz, and de valu ov its rezults. Az beb elektʒo-telegrafi and fotografi ar not se mʒte niu eidiaz, az an impruvment spon old wʒnz, se iz fonografi an impruvment spon kaligrafi and stenografi hwite wer in ekzistens bifor it.

Fonografi ʒstenz a relecon tu sound veri similar tu dat hwite Fotografi heldz tu form. It iz a korekt reprezentcon ov it, and de proses iz instantenisali efekted bei beb. It dsz not rekweir a log and wirissim aprentiscip tu master eider art, and hwen wʒnz atend, its yusez ar manifold, and ar avelabel bei everibodi. A man meit mek a veri pur portret-penter, hu wud mek a veri gud fotografer; and a veri moderet skolar me biksm a gud fonografer; and fʒrder, der iz no limit—sales it iz self-impezd—tu de ekseesiz ov hiz art.

ilodjikal. Ei woz reversig de order ov der relativ importans, and komperig de greter bei de les. Ei duu not klem for bot.fotografi az mʒte atencon and regard az hav bin bisted spon de Fotografi ov Form, bst ei klem for it mʒr atencon—imejurabli mʒr. Inazmʒte az de meind itself iz siupirior tu mater, bei se mʒte de mʒr iz de fotografi ov meind siupirior tu de fotografi ov mater. Mater iz ʒnsʒstancial, flitig, evanesent. De mʒst solid bloks ar kʒsmblig awe everi moment bei de akcon ov disintegʒstig edjensiz, hwite rob dem ov der ʒstans. Meind iz mʒr ʒstancial dan ʒstans itself, for it never deiz; its botz wil out-liv teim, and rʒn paralel wid eterniti. ʒ Hu kan limit de bot or de diŋker, or estimet de magnitiud and de importans ov its pouer. Impirial Rom woz wʒns de mistres ov de wʒrld. Her gets wer de sentral fosei ov de wʒrld's welb, and pomp, and magnifisens, bst her dominion in de proudest dez ov her empeir, never ekstended tu de limits dat hav bin atend bei de filosofez ov Gris, hwen her Aristotelz and her Pletʒz ruuld de meindz ov men hu demselvz ruuld de wʒrld. Ei fil ei am onli reizig tu de digniti ov mei ʒbdjekt, de az yet ei bst dimli dizern ol its veital importans. Hwen bronz and empeirz hwite nou ruul de wʒrld hav kʒsmbeld intu ruinz, de botz hwite

LITERARI GLÆNIWZ.

*Everi tʒaf hwite wi no' and aknoledj in dis leif, but duu not relidjʒoli obe, iz token awe from us hwen wi enter de spiritiual wʒrld. It iz token awe from us bikʒz wi hav no rial afekcon for it; hav nʒfij in our harts tu reten it; for nʒfij kan aboid wid us but hwot haz enterd intu our leif's bou.*

*A gud man'z frendy me fʒrsek him, or me dei and liv him tu morn. Hiz fortium me fel, or hiz helf deho. Healmni and reprotc me undjʒstli atak hiz karakter. In serkʒmstansez ov dis*

*But hwen dou mek'st dei pʒezens felt,  
 and hwen de sol haf graspt di veit,  
 dou fast de drivri cadʒz melt  
 bʒnid dei worm and livij leit!  
 In di ei feind a nobler berf,  
 a glori o'r de wʒrld ei si!  
 and Paradeis retrʒnz tu eef,  
 and blumy agen for us in di.*

*Dou stroy and livij Sn ov Man,  
 Poed'mer fram de bandy ov sin,  
 'tiz Dou de livij spark drst fan  
 dat sets mei hart on feir widin.*

Fig. 1860d: *ibid.*, excerpt from p.129.  
 Showing an example of the parentheses with middle ring, to resolve an ambiguity.

elongetig der bodiz. Wʒns in de dismis der telz az ymsles apendedjez, and bigin hwot iz kold de proses ov insistig (incysting) dat iz, ov rʒlij demselvz ʒp intu a bol, and sekritig a miukʒs ever its ʒʒfes, hwite in teim develops intu a flei, hoverz ʒver de pond, and iz swolod bei sʒm berd. De flei iz didjested, and de libereted serkeria feindz itself in kʒsmfortabel kworterz; its cel iz broken, and its proses tu matiuriti iz ritct.—Dj. *Lewis* in “*Kornhil Magazin*.”



Fig. 1860e: A triple (twelve gross) Gems of Wisdom (ed. Isaac Pitman); London 1860; title and p.5. Showing the variant of as in fig. 1860a.

A T R I P E L  
 (TWELV GR0S)  
 DJEMZ OV WIZDOM,

ON  
 MORAL AND SPIRITUAL S0BDJEKTS.

SELEKTED FROM 4E BEST 0FORZ.

SECOND EDITION.

L0NDON :  
 FRED. PITMAN, 20 PATERNOSTER RO0, E.C.  
 W. HWEIT, 36 BLUMZBERI STR0T, W.C.  
 BAN (BATH) : RIZAK PITMAN, FONETIK INSTITIUT.  
 1860.

THE PHONETIC ALPHABET.

The phonetic letters in the first column are pronounced like the italic letters in the words that follow. The last column contains the names of the letters.

CONSONANTS.

*Guttural.*  
 K k .. leek..... ke  
 G g .. league... ge  
 H h .. hay..... etq  
 Y y .. yet..... ye

*Lingual.*

T t .. fate ..... ti  
 D d .. fade..... di  
 C c .. vicious... iq  
 J j .. vision... ji  
 S s .. hiss ..... es  
 Z z .. his ..... zi  
 H h .. wreath... ih  
 d d .. wreathe.. di

*Labial.*

P p .. rope..... pi  
 B b .. robe..... bi  
 F f .. safe ..... ef  
 V v .. save..... vi  
 W w .. wet ..... we

LIQUIDS.

W w .. sing..... iq  
 N n .. seen..... en  
 M m .. seem.... am  
 L l .. fall..... el  
 R r .. rare..... ar

VOWELS.

*Guttural.*

A a .. am..... at  
 H h .. alms ..... s  
 E e .. ell ..... et  
 E e .. ale..... e  
 I i .. ill..... it  
 F i .. eel..... i

*Labial.*

O o .. on..... ot  
 O o .. all..... o  
 S s .. up..... st  
 O o .. ope..... o  
 U u .. full..... ut  
 U u .. food..... u

DIPHTHONGS: si, ei, oi, ou.  
 as heard in ay, by, voice, now.

Fig. 1864a: The Reporting Magazine; Vol. 3, 1864: Appendix "Key to the Reporting Magazine", excerpt from p.1: *Showing the use of EPA 1856 in 1864.*

**THE PHONETIC ALPHABET.**

The Phonetic Alphabet consists of 34 letters, namely, the 23 useful letters of the common alphabet (*c, g* and *x* being rejected,) and the 11 new ones below. *J* is used for the French *j* (*zh*), or *g* in *edge*, or *s* in "vision;" hence *dj* represents *J* in *John*, and *dg* in *edge*. *Tç* (*t sh*) represents *ch* in *chess*, and *tch* in *catch*. *Y* and *w* are consonants; *wh* being replaced by *hw*. The vowels *a, e, i, o, u*, have invariably their short sounds, as in *pat, pet, pit, pot, put*. All the other old letters have their usual signification. The italic letters in the words in the third line denote the SOUNDS of the letters.

VOWELS.

Phonotype.	À s, È z, F i — Ó o, O o, U u — X x.
Script.	<i>À a È e F f — Ó o O o U u — X x</i>
Example.	<i>alms, age, air, eat — all, ope, food — son, but.</i>
„	<i>smz, edj, er, it — ol, ep, fud — ssn, bst</i>

DIPHTHONGS.

si, ei, oi, ou.  
*æ ei oi ou*  
*ay, by, boy, now.*  
*si, bei, boi, nou.*

CONSONANTS.

Ç ç, H h, T t, W w.  
*L l K k B b J j*  
*she, thin, then, sing.*  
*çi, bin, den, sij.*

The double letter *u*, as in *unit unite, duty, value*, is written thus: "yunit, yuneit, diuti, valiu." When *ai, oi*, make a *dissyllabic* diphthong, the second letter is marked with a diæresis; thus, *solfaüy, soüy*.

The order of the Phonetic Alphabet, and the names of the letters are:

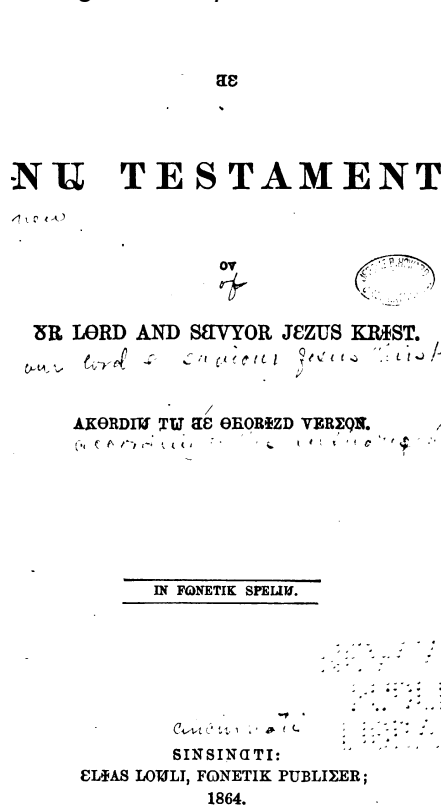
CONSONANTS.

*k, g; h; y: t, d; ç, j; s, z; ð, ð:*  
*kay, gay; aitch; yay: tee, dee; ish, zhee; es, zee; ith, thee:*  
*p, b; f, v; w: ñ, n, m; l, r.*  
*pee, bee; ef, vee; way: ing, en, am; el, ar.*

VOWELS.

*a, s; e, z; i, i: o, o; x, o; u, u.*  
*at, ah; et, eh; it, ee: ot, awe; ut, oh; oot, oo.*

Fig. 1864b: The New Testament, in phonetic spelling; Cincinnati (Ohio) 1864. title; pp. v, viii, 21. Giving an example of the unchanged use of EPA 1855 in Cincinnati for at least 10 years.



PHONETIC ALPHABET OF THE ENGLISH LANGUAGE.

Each letter has the sound of the italicized letter or letters in the illustrative words.

Letters.	Illustrative Words.	Name.	Letters.	Illustrative Words.	Name.
<i>Long Vowels.</i>			<i>Explosives.</i>		
E e	...eel	e	P p	...pale	ps
E e	...earth	φ	B b	...bale	be
El a	...ale	a	T t	...tame	te
A a	...air	q	D d	...dame	de
A q	...arms	q	G g	...gear	ga
O o	...oak	o	J j	...jeer	ja
O o	...ooze	o	K k	...king, came	ka
<i>Short Vowels.</i>			<i>Continuants.</i>		
I i	...ill	it	F f	...fain	ef
E e	...ell	et	V v	...vain	ve
A a	...am	at	H h	...high	ih
O o	...ask	ot	Th	...thy	de
O o	...on	ot	S s	...seal	es
U u	...up	ut	Z z	...zeal	ze
U u	...wood	ut	Sh	...shall	if
<i>Diphthongs.</i>			<i>Liquids.</i>		
Hi	...ice	i	L l	...lull	el
Hi	...oil	o	R r	...rare	qr
Hi	...owl	o	<i>Nasals.</i>		
Hi	...dupe	u	M m	...main	am
<i>Coalescents.</i>			N n	...nine	en
Y y	...yea	ya	W w	...sing	ip
W w	...way	wa	<i>Breathing.</i>		
H h	...hay	ha			

The marks of punctuation are the same as in the old orthography, excepting the following changes and additions: the mark of interrogation ? is placed before the first word in a sentence that indicates a query, ? at the end of a sentence indicates doubt, ! laughter, ! surprise. ; sorrow; the inverted ' signifies the omission of a letter.

Rules of Accent.

1. Words of two syllables are accented on the first.
  2. Words of three or more syllables are accented on the third from the end; Unless the last syllable but one contain a long vowel or diphthong, or the last syllable begin with f, s, or y,—in which case the accent falls on the last syllable but one.
- Exceptions to these rules are marked with the sign ' placed over the vowel to be accented.
- Words wholly printed in capitals, and French words, (which have no regularly accented syllables,) are not thus marked.

viii INTRODUKTORI REMARKS.

As il spæd tu be.	As il is ns.	As il is tu be.
This apyringe of the birthe tonge is by cause of tweye things: oon is forechildren in scole, asense [ because ] children in the usage and maner of alle other nacions, both com- pelled for to leve her owne school, against the usage and maner of all other nations, be [are] compelled for to leve her owne language, and for to kon- strowe her lessouns and her things a Frensche, and haveth siththe that the Normans come first into England. Also gentil men- nes children both ytaunt for to speke Frensche, from the tyme that thei both rokked in her cradel, and kunne the speke, and playe with a childes brooch.— Hyden, who died about 1360.	This appearing of the birth tongue, is because of two things: one is for [ because ] children in school, against the usage and maner of all other nations, be [are] compelled (for) to leave their own language, and (for) to con- strowe their lessons and their things on [ into ] Frensch, and have [done so] since (that) the Normans come [ came ] first into England. Also gentlemen's children be [are] taught (for) to speak French, from the time that they be [are] rocked in their cradle, and can speak, and play with a child's brooch.	His apering ov de heft tu, is bekos ov tu tips: wun is for [bekos] children in skol, agens de yuzel and maner ov el uder na- jons, be [qr] kompeld (for) tu lev dar on lagwej, and (for) tu konstru darlesons and dar tips on [intu] Frenç, and hav [dun so] kum [kam] ferst intu Iy- gland. Also jentlmen's çil- dren be [qr] tet (for) tu for to speke Frenç, and from de tyme that de dar kradi, and kan spek, and pla wid a çilds broeç.

De çanjes in ortografi sins 1360 hav bin nqmerus, and de printij ov de Bjbl has variid wid dem el. His last çan], from romanik tu fonetik spellij, as has bin sen abdv, is not so difikult for de reder tu master as de tranzijon bak tu Higdens tju, and is but a burde komplejion ov de wurk dat has bin gradyuall progresjiv for several senturis, namli, de konsistent and filosofikal representaçion ov spoken lagwej.

3. In regurd tu de pronunçiaçion indikated, we hav endevord tu konform tu Amerikan yuzel as defind bj Webster and Wuster in dar pronunçij dikçionaris. At de tju ov sterioçipij deç pajes, dar is no fonetik dikçionari in print, tu hwig tu refer as a gid so dat de Testament ma agrs wid uder wurks in fonetik spellij; but befur da se de publik juç a fonetik standard wil be komest, and rapidi hurid tru de prez. Ead dar be diskrepansij betwén dis and uder publikaçions i]yud from tr ofia, on de njeç pents ov ortoeçi, dis statment wil eksplan de kez.

De anjent stjil ov pronunçij a sçrten klas ov wurds, hwig is still praktiik bj meni reders from de pulpit, namli, *lived, greeed, praed, laked, bleed*, has so jenerali bin diskontinuyd in de ordinari redij ov de skripturij, dat we felt fulli woranted in printij *lued, greeed, praed, laked, bleed*. But we hav not gon se for as tu modernis de lagwej in de kas ov verbs tçrminatij in (th) - dus we

HE GOSPEL AKÖRDIN TU SAINT MARU.

CHAPTER 1.

1. De buk ov de jeneraçon ov Jezus Krjst, de sun ov David, de sun ov Abraham.

2. Abraham begat Fzak; and Fzak begat Jakob; and Jakob begat Juðas and hiz bredren;

3. And Juðas begat Farez and Zura ov Ramar; and Farez begat Ezrom; and Ezrom begat Fram; and Fram begat Aminadab; and Aminadab begat Naason; and Naason begat Salmon; and Salmon begat Booz ov Rakab; and Booz begat Obed ov Rut; and Obed begat Jese;

4. And Jese begat David de kon; and David de kij begat Solomon ov her [dat had bin de wijf] ov Yurias;

5. And Solomon begat Roboam; and Roboam begat Abja; and Abja begat Ejsa;

6. And Ejsa begat Josafat; and Josafat begat Joram; and Joram begat Ozjas;

7. And Ozjas begat Joatham; and Joatham begat Elkaz; and Elkaz begat Ezekjas;

8. And Ezekjas begat Manasez; and Manasez begat Imon; and Imon begat Josjas;

9. And Josjas begat Jekonjas and hiz bredren, abt de tju da wer karid awa tu Babilon;

10. And after da wer brot tu Babilon, Jekonjas begat Salatiel; and Salatiel begat Zorobabel;

11. And Zorobabel begat Abjud; and Abjud begat Eljakim; and Eljakim begat Elzer;

12. And Elzer begat Sadok; and Sadok begat Elkim; and Elkim begat Eljud;

13. And Eljud begat Eleazar; and Eleazar begat Maðan; and Maðan begat Jakob;

14. And Jakob begat Jozef de huzband ov Mari, ov hom woß born Jezus, ho iz kold Krjst.

15. So el de jeneraçon from Abraham tu David [qr] fortien jeneraçon; and from David until de kariij awa intu Babilon [qr] fortien jeneraçon; and from de kariij awa intu Babilon until Krjst [qr] fortien jeneraçon.

16. ¶ Ns de heft ov Jezus Krjst woz on dis wijz: Hwen az hiz muder Mari woz espözd tu Jo- kiz; and David de kij begat Sol- fnd wid çild ov de Holi Gost.

17. ¶ Ion Jozef her huzband, be- ij a just [man,] and not wiliij tu mak her a publik egzämpl, woz mindet tu put her awa privill.

18. But hwil he wet on deç tipz, behold, de anjel ov de Lord aperd unta him in a drem, saij, Jozef, de sun ov David, fer not tu tak unta de Mari di wijf: for dat hwig iz konsévd in her iz ov de Holi Gost.

19. And je jal brig forð a sun, and de jal kel hiz nam JEZUS: for he jal sav hiz pepl from dar sinz.

20. ¶ Ns el dis woz dun, dat it mijt be fullfid hwig woz spoken ov de Lord bj de profet, saij, Behold, a verjin jal be wid çild, and jal brig forð a sun, and da jal kel hiz nam Emanyual, hwig beij interpreted iz, God wid us. [Mt. 7: 14.]

Fig. 1865a: Specimen of the manuscript of the Yahgan-English dictionary started 1865 by Thomas Bridges (from <https://patlibros.org/yam/ye.php>, page 005a).

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*Szacina.* To refuse, resist, oppose, withstand.  
*Szruk.* adv. used only after verbs. Very exceedingly.  
*Onizina.* A kind of game. To play this game.  
*Ona. Onola.* Foot Indian. Foot Indians.  
*Onisina.* The land of the Foot Indians  
*On asagan.* The Beagle Channel.  
*Onoli. - Satauk* A species of small very light fish.  
*Uja yurpa* jealous. To be jealous, used only of marriage.  
*Ujata.* to be more jealous. Arteries. Blood vessels.  
*Ujela.* To leave off being jealous. Not jealous. To be not jealous.  
*Ujin.* The border, edge, verge, selvage, end, limit, extreme.  
*Ujin.* By, close to.  
*Ua.* A young crab.

**Fig. 1866a:** Specimens of the manuscript of the Yahgan grammar started 1866 and completed 1895 (pp 145–147) by Thomas Bridges (from <https://www.loc.gov/item/unk83030617/>), showing the EPA variant used by Thomas Bridges. The letters marked by red arrows are not subject of this proposal. A separate supplementary proposal for these letters may be expected.

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Yahgan & Oua Alphabet  
as now written & printed, a great  
improvement on the system in which  
I first wrote Yahgan, as any teacher  
may soon know. T. Bridges

Yahgan Alphabet.

a	A	a	A	always sounded as ai in fail
ε	E	ε	E	" " ee " feel
j	J	j	J	" " ie " file.
o	O	o	O	" " oe " foe.
z	Z	z	Z	" " ir " fir.
a	A	a	A	" " a " fat
e	E	e	E	" " e " fed.
i	I	i	I	" " i " fit
o	O	o	O	" " o " hot
u	U	u	U	" " u " nut
u	U	w	W	" " oo " foot
q	Q	q	Q	" " a " father.
o	O	i	O	" " a " fall.
a	A	e	A	" " ai " foil
s	S	r	S	" " a " foul.
u	U	u	U	" " oo " food.

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Yahgan Alphabet Cont<sup>d</sup>  
Consonants (so called.)

p	P	p	P	always sounded as p. in pin
b	B	b	B	" " b. " bin
c	C	c	C	" " c. " can.
g	G	g	G	" " g. " gun.
t	T	t	T	" " t. " tin
d	D	d	D	" " d. " den.
f	F	f	F	" " f. " fin
v	V	v	V	" " v. " vin.
ch	Ch	ch	Ch	" " ch. " chin.
j	J	j	J	" " j. " jam.
s	S	s	S	" " s. " sand.
z	Z	z	Z	" " z. " zone.
sh	Sh	sh	Sh	" " sh. " she.
s	S	s	S	" " s. " vision.
th	Th	th	Th	" " th. " thin.
th	Th	th	Th	" " th. " then
n	N	n	N	" " n. " nun
ng	Ng	ng	Ng	" " ng. " sing
n	N	n	N	" " n. " atuna.
m	M	m	M	" " m. " man

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Alphabet continued.  
Consonants.

l	L	l	L	always sounded as l. " lily.
l	L	l	L	" " l. " lily.
r	R	r	R	" " r. " ram.
r	R	r	R	" " r. " piliz.
k	K	k	K	" " k. " gm. ick.

**Fig. 1868a:** The Trial of William Rodger (Isaac Pitman; London 1868); p. vi and p.3. Showing the EPA 1868, which reintroduces single letters for some diphthongs and consonant clusters.

The encircled letter introduced here (at this time unified with U+0244 LATIN CAPITAL LETTER U BAR) is in fact a TURNED ROUNDTOP A (see the proposed U+1DF6A LATIN CAPITAL LETTER PHONOTYPIC ROUNDTOP A).

Therefore, a unification with U+0244 LATIN CAPITAL LETTER U BAR was considered inappropriate in an earlier version of this document, as this letter has a protruding bar. The difference is comparable to: U+019F LATIN CAPITAL LETTER O WITH MIDDLE TILDE (which, as the reference glyph in the Standard shows, is in fact an O with non-protruding bar; this letter is common in EPA), vs. U+A74A LATIN CAPITAL LETTER O WITH LONG STROKE OVERLAY, showing a protruding bar.

### THE PHONETIC ALPHABET.

The phonetic letters in the first column are pronounced like the italic letters in the words that follow. The last column contains the names of the letters.

CONSONANTS.		<i>Liquids.</i>
<i>Mutes.</i>		L l ...fall, light.....el
P p...rope, post.....pi		R r...more, right...ar
B b...robe, boast.....bi		<i>Coalescents.</i>
T t...fate, tip.....ti		W w...wet, quit.....we
D d...fade, dip.....di		Y y...yet, young.....ye
Ç ç...cheap, fetch.....çç		<i>Aspirate.</i>
J j...jump, bridge.....je		H h...hay, house.....eg
K k...leek, cane.....ke		<b>VOWELS.</b>
G g...league, gain.....ge		<i>Guttural.</i>
<i>Continuants.</i>		A a...am, fast, far...at
F f...safe, fat.....ef		ʌ s...alms, father....s
V v...save, vat.....vi		E e...ell, any, her...et
ʃ f...wreath, thigh....iʃ		ɛ e...ale, fair, bear...e
θ θ...wreathe, thy....θi		I i...ill, pity, filial..it
S s...hiss, seal.....es		ɪ i...eel, eat, mere...i
Z z...his, zeal.....zi		<i>Labial.</i>
ʒ ʒ...vision,pleasure...ʒi		O o...on, not, nor...ot
<i>Nasals.</i>		ʊ u...all,law, ought..u
M m...seem, met.....em		Ⓢ v...up, son, cur...vt
N n...seen, net.....en		σ σ...ope, coat,pour..σ
ŋ ŋ...sing, long.....iŋ		U u...full, foot.....ut
		W w...do, food, tour..uw
<b>DIPHTHONGS:</b> ʃ i, ʒ r, ʊ u.		
as heard in by, now, new.		

"William Rodger (Rodger); ker ov Mesierz Tinli (Tinley) and Spnz, 7 Water strit, Liverpml," woz dujli enterd in de *Phonotipik Journal* for Februari, 1848, pej 72. Hi enterd de servis ov dis ferm in 1844, at de ej ov fiftin.

Wi hav nør rekord ov him durig 1849, hwen hi woz droig nir de ekspirejon ov hiz fiv yirz' aprentisjip; bot durig dis yir it apirz dat hi formd de dezjn ov bikvminj a travelij profesjnal fonografik lekturør and tiger. Hi kometst in de tsnz ov Edinbørø and Dalkit (Dalketh). ʒr ferst konsjment ov fonografik instrøkjon buks for hiz pupilz, woz med tu him in Februari, 1850, and forwarded tu Edinbørø. Hi woz svpljð wid instrøkjon buks for tú yirz and a haf: de aksnt had den inkrist tu P 67. Az wi kud get nør remitansez, bot onli promisez tu pe, de aksnt woz klezd in Julij, 1852. Bot bisjdz promisez, hi sent kopiz ov sòm tjitel didz ov properti hwiç wud sun fol intu hiz pozejon, in order tu als ʒr firz dat wi wer inkvriç a bad det. Diz peperz wer mir fabrikejonz, az wi sfterwardz lernd, on bikvminj akwented wid hiz famili, hu ar ol respektabel and wordi pipel.

Hi kontinud tu lektur and tigç Fonografi in Edinbørø and Dalkit for mør dan a yir. An entri in hiz aksnt respektij a parsel ov instrøkjon buks sent 26 Julij, 1851. "tu remen at de stefon (Edinbørø) til kold for," naturali eksjited nør svspijon, it biij a komvn okprens. Wi hav in dis prezent yir lernd de rizon for dis prekojon tu prevent hiz adres from biij non.

Sodenli ʒr talented and svksesful lekturør adrest vs from Berik-on-Twid (Berwick-on-Tweed), and eksplend de koz ov hiz krosij de border—ov kers hi did not intimet dat der woz eniçij ov de karakter ov a "fljt" in it—bj seij dat hi kud perfekt hiz Edinbørø and Dalkit pupilz ʒru de post, hwjl hi rezd and tot frej klasez in Berik;—a veri ekselent arenjment wi tot.

Durij de foleij tri yirz hi wørkt hiz we sst ʒru de tsnz ov Nordumberland and Dørham, lekturij on Fonografi, and tigçij de art in Anik (Alnwick), Morpeç, Nord

Fig. 1871a: The Other Life (William Holcombe); London 1871; p.2 and p.8.

Showing the 1871 form of EPA 1868.

Compared with the original EPA 1868, one character is dropped, and for one character another meaning is assigned. (As all case mappings and the shapes of all retained letters are unchanged, this version here is subsumed under EPA 1868).

## THE PHONETIC ALPHABET.

The phonetic letters in the first column are pronounced like the italic letters in the words that follow. The last column contains the names of the letters.

CONSONANTS.		Liquids.	
<i>Mutes.</i>		L l... <i>fall, light</i> .....el	
P p... <i>rope, post</i> .....pi		R r... <i>more, right</i> .....ar	
B b... <i>robe, boast</i> .....bi		<i>Coalescents.</i>	
T t... <i>fate, tip</i> .....ti		W w... <i>wet, quit</i> .....we	
D d... <i>fade, dip</i> .....di		Y y... <i>yet, young</i> .....ye	
Ɔ ɔ... <i>cheap, fetch</i> .....ɔe		<i>Aspirate.</i>	
J j... <i>jump, bridge</i> .....je		H h... <i>hay, house</i> .....eg	
K k... <i>leek, cane</i> .....ke		VOWELS.	
G g... <i>league, gain</i> .....ge		<i>Guttural.</i>	
<i>Continuants.</i>		A a... <i>am, fast, far</i> .....at	
F f... <i>safe, fat</i> .....ef		ʌ s... <i>alms, father</i> .....s	
V v... <i>save, vat</i> .....vi		E e... <i>ell, head, any</i> .....et	
H ʃ... <i>wreath, thigh</i> .....iʃ		ɛ z... <i>ale, air, bear</i> .....s	
ʌ ɔ... <i>wreath, thy</i> .....di		I i... <i>ill, pity, filial</i> .....it	
S s... <i>hiss, seal</i> .....es		ʌ i... <i>eel, eat, mere</i> .....i	
Z z... <i>his, zeal</i> .....zi		<i>Labial.</i>	
Σ f... <i>vicious, she</i> .....if		O o... <i>on, not, nor</i> .....ot	
Ʒ z... <i>vision, pleasure</i> .....zi		Ō ō... <i>all, law, ought</i> .....ō	
<i>Nasals.</i>		ʒ z... <i>up, son, cur</i> .....st	
M m... <i>seem, met</i> .....em		Ɔ σ... <i>ope, coat, pour</i> .....σ	
N n... <i>seen, net</i> .....en		U u... <i>full, foot</i> .....ut	
W ɥ... <i>sing, long</i> .....iɥ		U u... <i>do, food, tour</i> .....u	
DIPHTHONGS: F j, U u, OU ou, OI oi.			
as heard in by, now, now, boy.			

8

Ɔe ʒder Lijf.

nomena ekzist in Ɔe ʒder wɔrld, i duu not nɔ, nor iz it esensal Ɔat i ʒud inkwɔr.”

. And sɔ men pas from a temporal tu an eternal stɛt ov biɔ in a strenj apaʒi respektɔ ʒbjeɔts ov suprim valɔ, az ignorant ov Ɔe fɔtɔr Ɔat awɛts Ɔem az Ɔe ʒnborn beb iz ov Ɔe wɔrld intu whiɔ hi wil bi ʒʒerd.

Iz Ɔis riɔt? Iz it nesəsari? Iz it inevitabel?

Ɔe skeptikal filosofɔr afɛrmz Ɔat Ɔer ar pozitiv limiteɔnz tu hɔman Ɔɔt; Ɔat nɔr posibel sɔntifik development or reserɔ kan ever lid ʒs tu a nolej ov Ɔe sɔl and its destiniɔ; Ɔat Ɔe ekzistens ov a spirital wɔrld iz a mir hipɔtesis, and ol Ɔioloji Ɔe of-sprɔɔ ov drimi abstrakɔn and iɔdel spekɔleɔn.

Ɔe Kristian konsidz Ɔe ʒniɔtnes and fibelnes ov Ɔe hɔman ʒnderstandiɔ, and korektili inferz from it Ɔe nesəsiti ov reveleɔn. Hi akseptɔ Ɔe Wɔrd ov God az Ɔe reveleɔn ov a moral lɔ. Afurd ov a blessed immortaliti, hi asks for nɔr speɔjal ʒnfɔldiɔ ov Ɔe liɔ tu kɔm. Indid hi perswɛdz himself Ɔat God haz intenɔionali and wiɔli kept ʒs in ignorans ov Ɔe lɔz and fenomen a ov Ɔe spirital wɔrld: and Ɔat it iz best for ʒs tu nɔr litel and Ɔɔɔk litel ov whɔt simz tu bi konsild and forbiɔen ground.

Iz not Ɔis a hesti konkluzon, an ʒnfounded asɔm-

**Fig. 1873a:** The Future of the English Language: An Argument for a Spelling Reform; William E. A. Axon, London 1874 (reprinted from the "Quarterly Journal of Science" for July 1873); p.12/13.  
Showing the 1871 subset of EPA 1868 in different fonts and styles.

## A VIEW OF THE PHONETIC ALPHABET, IN VARIOUS STYLES OF WRITING AND PRINTING.

CONSONANTS.							VOWELS.						
Examples	Roman.	Old English.	Italic.	Script.	Short-hand.	Name.	Examples	Roman.	Old English.	Italic.	Script.	Short-hand.	Name.
peep	P p	Ꝁ Ꝁ	P p	Ꝁ Ꝁ	Ꝁ Ꝁ	pee	pat	A a	Ꝁ Ꝁ	A a	Ꝁ Ꝁ	Ꝁ Ꝁ	at
bib	B b	Ꝁ Ꝁ	B b	Ꝁ Ꝁ	Ꝁ Ꝁ	bee	alms	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	ah
tight	T t	Ꝁ Ꝁ	T t	Ꝁ Ꝁ	Ꝁ Ꝁ	tee	pet	E e	Ꝁ Ꝁ	E e	Ꝁ Ꝁ	Ꝁ Ꝁ	et
deed	D d	Ꝁ Ꝁ	D d	Ꝁ Ꝁ	Ꝁ Ꝁ	dee	age	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	eh
church	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	chay	pit	I i	Ꝁ Ꝁ	I i	Ꝁ Ꝁ	Ꝁ Ꝁ	it
judge	J j	Ꝁ Ꝁ	J j	Ꝁ Ꝁ	Ꝁ Ꝁ	jay	eat	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	ee
cake	K k	Ꝁ Ꝁ	K k	Ꝁ Ꝁ	Ꝁ Ꝁ	kay	pot	O o	Ꝁ Ꝁ	O o	Ꝁ Ꝁ	Ꝁ Ꝁ	ot
gig	G g	Ꝁ Ꝁ	G g	Ꝁ Ꝁ	Ꝁ Ꝁ	gay	all	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	aw
faith	F f	Ꝁ Ꝁ	F f	Ꝁ Ꝁ	Ꝁ Ꝁ	ef	but	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	ut
batn	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	ith	put	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ
bathe	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	thee	ooze	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	oo
sauce	S s	Ꝁ Ꝁ	S s	Ꝁ Ꝁ	Ꝁ Ꝁ	ess	DIPHTHONGS.						
size	Z z	Ꝁ Ꝁ	Z z	Ꝁ Ꝁ	Ꝁ Ꝁ	zee	my	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	eye
ship	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	ish	new	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	you
azure	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	zhee	<p>The diphthongs in "ay (yes), boy, boil, now, noun," are written by the single letters that represent their elements, thus:</p> <p style="text-align: center;">ai Ꝁ Ꝁ   oi Ꝁ Ꝁ   ou Ꝁ Ꝁ</p> <p>The Phonetic Alphabet consists of 38 letters, namely, the 23 useful letters of the common alphabet (c, q, and x being rejected,) and 15 new ones. The vowels a, e, i, o, u have invariably their short sounds, as in pat, pet, pit, pot, put. All the other old letters have their usual signification.</p>						
maim	M m	Ꝁ Ꝁ	M m	Ꝁ Ꝁ	Ꝁ Ꝁ	em	SPECIMEN OF PHONETIC PRINTING.						
noon	N n	Ꝁ Ꝁ	N n	Ꝁ Ꝁ	Ꝁ Ꝁ	en	<p>Bj de Fonetik Alfabet eni person, old or ysp, me bi tot tu rid, bot in fonetik and in ordinari buks, in tri mndz,—ai, ofen in twenti ourz' instrskjon,—a task whiq iz rerli akomplift in tri yirz ov toil bj de old alfabet. What fsder or tiger wil not hel dis gret buun tu edukejon?—dis pouerful majn for de difuzon ov nolej!</p>						
sing	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	Ꝁ Ꝁ	ing							
lull	L l	Ꝁ Ꝁ	L l	Ꝁ Ꝁ	Ꝁ Ꝁ	el							
roar	R r	Ꝁ Ꝁ	R r	Ꝁ Ꝁ	Ꝁ Ꝁ	ar							
way	W w	Ꝁ Ꝁ	W w	Ꝁ Ꝁ	Ꝁ Ꝁ	way							
yea	Y y	Ꝁ Ꝁ	Y y	Ꝁ Ꝁ	Ꝁ Ꝁ	yea							
hay	H h	Ꝁ Ꝁ	H h	Ꝁ Ꝁ	Ꝁ Ꝁ	aitch							



**Fig. 1880a:** Das Buch der Schrift, enthaltend die Schriftzeichen und Alphabete aller Zeiten und aller Völker des Erdkreises (Carl Faulmann, Wien 1880; reprint Nördlingen 1985; ISBN 392156851X); p.240. *Showing the 1871 subset of EPA 1868.*

I. PITMAN'S ENGLISCHE PHONOGRAPHIE.

Vokale.

Antiqua	Cursiv	Schreib-schrift	Steno-graphie	Antiqua	Cursiv	Schreib-schrift	Steno-graphie	Antiqua	Steno-graphie	Antiqua	Steno-graphie
Ā ā	A a	ℒ a	·	A a	A a	ℒ a	·	i, ay	ʹ	woh	˘
Ē ē	E e	ℒ e	·	E e	E e	ℒ e	·	oi, oy	ʹ	woo	˘
Ī ī	I i	ℒ i	·	I i	I i	ℒ i	·	ow	^	yah	˘
Ō ō	O o	ℒ o	·	O o	O o	ℒ o	·	wah	ʹ	yeh	˘
Ū ū	U u	ℒ u	·	U u	U u	ℒ u	·	weh	ʹ	yee	˘
Ŵ ŵ	W w	ℒ w	·	W w	W w	ℒ w	·	wee	ʹ	yaw	˘
Ŷ ŷ	Y y	ℒ y	·	Y y	Y y	ℒ y	·	waw	ʹ	yoo	˘

Konsonanten.

Antiqua	Cursiv	Schreib-schrift	Steno-graphie	Antiqua	Cursiv	Schreib-schrift	Steno-graphie	Antiqua	Cursiv	Schreib-schrift	Steno-graphie
P p	P p	ℒ p	∖	F f	F f	ℒ f	∖	M m	M m	ℒ m	(
B b	B b	ℒ b	∖	V v	V v	ℒ v	∖	N n	N n	ℒ n	(
T t	T t	ℒ t		H h	H h	ℒ h	(	Ŵ ŵ	Ŵ ŵ	ℒ ŵ	∖
D d	D d	ℒ d		Ā ā	Ā ā	ℒ ā	(	L l	L l	ℒ l	∖
C c	C c	ℒ c	/	S s	S s	ℒ s	)o	R r	R r	ℒ r	∖
J j	J j	ℒ j	/	Z z	Z z	ℒ z	)o	W w	W w	ℒ w	∖
K k	K k	ℒ k	—	Σ σ	Σ σ	ℒ σ	)	Y y	Y y	ℒ y	∖
G g	G g	ℒ g	—	Ξ ξ	Ξ ξ	ℒ ξ	)	H h	H h	ℒ h	∖

Nach dem Standard-Alphabet bedeuten obige Zeichen: ā, ē, ī, ō, ū, ei, ū, ě, ŷ, ō, ŷ, ū, yu, p, b, t, d, tš, dž, k, g, f, v, h, ō, s, z, š, ž, m, n, ŋ, l, r, w, y, h.



**Fig. 1880b:** On Spelling (M. Müller, London 1880); p.46:  
Showing an example using the 1871 subset of EPA 1868. The text claims that Isaac Pitman's "Phonetic Journal" is distributed by 12,400 copies in 1880.

If ei hav spöken stroglî in svpört ov Mr Pitman'z sistem, it iz not beköz on ol points ei konsider it siu-pprior tu de sistemz prepar'd bei vder reformerz, hq ar deli inkrişij in nşumber; bst çifî beköz it haz bîn tested sş larjli, and haz stud de test wel. Mr Pitman'z *Fönetik Jsruol* haz nou [1880] bîn psblift terti-et yjrz, and if it iz nen dat it iz psblift wjkli in 12,400 kopiz, jç kopi reprezentij at lşst for or feiv rjderz, it me not sşm sş veri fşlşf, after ol, if wj imajin dat der iz sşm veital pouer in dat insignifikant jerm.

**Fig. 1881a:** The Gospel of St. Luke, translated into the Yahgan language (London 1881, printed for The British and Foreign Bible Society), part of p. 69. The arrows mark one of the letters added to the EPA for the Yahgan orthography, which is not in the scope of this proposal but might be subject of a supplementary proposal.

S. Luç, çaptş 13. 69

5 ş sananima tusieu; san tula monnqinu eucan san lamulqcu.

6 ¶ şançi parabl ácun cumuruda, 'ua cutupusteeq-guda fig ūrur ciçin vinşd, cutupj cumánatanacuda amjim, cunjın bq̄v tecida.  

7 cutucutqnada ciçin vinşd mşstecuūnçi, mutan ş ámuni tstanacuda amjim şançi fig ūratun, cunjuiçik ş teci èca; sa tēiktupəanəa, ūla ā uuffimunicunna.

8 culacutqnada cunjima, 'Lerd ā upuřmuni şançi ş ácun, cutupj ágřamagqmatea, átumşi - ūřtağua řq̄mara.

9 tul' isşean' şma, tul' issunnaca sa tēiktupəanəa.

10 sabař dq̄ra cuçeq̄gimutuda sinagogun.

Fig. 1888a: The Phonetic Journal, vol. 47 (London 1888); excerpt from p.1. Showing an again reduced version of EPA 1868 (however with no new case pairings; thus this stage can still be subsumed under EPA 1868).

### THE PHONETIC ALPHABET.

The Phonetic Alphabet consists of 36 letters, namely, the 23 useful letters of the common alphabet (*c, q, and x* being rejected,) and the 13 new ones below. The vowels *a, e, i, o, u* have invariably their short sounds, as in *pat, pet, pit, pot, put*. All the other old letters have their usual signification. The italic letters in the words in the fourth line denote the sounds of the letters.

VOWELS.								CONSONANTS.						
Α α,	Ε ε,	(E e)	Η η:	Ω ω,	Ο ο,	Υ υ:	Ϝ ϝ.	Ϟ ϟ,	Η η,	Α α,	Σ ς,	Ξ ξ,	Ψ ψ.	
Α α,	Ε ε,	(E e)	Η η:	Ω ω,	Ο ο,	Υ υ:	Ϝ ϝ.	Ϟ ϟ,	Η θ,	Α α,	Σ ς,	Ξ ξ,	Ψ ψ.	
<i>Α α</i>	<i>Ε ε</i>	<i>(E e)</i>	<i>Η η</i>	<i>Ω ω</i>	<i>Ο ο</i>	<i>Υ υ</i>	<i>Ϝ ϝ</i>	<i>Ϟ ϟ</i>	<i>Η θ</i>	<i>Α α</i>	<i>Σ ς</i>	<i>Ξ ξ</i>	<i>Ψ ψ</i>	
alms,	age, air,	pet,	eat:	all,	ope,	food:	son, but.	chair,	thin,	then,	shoe,	vision,	sing.	
smz,	εj, εr,	pet,	jt:	ol,	op,	fud:	ssn, bst.	qer,	tin,	den,	fu,	vizon,	sin.	

The order of the Phonetic Alphabet, and the names of the letters are,

CONSONANTS:—p, b; t, d; g, j; k, g: f, v; t, d; s, z; s, z: m, n, η: l, r: w, y: h.  
*pee, bee; tee, dee; chay, jay; kay, gay: ef, vee; ith, thee; es, zee; ish, zhee: em, en, ing: el, ar: way, yay: aitch.*

VOWELS:—a, ε; e, ε; i, i: o, ω; ϝ, σ; u, υ.  
*at, ah; et, eh; it, ee: ot, awe; ut, oh; øt, oo.*      DIPHTHONGS:—ei, iu, ou, ai, oi.  
 as in *by, new, now, ay, boy.*

Fig. 1888b/c: *ibid.*, enlarged parts from the same excerpt (to show the exact letterforms).

Α α,	Ε ε,	(E e)	Η η:	Ω ω,	Ο ο,	Υ υ
Α α,	Ε ε,	(E e)	Η η:	Ω ω,	Ο ο,	Υ υ
<i>Α α</i>	<i>Ε ε</i>	<i>(E e)</i>	<i>Η η</i>	<i>Ω ω</i>	<i>Ο ο</i>	<i>Υ υ</i>
alms,	age, air,	pet,	eat:	all,	ope,	food:
smz,	εj, εr,	pet,	jt:	ol,	op,	fud:

#### CONSONANTS.

Ϝ ϝ.	Ϟ ϟ,	Η η,	Α α,	Σ ς,	Ξ ξ,	Ψ ψ.
Ϝ ϝ.	Ϟ ϟ,	Η θ,	Α α,	Σ ς,	Ξ ξ,	Ψ ψ.
Ϝ ϝ.	Ϟ ϟ	Η θ	Α α	Σ ς	Ξ ξ	Ψ ψ.
son, but.	chair,	thin,	then,	shoe,	vision,	sing.
ssn, bst.	qer,	tin,	den,	fu,	vizon,	sin.

**Fig. 1894a:** Introduction of Thomas Bridges' contribution "A few Notes on the Structure of Yahgan", published in "The Journal of the Anthropological Institute of Great Britain and Ireland", vol. XXIII, London 1894, pp. 53 ff, showing the letters used for his orthography of Yahgan, including four case pairs which are not proposed in this document. They are the curled S-like letter used for "er in herd" and L//N/n/R/r with a left ring. These might be subject of a supplementary proposal.

## *A few NOTES on the STRUCTURE of YAHGAN.*

BY T. BRIDGES.

### *Alphabetic Key.*

A a, a in <i>haze</i> .	E e, e in <i>men</i> .	E ε, ea in <i>each</i> .	I i, i in <i>ill</i> .
A a, a in <i>flask</i> .	A a, a in <i>at</i> .	Θ θ, a in <i>all</i> .	O o, o in <i>ox</i> .
U u, oo in <i>food</i> .	U u, oo in <i>foot</i> .	O σ, oi in <i>oil</i> .	ϙ ϙ, i in <i>isle</i> .
O o, oe in <i>hoe</i> .	U u, u in <i>us</i> .	ϙ ϙ, ou in <i>our</i> .	S s, er in <i>herd</i> .

[*N.B.*—This last vowel is written S s, and is only used in foreign words in translations or otherwise introduced, and is sounded as *ear* in *earth*. Its printed form might be represented by S̄ as a capital and s̄ as a small letter.]

ALL the consonants of English, save *x* and *q*, are in use, and have their *proper* sounds *only*; thus, *c* is hard like *k*, *g* as in 'lag;' *s* is always sharp. Also, the combinations of letters used in English are not used in Yahgan, but for these we have separate letters; thus, C c is *ch* in 'chap,' S̄ s̄ is *sh* in 'she,' T t is *th* in 'thin' and B b t̄ *th* in 'the,' K k is the *ch* of the Germans, L l the *ll* of the Welsh, R r is an aspirated and trilled *r*, N n is an aspirated *n* (almost *kn*), W w is *ng* in 'sing,' Σ ζ is *s* in 'pleasure,' or the *j* of French; whilst Z z is the common *z*. Three marks, written over the vowels only, (and their sounds *always* precede them) are: ' = *h*, ` = *y*, ~ = *w*. These sometimes unite, as: " = *hw*, and ^ = *hy*. Samples in English words: ϙ̄, worth; ðz, years; û, ewe or you or yew; Ũ, Hugh, or hew or hue; ú, who; á, hay; ā, way or weigh; à, yea; é̄s, hair or hare; ēs, ware or wear, é̄s, where; uz, ooze; ûz, yews or use; úz, whose; ót, hot; ôf, wash; ôç, watch; ót, what.

**Fig. 1909a:**

\*markkø̄s erutiya suviḑ̄sam

(Gospel of Matthew) in Romanized Malayalam (1909), back cover, showing:

U+1DF6B LATIN SMALL LETTER PHONOTYPIC ROUNDTOP A

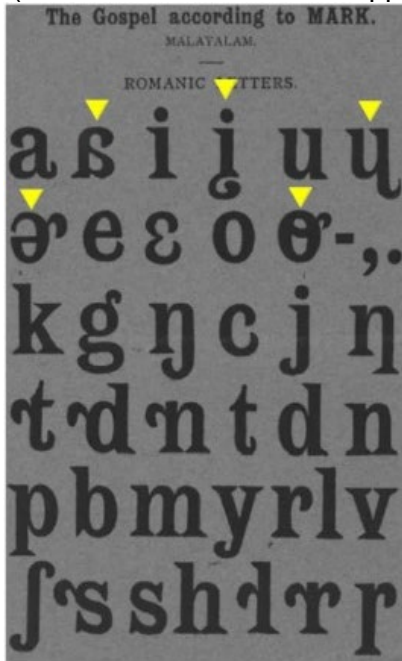
U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI

U+1DF73 LATIN SMALL LETTER O WITH CURL

U+1DF7B LATIN SMALL LETTER U WITH HOOK TAIL

(The LATIN SMALL LETTER SCHWA WITH RIGHT HOOK is intended to be a subject of a different proposal.)

(Thanks to Kirk Miller for supplying this figure.)

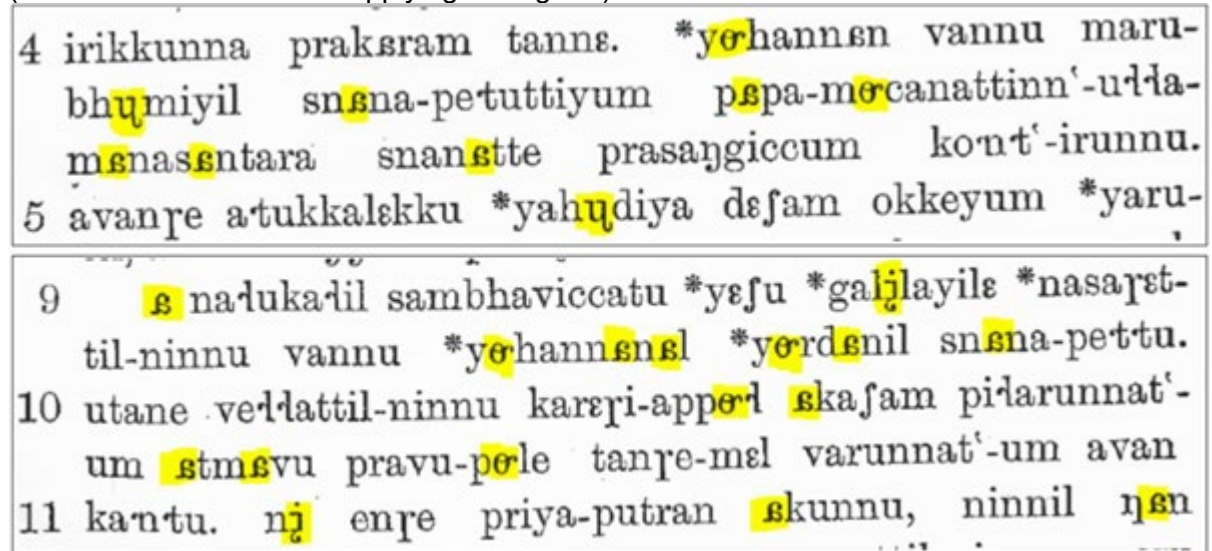


**Fig. 1909b:**

\*markkoṣ erutiya suviṣṣam

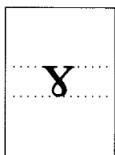
(Gospel of Matthew) in Romanized Malayalam (1909), p. 1, showing examples of the letter listed in fig. 1909a. (The asterisks mark proper names.)

(Thanks to Kirk Miller for supplying this figure.)



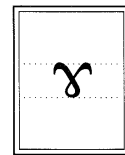
**Fig. 1996a:** Pullum, Geoffrey K., and Ladusaw, William A.: *Phonetic Symbol Guide* (second edition). Chicago and London 1996, ISBN 0-226-68536-5, p. 69 and 71.

The left picture shows the “Baby gamma” as a phonetic symbol (p. 69), while the right one shows the “ram’s horns” (U+0264), which today is the preferred character to be used in phonetics.



Baby Gamma

RAM’S HORNS



*IPA Usage:* Not currently used (superseded by Ram’s Horns), but encountered in pre-1989 IPA transcriptions for Cardinal 15, a close mid back unrounded vowel. *American Usage:* When used, denotes an upper mid back rounded vowel. *Comments:* This character was well established in earlier IPA usage (see *Principles* (p. 6)), but it has often

IPA USAGE

Cardinal Vowel No. 15: close mid back unrounded. The secondary cardinal vowel corresponding to Cardinal 7, [o].

AMERICAN USAGE

When used, same as IPA.

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**Fig. 1996b:** Schmitter, Peter (ed.): *Geschichte der Sprachtheorie*, Vol. 5: *Sprachtheorien der Neuzeit II*. Tübingen 1996, ISBN 3-8233-5011-0, p. 315.  
*Showing use of EPA in referring to a work originally published in EPA.*

**OED**

1989            **The Oxford English Dictionary**, 2nd ed., Vol. XI: **Ow-Poisant**. Oxford: Oxford Univ. Press.

**Origin**

1848            **Orijin and ʊs ɔv ðɛ fənetik alfabet** [Origin and use of the phonetic alphabet]. In: **The Phonetic Journal** 1848, 4–31.

**Passy, Paul**

1887            **Les sons du fransais, leur formation, leur combinaison, leur représantation**. Paris: Firmin-Didot.

1926            **a prɔpɔ d nuvo siʝ** [A propos de nouveaux signes]. In: **Le maître phonétique**, 3<sup>e</sup> série 4 [No. 13], 13–15.

**ISO/IEC JTC 1/SC 2/WG 2  
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS  
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>1</sup>**

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

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

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

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

**A. Administrative**

1. Title:	<i>Fourth revised Proposal to encode characters for the English Phonotypic Alphabet (EPA) in the UCS</i>
2. Requester's name:	<i>Karl Pentzlin</i>
3. Requester type (Member body/Liaison/Individual contribution):	<i>Individual contribution</i>
4. Submission date:	<i>2024-12-11</i>
5. Requester's reference (if applicable):	
6. Choose one of the following:	
This is a complete proposal:	<input checked="" type="checkbox"/> <i>Yes</i>
(or) More information will be provided later:	<input type="checkbox"/>

**B. Technical – General**

1. Choose one of the following:	
a. This proposal is for a new script (set of characters):	<input type="checkbox"/> <i>No</i>
Proposed name of script:	
b. The proposal is for addition of character(s) to an existing block:	<input checked="" type="checkbox"/> <i>Yes</i>
Name of the existing block:	<i>Latin Extended-D; Latin Extended-G; Supplemental Punctuation.</i>
2. Number of characters in proposal:	<i>31</i>
3. Proposed category (select one from below - see section 2.2 of P&P document):	
A-Contemporary <input type="checkbox"/> B.1-Specialized (small collection) <input checked="" type="checkbox"/> B.2-Specialized (large collection) <input type="checkbox"/>	
C-Major extinct <input type="checkbox"/> D-Attested extinct <input type="checkbox"/> E-Minor extinct <input type="checkbox"/>	
F-Archaic Hieroglyphic or Ideographic <input type="checkbox"/> G-Obscure or questionable usage symbols <input type="checkbox"/>	
4. Is a repertoire including character names provided?	<input checked="" type="checkbox"/> <i>Yes</i>
a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?	<input checked="" type="checkbox"/> <i>Yes</i>
b. Are the character shapes attached in a legible form suitable for review?	<input checked="" type="checkbox"/> <i>Yes</i>
5. Fonts related:	
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?	<i>Andreas Stötzner</i>
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):	<i>Andreas Stötzner, as@signographie.de</i>
6. References:	
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?	<input checked="" type="checkbox"/> <i>Yes</i>
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?	<input checked="" type="checkbox"/> <i>Yes</i>
7. Special encoding issues:	
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)?	<input checked="" type="checkbox"/> <i>Yes</i>
	<i>Special casing of Latin letters (see text)</i>

**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. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see <http://www.unicode.org/Public/UNIDATA/UCD.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

<sup>1</sup> Form number: N3702-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11)



### C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES explain _____	<i>No</i>
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.)? If YES, with whom? _____ If YES, available relevant documents: _____	<i>Yes</i> <i>Linguists, historians, librarians</i> <i>As an example, attached Letter of Support by researchers from the University of Toulouse and the University of Oslo</i>
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference: _____	<i>Yes</i> <i>Linguists, historians, librarians</i>
4. The context of use for the proposed characters (type of use; common or rare) Reference: _____	<i>Specialist</i> <i>Linguists, historians, librarians</i>
5. Are the proposed characters in current use by the user community? If YES, where? Reference: _____	<i>Yes</i> <i>By linguists, historians, librarians</i>
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? If YES, is a rationale provided? _____ If YES, reference: _____	<i>No</i>
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	<i>Yes</i>
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? If YES, is a rationale for its inclusion provided? _____ If YES, reference: _____	<i>No</i>
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? If YES, is a rationale for its inclusion provided? _____ If YES, reference: _____	<i>No</i>
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? If YES, is a rationale for its inclusion provided? _____ If YES, reference: _____	<i>No</i>
11. Does the proposal include use of combining characters and/or use of composite sequences? If YES, is a rationale for such use provided? _____ If YES, reference: _____ Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? If YES, reference: _____	<i>No</i>
12. Does the proposal contain characters with any special properties such as control function or similar semantics? If YES, describe in detail (include attachment if necessary) _____ _____	<i>No</i>
13. Does the proposal contain any Ideographic compatibility character(s)? If YES, is the equivalent corresponding unified ideographic character(s) identified? If YES, reference: _____	<i>No</i>

1<sup>st</sup> April 2024

**To whom it may concern**

REFERENCE IN SUPPORT OF KARL PENTZLIN


We are writing in support of Karl Pentzlin's proposal to encode characters for the English Phonotypic Alphabet devised in the 19<sup>th</sup> century by Isaac Pitman (internationally known for his Shorthand system) and the British phonetician Alexander Ellis. In recent years, our own research work has focused on the French linguist Paul Passy (1859-1940) who was largely responsible for the development of the International Phonetic Alphabet in the late nineteenth century and the early twentieth century. It is clear that the International Phonetic Alphabet (hereafter abbreviated as IPA) has become the most widely used transcription system for phonetics and phonology in the world and part of its success rests on the relative stability of many of the signs used from the foundation of the project in the last quarter of the nineteenth century. However, the development of the IPA and many of the choices that were made by the 19<sup>th</sup> century members of the International Phonetic Association can only be understood by reference to the English Phonotypic Alphabet (EPA for short).

Karl Pentzlin's proposal for the encoding of the EPA rests on a tremendous amount of scholarship. He has scanned a considerable amount of literature demonstrating how widely used the EPA was not only in Britain but also in North America both in the teaching of phonetics but also in attempts at spelling reform. His work demonstrates striking technical abilities backed by a thorough understanding of the historical context within which the EPA emerged.

We believe Karl Pentzlin's work deserves to be strongly supported and wish to express our thanks for the light he has already thrown on the EPA and its contribution to the creation of the International Phonetic Alphabet.

In addition to this letter, we append below a few of our recent publications which benefit from Karl Pentzlin's work.

Jacques Durand,  
Emeritus Professor of Linguistics, Membre honoraire senior Institut Universitaire de France  
University of Toulouse Jean Jaurès



Chantal Lyche  
Emeritus Professor of French Linguistics  
University of Oslo



#### SAMPLE RECENT PUBLICATIONS RELATED TO KARL PENTZLIN'S PROPOSAL

DURAND Jacques et LYCHE Chantal, 2019, « Paul Passy, Johan Storm and the palatal nasal in modern French », dans J.K. Hognestad, T. Kinn et T. Lohndal (dirs), *Fonologi, sosiolingvistikk og vitenskapsteori. Festskrift til Gjert Kristoffersen*, Oslo, Novus, p. 79–97.

DURAND Jacques et LYCHE Chantal, 2020a, « Phonétique, description du français et graphie : retour sur Paul Passy », dans G. Christoph, A. Pešková et M. Selig (dirs), *Contact, Variation, and Change in Romance and Beyond*, Berlin, Erich Schmidt Publishing Company, p. 671–694.

DURAND Jacques et LYCHE Chantal, 2020b, « Quelles données pour l'enseignement du schwa ? De Passy à PFC », *Synergies Pays Scandinaves*, 15, 13–24.

DURAND Jacques et LYCHE Chantal, 2020c, « La méthode directe et Paul Passy. Retour sur un parcours », *Le langage et l'homme*, 2, 43–59.

DURAND Jacques et LYCHE Chantal, 2021a, « Retour sur *Les Sons du français* : la modernité de Passy », *Journal of French Language Studies*, 31, 318–337.

DURAND Jacques et LYCHE Chantal, 2021b, « L'alphabet phonétique international : phonétique, phonologie et prononciation du français », dans E. Pustka (dir.), *La prononciation du français langue étrangère : perspectives linguistiques et didactiques*, Tübingen, Narr, p. 275–309.

DURAND Jacques et LYCHE Chantal, in press, to appear in 2024, *Paul Passy, un linguiste révolutionnaire. Didactique des langues, réforme de l'orthographe et alphabet phonétique international*, Limoges, Edition Lambert Lucas.

DURAND Jacques et LYCHE Chantal, to appear in 2025, *Paul Passy: from language teaching to the International Phonetic Alphabet*. Under contract with Oxford University Press.