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

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Supersedes: L2/24-136 = WG2 N5269

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, <a href="https://www.unifon.org">https://www.unifon.org</a>). 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 [tf] 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 19th 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/I 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

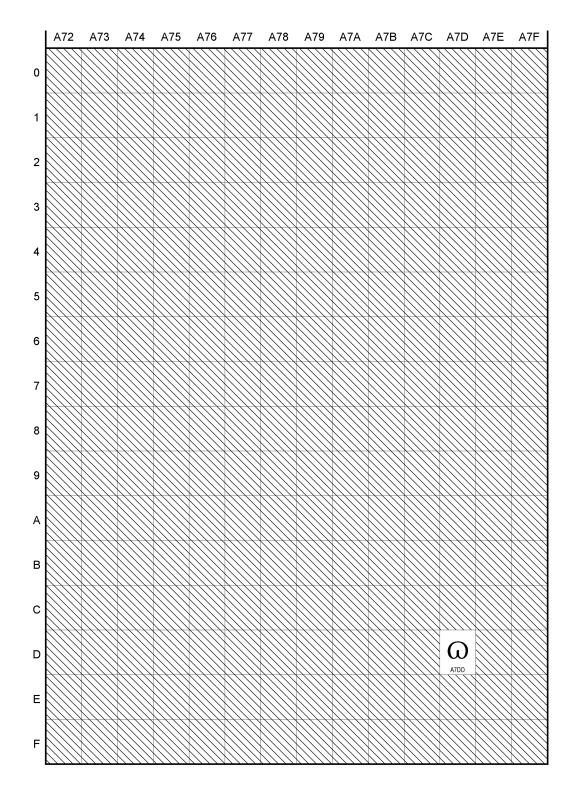
EPA 1868 - fig. 1868a

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

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

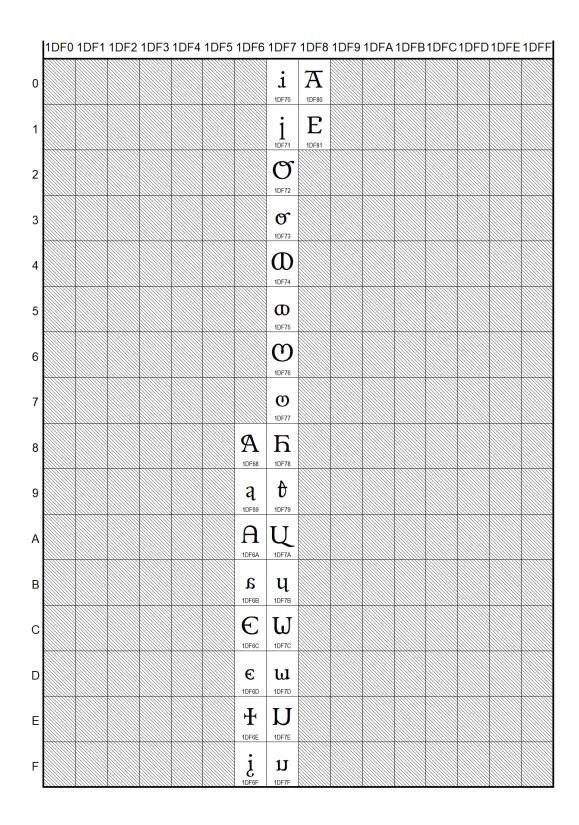
One capital letter, U+A7DD LATIN CAPITAL LETTER CLOSED OMEGA, is the obvious counterpart of the already encoded lowercase IPA letter 0277 LATIN SMALL LETTER CLOSED OMEGA. Therefore, it is proposed in the BMP (in Block *Latin Extended-D*), to avoid case pair spanning over BMP/SMP.

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.



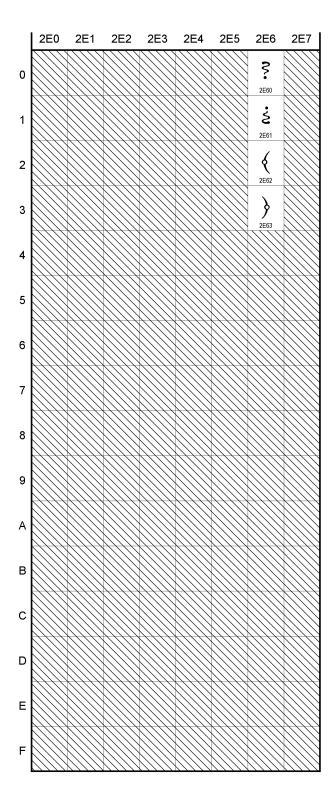
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Annotations in parentheses address special issues for a character, or reference to figures where such special issues are discussed. These annotations are not intended to be retained in the character listings in the Unicode tables.

### Block: Latin Extended-D

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

O 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**

A	U+1DF68	LATIN CAPITAL LETTER PHONOTYPIC A WITH SWASH
a	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
A	U+1DF6A	LATIN CAPITAL LETTER PHONOTYPIC ROUNDTOP A
a	U+1DF6B	LATIN SMALL LETTER PHONOTYPIC ROUNDTOP A  · italic and handwriting forms usually do not show a reversed a  · also used for Malayalam transliteration
$\mathbf{\epsilon}$	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
$\epsilon$	U+1DF6D	LATIN SMALL LETTER REVERSED SCRUPLE  → 03F5 greek lunate epsilon symbol
<b></b>	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)
į	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)

i	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)
i	U+1DF71	LATIN SMALL LETTER STRETCHED I  · also used in the Dania phonetic alphabet
Q	U+1DF72	LATIN CAPITAL LETTER O WITH CURL  the italic form may have the curl directed to the left (see fig. 1888b)
Q	U+1DF73	LATIN SMALL LETTER O WITH CURL also used for Malayalam transliteration
Φ	U+1DF74	LATIN CAPITAL LETTER CLOSED OMEGA WITH LONG STEM  → A74E latin capital letter oo  → A7DD latin capital letter closed omega
$\boldsymbol{\omega}$	U+1DF75	LATIN SMALL LETTER CLOSED OMEGA WITH LONG STEM
ტ	U+1DF76	LATIN CAPITAL LETTER TURNED CLOSED OMEGA (see fig. 1848d, 1848i, 1849a)
ധ	U+1DF77	LATIN SMALL LETTER TURNED CLOSED OMEGA (see fig. 1848a, 1848d, 1848h, 1848i, 1849a)
F	U+1DF78	LATIN CAPITAL LETTER PHONOTYPIC TH
$\mathfrak{b}$	U+1DF79	LATIN SMALL LETTER PHONOTYPIC TH
Ų	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)
Ч	U+1DF7B	LATIN SMALL LETTER U WITH HOOK TAIL  → 1D99 latin small letter u with retroflex hook  · also used for Malayalam transliteration
W	U+1DF7C	LATIN CAPITAL LETTER U WITH NOTCH AT BOTTOM
w	U+1DF7D	LATIN SMALL LETTER U WITH NOTCH AT BOTTOM  → AB50 latin small letter ui
Ŋ	U+1DF7E	LATIN CAPITAL LETTER REVERSED ENLARGED SMALL U (see fig. 1856b)
บ	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.

A	U+1DF80	LATIN CAPITAL LETTER A WITH TOPBAR
_		(≈ MUFI PUA U+F13A LATIN CAPITAL LETTER A SQUARE FORM)
$\mathbf{E}$	U+1DF81	LATIN CAPITAL LETTER E WITH BENT TOPBAR

## **Block: Supplemental Punctuation**

## **Punctuation used with the English Phonotypic Alphabet**

\$	U+2E60	WIGGLY EXCLAMATION MARK
		<ul> <li>smile mark, mirth mark, laughter mark</li> <li>wiggles are broader at top than at bottom</li> <li>(see fig. 1848e, 1851b, 1852b, 1855c, 1858a)</li> </ul>
કં	U+2E61	INVERTED WIGGLY EXCLAMATION MARK
		<ul> <li>may indicate sarcasm when used in sequence with U+2E60</li> <li>used at the end of sentences, unlike U+00A1 inverted exclamation mark (see fig. 1852c)</li> </ul>
€	U+2E62	LEFT PARENTHESIS WITH MIDDLE RING
,		→ FD3E ornate left parenthesis (see fig. 1848f, 1849b, 1855c, 1860d, 1868a)
<b>)</b>	U+2E63	RIGHT PARENTHESIS WITH MIDDLE RING

## 2.1 Annotations to be added for already encoded characters

q	U+024B <i>ADD:</i>	LATIN SMALL LETTER Q WITH HOOK TAIL  = latin small letter alpha with hook tail
ω	U+0277 <i>ADD:</i> <i>ADD:</i>	LATIN SMALL LETTER CLOSED OMEGA  · uppercase is A7DD latin capital letter closed omega  → 1DF75 latin small letter closed omega with long stem
В	U+A79A <i>ADD:</i>	LATIN CAPITAL LETTER VOLAPUK AE  · also used for the English Phonotypic Alphabet  (this informative note seems appropriate as the character name suggests a specific use)
В	U+A79B <i>ADD:</i>	LATIN SMALL LETTER VOLAPUK AE  · 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;;;1DF6A;;1DF77
1DF6C;LATIN SMALL LETTER PHONOTYPIC ROUNDTOP A;Ll;0;L;;;;N;;;1DF6D;
1DF6D;LATIN SMALL LETTER REVERSED SCRUPLE;Lu;0;L;;;;N;;;1DF6C;
1DF6E;LATIN CAPITAL LETTER PHONOTYPIC DIPHTHONG AI;Lu;0;L;;;;N;;;1DF6F;
1DF6F;LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI;Lu;0;L;;;;N;;;1DF6E;
1DF70;LATIN SMALL LETTER I WITH PIGTAIL AT BOTTOM;Ll;0;L;;;;N;;;;
```

```
1DF71; LATIN SMALL LETTER STRETCHED I; L1; 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;;;;; 1DF75;
1DF75; LATIN SMALL LETTER CLOSED OMEGA WITH LONG STEM; L1;0;L;;;;;N;;;1DF74;;1DF74
1DF76;LATIN CAPITAL LETTER TURNED CLOSED OMEGA;Lu;0;L;;;;;N;;;;1DF77;
1DF77; LATIN SMALL LETTER TURNED CLOSED OMEGA; L1;0;L;;;;;N;;;1DF76;;1DF76
1DF78; LATIN CAPITAL LETTER PHONOTYPIC TH; Lu; 0; L;;;;; N;;;; 1DF79;
1DF79; LATIN SMALL LETTER PHONOTYPIC TH; L1;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;L1;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; L1;0;L;;;;N;;;1DF7C;;1DF7C
1DF7E; LATIN CAPITAL LETTER REVERSED ENLARGED SMALL U; Lu; 0; L;;;;; N;;;; 1DF7F;
1DF7F; LATIN SMALL LETTER REVERSED U; L1;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; L1;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)

	Headlines; example words	Unicode (capital) U+	If proposed: Name LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: Name LATIN SMALL LETTER	C.
	Vowels – Long.					
з З	eel	0190		025B		
Aa	ale	1DF6A	phonotypic roundtop a	0061		Х
Αq	alms	1DF80	a with topbar	024B		Х
Өө	all	019F		0275		
$\Omega$ $\omega$	ope	A7DD	closed omega	0277		
Шш	food	W 019C		026F		
	Short.					
Ιi	ill	0049		0069		
Еe	ell	0045		0065		
Αa	am	0041		0251		Х
Оо	olive	004F		006F		
U u	up	0055		0075		
Wш	foot	1DF7C	u with notch at bottom	1DF7D	u with notch at bottom	
	Diphthongs.					
Ŧį	isle	1DF6E	phonotypic diphthong ai	1DF6F	phonotypic diphthong ai	
Oσ	oil	1DF72	o with curl	1DF73	o with curl	
Х×	owl	<b>Y</b> A7CB		γ 0264		
Ųч	mule		u with hook tail	1DF7B	u with hook tail	
	Coalescents.					
Yу	yea	0059		0079		
Ww	way	0057		0077		
	Aspirate.					

	Headlines; example words	Unicode (capital) U+	If proposed: Name LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: Name LATIN SMALL LETTER	C.
Ηh	hay	0048		0068		
	Consonants.					
Pр	rope	0050		0070		
Вb	robe	0042		0062		
T t	fate	0054		0074		
D d	fade	0044		0064		
$\mathbb{E}^{\mathfrak{g}}$	etch	1DF6C	reversed scruple	A794		Х
Jј	edge	004A		006A		
Сс	leek	0043		0063		
Gg	league	0047		0067		
Ff	safe	0046		0066		
Vv	save	0056		0076		
Пt	wreath	A780		t 1DF79	phonotypic th	Х
Вđ	wreathe	018B		đ 0111		Х
Ss	hiss	0053		0073		
Ζz	his	005A		007A		
Σ∫	vicious	01A9		0283		
33	vision	<b>3</b> 01B7		0292		
Rr	for	0052		0072		
Ll	fall	004C		006C		
M m	seem	004D		006D		
Nn	seen	004E		006E		
Иŋ	sing	D 014A		014B		
	(additions:)					
Oω	(french) bonne (see fig. 1848a)	1DF76	turned closed omega	1DF77	turned closed omega	
Сә	tit le, taken (see fig. 1851c)	<del>O</del> 018F	e without middle bar	0259		

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

	Headlines; example words	(Capitai)	If proposed: LATIN CAPITAL LETTER	(SIIIaII)	If proposed: LATIN SMALL LETTER	C.
	Long vowels.					
3 3	eel	0190		025B		

	Headlines; example words	Unicode (capital) U+	If proposed: LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: LATIN SMALL LETTER	C.
Еę	earth	1DF81	e with bent topbar	1EB9		Х
вВ	ale	A79A		A79B		
Яą	alms	1DF68	phonotypic a with swash	1DF69	phonotypic a with swash	
Αq	ale	1DF6A	phonotypic roundtop a	024B		Χ
Өө	all	019F		0275		
$\omega$	oak	A7DD	closed omega	0277		
ΦΦ	ooze	1DF74	closed omega with long stem	1DF75	closed omega with long stem	
	Short vowels.					
I i	ill	0049		0069		
E e	ell	0045		0065		
A a	am	0041		0061		
αа	ask	2C6D		0251		
Оо	on	004F		006F		
Uu	up	0055		0075		
Wш	wood	1DF7C	u with notch at bottom	1DF7D	u with notch at bottom	
	Diphthongs.					
Ŧį	ice	1DF6E	phonotypic diphthong ai	1DF6F	phonotypic diphthong ai	
Oσ	oil	-	o with curl	1DF73	o with curl	
Хх	owl	<b>Ƴ</b> A7CB		Υ 0264		
Ųч	dupe	1DF7A	u with hook tail	1DF7B	u with hook tail	
	Coalescents.					
Yy	yea	0059		0079		
Ww	way	0057		0077		
	Aspirate.					
Ηh	hay	0048		0068		
	Explodents.					
Pр	pale	0050		0070		
Вb	bale	0042		0062		
T t	tame	0054		0074		
D d	dame	0044		0064		
Eg	cheer	1DF6C	reversed scruple	A794		Х
Ji	jeer	004A		006A		
Kk	came	004B		006B		
Gg	game	0047		0067		

	Headlines; example words	Unicode (capital) U+	If proposed: LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: LATIN SMALL LETTER	C.
	Continuants.					
F f	fain	0046		0066		
V v	vain	0056		0076		
Бŧ	thigh	1DF78	phonotypic th	1DF79	phonotypic th	
аđ	thy	018B		đ 0111		Х
Ss	seal	0053		0073		
Ζz	zeal	005A		007A		
Σ∫	shall	01A9		0283		
33	vision	<b>3</b> 01B7		0292		
	Liquids.					
Ll	lull	004C		006C		
Rr	rare	0052		0072		
	Nasals.					
M m	maim	004D		006D		
Nn	nine	004E		006E		
Иŋ	sing	Ŋ 014A		014B		

# EPA 1856 (fig. 1856b)

	Headlines; example words	Unicode (capital) U+	If proposed: LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: LATIN SMALL LETTER	C.
	Consonants – Guttural.	<b></b>				
Κk	leek, cane	004B		006B		
Gg	league, gain	0047		0067		
Ηh	hay, house	0048		0068		
Yу	yet, use	0059		0079		
	Lingual.					
T t	fate, tip	0054		0074		
D d	fade, dip	0044		0064		
Сс	vicious, etch, she	0043		0063		
Jј	vision, edge	004A		006A		
Ss	hiss, seal	0053		0073		
Ζz	his, zeal	005A		007A		
Б ₽	wreath, thigh	1DF78	phonotypic th	1DF79	phonotypic th	
ВВ	wreathe, thy	018B		đ 0111		Х
	Liquids.					
Pр	rope, post	0050		0070		
ВЬ	robe, boast	0042		0062		
F f	safe, fat	0046		0066		
Vv	save, vat	0056		0076		
Ww	wet, quit	0057		0077		
	Labial.					
Ll	fall, light	004C		006C		
Rr	more, right	0052		0072		
Иŋ	sing, long	D 014A		014B		
Nn	seen, net	004E		006E		
M m	seem, met	004D		006D		
	Vowels – Guttural.					
A a	am, fast, far	0041		0061		
a A	alms, father	1DF6A	phonotypic roundtop a	1DF6B	phonotypic roundtop a	
E e	ell, head, any	0045		0065		
з З	ale, fair, bear	0190		025B		

	Headlines; example words	Unicode (capital) U+	If proposed: LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: LATIN SMALL LETTER	C.
Ιi	ill, pity, filial	0049		0069		
Ŧі	eel, eat, mere	1DF6E	phonotypic diphthong ai	1DF70	i with pigtail at bottom	Х
	Labial.					
Оо	on, not, nor	004F		006F		
$\Omega$ $\omega$	all, law, ought	A7DD	closed omega	0277		
Иu	up, son, cur	1DF7E	reversed enlarged small u	1DF7F	reversed u	
Oσ	ope, coat, pour	1DF72	o with curl	1DF73	o with curl	
U u	full, foot	0055		0075		
Шш	do, food, tour	W 019C		026F		

# EPA 1868 (fig. 1868a)

	Headlines; example words	Unicode (capital) U+	If proposed: LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: LATIN SMALL LETTER	C.
	Consonants – Mutes.					
Pр	rope, post	0050		0070		
ВЬ	robe, boast	0042		0062		
T t	fate, tip	0054		0074		
D d	fade, dip	0044		0064		
Eg	cheap, fetch	1DF6C	reversed scruple	A794		Х
J j	jump, bridge	004A		006A		
Κk	leek, cane	004B		006B		
Gg	league, gain	0047		0067		
	Continuants.					
F f	safe, fat	0046		0066		
Vv	save, vat	0056		0076		
t A	wreath, thigh	1DF78	phonotypic th	<b>₺</b> 1DF79	phonotypic th	
ВВ	wreathe, thy	018B		đ 0111		Х
Ss	hiss, seal	0053		0073		
Ζz	his, zeal	005A		007A		
Σ∫	vicious, she	01A9		0283		
3 3	vision, preasure	<b>3</b> 01B7		0292		
	Nasals.				_	
M m	seem, met	004D		006D		
Nn	seen, net	004E		006E		

	Headlines; example words	Unicode (capital) U+	If proposed: LATIN CAPITAL LETTER	Unicode (small) U+	If proposed: LATIN SMALL LETTER	C.
Иŋ	sing, long	Ŋ 014A		014B		
	Liquids.					
Ll	fall, light	004C		006C		
Rr	more, right	0052		0072		
	Coalescents.					
Ww	wet, quit	0057		0077		
Yу	yet, young	0059		0079		
	Aspirate.					
Ηh	hay, house	0048		0068		
	Vowels – Guttural.					
A a	am, fast, far	0041		0061		
a A	alms, father	1DF6A	phonotypic roundtop a	1DF6B	phonotypic roundtop a	
Εe	ell, any, her	0045		0065		
з З	ale, fair, bear	0190		025B		
Ιi	ill, pity, filial	0049		0069		
Li	eel, eat, mere	l 0196		1DF70	i with pigtail at bottom	Х
	Labial.					
Оо	on, not, nor	004F		006F		
$\Omega$ $\omega$	all, law, ought	A7DD	closed omega	0277		
Ηр	up, son, cur	<del>U</del> 0244		0252		Х
Oo	ope, coat, pour	1DF72	o with curl	1DF73	o with curl	
Uu	full, foot	0055		0075		
Шш	do, food, tour	W 019C		026F		
	Diphthongs.					
Ŧį	by	1DF6E	phonotypic diphthong ai	1DF6F	phonotypic diphthong ai	Х
88	now	<b>Y</b> A7CB		γ 0264		
Ųч	new		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/I 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:
  - o 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 LTTER 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):

$$q - q q$$
  $q - q q$   $i - i i$   $q - q q$ 

As the alpha with hook tail is visually indistinguable 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 A + U are not appropriate capital letters of these glyph shapes. Therefore, it seems appropriate to encode as separate letters wich are part of the appropriate case pairs.

- If 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).
- i proposed as U+1DF70 LATIN SMALL LETTER I WITH PIGTAIL AT BOTTOM: This appears as an allograph of i 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 woud 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.

•  $\mathfrak{D}$  proposed as U+1DF79 LATIN SMALL LETTER PHONOTYPIC TH:

This letter occurs in three similar forms: **U** U 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

•  $\hat{d}$ : 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:  $\hat{d}$  or where it is zero:  $\hat{d}$  (see fig. 1855a, 1873a), even showing a round form like  $\hat{d}$  (see fig. 1864a, 1868a). Also, some longhand forms show a closed loop top like  $\hat{d}$  (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 đ 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 đ at this time.

•  $\Gamma$ : 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.

- Li: 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.
- **V**: 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.
- 8: These letters, which denote the diphthong /aʊ/ 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.

88	88	Υγ	88	¥
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 orthografies, 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.

• \$\overline{\text{\$\Sigma}}\$: 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 " $\mathcal{I}$ " [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 " $\mathcal{I}$ " in the phonetic fonts already prepared, and introduce the improved " $\mathcal{I}$ " 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 <3> 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 digitzation 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.)

# Rrainische und aus andern Alphabeten gleichbedeutende Schriftzeichen:

Reu-Rrain. Alt-Rrain. Rroatifche, Deutsche, Frangof. Italienische.

Aa	<b>a</b>		a		a ·
ВЬ	<b>b</b>	Ь	<b>b</b>	Ь	Ь
Dd	ď	ď,	Ď	d	d
Еe	e	e	ă .	e	e aperto
<b>→€ €</b>	e — <del>é</del>	<del>-</del> (?)	¢ .	é	e chiuso(?)
E e  C c  F f	F ' '''	$\frac{1}{\mathbf{f}}$	f	é f	f
$\mathbf{G} \cdot \mathbf{g}$	g.	R	à	g: gant	g: gara
H h	8` h	B h	<b>8</b> 5	<u> </u>	-
Hh.	h	h	ά	· ,	
Li	i	i	đ) i	i	i
I i 2 s J j	ì, ù, e	— (?)	t	e: que	-
Ji	i	. <b>i</b>	Í	i : mien	i '
K K	· k	' k	ŧ	c: car	ch
Ll	1 1	1	I	1	1
Ll	Ij	ly ·		il: ail	gl: gli
Mm	m	m	m	m '	m
Nn	n	n	n	n	n
Nn	nj	ny .	.`	gn	gn
Οo	0	o ´	٥.	0	o chiuso
ФФ	ò	-		oi (?)	o aperto (?)
Pp.	P	<b>p</b>	Þ	<b>p</b> `	P
Rг	r	r	ř	r	r
Ss	ſ	5Z	B	s: son	s: sono
W w	fh	ss, sh	(d)	che	sce
ष्पु भू	fhzh	sch	(d)t(d)	promptes.	
3 3 96 32 T t U u V v	• '	2	f: lefen	Z	s : rosa
<b>3€ 3</b> €	sh	8		j '	
Tt	t	<b>t</b> 99	t.	t .	t
Uu	u	u	u	ou	u
V v	V	`♥	110	<b>V</b> ( )	<b>v</b>
ηη	<b>2</b>	CZ	8	-	z : zio
Ч ц	2h	ch	t(d)	and the same of	c : ciò
. 7			. ,		1

1

**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 ze nim ozalwa ine nawepíre. 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.		ı	C	CONSONANT	S.
No.	Type.	Example of	ts sound.	No.	Type.	Example of i	ts sound.
1	3 3	LONG.	-1	20	P p	rope	rop
_	_	eel	El -	21	Вь	, ro <i>ō</i> e	rob
2	A a	ale	al	22	T t	fa <i>t</i> e	fat
3	Αq	<i>a</i> lms	qmz	23	D d	fade	fad
4	θе	all	el		•		
5	Ω ۵	ope	ωр	24	€ g	etch	eg
6	W w	food	fud	25	Јj	$\mathrm{e}dg\mathrm{e}$	ej
		SHORT.		26	Сс	$\mathrm{lee}k$	læ
7	Ιi	ill	il	27	Gg	league	leg
8	Ее	ell	el	28	Ff	sa <i>f</i> e	saf
9	Αα	am	am	29	V v		
10	Оо	<i>o</i> live	oliv	25	V V	save	sav
11	U u	up	up	30	T t	wreath	ret
12	W u	foot	fut	31	a c	wrea <i>th</i> e	ređ
	DI	PHTHONGS		32	S s	hiss	his
13	Ŧ į	isle	įl	33	$\mathbf{Z} \mathbf{z}$	his	hiz
14	Q, a	oil	øl	34	Σ∫	vicious	vi∫us
1.5	8 8	owl	δl	35	<b>3</b> 3	vision	vigun
16	Uц	$\mathbf{m}u$ le	mųl		·		
	CO	ALESCENTS	i <b>.</b>	36	Rr	fo <i>r</i>	fer
17	Y y	yea	ya	37	Ll	fall	fel
18	$\boldsymbol{W} \ \boldsymbol{w}$	way	wa	38	M m	seem	sem
	4	ASPIRATE.		39	N n	seen	sen
19	H h	<i>h</i> ay	ha	40	V ŋ	si <i>ng</i>	siŋ

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

#### матц 3.14—4.9.

MATU.

MATTHEW 8.14-4.9.

him. <sup>14</sup> But Jon forbad him, sain, I have need to be baptized of thee, and him. <sup>14</sup> But John forbad him, saying, I have need to be baptized of thee, and summer that the same is a same in sed untured him, Sufer it the becomest thou to me? <sup>15</sup> And Jesus answering said unto him, Sufer it to be so no: for flus it becomet us the fulfil of riteusnes. Hen he suffered him. so now; for thus it becometh us to fulfil all righteousness. Then he suffered him. <sup>16</sup> And Jesus, hwen he was baptized, went up stratum at ov the water: and, <sup>16</sup> And Jesus, when he was baptized, went up straightway out of the water: and, <sup>16</sup> And Jesus, when he was baptized, went up straightway out of the water: and, <sup>16</sup> And Jesus, were opened unto him, and he so the Spirit ov God descending lo, the heavens were opened unto him, and he saw the Spirit of God descending life a duv, 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.	3	EXP	LODENTS.	C	ON'	TINUANTS.
Sounded as	Sounded as			Sounded as			Sounded as
E e ee in eel	I i i in ill	; <b>P</b>	p	p in rope	F	f	f in safe
$\Omega$ a $a$ $a$ le	E e e ell	B	b	<i>b</i> ro/e	V	v	v sane
A q a alms	A a a am	$^{\mid \cdot \mid}_{\perp}$ ${f T}$	t	t fate	T	t	th wreath
Ө ө а all	O o o olive	ii D	d	d fade	В	đ	th wreathe
	U u u up	<u>.</u>	ç	ch cheer	S	8	ss hiss
W m oo food ;	W w oo foot	+ $J$	j	<i>j j</i> eer	Z	Z	s his
Departh	ongs.	$\mathbf{C}$	c	c came	Σ	ſ	sh mesh
∄ j i in isle	y ow in owl	G	g	g $g$ ame	3	3	s measure
Of or oi oil	U u u mule	;1		LIQU	IIDS.	,	
COALESC	ENTS.	R	r	r in for	L	1	l in fall
Y y y in yea	$\mathbf{W} \mathbf{w} \mathbf{w}$ in way			NAS	a LS.		
ASPIR	ATE.	M	ın	m in scem	IJ	ŋ	ng in sing
II h A	in hay	N	n	n seen		Ī	-

The sign (') is prefixed to l, m, n, to shew when they form syllables by themselves; as, dub'l, dublin; rit'm, ritmic;  $\varepsilon v'n$ ,  $\varepsilon vnin$ ; 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.

New Orthographical Signs:—( $\P$ ) query, placed at the commencement of interrogative clauses; ( $\P$ ) sigh; ( $\P$ ) smile;  $\P$ 0 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. Ogust, 1844.

P B, T D, E J, C G; F V, T 
$$\Delta$$
, S Z,  $\Sigma$  Z; L, R; M, N,  $U$ , =  $p$   $b$ ,  $t$   $d$ ,  $g$   $j$ ,  $c$   $g$ ;  $f$   $v$ ,  $t$   $d$ ,  $s$   $z$ ,  $f$   $g$ ;  $l$ ,  $r$ ;  $m$ ,  $n$ ,  $p$ , ov 1847.

His woz avsedli 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.

J. I. E. E., 
$$X$$
 A.  $\Theta$  O. E. U.,  $\Theta$ .  $\Theta$  U;  $f$ .  $\Phi$ .  $M$ .  $W$ ;  $Y$ .  $W$ .  $H$ . i. i., i. e., a. a. d. o., c. u., o., o. u.; j. q., u., u.; y., w., h., e. i. a. e., q. a., o. o.,  $[e]u$ , o., u. u.; j., v., s., y.; y., w., h., ov 1847.

P. B., T. D., E. J.,  $K$  G.;  $F$  V.,  $T$  H.,  $S$  Z.,  $\Sigma$  Z.;  $L$ ,  $R$ ;  $M$ ,  $N$ ,  $V$ .  $P$  b.,  $t$  d.,  $q$  j.,  $k$  g.;  $f$  v.,  $t$  d.,  $s$  z.,  $\int g$ ;  $l$ ,  $r$ ;  $m$ ,  $n$ ,  $n$ ,  $n$ ,  $n$ , ov 1847.

His iz de ferst "loer-cas" er smol-leter alfabet, and it wil be sen dat de consonants wer no priti wel set'ld. Priur tur de adopsun ov dis 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.

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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.

#### AE FONETIC JUBNAL.

#### § 8. II. ADIΣUNAL SIMBULZ FOR FOREN SYNDZ.

- 1 He Polif y; it is de proper lon vsel ov Inglif 7.
- 2 He Jerman  $\ddot{a}$ , Frenc  $\dot{e}$ ; de proper synd ov Inglif  $2^2$ .
- 3 He Hrif a, az distingwist from eder q or s; it is de true lon veel ov
- Frenç a; muç breder dan İnglif 3, but not so bred az İnglif 4.
- 5 Italian o apárto; not cwit so bred az Inglis 4, but breder dan 8.
- 6 O g Italian o cúzo; betwen Inglis 5 and 6, but inclind tur de later.
- Lon Jerman  $\ddot{u}$ , Freng u; formal bj an atemt tun pronous Inglif 1 and "U ü 6 simultaniusli. İnglismen hun can not caç de send, ma substitut y in Freng, and  $\varepsilon$  in Jerman wurdz.
- 8 Lon Jerman ö, Frenç ed; formd bi atemtin tun pronons Inglif 2 and 5 simultaniusli. Inglismen hur can not caç de sond, ma substitut ë.
- Frenç e miii (muet); jenerali a bref vvel. He Inglis 9 bref haz veri nerli de sam synd. Sum Fonetisanz consider dat Inglis 363 and 9 364 wud be mor corectli rit'n ër.
- 10 Az Freng stopt i; a mug briter synd dan de Inglis 7. Inglismen, hwen specin Freng, jenerali uz "z" er "i" insted ov i. We hav Ίĭ herd it pronoust in de wurd (been) = "bin," insted ov "ben."
- 11 He Frenc  $\dot{e}$ ; rader tiner, and mor lie 7 dan 8. Inglismen jenerali uz e insted ov it.
- 12 Stopt a in ol Foren langwejez, hwar it replasez or Inglis 9. As sond liz betwen Inglif 9 and 10, and approgez de later veri nerli. It iz herd in de nort ov Ingland and Scotland in plas ov Inglis 9. It iz elso veri nerli de synd hwig meni Inglis specerz giv tun de Inglis 3², tun avod a gans ov pronynsin "a" er "ar" fer q.
- 13 oδ Stopt Italian o apárto; scarsli distingwisab'l from Inglis 10.
- 14 He true fort voel ov Inglif 5, az in Frenc (bonne) = "bon." It iz stil ტ თ herd in America, hwar (stone)="ston;" but it iz olwaz replast in Ingland bj "o" or "u," dus "a ston, tre stun wat."
- ·U ú Stopt Jerman ü, Frenç u, dus (künste, hutte)="cinste, hut." 15
- Stopt Jerman "ö," Freng eu, dus (böcke, jeune)="boce, zon." 16 ·O o
- As Oriental compresun, az "agin." Oa 17
- Хх As Oriental glef-hamza, or soft bredin. 18
- Az Jerman w, intermediet tu de Inglis "w" and Inglis "v;" de loer lip duz not tug de tet az for "v," but presez de uper lip mor 'V ∳ 19 flatli đan fer "w."
- K k As Jerman ch, after paletal vvelz er licwidz, dus (ich)="ik;" hwen 20 printed in italies, it reprezents to harf sond ov Jerman ch, herd after of under vselz, az  $\langle auch, ach \rangle = "auk, ak$ . Inglismen hun can not cag de sønd, ma uz de hwisperd y for "k," and c for k.
- Az Jerman g final after paletal vvelz, dus (sieg)="zeq," or mor acuretli="szeqk," and veri freewentli="szek" onli; hwen printed 21 in italics, it has de harser sond ov de Dug g and de final Jerman g after uder voelz, az  $\langle tag \rangle = "taq."$  Inglismen hu can not cag de sond, ma uz "y" for "q," and "g" for "q."

#### 2. Ogzílyeri Sinz.

- Tu prevent de nesesiti ov castin a number ov nu tipz, a fu ogzílyeri sinz ar emplod, tu modifi de non valuz ov de leterz tu hwig da ar subjord or preficst.]
- 22 'n Sin ov nazáliti. Hwen jond tur eni vsel, it soz dat it must be spoc'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. ECSPREZUNAL SANZ.

- 11 ((f)) He Cweri. His iz plast befor eni wurdz er clezez bi hwig a cwesgun iz qsct.
- 12 (?) He Det. His iz plast after eni wurd er statment, consernin hwig de riter felz sum det, er hwig he wisez tur cel in cwesqun. Obzerv de diferens betwen de detful incwiri "U cam last nit?" and de uzual interogasun "I Did u cum last nit."
- 13 (!) de Col; a mare ov eesclamajun, or simpli surpriz. Dub'ld (!!), it indicats grat astonijment.
- 14 (i) The Si; a marc ov gref or soro: plast after a statment hwig give de riter pan. Dub'ld (ii), it indicats grat afliciun.
- Its Smil; a marc ov mert er plezur: plast after a statment hwig givz de riter plezur, or produsez in him a felin ov amuzment; and hens uzd in plas ov dat ecsprejun in de specer hwig in comun intercors iz ment tu indicat "i woz onli in joc." He dub'l smil (!!) iz a dwnrit laf.

Ol dez sinz ar uzd twi indicat de felin ov de riter or specer: da hav no referens twi de reder, hwi iz cwit at liberti twi si over a smil, or smil over a si.]

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).

#### AE FONETIC JURNAL.

#### 4. PARENTETICAL SANZ.

- () He Paréntesis, or in de plural Paréntesez; uzd tu incloz eni wurd or cloz hwig iz inserted in de bodi ov a sentens, wid huz gramatical construcjun it sumhwot interferz. It iz elso uzd tu incloz eni lit'l marcs or sinz hwig mit uderwiz be overluct, or not hav sufijent importans giv'n tu dem bi de reder. For instans, we hav for dis rez'n, inclozd de ortografical sinz 1 tu 15 in de marjin ov de abuv ecsplanajunz betwen parentesez.
- 17 { } Brasez, uzd az a variasun ov de parentesis; de ferst haf { iz elso uzd tw conect er linc tweeder several linz.
- 18 [] Bracets; uzd az a variajun ov parentesis, and else tu incloz hol sentensez hwig interfér wid de jeneral aranjment ov a paragraf, and consecwentli hav rader de aperans ov nots. Obzervajunz mad bi de siter, in de cors ov a sitajun, ar jenerali se inclozd, tu distingwij dem from de wurdz ov de etur sited.
- 19 ( ) Obsolésent Parentesez; uzd tu incloz wurdz hwig ar not egzibited Foneticali.
- 20 ("") Invérted Comaz er Marcs ov Sitafun, incloz wurdz ewoted from anuder etur, er put intu de met ov de specer. Wurdz tu hwig particuler importens iz atagt, tecnical ecsprejunz, ets., ar of'n so inclozd.

Fifth Revised Proposal to encode characters for the English Phonotypic Alphabet (EPA) in the UCS 2024-12-11

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Fig. 1848g: ibid., excerpt from p.122.

Showing an example of the "Obsolescent Parentheses".

1. His lit'l poem iz a translasun ov Clopstocs "Fürst und zin Cebzvib" (Fürst und sein Kebsweib), hwig woz compozd in 1789, wid referens tu de ferst Freng revolusun.

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.

Le complét Scog alfabet apérz tur be:

```
Loy Vselz

E — a ä q e ô o m ü ö

Eert Vselz

Y i ĕ e a o — o u ù o u

Diftoyz

uĭ, aĭ, oĭ an, ĕm

Coalésents and Bretiy y w, h

Ecsplodents

p b, t d, c; —, c g

Continyants

f v, t d, s z, ∫ z, k —, ķ

Licwidz

r l, m n n.
```

Te gef ponts tw be noted by an Inglisman ar:

Is prezens ov de vselz  $\acute{o}$ ,  $\ddot{u}$ ,  $\ddot{o}$ ,  $\ddot{i}$ ,  $\ddot{e}$ , a, o, u,  $\dot{o}$ , hwig due not ocúr in Inglif; de natur ov de diftonz, espesali de diftonz  $u\ddot{i}$ ,  $a\ddot{i}$ , neder ov hwig ocúr in Inglif, and hwig replás de Inglif i at different time. Ov dis,  $u\ddot{i}$  iz veri nerli de true Inglif i, and Inglismen ma darfor substitut i for it, hwil  $a\ddot{i}$  veri nerli  $=\dot{q}i$ , de sønd giv'n in Ingland tu de sing'l wurd  $\{aye\}$ . Te Scog,

Duncan Gray came here to woo,

- (F) duncan gra cam her tu wu,
- (E) Duncan Gra cam her tu wu,

On blithe yule night when we were fou,

- (F) on blat yul někt hwen we wer fu,
- (E) On blait yul nikt hwen we wer fu,

Fig. 1848i: 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).

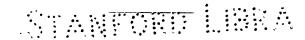
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# CARLIZ HYS.

A TAL FOR YUM CILDREN.

B4

ALECSANDER JON ELIS, B.A. Ellis, Alexander Tehn



#### LUNDUN:

FRED PITMAN, FONETIC DEPO, 1, CWENZ HED PASEJ, PATERNOSTER RO.

1848.

tu cum tu super, becez it woz de ferst tim in de nu hys. So Jan went tu de dor tu cel Carli in.

"Carli! Carli!" but no wun cam, and no wun anserd.

Of set Jan abst de gard'n tw find Carli, but se luct for a lon tim widst sein him, so se cam in tu her muter, and sed; "Mamá, j canot find Carli eni hwar. Wil u help me tu luc for him."

Hen Mister Bren, hu woz in de rum tú, and had just sat den tw rest himself, and enjo hiz te, sed: "Hwi, de bo haz ben runin abst ol de afternun, and i no he wud not go beyond de gard'n. Brin me mi cap, Jan, i wil go after him misélf.

So Jan and her papá set of tugéder; wun went tu de rit, and de uder tu de left, and da cept celin st, "Earli! Earli!" but no Earli qnserd. At lost Jan tot se herd a fant "Her, Jini!" but se cud not mac st hwar it cam from.

"Dont hid, Earli," sed se; "Hwar ar u. Papá iz luciŋ everi hwar fer u."

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

Sen 8.1 Macbét. - 11 er memoriz anúder Golgota,

i canot tel : but i am fant, mi gasez cri for help.

8 Dunc. So wel di wurdz becum dé, az di wundz; da smac ov onur bot.—Go, get him surjunz.

Tecsit Soljer, aténded.

Enter Ros and Angus.

9 Húi cumz her.

o Mal. He wurdi tan ov Ros.

10 Len. Hwot hast lucs tru hiz [z! So jud hé dat semz tu spec tinz stranj.

God sav ds cin! 11 Ros.

13 Dunc. 9 Hwens cam'st do, wurdi tan. From Fif, grat cip,

hwar de norwaan banerz flat de scj. and fan er pep'l cold.

12 Macbét.

Act 1.

15 Ros. aat no. Sweno, de Norwaz cin, cravz compozisun; ner wud we dan him berial ov hiz men, til he disbarsed, at Sant Colmez Ing, ten tszend dolerz tur sr jeneral us.

16 Duyc. No mor dát tan ov Cedur sal desév or buzum interest.—Go, pronons hiz det, and wid hiz former tit'l gret Macbét.

17 Ros. Il se it dun.

18 Duyc. Hwot-he hat lost, nob'l Machét hat ecsiunt.

SEN 3.—A Het. Tunder. Enter tre Wigez.

- 1 Ferst Wig. 9 Hwar hast do ben, sister.
- 2 Secund Wig. Cilin swin.

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	leterz	for	foren	sındz	hoio	: તેપા	not	ocúr	in	inglis.
		,	,			-	,,,,,	0000		-11:3

As leter		iz o <i>lwaz</i>		eter	iz elwaz		
rit'n	prntd	synded az	rit'n	printd	synded az		
A Ä	A ä	freng $\langle \hat{e} \rangle$	#l hl	-Hl hl	welf (11)		
A a	^A &	freng (d)	Hertu	-Hrhr	welf (rh)		
Ų ü	…U ü	freng (4)	I b	L <sub>J</sub> l <sub>J</sub>	it <b>alyan</b> (gl)		
OÖ	O g	freng (eus)	Ngny	N <sub>j</sub> n <sub>j</sub>	italyan (gn)		
$\mathcal{E}$ $\ddot{e}$	∵E ë	freng (e)					
			$\mathcal{H}$ $k$	Kk	jerman (ch)		
Aā	-A a	fr. fort (a)	2 g	Qq	dug (g)		
O O	(O o	fr. fert (0)					
U ii	·U ù	fr. fort (u)	9 0	၁၁	árabic ogin		
O Ö	'O o	fr. sert (eu)	NYNZ	1Z 13	polis (rz)		
an on on	an on on	freng (in) freng (an) freng (on)	qr indica and in pr Mu.hám C1. 91.	ted in riti int bi prefi nud oAle ( k, q, qr	nst árabic leters  g, bi subscribin, csin, a dot; dus, Mehemet Ali).  uzd fer palatal  q; compár áky,		
wn	uń	freng (un)	ak, (ich,	ach).			

How ignorant ov foren langwejez ar advisd tu pronsns  $\ddot{a}$ , d,  $\ddot{e}$ , a, o,  $\dot{n}$ , g, k, q, 43,

az s, q, u, a, o,  $\eta$ , y, c, g, g, g, g, g, respectivli, tun omít o, and tun disregárd de marc ov stron leterz, until de con lern de trun synds. In frenç,  $\ddot{o}$ ,  $\ddot{u}$  ma be pronúnst as ur, v, and o,  $\dot{u}$  as u,  $\dot{v}$ ; in jerman,  $\ddot{o}$ , o ma be spac'n lie s, o, and  $\ddot{u}$ ,  $\dot{u}$  lie c,  $\dot{v}$ .

**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 de vali tu asertán de cez ov de defisensi ov weter, and da discúverd dat vast masez ov de glasierz ov Zetroz (Getroz) and avaloñsez ov sno, had fel'n intu a naro part ov de vali, betwén ment Plörör (Pleureur) and ment Movuazañ (Mauvoisin), and fermd a dic ov is and sno 600 fet wid

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.

ECSELSIUR SERIEZ.	Letters. Illustrative words. Names. Letters. Illustrative words. Names.  Long Vowels. Explodents.
FURST	E ε eel ε       P p pole pε         A a ale a       B b bowl bε         A q arms q       T t toe tε         Θ θ all θ       D d doe de         G ο oak ο       E g cheer ga         U u ooze u       J j jeer ja         Short Vowels.       C c came ca
FONETIC REDUR.	I i ill it $G$ $g$ $g$ ame $g$ a $E$ e ell et $C$ ontinuants.
nongley (Elias)	A $\alpha$ $\alpha$ m at $F$ $f$ fear ef $O$ o on ot $V$ $V$ veer ve $U$ $U$ $U$ $\alpha$ p ut $G$ $G$ $G$ $G$ $G$ $G$ $G$ $G$ $G$ $G$
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
FORT EDIEUN.	$egin{array}{ccccc} U & u & & u & & Liquids. \\ \hline & & & & & & & & & & & & & & & & & &$
LOULI & BRUAUR, FONETIC PUBLIXURZ;  WOLNUT STRET, BETWEN FORT & FIFT,  SINSINATI, OR FO.	Breathing.  H h . hay ha  N n nun am  N n nun en  y n sing in  (') vocal, showing when l, m, n, make syllables of them- selves.

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.

# Mi Slat.

Pra giv me mj nu slat, j wi∫ tu dre on it. Mj slat haz a fin red ej. H wil dro a bo. Hwot a lon noz he haz, and but wun grm? Ny j wil dre a cv, 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"/"\epsilon" for [i:] seemed not acceptable for a Spanish audience, thus a I with hook (proposed to be unified with Latin iota; marked red) was introduced to indicate that phoneme.

Also, the "a" 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  $\Theta$  (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 vozes castellanas adjuntas: donde este sonido no es ecsacto, o al ménos mui aprocsimado, se pone una señal de referencia a la pájina 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.
Largas.	Prorumpientes. (Explodents.)
t.       i.       eel.       ir.       i         E.       e.       ale.       el.       e         A.       q.       air.       (¹).       q.         A.       q.       alms.       (²).       aáh         O.       o.       all.       (³).       o         O.       o.       ope.       oro       o         W.       food.       nudo.       ú	P p . rope pan pi B b . robe bobo bi T t fate (15) ti D d fade (16) di C g etch charro . ché J j edge (17) je C c leek cacao . qué G g league legua gué
I i $i$ ll (*) it E e $e$ ll (5) $e$ t	Continuantes.
A a am (6) at  A a are, pass . ama a  O o olive (7) ot  U u up (8) ut  U u full (9) ut  D e tit,le, taken (10) el	F f safe fuego . ef         V v save vivo vi         Θ δ thigh zierzo . iδ         H ft thy deidad . di         S s seal sesos es
Diptongos.	Z z zeal (18) zi $\Sigma$ $\int$ mesh (19) if $\Xi$ 3 measure . (20) 3i
Ψ i eye (11) i Χ s owl (12) s U η you yugo yu	Líquidas.  L l fall (21) el
Ligantes. (Coalescents.)	R r rare (22) ar
W w	Nasales.
Aspirante.  H h hay (14) heg	M m. seem . mamá . cm N n . seen $\binom{23}{}$ en U $\mathfrak{g}$ . $\sin g$ $\binom{24}{}$ $i\mathfrak{g}$

Fig. 1851d: Cubi i Soler, Mariano: Nuevo Sistema (Bath 1851), p. 66.

Showing ( $3^{rd}$  column) the handwriting form of the "latin capital letter E without middle bar" resembling the small letter, supporting the unification with  $\Theta$ ).

Half Vowel.

La | La | 2 2 | tottle | al

The Phonetic Journal, Vol. 7, London 1852. Excerpts from p.5 and p.23. Fig. 1852a: 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.

εα q ο ο ω, i ο α ο α ω, j σ ε ų, i ε ą ο σ ų, i e a ο α ω, j ε ω, w

#### Specimen.

Nutin hwotever iz mor tu be dezird, or mor delitful, dan de lit dezird, or mor delitful, dan de lit ov truit: for it iz de sors ov wizdum. Hwen de mind iz harast wid obscuriti, distracted bi dats, renderd torpid or sad'nd bi ignorans or felsitiz, and trut emerjez az from a darc abís, it sinz fort instantaniusli, lie de sun dispersin mists and vapurz, or lie de den dispelin de [adz ov darcnes.

No, 5, Proposed Jan., 1852.

wyh, pbtd gjcg, fvt asz yh, pbtd gjcg, fvo asz 53, 53, 1r, mnn.

#### Specimen.

Nuôin hwotever iz mor tu bi ov truô: for it iz de sers ov wizdum. Hwen de mind iz harast wid obscuriti, distracted bi dats, renderd torpid or sadend bi ignorans or folsitiz, and truô emerjez az from a darc abís, it sinz forô instanteniusli, lic de sun dispersin mists and vepurz, or lie de don dispelin de sedz ov darcnes.

No 6, Romanic Alphabet.

aa, bb, cc, dd, ee, ff, gg, hh ii, jj, kc, ll, mm, nn, oo, pp, qc, rr, ss, tt, uu,  $\nabla v$ , ww, xcs,  $y\bar{y}$ , zz.

#### Specimen.

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, distracted by doubts, rendered torpid or saddened by ignorance or falsities, and truth emerges as from a dark abyss, it shines forth instantaneously, like the sun dispersing mists and vapours, or like the dawn dispelling the shades of darkness.

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 PHONETICS

H wil lev Dr Ston tu tác cær ov hiz on reputásen. It wud be lafabl for me tu testifi dat i hav sen him rit 120 wurdz a minit ? H hav ritn 201 wurdz in a minit wid ez, befor witnesez, but did not tac de trubl tu get a sertificat dærfor, for de simpl rezn dat an abiliti tu rit rapidli duz not prav 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 mi cor, wid de asurans dat de cud rit 60 wurdz per minit. and after mor practis cud undowtedli rit faster (134) A jentlman woz introdust to me bi Mr Lonli az bein wun ov dar fastest riterz hwil he cud not rit mor dan 60 or 70 wurdz per minit !! A western fonografer woz told bi wun ov de ledin fonograferz ov 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 <a href="https://digitalarchive.tpl.ca/objects/344247">https://digitalarchive.tpl.ca/objects/344247</a>.

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:

Scale:

Short vowels.—Ii, Ee, Aa, Oo, Uu, u.

it, edge, am, not, up, foot.

Long vowels.—i, e, a, o, u.

eat, age, alms, ope, food

Dipthongs.—

i s u.

mine, house, mule.

The sound of the long vowels, i,  $\epsilon$ ,  $\eta$ ,  $\sigma$ ,  $\psi$ , 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		is always	The le	etter	is <i>alway<b>s</b></i>		
written	prntd	sounded as	written	prntd	sounded as		
E &	83	ee in eel	Ph	Рр	p in $p$ ole		
A a	Яa	a ale	BA	Вb	bbowl		
A A	A q	a $a$ lms	$\mathcal{T}$ $t$	T t	<i>t t</i> oe		
00	θθ	a all	D d	Dа	d $doe$		
00	O 0	o ope	E 9.	Cg ·	chcheer		
Ul ru	Wu	<i>00</i> food	J.J.	Јj	$m{j}$ $m{j}$ eer		
Fi			K k	Kk	<i>c c</i> ame		
0	Ιi	$i \dots i$ ll	99	G g	$g \dots g$ ame		
E R	Ее	$e \dots e l l$					
Aa	A a	<i>a a</i> m	FA	$\mathbf{F} \mathbf{f}$	f fear		
00	Oo	o olive	V V	V v	v veer		
W M	Uu	<i>u u</i> p	TA	$\mathbf{K}\mathfrak{b}$	th thigh		
Ul AL	Wu	oo foot	To D	аđ	th thy		
			8 8	S s	sseal		
#05	Ηį	<i>i i</i> sle	2 2	Ζz	z $z$ eal		
99	Øв	oi oil	G. J	Σ∫	c vicious		
	ষ্ঠ হ	ow $ow$	33	33	s vision		
4 4	Uų	u mule					
			Rr	$\mathbf{R} \; \mathbf{r}$	r rar		
yy	Yy	<i>y y</i> ea	Ll	Ll	l lull		
WW	W w	w way	Mm	M m	$m \dots mum$		
			N'n	Nn	nnun		
$\mathcal{H}\left(h\right)$	Hh	y yea w way h hay	If of	N y	$ng \dots \sin g$		

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 η (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 Aperican Phonetic Journal vol. II p. 48.

12	AMERIC	AN PHO	NETIC JOU	RNAL.						
THE PHONETIC ALPHABET.  The Phonetic letters in the first column are pronounced like the italic letters that										
LETTERS	follow. The last of	lumn con	tains the na	mes of the letters.	Name					
	Long Vowels.			Explodents.						
s 3	eel	ε	P n	pale	ne					
•	earth	•		bale						
	ale		T t	<i>t</i> ame	te					
	air		D d	dame	de					
	arms			cheer	-					
	all			jeer						
				came						
ωω		ω	G'g	game	ga					
т;	Short Vowels.		_	- Continuants.						
	ell		Fr f	fain	of					
	am			vain						
	ask			thigh						
	on			thy						
	up			seal						
W <b>ա</b>	wood	ut		zeal						
	Diphthongs.			shall						
	Diphthongs.		₹ 3	vision	38					
	oil			Liquids.						
	owl		7 1	lull	-1					
ե ս	dupe	પ્		rare						
37	Coalescents.			Nasals.	/-					
	yea									
17 W	way	wa		maim						
tr 1.	Breathing.	,		nine						
п п	hay	. na	N ŋ	sing	1ŋ					

The marks of punctuation are the same as in the Romanic orthography, excepting the following changes and additions: the mark of interrogation 9 is placed before the first word of a question; ? is placed at the end of a sentence, and indicates doubt; ? indicates laughter; ! surprise; ; sorrow; the inverted period · signifies the omission of a letter.

**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.

	*****	••••			
	9	The Phone	tic A	lphab	ret.
	EI a A q A q	is always sounded as  ee as in eel ea earth a ale a air a arm a all	The land written Black To de G	P p B b T t	is always sounded as  p as in rope b robe t fate d fade ch etch g edge
00		o ope	Kh Gg	K k G g	
00 *55 2/2	EeAaa Ca Oo Uu Uu Fi Oo Uu Uu	$oi \dots oil$ $ow \dots owl$ $u \dots mule$	Rop Ll	FfVvRBBSSZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	l fall
Ww	W w	y yea w way h hay	$\mathcal{N}_n$	Nn	nseen

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

## JERMAN SILVER.

Fu ov sr rederz qr probabli awar he meni aplikasonz qr ne-a-daz mad ov dis yusful kompozison. We kel it kompozison, eldo de majoriti ov de pepl imajin dat it iz a metal (sui generis)—but sug iz not de fakt. It iz kompozd ov wun part nikel, wun part ov spelter ov zink, and tre parts ov koper; but el dez substansez hav tu be pur, and ekspozd tu a grat het befor da miks amun demselvz. As zink metal, hwig iz ov a volatil natyur, iz not put in de pot until de ferst to ar wel yunited tugeder. He refraktori natyur ov de nikel,

### GOST STORIZ.

151

## GOST STORIZ — A YUMORUS SKEC.

## REV. 8. STEVENZ, A. M.

Hanksgiving diner woz over, and de kumpani returnin tu de parlorz, de yunger memberz, bi aksident er natyural afiniti, gaderd in wun, hwil de senyorz remand in de uder. To ov de later, hyever, son folod de yun pepl; wun ov kors woz Jonatan Pebodi, hoz hart had never stgron its you; de uder woz Peleg

"Wel Mr. Pebodi," kontinyud 'Ant Kezia,' lukin at him over her spektaklz, most gravli, "it iz nutin tu jok at, i kan afor yo-gosts hav bin sen, and i hav sen wun;" and de old ladi tuk anuder ping ov snuf.

<sup>&</sup>quot;Hwot's dat yo sa, Mr. Pebodi," inkwird 'Ant Kezia,' wid solem emfasis. "IDo yo, a Kristyan man, sa dar qr no gosts. Havn't i sen wun wid mi on iz."

<sup>&</sup>quot;Hq? hq? Hwot! ! anuder wun." eksklamd Jonaten. "Gosts must be plenti abst dez rejonz. His must be a veri spirityual vilaj. H wij i kurd kaç wun ov dem; dys se, Kazia, i'd jist kari him el bro de Stats, and tu de old kuntri, and kum hom wid a fortyun?"

**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).

THE

### PREFACE.

### AMERICAN

# PHONETIC DICTIONARY

ENGLISH LANGUAGE.

ADAPTED TO THE PRESENT STATE OF INTERACTURE AND SCIENCE; WITH PRONOUNCING VOCABULARIES OF UNIVERSITY, SCRIPTURAL, AND GROUNDINGS NAMES.

> Designed by Jathaniel Storrs. Compiled by Dan S. Smalley.

WITH A GENERAL INTRODUCTION

BY A. J. ELLIS, B. A.

CINCINNATI:

LONGLEY BROTHERS, PHONETIC PUBLISHERS, BOSTON, OTIS CLAFF. NEW YORK, FOWLER & WELLS; PHILADELPHIA, FOWLER, WELLS & CO.; LONDON, FRED PITMAN. 1855.

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, lexicographors 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 discritic 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

the vowel is short the accent falls upon the following consonant, and they would therefore accent he'pip, hap'i. This is an error which may be traced to the inconsistencies of romanic spelling.

43. Order of the Tetters 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, z, a, q, e, o, o, 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, a, a, a, o, o, o, l H

## American Phonetic Alphabet.

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

Long Voivels.	Explodents. P p as in pole, Name ps B b te D d
E e as in eel. Name e	P p as in pole, Name ps
Eeearthe	Bbbowlbg
u аaleя	Τ t toe tε
A a air a	D d doe dε
flqarmq	€ g cheer ga
θ e all e	Jjjeerja
ωωoak ω	Kk king, can . ka
(Dosoozeo)	Gggamega
Short Vurcels.	Continuants.  F f fear ef V v reer ve H t thigh it I d d thy da S s seal es Z z zeal ze E [ ] shall if I d 3 vision . 3a  Liquids.  R r rare ur L l lull el
I i ill it	Continuants.
E e ell et l	F f fear ef
A a . am at	V v veer ve
(I a . ask at	H t thigh it
0 o on ot	a ctthy da
U u up ut	Sses
Uuwood ut	Z z zeal ze
Dinhthonge	2 ] 8/All 1]
H i ice i	3 Visson 3a
or e e	Liquida
8 x owl x	n inquias.
L n dwpe n	Rrrareur
Contenents	Lilullel
V - Coulescepus.	Manala
W w	Trasais.
17 w	Nasals.  M m main em N n none en M n sieg in
Breathing.	N n none en
<b>H h λау</b> ha	Юр. sing. in

## FONETIK DIKEONURI

SB VO

# INGLIE LANGWEIJ.

#### ABB

A, beginin wid de sond ov a konsonant. Befor wardz beginin wid de send ov a veel, it is

ABACIST, Ab'a-sist, n. an akuntant.
ABACIST, A-bák, ad. bak; bakward; behind.
ABACOT, Ab'a-kot, n. kap ov stat fermerli yugd in Ingland.

ABACTOR, A-bák-tor, n. [L.] wun ha stelz a herd ov katl.

ABACUS, Ab'a-kus, n. a kuntin tabl; a part ov a ABAFT, A-baft, ad. toard de stern ov a Jip. ABAISANCE, A-ba-sans, n. abasans.

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

ABALIENATION, Ab-al-yen-á-son, n. de transferin dz titl tu properti. [tu forsák. ABANDON, A-bán-don, r. t. tu giv up; tu kwit; ABANDONED, A-bán-dond, p. a. forsakn; dezerted; veri wiked.

ABANDONER, A-bán-don-er, n. wun ho abándons. ABANDONING, A-ban-don-ig, n. levin er forsakin. ABANDONMENT, A-ban-don-ment, n. de akt ov forsakin.

ABANDONEE, A-ban-don-é, n. wun tu hom a tip iz abandond.

Abarticulation, Ab-ar-tik-yq-la-son, n. a kind ov qrtikyulason hwic admits ov manifest moson. Abase. A-bas, v. t. tu humbl; deprés; brip lω. ABASEMENT, A-bas-ment, n. de akt ov humblin;

lo stat. ABASH, A-báf, r. t. tu mak ajámd; tu konfánd. ABASHMENT, A-báf-ment, n. jam; konfuzon. ABATABLE, A-bát-a-bl, a. dat ma be abated.

ABATE, A-bat, c. t. tu lesn; tu diminif; in le, tu defét, tu avertrá. [diskunt. ABATEMENT, A-bat-ment, n. de akt ov abatin;

ABATER, A-bát-or, n. de person er tin dat abáts,
ABATER, Ab'a-tis, n. trez kut den for militari
ABB, Ab, n. de yarn for a wevers werp. [deféns.
ABBA, Ab'a, n. a Siriak wurd, hwig signifis fader. ABBACY, Ab'a-si, n. de rits and posejons ov an ABBATIAL, Ab-á-jal, a. relatin tu an abu. [abot. ABBE, Ab's, n. an abot; an ekleziastikal titl wid-

st ofis er duti anékst. ABBESS, Ab'ee, n. de guvernes ov a nuneri. ABBEY, Ab'i, n. de residens ov an abot er munk. ABBOT, Ab'ot, a. de cef ov an abi er konvent.

ABBOTSHIP, Ab'ot-fip, n. de stat ov an abot.
ABBREVIATE, A-bré-vi-at, v. s. tu fortn; tu abrij. ABBREVIATION, A-bre-vi-a-fon, s. akt ov fertnin; kontráktiy.

### ABI

de indefinit artikl, plast befor wards ABBREVIATOR, A-bré-vi-a-tor, n. wan ho abrijes er reduses tu a smeler kumpas. traktin. ABBREVIATORY, A-bré-vi-a-to-ri, a. fertnin; kon-Abbreviature, A-bré-vi-a-tur, n. abreviason:

ABDICANT, Ab'di-kant, a. ábdikatin; rengnsin. ABDICANT, Ab'di-kant, n. a person ho ábdikats. Abdicate, Ab'di-kat, v. t. tu rezin; tu rentas;

tu giv up; tu depriv ov rit.

Abdication, Ab-di-ká-son, n. de dezertin ov a
publik trust widst a formal surender.

ABDICATIVE, Ab'di-ka-tiv, a. abdikatip.
ABDITIVE, Ab'di-tiv, a. havin de kwoliti ov hidip. ABDITORY, Ab'di-to-ri, n. a plas tu hid guds in. ABDOMEN, Ab-dó-men, n. de loer part ov de boh. ABDOMINAL, Ab-dóm-i-nal, a. relatin tu de abdomen.

ABDOMINAL, Ab-dóm-i-nal, s. wun ov an erder ov ABDOMINOUS, Ab-dom-in-us, a. lqrj-belid; abdom-

ABDUCE, Ab-dús, v. t. tra separat; tra dre from; yuzd in anatomi.

ABDUCENT, Ab-dú-sent, a. drein er pullin bak. ABDUCTION, Ab-dúk-Jon, n. ú kariin awa a person bi fors.

ABDUCTOR, Ab-duk-tor, n. a must dat drez bak. ABEARANCE, A-bar-ans, a. behavyor.

ABECEDARIAN, El-be-se-dá-ri-an, a. a teger er lerner ov de alfabet.

ABED, A-bed, ad. in bed; on de bed.

ABELE, A-bél, n. de hwit poplar.

ABERRANCE, Ab-ér-ans, i n. a wonderin from

ABERRANCY, Ab-ér-an-si, de rit wa.

ABERRANT, Ab-ér-ant, s. déviatin from de rit wa.

ABERRATION, Ab-or-á-son, n. de akt ov wonderin. ABERBING, Ab-ér-in, s. wonderin; goin astrá.

ABET, A-bet, v. t. tu enkuraj; tu set on; tu ad. ABETMENT, A-bet-ment, n. de akt ov abetin. ABETTER, A-bét-er, \ n. wun ho abéts; an akom-ABETTOR, A-bét-or, \} plis.

ABETANCE, A-bá-ans, n. reverson; ekspektason ov

ABGREGATION, Ab-gre-gá-son, n. a separason from Abhob, Ab-hér, v. t. tu hat biterli; tu dstést; tu abominat. hatred.

ABHORRENCE, Ab-hor-ens, m. detestajon; grat ABHORRENT, Ab-hor-ent, s. struk wid abhorens; adius; kontrari tu; inkonsistent wid. ABHORRENTLY, Ab-hor-ent-li, ad. in an abhorent

maner. ABHORRER, Ab-hér-er, n. wun ho abhérs. ABIB, A'bib, n. de ferst munt ov de Juis yer.

\_(1)

## PRONUNSIEDON

## JEOGRAFIKAL NUMZ.

Aachen, A'ken. Aalborg, Ol'borg.
Aargau, fir'gs,
Argovie, fir-go-vé, [Fr.] Aarhuus, Or'hos. Abaso, H'bq-ko. Abakan, H-bq-kqn. Abaco, n. ...
Abakan, fl-bq-kqn.
Abano, fl-bq-ne.
Abasois, or Abasois, A-bás-i-a.
Abbeville, Ab's-vil, [Fr.] flb-vél.
Abbetibbie, or Abbetibbe, Absetibe.
Abd-el-Curia, flb-del-ká-rs-q.
Ritn elsa (Kooree, or Kouri.)

Ritn elsa (Kooree, or Kouri.)

Ritna elsa (Kooree, or Kouri.)

Ritna elsa (Kooree, or Kouri.)

Ritna elsa (Kooree, or Kouri.) Abergavenny, Ab-er-gá-ne. Aberistwith, Ab-er-ist-wit. Abernethy, Ab'er-net-i. Abex, H'beks. Abington, Ab'in-ton.
Abo, H'bo. Abomey, Ab-ω-má. Abookeer, Aboukir, or Abukir, A-bo-kér. Abootish, Aboutige, or Aboutij, Al-be-tig.
Abrantes, Al-brén-tes.
Abrolhos, Al-brén-yes.
Abrusso Citra, Al-brét-se Cétrq. [trq. Abrusso Ultra, A-brot-so Ol' Absecum, er Absecombe, Abs sé-kum. (keer.) Abukir, A-bo-kér. Se (Aboo-Abutige, or Abutisch, A-ba-tig. Se (Abootisk.) Abyssinia, Ab-is-in-i-a. Acadia, A-ká-di-a. Acapulco, A-kq-pól-ko. Acaray, A-kq-ri. Accomack, Ak'o-mak. Accra, Ak'ra. Achmim, or Akhmym, Ak-mem. Acqs, Aks. Acqui, or Aqui, A'kwe. Acra, er Accra, Ak'ra. Acre, B'ker, er B'ker. Adair, A-dár. Adalia, H-dá-li-q, er Satalia, Sq-tq-li-q. Adana, fl-dq-nq. Adda, fld'q.

Adel, A-dél. Aden, A'den, er A'den.
Adige, Ad'i-je, [£.] A'di-ja.
Adirondack, Ad-i-ren-dak.
Adlerberg, A'dler-berg.
Adour, Ad-ér. Afghanistan, Af-gqn-is-tqn. Aficom, Aficum, or Afium, A-fi-6m. Afragola, A-frq-gá-lq. Africa, Af'ri-ko. Agably, or Aghably, fl-gq-blé.
Agadir, fl-gq-dér.
Agdas, flg-dés, er
Aghades, fl'gq-des.
Agde, flgd. Agen, fl.-zán. Aghrim, Og'rim, 🛷 Oh'rim. Agincourt, Aj'in-kart, or Aj-in-kart. Agnone, An-yo-na. Agoote, An-yo-na.
Agosta, A-gos-tq.
Agra, A'gra.
Agram, A'gram.
Aguadilla, A-gwq-del-yq.
Agua Nueva, A'gwq Nwa-vq.
Aguas Calientes, A'gwqs Kq-lién-tes. Aguayo, fl-gwi-o.
Aguihas, fl-gwi-yqs.
Ahanta, fl-hin-tq.
Ahgrim, fl'grim.
Ahmedabad, fl-méd-a-bid. Aichstadt, Tk'stet. Aigle, a'gl. Aigues Mortes, ag Mort. Ain, An. Aintab, In-tab. Aisne, In. Aix aks, Aix-la-Chapelle, Eks-lq-Eq-pel.

Ajan, fl-54n. Ajalon, Aj'a-lon. Ajmeer, Aj-mér. Akaba, H'kq-bq. Akerman, A'ker-man. Akhaf, A'kaf. Akhissar, Ak-his-ár. Akshehr, Akchehr, or Aksche-her, Ak-Jár, er Ak-Já-her. Aksoo, Aksou, or Aksu, fik-so. Alabama, Al-a-bóm-a. Alachus, Al-áq-q-a. Aladulia, Al-a-dó-li-a. Alagoas, fi-lq-gó-qs. Alais, fi-lá. Alamo, A'lq-ma. Aland, A'land. Alashehr, or Alaschehr, Al-lq-jár, or Al-lq-já-her. Alaska, Alás-ka. Alatamaha, Ol-ta-ma-hé. Alba, Al'bq. Al Baab, Al Bqb. Albacete, Al-bq-tá-ta. Albania, Al-bá-ni-a,
Arnaootleek, or Arnaoutlik,
Ar-nq-át-lsk, [T.]
Albano, Al-bá-na.
Albans, St., Sant Ol'bans. Albans, St., Sant Ol'bans.
Albany, Ol'ban-i.
Albemarle, Al'be-mqri, (Esg.)
Albemarle, Al-be-mqri, (U. S.)
Albufera, Al-bu-fá-ru.
Albula, fil'bo-lq.
Alby, or Albi, Al'bi, [Fr.] fil-Alcala, fil-kq-lq.
Alcala de Henares, fil-kq-lq da
En-á-res. En-q-res. Alcamo, fli'kq-mo. Alcaniz, fli-kqn-yst. Alcaniara, fil-kon-to-ro. Alcarria, Al-ka-ré-o. Alckmaer, Alk-mor. Se (Alkmaar.) Alcona, Al-kó-na. Alcoy, Al-kó-e. Aldabra, Al-dé-brq. Aldan, Al-den. Alden, Ol'den. Alderney, Ol'der-ni.
Alem-Tejo, or Alen-Tejo, fllen-Tá-za. Alencon, A-lén-son, lon-són. [Fr.] A-

As only no notason emploid in dis list is do you on italik r for do tril ov dat leter. Name dat, by joneral you in dis kuntri, hav bekum Applisied, or markt wid do Inglis pronunsiason rader dan do Yaropean.

Ajaccio, A-yát-go, or Ajazzo, A-yát-so.

(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.

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.

THE 38 SIMPLE LETTERS.										
15 Vowels.			1	14 Subvowels.			9 Aspirates.			
E	е	ale	B b bow			P	p	pit		
A	a	arm	D	d	day	Т	t	<i>t</i> in		
ြ	۵	all	G	g	gay	K	k	kite .		
A	<b>B</b>	<i>a</i> n	v	V	vile	F	$\mathbf{f}$	fame		
I	X	eve	Δ	δ	then	Θ	в	thin		
3	ε	end	$\mathbf{Z}$	Z	zone	S	s	sin		
I	i	ile	J	j	azure	C	c	shade		
I	I	in	L	1	<i>l</i> ight	H	þ	<i>h</i> ut		
Ω	ω	<i>o</i> ld	R	r	roll	Q	q	what		
R	ห	lose	M	m	met	~~ #	·····			
0	0	<i>o</i> n	N	n	not		ent Ac	rks to repre- cent, Inflec-		
IJ	IJ	tube	Ŋ	ŋ	song		ion, a	nd Intona-		
u	u	up	W	w	wo	, ,	, , ,	• • • •		
σ	U	full	Y	У	yoke	٠, ١	, , ,	* A A. A		
Φ	φ	out								
		1	нв 6	СОМР	OUND LETTE	RS.				
a	α	oil	D	đ	<i>j</i> ob	v	Ĉ	etch		
ε	Ð	air	g	g	tugs	X	x	oa <i>ks</i>		



(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).

**BHOGRAFIZ** 

ov as

## BRKKDBKKR

ov as

## YUNTED STATS

KOMP#LD B# F. G. ADAMZ.

SINSINGTI.
LOULI BRUGERZ, FONETIK PUBLIZERZ.
1856.

JORJ WOZINTON.

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ns and den yo find wun. "Trot, Jerj," sed Ogústin Wosinton, "iz de luvliest kwoliti ov yot. I wud rid fisti milz, mi sun, tu se de bo hoz hart iz so onest, and hiz lips so pyr, dat we ma depénd on everi wurd he sez."

"Pq," sed Jorj, veri seriusli, "da į ever tel liz."

"No, Jerj, į tank God yo do not, mį sun; and į rejós in de hop dat yo never wil. At lest yo sal never, from me, hav kez tu be gilti ov so samful a tin. Meni parents, indéd, do drįv đạr gildren tu đis vịl praktis, bị bárbarusli betin đem for everi litl felt; hens, on đe nekst oféns, st kumz a fib tu hịd it, and tu eskáp a trsnsin. But az tu misélf, Jorj, yo no į hav elwaz told yo, and no tel yo agén, đat hwenéver bị aksident, or for eni rezn, yo do enitin ron, hwig must ofn be đe kas, az yo ar but a litl bo yet, widót mug eksperiens or nolej, yo must never tel a felshud tu konsél it; but kum bravli up, mį sun, lįk a litl man, and tel me ov it; and, instéd ov betin yo, Jorj, į wil but đe mor onor and luv yo for it, mį bo."

de sun ov Ogústin Wosinton bekám de "Fader ov hiz Kuntri." Ot not he ha planted de sedz ov gratnes in de hart ov dat sun tu sar a litl ov de onorz bestád on him. Sertenli. If dar iz eni gud in Ford ov Julsa orasonz, let a fu ov dem be givn in praz ov de fader

**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.

AN

# INGLIC GRAMAR,

PRINTED FONETIKALI.

FROM HE "FONETIK DJURNAL," 1856.

LUNDON:

FRED. PITMAN, 20 PATERNOSTER RG.
WILIAM WHEIT, 36 BLUMZBERI STRFT.
BAG, (BATH): RIZAK PITMAN, PARSONEDJ LEN.

Preis Wwn Cilig.

### 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.

DIPHTHONGS: ei, ai, oi, ou, iu.

as heard in by, aye, voice, now, new.

THE PHONETIC JOURNAL.

[12 July, 1856

## DJWVENIL DEPARTMENT.

### GOLDEN RWL.

"But it iz so kruuel, so cemfuli kruuel, mams, and so wiked, and so gud-for-nubin," kreid litel Hari Lester, pantin wid redj, and stampin hiz fut bitwin itc paconet wurd. "And ei'l never luv him agen,—never,—never."

"O yes yu wil, Hari."

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"No ei cent—ei no ei cent. Ei cal het him ol mei leif, and ei l go up tu de Hol and let hiz rabits out direktli, dat ei wil." "But ei woz veri unhapi, mams, and ei am sori. Du, du forgiv mi."

"Wilipli, when you kan tel mi dat from your hart you hav forgiven Arbur, and hav trouli repented ov your revenjful filing tordz him."

Agen der woz a seilens, for Hari woz an onest boi, hu wud not, iven tu gen hiz mud-er'z pardon, tel her a folshud, and ci had askt him a hard bin, harder dan eni task or leson hi had ever yet lernd, and wun white it simd imposibel for him tu perform. Had it bin enibin dat 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.

gerl ov siksten sumerz.

Es woz djip ov Skrofyula. It had fasnd itself on ds ergan ov Nutrijon, and is woz bein starvd tu del do her beloping the de solar sistem. Eq is the be de terminus ov an ar-lin ral-rod, runing the el uder parts ov de kreated yunivers and de mon? Eq is larjer dan

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

#### VOWELS.

### DIPHTHONGS.

#### CONSONANTS.

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

Fifth Revised Proposal to encode characters for the English Phonotypic Alphabet (EPA) in the UCS 2024-12-11

### 14 Jan., 1860]

## THE PHONETIC JOURNAL.

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inventer hu iz dis ivnin amen se-Mr Eizak Pitman ov Bab-iz az wardi ov de onor and de respekt ov de men ov everi edj, az de inventerz ov de elektro-telegrafi and fo-

And hwei. Bikoz hiz art, tu de sem degri az derz, mits dis wont ov hiumaniti in everi edi. It parteks indid ov de natiur ov bob elektro-telegrafi and fotografi, and der is a konsiderabel amount ov analodji bitwin it and dem, az tu its histori az an invencon, maner ov its operaconz, and de valiu ov its rezults. Az bob elektro-telegrafi and fortografi ar not so myto nim eidiaz, az an impruvment spon old wsnz, so iz fonografi an impruvment spon kaligrafi and stenografi hwitc wer in ekzistens bifor it.

Fonografi sestenz a relecon tu sound veri similar tu dát hwite Fotografi holdz tu form. It iz a korekt reprezentscon ov it, and de proses iz instantenizsli efekted bei beb. It daz not rekweir a lon and wirisam aprentiscip tu master eider art, and hwen wons 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 bikum a gud fonografer; and forder, der is no limit-onles it is self-impozd-tu de ekserseiz ov hiz art.

ilodjikal. Ei woz reversin de order ov dar relativ importans, and komperin de greter bei de les. Ei du not klem for bot-fotografi az metc atencon and regard az hav bin bistod spon de Fotografi ov Form, bet ei klem for it mor atencon—imejurabli mor. Inazmete az de meind itself iz siupirior tu mater, bei so mote de mor iz de fotografi ov meind siupirior tu de fotografi ov mater. Mater iz sussibstancal, flitig, evanesent. He most solid bloks ar kramblin awe everi moment bei de akcon ov disintegrstig edjensiz, hwite rob dem ov der substans. Meind iz mor substancal dan substans itself, for it never deiz; its bots wil out-liv teim, and run paralel wid eterniti. Hu kan limit de bot or de binker, or estimat de magnitiud and de importans ov its pouer. Impirial Rom woz wans de mistres ov de warld. Her gets wer de sentral fosei ov de world's welb, and pomp, and magnifisens, but her dominion in de proudest dez ov her empeir, never ekstended tu de limits dat hav bin atend bei de filosoferz ov Gris, hwen her Aristotelz and her Platoz ruld de meindz ov men hu demselvz ruld de world. Ei fil ei am enli reizig tu de digniti ov mei subdjekt, do az yet ei but dimli dizera ol its veital importans. Hwen bronz and empeirz hwite nou rul de world hav krombeld inturminz, de bots hwite

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## THE PHONETIC JOURNAL.

[14 Jan., 1860

#### LITERARI GLENIUZ.

Everi truf hwite wi no and ahnoled; in dis leif, bet du not relidjesti obe, iz teken awe from es hwen wi enter de spiritizal world. It iz token aws from as bihaz wi hav no rial afekcon for it; hav nesting in our harts to reten it; for nesting han abeid wid vs bot hwat haz enterd intu our leif's bru. A gud man'z frendz me forsek him, or me dei and liv him tu morn. Hiz fortiun me fel, or hiz helf dehe. Halrmni and reprote me endjestli In serhamstansez ov dis atak hiz karakter.

Brt hwen dou moh'st dei prezens felt, and hwen de sol haf graspt di reit, hou fast de drivi cadoz melt binid dei worm and living leit ! In di ci feind a nobler berf, a glori o'r de wrrld ei si! and Faradeis returnz tu erf, and blumz agen for ws in di.

How strop and bruin Sen ou Man, Redimer from de bondz ov sin, 'tiz hou de livin spark dest 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.

elongetin der bodiz. Wons in de dismis der telz az yusles apendedjez, and bigin hwot iz kold de preses ov insistin ((incysting),) dat iz, ov rolin demselvz sp intu a bol, and sekritin a mimkes over its serfes, hwite in teim develops intu a flei, hoverz over de pond, and iz swolod bei sem berd. He flei iz didjested, and de libereted serkeria feindz itself in komfortabel kworterz; its cel iz broken, and its proses tu matiuriti iz ritct.—Dj. Lwis in "Kornhil Magazin."

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

**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 TRIPEL

(TWELV GROS)

# DJEMZ OV WIZDOM,

ON

MORAL AND SPIRITIUAL SYBDJEKTS.

SELEKTED FROM HE BEST OFORZ.

SECOND EDITION.

### LANDON:

FRED. PITMAN, 20 PATERNOSTER RØ, E.C. W. HWEIT, 36 BLUMZBERI STRIT, W.C. BAR (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.	Liquids.
Guttural.	$V_1 $ $\eta \dots sing \dots i\eta$
K k leek ke G g league ge H h hay etc Y y yet ye	$egin{array}{llll} N & n & & see n. & & en \\ M & m & & see m. & & am \\ L & l & & fall. & & el \\ R & r & & rare & & ar \\ \end{array}$
Lingual.	VOWELS.
T t fate ti	Guttural.
D dfadedi C gviciousig J jvisionji S shisses Z zhiszi R bwreathib d dwreathedi	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Labial.	O o on ot
P p rope pi B b robe bi F f safe ef V v save vi W w wet we	Ω ωallω         ℧ σopeσ         U ufullut         W wfoodw
	si, ei, oi, ou. 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, q 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. Tg (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.

Script.

Script.

Example.

smz, edj, er, it — ol, op, food — son, but.

Bi, ei, oi, ou.

E g, K b, A d, V g.

E g, K b, A d, V g.

St.

E g, K b, A d, V g.

ay, by, boy, now. she, thin, then, sing. si, bei, boi, nou. gi, bin, den, sig. he double letter u, as in unit unite, duty, value, is written thu

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

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

CONSONANTS.

k, g; h; y: t, d; g, j; s, z; b, d: kay, gay; aitch; yay: tee, dee; ish, zhee; es, zee; ith, thee:

p. b; f, v; w: n, n, m; l, r.

pee, bee; ef, vee; way: ing, en, am; el, ar.

VOWELS.

a, B;  $\Theta$ , E;  $\dot{i}$ ,  $\dot{i}$ : O,  $\Theta$ ;  $\overline{\sigma}$ ,  $\overline{\sigma}$ ; U, UL, 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.

ав NU TESTAMENT **VR LORD AND SEVYOR JEZUS KRÆST.** our lord & encious fevers "hist AKORDIN TW HE OFOREZD VEREON. GONTHERE TO TE LIE TO TO THE IN FONETIK SPELJU. Concess : + 14 SINSINGTI: ELFAS LOWLI, FONETIK PUBLIZER; 1864.

INTRODUKTORI REMARKS.

As it yead tu be.

This apayrings of the birth tongue is by cause of twey thinges: oon is for of tweye thinges: oon is for it wo things: one is for wun is fer bekés] that the usage and maner of alle other nacioums, beth completed for to leve her owne language, and for to kondings: one is for things: one is for mations, be [arg] kompeld (for pelled for to leve her owne language, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for to kondingse, and for the kert thing is a Frensche, and have defense of sins (dat) of kommans come first into from the firm time for to speke Frensche, from the firm for to speke Frensche, from the firm for to speke Frensche, from the firm that thei beth children be larel taught date [arg] rotk in day kradl, and kan spek, and kunneth speke, and play with a childre brooch.

Higden, who died about Az it yyzd tu be. Az it iz ns. Higden, who died about and can speak, and play 1360. with a child's brooch.

He canjes in ertografi sins 1360 hav bin numerus, and de printin ov de Bibl has varid wid dem el. His lust çanj, from romanik tu fonétik spelin, as has bin sen abúv, iz not so difikult fer de reder tu muster as de transijon bak tu Higdens tim, and is but a turo kompleson ov de wurk dat has bin gradyuali progrésin for several senturis, namli, de konsistent and filosofikal reprezentaĵon

3. In regard tu de pronunciason indikated, we hav endévord tu konférm tu Amerikan yuzej az defind bi Webster and Wuster in dar pronansin diklonaris. At de tim ov steriotipip des pajes, dar is no fonétik diksonari in print, tu hwig tu refér az a gjd so dat de Testament ma agré wid uder wurks in fonétik spelin; but befár da se de publik í sug a fanétik standard wil be koménst, and rapidli hurid tro de pres. Eud dar be diskrepansis betwen dis and uder publikajons ijyud from er ofis, on de niser ponts ov ertoepi, dis statment wil eks-

He ansent stil ov pronousin a serten klas ov wurdz, hwig iz stil praktist bi meni reders from đe pulpit, namli, luved, greved, praed, luked, blesed, haz so jénerali bin diskontinyud in de érdinari redin ov de skriptyurs, dat we felt full woranted in printip lued, greed, prad, lukt, blest. But we hav not gon so for as tu modernis de langwej in de kas ov verbs términatin in (th). dus wa

Each letter has the so	und of the <i>italioized</i>	letter or letters in	the illustrative	words.

Long Vowels.  E eeele  E eearthe  B bbale	.be
E eearthe R h	.be
El g	.be
	.te
A - air	. as
O a grown of D d	
O all	
0	
	. ka
Φ ω	
Short Vounels.	ŭ
I iit   Continuants.	
E eet   F ffain	ef
A aamat   V vvain	
Cl aaskat   F. tthigh	
U uuput S sseal	
Wuwoodut Z zzeal	
Diphthongs. $\Sigma \int \dots shall \dots$	i∫
# iice i   3 3vision	38
60°	-
Inquius.	
TT 3 13.1	
101	qr
Coalescents. Nasals.	
Y у yea ya   мазанз.	
W wwaywa   M mmaim	. am
Breathing. N nnine	
H hhayha lo nsing	

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

#### 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 dipthong, or the last syllable begin with f, 3, or y,—in which case the accent falls on the last syllable but

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.

#### HE GOSPEL AKORDIN TU SHNT MARU.

6APTER 1.

1. Te buk ov de jenerajon ov Jezus Krist, de sun ov David, de sun ov Braham.

2. Albraham begåt fzak; and fzak begåt Judas and hiz bredren;

3. And Judas begåt Farez and Zara ov Ramar; and Farez begåt flamo;

4. And Ham begåt Aminadab; and Aminadab begåt Aminadab begåt Nasson; and Nasson begåt Salmon;

5. And Salmon begåt Robo and Nasson begåt Salmon;

6. And Jese begåt David de kinj begåt Solomon ov her [dat had bin de wif] ov Yurjas;

7. And Solomon begåt Robo am; and Roboam begåt Abiq; and Josafat begåt Josafat; and Josafat begåt Joram; and Joram begåt Elgakin;

8. And Bra begåt Josafat; and Josafat begåt Joram; and Joram begåt Elgakin;

9. And Ozjas begåt Josafat; and Josafat begåt Joram; and Joram begåt Elgakin;

10. And Ezekjas begåt Manásez; and Manásez begåt Josafat; and Bolon begåt Elgakin; and Salattiel begåt Zorobabel;

12. And after da wer bret tam begåt kel hil Gost.

22. Nw el dis woz dun, dat it mil begåt Eljakin; and Elazer begåt Sadok;

14. And Ezer begåt Sadok;

15. And Eliud begåt Elgakin; and Elezer begåt Matan; and Elezer begåt Matan; and Elezer begåt Matan; and Elezer begåt Matan; and Elezer begåt Matan; and Elezer begåt Matan; and Elezer begåt Matan; and Elezer begåt Eljakin; and Salattiel begåt Zorobabel;

16. And Jakob begåt Krit.

17. So el de jenerajonz from Jezus, ho iz keld Krist.

17. So el de jenerajonz, and from David until de karilj awá intu Babilon untu Krist [qr] forten jenerajonz; and from de karilj awá intu Babilon untu Krist [qr] forten jenerajonz.

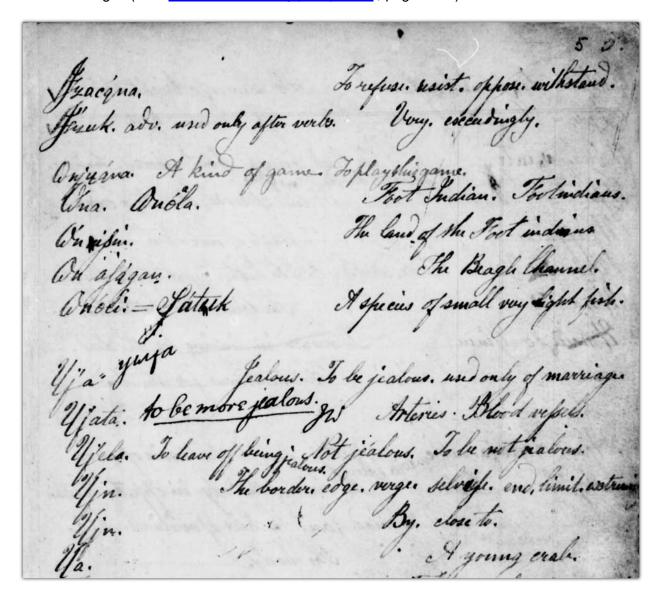
18. ¶ Nw de berð ov Jezus Krist woz en fis wiz: Hwen az hiz muder Mari woz espráz du Jozef her huzband, bein quit elle ver gen publik egzámpl, woz mindet tu put her awá privili.

20. But hwil he tet on dez Lord have fis sun ov David, fer not dat huzband sez; and man and til min a drem, sait, Jozef, de sun ov David, fer not dat huzband sez; and hiz bredren, abståt de tim da wer karid awá tu Babilon.

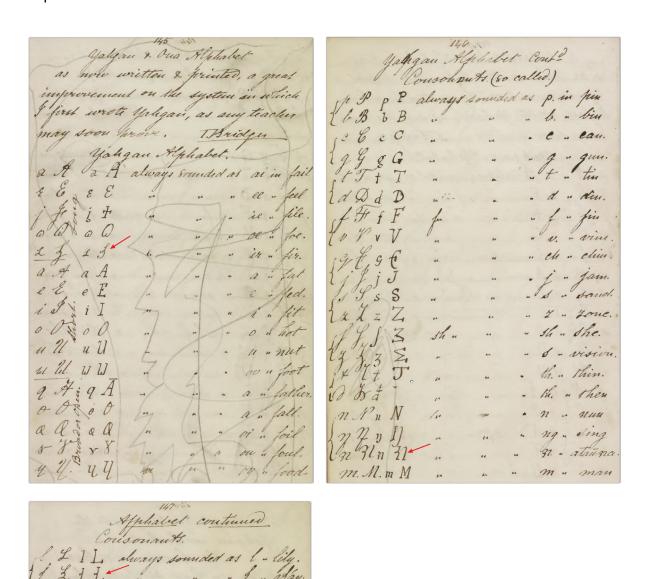
12. And after da wer bret tu mit be fulfild hwig woz spoken lejakin; and Elezer begåt Sadok;

13. And Bezet Eljakim; and

**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).



**Fig. 1866a:** Specimens of the manuscript of the Yahgan grammar started 1866 and completed 1895 (pp 145–147) by Thomas Bridges (from <a href="https://www.loc.gov/item/unk83030617/">https://www.loc.gov/item/unk83030617/</a>), 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.



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 nonprotruding 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.

vow. Instast column contai	ms ine names of the tetter
CONSONANTS.	Liquids.
Mutes.	L lfall, lightel
P prope, postpi	R rmore, rightar
B brobe, boastbi	Coalescents.
T tfate, tipti	W wwet, quitwe
$\mathbf{D}$ dfade, $d$ ipdi	Y yyet, youngye
€ gcheap, fetchge	Aspirate.
${f J}$ ${f j}{m j}$ ump, bri ${m d}{m g}$ eje	H hhay, houseeg
K klee $k$ , caneke	VOWELS.
G gleague, gainge	Guttural.
Continuants.	A aam, fast, farat
F fsafe, fatef	A salms, fathers
V vsave, vatvi	E eell, any, heret
H Jwreath, thighif	εale, fair, bearε
I dwreathe, thydi	I iill, pity, filialit
S shiss, seales	l ieel, eat, merei
Z zhis, zealzi	$oldsymbol{Labial}.$
$\Sigma \int \operatorname{vi} c \operatorname{ious}, she i $	O oon, not, norot
ℤ z…vision,pleasure…zi	@ oall,law, oughto
Nasals.	U vup, son, curvt
M mseem, metem	O oope, coat, pour o
N nseen, neten	U ufull, footut
V ŋsing, longiŋ	W wdo, food, tourw
Diphthongs: 4	į, 8 s, U.y.
	y, now, new.

"Wiliam Rojer (Rodger); ker ov Mesierz Tinli (Tinley) and Spnz, 7 Woter strit, Liverpul," woz duli enterd in de Fonotipik Jornal for Februari, 1848, pej 72. Hi enterd de servis ov dis ferm in 1844, at de ej ov fiftin.

Wi hav no rekord ov him durin 1849, hwen hi woz droin nir de ekspirs on ov hiz fiv yirz' aprentis fip; bot durin dis yir it apirz dat hi formd de dezin ov bikomin a travelin profesonal fonografik lekturer and ticer. Hi komenst in de tenz ov Edinbore and Dalkif (Dalkeith). Yr ferst konsinment ov fonografik instrokson buks for hiz pupilz, woz med tu him in Februari, 1850, and forwarded tu Edinboro. Hi woz soplid wid instrokson buks for tú yirz and a haf: de akont had den inkrist tu P67. Az wikud get no remitansez, bot onli promisez tu ps, de akent woz klezd in Juli, 1852. But bisidz promisez, hi sent kopiz ov som titel didz ov properti hwig wud sum fol intu hiz pozeson, in order tu ale or firz dat wi wer inkprin a bad det. Aiz peperz wer mir fabrikesonz, az wi sfterwardz lernd, on bikpmin akwented wid hiz famili, hu ar ol respektabel and wordi pipel.

Hi kontinud tu lektur and tic Fonografi in Edinboro and Dalkif for mor dan a yir. An entri in hiz akent respektin a parsel ov instrukjon buks sent 26 Juli, 1851. "tu remen at de steson (Edinboro) til kold for," naturali eksited no spspison, it biin a kompn okprens. Wi hav in dis prezent yir lernd de rizon for dis prekoson tu prevent hiz adres from biin non.

Spdenli or talented and spksesful lekturer adrest ps from Berik-on-Twid (Berwick-on-Tweed), and eksplend de koz ov hiz krosin de border-ov kers hi did not intimet dat der woz enifin ov de karakter ov a "flit" in it-bi sein dat hi kud perfekt hiz Edinboro and Dalkit pupilz trun de post, hwil hi rezd and tot fref klasez in Berik ;-a veri ekselent arenjment wi fot.

Durin de folein fri yirz hi workt hiz we sef fru de tenz ov Nortomberland and Dorham, lekturin on Fenografi, and tigin de art in Anik (Alnwick), Morpet, Nort

**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.	Liquid <b>s.</b>
Mutes.	L lfall, lightel
P prope, postpi	R rmore, rightar
B brobe, boastbi	Coalescents.
T tfate, tipti	Wwwet, quitws
D dfade, dipdi	Y yyet, youngys
C qcheap, fetchgs	Aspirate.
J jjump, bridgejs	H hhay, house eq
• • • •	-
K kleek, caneke	VOWELS.
G gleague, gaings	Guttural.
Continuants.	A aam, fast, farat
F fsafe, fatef	A salms, fathers
V vsave, vatvi	E eell, head, anyet
K Jwreath, thighif	E eale, air, bears
A dwreathe, thydi	I iill, pity, filialit
S shiss, seales	L ieel, eat, merei
Z zhis, zealzi	Labial.
Σ [vicious, shei]	O oon, not, norot
I zvision, pleasurezi	O o all, law, ought o
Nasals.	8 sup, son, curst
M mseem, metem	O cope, coat, pourc
N nseen, neten	U ufull, footut
V nsing, longin	W u. do, food, touru
Diphthongs: 4 į,	U, OU ou, OI oi.
as heard in by,	new, now, boy.

Ae 8der Lif.

nomena ekzist in de sder wsrld, į du not nó, nor iz it esensal dat į sud inkwir."

And so men pas from a temporal tu an eternal stat ov biin in a strenj apati respektin subjekts ov suprim valu, az ignorant ov de futur dat awats dem az de unborn beb iz ov de wurld intu whichi wil bi uferd.

Iz dis rit? Iz it nesesari? Iz it inevitabel?

He skeptikal filosofer afermz dat der ar pozitiv limitesonz tu human tot; dat no posibel sjentifik development or reserg kan ever lid zs tu a nolej ov de sol and its destiniz; dat de ekzistens ov a spiritual world iz a mir hipotesis, and ol tioloji de ofsprin ov drimi abstrakson and idel spekuleson.

The Kristian konside the finitines and fibelnes ov the human understandin, and korektli infere from it the nesesiti ov reveleson. His aksepts the Wurd ov God as the reveleson ov a moral los. As und ov a blesed immortaliti, his asks for no spesal unfolding ov the lift tu kum. Indid his persueded himself that God has intensonali and wighli kept us in ignorans ov the lose and fenomena ov the spiritual wurld: and that it is best for us tu no litel and tink litel ov whot sime tu bi konsild and forbiden ground.

Iz not dis a hesti konklugon, an enfounded asem-

**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	P p	P p	P p	\	pee	pat	A a	Aa	A a	À a	-1	at
біб	Вь	Bb	B $b$	B 6	\	bee	alms	a A	Aα	А а	A a	•1	ah
tigh $t$	T t	Tt	T t	$\mathcal{T}_t$		tee	pet	Ее	E e	E e	L e	-	et
d e e d	D d	Dd	D d	D d		dee	age	з З	Æε	εε	E &	•	eh
church	$\mathfrak{C}$ $\mathfrak{g}$	E G	eg	69	/	chay	pit	Ιi	H i	I $i$	I i		it
ju $dg$ e	Jј	I j	$J \mid j \mid$	Jj	/	jay	eat	Ъi	lì	ιi	ő i		ee
cake	K k	K k	K k	K h		kay	pot	Οo	0 o	0 o	0 a	-	ot
gi $g$	G g	G g	G g	99		gay	all	က စ	<b>O</b> a	<i>O</i>	Q a		aw
<i>f</i> aith	$\mathbf{F}$ $\mathbf{f}$	# f	Ff	Ff		ef	but	8 ह	క్ క	8	Se n	-	ut
bath	n J	'l w t	h o	no	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	ith	put	υ α	e u	i Ca	W		1
bathe	a a	1910 1910	$\mathcal{A}$ $\mathcal{A}$	% d	(	thee	ooze	W w	MA m	W w	Was	_	ōō
sauce	S s	\$ 5	S s	90	0)	ess			DIP	HTHONG	SS.		
size	Zz	Z z	Zz	25 z	0)	zee	m <i>y</i>	H į	j E	F i	81	v	eye
ship	Σ∫	# 5	$\Sigma f$	Ff	ノ	ish	new	U u	M n	U u	W W		you
azure	<b>X</b> 3	<b>3</b> 3	3 3	33	ノ	zhee	The	diphtho	ngs in "ay	(yes), bo	y, boil, no	w, noun	," are
maim	M m	M m	M m	16 m		em	writte		ingle letters :	that repre oi	$\begin{bmatrix} \mathbf{ou}_{\wedge} \end{bmatrix}$	lements,	, thus:
noon	N n	An	N n	N $n$		en	The letters	Phonetic .	Alphabet cons	ists of 38 le	etters, name	ly, the 23	useful
sing	N ŋ	A v	VI y	2 1		ing	new or	hes. The variate, $pet$ , $pit$	owels $a, e, i, c$ , $pot, put$ . Al	, u have in	variably the	ir snort s	ounds.
lull	Ll	Ll	L $l$	Ll		el			CIMEN OF	PHONETI	 C PRINTIN	ıg.	
roar	R r	R r	R r	Po 1	1	ar	Bi me l	į de Fe bi tot t	netik Alfa u r.id, boʻt	bet eni in fone	person, e etik and	old or ; in ordi	yvŋ, inari
way	w w	TH w	Ww	W w		way	buks	s, in fri	msnts,— ı task whi	ai, ofen	in twen	ti ourz	' in-
yea	Yy	D y	Y y	2f 4		yea	yirz	ov toil	bį đe old ε	lfabet.	Whot fa	der or t	iger
hay	H h	B h	H h	96 h	196	aitch			tis gret bu r de difuz			–ais po	uer-

**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	ı	Antiqua	Steno- graphie	Antiqua	Steno- graphie
аА	На	Aa	•	A a	A a	A a	•1	i, ay	4	woh	١
з З	εε	8 e	•	Ее	E e	£ e	-	oi, oy	7	woo	
į, j	Lι	8 1		Ιi	I $i$	I i	.1	ow	1	yah	l º
Ω ω	0 a	Wo	-	Оо	0 0	O a	-	wah	۱۶	yeh	-
Q $Q$	$\mathcal{D}$ v	90	-	8 8	8 8	Je se	-	weh	c	yee	10
W w	W w	W m	_	U u	U $u$	W u		wee	اء	yaw	'
Φį	$F_i$	81	<b>'</b>	Uч	U y	U y	دا	waw	)	yoo	c

## Konsonanten.

Antiqua	Cursiv	Schreib- schrift	Steno- graphie		Cursiv	Schreib- schrift	Steno- graphie	Lintiana	Cursiv	Schreib- schrift	Steno- graphie
Pр	P p	P p	\	F f	$F_{f}$	Ff		Мm	M m	M m	
Вb	B b	B 1	\	V v	V v	V v		N n	N n	$N^n$	_
T t	T t	$\mathcal{T}_t$	İ	Бэ	$\boldsymbol{\mathit{F}}$ $\theta$	n a	(	Иŋ	$\mathcal{U}_{\mathcal{I}}$	Ny	
D d	D d	D d	١	a a	$\mathcal{A}$ $d$	% a	(	Ll	L $l$	21	
ۍ	$\mathscr{C}$ $g$	60 9	/	Ss	S s	$\mathscr{S}$ s	)。	Rr	R r	Ro v	7/
Jј	J j	gi	/	Ζz	Z z	æ z	)。	W w	Ww	Ww	
Kk	K k	N6 k		Σ∫	$\Sigma f$	J. f	ノ	Υу	Y y	y y	_
Gg	G $g$	99		Z 3	33	33	ノ	H h	H h	96 h	16

Nach dem Standard-Alphabet bedeuten obige Zeichen:  $\bar{a}$ ,  $\bar{e}$ ,  $\bar{i}$ ,  $\bar{o}$ ,  $\bar{\varrho}$ ,  $\bar{u}$ , ei,  $\check{a}$ ,  $\check{e}$ ,  $\check{i}$ ,  $\check{o}$ ,  $\check{\varrho}$ ,  $\check{u}$ , yu, p, b, t, d,  $t\check{s}$ ,  $d\check{z}$ , k, g, f, v,  $\theta$ ,  $\delta$ , s, z,  $\check{s}$ ,  $\check{z}$ , m, n, n, 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 spoken stroyli in syport ov Mr Pitman'z sistem, it iz not bekoz on ol points ei konsider it siupirior tu de sistemz preperd bei yder reformerz, hu ar deli inkrisin in nymber; byt gifti bekoz it haz bin tested so larjli, and haz stud de test wel. Mr Pitman'z Fonetik Jsrnal haz nou [1880] bin pyblift ferti-et yirz, and if it iz non dat it iz pyblift wikli in 12,400 kopiz, ję kopi reprezentin at list for or feiv riderz, it me not sim so veri fulif, after ol, if wi imajin dat der iz sym 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. Luc, gapts 13.

69

- 5 í sananima tusicu; san tula monnginu cucan san lamulgeua.
- 6 ¶ śangi parabl ácun cumuruda, 'ua cutupusteeq-guda fig ūrur cigin vinèd, cutupi cumanatanacuda amijim, cunjin bav tecida.
- 7 cutucutanuda cigin vinšd mystecuūngi, mutan š ámuni tstanacuda amiim fangi fig ūrutun, cunjuigik į teci èca; sa tēiktupθanθa, ula ā uussimunicunna.
- 8 culacutanuda cunjima, 'Lord ā upusmuni śangi à ácun, cutupi ágiamagamatoa, átumsi ūstagua samara.
  - 9 tul' issean' íma, tul' issunnaca sa tēiktupeanea.
  - 10 sabat dara eugeagimutuda 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.						ſ		CONSO	NANT	'S.		
a A	εε,	(E e)	Φį:	O o,	σσ,	Ա Վ։	४ ४.	Eg,	Бđ,	Ηđ,	Σ∫,	Z 3,	VI ŋ.
A a	Εε,	(E e)	$F_i$ :	Ο ω,	O v,	U y:	8.	E g,	Бθ,	Æ₫,	Σſ,	Z 3,	VI y.
A a	L e	/8 e/	8 i	W a	Q o	U y	J* v.	69	% Q	$\mathcal{H}$ $\partial$	SI	Zy vision,	27.
	age, air,		eat:	all,	ope,	food:	son, but.	chair,					
smz,	ej, er,	pet,	$\operatorname{it}:$	ol,	ep,	$\mathbf{f}\mathbf{q}\mathbf{d}$ :	syn, byt.	ger,	in,	đen,	∫ų,	vigon,	sin
		r	he order	of the Pho	onetic Al	lphabet,	and the nam	es of the	eletter	s are,			
Conson	ANTS :	o, b; t	, d; գ,	j; k,	g: f,	v; f,	đ; s, z;	∫, ʒ:	m, n,	, ŋ:	l, r:	w, y:	h.
							iee; es, zee;						
37		_						-		.: :		: .	<u>.</u>

Vowels:—a, s; e, ε; i, į: o, ω; γ, σ; u, ų. Diphthongs:—ei, iu, ou, ai, oi.

at, ah; et, eh; it, ee: ot, awe; ut, oh; δότ, oo.

as in by, new, now, ay, boy.

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

As, 
$$\mathcal{E}\varepsilon$$
,  $(\mathcal{E}e)$   $\mathcal{H}i$ :  $\mathcal{O}\omega$ ,  $\mathcal{O}\sigma$ ,  $\mathcal{U}u$ 

As,  $\mathcal{E}\varepsilon$ ,  $(\mathcal{E}e)$   $\mathcal{H}i$ :  $\mathcal{O}\omega$ ,  $\mathcal{O}\sigma$ ,  $\mathcal{U}u$ 

As,  $\mathcal{E}\varepsilon$ ,  $\mathcal{E}e$   $\mathcal$ 

 $\mathcal{S}$  8.  $\mathcal{E}$  9,  $\mathcal{H}$  1,  $\mathcal{H}$  1,  $\mathcal{H}$  1,  $\mathcal{H}$  2,  $\mathcal{H}$  3,  $\mathcal{H}$  9.  $\mathcal{H}$  8.  $\mathcal{E}$  9,  $\mathcal{H}$ 

**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/I/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 haze.	E e, e in men.	E ε, ea in each.	I i, i in ill.
A q, a in flask.	A $a$ , $a$ in $at$ .	$\Theta$ e, a in all.	O o, o in ox.
U u, oo in food.	U u, oo in foot.	O o, oi in oil.	₱ j, i in isle.
O o, oe in hoe.	U u, u in us.	δ v, ou in our.	S s, er in herd.

[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 torm might be represented by S as a capital and S 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,' c f is ch in 'she,' f is ch in 'thin' and f f the in 'the,' f f is f in 'she,' f is f in 'the f of the Welsh, f is an aspirated and trilled f, f f is an aspirated f (almost f f is f in 'sing,' f f is f in 'pleasure,' or the f of French; whilst f f is the common f in 'sing,' f f is f in 'pleasure,' or the f of French; whilst f f is the common f in 'sing,' f is f in 'pleasure,' or the f of French; whilst f is the common f in 'sing,' f is f in 'pleasure,' or the f of French; whilst f is the common f in 'sing,' f is f in 'pleasure,' or the f of French; whilst f is the common f in 'sing,' f is f in 'pleasure,' or the f in 'thin' and f is f in 'thin' and f in 'thin' and f is f in 'thin' and f is f in 'thin' and f is f in 'thin' and f is f in 'thin' and f is f in 'thin' and f is f in 'thin' and f is f in 'thin' and f in 'thin' and f is f in 'thin' and f is f in 'thin' and f in 'thin' and f is f in 'thin' and f in 'thin' and f in 'thin' and f is f in 'thin' and f in 'thin' and f in 'thin' and f in 'thin' and f in 'thin' and f in 'th

## Fig. 1909a:

\*markkos erutiya suvisesam

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

U+1DF6B LATIN SMALL LETTER PHONOTYPIC ROUNDTOP A

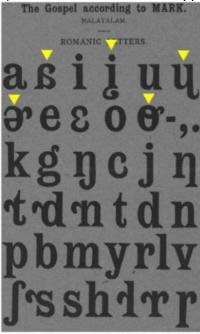
U+1DF6F LATIN SMALL LETTER PHONOTYPIC DIPHTHONG AI

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:

\*markkos erutiya suvi∫ɛsam

(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.)

- 4 irikkunna praksram tanns. \*yohannsn vannu marubhumiyil snsna-petuttiyum pspa-mocanattinn'-uddamsnassntara snanstte prasangiccum kont'-irunnu. 5 avanre atukkalskku \*yahudiya dsfam okkeyum \*yaru-
- g natukatil sambhaviccatu \*yeʃu \*galilayile \*nasarettil-ninnu vannu \*yehannenel \*yerdenil snena-pettu.

  10 utane veltattil-ninnu kareri-apped ekaʃam pidarunnat'um etmevu pravu-pele tanre-mel varunnat'-um avan
  11 kantu. ni enre priya-putran ekunnu, ninnil nen

**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. **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 Origin and us ov de fonetic 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 propo d nuvo sin [A propos de nouveaux signes]. In: Le maître phonétique, 3e 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 106461

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

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

Please ensure you are using the latest Form from <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>. See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/road

## A. Administrative

1. Title:	Fourth revised Pro		acters for the English Phono of the UCS	typic Alphabet
2. Requester's n	ame:		arl Pentzlin	
Requester typ	Individual contrib	oution		
4. Submission d	2024-12-11			
5. Requester's re				
6. Choose one of				
	complete proposal:			Yes
	e information will be prov	vided later:		
B. Technical – (				
1. Choose one o		<i>(</i>		
	posal is for a new script	(set of characters):		No
	posed name of script:	naracter(s) to an existing		Yes
	ne of the existing block:		D; Latin Extended-G; Suppleme	
	aracters in proposal:	<u> </u>	2, Lutin Extended C, Cappionio	31
	• •	elow - see section 2.2 of l	20D document):	31
A-Contempor			B.2-Specialized (large col	lection)
C-Major extin			E-Minor extinct	
	eroglyphic or Ideographic		G-Obscure or questionable usage	e symbols
	including character nam			Yes
		ance with the "character r	aming guidelines"	
	nnex L of P&P documen			Yes
b. Are the	character shapes attach	ed in a legible form suitat	le for review?	Yes
5. Fonts related:				
a. Who will	provide the appropriate of		ject Editor of 10646 for publishing	the standard?
h Identify	the party granting a licen	Andreas Stötzn	<i>er</i> he editors (include address, e-m	acil fta cita eta \:
b. identily	the party granting a licer	Andreas Stötzner, as@si		iaii, rip-site, etc.).
6. References:		711101000 010121101, 000001	9.109.401110.40	
	rences (to other characte	er sets. dictionaries. desc	riptive texts etc.) provided?	Yes
			wspapers, magazines, or other s	sources)
	d characters attached?	· 	Yes	
7. Special encod				
			processing (if applicable) such a	
presentation			(if yes please enclose informati	on)? <u>Yes</u>
		Special casing of Latin le	tters (see text)	
8. Additional Info				
			Properties of the proposed Char	
			ocessing of the proposed charac ormation, Currency information,	
information such	as line breaks widths e	tc. Combining behaviour	, Spacing behaviour, Directional	behaviour Default
Collation behavi	our, relevance in Mark U	p contexts, Compatibility	equivalence and other Unicode	normalization
related informati	on. See the Unicode sta	indard at http://www.unico	ode.org for such information on o	other scripts. Also
see http://www.u	inicode.org/Public/UNID/	ATA/UCD.html and associ	iated Unicode Technical Report	s for information

needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

<sup>&</sup>lt;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?	No					
If YES explain						
2. Has contact been made to members of the user community (for example: National Body,	Voc					
user groups of the script or characters, other experts, etc.)?	Yes					
If YES, with whom?  Linguists, historians, librarians  If YES, available relevant documents:  As an example, attached Letter of Support by re	searchers					
If YES, available relevant documents:  As an example, attached Letter of Support by refrom the University of Toulouse and University of Toulouse and Univer						
3. Information on the user community for the proposed characters (for example:						
size, demographics, information technology use, or publishing use) is included?	Yes					
Reference: Linguists, historians, librarians						
4. The context of use for the proposed characters (type of use; common or rare)	Specialist					
Reference: Linguists, historians, librarians						
5. Are the proposed characters in current use by the user community?	Yes					
If YES, where? Reference: By linguists, historians, librarians						
6. After giving due considerations to the principles in the P&P document must the proposed characters						
in the BMP?	No					
If YES, is a rationale provided?						
If YES, reference:						
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)	? Yes					
8. Can any of the proposed characters be considered a presentation form of an existing	No					
character or character sequence?	No					
If YES, is a rationale for its inclusion provided?						
If YES, reference:  9. Can any of the proposed characters be encoded using a composed character sequence of either						
existing characters or other proposed characters?	No					
If YES, is a rationale for its inclusion provided?						
If YES, reference:						
10. Can any of the proposed character(s) be considered to be similar (in appearance or function)						
to an existing character?	No					
If YES, is a rationale for its inclusion provided?						
If YES, reference:						
11. Does the proposal include use of combining characters and/or use of composite sequences?	No					
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	d?					
If YES, reference:						
12. Does the proposal contain characters with any special properties such as						
control function or similar semantics?	No					
If YES, describe in detail (include attachment if necessary)						
42. Does the averaged contain any lide arms big constant to the state of the state	No					
13. Does the proposal contain any Ideographic compatibility character(s)?						
If YES, is the equivalent corresponding unified ideographic character(s) identified?  If YES, reference:						
II I EO, ICICICIDE.						





1st 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.

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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

Chosal Mehre

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.