## A Beginner's Guide to Nuscrîpt

## **Background**

There are 44 distinct phonemes (units of sound in words) in the English language. The history of why exactly is long and winding, filled with collision and borrowing from a multitude of other languages, a bubbling melting pot descended from Old Norse, but heavily influenced by Latin, French, Dutch, Celtic, Greek, Arabic, Hindi and more. All that contact, plus hundreds of years of development before spelling was standardized, left us with a lot of different ways to write those 44 sounds – 199 in fact, of what are called graphemes (distinct ways to write sounds). Consider the long /ay/ sound you know from grade school: there are a whopping 12 different ways to write that sound, ranging¹ from ballet² to weigh³, a trait⁴ that might make⁵ you say⁶ 'Hey³, give me a break³!' And look, reader, I'll tell you straight9, I can't gauge¹⁰ your level of interest in this from afar, so…reign¹¹, foyer¹².

Whew, we made it, but that's a lot of different ways to write one sound! And there's plenty of words where those very same spellings are pronounced differently, like *cat* and *plaid* and *laugh* and *maul*! On one hand, the variety of ways to represent sounds in English is charming, a beautiful reminder of the rich history of our language and our dependence as a people on other cultures. On the other hand, it really sucks to learn to read and write, not only as a schoolchild, but even more so for English language learners. Nuscrîpt seeks to alleviate that struggle by introducing a new system of writing words that removes irregularity and uncertainty by making a nearly one-to-one relationship between sounds and letters, reducing the number of graphemes from 199 all the way down to 39.

This guide will show you how to use Nuscrîpt, and don't worry, there will be some helpful charts at the end.

Note 1: Several conventions have been employed in this guide to assist the reader, as follows:

- /abc/ Glyphs between slashes represent sounds or IPA symbols.
- [Aa] Glyphs between brackets represent letters of Nuscrîpt.
- *abc* Words in italics are provided as examples.
- CWE Abbreviation for 'Current Written English', aka English as it is now written.

### **Consonant Changes**

We start with consonants:

#### 1. Removed Letters

First, we'll remove some letters that aren't pulling their weight.

- Kk  $\rightarrow$  We have two letters for this sound: /c/ and /k/. /c/ was here first.
- Qq → It's /k/ and /kw/, which already requires two letters (qu) not too bad.
- $Xx \rightarrow$  Another easy one. It's actually just a /k/ and an /s/ together.

#### 2. Newly Added Letters

That made your life easier, so now we'll make it a bit harder: with some fun new letters!

First is a replacement for the /ng/ sound, like in *ringing*. No reason to use two letters when one will do, so here's a new friend:

/ng/ → Now represented by [Ŋŋ], pronounced ing.

Next, let's look at the /th/ sound, like in *thumb* and *thick* and *that* and *these*. You may have noticed that while these words are all written with /th/, the first two make a slightly different sound than the last two. Let me explain: We have lots of words that are minimal pairs (words with only one sound different), like *fast* & *vast*, *par* & *bar*, *cheap* & *jeep*, and *sip* & *zip*. In all these examples, the first word's initial sound is *unvoiced* (doesn't vibrate your vocal cords), and the second word initial sound is *voiced* (vibrates your vocal cords). That's the same thing happening with those words above. Consider *thigh* and *thy*: another minimal pair with an unvoiced initial sound and a voiced initial sound. These distinctions are important, so we'll split those sounds into two new letters:

- /th/ → Split into two letters: [Þþ] and [Đð]
  - Unvoiced /th/ like <u>think</u> and <u>thigh</u> is now [Pþ], pronounced <u>eth</u> (with the /th/ unvoiced, of course). Fittingly, it's a letter used for this sound in Old English. Fun fact: in ye olden dayes it was nicknamed <u>thorn</u>.
  - Voiced /th/ like <u>th</u>at and <u>th</u>y is now [Đỡ], pronounced <u>eth</u> (with the /th/ voiced this time). It was also used for this sound in Old English. Hooray for historical throwbacks!

#### 3. The Retroflex Diacritic

Next, let's tackle some familiar sounds known as <u>retroflexes</u>, where your tongue curls up to the roof of your mouth and makes fun noises.

Each of the following are similar to those we just talked about, in that it's a digraph (a phoneme represented by two letters instead of just one). Let's change that by letting them be represented by a single letter with a dot beneath it to remind us it's just a tiny bit different. Many languages use diacritics (markers for letters like the underdot) to denote pronunciation differences, so let's join them.

- $/\text{ch}/ \rightarrow [C, C]$  As in <u>chugga-chugga</u> and <u>choo-choo</u>.
- $/sh/ \rightarrow [\S\S] Shush$ , it's gonna be okay.
- $/zh/ \rightarrow [Zz]$  This is the neat sound in azure, pleasure, and treasure.

#### 4. Hard and Soft Gg

We're getting close! Hang in there!

You may remember "hard g" and "soft g" from those heady schoolchild days. The silly thing is, we already have another letter whose entire job is handling the "soft g" sound: Jj! Gg has been doing too much for too long, so we're giving it a break by letting it return to just representing "hard g".

- $/g/ \rightarrow [Gg]$  For all those *grin*-inducing *giggles* and *goofs*.
- $/j/ \rightarrow [Jj]$  No more Gg in *nudges* and *budges*. Just Jj for the "soft g" here.

#### 5. Remaining Letters

Lastly, let's clarify the remaining letters.

Most of the familiar consonants remain the same as in CWE, but don't have to work as hard. For instance, Bb doesn't have to put up with words like *subtle* anymore and can just stick to what it's good at: words like *bubble*. The rule of *thumb* here is if the word makes the sound, you write it. If it doesn't, you don't! Written in Nuscrîpt, Bb doesn't have to go anywhere near a word like *subtle*. And that's the same story for most of the consonants we haven't discussed yet: Bb, Dd, Ff, Hh, Ll, Mm, Nn, Pp, Rr, Ss, Tt, Vv, Ww, Yy, and Zz.

In addition, there are no silent letters: good news for all the <u>knights</u> and <u>knaves</u>. And while we're on the topic of Kk, which you'll remember is no longer used, let's take a second to discuss the 'ck' sound. /k/ didn't enter English for native words until Middle English, and since /c/ has been part of the English alphabet since Old English, it wins out. Anytime you see a /c/, rather than wondering if it's pronounced with a 'ck' sound or a 's' sound, you know it's 'ck'. We'll leave 's' to Ss.

## **Vowel Changes**

Vowels are up next. Almost half of the phonemes in English (20/44) are vowels, and they're only represented by five well-known letters: Aa, Ee, Ii, Oo, Uu. Note: If you mentally inserted "... and sometimes Yy," good for you – you're right, but you're also wrong. Yy just stands in for other vowels in words because of English's weird spelling rules, but fixing that is the entire reason we're here, isn't it? We'll talk more about Yy and some other special cases later.

At the end of the day, these five vowels have a lot of the same problems as our consonants: they have too many jobs and variant spellings, and that makes reading and writing harder than it needs to be. Before we break down each vowel to understand what sounds it should really be responsible for, let's meet some new symbols that will help shoulder the load.

#### 1. Vowel Diacritics

<u>Diacritics</u> are markers added to letters to help denote pronunciation. Nuscrîpt utilizes 5 vowel diacritics along with the 5 vowel letters to make our lives easier. In examples below, you'll see a dotted circle stand in for vowels so you can focus on the markers.

- $\hat{O}$ , the <u>circumflex</u>. A caret hat on top of a vowel, the circumflex denotes the short form of some vowels:  $\hat{A}$ â,  $\hat{E}$ ê,  $\hat{I}$ î,  $\hat{O}$ ô, and  $\hat{U}$ û. When handwritten, the circumflex can also be represented by three dots.
- Ö, the <u>overring</u>. A single ring on top of a vowel, the overring denotes the rounded variant of some vowels: Åå and Ůů. When handwritten, the overring can also be represented by one dot.
- $\Box$ , the <u>bar</u>. An ascending diagonal line across a vowel, the bar denotes the rounded form variant of Oo:  $\emptyset \emptyset$ .
- $\tilde{O}$ , the <u>tilde</u>. A waved line on top of a vowel, the tilde denotes the open variant of Oo:  $\tilde{O}\tilde{O}$ . When handwritten, the tilde can also be represented by a horizontal bar without the wave.
- ´, the <u>acute accent</u>. This is the only vowel diacritic not written on top of a vowel (it's written on top of consonants instead). An ascending diagonal line on top of a consonant, the acute accent denotes the presence of a schwa vowel (more on those later).

#### 2. Standard Vowels

Aa
 In CWE, Aa sounds are represented by 15 different graphemes, but in Nuscrîpt there are only 3 Aa sounds we need to account for:

- $\circ$  /ay/  $\rightarrow$  [Aa]
  - This is "true a" or "long a", the sound in hay, name, and train.
  - Represented by Aa, the standard vowel with no diacritics.
- $\circ$  /a(t)/  $\rightarrow$  [Ââ]
  - This is "short a", the sound in cat, raft, and track.
  - Represented by Ââ, an Aa with a circumflex diacritic above.
- o /ow/ → [Åå]
  - This is "round a", the sound in how, cloud, and bough.
  - Represented by Åå, an Aa with an overring diacritic above.
  - It's a bit different because it's a diphthong (where the mouth shifts between two vowel sounds in one smooth vowel). Try saying it slowly and you'll see what I mean.
- Ee

In CWE, Ee sounds are represented by 18 different graphemes, but in Nuscrîpt there are only 2 Ee sounds we need to account for:

- o /ee/ → [Ee]
  - This is "true e" or "long e", the sound in bee, read, and squeak.
  - Represented by Ee, the standard vowel with no diacritics.
- o /e(h)/ → [Êê]
  - This is "short e", the sound in met, edge, and blend.
  - Represented by Êê, an Ee with a circumflex diacritic above.
- li

In CWE, Ii sounds are represented by 14 different graphemes, but in Nuscrîpt there are only 2 Ii sounds we need to account for:

- $\circ$  /ai/  $\rightarrow$  [Ii]
  - This is "true i" or "long i", the sound in *eye*, *kind*, and *light*.
  - Represented by Ii, the standard vowel with no diacritics.
- o /it/ → [îî]
  - This is "short i", the sound in *lit*, *grit*, and *flick*.
  - Represented by Îî, an Ii with a circumflex diacritic above.
- Oo

In CWE, Oo sounds are represented by 15 different graphemes, but in Nuscrîpt there are only 4 Oo sounds we need to account for:

- $\circ$  /oh/  $\rightarrow$  [Oo].
  - This is "true o" or "long o", the sound in *no*, *glow*, and *though*.
  - Represented by Oo, the standard vowel with no diacritics.
- o /ah/ → [Ôô]
  - This is "short o", the sound in father, daughter and often.

- Represented by Ôô, an Oo with a circumflex diacritic above.
- $\circ$  /oa/  $\rightarrow$  [Õõ].
  - This is "open o", the sound heard in in some dialects in the words thought, cloth, north, and floor.
  - Represented by Õõ, an Oo with a tilde above.
  - If the four example words above have the same vowel in your dialect, this vowel represents that sound. If the words have different vowel sounds in your dialect, you can use either [Oo] or [Ôô], depending on the word. More on this phenomenon under 'Special Cases' in this section.
- $\circ$  /oy/  $\rightarrow$  [Øø].
  - This is "round o" or "slashed o", the sound in boy, ploy, and annoy.
  - Represented by Øø, an Oo with a bar diacritic rising through it.
  - It's a bit different because it's a diphthong (where the mouth shifts between two vowel sounds in one smooth vowel). Try saying it slowly and you'll see what I mean.
- Uu
   In CWE, Uu sounds are represented by 11 different graphemes, but in Nuscrîpt there are only 3 Uu sounds we need to account for:
  - $\circ$  /oo/  $\rightarrow$  [Uu]
    - This is "true u" or "long u", the sound in boo, true, and askew.
    - Represented by Uu, the standard vowel with no diacritics.
  - o /uh/ → [Ûû]
    - This is "short u", the sound in *but*, *luck*, and *truck*.
    - Represented by Ûû, a Uu with a circumflex diacritic above.
  - o /ugh/ → [Ůů]
    - This is "round u" or "near u", the sound in *put*, *book*, and *shook*.
    - Represented by Uu, a Uu with an overring diacritic above.
- Yy
   In CWE, Yy is responsible for representing many different vowel sounds, but those are handled well by the five real vowels, and Yy has a job to do representing the /y/ sounds in "Yes, I love yarn!" In Nuscrîpt, any existing use of Yy to represent vowels is discontinued, and those sounds represented by the characters above.

#### 3. Schwa Vowels

<u>Schwa</u> is the vowel sound produced when most of your vocal anatomy is relaxed and in a neutral position (including lips, tongue, and jaw). The most common vowel in spoken English, it's the vowel sound you hear in <u>about</u>, <u>celebrate</u>, <u>experiment</u>, <u>cognition</u>, and

camp<u>us</u>. It usually occurs in unstressed syllables at the beginning or middle of words and can be a bit tricky to hear if you aren't used to listening for it. Because shwa exists right in the middle of the standard vowel chart, it can sound a bit like several other closely-related vowels, like [î] and [û].

In Nuscrîpt, schwa is represented using an acute accent on the immediately following consonant. Let's take our five examples above and see what that looks like:

- <u>about</u>  $\rightarrow$  Precedes a Bb here, so the accent goes over that following  $\acute{\rm b}$ .
- *celebrate* → Same as above.
- experiment  $\rightarrow$  Before an Mm here, so the accent goes over that following  $\acute{m}$ .
- cognition → It precedes an Nn here, so the accent goes over the following ń.
- $campus \rightarrow Before an Ss here, so the accent goes over that following <math>\dot{s}$ .

Schwa sometimes occurs at the end of words where there is no following consonant. Like in *pizza* In these cases, a following apostrophe can be used to show the presence of the vowel.

Don't worry too much about what the entire word would look like yet. We'll talk about that soon and there will be more examples.

#### 4. R-Colored Vowels

<u>R-colored</u>, or <u>rhotacized</u> vowels are vowels that are slightly modified by an /r/ sound that immediately follows them, causing the tone of the vowel to drop toward the end. While there is some variation in regional pronunciation, these sounds can generally be represented in Nuscrîpt by using the initial vowel.

- $\langle e e^{r} \rangle \rightarrow$  [ar], he sound in <u>air</u>, <u>pear</u>, and <u>prayer</u>. Use [ar].
- $/ie^r/\rightarrow$  [er], the sound in <u>ear</u>, t<u>ier</u>, and st<u>eer</u>. Use [er].
- $/ v e^{r} \rightarrow [ur]$ , the sound in *cure*, *pure*, and *tour*. Use [ur].
- /3:  $/\rightarrow$  [f], the sound in *bird*, *pearl*, and *journey*. Use schwa diacritic [f].

The pronunciation of rhotacized vowels varies quite a bit from place to place. Rhotic forms like General American English and Irish English faithfully produce the /r/, while non-rhotic forms like Received Pronunciation (traditional British English) and Southern American English do not. Try reading the words above in a rhotic and non-rhotic accent and see for yourself. For speakers of varieties which have become non-rhotic over time, the vowel in *pear* may end up pronounced less like [ar] and more like [ê]. A great deal of the variety in English pronunciation is found in vowels, and this naturally leads to questions about how these differences should be accounted for in written forms. Additional information on handling these ambiguities can be found in the section on Regional Variation.

#### Special Cases

If you've been counting phonemes, you'll have noticed we're not quite to 44 yet. So now it's time to dive into some additional peculiarities.

#### Phoneme 43: 'Open O'

The 43rd phoneme is 'open o', represented in IPA as /ɔ/. It's heard only in certain dialects of English, and found in words like *thought*, *cloth*, *north*, and *floor*. If you read those words aloud and they all had the same vowel sound, your native dialect of English has resisted what is called the <u>cot-caught merger</u>. If they sounded different to you, your native dialect or English has adopted the cot-caught merger.

The cot-caught merger, so named because it demonstrates the merger in the name, collapses the /ɔ/ sound into other vowels, like [Aa] and [Oo]. In the examples above, the original /ɔ/ sound has collapsed into /a/ in *thought* and *cloth*, and /o/ in *north* and *floor*. Most users of Nuscrîpt can represent the merged sounds with [Oo] and [Ôô]. For those that distinguish between the two sounds, use the

Note: If none of this makes sense to you, that's ok. If you feel *cot* and *caught* sound the same, try pronouncing them with a stereotypical Philadelphia or New York accent to hear what a non-merged variety sounds like. If *cot* and *caught* sound different, try pronouncing them with a stereotypical Chicago or Wisconsin accent to hear what a merged variety sounds like.

#### Phoneme 44: 'Broad A'

Linguists refer to the  $44^{th}$  phoneme, (represented in IPA as  $/\alpha$ :/), as 'broad a' or 'long a'. It's the vowel in father, wash, and talk. You might be wondering what the difference is between this vowel and the standard /ah/ or [Aa] sound we discussed earlier. In most dialects, it is one and the same, so for the purposes of the present guide, users of Nuscrîpt can consider them such and represent both with [Aa].

## **Regional Variation**

Regional differences have long influenced the vocabulary, grammar and spelling of English. Indeed, these differences are so widespread that one need look no further than their own neighborhood to study the infinite varieties, not to mention the variations present in the English-speaking diaspora at large.

### Variation and the Purpose of Nuscrîpt

There are hundreds of recognized <u>English dialects</u> and <u>accents</u>; no sufficiently simple phonetic orthography would be capable of capturing this wide and wonderful variation without sacrificing simplicity for academic completeness. I anticipate continued differences in regional spellings and expect that the adoption of Nuscrîpt would lead to yet further flexibility on the part of local governments and citizens to represent English as it is truly spoken in their area. It is my hope that Nuscrîpt serves as a vehicle for descriptive expression, rather than prescriptive compulsion. The goal is not to standardize spelling, but rather to accurately convey pronunciation. For the purposes of this project, General American English has been used as the preferred source where pronunciation is variable. Accurate conveyance of regional variation will require the introduction of alternate spellings, just as it always has in CWE.

#### **Notable Varieties**

As noted above, there are hundreds of dialects and accents. These are generally divided by linguists into several large categories:

- British Isles dialects, including <u>Received Pronunciation</u> (Standard British), <u>Scottish</u>
   <u>English</u>, <u>Irish English</u>, <u>Welsh English</u>, <u>Northern English</u>, <u>Midlands English</u>, and
   <u>Southern English</u>.
- North American dialects, including <u>General American</u> (Standard American), <u>Black Vernacular English</u>, <u>New England English</u>, <u>Southern American English</u>, <u>Canadian English</u>, and Jamaican English.
- Australasian dialects, including Australian English and New Zealand English.
- African dialects, including <u>Nigerian English</u>, <u>Zimbabwean English</u>, and <u>South African English</u>.
- Asian dialects, including <u>Indian English</u>, <u>Singaporean English</u>, and <u>Hong Kong</u> English.

#### **Notable Variations**

The list of variations in English dialects and accents is too great to capture here, but some relevant variations are provided below with links to learn more.

#### Rhoticity

The pronunciation of /r/ is up for debate depending on what variety of English you speak. In rhotic varieties (like General American English), the historical post-vowel /r/ sound is preserved, while in non-rhotic varieties (like Received Pronunciation), it is no longer pronounced. Nuscrîpt prefers the rhotic form, though non-rhotic form is easily represented using the primary vowel sound. Learn more about rhoticity here.

#### Flapping

Flapping, sometimes known as tapping, is when /t/ is pronounced as /r/, an alveolar flap. This is present in North American and Australasian varieties in words like *butter* and *latter*, where the pronunciation is identical to *budder* and *ladder*. Nuscrîpt prefers the standard non-flapped form, though the flapped form is easily represented. Learn more about flapping <a href="here">here</a>.

#### • <u>T-Glottalization</u>

In some varieties of English, the /t/ sound is pronounced as a <u>glottal stop</u>. It happens most often in the middle of words, like <u>mountain</u> or <u>button</u>, and at the end of words, like <u>part</u> and <u>what</u>. Interestingly, in no variety is it universal, especially in careful speech. Nuscrîpt prefers the non-glottalized form. Learn more about t-glottalization here.

#### • Cot-Caught Merger

The cot-caught merger, so named because it demonstrates the merger in the name, collapses the /ɔ/ sound into other vowels, like [Oo] and [Ôô]. Varieties such as New England English have resisted this merger, while varieties like General American English have adopted it. Nuscrîpt prefers the merged form. Learn more about the merger <a href="here">here</a>.

## **Reading and Writing Nuscrîpt**

For the most part, writing Nuscrîpt is as easy as sounding out the word you want to write. Because of the heavy use of digraphs and other multi-characters to represent single phonemes in CWE, Nuscrîpt's use of single character to phoneme transcription results in shorter, more concise words.

Reading and writing will feel tedious in the beginning, but with minimal practice it soon becomes second nature. While transliterating, if in doubt, default to a 'standard' pronunciation (dictionary pronunciation guides are a helpful resource).

Note: A dictionary of translated terms in the <u>General Service List</u> is forthcoming, as is a concordance of CWE words and Nuscrîpt transliterations.

## **Examples**

For examples, we'll use five of the better-known English short pangrams (phrases which use all the letters of the alphabet at least once).

#### **Additional Rules and Notes**

#### Capitalization

Sentence capitalization is not required in Nuscrîpt. Capitalization of proper nouns is optional.

#### Pluralization

English uses Ss as a marker for plurality, but that final Ss is pronounced as both /s/ and /z/ depending on the word. When the final sound of the pluralized word is voiced, /z/ is used, because it is also voiced. When the final sound of the pluralized word is a <u>sibilant</u> (/s/, /sh/, /z/, and /zh/) unvoiced, /s/ is used, because it is also voiceless. Nuscrîpt prefers the actual sound produced ([s] for /s/ and [z] for /z/), though appending either [s] or [z] is acceptable.

#### Contractions

Nuscrîpt does not recognize contractions, nor use apostrophes to represent deleted letters. Users should represent contracted words as they sound. For example, *can't* is represented as [kânt].

#### • Single-Letter Words

The words  $\alpha$  and I are unique in that they consist of a single letter and yet stand as complete words. I poses no issues, as it is always pronounced [i], but  $\alpha$  is a bit trickier, as it is pronounced sometimes as  $[\hat{u}]$  and sometimes as [a]. Just like other words with multiple accepted pronunciations, either is allowable. However, for the sake of simplicity Nuscrîpt prefers a single unmarked [a]. This introduces a slight irregularity to the system, but allows the writer and reader to be unburdened by other potential representations.

#### Pronunciation-Influenced Words

The and some other words like A/An are interesting because their pronunciation depends somewhat on the immediately following word. When the following word starts with a consonant, the is pronounced  $[\delta\hat{u}/\delta']$  and a is pronounced  $[\hat{u}]$ , but when the following word begins with a vowel, the is pronounced  $[\delta e]$  and a is pronounced [a]. Nuscrîpt considers variants equivalent, though writers are encouraged to use the variant most appropriate to the phrase.

#### • Final Schwa

Sometimes the final sound in a word is a schwa vowel, like in *California* and *pizza*. In these cases, the schwa diacritic has no following consonant to appear above. Instead, use an apostrophe immediately following the word to show the presence of the schwa: *câlîforny'*, *pez'*.

## **Appendices and Charts**

## **Nuscript Letters and Names**

In CWE, names of letters are inconsistent, only sometimes using the sound of the letter in their names. Nuscrîpt has an expanded alphabet; instead of 26 letters, there are 38 (39 if you count the schwa diacritic). Each letter has a name which includes the sound it represents.

Letter	Accented	Name
Aa		ae
Ââ		âş
Åå		åo
Bb	В́б	be
Сс	Ćć	ce
Çç	Ćć	êç
Dd	Óď	de
Ee		ee
Êê		êh
Ff	ŕŕ	êf
Gg	Ġģ	ge
Hh	ĤŃ	ha
li		ie
îî		îg
Jj	Íj	ja
Ll	Ĺĺ	êl
Mm	М́т	êm
Nn	Ńń	ên
Ŋŋ	Ŋ́ή	îŋ

Letter	Accented	Name
Oo		ou
Ôô		ôh
Õõ		õa
Øø		øe
Рр	Ρ́ρ́	pe
Rr	Ŕŕ	ar
Ss	Śś	ês
Şş	\$\$	êş
Þþ	Þ́þ	êþ
Đð	Ðð	êð
Tt	Ťť	te
Uu		uu
Ûû		ûh
Ůů		ůŗ
Vv	Ýý	êv
Ww	Ŵẃ	wu
Yy	Ýý	ya
Zz	Źź	ze
Żż	Źź	êẓ
,		şwô

# **Concordance 1: Letters to IPA Symbols**

Letter	IPA
Aa	eɪ/eər
Ââ	æ
Åå	аυ
Bb	b
Сс	k
Ċċ	t∫
Dd	d
Ee	i:/ɪəʰ
Êê	е
Ff	f
Gg	g
Hh	h
li	aı
îî	I
Jj	dʒ
Ll	1
Mm	m
Nn	n
Ŋŋ	ŋ

Letter	IPA
Oo	0ʊ/ɔ:
Ôô	:c\:p\a
Õõ	э:
Øø	ΟI
Рр	р
Rr	r
Ss	S
Şş	ſ
Þþ	θ
Đð	ð
Tt	t
Uu	น:/ซə <sup>r</sup>
Ûû	۸/3: <sup>r</sup>
Ůů	Ω
Vv	V
Ww	W
Yy	j
Yy Zz	Z
Żż	3
,	ə

## **Concordance 2: IPA Symbols to Letters**

IPA	Letter
æ	Ââ
aı	li
aʊ	Åå
p/a:	Ôô
b	Bb
d	Dd
ð	Đð
dʒ	Jj
е	Êê
eɪ/eər	Aa
ə	,
f	Ff
g	Gg
h	Hh
i:/ɪə <sup>r</sup>	Ee
I	îî
j	Yy
k	Сс
l	Ll

IPA	Letter
m	Mm
n	Nn
ŋ	Ŋŋ
OΩ	Oo
ΣΙ	Øø
э:	Oo/Ôô/Õõ
р	Рр
r	Rr
S	Ss
ſ	Şş
t	Tt
t∫	Çç
θ	Þþ
น:/ซə <sup>r</sup>	Uu
ΰ	Ůů
V	Vv
۸/3: <sup>r</sup>	Ûû
W	Ww
Z	Zz
3	Żż

# **Concordance 3: Letters to Graphemes**

Letter	Graphemes	Examples
Aa	a, ai, eigh, aigh, ay, er, et, ei, au, a_e, ea, ey	bay, maid, weigh, straight, pay, foyer, filet, eight, gauge, mate, break, they
Ââ	a, ai, au	cat, plaid, laugh
Åå	ow, ou, ough	now, shout, bough
Bb	b, bb	bug, bubble
Сс	k, c, ch, cc, lk, qu, q(u), ck, x	kit, cat, christmas, accent, folk, bouquet, queen, rack, box
Çç	ch, tch, tu, ti, te	chip, watch, future, action, righteous
Dd	d, dd, ed	dad, add, milled
Ee	e, ee, ea, y, ey, oe, ie, i, ei, eo, ay	be, bee, meat, lady, key, phoenix, grief, ski, deceive, people, quay
Êê	e, ea, u, ie, ai, a, eo, ei, ae	end, bread, bury, friend, said, many, leopard, heifer, aesthetic
Ff	f, ff, ph, gh, lf, ft	fat, cliff, phone, enough, half, often
Gg	g, gg, gh, gu,gue	gun, egg, ghost, guest, prologue
Hh	h, wh	hop, who
li	i, y, igh, ie, uy, ye, ai, is, eigh, i_e	spider, sky, night, pie, guy, stye, aisle, island, height, kite
Îî	i, e, o, u, ui, y, ie	it, english, women, busy, guild, gym, sieve
Jj	j, ge, g, dge, di, gg	jam, wage, giraffe, edge, soldier, exaggerate
Ll	I, II	live, well
Mm	m, mm, mb, mn, lm	man, summer, comb, column, palm
Nn	n, nn,kn, gn, pn, mn	net, funny, know, gnat, pneumatic, mneumonic
Ŋŋ	ng, n, ngue	ring, pink, tongue
Oo	o, oa, o_e, oe, ow, ough, eau, oo, ew	open, moat, bone, toe, sow, dough, beau, brooch, sew
Ôô	a, o, au, aw, ough	swan, honest, maul, slaw, fought
Øø	oi, oy, uoy	join, boy, buoy
Рр	p, pp	pin, trippy
Rr	r, rr, wr, rh	run, carrot, wrench, rhyme

Letter	Graphemes	Examples
Ss	s, ss, c, sc, ps, st, ce, se	sit, less, circle, scene, psychology, listen, pace, course
Şş	sh, ce, s, ci, si, ch, sci, ti	sham, ocean, sure, special, pension, machine, conscience, station
Þþ	th	think
Đð	th	leather
Tt	t, tt, th, ed	tip, matter, thomas, ripped
Uu	o, oo, ew, ue, u_e, oe, ough, ui, oew, ou	who, loon, dew, blue, flute, shoe, through, fruit, manoeuvre, group
Ûû	u, o, oo, ou	lug, monkey, blood, double
Ůů	o, oo, u, ou	wolf, look, bush, would
Vv	v, f, ph, ve	vine, of, stephen, five
Ww	w, wh, u, o	wit, why, quick, choir
Yy	y, i, j	you, onion, hallelujah
Zz	z, zz, s, ss, x, ze, se	zip, buzz, his, scissors, xylophone, craze
Żż	s, si, z	treasure, division, azure
,	a, er, i, ar, our, ur	about, ladder, pencil, dollar, honour, augur

# **Concordance 4: Graphemes to Letters**

Grapheme	Example	Letter
Α		
а	swan	Ôô
а	cat	Ââ
а	bay	Aa
а	many	Ěě
а	about	(schwa)
a_e	mate	Aa
ae	aesthetic	Ěě
ai	plaid	Ââ
ai	maid	Aa
ai	said	Ěě
ai	aisle	li
aigh	straight	Aa
ar	dollar	(schwa)
au	maul	Ôô
au	laugh	Ââ
au	gauge	Aa
aw	slaw	Ôô
ay	pay	Aa
ay	quay	Ee
В		
b	bug	Bb
bb	bubble	Bb
С		
С	cat	Сс
С	circle	Ss
СС	accent	Сс
ce	pace	Ss
ce	ocean	Şş
ch	chris	Сс
ch	machine	Şş
ch	chip	Çç
ci	special	Şş
ck	rack	Сс

Grapheme	Example	Letter
D		
d	dad	Dd
dd	add	Dd
dge	edge	Jj
di	soldier	Jj
E		
е	end	Ěě
е	be	Ee
е	english	Îî
ea	break	Aa
ea	bread	Ěě
ea	meat	Ee
eau	beau	Oo
ed	milled	Dd
ed	ripped	Tt
ee	bee	Ee
ei	eight	Aa
ei	heifer	Ěě
ei	deceive	Ee
eigh	weigh	Aa
eigh	height	li
ео	leopard	Ěě
ео	people	Ee
er	foyer	Aa
er	ladder	(schwa)
et	filet	Aa
ew	sew	Oo
ew	dew	Uu
ey	they	Aa
ey	key	Ee

Grapheme	Example	Letter
F		
f	fat	Ff
f	of	Vv
ff	cliff	Ff
ft	often	Ff
G		
g	gun	Gg
g	giraffe	Jj
ge	wage	Jj
gg	egg	Gg
gg	exaggerate	Jj
gh	enough	Ff
gh	ghost	Gg
gn	gnat	Nn
gu	guest	Gg
gue	prologue	Gg
Н		
h	hop	Hh
ho	honest	Ôô
I		
i	ski	Ee
i	it	Îî
i	spider	li
i	pencil	(schwa)
i	onion	Yy
i_e	kite	li
ie	friend	Ěě
ie	grief	Ee
ie	sieve	Îî
ie	pie	li
igh	night	li
is	island	li

Grapheme	Example	Letter
J		
j	jam	Jj
j	hallelujah	Yy
K		
k	kit	Cc
kn	know	Nn
L		
1	live	Ll
If	half	Ff
lk	folk	Сс
II	well	Ll
lm	palm	Mm
M		
m	man	Mm
mb	comb	Mm
mm	summer	Mm
mn	column	Mm
mn	mneumonic	Nn
N		
n	net	Nn
n	pink	Ŋŋ
ng	ring	Ŋŋ
ngue	tongue	Ŋŋ
nn	funny	Nn

Grapheme	Example	Letter
0		
О	women	Îî
О	open	Oo
О	monkey	Ûû
О	wolf	Ůů
О	who	Uu
О	choir	Ww
o_e	bone	Oo
oa	moat	Oo
oe	phoenix	Ee
oe	toe	Oo
oe	shoe	Uu
oew	manoeuvre	Uu
oi	join	Øø
00	brooch	Oo
00	blood	Ûû
00	look	Ůů
00	loon	Uu
ou	shout	Åå
ou	double	Ûû
ou	would	Ůů
ou	group	Uu
ough	fought	Ôô
ough	bough	Åå
ough	dough	Oo
ough	through	Uu
our	honour	(schwa)
ow	now	Åå
ow	sow	Oo
oy	boy	Øø
Р		
р	pin	Рр
ph	phone	Ff
ph	stephen	Vv
pn	pneumatic	Nn
рр	trippy	Рр
ps	psychology	Ss

Grapheme	Example	Letter		
Q				
q(u)	queen	Сс		
qu	bouquet	Сс		
R				
r	run	Rr		
rh	rhyme	Rr		
rr	carrot	Rr		
S				
S	sit	Ss		
S	sure	Şş		
S	his	Zz		
S	treasure	Żż		
sc	scene	Ss		
sci	conscience	Şş		
se	course	Ss		
se	tase	Zz		
sh	sham	Şş		
si	pension	Şş		
si	division	Żż		
SS	less	Ss		
SS	scissors	Zz		
st	listen	Ss		
Т				
t	tip	Tt		
tch	watch	Çç		
te	righteous	Çç		
th	leather	Đð		
th	thomas	Tt		
th	think	Þþ		
ti	station	Şş		
ti	action	Çç		
tt	matter	Tt		
tu	future	Çç		

Grapheme	Example	Letter
U		
u	bury	Ěě
u	busy	Îî
u	lug	Ûû
u	bush	Ůů
u	quick	Ww
u_e	flute	Uu
ue	blue	Uu
ui	guild	Îî
ui	fruit	Uu
uoy	buoy	Øø
ur	augur	(schwa)
uy	guy	li
V		
V	vine	Vv
ve	five	Vv
W		
w	wit	Ww
wh	who	Hh
wh	why	Ww
wr	wrench	Rr
X		
x	box	Сс
х	xylophone	Zz
Υ		
У	lady	Ee
У	gym	Îî
У	sky	li
У	you	Yy
ye	stye	li
Z		
Z	zip	Zz
Z	azure	Żż
ze	craze	Zz
ZZ	buzz	Zz