

A CHART OF ENGLISH PHONETIC SYMBOL
EQUIVALENCE: A USEFUL TOOL

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In using dictionaries, or other reference works, for determining the pronunciation of English words, non-native teachers continuously face the problem of finding different symbols for the same sounds. This happens not only between British and American authors, but also among the American. Furthermore, some American authors even coincide with the British, while others do not. This fact naturally results in confusion in the non-native teachers of English. A chart showing the equivalence of phonetic symbologies is suggested as a solution.

INTRODUCTION

Very often foreign language teachers need to look up the pronunciation dictionaries, or lexical dictionaries which also provide the pronunciation of words, and are disappointed at finding the existing diversity of sound representation systems (1), which generally leads to an exasperating waste of time.

It could be argued that just one dictionary would do provided that it were highly reliable. However, quite frequently we realize that the word that interests us is not in our dictionary and therefore we are compelled to use other sources, or, it may also happen that the dictionary we generally use is not available at a given moment.

A teacher of English most frequently meets with this problem when he or she wishes to know or confirm the British pronunciation of a particular word when he normally teaches American English or when the reverse is

- (1) in all our references we can observe that certain changes have been introduced into IPA symbols. These changes were found to be justified as necessary for reasons of simplification by the different authors.

the case.

This problem has primarily affected us personally in trying to analyze the pronunciation mistakes made by our students, using different phonetic references for this purpose and too often finding that the transcriptions or symbols used do not coincide with each other in many cases.

Moreover, and what constitutes a serious danger, we have found that sometimes the same symbol is used to represent different sounds by diverse sources.

For this reason, our suggestions are intended to lighten somewhat the English teacher's (or prospective English teacher's) work whose mother tongue is Spanish and who constantly has to identify these sound representation systems.

In this short survey, we will refer to those English phonetic symbols that Spanish-speaking teachers often find difficult to identify in their reference works mainly due to the diversity of symbols met with.

For daily work, the most rapid and simple way to solve this problem, we believe, is by having a large chart posted in one's office with sample words showing the particular sounds clearly marked in a convenient system and providing the different symbols found for each sound.

Our idea is that the teacher be able to determine or confirm, hopefully with a single glimpse of the equivalence chart, the meaning of any doubtful symbol found in his usual references.

Concerning our selection of references, it was obviously based upon those most easily available to us. Likewise, those teachers to whom these ideas may prove useful will have to adopt for their charts the symbols of those reference works which they normally use.

In the following analysis we will refer to each pronunciation reference as follows:

BR = British references: The Advanced Learner's Dictionary of Current English by A. S. Hornby, E. V. Gatenby and H.

Wakefield; English Pronouncing Dictionary by Daniel.

Jones; An English Phonetics Course by Paul Christophersen.

- C&D = Pronunciation Exercises in English by M. Elizabeth Clarey and Robert J. Dixon.
- L&F = English Pronunciation by Robert Lado and Charles C. Fries.
- WNCD = Webster's New Collegiate Dictionary.

As teachers of American English (2), whose native language is Spanish (3), we have developed a certain preference for particular symbols most frequently used which prove more helpful. They are, as shown below, a combination of British and American symbologies. This might be considered as a deviation from normal symbol usage; however, the ones we use were chosen because they readily convey the corresponding sounds to us.

Phonetic Symbols for Vowels

Unless he has a key to the phonetic symbols at hand, a Spanish-speaking teacher of English will, no doubt, become confused with the various symbols for the vowel sounds found in words such as peat, for which we have recorded the following symbols in our sources:

	BR	C&D	L&F	WNCD
<u>peat</u>	i:	í	ì	ē

To further visualize the serious problem caused by the vowel symbols, we refer to the first vowel sound of the word event. Its representations are as follows:

	BR	C&D	L&F	WNCD
<u>event</u>	i	ɪ	ɪ	ì

The symbol used by C&D and L&F for the vowel in peat is found to be very similar to that employed by BR and WNCD for the contrasting

- (2) This does not mean that we overlook the main differences in pronunciation and vocabulary between British and American English in our classes.
- (3) Specifically Chilean Spanish.

vowel in event, which becomes a source of constant doubt for the Spanish-speaking teacher. We prefer the symbol /ɪ̃/ for the vowel in pear because we easily associate the colon of its transcription with a long sound, the length being the most important thing to remember about this vowel (4). Similarly, for the first vowel in event, we simply put /ɪ/. The lack of colon in its transcription suggests to us at once that this is the short vowel.

As to the vowel sound in the word back, the symbol /æ/, used by all our reference works except WNCID, easily conveys to us a sound between Spanish-sounds for letters a and e. WNCID uses /ɛ/, which is easily mistaken for the symbol used by L&F for the vowel sound in hot /ɒ/.

Now with regard to the latter vowel sound, we observe that BR represent it as /ɔ/; C&D, as /ɑ/, and WNCID, as /ɔ/. We are inclined to use the British symbol /ɔ/ because we readily associate the opening of its transcription with the open characteristic of the sound (5).

The vowel sound in all is quite troublesome for us as far as its representation is concerned. We could use the British /ɔ̃/ since the colon of its transcription would help us remember that it is a long vowel; however, the opening in the symbol makes us think of an open vowel, which is not so, for in this vowel the jaw is less open than for the vowel in hot (6). On the other hand, the symbol /ɔ̂/ used by WNCID could have been useful to us had it been provided with two dots instead of one. In this way, it would have indicated to us two things: lengthening of the vowel and the fact that it is pronounced with rounded lips. Unfortunately, the occurrence of a single dot above the symbol is misleading because it suggests something different from the lengthening indicated by two dots.

To make matters worse, Spanish users of these references can find that vowel lengthening is represented by different marks by WNCID. Thus,

- (4) Paul Christophersen, An English Phonetic Course (London: Longmans, Green and Co. Ltd., 1954), p. 4L.
- (5) Actually, we are dealing with different sounds here. Whereas for the British vowel the lips are rounded and the sound is short, many Americans use a version of it unrounding the vowel and making it rather long. This makes it sound almost like the British vowel in farm. Hence, misunderstandings are likely to occur with the American pronunciation of posture, for instance, which sounds in English ears rather like pasture. (ibid. p. 50).
- (6) Christophersen, p. 51.

needed a single dot above the symbol for the vowel in call /ɔ̇/, this dictionary shows a macron and two dots for lengthening of the vowel sound in words such as see /sē/ and too /tū/ respectively.

Now, we logically infer that the absence of dots above the symbol /ʌ/ found in C&D and L&F would indicate a short sound. Unfortunately, it is exactly the opposite case: /ʌ/ is used by C&D and L&F to represent the long vowel in words such as too /tʌ/ (7).

Going back to WNCD and observing the symbols for the vowels in the words all /ɔ̇/ and put /ʌ̇/, we notice that both show a dot on top. But this dot does not mean the same thing in both cases: in all it indicates a lengthening of the vowel, while in put it reflects its short characteristic.

With respect to the vowel sound in the word cup, we see that in WNCD, C&D and L&F it is represented by /ə/, which is also the symbol found for the initial vowel in ago in the same reference works. However, in the British references these vowel sounds are found to be represented by two distinct symbols /ʌ/ and /ə/ in accordance with the fact that in British English these are two different sounds. We have adopted the schwa symbol for both sounds concurring with the American usage, where the only acknowledged difference refers to the occurrence of the sound in stressed or unstressed syllables, i.e. when it is pronounced with tense or with relaxed muscles.

For the combination vowel + r, in which /ə/ is also involved, we feel /ər/ is practical since it efficiently reflects this combination.

Phonetic Symbols for Consonants

Another troublesome representation is that for the initial sound in the word joy. We find that WNCD indicates it as /j̇/ and that L&F use /j̄/. However, /j̄/ is employed, by BR to represent the semi-vowel in the word yes. Adding to the confusion is the fact that C&D and BR use /dʒ/ for the initial sound in joy and C&D, L&F and WNCD use /y/ for the semi-vowel in yes. We have finally adopted /dʒ/ and /y/ respectively.

We have commonly used /ʒ/ for the middle consonant sound in

- (7) We are aware that this problem would not arise if we limited ourselves to the usage of just one reference. Thus, we could adopt WNCD's /ū/ and /ū̇/, or L&F's /ʊ/ and /u/, or C&D's /ʊ/ and /u/ or the British /u/ and /u/ for the representation of the vowel sounds in put and too respectively. But, as indicated earlier, using the same reference all the time is not always possible or convenient.

vision. We presume that teachers born in Spain may have an interference of this symbol with the initial letter representation they employ in handwritten words as *zapato* which they actually pronounce as the initial sound in thought. We, as many people in several Latinamerican countries, pronounce /s/ instead and, therefore, can leave /ʒ/ for the phonetic representation referred to in vision without any problem. L&F and WNCID use /z/ and /zh/ respectively. These symbols are misleading to us.

Since the spelling *sh* is always pronounced as in *shoe* or *she*, and since the elements used by WNCID for the sound representation coincide with those found in the spelling, we could have easily adopted it. However, we have adopted /ʃ/ used by BR and C&D because this symbol is faster to draw and is also involved in the phonetic representation of the initial contrasting sound in *child*, for which we simply place /t/ before /ʃ/. As to /ʒ/ used by L&F, it is not easy for us to think of it as the initial sound in *she*.

Now, let us go back to the initial sound in *child*. We must recognize that even though we have adopted /tʃ/, WNCID's /ch/ would indicate to us the sound just as well because of its coincidence with both the Spanish letter *ch* and its pronunciation (8). Conversely, we cannot associate this sound with /z/ used by L&F.

For the initial sound in the word *thin*, we like /θ/ because it readily makes us think of the voiceless sound made with the tip of the tongue against the cutting edge of the upper front teeth (9). Fortunately, only WNCID uses a symbol different from it /th/: we find this usage rather confusing because it leads us to associate /th/ with the sound found in words regularly spelt with *th*, such as *then*. In other words, there is an interference problem between phonetic and letter, or spelling, symbols.

We use /ð/ for the consonant sound in *they* because the transformation of the letter *d* into /ð/ immediately makes us remember that the latter is not our Spanish /d/ and that therefore it refers to the voiced sound made with the tip of the tongue against the cutting edge of the upper front teeth (10).

(8) It should be remembered that we are referring to Chilean Spanish.

(9) M. Elizabeth Clarey and Robert J. Dixon, Pronunciation Exercises in English (New York: Refents Publishing Co., 1963), p. 43.

(10) Clarey and Dixon, p. 46.

Luckily, the symbologies for the initial consonants in zoo /z / and hat /h /, non-existing sounds in Spanish, and the final sound in sing /ŋ / are found to coincide in all cases. Coincidence also exists in the symbols for the consonant sounds of tea, day, pea, be, cue, go, and the semi-vowel in west represented as /t /, /d /, /p /, /b /, /k /, /g / and /w / respectively. (11)

Phonetic Symbols for Diphthongs

Apart from problem-symbols related to vowels and consonants, we have also encountered certain difficulties in some of the symbologies representing diphthongs. Fortunately, only a few of these are really troublesome for us.

For the diphthongs in say and old, we concur with BR in using /eɪ / and /oʊ / respectively because of their coincidence with both the spelling and sound representation of the Spanish diphthongs occurring in words like seis and bou.

In say, the symbol /e / employed by L&F and C&D offers interference with that found in WNCID and BR for the initial sound of the word end /e /, that is to say it is highly misleading for our work.

Likewise in old, /o / used by C&D and L&F is interfered by the Spanish spelling and sound representation of the vowel in por.

As to the diphthong found in eye, the only representation hindering our work is WNCID's /ī /. The others, again, are easily associated with both the spelling and sound representation of the Spanish diphthong found for example in vaina.

Diphthongs in words such as house and boy present us no difficulties since all our references use symbologies quite similar to the letters found in the Spanish spelling of diphthongs au and oi occurring for instance in causa and loica.

Lastly, we must recognize that even though we do not frequently employ WNCID's symbols, the key lines printed at the bottom of every other page are quite helpful because they save us the work of going back

- (11) The initial sounds in my, fan, vest, no, lad, red, and so are not discussed here since they showed no symbol equivalence problems among our references.

to the first pages in order to find the meanings of the symbols, as happens with other references such as The Concise Oxford Dictionary (12) which proves extremely time-consuming.

IN SUMMARY, interference problems in phonetic symbols may affect a foreign language teacher in various ways determined mainly by the language he is teaching, his mother tongue, and the reference works he commonly uses in looking up the pronunciation of words. As a solution for this problem, we have suggested the use of a wall chart of phonetic transcription equivalence which has proved useful in our work and which may help other teachers having the same problem.

To further illustrate the degree up to which a teacher of English may become confused by the diversity of phonetic symbols found, we will just add that analyzing particular problems of symbols for this article would have been quite a difficult task had it not been for the fact that our equivalence chart was always at hand.

(12) Edited by H. W. Fowler and F. G. Fowler (based on The Oxford Dictionary).

EQUIVALENCE OF DIPHTHONG SYMBOLS

Sounds represented in sample words	BR	C&D	L&F	WNCD		
<u>pea</u> t	i:	i	i	ē		
<u>e</u> vent	i	ɪ	ɪ	ɪ		
<u>ba</u> ck/pasture	æ/a:	æ/æ	æ/æ	a/a		
<u>ho</u> t/posture	ɔ	ɑ	ɑ	ä		
<u>a</u> ll	ɔ:	ɔ	ɔ	ó		
<u>to</u> ol	u:	u	u	ü		
<u>pu</u> t	u	U	υ	ú		
<u>cu</u> p	ʌ/ə	ə	ə	ə		
<u>bi</u> rd	ə:	ɚ	ər	ær		
<u>e</u> nd	e	ɛ	ɛ	e		

EQUIVALENCE OF SEMI-VOWEL SYMBOLS

<u>w</u> est	w	w	w	w		
<u>y</u> es	j	y	y	y		

EQUIVALENCE OF DIPHTHONG SYMBOLS

<u>sa</u> y	ei	e	e	ā		
<u>o</u> ld	ou	o	o	ō		
<u>ey</u> e	ai	aɪ	aɪ	ī		
<u>hou</u> se	au	aU	aυ	aú		
<u>bo</u> y	ɔi	ɔɪ	ɔɪ	ôɪ		

Note: We are leaving some space in our chart for other systems that could still be found to differ from the above.

EQUIVALENCE OF CONSONANT SYMBOLS

Sounds represented in sample words	BR	C&D	L&F	WNCD		
<u>j</u> oy	dʒ	dʒ	ʃ	j		
vi <u>s</u> ion	ʒ	ʒ	ʒ	zh		
<u>sh</u> oe	ʃ	ʃ	ʃ	sh		
<u>ch</u> ild	tʃ	tʃ	ʧ	ch		
<u>th</u> in	θ	θ	θ	th		
<u>th</u> ey	θ	θ	θ	th		
<u>z</u> oo	z	z	z	z		
<u>h</u> at	h	h	h	h		
<u>ng</u>	ŋ	ŋ	ŋ	ŋ		
<u>t</u> ea	t	t	t	t		
<u>d</u> ay	d	d	d	d		
<u>p</u> ea	p	p	p	p		
<u>b</u> e	b	b	b	b		
<u>k</u> ue	k	k	k	k		
<u>g</u> o	g	g	g	g		

Note: As to symbols for missing sounds, cf. footnote (11).