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SOME REMARKS REGARDING ENGLISH TRANSCRIPTION PRACTICES IN TAIWAN

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ABSTRACT

The EFL and linguistic materials available in Taiwan exhibit a large number of transcription systems, all differing from each other in certain respects. While some of these differences are of linguistic nature, and stem from the authors' own perception of the English phonetic/phonological system, others are purely graphic, frequently having arisen through misinterpretation of the traditional transcription symbols as established by the International Phonetics Association (IPA). The multitude of transcription systems and the differences in graphics for the same phonetic symbols can be said to present a confusing picture of English sounds and their transcription to the students of English in Taiwan. In the present article, the background of the issues discussed above is investigated, and, wherever appropriate, ways to correct some of these non-standard practices are presented. The author also provides some suggestions regarding the reduction of the current multitude of transcription styles by means of standardization.¹

Key words: English, transcription, pedagogy, IPA, KK, DJ, phonetics, phonology, historical linguistics

¹ The author would like to express gratitude to the two anonymous reviewers of this article for their constructive remarks, which have made it more complete. While I was unable to include all of the suggestions they made in this article, the reasons for that are discussed at the end of section 1 below. I would also like to thank Christina Pan and Ino Huang from NCKU for their help with some of the Chinese materials used in this article, as well as the editors of *TJL* for technical advice.

1. INTRODUCTION

The English language probably may be said to have the largest number of different phonetic transcription systems available, and many of these systems can be encountered in the EFL and linguistic materials available in Taiwan. A quick glance at several different dictionaries issued by different publishers will reveal a number of transcription systems, all quite unlike each other. Certain differences can also be noticed in the transcription systems employed in electronic dictionaries, as well as dictionaries in mobile telephones. Besides the different systems used in different dictionaries, further variation may be found in handbooks, linguistic atlases, EFL textbooks, and other linguistic materials. Furthermore, several non-standard phonetic symbols commonly occur in various handwritten materials – although they are much rarer in printed texts (or even do not occur in printed works at all).

The most widespread transcription system used in EFL instruction at all levels of education in Taiwan is the so-called Kenyon and Knott's transcription system, otherwise known as “KK”. This system can be found in a large number of the English dictionaries published in Taiwan, the majority of locally produced electronic dictionaries, and virtually all locally produced EFL materials (including not only textbooks but also EFL sections in local English daily papers, e.g., *The China Post*).

Another, much less common, transcription system used here is commonly referred to as “DJ”, and this system, too, may be found in a number of local products, both electronic and printed.

The third system that may be said to have a significant distribution in Taiwan is the International Phonetic Alphabet or the “IPA”. This system can be primarily seen in strictly linguistic/phonetic literature or in English dictionaries produced by European publishers (Oxford University Press, Cambridge University Press, and the like). Whenever IPA is found in locally produced dictionaries, in nearly all instances that I have so far encountered, it is specifically used to represent the British English pronunciation, whereas the American English pronunciation is

displayed in KK – in fact, often in some of its uniquely Taiwanese versions.²

More transcription systems can probably be found after a more thorough search (the author of this article is aware of more than 10 different systems, all of which are accessible to Taiwanese English teachers and learners), but the three systems briefly introduced in the preceding paragraphs are by far the most commonly found in this country.

All this raises a number of questions: first of all, why are there so many transcription systems in use in Taiwan? Second, one may also ask why the Kenyon and Knott system is so common in Taiwan whereas it is extremely rare in the rest of the world.³ A further curiosity is the employment of KK for the transcription of specifically American English in Taiwanese dictionaries whereas the British pronunciation is represented by another system (IPA). Such a distinction is never made in dictionaries produced in the West. Furthermore, what is “DJ”, and, finally, what was meant above by “the Taiwanese versions” of KK?

In the following sections, I will discuss these issues, as well as their impact on the EFL teaching and linguistic research in Taiwan. It may also be necessary to address several linguistic “myths” in this article, such as the alleged “difficulty” of IPA (which is frequently used as an argument against its usage), or the previously mentioned – and fairly common – belief that the KK and IPA should be used respectively for the transcription of American and British English. Along with these issues, also several phonological questions will have to be considered also, in order to shed light on the reasons behind some of the transcription practices that may be observed in different resources.

In sections 2 – 3.1 of this article, I will discuss some of the features and the main differences between two common transcription systems used in Taiwan, viz., the so-called “DJ” and “KK”. As one of the main

² The only exception to this general trend that I have found so far is an ESP textbook by Frank Levin and Peg Tinsley (Levin & Tinsley 2009), in which “Taiwanese KK” is used for both British and American English.

³ KK has several competing transcription systems in the USA, while it is virtually unknown in Europe, and I am not aware of its usage in other Asian countries (see a longer discussion in sections 4 – 4.2 below).

features of KK is the monophthongal notation of the vowels in the English words *face* resp. *goat* (cf. KK /fes/ resp. /got/) while in many other systems, these vowels are represented as diphthongs (cf. /feɪs/ resp. /gout/, /feys/ resp. /gowt/ etc.), in sections 4 – 4.2, I will provide an overview of the different interpretations of these vowels that one can find in different linguistic materials.

In sections 5 – 5.1, I will discuss the regional distribution of the monophthongal and diphthongal articulation of the two vowels in the English-speaking world, and the evolution of their pronunciation in the modern standard varieties of British and American English. Along with the modern language facts, the history of the *face*- resp. *goat*-vowels will provide additional evidence as to why these vowels should not be called “monophthongs” in the standard varieties of British and American English, either at the phonetic or the phonological level, and also as to why their fairly common transcription with monophthongal symbols /e/ resp. /o/ is inappropriate.

Sections 6 – 6.6 are devoted to the comparison of the original KK, as presented in Kenyon and Knott’s *Pronouncing Dictionary of American English*, and the different versions of this transcription system that have developed in Taiwan over the course of time. The main features of the Taiwanese variety of KK are the notation of syllabic consonants by a subscript dot (instead of the traditional subscript bar), the use of acute or grave to denote stress (instead of the traditional vertical upper bar), and peculiar notation of the following phonetic symbols: /ŋ/, /θ/, /i/ and /j/, as well as the American rhotic vowels /ɜː/ resp. /ɝː/.

In the following sections 7 – 7.1, I will provide an overview of the notation of these rhotic vowels in other transcription systems, as well as discussing some of the reasons for their differences.

In sections 8 – 8.1, I raise the issue of the necessity to adopt a standardized transcription system in Taiwan, in order to reduce the current variation and the confusion resulting therefrom. The three transcription systems that are most commonly used in Taiwan are compared, and their weaknesses and strengths are pointed out via examples.

In this paper, I will not discuss the various idiosyncratic transcription systems referred to above in this section. None of them is as widely used

in Taiwan as KK, DJ, or IPA, and their impact on teaching and research has been minimal, and, further, since the focus of this article is the interrelationship, individual features, and use of KK, DJ, and IPA, digressions into systems that are either secondarily derived from these, or are utterly unrelated to them, will be an unnecessary complication of the article. The “minor” systems may be brought into discussion, however, in those cases when this seems appropriate.

I will also not discuss the various errors in the *articulation* of any English sounds made by English learners in Taiwan. The various issues related to articulation have already been discussed in some detail by Ing (1998) and Liu (2004). Many of the typical mistakes in articulation are also discussed online by Karen Chung,⁴ and the work of these scholars need not be repeated here. Further, the focus of this article is the various peculiarities of transcription, i.e., the *graphic* representation of English sounds that one may encounter in different EFL and linguistic materials available in Taiwan, along with some peculiar phonetic symbols that are commonly used in EFL/linguistic classes (see sections 6.1 – 6.6 below).

While a number of these Taiwanese transcription features may be said to be simple graphic “slips”, and their correction is largely “cosmetic”, some of the other features require a deeper understanding of their respective linguistic and/or historical background. Therefore, while this article may be seen as largely “pedagogical” and “synchronistic”, a fair number of issues in general phonetics and phonology, the history of the English language, and English dialectology will be discussed where it appears necessary to turn to these fields in order to shed more light on the background of the issues being addressed.

2. THE “DJ” TRANSCRIPTION SYSTEM, ITS HISTORY AND FEATURES

Among the questions raised in the preceding section, the easiest one to answer is the “DJ” system question. The abbreviation “DJ” is the acronym of Daniel Jones, the famous English phonetician (1881-1967), as well as the author of the first dictionary of English pronunciation, the

⁴ Accessible at <http://homepage.ntu.edu.tw/~karchung/intro%20page%2029.htm>

English Pronouncing Dictionary (first edition 1917). The transcription system used in this dictionary was essentially the International Phonetic Alphabet of Jones's times.

The International Phonetic Alphabet has been revised a number of times since its creation, the most recent revision being from 2005;⁵ however, the system as it was first used in Jones's dictionary persists in two different contexts: it has been preserved in the dictionaries and linguistic scholarship which were produced in his day and which survive until now, and it was adopted in non-English-speaking countries, where Jones's original transcription was perceived as the standard transcription of the English language (primarily its British variety). This transcription system (or its slightly modified variants) can be found in many bilingual dictionaries, some published as recently as late 90s.⁶

This transcription system is no longer used in modern linguistic scholarship or modern dictionaries produced by the major publishers (Oxford, Cambridge, Collins, Longman, etc.), as it is considered obsolete. However, it is still fairly commonly used in bilingual dictionaries produced in Taiwan, including very recent ones.⁷

The International Phonetic Alphabet has already been updated a number of times, and at present it looks quite different from the original IPA (i.e., the system that specifically in English studies may be called "DJ"), cf. several examples below:⁸

⁵ <http://www.langsci.ucl.ac.uk/ipa/>

⁶ Among the bilingual language dictionaries employing this system, it is possible to mention the entire Wordsworth Reference series, cf. *English-Russian / Russian-English Dictionary* by Benyuch & Chernov, 1997; *German-English / English-German Dictionary* by Sawyers, 1982, etc. This system can also be found in many other dictionaries, e.g. *Modern engelsk-svensk ordbok* (Danielson 1979), *Ensk-føroysk orðabók* (Anfinnur í Skála et al. 1992), etc.

⁷ E.g., *Time English-English and English-Chinese Dictionary* (1994), *A Key to English Vocabulary* (English-Chinese; 1998) *Longman Dictionary of Contemporary English* (English-Chinese; 2009), etc.

⁸ The accent used here is British.

	modern IPA	DJ
<i>kit</i>	/kɪt/	/kit/
<i>lot</i>	/lɒt/	/lɔt/
<i>foot</i>	/fʊt/	/fut/
<i>face</i>	/feɪs/	/feɪs/
<i>price</i>	/praɪs/	/praɪs/
<i>goat</i>	/gəʊt/	/gout/
<i>mouth</i>	/maʊθ/ ⁹	/mauθ/
<i>near</i>	/nɪə/	/niə/
<i>thought</i>	/θɔ:t/	/θɔ:t/
<i>north</i>	/nɔ:θ/	/nɔəθ/
<i>first</i>	/fɜ:st/	/fə:st/

As one can see from these selected examples, the main differences are the substitution of the symbols /ɪ/ and /ʊ/ for Jones's /i/ and /u/ when they occur either as monophthongs or parts of falling/centring diphthongs, and the notation of certain back vowels: the modern IPA differentiates between the symbols /ɒ/ and /ɔ:/ for the vowels of the words *lot* resp. *thought* whereas in DJ, both are denoted by the symbol /ɔ/ (with the length mark added to the vowel of *thought* in the same way as is done in the updated IPA version). Furthermore, DJ contrasts the vowels of *thought* and *north*, cf. /ɔ:/ vs. a centring diphthong /ɔə/, the latter always occurring before the “silent” *r*, and only affecting the vowel *o*. Also the notation of the diphthong of *goat* differs significantly in the two systems, the DJ transcription representing the pronunciation that is now considered obsolete in England (although this same pronunciation – notated as /ou/ – is standard in the USA).

Finally, the two systems also differ in the notation of the root vowel of *further*: whereas in DJ, the notation is /ə:/, in the modernized IPA, the symbol employed is /ɜ:/ . In Jones's transcription, the letter schwa was selected on purely articulatory grounds, since both vowels in these words are pronounced in the same (or nearly the same) way. In the

⁹ P. Roach notes that the initial sound of this diphthong is acoustically more similar to [ɑ:] (cf. Roach 2000:23).

modernized version of the IPA, the reverse epsilon (i.e., /ɜ:/) became employed for this vowel whenever it occurs in the stressed position, whereas the use of schwa was reserved for unstressed syllables. While, from the point of view of articulation, this distinction may be said to be artificial, it has a more “practical” use from the phonological point of view, since in this way, a symbol traditionally used for a reduced vowel will not occur in a stressed syllable (i.e., the environment where reduced vowels do not occur in English).¹⁰

The use of both DJ and IPA in Taiwan causes specific problems which are at times very difficult to deal with. DJ occurs in many old-fashioned dictionaries, making them outdated next to more recent linguistic textbooks or to EFL textbooks produced in the UK and using the British pronunciation in which modern IPA is normally used. Because of the differences of the two systems, a lot of unnecessary confusion occurs both in EFL and linguistic classes, especially when the British accent is brought into discussion.

3. COMPARISON OF DANIEL JONES’S AND KENYON/KNOTT’S TRANSCRIPTION SYSTEMS (“DJ” VS. “KK”)

Since the most popular variety of English used in Taiwan today is American English (cf. a recent study of this issue described in Chang 2009), perhaps the problems addressed in section 2 are not felt equally acutely by all EFL and linguistics teachers. The transcription of American English entails numerous problems nevertheless, which in nature are quite similar to the problems described in the preceding section.

When the American English pronunciation was adopted as the “official” English pronunciation in Taiwan, this marked the beginning of a new era not only for the pronunciation of English, but also for the transcription: the DJ system acquired a vigorous competitor popularly

¹⁰ The symbol /ɜ:/ has been reintroduced in the *Oxford Dictionary of Pronunciation for Current English* (Upton, Kretzschmar & Konopka 2001), cf. *further* /ˈfɜːðə(r)/, although given the fairly long tradition of the usage of the symbol /ɜ:/ in the stressed syllables, the reintroduction of /ɜ:/ can only be said to create unnecessary confusion.

known as “KK”, which was the transcription system from the *Pronouncing Dictionary of American English* authored by J. S. Kenyon and T. A. Knott (first edition 1944).

The two systems in fact did not differ from each other in drastic ways, the main reason being that they actually derive from a single source – one of the early versions of IPA (cf. Kenyon/Knott 1953:xvi). The two main differences between DJ and KK were, first of all, the obvious “dialectal” features, such as the American rhoticity, or the use of unrounded vowels where standard British English would have them rounded, cf. US “KK” *further* /'fɜːðə/ vs. UK “DJ” /'fɜːðə/,¹¹ and US “KK” *lot* /lat/ vs. UK “DJ” /lɒt/, etc. The other notable difference between the two systems is the notation of the vowels of the words *face* and *goat* as /e/ resp. /o/, where DJ has /ei/ resp. /ou/ (and the modern IPA has /eɪ/ resp. /oʊ/).¹²

Of these two differences, it is the use of the symbols /e/ and /o/ in KK that is more pertinent for the purposes of this article, as both the authors’ reason for their usage, as well as the interpretation of this notation in Taiwanese EFL teaching and (partially) linguistic scholarship deserve a separate discussion. I would like to turn to these issues now, leaving the additional formal peculiarities of the variety of KK as used specifically in Taiwan for a separate discussion later in this article (see sections 6 – 6.6 below).

3.1. The Interpretation of the Symbols /e/ Resp. /o/ in the Pronouncing Dictionary

The use of the symbols /e/ and /o/ in KK is one of its most salient features, and its “monophthongal” appearance indeed appears quite striking to an eye used to the IPA style, in which the corresponding American sounds are represented by *two* symbols, according to their

¹¹ For the discussion of the symbol /ɜː/, see section 2 above.

¹² There also exist several minor differences, such as the extremely rare usage of the length mark [ː] in KK (it does occur occasionally, although is denoted by a colon, cf. a brief discussion of this symbol in §5, on p. xviii of the *Pronouncing Dictionary*), and the transcription of the vowel of *dress* with /ɛ/ rather than /e/ (as is done in the DJ system).

diphthongal nature, cf. /eɪ/ (i.e., the nucleus “e” + the glide “r”) resp. /ou/ (“o” + “u”).

In my experience, these symbols /e/ resp. /o/ are normally interpreted in the following way in Taiwan: whereas the underlying phonemes are perceived as “monophthongal”, the actual articulation of these sounds is normally diphthongal, i.e., [eɪ] resp. [ou].¹³ This diphthongal articulation of sounds that are perceived as “monophthongs” naturally calls for an inquiry as to why this should be done so.

A closer study of Kenyon and Knott’s original dictionary reveals the following explanation of the use of the symbols /e/ and /o/. On p. xviii, in a description of the use of the symbol /e/ (typed in bold in KK, viz. **e**), the authors say:

§7. **e**. The vowel in *rate* **ret** and other words with “long *a*” is very often (but by no means always) a diphthong (gliding from one vowel to another in the same syllable) **ei**, **ei**, **ee**, or the like. On linguistic principles the one symbol **e** properly stands for all varieties of the sound (whether diphthong or not). The variants never distinguish words otherwise alike.

The description of the use of the symbol /o/ (or “o” in the original notation) on p. xix is as follows:

§13. **o**. Like **e**, the symbol **o** represents either a simple vowel or a diphthong (**ou**, **ōu**, **ou**, etc.). For the same reason stated at **e** (§7 above) the symbol **o** is used for both the vowel and the diphthong.

These two very brief descriptions can only be interpreted in such a way that the two authors of the *Pronouncing Dictionary of American English* considered the two sounds in question essentially “monophthongs” at both the phonemic and phonetic level, although they were also aware of their frequent diphthongal pronunciation by native speakers in the

¹³ Variation in pronunciation does occur: whereas in many instances, especially the diphthong /eɪ/ is frequently erroneously monophthongized into a usually rather low [ɛ]/[æ], cf. *make* *[mɛˈk]/*[mæˈk], *plane* *[plɛˈn]/*[plæˈn], *April* *['æpɹəl] etc.; occasionally, both are exaggerated to over-tense [ei] resp. [ou]. These issues are also addressed by Ing (1998:1ff.), Liu (2010), and by Karen Chung (<http://homepage.ntu.edu.tw/~karchung/intro%20page%2029.htm>).

USA.¹⁴ The conditions for either the monophthongal or the diphthongal pronunciation, however, are not specified in the introduction, and one is left to speculate whether the authors perceived the difference between the monophthongal and the diphthongal articulation as somehow “dialectal” or “idiolectal”, or whether it should be in some way phonetically conditioned. Finally, it is not clear from these descriptions whether one should use diphthongal or monophthongal articulation of these sounds while speaking standard American English. I will return to this issue below in sections 4.2 – 5.1.

4. THE INTERPRETATION OF *FACE* RESP. *GOAT* VOWELS IN DIFFERENT LINGUISTIC MATERIALS

The phonetic and phonemic interpretation of the vowels of *face* resp. *goat* is presented differently in different linguistic materials. It is impossible to provide an exhaustive study of the interpretation of these two vowels in all of the existing linguistic scholarship and the EFL materials, but the following overview should provide the reader with a sense of the diversity and trends that exist in this field. Since the treatment of these vowels in British and American English shows considerable variation, I would like to describe their interpretation and representation separately.

4.1. The *Face* and *Goat* Vowels in Standard British English

As far as the *face* and *goat* vowels in standard British English are concerned, the analysis is very uniform: the two vowels are generally treated as diphthongs, and transcribed as /eɪ/ resp. /əʊ/. Such transcriptions may be found in a large number of handbooks, textbooks, dictionaries, and other linguistic sources, e.g., Trim (1965), Abercrombie (1967), Wells (1982), Clark & Yallop (1990), Roach (2000), Ladefoged (2001, 2006), Redston & Cunningham (2005), Baker (2006), EPD15, LPD,

¹⁴ Wells assumes that these authors interpreted these sounds as monophthongs, too, cf. Wells (2006:393).

HVE, etc. Diphthongal phonemes are assumed in the phonological studies of English by Katamba (1989) and Hawkins (1992).¹⁵

4.2. The *Face* and *Goat* Vowels in Standard American English

In respect to American English is concerned, rather different opinions are expressed in different sources. The two vowels are interpreted differently already in the early American linguistic scholarship, and the differences can be radical: thus, whereas Kenyon and Knott treated these vowels as monophthongs both at the phonemic and phonetic level (see section 3.1 above), at the other extreme, G. L. Trager and B. Bloch treated the respective vowels as diphthongs both at the phonemic and the phonetic level, transcribing them as /ej/ resp. /əw/ (Trager/Bloch 1941: 235f.).¹⁶ Still different analysis is to be found in Pike (1947), where the vowels of *face* resp. *goat* are analyzed as “monophthongs” phonologically, but as “diphthongs” at the phonetic level, and are phonetically transcribed as [e^h] resp. [o^u] (Pike 1947:151 et passim).

In more recent scholarship, the variety of available transcriptions has become even greater, since, in addition to the recent scholarship based on the older works discussed in the preceding paragraph, a number of American and British scholars have described these American English vowels using the more recent versions of IPA. The disagreement as to whether the vowels involved are monophthongal or diphthongal at the *phonemic* level continues, too. Thus, some of the authors mentioned in section 4.1 above assume diphthongal articulation (and diphthongal phonemes) also in the case of standard American English. The two diphthongs are generally transcribed as /eɪ/ resp. /oʊ/ in these books.¹⁷ Diphthongal phonemes are assumed in Hayes (2009) as well as Bergman, Carrie Hall & Ross (2007), in both of which the phonemic

¹⁵ Katamba only speaks of the phoneme /eɪ/, as in *eighth* (Katamba 1989:70), whereas Abercrombie used the old-fashioned symbols /eɪ/ and /oə/ for what is nowadays generally notated as /eɪ/ resp. /əʊ/ (see Abercrombie 1967:130; the transcription /oə/ can also be found in Hawkins 1992:12).

¹⁶ A slightly different version of this analysis is to be found in the later work Trager/Smith (1951), where the notations /ey/ resp. /ow/ are used instead.

¹⁷ Ladefoged (2001, 2006), Clark & Yallop (1990), LPD, HVE, EPD15.

system of specifically American English is discussed. In both books, the two diphthongs are transcribed as /eɪ/ resp. /oʊ/.

Some of these modern sources, however, mention the monophthongal articulation [e:] resp. [o:] as variant, although the views expressed in these books do not always agree on the details. Thus, in Wells (1982), the monophthongal articulation [o:] was assumed to be quite widespread in standard American English (although this view is no longer held in LPD). In HVE, it is argued that monophthongal articulation is more likely specifically before voiceless consonants.¹⁸ Hayes (2009) holds a still different view, assuming the shortening of the diphthong before voiceless consonants, without the loss of the glide (Hayes 2009:23, 26f.; cf. his notation [ɛɪ] for this shortened diphthong).

In some other new (or fairly new) American sources (books, internet), or Taiwanese books dedicated to American English, the sounds in question are treated as monophthongs.

In the book *American English Phonetics*, C. S.-H. Sun presents the vowels of *mate* and *boat* as phonemic monophthongs (1988:21ff.), transcribing both as /e/ resp. /o/. She only assumes three diphthongal phonemes for American English, viz., /aɪ/, /ɔɪ/, and /aʊ/ (Sun 1988:27ff.).

In the internet resources, a similar view may often be found: thus, in the website of the Linguistics Department of the University of Iowa, these vowels are classified together with monophthongs, and transcribed as /e/ resp. /o/.¹⁹ However, in the audiofiles that are provided in this website, the pronunciation is not always monophthongal. When the two vowels are pronounced in isolation, the vowel “/e/” is indeed pronounced as a monophthongal [e:] by the speaker, but the vowel “/o/” is very clearly pronounced as a fairly open diphthong, which one may even transcribe more narrowly as [ɔʊ].

¹⁸ See Kretzschmar (2004:266), where he says that in General American English, monophthongization occurs before voiceless consonants. Gordon (2004:340) presents the distribution of the variants in the following way: *face* [eɪ] > [e:] resp. *goat* [oʊ] > [əʊ] > [o:] (square brackets added by me).

¹⁹ <http://www.uiowa.edu/~acadtech/phonetics/english/frameset.html>

When pronounced in actual English words in the same website, however, both are pronounced as very clear diphthongs in all the examples.²⁰

An even more confusing picture is presented in the website of the Linguistics Department at the University of Arizona, where “/e/” and “/o/” are classified together with monophthongs (/ɛ/, /æ/, /ɔ/ etc.), but certain “non-phonemic” diphthongs [ey] and [ow] are assumed, too.²¹ No explanation for the allophonic distribution of these diphthongs is provided, and in the audiofiles, available in a related website, the pronunciation of relevant examples is in all cases diphthongal.²²

Yet another American source of transcription is taken from Youtube. It is a series of lessons in phonetics and pronunciation of American English, called “Rachel’s English”.²³ The hostess of this programme does not specifically speak of phonemes, but her pronunciation is very clearly diphthongal, and the transcriptions provided in the video are [eɪ] resp. [oʊ].²⁴

To summarize the preceding discussion, it may be said that whereas the diphthongal notation of the vowels in *face* and *goat* prevails at least in British sources, the monophthongal notation also occurs, and it appears primarily in American sources, or materials dedicated to specifically American English (e.g., Sun 1988). Although this is not always said explicitly, one can probably say that the scholars who see the diphthongal pronunciation of these vowels as “primary” or somehow “standard”, also perceive the underlying phonemes to be diphthongal. On the contrary, the notation of these vowels with the symbols /e/ resp. /o/ implies that these authors consider the underlying phonemes monophthongal.

²⁰ The examples were *eight*, *locate*, *ballet* for “/e/” and *over*, *boat*, *hello* for “/o/”.

²¹ <http://www.ic.arizona.edu/~lsp/IPA/SSAE.html>

²² <http://www.ic.arizona.edu/~lsp/IPA.html>

²³ <http://www.youtube.com/watch?v=XajvB178Hhs>

²⁴ The nucleus of the diphthong /oʊ/ in the pronunciation of this speaker is so low that one might transcribe it more narrowly as [ɔʊ].

5. ARE THE VOWELS OF *FACE* AND *GOAT* DIPHTHONGS OR MONOPHTHONGS?

The authors of KK must have perceived the phonemes underlying the vowels of *face* and *goat* as monophthongs, whereas they would have treated the diphthongal articulation [eɪ], [oʊ] etc. as (somehow) being of allophonic nature. However, since the other view, viz. that these vowels are phonemic diphthongs and their monophthongal articulation is allophonic, is an essentially opposite view, one has to investigate the rationale behind these two views.

The view that the phonemes involved a diphthong is based on the actual data from the modern standard varieties of both British and American English. In spite of the structure of the rhyme, the vowel remains diphthongal in all the following examples in British English: *go* [gəʊ], *goal* [gəʊl], *goad* [gəʊd], *goat* [gəʊt], *ghost* [gəʊst], *ghosts* [gəʊsts]. The only difference in the articulation of the diphthong in these examples is that of length (not marked in the transcriptions above), which slowly decreases as the coda increases (or as the sonority of the following consonants decreases). As far as the articulation of the diphthongs /eɪ/ resp. /oʊ/ in American English is concerned, as was shown in the preceding section, several different views have been expressed; however, the actual data clearly speak in favour of diphthongal articulation at least in open syllables and syllables closed by voiced stops. I will return to the American articulations below.

Where does the other view come from, according to which the vowels of *face* resp. *goat* are monophthongal?

The monophthongal articulation of the vowels of *face* resp. *goat* is by no means rare in the English-speaking world. In England, it occurs in the northern and southwestern regional dialects, and is very common in the varieties of English as spoken in the neighbouring Wales, Scotland, and Ireland.²⁵ In the USA, the monophthongal articulation is said to be widespread in the Upper Midwest,²⁶ i.e., the areas east/southeast of the

²⁵ For details, see Wells (1982:349ff., et passim), Hickey (2004:91), Penhallurick (2004:104ff.), and Stuart-Smith (2004:59).

²⁶ Kretzschmar (2004:266).

Great Lakes: Wisconsin, Illinois, Iowa, the Dakotas, northern Nebraska, as well as the northern peninsula of Michigan. It is a sub-area of the very large area within the USA, in which General American English pronunciation is used.²⁷

The relationship between the two pronunciations is largely historical, and in all cases, one has developed out of the other. The details of this process, however, are not equally clear in all cases. In the English dialects spoken on the British isles, it is the monophthongal pronunciation that is older in all instances. The modern standard pronunciation [eɪ] resp. [əʊ] has developed out of the long monophthongs [e:] resp. [o:] of early Modern English as spoken primarily in the Midlands. In the British dialects that have monophthongs today, such pronunciation may be considered more conservative than the standard diphthongal pronunciation.

In the case of American English, the same relationship may be assumed, since a large number of immigrants from the British isles came from dialectal areas (especially Ireland), where monophthongal pronunciation is widespread. However, it is also possible that in some of the cases where the articulation of the vowels of *face* resp. *goat* is not as clearly diphthongal as in General American – e.g., Californian English – such articulation may be new, i.e., it may reflect a secondary monophthongization of the General American diphthongs [eɪ] resp. [oʊ] rather than being a preserved archaic feature.²⁸ The origin of the American English monophthongs thus may be not in all cases be the same, in some areas being “imported” from the Old World, and in some areas being a recent local innovation.

The tendency for there to be monophthongal articulation [o]/[e] before voiceless consonants in certain areas of the USA, which was referred to earlier in this section, almost certainly reflects a secondary monophthongization, and it is not an “archaic” feature of any sort. Since vowels tend to be shortened before voiceless consonants in English, it is naturally easier to perceive the shortened diphthongs in such a position

²⁷ See Bronstein apud Wells (1982:471, Fig. 16).

²⁸ For this view, see Ladefoged (2001:43f.).

as either having a very slight glide or being glideless and to articulate them in the corresponding way.²⁹

5.1. The Historical Background of the *Face* Resp. *Goat* Vowels

In this section, I would like to describe the development of the *face* and *goat* vowels in the English language, in order to elaborate on some of the issues briefly mentioned in the preceding section.

The phonetic/phonological development of the English diphthongs /eɪ/ and /əʊ/ resp. /oʊ/ was a very complex process, characterized by a number of mergers which took place at different times in different parts of the country.³⁰ A simplified picture of the development may be described in the following way: in early Modern English, a number of diphthongal and monophthongal phonemes merged into long monophthongs /e:/ resp. /o:/, but soon thereafter these two monophthongs became diphthongized again in some parts of the country (mainly the area where the future “standard English” was spoken, i.e., the Southeast).³¹ These new diphthongs were [eɪ] and [oʊ].

Although this second diphthongization may have first taken place at the phonetic level only, at the first stage the diphthongs [eɪ] and [oʊ] having been positionally conditioned allophones of the corresponding

²⁹ On the function of perception for the process of sound change, see Ohala (2003). A comparable loss (or very weak articulation) of glides in shortened diphthongs may also be observed in another Germanic language, Modern Faroese, cf. Fa. *loysa* ‘solve; untie’ [‘lɔisa] vs. *loyst* ‘solved; untied’ (neuter past participle) [lɔst]/[lɔ’st], *meini* ‘mean’ (1. sg. pres.) [‘maɪni] vs. *meinti* ‘meant’ (sg. pret.) [‘maɪnti]/[‘maɪnti], etc. (cf. also Barnes & Weyhe 1994:192).

³⁰ For a detailed discussion of the matter, the reader is referred to Dobson (1968) and Lass (1999). Simplified descriptions may be found in Algeo/Pyles (2004:164f.), Barber (2000: 194), and Freeborn (1998:295ff.).

³¹ These mergers involved a number of different phonemes, e.g., the /o:/ of *road* (late Middle English *rōd*) or *stone* (late ME *stōn*) go back to earlier /ɔ:/ (< Old English *ā*, cf. OE *rād*, *stān* < Proto-Germanic **ai*, cf. **raidō* ‘trip, ride’ resp. **stainaz* ‘stone’), whereas the /o:/ of *gold* goes back to an Old English /ō/, cf. OE *gold*, and even earlier **u*, cf. PGmc. **gulđan*. The /o:/ of the early Modern English version of *know* reflects an earlier diphthong /ɔʊ/ (ME *known* < OE *cnāwan*), whereas *show* ultimately goes back to OE *scēawian* ‘look’. Mutatis mutandis, similar things may be said about the earlier history of /e:/ (for more examples, see Mossé 1952:27ff.).

monophthongal phonemes /e:/ and /o:/, after the diphthongization was completed in all positions, the phonemic system changed, too. The old monophthongal phonemes /e:/ and /o:/ became the new diphthongal phonemes /eɪ/ and /ou/. Schematically, these diphthongizations and the phonemic changes may be represented in the following way:

phonetic change

phonemic change

1. /e:/ [e:] > 2. /e:/ [eʲ] > 3. /e:/ [eɪ] > 4. /eɪ/ [eɪ]

1. /o:/ [o:] > 2. /o:/ [oʲ] > 3. /o:/ [ou] > 4. /ou/ [ou]

Since the changes described above eliminated the earlier monophthongs both at the phonetic and phonemic levels, the notation of the vowels of *face* resp. *goat* as “/e/” and “/o/” at the *phonemic* level – as it is done in Kenyon and Knott’s transcription and by some American and Taiwanese authors – is inappropriate, as it does not accord to the facts of the standard British and American varieties of the English language. In these two major varieties of English, /eɪ/ and /ou/ are phonemic diphthongs, just like /aʊ/ (as in *how*), /aɪ/ (as in *shy*), and /ɔɪ/ (as in *boy*).

6. VARIATIONS OF THE KENYON/KNOTT’S SYSTEM (“KK”) IN TAIWAN

The final issue to be discussed in this article are the various Taiwanese versions of KK referred to in section 1.

Although most – if not all – locally produced EFL materials employ the KK transcription system, in reality there exist several varieties of it, differing from each other in certain ways. Most of these varieties of KK also differ in one or another way is from the version of this transcription system that one can find in the original *Pronouncing Dictionary of American English*. The differences between the “original” and the “Taiwanese” versions arose through misinterpretation of the original KK symbols, but eventually the misinterpreted symbols became “the norm” on this side of the ocean, and these new symbols nowadays may be

found in a wide variety of locally produced paper and electronic dictionaries, as well as EFL materials. The Taiwanese KK symbols are also widely used in EFL sections available in some Taiwanese newspapers.

6.1. The Notation of Syllabic Consonants

The first difference I would like to discuss is the notation of syllabic consonants. In the original version of KK, the syllabic consonants are marked by a subscript syllabicity mark “_ɿ”, i.e., the same way as is done in the International Phonetic Alphabet. The following examples are taken directly from the *Pronouncing Dictionary*.³²

cradle 'kredl_ɿ
keep'em 'kipm_ɿ
Eden 'idn_ɿ

In the Taiwanese version of KK, a subscript dot is used instead:³³

/˘kredl/, keep'em /˘kipm/, Eden /˘idn/

Such notation of syllabic consonants is one feature that nearly all of the different varieties of KK as used in Taiwan agree on, and can be found from book/electronic dictionaries to EFL magazines like *Studio Classroom*, *English Digest* to more specialized materials, such as *Phonic Program for Beginners* (Allison 2011), many locally produced English textbooks, etc.³⁴

This difference in usage may have arisen due to two possible reasons – or their combination.

On the one hand, the “Taiwanese KK” usage may have arisen through misinterpretation of the original syllabicity mark as a dot,

³² Kenyon/Knott (1953:xvii).

³³ NB the usage of the grave to denote the stress (for a more detailed discussion of the notation of stress in Taiwan, see section 6.2 below).

³⁴ The only exception that I have found so far is Ing (1998), in which the syllabic sign is clearly a bar, cf. her notations like ['lɪt̪̩], ['sɑd̪̩lɪ], etc.

although, if one looks at the *Pronouncing Dictionary* carefully, the symbol employed appears to be a short vertical bar (see illus. 1):³⁵

Illus. 1

ṃ	keep 'em	'kipṃ
ṇ	vision	'vɪʒəṇ
ɛ̣	Eden	'idɛ̣

From this picture, it is possible to see that the notation of syllabicity in the “American” KK (or “original” KK) is in fact the same as in IPA. However, since the transcriptions are in bold type, the bar may have appeared similar to a dot – or that the more readily available symbol “.” may have been considered to be close enough to the bar.

On the other hand, it is also possible that the usage of the dot may have its roots, or – as I think is more likely – it may have been influenced by the notation of syllabicity in fairly influential American linguistic works like Trager/Bloch (1941) or Trager/Smith (1951). The notation of syllabicity in these two works is not exactly the same: whereas in Trager/Bloch (1941), syllabic consonants have a subscript circle, cf. [ḷ], [ŋ̣] (p. 232), in Trager/Smith (1951), the symbol employed is a large subscript dot, cf. [ḷ], [ŋ̣], etc. (pp. 33, 41; although in the introductory section of this work, a *circle* is used, cf. [ḷ], [ŋ̣] on p. 12). Although the authors did not explain the source of this circle – nor the difference between the circle and the dot – the former must be older than the latter, and originally, the circle must have been adopted from the Indo-Europeanist tradition in Europe, where it had been used already in the earliest comparative Indo-European grammars (but nevertheless had no connection to the later work of the phoneticians involved with IPA),³⁶

³⁵ Kenyon/Knott, *ibid.*

³⁶ Cf., e.g., Schleicher (1871).

cf. such Proto-Indo-European *phonemic* reconstructions containing syllabic consonants like **p_hh₁-nó-s* ‘full’ **[p_hʔ^hnos]* (vel sim.), **mṇ-tí-s* ‘thought’ **[mṇ^htis]*, **p_h-tú-s* ‘passage’ **[p_htus]*, etc.

6.2. The Notation of Stress

Another issue in which the Taiwanese versions of KK differ from the original KK is the notation of stress. As can be seen from illustration 1 above, the stress mark is a vertical bar written in front of the stressed syllable above the line, cf. KK *vision* /ˈvɪʒən/, etc. The original KK stress mark differs from the standard IPA stress mark in that in KK, the stress mark looks more like a wedge, i.e., somewhat like a sharp-angled “!” (here shown enlarged; see illus. 1 above), whereas the IPA symbol is a line, viz. “ˈ” (enlarged). Both are vertical, though.

In Taiwan, several varieties of the stress mark are used. Although the vertical line does occur,³⁷ by far the most common type is the one resembling the grave accent mark, i.e., “˘” (enlarged). This symbol occurs in many electronic and paper dictionaries, and multiple EFL materials of all kinds.³⁸ The third version is the acute mark, i.e., “ˊ” (enlarged). This symbol is used in the locally popular *Studio Classroom* series, although occasionally it also occurs in *The China Post*. A still different system, with the stress written directly above the vowel, can be found in Sun (1988).³⁹ Finally, a mixture of symbols is used in the reader *English News Selection* (Jin 1989) and the English textbook *Getting Around in American English* (McSwain & Morihara 1993).⁴⁰ In Jin

³⁷ See, e.g., Vickers (1991), Xie (2010), McSwain & Morihara (1993; but see below on their notation of secondary stress), Longman (1999), *English Digest*, *English Works*, *CNN*, etc.

³⁸ See Allison (2011), Liu (2004), and many others.

³⁹ This system is called “T.S.” (= “Trager/Smith”) in Sun’s book, but this is not accurate. First, such notation of the stress was already used in Trager/Bloch (1941). Second, Sun’s system is really mixed, containing features of Trager/Bloch’s system, KK, and IPA, cf. the following examples taken from her book: *castle* [kæsl̩] vs. *didn’t* [dídnt̩], *bottom* [bátəm] vs. *letter* [létə̃], further *save* [se:v̩], *fill* [fɪ̃], *width* [wɪd̩], *soot* [sut̩], etc.

⁴⁰ Transcriptions are rare in this last-mentioned textbook, but in the few examples that I have found, a vertical bar was used for the primary stress, and a low acute for the secondary stress.

(1989), two different types of stress-marking can be found. Below, several examples are shown in order to illustrate the different notations:⁴¹

- *English Digest*: *glory* ['glɒɹɪ];⁴² *Vickers* (1991): *gather* /'gæðə/; *Eurasia's*: *learner* ['lɜːnə], *EPP*: *con'vert* /kən'vɜːt/
- *Studio Classroom*: *bittersweet* [ˈbɪtəˌswɪt]; *The China Post*: *phantom* [ˈfæntə-m] (sic)⁴³
- *The China Post*: *persistent* [pəˈzɪstənt] (sic); *Allison* (2011): *girdle* [ˈɡɜːdl]; *Apple Daily*: *nervous* [ˈnɜːvəs]⁴⁴
- *McSwain and Morihara* (1993): *Fort Worth* [ˌfɔːtˈwɜːθ]
- *Jin* (1989): *sellout* [ˈsɛlˌaʊt], *misconduct* [ˈmɪsˌkændʌkt];⁴⁵ *English*: *a British person* [əˈbrɪtɪʃˌpɜːsn]; *Hot English*: *wetland* [ˈwetˌlænd]
- *Sun* (1988): *duration* /dʒʊrɛʃən/; *Colegrove* (1981): *hasten* [hɛɪsn]

6.3. The Notation of /ŋ/

Although printed materials in Taiwan normally reproduce the so-called “eng”-symbol /ŋ/ correctly, a peculiar version of this symbol can

⁴¹ Different authors also use different types of brackets. In order to illustrate this diversity, the original notations have been preserved. Some authors used the symbol “g” where IPA employs “g”. Certain of the titles of the sources have been abbreviated (the full titles are provided in the bibliography).

⁴² In this system, a distinction is made between the symbols “o” and “ɔ”. Whereas the words *glory*, *territory*, *explore*, *pour*, and *forecast* are transcribed with [o], *formerly*, *gorge*, and *performer* have [ɔ].

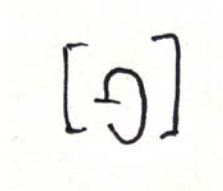
⁴³ Here and in a number of other instances, the symbol “ə” has been used in *The China Post* instead of the correct “ɜ”. Other examples of such usage include *penultimate* [pɪn-ˈʌltə-mɪt] and *prosperity* [prəˈspɛrə-tɪ] (all taken from December 2011 issues; transcriptions shown as they appear in the newspaper).

⁴⁴ For a discussion of the rhotic vowel symbol, see section 6.6 below.

⁴⁵ Aside from the non-KK symbol [ʊ], numerous other transcription mistakes and inconsistencies occur in this book, cf. several other examples: *equivalent* [ɪˈgwɪvələnt], *carat* [ˈkærət], *property* [ˈprɒpə-tɪ], *intermittent* [ɪntəˈmɪtnt] (sic), *assassination* [əˌsæsnˈeɪʃn] and [əˌsæsnˈeʃn] etc.

be observed in handwritten materials. This symbol does not appear to contain a vertical leg on the left at all, and, starting at bottom left, it curves to the right in a single line. At the bottom of the left leg, a very prominent horizontal line is normally added. A handwritten approximation of this symbol is presented below (illus. 2):

Illus. 2



The correct “eng”-symbol is shown below (illus. 3):

Illus. 3

[ŋ]

I do not know the ultimate origin of this symbol, but it seems to be fairly widespread in use Taiwan, as, aside from my own observations, its existence was also kindly pointed out to me by one of the reviewers of this article. Students may have picked it up through incorrect instruction at the high school level. As far as the shape of this symbol is concerned, the horizontal line at the bottom of the left leg must have developed through misinterpretation of the serif as a separate line.

6.4. The Notation of /θ/

There also exist several versions of the “theta”-symbol in Taiwan. Aside from the regular symbol “θ”, two diminished versions of it occur, one being “θ̣”, and the other “θ̥”. To illustrate these symbols, several examples are provided below:

- *Anthology*: *enthusiast* [ɪn'θjuːzɪ,æst], *cloth* [klɔθ]
- *English ABC*: *thinker* ['θɪŋkə], *enthusiam* (sic) [ɪn'θjuːzɪ,æzəm]
- *English Works*: both /θ̣/ and /θ̥/ occur (vol. 11, pp. 50f.)
- electronic dictionary in a mobile phone: *enthusiast* [ɪn'θjuːziæst], *cloth* [klɔθ̣], *thinker* ['θɪŋkə(r)]

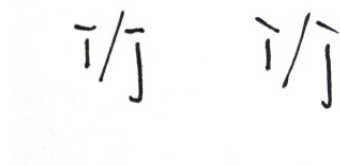
Although the two “dwarf” versions of theta do not occur in EFL and linguistic materials produced in the West, and are quite rare in locally produced printed or electronic materials, Taiwanese students routinely use them in their handwritten work. According to my own observation, the smaller version, viz. “θ̥”, is especially common.

Just like the incorrect version of the “eng”-symbol, the two “dwarf-thetas” must have evolved through misinterpretation of the original symbol, which is a rather tall letter, cf. “θ” vs. “θ̣/θ̥”. Of the two incorrect symbols, it is the smaller one which is especially unfortunate, since its shape coincides with the that of the mid-high rounded central vowel /ə/ (the so-called “barred o”).

6.5. The Notation of /i/ and /j/

Another problem, unique to the handwritten texts, is the notation of the symbols “i” and “j”. Both symbols routinely exhibit a horizontal or semi-horizontal bar instead of the dot, as shown below (illus. 4):

Illus. 4



Besides being incorrect, such symbols may cause confusion in such contexts where a distinction must be made between long and short segments, since the superscript bar is a traditional sign for length. Although it is not normally used to denote consonantal length, it is the standard symbol to denote vocalic length, cf. Old English *īs* [i:s] ‘ice’, *fōt* [fo:t] ‘foot’, *mūs* [mu:s] ‘mouse’, Latin *vōx* [wo:ks] ‘voice’, *vēnī* [we:ni:] ‘arrive’ (perf.), etc.

Likewise, the tilted symbol resembles the grave, which is commonly used to denote the falling tone, cf. Mandarin Chinese *shì* 是 ‘be’, or other vocalic features, e.g., shortness and closeness in Lithuanian *tàs* [tʌs] ‘that’ (masc., nom. sg.), as opposed to *tám* [təˈm] ‘id.’ (masc., dat. sg.), etc.

Although the letter “j” hardly ever occurs with either the length mark or grave, the symbols shown in illus. 4 are neither standard English letters nor transcription symbols, and therefore should be avoided.

6.6. The Notation of Rhotic Vowels

The last major issue in this discussion of the Taiwanese versions of the KK system is the denotation of the American rhotic vowels [ə] and [ɜ]. In the original *Pronouncing Dictionary*, the symbols employed were “ə” resp. “ɜ”, and both are used in many Taiwanese publications, including many book dictionaries, *Studio Classroom*, and other materials of diverse nature. However, most Taiwanese students nowadays routinely denote these vowels using rather unique symbols, which are neither taken from KK nor from IPA, and look as is shown in illus. 5 below:

Illus. 5



These symbols appear as if they have been composed of a schwa resp. reversed epsilon and the symbol “<”, or the so-called “left pointer” (Pullum & Ladusaw 1986:241). The origin of this notation may ultimately be fast cursive writing, whereby the original round rhoticity sign “~” (enlarged) acquired more angular shape and was slightly turned, to eventually resemble the left pointer. Ultimately, the new sign became reinterpreted as the actual rhoticity sign, and was transferred into printed texts, pushing out the original “~”.

This usage does not follow either the standard IPA or the original KK notation, in both of which the symbol “~” may be said to be a modified version of the cursive letter *r*, viz. “*ʀ*”. Because of this transparent association, the IPA rhoticity sign may be said to be iconic. The left pointer, however, does not have such a clear association with rhotic articulations or the sound [r], and is therefore less preferable than the traditional rhotic sign. In addition, the left pointer has been used by some authors to denote fronted allophones (cf. Pullum & Ladusaw, *ibid.*), for which it seems to be much more suitable, due to its shape indicating a leftward direction.⁴⁶

Although these symbols are not used in the popular *Studio Classroom* series, and are far from being omnipresent in dictionaries, both still occur fairly frequent, and, unfortunately, not only in EFL textbooks and magazines, e.g., *English Digest*, *Getting Around in American English*, but also in instructional materials for school teachers, e.g., *English Works*, *English Pronunciation Practice*, etc. In some materials, two different versions of rhotic symbols are employed: while

⁴⁶ The symbol “<” occurs, e.g., in Trager & Smith (1951:11 et passim). The standard IPA symbol for fronting, however, is subscript “+”.

the stressed rhotic vowel is denoted by the non-standard symbol “ɜ̃”, the unstressed one is denoted by the standard symbol “ə̃”. Several examples of such usage are shown below (notations presented as in originals):

- *English Works* (vol. 22): *person* [ˈpɜ̃sn̩], *imperfect* [ɪmˈpɜ̃fɪkt]
- *CNN*: *assert* [ə̃ˈsɜ̃t], *overture* [ˈovɜ̃tʃɜ̃]
- *English Digest*: *commercial* [kə̃ˈmɜ̃ʃəl], *researcher* [rɪˈsɜ̃tʃə̃]
- *English Focus*: *hamburger* [ˈhæmbɜ̃ɡə̃]
- McSwain and Morihara (1993): *Denver* [ˈdɛnvə̃], *Pittsburgh* [ˈpɪtsbɜ̃rg]
- *Passport*: *learner* [ˈlɜ̃nə̃]
- *Time*: *learner* [ˈlɜ̃nə̃]
- *Wen Shin's*: *learner* [ˈlɜ̃nə̃]
- Hsieh et al. (1997): *turn* [tɜ̃n], but *another* [ə̃ˈnʌðə̃]
- EPP: *con'vert* /kənˈvɜ̃t/
- Ing (1998): *birds* [bɜ̃dz], but *manner* [ˈmænə̃]

7. OTHER STYLES OF RHOTIC VOWEL NOTATION

Along with the notations of this type and the original KK type “ə̃” resp. “ɜ̃”, there also exist further notations of the rhotic vowels, which are to be found in dictionaries produced in the United Kingdom, or otherwise following the British transcription principles. In such dictionaries, the symbols “ə̃” resp. “ɜ̃” are very rare, and the sequences “ə̃” + “r” resp. “ɜ̃” + “r” are normally used instead, cf. several examples below:

- *Oxford* (1974): *ever* /ˈevə(r)/, *fur* /fɜ̃:(r)/
- *Cambridge* (2000): *ever* /ˈevər/, *fur* /fɜ̃r/
- *Collins Cobuild* (2000):⁴⁷ *fur* /fɜ̃:/, *litre* /ˈlɪtə̃/

Finally, a mixed style may be found in some sources, notably in two important pronouncing dictionaries, EPD15 and LPD. In EPD15, the

⁴⁷ In this dictionary, the stressed vowel is normally underlined. In this article, the usual stress mark has been used instead.

sequence “-ɜ:r-” is used for the stressed rhotic vowel, but a single symbol “ɜ” for the unstressed one, cf. *further* [ˈfɜ:rðɜ] (US pronunciation). In LPD, the stressed vowel is denoted by “ɜ” whereas the unstressed one is represented by “ɜr”, cf. *further* [ˈfɜ:rðɜr].⁴⁸

7.1. On the Reasons for Different Notations of Rhotic Vowels

The reasons for the differences in the notation of the rhotic vowels are hardly ever clearly explained. Only in Ladefoged (2006:92) one can find a fairly straightforward argument for the use of the symbol “ɜ”, where the author claims that such notation is preferable because this vowel is characterized by rhoticity throughout the entire articulation.⁴⁹ It has to be noted here, too, that, unlike the central middle rhotic vowels, which are transcribed differently in different materials, the rest of the rhotic vowels never occur with the rhotic sign “~”. Thus, although also the vowels /ɑ:/ or /ɔ:/ may also occur before *r*, e.g., *car*, *horse*, the transcriptions *[kɑːr], *[hɔːrs] do not occur. Furthermore, according to some opinions, *r* can also immediately follow /ɪ/, like in *here*, or /ʊ/, like in *sure*, as well as /e/, like in *pear*. However, in none of these situations, the rhotic sign “~” is never attached to the vowel in any of these situation, i.e., there are no transcriptions such as *[hr̥], *[ʃʊ̯], or *[pe̯].

The reason why the rhotic sign is not attached to /ɑ:/ or /ɔ:/ is indirectly expressed in Ladefoged (2006:92), where he says that in these environments, the vowels only have the rhotic quality for some of the articulation (the later part, that is). This implies that the difference between words like *course* and *born* on the one hand, and *curse* and *burn* on the other hand is that in whereas in the former, there is a vowel [ɔ], which becomes rhotic towards the end of its articulation, in *curse* and *burn*, one may assume a syllabic [ɹ] throughout.

⁴⁸ Wells does not use the symbol “ɜ” in his transcriptions, although it is mentioned in the introduction to the dictionary as the sound in American English *better* (LPD, p. xxvi).

⁴⁹ In Ladefoged (1996:234, 313), the author also speaks of a “syllabic *r*” in words like *herd*, i.e., he assumes that the peak of the syllable in such cases is a syllabic consonant [ɹ] (this view is also shared by Wells in LPD2, p. xiv, and was previously discussed in Trager/Smith 1951:41).

The situation is still different in the case of the words of the *here* type, described earlier. The vowels /ɪ/, /e/, /ʊ/ in fact are not rhotic in these words at all, and a slight schwa sound is normally inserted between the vowel and the following *r*. Although these sequences are frequently transcribed as [ɪr], [er] resp. [ʊr], to my mind, it would be more accurate from the phonetic perspective to add a schwa to the transcriptions, viz., [ɪʁ], [eʁ] resp. [ʊʁ] (cf. the transcription of such sequences in LPD).

8. “IPA” AS THE STANDARD TRANSCRIPTION SYSTEM

The present variety of transcription systems is in several ways disadvantageous, as the same phonetic units are transcribed in different ways in different systems, resulting in confusion for language students, and leading to very different descriptions of the phonetic/phonological system of one and the same language in textbooks, dictionaries, and other scholarly materials.

The adoption of a unified transcription system would be of great advantage to language students in Taiwan and scholars alike, as the present confusion due to the multitude of different transcription styles could be avoided. Although it may be said that such a major unified transcription system indeed exists in Taiwan – that system being KK – my study has revealed that, aside from the fact that there exist several varieties of KK in Taiwan, and all differ in certain ways from the original system as used by Kenyon and Knott in the USA, the system itself contains idiosyncratic features that do not accord to the facts of the standard language (or specifically American English; see sections 3 – 5.1 above for a more detailed discussion).

Another issue with KK is that a lot EFL and linguistic materials available in Taiwan do not employ the KK system – including those produced in the US (for some examples, see sections 4.1 – 4.2).

The so-called “DJ” system, that also has significant distribution in Taiwan, is even more problematic, since it is outdated, and is not used in any new materials produced by major publishers in the West.

In my view, neither KK nor DJ can offer anything that would make them superior to the internationally acknowledged and much more versatile International Phonetic Alphabet. Although this system is not

widely used in Taiwan, and has also been described as not being suitable “for any one spoken language” (and specifically for American English, cf. Sun 1988:5), as far as I know, negative descriptions of this sort cannot be supported by any concrete examples. The fact that IPA itself was designed to provide unique symbols to transcribe all the physically possible speech sounds necessarily has to mean that it must be possible to use this system to provide phonetically accurate transcriptions of any spoken language. As far as I can tell, IPA has been very successfully used by both British and American scholars to represent very fine details of the pronunciation of American English, of which KK in its popular form will never be able (cf. also Ladefoged 2006:84; Wells 2006:386).

Although both DJ and KK also occur in materials produced outside of Taiwan, KK, especially, is very rare. As far as specifically KK is concerned, it is virtually unknown in Europe, and is far from being universally used in North America. Furthermore, neither system is employed by the modern producers of major dictionaries in the West, incl. Oxford University Press, Cambridge University Press, Longman, etc.

The often-heard argument against IPA, that the system is “too complex,” is a very unfair accusation. The set of symbols needed for basic transcription of English is far smaller than the full set of IPA, whereby the issue of “complexity” becomes entirely irrelevant. On the other hand, in narrow transcription, which is often needed in linguistic analysis of (especially) colloquial data, the degree of precision one can reach with the symbols of IPA cannot be rivaled by any other modern system (with the exception of the Trager/Bloch system, which, however, has never gained much popularity). Thus, whereas the only possible transcription of the noun *kitty* in KK is a rather broad /'kɪti/, using IPA symbols, the transcriptions can range from the broad phonemic /'kɪti/ to the rather narrow allophonic [ˈcʰɪɾi]/[ˈkʰɪɾi] (US pronunciation), or [ˈcʰɪtʰi]/[ˈkʰɪtʰi] (British pronunciation), etc. In addition, critics of IPA forget that the so-called “KK” system in fact evolved out of IPA (see section 3 above for a more detailed discussion).

The adoption of IPA would hopefully also put an end to the unfortunate – but very widespread – local linguistic myth that “IPA should be used for the transcription of British English, and KK should be used to transcribe American English”. It was IPA itself that Kenyon and Knott used to

transcribe their own language, and the differences between their transcription and the more common transcriptions one can find in modern linguistic materials are solely due to the two above-mentioned authors' idiosyncratic usage of this system (see sections 3 – 3.1 above).

8.1. Standardization Illustrated

To illustrate the proposed ways of standardization, several examples are provided below. Wherever there are differences between the American and the British pronunciation, both variants will be transcribed:

- a) the vowel of *face*: [eɪ] (as opposed to KK /e/, which implies monophthongal articulation);
- b) the vowel of *goat*: [əʊ] (British English), [oʊ] (American English; as opposed to KK monophthong-like /o/);
- c) the notation of stress: *English* ['ɪŋɡlɪʃ]; *pronunciation* [prəˌnʌnsi'eɪʃn];
- d) the notation of syllabic consonants (if no schwa is used):⁵⁰ *bottle* ['bɒtl̩] (BrE), ['bɑ(:)rl̩] (AmE); *button* ['bʌtl̩] (BrE), ['bʌrl̩] (AmE); *bottom* ['bɒtl̩] (BrE), ['bɑ(:)rl̩] (AmE);
- e) the notation of rhotic vowels in American English: *further* ['fɜ(:)ð̩ɹ̥] or ['fɜ(:)ð̩ɹ̥]

Among these examples, the notation of the rhotic vowels shows the most variation from among different resources, and is in many ways the most problematic. The reason for preferring the symbol [ɹ̥] to other forms of transcriptions was discussed in section 7.1 above. As for the symbols [ɹ̥] resp. [ɹ̥], these essentially are variants of the same symbol, the latter somewhat more clearly exhibiting its “compound” nature (and in this respect being more similar to the other compound sign, “ɹ̥” [< “ɹ” + “̥”]).

⁵⁰ If the symbol schwa is inserted, the syllabic mark will no longer be used, as the consonants lose their syllabicity, cf. *bottle* ['bɒtəl], etc.

9. CONCLUSION

To summarize the preceding sections, English transcription in Taiwan may be said to be characterized by a large variety of styles. Although some of these styles are also well-known and accepted in international linguistic scholarship (primarily, IPA), some appear to be idiosyncratic variations of established transcription systems, or even mixtures of several systems (cf. the transcription system employed in Sun 1988, which shows features of IPA, KK, and the transcription system used by Trager and Bloch).⁵¹

In this article, I have discussed the distinctive features of these transcription systems, as well as the background of their differences (see sections 3 – 7.1 above).

Since the current variety of transcription systems may be said to present a rather confusing picture of the English sounds (or, specifically, vowels) and their transcription, it is proposed in this article that, in order to reduce the current variety of styles and the confusion resulting thereof, some standard should be introduced. Although the transcription system as used in Kenyon and Knott's *Pronouncing Dictionary of American English* may be seen as the most common transcription system used in Taiwan today, it has been demonstrated in this article that some of the notations in this system are rather idiosyncratic, and do not reflect the phonological or phonetic reality of the current standard language. Besides, this system is normally only used for the transcription of American English, leaving other important varieties of English aside.

It is proposed in this article, that instead of KK, the much more versatile and internationally acknowledged International Phonetic Alphabet (IPA) in its current form could be used as the standard transcription system in Taiwan, in order to reduce the current multitude of transcription systems, and to follow the standard used in international scholarship.

⁵¹ Some examples from Sun (1988) are provided in fn. 39 above.

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論台灣通行之英語音標系統

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在台灣的英語教學與語言學領域裡，相關的語言教材或是語言研究的文獻資料，經常採用不一致的英語音標系統。其分歧的部份原因來自於各學者對語音和音位系統持有不同的認知判斷，另一部份原因則源自於對國際音標符號的錯誤解讀。在這兩種因素加總之下，造成了台灣英語音標系統的混亂現象，也增加了學生在學習英語上的困難。本文檢討上述之議題，並嘗試釐清各種相關問題，最後提議以標準化的英語發音輔助系統，來改善現今的音標使用問題。

關鍵詞：英語、發音輔助系統、教育學、國際音標、KK 音標(標記美式發音的音標)、DJ 音標 (標記英式發音的音標)、語音學、音韻學、歷史語言學