

THE REPRESENTATION OF THE SOUNDS OF ENGLISH IN JAPAN

メタデータ	言語: en 出版者: 浜松医科大学 公開日: 2013-08-27 キーワード (Ja): キーワード (En): 作成者: Kelley, David B. メールアドレス: 所属:
URL	http://hdl.handle.net/10271/206

THE REPRESENTATION OF THE SOUNDS OF ENGLISH IN JAPAN

日本における英語音の表記

David B. Kelley, Ph.D.

English Section, Hamamatsu University School of Medicine

Abstract: In Japan, English words and their pronunciations are graphically represented by the signs of three scripts: (1) the standard Roman alphabet of written British and American English, (2) a modified Roman alphabet based on an early version of the International Phonetic Alphabet (IPA), utilized by the British phonetician, Daniel Jones, in his (1917) *English Pronouncing Dictionary*, and (3) a Japanese syllabary originally based on abbreviated forms of Chinese characters, known as Katakana. The general ineffectiveness of the Jones system and the Katakana script in representing the pronunciation of English words, within a Japanese English-language teaching context, is demonstrated and alternative transcription systems are presented. The ineffectiveness of the Jones system centers on its lack of signs to represent tense and lax vowels, and its misrepresentation of vowel length. The ineffectiveness of the Katakana script involves the same two weakness as the Jones system, in addition to the lack of signs to represent certain English consonants which do not exist in Japanese, and the syllabic nature of its signs, necessitating the intrusion of Japanese vowels into Katakana transcriptions which do not exist in the original English words. Lastly, the study calls for a total reassessment of the utility of the system(s) of transcriptions found in Japanese-made dictionaries, textbooks, and informal handbooks and used by Japanese teachers and students of English, scholars, and tourists.

Key Words: Japan, English teaching, pronunciation, IPA (International Phonetic Alphabet)

I. INTRODUCTION

1. English Dictionaries

When Japanese teachers or students of English consult a dictionary, such as Kenkyusha's *Shin Kan'yaku Eiwa Jiten* [New Concise English-Japanese Dictionary], they find that the pronunciation of words is indicated by a system of transcription designed by Daniel Jones. This system, which is a simplified version of the IPA (International Phonetic Alphabet), was designed exclusively for the benefit of native English speakers and was used in Jones'

(1917) *English Pronouncing Dictionary*. The dictionary soon arrived in Japan and eventually gained such popularity among educators as to become the standard for all dictionaries indicating British-English pronunciation. The overall simplicity of the Jones transcription system was apparently appealing to those linguistically unsophisticated educators. Yet, its oversimplicity, misrepresentation of vowel length, and outright misuse of IPA signs are the very cause of pronunciation problems.

By contrast, if we examine the transcription system used in the (1981) *Longman Lexicon of Contemporary English*, also dealing with British English, we see a better system based on the IPA system, and one with the vowels represented in a much more accurate fashion. This dictionary is the most modern representative of a tradition of dictionary-making that goes back to the 18th century to Thomas Longman, one of five publishers involved with the publication of Samuel Johnson's first dictionary of the modern English language.

In 1944, John Kenyon and Thomas Knotts' book, *A Pronouncing Dictionary of American English*, appeared. They utilized an IPA-based transcription system of their own, that correctly represents the sounds of American English. Either this dictionary, or one such as Longman's, would better serve the special needs of Japanese teachers and students of English. However, as an American teacher of English, it is upon the Kenyon-Knott transcription system that I have based my own system of transcription presented in this paper.

2. The Appendices

The various transcription systems investigated in this paper utilize both standard and non-standard Roman alphabetic and KATAKANA signs. For typographic reasons, it is necessary to present data written using non-standard (IPA) signs in four appendices. The appendices are designed in such a way as to allow for easy comparison of information on English consonants and vowels across the appendices. The data are divided into two general groups, including one group of 25 consonants & semi-vowels and another of 25 vowels and diphthongs (including r-colorings). In my classes, these fifty sounds are referred to as: "The 50 Sounds of English" (英語の五十音). Each consonant or vowel sound is assigned a number from 1 to 25, based on American English pronunciation (because British English utilizes more than the 50 sounds of American English). Thus, for example, consonant #1 [p] and vowel #1 [i] refer to the same sound in any of the appendices (except Appendix III, which only deals with vowels). In Appendices II and III, because the numbering of

sounds is based on American English, vowel #5 refers to the sound [a], even though this British English sound is also found on the same line as American English vowel #4.

3. The Problem

When people speak a language, they utter sounds in conventionalized sequences. The sounds consist of various vocalized and non-vocalized segments called vowels and consonants. If either the sequencing of the sounds, or the sounds themselves are not within acceptable limits of performance, the speaker is not understood. Perhaps because written language tends to utilize more signs for consonants than for vowels, many people tend to think that consonants are perhaps a little more important than vowels. Yet, from ancient times, people interested in languages have recognized the overriding importance of vowels. This is why the Chinese and the Japanese adopted the originally Indian idea that vowels are the “mothers of sound” (母音) and that consonants are merely the “children of sound” (子音). This is no less true in learning a foreign language, or in transcribing the sounds of a foreign language. This paper is primarily about how the vowels (or the “mother sounds”) of English are represented in Japan, because no matter how precisely spoken the consonant sounds of a word are spoken, if the vowel at the core of every word is incorrect, then the speaker will surely be misunderstood.

The transcription system used by Jones in his *English Pronouncing Dictionary* was not made for use in dictionaries, textbooks, and other materials for foreign learners of English. It was made only for the benefit of native speakers of English. Jones, himself, was completely aware of the unsuitability of his system in EFL instruction, and, as noted by Lewis (1979), never used it in his books for the last fifty years of his life. Lewis also commented briefly on one of the “unfortunate” features of the original system: its “highly misleading” emphasis on “relatively trivial” contrasts of length between the vowels in minimally distinct pairs such as: *beat/bit*. But, why did (and do) Japanese educators think so highly of the Jones system? Perhaps this has to do with the nature of Japanese phonemics. According to Bloch (1950), there are five long voiced mediovelar (unnasalized) vowels: [i], [e], [a], [o], and [u]. In Japanese, it is not unusual to see any of these vowels joined with a like vowel in succession, which is pronounced as a single phonetically “over-long” vowel. Based on this “long” and “overlong” feature, minimally distinct pairs, such as: [obasan] ‘grandmother’ and [obaasan] ‘aunt’ may occur. In standard British and American English, however, such pairs based on vowel length are virtually nonexistent. Instead, we commonly find pairs based on differences in vowel tension. Because Jones

realized that native speakers were already aware of this feature of English, he decided to distinguish the vowels in such a pair as: *beat/bit*, only by a colon, thus obtaining: [bi:t]/[bit]. The Japanese, however, because of the nature of their own language, saw this use of the colon as something which they could readily understand, and so the Japanese educators adopted the Jones system, and now, in all the English classrooms in Japan, students are being taught that, in effect, English vowels are just like Japanese vowels, i.e. that a long-short distinction between certain vowels holds in English. This mistaken assumption is one of the causes of the problem Japanese have in being understood by native speakers of English. Clearly, an alternative system of transcription is needed, one which accurately represents English vowels, so that Japanese students at least have a chance to study English realistically and learn how English words are actually pronounced.

As possible alternatives, either the Longman or the Kenyon-Knott system will do very nicely, with the former used to represent British English and the latter used to represent American English pronunciation. If we now go back to the English pair: *beat/bit*, we see that the Longman system utilizes an IPA-based sign for the lax vowel in *bit*, while, as in the Jones system, using a colon /:/ to indicate the phonemic length of the vowel in *beat*. The Kenyon-Knott system, on the other hand, uses a more phonemic approach and no colon is used to indicate vowel length, while maintaining two vowel signs, as in the Longman transcription system. Because it does not "set" vowels at only one length, and because I teach American English pronunciation, I adopted and adapted the Kenyon-Knott system for use in my English classes.

Complicating the picture, as mentioned by Charles K. Thomas in his (1958) *Introduction to the Phonetics of American English*, is the nomenclature of educators (not linguists) which includes such terms as: "long" and "short" vowels. Japanese educators who saw such words being used, understandably, got the impression that the English vowels are like Japanese vowels. Unfortunately, Japanese linguists (not educators), who should know better, say nothing on this point; in fact, they consistently utilize the Jones system in their technical papers (perhaps, because the system is so pervasive in Japan). It is primarily the vowels of English, not the consonants (which are rather quickly learned by serious students) which pose the greatest difficulty to Japanese teachers and students of English. It is the matter of the nature of these vowels and their representation that I address next.

II. THE NATURE OF ENGLISH VOWELS

1. Tense and Lax Vowels

When linguists denote the phonetic features that distinguish the vowels in the set: *beet* and *bit*, they use the terms: TENSE, for the former vowel, and LAX, for the latter. Looking at the appendices, tense vowels would include: #1, #6, #8, #10, and #12 along with the stressed form of #11 (English: *earth*). All other vowels are lax. "Tense" refers to the relative tenseness in the muscles coming from the chin to the neck, which tend to bulge slightly when a tense vowel is pronounced. "Lax" refers to the relative lack of tenseness in the same muscles when a lax vowel is pronounced. As mentioned by Thomas in his (1963) article in *Exposition and the English Language*, the differences in tension result in three "incidental" phenomena: (1) tense vowels tend to be slightly longer than lax vowels, (2) the tongue tends to be raised slightly higher with tense vowels than lax vowels, and (3) the slight rise in the tongue with tense vowels leads to a more diphthongal quality. These comparisons hold for the tense/lax vowels in such minimally distinct pairs as: *meet/mitt*; *aid/Ed*; *awed/odd*; *odor/udder*, and *pool/pull*, involving vowels #1/#2, vowels #12/3, vowels #6/#5, vowels #8 (and #16)/#7, and vowels #10/#9, respectively.

2. The Length of Vowels

In Thomas' (1958) book, cited earlier, one can find one of the clearest explanations of the nature of incidental lengthening of tense vowels, and the general nature of vowel length in English. First, it should be stated that both tense and lax vowels lengthen in certain phonetic contexts. In the case of tense vowels, Thomas presents the following four English words: *bee*, *beam*, *bead*, and *beet*, in all of which, the vowel in question is vowel #1. The first word (*bee*), contains the longest version of vowel #1, while the last word (*beet*), contains the shortest version of the vowel, with the vowel in the second and third words (*beam/bead*) being intermediate in length. If we use "T" to represent tense vowels, then the varying lengths of the vowel in the words: *bee/beam/bead/beet*, can be indicated by: [T:], T·, T·, and T], respectively. This kind of device is standard in linguistics, but usually, only version, [T:], is encountered in most pronouncing dictionaries. It should be noted that, because the vowel is slightly longer in the second word (*beam*) than in the third word (*bead*), there should be some way to distinguish the vowels of intermediate length, such as by: [T·· and T·], respectively. This also provides a way to describe

the varying lengths of a lax vowel, such as (appendix) vowel #2, which occurs in the following three words: *bin*, *bid* and *bit* (note that vowel #2 does not occur as the final sound in English words). If we now use "L" to represent lax vowels, then the lengths of the vowel in the three words can be indicated by: [L··, L·, and L], respectively. In fact, in neither the Jones system, nor in any other system, is the length of lax vowels ever indicated. It is not necessary to do so, because their length varies, depending on the phonetic context. For the same reason, it should not be necessary to indicate the length of tense vowels, because their length also varies. We must also know that both types of vowel tend to lengthen in certain case, especially before voiced stops and continuants. The length also varies according to the emotional context and the amount of stress a particular syllable carries in natural connected speech. Both phenomena can be accounted for and indicated by one of the symbols designed to indicate stress, such as: /' /.

3. Teaching Students

In a Japanese teaching context, great care must be taken in instructing students. Because Japanese learners are highly sensitive to the matter of vowel length, any indication of length quickly becomes counterproductive. Instead, emphasis should be placed on mastering the lax vowels. This can never be achieved if the teacher or student merely attempts to shorten a tense vowel. To achieve this, students must (1) be completely aware of the true differences between tense and lax vowels, (2) be able to hear the differences, and then (3) be able to produce both kinds of vowels with some degree of accuracy. Number (3) requires that the teachers be fully trained and competent, themselves, which will necessitate some change in the Japanese teacher-training system. Because Japanese teachers of English are merely teaching the (inaccurate) Jones system, not actual British English pronunciation, the system of transcription must be changed, as well.

III. BRITISH AND AMERICAN ENGLISH

1. Similarities and Differences

Among Japanese students of English, there are several misconceptions about British and American English. The first involves the spelling systems employed and the idea that the two spelling systems are vastly different. This is simply not the case. People may read hundreds of pages in a book written in English before coming across a word such as colour/color. The second involves the pronunciation of British and American English and

the idea that differences in pronunciation lead to great difficulty in comprehension. This, also, is not the case. Over the years, I have met and spoken with many users of British English and have yet to encounter any speaker of British English whose pronunciation I found to be in the least incomprehensible. The differences in vocabulary are also greatly overrated, especially in an international setting where grossly different idioms and slang are seldom encountered. But even here, television and movies have familiarized both groups, to a great extent, with the idioms and slang of the other.

In the end, one sees an overriding unity in the pronunciation, spelling, vocabulary, and usage of English throughout the world, with the differences reflecting the varied environments, histories and interests of the users of a truly international language. In this connection, we see, in Appendix I, the overall unity of the sounds of English. From the chart, we can also see that Standard British English has slightly more sounds, including the British "short o" (listed under vowel #5) and the central, lax vowel known as "schwa" (listed under vowel #2 and #7). Because I have not observed either sound in standard American English, I teach neither. In the case of "schwa", it is not necessary because vowels #2 or #1 will do. In the case of "syllabic r" or "r-colored" vowels, no discrete "schwa" exists.

Appendices II and III show the distribution, occurrence, and differences in English sounds. This should be of use to American teachers who, in a Japanese setting, find dictionaries designed, primarily, to represent the sounds of British English. In other words, the American teacher must know when students are trying to accurately use the sounds of British English and when they are not (and are perhaps, simply making a mistake). Even if the American teacher can not instruct the students in British-style pronunciation, that teacher must at least be able to explain the differences in some fashion.

2. Sources of Phonetic Differences

Americans tend to frontalize, raise, and lengthen their vowels, when compared to British speakers. We can see this by looking at Appendix II, which shows the actual distribution of the sounds of English, and by looking at Appendix III, which presents examples of words in which the sounds occur, including examples of words in which different vowels occur (in the right-hand section). For example, we see that raising and frontalization is evident in the American-English pronunciation of *get*, which utilizes vowel #2. In this case, vowel #2 historically comes from vowel #3. Since the American vowel is formed higher in the mouth than the British vowel, we can say that it has been "raised". Like-

wise, because the American vowel is also formed more forward in the mouth than the British vowel, we can say that it has been "frontalized". Because this process has not occurred in all American words, two lines are necessary in Appendix II: the lower British vowel is listed under (American) vowel #2, and the common British/American form is listed under (American) #3. Frontalization and/or raising of American vowels is also evident in such words as: *catch* (vowel #3 comes from vowel #4), *ask* (vowel #4 comes from vowel #5), *on* (vowel #5 is more forward than the British "short o"), and *oil* (vowel #14 begins with vowel #8, which is higher than vowel #6, which begins the British version of #14). In the case of such words as: *on* and *water*, we see that British English tends to use rounded vowels, while Americans use unrounded vowels. Teachers must remember, however, that these differences constitute tendencies and not rules; the complex history of the development of standard British and American vowels does not so easily allow for completely consistent correspondences.

IV. THE USE OF KATAKANA

1. The Assimilation of Loan-words into Japanese

The creation of the Katakana (片仮名) syllabary is traditionally credited to Japanese deputy ambassador to the Chinese T'ang court, Kibi-no-Makibi (吉備真備), who lived from 695 to 755 AD. However, it is more likely that it was devised by more than one person, and in the 10th century. Like its counterpart, the Hiragana (平仮名) syllabary, it consists of 48 separate signs derived from Chinese characters. The term, "kana" (仮名), was originally pronounced: KARINA, which means 'false' or 'borrowed letters'. Actual Chinese characters were called MANA, which means 'real letters'. Thus, the development of the two Kana syllabaries, itself, from attenuated Chinese signs, is one of the first indications of the process of assimilating foreign words into the Japanese language. Although Katakana first served to represent the sounds of Japanese words, with the creation of Hiragana, it began to serve, primarily, as a means to indicate the sounds of Chinese-based loan-words. The use of Katakana for this purpose became the model for its later, and most recent, use as the primary means of representing the sounds of loan-words from Portuguese, Dutch, English, German, French, Korean, and even modern Chinese. As was the case in the assimilation of older, Chinese-based words, the unique sounds occurring in European and other languages were simplified in the process of assimilation in a way that is reflected in their Katakana representation. The simplification, of course, is directly

related to nature of Japanese, itself. That is to say, because of the relative paucity of sounds in the Japanese language, the sounds of any language whose words are assimilated into the Japanese, out of pure necessity, become simplified. In part, the necessity arises because of the intractable nature of the Kana writing systems. The result of this whole process is the unintelligibility of many Japanese loan-words to users of the languages from which the loan-words are derived. This situation, although hardly unique, creates difficulties for students of English in Japan.

2. The Transcription of Foreign Words

The utilization of the Katakana syllabary to represent various foreign-based loan-words in the lexical corpus of modern Japanese can be seen in such dictionaries as: Sanseido's (1987) *Konsaisu Gairaigo Jiten* [Concise Dictionary of Foreign Terms]. Katakana can be used for another purpose, as well: the representation of the pronunciation of non-assimilated foreign words. This use is seen in Saito Hidesaburo's (1920) *Hon'i Jyukugo Eiwa Chūjiten* [Mid-Size, English-Japanese Dictionary of Standard Phrases], Yoshida's (1973) *Kokugo Jitsuyō Jiten* [Practical Dictionary of the National Language], and Saito Akio's (1985) *Rokka Kokugo Kaiwa* [Conversation in Six Languages], where English words and phrases are transcribed using Katakana signs. An inspection of these transcriptions quickly reveals the ineffectiveness of Katakana signs for this purpose. For example, Saito (1920) transcribed English: *beat/bit* as: ビート ['bi:to] and ビット ['bitto], respectively. Both transcriptions resulted in the bi-syllabication of words of one syllable and the addition of an extra vowel: [o]. These changes alone, cause comprehension difficulties for native speakers; however, this problem is compounded by the absence of any indication of the tense or lax nature of the English vowels, resulting in the almost total incomprehensibility of the two words. The Japanese tendency to rely on indications of vowel length: long, in the case of *beat*, and short, in the case of *bit*, is understandable not only because phonemic length is so important in Japanese, but also because it is so clearly indicated in the Jones system. In many cases, as above, the use of the sign: /--/ in Katakana transcriptions, which indicates extended vowel length, is merely modeled on Jones' use of a colon: /:/ . On the other hand, an English-based spelling convention, whereby lax vowels are indicated by a doubling of the following consonant, as in: *bitter*, *batter*, *butter*, and *bullet*, are indicated by another special sign, /ツ/, in Katakana. Unfortunately, Japanese linguists seem to be unaware of the fact that lengthening a vowel by using either /:/ or /--/ is irrelevant in words such as: *beat*=Jones' [bi:t]=Saito's ビート ['biito]. And,

it is simply wrong to shorten a vowel by using /ツ/ in words such as: *bit*=Saito's ビット [ˈbitto], because it creates a geminated (over-long) consonant which does not exist in the English words. The use of /ツ/ to make consonant geminates is not only based on the English spelling convention of doubling the consonant after lax vowels, but also on Japanese phonemics (discussed in the next section).

Unlike the case of assimilated loan-words, where simplification is justified because such words have had to be adapted to fit in with the other words of Japanese, and where use of Katakana is consistent with this assimilation process, such is not the case when we look at the use of Katakana for the representation of the pronunciation of non-assimilated words or the transcription of the original foreign models of assimilated loan-words. In the English classroom, students naturally draw upon their knowledge of assimilated loan-words, but become confused and frustrated when the use of the simplified Katakana-style pronunciation of the loanwords just does not work. Students must be made perfectly aware of the great simplification involved with the assimilation of the loan-words and taught to avoid their use, or at least, to question the pronunciation of each Katakana-word they may try to use. This whole process of doubting and questioning could be avoided if the Katakana-words more accurately reflected the sounds of words from English (or any other language). How this can be done is the topic of the next section.

3. The Adaptation of KANA

A few Japanese, and almost all foreign linguists, tend to feel that Katakana can never be adapted for use in the transcription of any language other than Japanese. I, myself, have not found this to be the case, and some time ago decided to attempt to adapt Kana for transcribing English. My inspiration for the adaptation of Katakana came from Saito Hidesaburo's (1920) book, cited earlier. With one exception (involving the sound of "s" in the word: *pleasure*), Saito found a way to represent the consonants and semi-vowels of English. A look at Appendix IV will reveal the general nature of Saito's transcription system. Another admirable part of Saito's system was the use of the "suppressed vowel" system of Katakana. This is commonly seen in such Japanese loan-words as: チェーン (〈English: *chain*) and スシーン (〈English: *scene*), where the original vowels of チ [tʃi] and ス [su] have been suppressed by the use of lower-case Katakana vowel signs: エ [e] and イ [i] after the syllable in question, yielding: チエ [tʃe] and スイ [si]. In my own new version of Katakana, I use the same strategy to represent other consonants.

The two examples presented above also reveal the difference between Saito's representation of the two words using Katakana and the style of representation used by Japanese scholars who use the more simplified approach found in Kimoto's (1987) *Konsaisu Gairaigo Jiten* [Concise Dictionary of Foreign Terms]. In the latter book, we see チェーン instead of チェーイン (English: *chain*) and シーン instead of スイーン (English: *scene*). In the case of チェーン, there is no problem with the use of vowel suppression; however, the diphthongal nature of [-ei-] in [t/ein] is better shown by Saito's system. As for シーン (English: *scene*), however, vowel suppression is not used and confusion has been created because, if a Japanese student tries to use this simplified pronunciation in the English classroom, the teacher does not know if the student means to say English: *scene*, *sheen*, or even *thin* (which is シン in the official spelling). Here, too, Saito's rendering is superior, but not without its problems because it misrepresents vowel length. Therefore, I adopted only Saito's signs indicating vowel-suppression.

In certain cases, completely new Katakana signs were designed. In the case of the signs for consonants #3, #4, and #16, vowel suppression was used, but, because of the fundamentally different nature of the Japanese allophone of [h] and [b], respectively, in: ファ [ɸa] and ヴイ [βi], which are intended to represent the English sounds: [fa] and [vi], new signs are used. In the case of the sign for consonant #4, I merely adopted Saito's sign. In the case of the sign for Consonant #16, a completely new sign was called for, in order to emphasize the unique nature of the sound in question. The same is true of the signs for vowel #11, known as: "syllabic-r", its consonantal form, consonant #17, and the syllabic and regular forms of consonant #11. Great care should be taken in the instruction of students in the use of the two forms of "r" and the two forms of "l". With regard to consonant clusters, please note the use of lower-case signs in Appendix IV (consonant and vowel #s 26-29), which serve to indicate suppression of both the preceding and following vowels.

As for the tense and lax vowels of English, I had to go far from Saito's strategy. I had to find a way to indicate difference in vowel-quality without getting involved with either vowel-lengthening or vowel-shortening. To do this, I had to utilize Hiragana. Because many Japanese feel that Hiragana signs are somehow softer (or even more feminine) than Katakana signs, I decided to use Hiragana signs to indicate the lax vowels: #2, #3, #4, #5, #7 and #9, and the lax form of vowel: #11. Note that lax vowel #3, because it is not involved in any lax-tense set, is represented by the Hiragana sign for [ya]. In my system, however, it must be read as vowel #4. Also note that vowel #3 and #12 form

a lax-tense set. Of course, their values still have to be mastered. Even after the signs and values have been mastered, I would not like them to replace a better, IPA-based Roman alphabetical system, but the use of my system is preferable, when absolutely needed; my adaptation of Kana is more of an intellectual exercise than a solution. Anyway, I do not expect much interest by Japanese; the unpleasant appearance of the forms most likely prevents this. Still, my system reflects a native speaker's view of his own language and does not impose a Japanese view upon English. In other words, it does not force English into a Japanese conceptual mold, but rather, forces Japanese Kana into an English conceptual mold, for the first time. As can be seen by looking at Appendix IV, this process of remolding Kana into a form that accurately reflects the nature of English phonetics also brings to light the weaknesses in the present use of Katakana; of the 25 entries in the consonant section, none of the Kana transcription emerged unscathed from the process of using Kana to represent the sounds of English. This is also indicative of just how serious the problems is which Japanese speakers of English face when they use either the Jones system of pronunciation or the Katakana-style pronunciation of English words.

V. CONCLUSIONS

Many Japanese learners of English have found that their diligent study of English has not resulted in success in mastering English. Many question the ability of their teachers and the system of English education in Japan. Yet, I have found that it may be the materials used by teachers and students, and the information they contain, that may require the most reform. If Japanese truly want to speak English with some degree of accuracy of pronunciation, they must come to recognize that the sounds of English, especially the vowels, are represented incorrectly in Japan. These sounds can be mastered, but, they must be approached realistically. The first step toward rectifying this situation is to recognize there is a problem. Next, learners must see that over-simplification of the representation of the sounds is at the root of the problem. Only then, can the dictionaries and textbooks be changed. As a first step in the actual reform, I recommend that the Jones system be abandoned in Japan and a more suitable system be adopted. Next, I recommend that the information on English phonetics presented to teachers and students be reviewed and revised completely, first, by competent linguists, and only then, by educators. The decisions about what kinds of English materials should be presented to Japanese students of English should not be made by educators and policy makers; they

should be made by people who care more about teaching English realistically than merely simplifying the process and the nature of English to fit the abilities of the Japanese teachers and the requirements of the Japanese education system. Producing good speakers of English should be the one and only goal.

The contents of this paper were presented by the author at a lecture sponsored by the Shizuoka Branch of the Japan Association of Language Teachers (JALT) on January 17, 1993, at the Create Hamamatsu Building, in Hamamatsu, Japan.

APPENDIX I

THE SOUNDS OF ENGLISH

	CONSONANTS & SEMI-VOWELS				VOWELS & DIPHTHONGS			
	Jones ¹ (Japan)	Longman ² (Br. E.)	IPA ³ (Am. E.)	NEW ⁴ (Am. E.)	Jones ¹ (Japan)	Longman ² (Br. E.)	IPA ³ (Am. E.)	NEW ⁴ (Am. E.)
1.	p	p	p	p	i:	i	i:	i
2.	b	b	b	b	i	ə	ɪ	ə
3.	f	f	f	f	e	e	ɛ	e
4.	v	v	v	v	æ	æ	æ	æ
5.	w hw	w	w ʍ	w	a:	ɔ	a:	ɑ
6.	m	m	m	m	ɔ:	ɔ:	ɔ	ɔ
7.	t	t	t	t	ʌ	ə	ʌ	ə
8.	d	d	d	d	o	ə u	o	o
9.	θ	θ	θ	θ	u	u	u	u
10.	ð	ð	ð	ð	u:	u:	u	u
11.	l	l	l	l	ə:r	ɜ:r	ə	r
12.	n	n	n	n	ə r	ə r	ə	r
13.	s	s	s	s	e i	e i	e	e i
14.	z	z	z	z	a i	a i	a i	a i
15.	ʃ	ʃ	ʃ	ʃ	ɔ i	ɔ i	ɔ i	o i
16.	ʒ	ʒ	ʒ	ʒ	a u	a u	a u	a u
17.	r	r	r	r	o u	ə u	o	o u
18.	tʃ	tʃ	tʃ	tʃ	i ə r	ɪ ə r	ɪ r	ɪ r
19.	dʒ	dʒ	dʒ	dʒ	ɛ ə r	e ə r	ɛ r	e r
20.	j	j	j	y	ɑ:r	ɑ:r	ɑ r	ɑ r
21.					ɔ:r	ɔ:r	ɔ r	o r
22.	k	k	k	k	u ə r	ʊ ə r	ʊ r	ʊ r
23.	g	g	g	g	a i ə r	a i ə r	a i r	a i r
24.	ŋ	ŋ	ŋ	ŋ	ɔ i ə r	ɔ i ə r	ɔ i r	o i r
25.	h	h	h	h	a u ə r	a u ə r	a u r	a u r
					o u ə r	ə u ə r	o u r	o u r

¹ All data in Appendices I-III (Jones-Japan) are from Iwasaki (1956).

² All data in Appendices I-III (Longman-Br.E.) are from McArthur (1981).

³ All data in Appendices I and II (IPA-Am.E.) are from Kenyon (1963).

⁴ The signs in Appendices I and II (NEW-Am.E.) are adapted from Kenyon (1963). Also, note the simplified signs, which have been shown to facilitate, rather than hinder, mastery of the sounds of English in my classes.

APPENDIX II

THE DISTRIBUTION OF ENGLISH SOUNDS

	CONSONANTS & SEMI-VOWELS				VOWELS & DIPHTHONGS			
	Jones (Japan)	Longman (Br. E.)	IPA (Am. E.)	NEW (Am. E.)	Jones (Japan)	Longman (Br. E.)	IPA (Am. E.)	NEW (Am. E.)
1.	p	p	p	p	i:	i	i	i
2.	b	b	b	b	i	ə	ɪ	ɪ
3.	f	f	f	f	e	æ	e	e
4.	v	v	v	v	æ	ɑ:	æ	æ
5.	w hw	w	w ʍ	w	ɑ:	ɔ	ɑ	ɑ
6.	m	m	m	m	ɔ:	ɔ:	ɔ	ɔ
7.	t	t	t	t	ʌ	ə	ʌ	ʌ
8.	d	d	d	d	o	əʊ	o	o
9.	θ	θ	θ	θ	u	ʊ	ʊ	ʊ
10.	ð	ð	ð	ð	u:	u:	u	u
11.	l	l	l	l	ə:r	ɜ:r	ə	r
12.	n	n	n	n	ɜ:r	ər	ər	r
13.	s	s	s	s	e i	e ɪ	e	e i
14.	z	z	z	z	a i	a ɪ	a ɪ	a i
15.	ʃ	ʃ	ʃ	ʃ	ɔ i	ɔ ɪ	ɔ ɪ	o i
16.	ʒ	ʒ	ʒ	ʒ	a u	a ʊ	a ʊ	a u
17.	r	r	r	r	o u	əʊ	o	o u
18.	tʃ	tʃ	tʃ	tʃ	i ə r	ɪ ə r	ɪ r	ɪ r
19.	dʒ	dʒ	dʒ	dʒ	ɛ ə r	e ə r	ɛ r	e r
20.	j	j	j	y	ɑ : r	ɑ : r	ɑ r	ɑ r
21.					ɔ:r uər	ɔ:r uər	ɔ r	o r
22.	k	k	k	k	u ə r	ʊ ə r	ʊ r	ʊ r
23.	g	g	g	g	a i ə r	a ɪ ə r	a ɪ r	a ɪ r
24.	ŋ	ŋ	ŋ	ŋ	ɔ i ə r	ɔ ɪ ə r	ɔ ɪ r	o ɪ r
25.	h	h	h	h	a u ə r	a ʊ ə r	a ʊ r	a ʊ r
					o u ə r	əʊ ə r	o ʊ r	o ʊ r

APPENDIX III

THE DISTRIBUTION OF ENGLISH SOUNDS IN WORDS

SIMILAR British & American Sounds					DISSIMILAR British & American Sounds				
E X.	Jones (Japan)	Longman (Br. E.)	IPA ⁵ (Am. E.)	NEW ⁶ (Am. E.)	E X.	Jones (Japan)	Longman (Br. E.)	IPA ⁵ (Am. E.)	NEW ⁶ (Am. E.)
1. eat event	i : t i 'vɛnt	i : t i 'vent	i t i 'vent	i t i 'vent					
2. it	i t	r t	r t	r t	open	óupən	'əʊpən	'opən	'oupɪn
3. end	ɛnd	ɛnd	ɛnd	ɛnd	catch	kætʃ	kætʃ	kɛtʃ	kɛtʃ
4. add	æd	æd	æd	æd	ask	ɑ : sk	ɑ : sk	æsk	æsk
5. alms	ɑ : mɜ	ɑ : mɜ	ɑ mɜ	ɑ mɜ	on	ɔ n	ɔ n	ɑ n	ɑ n
					water	wɔ : tər	'wɔ : tər ⁷	'wɔ tə	'wɔ tɪ
6. aught	ɔ : t	ɔ : t	ɔ t	ɔ t					
7. up	ʌ p	ʌ p	ʌ p	ʌ p	upon	ə pɔ n	ə 'pɔ n	ə 'pɔ n	ʌ 'pɔ n
8.					obey	o beɪ	ə u 'beɪ	o 'beɪ	o 'beɪ
9. umlaut	úmlaut	'umlaut	'umlaut	'umlaut					
10. ooze	u : z	u : z	u z	u z					
11. her utter	hə : r ʌ tər	hə : r ⁷ 'ʌ tər ⁷	hə 'ʌ tər	hɪ 'ʌ tɪ	hers utters	hə : rz ʌ tərɜ	hə : z 'ʌ tɜz	hə z 'ʌ tɜz	hɪ z 'ʌ tɪz
12. aid	e id	e id	ed	e id					
13. ice	a is	a is	a is	a is					
14. oil	ɔ il	ɔ il	ɔ il	o il					
15. out	a ut	a ut	a ut	a ut					
16.					owe	o u	ə u	o	o u
17. ear	i ər	i ə ⁷	i r	i r					
18. air	ɛ ər	ɛ ə ⁷	ɛ r	ɛ r					
19. are	ɑ : r	ɑ : r ⁷	ɑ r	ɑ r					
20. or	ɔ : r	ɔ : r ⁷	ɔ r	o r	your	jɔ : r	jɔ : r ⁷	jɜ r	yɜ r
21. tour	tu ər	tu ə ⁷	tu r	tu r	poor	pu ər	pu ə ⁷	pɔ r	pɔ r
22. ire	á i ər	'a i ə ⁷	'a i r	'a i r					
23. oyer	ó i ər	'ɔ i ə ⁷	'ɔ i r	'o i r					
24. our	á u ər	'a u ə ⁷	'a u r	'a u r					
25.					ower	ó u ər	'ə u ə ⁷	'o u r	'o u r

⁵ All data are from Kenyon-Knott (1953).⁶ All data were obtained by conversion of pronunciations found in *Webster's New World Dictionary* (1984) into my own system.⁷ The "strong" pronunciation of final [r], used before a word beginning with a vowel.

APPENDIX IV THE SOUNDS OF ENGLISH IN KATAKANA

CONSONANTS & SEMI-VOWELS					VOWELS & DIPHTHONGS				
	E X.	Concise ⁸	Saito ⁹	New ¹⁰		E X.	Concise ⁸	Saito ⁹	New ¹⁰
1.	punk	パンク	パンク	ぼんッ	e(ven)	イー	イー	イー	イ
2.	bun	バン	バン	ぼん	i(t) i(d)	イッ	イ	イッ	イ
3.	fan	ファン	ファン	フヤン	e(nd)	エ	エ	エ	え
4.	van	バン	ヴン	フヤン	a(t) a(n)	アッ	ア	アッ	ア
5.	one	ワン	ワン	ワオン	(p)a(lm)	アー	アー	アー	あ
6.	man	マン	マン	メヤン	a(ll)	オー	オー	オー	ア
7.	town	タウン	タウン	たうン	u(p) u(n)	アッ	ア	アッ	ア
8.	down	ダウン	ダウン	だうン	o(paque)	オ	オ	オ	オ
9.	thin	シン	ツイン	ツイン	um(laut)	ウ	ウー	ウー	う
10.	the	ザ	テア	テオ	oo(long)	ウー	ウー	ウー	ウ
11.	line	ライン	ライン	ルあいン	ear(th)	アー	ア〜	ア〜	ル
	will	ウイル	ウィル	ワイル	(mak)er	アー	ア〜	ア〜	る
	bottle	ボトル	ボットル	ばとル	eigh(t)	エイ	エーイ	エーイ	エイ
12.	nine	ナイン	ナイン	ないン	i(ce)	アイ	アイ	アイ	あい
13.	scene	シーン	スィーン	スィン	oi(l)	オイ	オイ	オイ	アイ
14.	zone	ゾーン	ゾーウン	ゾーウン	ou(t)	アウ	アウ	アウ	あう
15.	shine	シャイン	シャイン	シあいン	o(pen)	オー	オーウ	オーウ	おう
16.	Jean(Fr)	ジャン	ジャン	ジあん	ear	イヤ	イーヤ	イーヤ	いる
17.	run	ラン	ラン	ルオン	air	エア	エーヤ	エーヤ	える
18.	chain	チェーン	チェイン	チェイン	ar(m)	アー	アール	アール	ある
19.	June	ジューン	ヂューン	ヂュン	o(a)r	オール	オー	オー	オる
20.	yeast	イースト	ユースト	ユースト	(t)our	ウアー	ウーア	ウーア	うる
21.					ir(on)	アイア	アイア〜	アイア〜	あいる
22.	can	カン	カン	ケヤン	(S)awyer	オーヤー	オーヤー〜	オーヤー〜	オいる
23.	gun	ガン	ガン	ゴン	hour	アワー	アワ〜	アワ〜	あうる
24.	young	ヤング	ヤング	ユオン	(l)ower	オアー	オーウア〜	オーウア〜	オうる
25.	horn	ホーン	ホーレン	ホレン					
26.	stone	ストーン	ストーウン	ストーウン	on	オン	オン	オン	あん
27.	guest	ゲスト	ゲスト	ゲスト	on	オン	オン	オン	をン ¹¹
28.	dress	ドレス	ドレッシ	ドルエ	own	オーン	オーウン	オーウン	オウン
29.	fly	フライ	フライ	フルあい	own	オーン	オーウン	オーウン	えうン ¹¹

⁸ All (Concise) data are from *Konsaisu Gairaigo Jiten* (1987).

⁹ All (Saito) data are from Saito (1920).

¹⁰ The (New) transcription system reflects my own system. Katakana signs denote tense vowels, and Hiragana signs lax vowels and diphthongs.

¹¹ “を” = The British “short o”, and “えう” = British English vowel #16.

REFERENCES

- Bloch, Bernard. 1950. Studies in colloquial Japanese: phonemics. *Language* 26. 86-125. [Reprinted in Miller 1969: 113-65.]
- Guralnik, David B. 1984 (ed.) *Webster's new world dictionary of the American language*. New York: Simon and Schuster, Inc.
- Iwasaki Minpei 岩崎民平. 1956 (ed.) *Shin kan'yaku eiwa jiten 新簡約英和辞典* [New concise English-Japanese dictionary]. Tokyo: Kenkyusya Co., Ltd.
- Jinushi, Toshiko S. 1967. The structure of Japanese. *Studies in linguistics: occasional papers* 11. Dallas, Texas: Southern Methodist University Press, 26-59.
- Jones, Daniel. 1969. (Everyman's) *English pronouncing dictionary*. London: J.M. Dent & Sons Ltd.
- Kenyon, John S., and Thomas A. Knott. 1953. *A pronouncing dictionary of American English*. Springfield, Mass: Merriam-Webster, Inc.
- Kenyon, John S. 1963. The representation of speech sounds. In Sanderson & Gordon 1963: 166-75.
- Kimoto Yukio 木本幸雄, et al. 1987 (eds.) *Konsaisugairaigo jiten コンサイス外来語辞典* [Concise dictionary of foreign terms]. Tokyo: Sanseido Co., Ltd.
- Lewis, J. Windsor. 1979. *A concise pronouncing dictionary of British and American English*. Oxford: Oxford University Press, xvi-xviii.
- Liu Shih-hong 劉世宏. 1969. *Hantzu 漢字* [Chinese characters]. Taipei: Eurasia Book Company, 76.
- McArthur, Tom. 1981. *Longman lexicon of contemporary English*. Singapore: Longman Singapore Publishers Pte. Ltd.
- McHenry, Robert. 1983 (ed.) *Webster's new biographical dictionary*. Springfield, Mass: Merriam-Webster, Inc.
- Miller, Roy A. 1969 (ed.) *Bernard Block on Japanese*. New Haven & London: Yale University Press.
- Principles of the International Phonetic Association. 1969. London: International Phonetic Association, 1-21. [Reprint of the 1949 edition].
- Saitō Akio 齊藤晃雄. 1985 (ed.) *Rokka kokugo kaiwa 六カ国語会話* [Conversation in six languages]. Tokyo: Japan Travel Bureau, Inc., Publishing Division.
- Saitō Hidesaburō 齋藤秀三郎. 1920. *Hon'i jiyukugo eiwa chūjiten 本位熟語英和中辭典* [Medium-size, English-Japanese dictionary of standard phrases]. Tokyo: Nichiei Co., Ltd.
- Sanderson, James L., and Walter K. Gordon. 1963 (eds.) *Exposition and the English language*. New York: The Ronald Press Company.
- Thomas, Charles K. 1958. *An introduction to the phonetics of American English*. New York: The Ronald Press Company, 163-67.
- . 1963. The classification of speech sounds. In Sanderson & Gordon 1963: 162-66.
- Yoshida Seiichi 吉田精一. 1973 (ed.) *Kokugo jitsuyō jiten 国語実用辞典* [Practical dictionary of the national language]. Tokyo: Obunsha Co., Ltd.