

it is nearly impossible to say whether they are voiced or voiceless. In other words, they practically coincide acoustically with the weak and obscure British one-tap trill, and so are confused with it. Some British dialect writers have very cleverly taken advantage of these phonetic phenomena and are found spelling the American use of the slang phrase "I gotta go", "I gorra go". To a British reader this represents the American pronunciation accurately, but it is vastly puzzling to the American reader, who, unless phonetically trained, will understand that the Englishman thinks the American says "I garə go".

This interlacing of British and American phonemes produces a whole set of anomalous homonyms. I set down a few:

Englishman says	American hears
<i>Perry</i>	<i>Peddie</i> or <i>petty</i>
<i>berry</i>	<i>Betty</i>
<i>carry</i>	<i>caddie</i> or <i>catty</i>
<i>Larry</i>	<i>laddie</i>
<i>Jerry</i>	<i>jetty</i>

Of course, the table above can be reversed. Indeed, I am of the opinion that the Englishman will misunderstand the American more often than vice versa.

American says	Englishman hears
<i>Peddie</i> or <i>petty</i>	<i>Perry</i>
<i>Betty</i>	<i>berry</i>
<i>caddie</i> or <i>catty</i>	<i>carry</i>
<i>laddie</i>	<i>Larry</i>
<i>jetty</i>	<i>Jerry</i>

IV. Pseudo-Phonetic Devices

I made mention a moment since of the American's puzzling at seeing his *gotta* (i.e. *got to*) interpreted as *gorra*. As a matter of fact, there is a general misunderstanding of many writers, since they cannot use a phonetic alphabet, and must rely, instead, on pseudo-phonetic spelling. British dialect writers are accustomed, for instance, to use the letter *r* as a lengthening symbol. Examples are the Cockney *off* ɔ:f represented as *orf*, 'alf ɔ:f as *arf*, *laugh* la:f as *larf*, etc. This is all well enough for the Southern British reader, and for the Eastern and Southern American. But the Scotchman, the Irishman and the general American, who pronounce all *r*'s, are woefully misled into thinking that Cockneys say ɔ:rf, arf, larf, arsk, etc. HILAIRE BELLOC, in his amiably satiric novel *But Soft, We Are Observed!* spells a word of his caricatured Lord Delisport *torkin*. I assume that here again a drawled *torkin* for *talking* is intended; but a good, round majority in the English-speaking world will think Lord Delisport said *tɔ:kən*. Incidentally, *h* as a lengthening sign is much more nearly universally understood than *r*. Mr BELLOC's *abaht* for *about* will hardly be misapprehended anywhere, whereas if he had spelled it *abart*, to match his *arsk* for *ask*, it would most certainly have been pronounced ɔbart by quite too many people.

V. Some Lists of Comparative Pronunciations

The following tabulation summarizes some of the points covered in this paper, and lists various others otherwise untouched herein.

	Standard General American	Standard Southern American	Standard Eastern American	British Received Standard
<i>pass</i>	pæs	pæs	pæs, pas, pas	pas
<i>dance</i>	dænts	dænts	dænts, dants, dants	dans
<i>can't</i>	kænt	kænt	kænt, kant, kant	kant
<i>man</i>	mæn	mæn	mæn	mæn, mæ+n
<i>water</i>	wətə	wətə, watə	wətə	wotə
<i>watch</i>	watʃ	watʃ	watʃ, wɔtʃ	wɔtʃ
<i>note</i>	nout	nout	noot	noot, nɔt
<i>cord</i>	kɔ:d	kɔəd	kɔ:d	kɔ:d
<i>court</i>	kɔ:rt	koət	koət, koət	kɔ:t, koət
<i>bove</i>	boʊ	boə	boə	bɔ:
<i>not</i>	nət	nət	nət, nɔt	nɔt
<i>was</i>	wəz	wəz	wəz, wɔz	wɔz
<i>news</i>	nju:z, nuz	nju:z	nju:z	nju:z
<i>assume</i>	əsum	əsum	əsum, əsjum	əsjum
<i>boxes</i>	baksəz	baksɪz	baksɪz, bɔksɪz	bɔksɪz
<i>Alice</i>	ælis	ælis	ælis	ælis
<i>careless</i>	kærləs, kɛrləs	kæəlis	kæəlis	kæəlis
<i>ability</i>	əbɪləti	əbɪlɪti	əbɪlɪti	əbɪlɪti
<i>lily</i>	lɪli	lɪli	lɪli	lɪli
<i>which</i>	wɪtʃ	wɪtʃ, wɪtʃ	wɪtʃ, wɪtʃ	wɪtʃ
<i>heard</i>	hɛ:d	hɜ:d	hɜ:d	hɜ:d
<i>murmur</i>	mɜ:mɜ	mɜ:mə	mɜ:mə	mɜ:mə
<i>card</i>	kɑ:d	kɑ:d	kɑ:d	kɑ:d
<i>very</i>	vɛri	vɛri	vɛri, vɛri	vɛri
<i>far away</i>	fɑ ɔweɪ	fɑ ɔweɪ, fɑ ɔweɪ	fɑ ɔweɪ, fɑ ɔweɪ	fɑ ɔweɪ
<i>more</i>	mɔə	mɔə	mɔə, mɔə	mɔ:, mɔə
<i>laboratory</i>	'læbɔrə, tuɔri	'læbɔrə, tuɔri	'læbrə, tuɔri, 'læbrɛtri	lɛ'buɔrɛtri, 'læbrɛtri
<i>dictionary</i>	'dɪkʃən, ɛri	'dɪkʃən, ɛri	'dɪkʃən, ɛri, 'dɪkʃənri	'dɪkʃənri
<i>thirteen</i>	θɜ:ti:n	θɜ:ti:n	θɜ:ti:n, θɜ:tin	θɜ:tin
<i>been</i>	bɪn	bɪn	bɪn	bɪn
<i>ate</i>	ɛt	ɛt	ɛt	ɛt
<i>either</i>	iðə	iðə	iðə, aɪðə	aɪðə
<i>Berkeley</i>	bɛ:kli	bɜ:kli	bɜ:kli	bɛ:kli
<i>much</i>	mʌtʃ	mʌtʃ	mʌtʃ	mʌtʃ
<i>fall</i>	fɔl	fɔl, fɔəl	fɔl	fɔ:l
<i>reptile</i>	rɛptl̩	rɛptl̩	rɛptl̩	rɛptail

64. Mrs JANE DORSEY ZIMMERMAN (New York): *Representative radio pronunciation in America.*

The radio and talking pictures have been in some measure responsible for the increased interest and attention that has been focused on the subject of American-English speech during the past few years, by making listeners conscious of variations in speech that had never before been brought to their attention.

Not only has the radio served in its general broadcasts as a laboratory for the observation of speech patterns, but it has offered programmes which have been devoted to that subject specifically. Under

such headings as "Your English", "Magic of Speech", and "Good American English", radio programme directors have scheduled talks and debates by specialists in speech, short dramatic sketches illustrating various American and some British-English dialects, and in addition to this have offered instruction over the air to those who wish to "improve" or to change their speech.

Many Americans, hearing pronunciations and expressions made by their own countrymen with which they are unfamiliar over the radio, or in the theatre or talking pictures, or in their travels, characterize them as incorrect or vulgar, or uneducated, and are as loud in their demands that something should be done about eliminating them, as are their British cousins who wish to keep their language free from Americanisms.

If these demands are in the form of letters to the newspapers, or to the broadcasting stations, or are presented in English and Speech classes, they very soon lead to the necessity of considering the problem of "standards" or *A Standard*. And then the fur begins to fly! Columns and columns in the newspapers are often given over to the criticisms and complaints and queries of lexicographers, teachers, dialect scholars and laymen who have something that they wish to say on the question of how American-English should be spoken. The purists are charged with trying to make the language static, artificial, and quite out of keeping with modern usage. Those who wish to preserve the dialects, and those who are willing to accept changes that seem to have become fairly well established in colloquial speech (and will probably prevail whether any one wishes them to or not) are accused of encouraging carelessness and vulgarity. In classes the discussions are no less violent and dogmatic. The debates may continue for days or even weeks, with no compromise or agreement ever arrived at, and with each contender holding fast to his original opinion or prejudice.

Scholars and teachers, dictionaries, language text-books, and other usage and pronunciation guides, are cited as authorities, often with the result of confusing the issue still further. In the first place, it is discovered that many of these authorities are not in agreement, and enquirers are at a loss to know whose opinion to accept. In the second place, it is found that definitions and pronunciations are recorded that are not current in the speech of the observers, or of those whom they are observing, and that definitions and pronunciations that are very commonly used are omitted.

The controversy is still further complicated by the fact that while many individuals are observing speech, are being exposed to variations in American-English, are being influenced either directly or indirectly by what they hear, and are trying to influence others, few of them have assembled their observations in a form suitable for study and discussion by other students who are interested in the subject. A notable exception is, of course, Dr JOHN KENYON, who has treated the subject of current usage in General American admirably in the *Guide to Pronunciation of Webster's New International Dictionary*, second edition, 1934. The editors, however, seem not to

have had complete faith in Dr KENYON's findings, and list too few of them in the body of the dictionary.

It was with the hope of becoming better informed about actual usage in American speech, and of collecting material on the subject that would be useful to students of the language, that the writer began a study of radio pronunciations several years ago in the Phonetics Laboratory of Dr CABELL GREET at Columbia University and has continued it in the speech laboratory at Teachers College during the past year and a half. During this period the speech of more than five hundred speakers was recorded on a phonographic recording machine which was equipped with apparatus for recording programmes as they were broadcast from the major radio stations.

For the part of the study to be reported here, the records of non-professional radio speakers were chosen. Non-professional radio speakers were designated as those who were influential enough in some field to be asked to broadcast, or having asked for time on the air, were granted it. They were in no sense professional announcers, or news commentators, or those engaged in weekly commercial broadcasts. Many of them had not previously talked over the radio, and those who had done so had spoken very infrequently.

The records of fifty such speakers were chosen. In most cases these were 10-inch double-faced aluminium records, on which was recorded about five minutes of speech, or from 400 to 600 words. The words having both strong and weak forms were not used in this study, so that the number of words for each speaker varied from three hundred to four hundred.

The speakers represented a variety of professions and occupations. President and Mrs ROOSEVELT were among them, as was ex-president HOOVER. There were several governors, an ex-governor or two, present and former cabinet members and Congressmen, several college and university presidents, college professors, a few politicians, several writers, a social worker, two newspaper publishers, a former ambassador, a banker, two lawyers, two philanthropists, a poet, and several business executives. There were ten women and forty men in the group studied. Their ages varied from thirty-five to seventy years. They had all had the equivalent of a secondary education, and all but a very few of them held one or more college degrees from accredited institutions.

Every section of the country was represented in the group, though there were more speakers from the Middle West and Middle Atlantic states included in the part of the study being reported. It is not the purpose of this paper to deal with the matter of regional differences in speech, although the writer believes that the best and most useful of these should be retained, but not as a matter of local pride of possession. The student who says, "Oh, I'm from the Middle West, and I pronounce my *r*'s", generally has a notion that the Middle West has a corner on that sound when it is post-vocalic, and that it is not heard in that position in any other section of the country. Such is not the case, of course, particularly in the matter of this retroflexive or retracted vowel which is indicated in the spelling by the letter *r*. It is heard in practically every state in the

union. Similarly with many other pronunciations that have been localized as characteristic of one section of the country only, but are heard quite commonly elsewhere.

The records were played on an electric phonograph and the words spoken were transcribed into narrow phonetic symbols. Most of the words used in the study were transcribed by at least one graduate student in the department of Speech at Teachers College who had studied phonetics. Several of the records were studied by groups of from five to ten or more students. There was general unanimity of opinion as to what was said by the speakers, as shown by a comparison of the transcriptions made by the writer and other observers. A few words were identified variously by different listeners, and there was some uncertainty, and occasionally a difference of judgment, in determining which of two symbols more nearly represented the sounds heard in some of the words.

For this study only those words were selected in which there was complete agreement between the writer and other listeners, both as to the identification of each word, and to the symbol to be used for the representation of the sound heard. Furthermore, a word was not included unless it was quite a common one, and unless it was used by ten or more of the speakers observed. The numbers given to indicate the times a word was pronounced refer to the pronunciations of different speakers. Repetition of a word by the same speaker was not recorded in this study.

A few of the many interesting and notable observations on the pronunciations of the speakers have been chosen for comment. They are illustrative of certain characteristics of speech which the writer believes are fairly general in American-English. Among the variations to be noted are these:

1. The vowel *a* in the words *after*, *asked*, *can't*, *class*, *half*, *last*, *pass* and *past* was pronounced 94 times. Both æ and *a* were used in all of the words, and *a* was heard in every word except *after*. Table I shows the frequency and percentage of occurrence of each sound. Other variations of these sounds, such as nasalization and glottalization, will be discussed later.

I. Pronunciation of words with the variants æ , *a*, *ɑ*

Word	Times pronounced	æ	<i>a</i>	<i>ɑ</i>
<i>after</i>	10	5	5	—
<i>asked</i>	10	4	5	1
<i>can't</i>	15	8	6	1
<i>class</i>	10	3	4	3
<i>half</i>	12	7	4	1
<i>last</i>	11	7	3	1
<i>pass</i>	14	9	4	1
<i>past</i>	12	7	3	2
Total Percentage	94	50 (53)	34 (36)	10 (11)

2. The diphthong represented in the spelling by *ou* and *ow* was heard in *about*, *council*, *house*, *how*, *now*, *our* and *out* 165 times. The following variants were used: æu , æũ ; *au*, ãũ ; *aə*, *aɜ*, *ɑ*; *au*, ãũ , *ɑə*, *ɑɜ*, *ɑ*. Of particular interest is the pronunciation of *our*, which occurs 5 times as *aə*, *aɜ*, and 10 times as *ɑə*, *ɑɜ* out of the total of 33 times the word was pronounced. Table II shows the frequency

II. Pronunciation of words with the variants æu , *au*, *ɑu*

Word	Times pronounced	æu , æũ	<i>au</i> , ãũ	<i>ɑu</i> , ãũ
<i>about</i>	26	2	11	13
<i>council</i>	12	2 æũ	6-2 <i>au</i> 4 ãũ	4-3 <i>ɑu</i> 1 ãũ
<i>house</i>	20	1	10	9
<i>how</i>	11	—	6	5
<i>now</i>	29	2 æũ	20-7 <i>au</i> 12 ãũ 1 <i>ɑ</i>	7-6 <i>ɑu</i> 1 ãũ
<i>our</i>	33	5	10-5 <i>au</i> 2 <i>aə</i> 3 <i>aɜ</i>	18-8 <i>ɑu</i> 4 <i>ɑə</i> 6 <i>ɑɜ</i>
<i>out</i>	34	3	18-16 <i>ɑu</i> 1 <i>aə</i> 1 <i>ɑ</i>	13-11 <i>ɑu</i> 2 <i>ɑ</i>
Total Percentage	165	15 (9)	81 (49)	69 (42)

III. Pronunciation of words with the variants *ɑɪ*, *ɑ*, *ɒ*, *ɔ*

Words	Times pronounced	<i>ɑɪ</i> , ã	<i>ɑ</i> , ã	<i>ɒ</i> , õ	<i>ɔ</i>
<i>congress</i>	10	1 ã	7-2 <i>ɑ</i> 5 ã	2-1 <i>ɒ</i> 1 õ	—
<i>conservation</i>	10	—	8	2	—
<i>democracy</i>	12	1	8	3	—
<i>dollar</i>	13	2	6	5	—
<i>economic</i>	16	2	8	6	—
<i>got</i>	15	3	8	4	—
<i>long</i>	13	—	—	3	10
<i>not</i>	34	5-2 <i>ɑɪ</i> 3 ã	19-12 <i>ɑ</i> 7 ã	10	—
<i>office</i>	12	—	5	4	3
<i>often</i>	10	—	3	5	2
<i>operate</i>	10	3	5	2	—
<i>opportunity</i>	12	2	6	4	—
<i>policy</i>	10	1	5	4	—
<i>politics</i>	10	2	5	3	—
<i>possible</i>	13	2	7	4	—
<i>probably</i>	12	1	7	4	—
<i>problem</i>	23	2	15	6	—
<i>responsibility</i>	11	1 ã	7-3 <i>ɑ</i> 4 ã	3	—
Total Percentage	246	28 (11)	129 (53)	74 (30)	15 (6)

and percentage of occurrence of this vowel. Nasalization of this diphthong will be discussed in Section 12.

3. There were seven variant pronunciations of *o* in the words *congress, conservation, democracy, dollar, economic, got, long, not, office, often, operate, opportunity, policy, politics, possible, probably, problem, responsibility*: aɪ, ā; a, ā; ɒ, ɔ̄; and ɔ. Table III shows the frequency and percentage of occurrence of the sounds. *Often* was pronounced by two different speakers with ɔ. The same speakers were the only ones to put a *t* in the word, and call it ɔftən.

4. Of the many words represented in the written form by *oar, or, ore, oor, our*, which were used by the speakers, only three were heard frequently enough to be listed here. These were *before, more* and *resources*. The most common pronunciation in these words, which were pronounced 63 times, and in fact in all of the words in this group, was oə. oə, ɔə and ɔ̄ə were also heard. Table IV indicates the frequency and percentage tabulations of these sounds. None of these words was recorded with the pronunciation ɔɪ.

IV. Pronunciation of words with the variants oə, ɔə, oɪ, ɔ̄ə

Word	Times pronounced	oə	oɪ	ɔə	ɔ̄ə
<i>before</i>	16	4	9	3	—
<i>more</i>	34	9	16	6	3
<i>resources</i>	13	4	5	2	2
Total Percentage	63	17 (27)	30 (48)	11 (18)	5 (8)

5. The words *attitude, duty, education, institution, new, New York, opportunity* and *students* show an interesting variation in the pronunciation of the vowel written *u, ew*, which occurred 112 times. It was pronounced u, ü and ju, jü, jʊ. Table V represents the frequency and percentage of occurrence of these sounds. The predominance of *u* over *ju* is noticeable generally in American-English, in spite of the attempts of the purists to establish *ju* as preferable.

V. Pronunciation of words with the variants u, ju

Word	Times pronounced	u, ü	ju, jü, jʊ
<i>attitude</i>	10	6	4
<i>duty</i>	12	7	5
<i>education</i>	19	13	6
<i>institution</i>	14	8	6
<i>new</i>	20	13-5 u 8 ü	7-5 ju 2 jü
<i>New York</i>	10	4	6
<i>opportunity</i>	12	8	4
<i>students</i>	15	10	5
Total Percentage	112	69 (62)	43 (38)

6. The vowels ɜ and ɜ̄, indicated in the written form by *ear, er, ir, or* and *ur*, were both heard in all of the following words: *certain, church, first, further, learn, word, work|er, world*. Table VI shows the frequency and percentage of occurrence of these sounds. The symbol ɜ represents a retroflexive or retracted middle vowel that is very common in the stressed syllables of these and similar words, as they are spoken by many speakers from every section of the country.

VI. Pronunciation of words with the variants ɜ, ɜ̄

Word	Times pronounced	ɜ	ɜ̄
<i>certain</i>	11	5	6
<i>church</i>	10	4	6
<i>first</i>	21	9	12
<i>further</i>	12	4	8
<i>learn</i>	10	3	7
<i>word</i>	15	5	10
<i>work er</i>	20	6	14
<i>world</i>	19	8	11
Total Percentage	118	44 (37)	74 (63)

7. The relative frequency of pronunciation of the retroflexive or retracted unstressed vowel ɜ̄ and the unstressed mid-vowel ə shows a striking resemblance to that of the vowels ɜ and ɜ̄ in stressed syllables. These unstressed vowels, having the written forms *ar, er* and *or*, were heard in the following words: *after, author, conservation, dollar, further, government, however, member, order, over, worker*. Table VII lists the words according to frequency and percentage of the total of each sound.

VII. Pronunciation of the unstressed vowel in words with ar, er, or

Words	Times pronounced	ə	ɜ̄
<i>after</i>	10	5	5
<i>author</i>	16	3	13
<i>conservation</i>	10	2	8
<i>dollar</i>	13	4	9
<i>further</i>	12	4	8
<i>government</i>	21	12	9
<i>however</i>	13	4	9
<i>member</i>	10	3	7
<i>order</i>	12	5	7
<i>over</i>	10	5	5
<i>worker</i>	10	4	6
Total Percentage	137	51 (37)	86 (63)

8. Other vowels in unstressed syllables were classified according to their position in the word as initial, medial, or final.

(a) The words with initial unstressed vowels which were heard frequently enough to be recorded were *because, before, believe, develop, enough, resources, responsibility* and *security*. The words were pro-

VIII. *Other vowels in unstressed syllables, initial, medial, final*

Word	Times pronounced	i	ɪ, ɪ̃		ə
1. Initial					
<i>because</i>	17	4	6		7
<i>before</i>	16	2	5		9
<i>believe</i>	17	1	1		15
<i>develop</i>	11	—	6		5
<i>enough</i>	11	—	5		6
<i>resources</i>	13	3	4		6
<i>responsibility</i>	11	1	4		6
<i>security</i>	12	—	5		7
Total	108	11	36		61
Percentage	—	(10)	(33)		(57)
		Medial vowel omitted	ɪ, ɪ̃		ə
2. Medial					
<i>America</i>	13	—	4		9
<i>community</i>	10	—	2		8
<i>definitely</i>	13	3	3		7
<i>family</i>	18	7	4		7
<i>individual</i>	12	—	1		11
<i>institution</i>	14	—	4		10
<i>policy</i>	10	—	2		8
<i>political</i>	16	—	5		11
<i>principle</i>	10	2	3		5
<i>responsibility</i>	11	—	1		10
<i>security</i>	12	—	3		9
<i>university</i>	16	4	4		8
Total	155	16	36		103
Percentage	—	(10)	(23)		(67)
			ɪ, ɪ̃	ɛ	ə
3. Final					
<i>business</i>	13	—	6	—	7
<i>congress</i>	10	—	1	1	8
<i>office</i>	12	—	4	—	8
<i>possible</i>	13	—	4	—	9
<i>service</i>	26	—	8	—	18
<i>united</i>	10	—	4	—	6
Total	84	—	27	1	56
Percentage	—	—	(32)	(1)	(67)

nounced 108 times, with the variants *i, ɪ, ɪ̃* and *ə*. Table VIII shows the words recorded with frequencies and percentages of occurrence noted.

(b) The words with medial unstressed vowels showed the same predominance in favour of the neutral vowel *ə* as did those with initial unstressed syllables. The words used were *America, community, definitely, family, individual, institution, policy, political, principle, responsibility, security, university*, and they occurred 155 times. Table VIII indicates frequencies and percentages of occurrences of these unstressed medial vowels.

(c) The final unstressed syllable in the words *business, congress, office, possible, service* and *united* showed a further preponderance of *ə* over *ɪ* in the vowel sound. There was one example of *ɛ*, in the word *congress*. Table VIII gives the data on this vowel in the final unstressed syllable.

9. As is indicated in Table VIII the medial vowel in unstressed syllables was frequently omitted. Such was the case in the words *definitely, different, family, history, interest, natural, probably, university*. Table IX indicates the number of occurrences of the words pronounced without the medial vowel, with frequency and percentage of vowels omitted indicated.

IX. *Omission of unstressed medial vowels*

Word	Times pronounced	Vowel omitted
<i>definitely</i>	13	3
<i>different</i>	14	7
<i>family</i>	18	7
<i>history</i>	13	10
<i>interest</i>	15	8
<i>natural</i>	14	5
<i>probably</i>	12	4
<i>university</i>	16	4
Total	115	48
Percentage	—	(42)

10. A marked tendency toward centralization of both the "front" and "back" vowels in stressed syllables has been noted recently in American-English. This tendency was illustrated in the speech of the speakers studied in the stressed syllables (and generally in the unstressed, too, unless they are already pronounced with the neutral vowel *ə*) in the following words: *America, bill, books, bring, built, city, different, during, food, give, hope, institution, introduce, know, least, little, means, new, only, school, teaching, three, weeks, well, will*. Table X records the data on this trend in vowel pronunciation. It is quite likely that this centralizing tendency is accompanied by relaxation and lowering of the active part of the tongue. The acoustic results seem to indicate that this is so, but it has not been practicable to consider the matter in this study.

X. *Centralized vowels in stressed syllables*

Word	Times pronounced	Times centralized
<i>America</i>	13	6
<i>bill</i>	11	5
<i>books</i>	11	4
<i>bring</i>	14	6
<i>built</i>	10	5
<i>city</i>	10	5
<i>different</i>	14	8
<i>during</i>	10	5
<i>food</i>	11	6
<i>give</i>	10	6
<i>hope</i>	10	5
<i>institution</i>	14	6
<i>introduce</i>	10	5
<i>know</i>	10	5
<i>least</i>	10	5
<i>little</i>	15	8
<i>means</i>	13	6
<i>new</i>	20	10
<i>only</i>	19	10
<i>school</i>	10	6
<i>teaching</i>	11	5
<i>three</i>	12	7
<i>weeks</i>	14	8
<i>well</i>	15	8
<i>will</i>	10	7
Total Percentage	307 —	157 (51)

XI. *Insertion of a glottal stop before vowels*

Word	Times pronounced	Glottal stop inserted
<i>after</i>	10	6
<i>asked</i>	10	9
<i>attitude</i>	10	8
<i>economic</i>	16	7
<i>education</i>	19	12
<i>even</i>	19	11
<i>every</i>	23	10
<i>interest</i>	15	12
<i>office</i>	12	8
<i>often</i>	10	8
<i>operate</i>	10	7
<i>opportunity</i>	12	10
<i>our</i>	33	20
<i>out</i>	34	23
Total Percentage	233 —	151 (65)

XII. *Pronunciation of words with nasal consonants*

Word	Times pronounced	Vowel nasalized, nasal consonant pronounced	Vowel nasalized, nasal consonant omitted
<i>attention</i>	10	4	2
<i>congress</i>	10	4	3
<i>council</i>	12	4	3
<i>down</i>	11	5	—
<i>interest</i>	15	5	2
<i>kind</i>	11	4	1
<i>man</i>	12	5	1
<i>many</i>	23	7	—
<i>men</i>	19	6	3
<i>mind</i>	12	6	1
<i>not</i>	34	10	—
<i>now</i>	29	14	—
<i>principle</i>	10	3	2
<i>programme</i>	20	8	—
<i>responsibility</i>	11	3	2
<i>science</i>	10	3	3
<i>thing</i>	10	4	1
<i>think</i>	12	4	3
<i>time</i>	18	5	2
Total Percentage	289 —	104 (35)	29 (10)

XIII. *Omission of final consonants*

Word	Times pronounced	Final consonant omitted
<i>almost</i>	10	4
<i>around</i>	11	4
<i>asked</i>	10	4
<i>can't</i>	15	4
<i>depend</i>	10	4
<i>fact</i>	11	6
<i>find</i>	11	5
<i>five</i>	10	5
<i>government</i>	21	10
<i>hand</i>	12	5
<i>interest</i>	15	7
<i>kind</i>	11	4
<i>most</i>	23	14
<i>school</i>	10	4
<i>subject</i>	12	9
<i>well</i>	15	9
Total Percentage	207 —	98 (45)

11. The consonant ʔ, called the glottal stop, was heard very frequently before initial stressed vowels in the speech recorded. The following words, which were listed 233 times, were illustrative of the repeated occurrence of the sound throughout the records of many of the speakers: *after, asked, attitude, economic, education, even, every, interest, office, often, operate, opportunity, our, out*. Table XI presents the data on this consonant.

12. The nasalization of vowels was referred to in Sections 2 and 3, where the presence of nasalized vowels was noted in the pronunciation of numerous speakers. Those words have been listed with others to make a total of 289 pronunciations of words with various vowels which are followed by nasal consonants. The words listed are *attention, congress, council, down, interest, kind, man, many, men, mind, not, now, principle, programme, responsibility, science, thing, think, time*. Table XII records the words with frequencies and variations in pronunciation indicated.

13. The omission of other final consonants than the nasals, particularly *t, d, v* and *l*, was recorded for 45 per cent. of the words listed under this heading, or in 98 pronunciations out of 207. The words studied were *almost, around, asked, can't, depend, fact, find, five, government, hand, interest, kind, most, school, subject, well*. The data are recorded in Table XIII.

65. Dr H. E. PALMER (Tokyo): *Some notes on the place of phonetics in Japan.*

In connexion with the teaching of phonetics in Japan, there are notably two points which will be of interest to those taking part in this Congress. The first is that Japan is seemingly the only country in which phonetic theory and notation is looked upon as a normal part of the study of English (and other languages); and the second, that the Japanese are among those whose pronunciation of foreign languages is the least influenced by traditional orthography.

Dealing with the first point:

It is true that phonetic theory and notation is not specifically prescribed in the Department of Education regulations, but inasmuch as the examining bodies to whom the Department delegates its authority have for many years past included a phonetics test, no Japanese teacher can qualify for a teaching licence who is unable to satisfy his examiners in this regard. This in itself might not mean much if it were not coupled with the facts that phonetics is not an unpopular subject, and that there is practically no anti-phonetics feeling. I have had occasion to note that any lecture dwelling on the advantages of phonetics meets with little attention and is rather resented: the need for phonetics—theory, notation and practice—being taken for granted.

Although some twenty years ago the Webster diacritic system was in general vogue, to-day almost without exception the Japanese-English dictionaries include phonetic transcriptions of every word. This is largely due to the existence of the JONES *Dictionary*, and to

the praiseworthy efforts notably of Dr S. ICHIKAWA and Prof. Y. OKAKURA, whose authority in matters phonetic is unquestioned. Much credit also is due to the wisdom and farsightedness of the leading publishing firms, their authors and advisers. When in 1901 Mr P. A. SMITH, a revered American teacher of English, introduced phonetic theory and transcription for the first time (so far as I can ascertain and remember) at what is now the Hiroshima University of Literature and Science, the subject was either unknown, or at best looked upon as a fad; to-day the subject is so respectable that none dare or wish to ignore it. If an English or American passenger on a Japanese liner is known to be a language teacher, the table, cabin or bar steward may ask him to explain certain English pronunciation phenomena in terms of phonetic notation. In common with other radio broadcasters I frequently receive similar requests from listeners. Indeed, according to my experience, a foreign teacher in Japan who is ignorant of phonetic theory and transcription risks being regarded as a back number.

In many countries there is a difficulty about the printing of phonetic notation; the printers have not the types, and the type-founders are unwilling to provide them. Not so in Japan. Practically every phonetic type is obtainable at a moment's notice. My book, *The Principles of Romanization*, was set up in the workshop of a fifth-rate printer by compositors who knew no English—and this book required a printer's fount that would almost exhaust the resources of a Teubner.

Now dealing with the second point:

When one is asked: "What are the purposes to be served by phonetic notation?" the answer seems to be: Three main purposes, viz.

(1) To indicate unequivocally in dictionaries, and similar works of reference, what are the sounds contained in a given word. In other terms, to provide in a simple manner what used to be provided by complicated systems of diacritical marks or, worse, "imitated pronunciations" (of the type *zher swee* for French *je suis*).

(2) To serve as an instrument in the hands of a teacher who wishes to give systematic exercises in hearing and articulation; an instrument more easy to handle than the device of "Sound No. 1 . . . , Sound No. 37 . . ."; an instrument by which he can show objectively and with immediate results, e.g., the difference between the English words *seat* and *sit* as compared with the French word *site*, or, e.g., the difference between the English words *bus* and *bath* as compared with the Japanese word *basu*.

(3) To react against the tendency to pronounce foreign spellings as if they were spellings of one's mother tongue. I don't believe that any Englishman would pronounce the French word *pain* as the English word *pain*, but I do know that the average Frenchman pronounces, e.g., *Southampton Row* in a way that sounds to us *Sootangtong Roff*.

Now, so far as Purpose 1 is concerned, the Japanese use phonetic notation on an extensive scale. They see the word *thoroughly* in