

INTERFERENCE. English has no velar fricative [g], so students substitute the English velar stop. The easiest way to teach this sound is to begin with the Spanish [k]. This is a stop. The fricative variant of this stop is the voiceless sound of the Spanish *jota*. The voiced variant of the *jota* is [g]. These steps can be drilled by series like *paca, paja, paga*. The substitution of the stop for the fricative does not create a strong accent and prolonged drills on the difference are not justified for the average class.

SPELLING. Either *g* or *gu* as described above. In most of Latin America and parts of Spain the *g* sound may be dropped before [wa]. Thus *agua* becomes [awa]. The student must learn to write *gu* not *w*.

A change in a word suffix requires a shift from *g* before *a* or *o* to *gu* before *e* or *i*: *paga, pagó > pague, pagué; largo > larguísimo*.

Affricate

There is only one Spanish phoneme, /ch/, which is a combination of a stop and a fricative.

/ch/: [č]; čh

[č]—Voiceless palatal affricate. The tongue tip touches the back of the upper front teeth (sometimes the lower front teeth) and the tongue blade pushes up against the front of the roof of the mouth, the palate. The sound starts as a stop, the passageway is opened more slowly than for regular stops and during this slow opening the escaping air produces friction: *chico, muchacho, chocolate, hachich, chueco*.

DISTRIBUTION. Except in extremely few recent loan words, word or syllable initial before a vowel or semiconsonant.

INTERFERENCE. The substitution of the English sound produces no accent.

SPELLING. Always *ch*.

Nasals

There are three Spanish phonemes which are made by blocking the air passageway so that the air comes out the nose. They are /m/, /n/, and /ɲ/.

/m/: [m], [ɱ]; m, n

[m]—Voiced bilabial nasal in all dialects. The lips are firmly closed, the vocal cords vibrate, and the air escapes through the nose: *mucho, cama, invento, impersonal, invierno, también, muy*.

DISTRIBUTION. Syllable initial before a vowel or semiconsonant and syllable final before /b/ or /p/.

INTERFERENCE. The substitution of English /m/ produces no observable accent. Spelling pronunciation causes difficulty with *n*.

SPELLING. *m* before vowels, semiconsonants, and *p*. *n* or *m* as syllable final before *v* or *b*: *invierno, también*. *n* never as syllable initial; *m* as word final only in words of foreign extraction.

[ɱ]—Voiced labiodental nasal in all dialects. The upper teeth close over the lower lip, the vocal cords vibrate, and the air escapes through the nose: *infante, conforme, ánfora*.

DISTRIBUTION. Only before /f/ which is also a labiodental. The [ɱ] allophone is created by anticipating the sound of *f*.

INTERFERENCE. English regularly has /n/ in cognate words and spelling pronunciation reinforces this projection. It is not sufficient to replace [n] by English bilabial [m]; the labiodental influence of the following /f/ is required to avoid an accent.

SPELLING. Always *n*.

/n/: [n], [ɲ], [ɲ], [ɲ]; n, m, pn

The phoneme /n/ has more allophones than any other Spanish phoneme. This great variation is created by the arbitrary convention of anticipating the point of articulation of the following consonant. Vowels and silence do not condition the pronunciation and it may be said, consequently, that the "basic" sound is a voiced alveolar nasal. This is the same as the sound of English *n* in *not*. The tongue tip touches the gum ridge, the vocal cords vibrate, and the air escapes through the nose. All the other allophones are conditioned by what follows and the variants may, as a result, be dental, alveolar, palatal, or velar. English has two of these variants, the alveolar and velar, and all interference comes from substituting the wrong variant. To achieve a perfect pronunciation requires a great deal of practice. However, the English projections are not offensive and failure to follow the various Spanish adjustments produces such a slight accent that it is frequently not observed by untrained natives. The teacher, of course, should always give a correct model, but for the average class there is not much to be gained from spending an excessive amount of drill time trying to get all the students to achieve a perfect pronunciation.

[ɲ]—Voiced dental nasal. The tip of the tongue touches the back of the upper front teeth: *dental, donde, pienso, un ciego, un zopilote, danza*.

DISTRIBUTION. Immediately before /t/, /d/, /s/, and /θ/.

SPELLING. Always *n*.

[n]—Voiced alveolar nasal. The tip of the tongue touches the gum ridge: *nada, no, nene, nido, nudo, honra, tan, un lobo, un rico, un yerno*.

DISTRIBUTION. Immediately before a vowel, /l/, /r/, /rr/, and, at word boundaries, /y/, and as word and utterance final.

SPELLING. *m* only as word final in a very few words of foreign ex-

traction; *pn* in archaic spelling, *pneumático > neumático*, and *n* elsewhere.

[ɲ]—Voiced palatal nasal. The tip of the tongue touches the hard palate: *concha, un cheque, ancho*.

DISTRIBUTION. Immediately before /ch/.

SPELLING. Always *n*.

[ŋ]—Voiced velar nasal. The back of the tongue arches up against the soft palate and closes the air passage through the mouth; *zanco, tango, un jinete, un hueso*. This same sound is heard as word final in lowland South America, the Caribbean, and in parts of Spain.

DISTRIBUTION. Immediately before /k/, /g/, /x/, and, at word boundaries, /w/.

SPELLING. *m* as word final in extremely few words, *n* elsewhere.

/ɲ/: [ny]; ñ

[ny]—Voiced prepalatal nasal plus a semiconsonant in all dialects. The first portion of the phoneme is made by forcing air out the nose. The blade of the tongue pushes firmly against the fore-part of the palate. The air comes out the nose. The tongue is then rapidly lowered and the air passage is opened enough to allow the air to come out the mouth and produce a semiconsonant. The Spaniard hears this combination sometimes as one, sometimes as two, sounds: *ñato, uñir, uño, año, señal, plañó*.

DISTRIBUTION. Word or syllable initial before vowels only. Rare as word initial.

INTERFERENCE. English has the component elements in the *ni* of *union* but treats them regularly as two sounds with the syllable division *un-ion*. This parallels what happens in preterite forms like *uñó, plañó, gruñó*, etc., where the *n* sound belongs to the stem and the [y] appears to be part of the ending. In *año*, however, the [ny] combination is not divided and both parts of the phoneme go with the second vowel. This is contrary to English practice and special drills are required to get the proper syllabication.

SPELLING. Always *ñ*.

Laterals

Spanish has two phonemes that are traditionally classified as laterals. They are /l/ and /ll/. The /l/ is heard in all dialects. The /ll/ appears to be gradually disappearing from the language. It is still heard in parts of upland South America, Paraguay, parts of central Spain, but only rarely in Madrid, where it is generally replaced by /y/. There is no practical advantage in teaching /ll/ since /y/ is a perfectly acceptable substitute in all major dialects.

/l/: [l]; l

[l]—Voiced alveolar lateral, [i]-colored, in all dialects. The tongue tip touches the gum ridge, the sides are lowered to let the air escape without friction, but the back is arched toward the position used in saying Spanish [i], hence the [i] coloring: *lado, sol, malo, hablar*.

DISTRIBUTION. The sound is essentially the same in all positions and all combinations. It is, however, slightly more dental before a following dental consonant: *alto, falta*.

INTERFERENCE. The American /l/ is one of the sounds which most quickly identifies the American speaking Spanish. The American substitute which is most unlike Spanish is the word final sound as in *final*. The [l] of *finally*, in middle American speech, is closer to Spanish because the tongue arches high toward the back in anticipation of the following [i]. The English /l/ is made with the tongue in the position used to produce schwa, the sound of the second *a* in *Dallas*. Students can quickly learn the Spanish position by starting to say [i] and then raising the tongue tip to the alveolar ridge. This gives the [i]-coloring which characterizes the Spanish /l/ in all positions.

SPELLING. Always *l*.

/ll/: [ly]; ll

[ly]—Voiced prepalatal lateral plus a semiconsonant in Castilian and in some parts of South America. For the first portion of the phoneme the blade of the tongue firmly touches the fore-palate and the sides are lowered to permit the air to escape without friction. The tongue is then rapidly lowered and the air passage is thus opened enough to produce a semiconsonant. The Spaniard hears this combination sometimes as one, sometimes as two, sounds: *llamar, hallo, lluvia, castellano, mulló, bulleron*.

DISTRIBUTION. Word or syllable initial before vowels only.

INTERFERENCE. The substitution of the sound of *y* in *yes* is acceptable in all major dialects. Some speakers of English have the component elements in *Castilian* and *million*. The English syllable division is *Castil-ian* and *mil-lion*. This agrees with the pattern of preterite forms like *mulló* and *bulleron* but not with *grillo* or *hallo* where both elements go with the second vowel.

SPELLING. Always *ll*.

Flaps

There are two Spanish phonemes which may be described as rapid flaps or taps. They are /r/ and /rr/. The /rr/ phoneme is also described as a trill, actually a very rapid series of short stops.

/r/: [r]; r

[r]—Voiced or voiceless alveolar flap in all dialects. This sound is essentially an extremely short stop. The tongue is held very tensely, then snapped up against the gum ridge. Voicing is common except in utterance final and after *t* where the sound is rapidly devoiced; *pero, ser, pronto, parte, mar, trigo*.

DISTRIBUTION. Only word internal or word final. Position in the word is the crucial factor. Phrase position internally does not affect /r/ the way it does other consonants, for example, /d/. The /r/ stands in meaningful contrast with /rr/ only between vowels. It may have [rr] as a free variant in two positions: word final [mar] ~ [marr] or syllable final before another consonant [parte] ~ [parrte]. This free variant is usually associated with a more emphatic articulation.

INTERFERENCE. The inability of Americans to produce a satisfactory [r] is generally considered the most obvious mark of the American speaking Spanish. American English has no precise equivalent of [r] and Spanish has no sound like American /r/. Other difficulties are created by the fact that Spanish has tongue position sequences unknown in English.

Most American students fail to hear [r] correctly and so have no notion of what to imitate. They can be helped by putting Spanish [r] in English words spoken with a strong Spanish accent: *very, pardon, partake, sorrow*, etc.

The closest American approximation is [d] when this sound follows a stressed syllable: *ladder, shudder, biddie*. The tongue position is the same but in making the Spanish [r] less of the tongue touches the roof of the mouth, the tongue is considerably more tense, and the contact is shorter. A fair imitation of *para* can be gotten by contracting *pod of to poda* and having the students say this rapidly. "Pot o' tea" is fairly close to *para tí*.

Special drills are needed for [r] in all combinations: (a) when the sound appears twice in the same word: *dorar, partir*; (b) between vowels: *pero, caro*; (c) especially before and after another consonant: *gordo, pronto*, and (d) as word final: *ir, ser*. The sound is slightly different in each of these positions, for example, after /t/ and /d/ the flap is somewhat more dental than alveolar. All non-English shifts in tongue position have to be practiced with special drills. For example, English has no sequence similar to [r] plus /t/ or /d/. Much practice is needed to learn to shift rapidly from the alveolar flap to the dental position. Final [r] is frequently replaced by the English final as in *far*. This produces a very strong accent.

Students sometimes confuse [r] and [d]. See under /d/.

SPELLING. Always *r*. The fact that [rr] may be a free variant of [r] and that *r* also regularly represents /rr/ requires special emphasis on

the distribution of the letter *r* and its normal relationship to [r]. The grapheme *r* consistently represents [r] only between vowels, that is the position where /r/ and /rr/ are regularly in meaningful contrast. As word initial *r* stands only for /rr/: [rriko], [rraro]. When *r* is word final or is followed by a consonant, it stands for either [r] or its free variant [rr]. This confusion produces considerable spelling pronunciation which needs to be counteracted by special drills.

/rr/: [rr]; rr, r

[rr]—Voiced or voiceless alveolar trill (multiple flap) or retroflexed alveolar fricative in some dialects. The voiced alveolar trill is more common and should be taught to foreigners. The tongue is tense as in producing /r/ but is held against the gum ridge for a series of flaps or taps, two to six in extreme cases of emphasis. The tip of the tongue appears to vibrate or flutter against the alveolar ridge: *perro, carro, rico, red, rojo, rubio*.

Spanish lexicographic traditions have created much confusion concerning /rr/. The Spanish Academy treats *rr* as a separate letter of the alphabet but has ignored the ancient tradition of writing *rr* as word initial. Most linguists, in conformity with this tradition, classify [rr] as a single phoneme. Nevertheless, the manner in which it affects a preceding /e/ suggests that *perro*, for example, should be syllabicated *per-ro*, not *pe-rrro*. This points to the possibility that /rr/ may be treated simply as double /r/. However valid this may be, the sound can best be taught by pretending that /rr/ is merely a multiplication of /r/ flaps.

DISTRIBUTION. Word initial, between vowels within a word, and a free variant of /r/ in other positions. The multiple flap produces length and, hence, may be used for emphasis where no contrast with /r/ is possible: word final or before another consonant.

INTERFERENCE. See /r/. The following procedure has frequently been helpful to the student who has great difficulty in making this sound. Have the student say *had* and hold the tongue tensely in the position for the final sound of *d*. This is the proper tongue position for [rr]. Now relax the tongue just enough so air can be forcefully blown out between the tongue and the alveolar ridge. A little experimentation with variations of tenseness will produce a proper degree at which the tongue will begin to flutter or flap. When the student can do this, the addition of voicing produces [rr].

SPELLING. *rr* between vowels; *r* as word initial. A special effort is necessary to clarify the conflict between *r* and *rr* as separate letters of the alphabet and *r* and *rr* as symbols for /rr/. Students should be trained to the notion that *r* plus position (word initial) is a special symbol for /rr/.

REVIEW

1. What is the total number of phonemes used in the four major dialects of Spanish?
2. Which dialect uses them all?
3. Why do the Latin-American dialects have only twenty-three phonemes?
4. Why is the notion of a phonemic system valid only for a given dialect?
5. What are the major differences between the dialects?
6. Can the alphabet be used to organize the phonemic system? Why?
7. What are the four major categories of phonemes?
8. What are the three features that characterize consonants?
9. Which are the stop phonemes?
10. What does *stop* mean?
11. What is the significance of allophonic distribution in teaching?
12. Which Spanish phonemes have an aspirated English equivalent?
13. Which English sounds are identical or virtually identical with their Spanish counterparts?
14. Which Spanish phonemes are fricatives?
15. Which phonemes must the student learn to spell from visual examples?
16. Why do students project [z] for Spanish [s]?
17. Which dialect determines how words are spelled?
18. Which allophones are affected by the sound immediately following?
19. What is the easiest way to teach the sound of *j*?
20. Which phonemes have stop and fricative allophones?
21. Do *b* and *v* stand for different sounds in educated speech?
22. Can *h* stand for a sound?
23. What interpretation of English [d] may a native make?
24. What is the relationship between [g] and [k]?
25. [g] is the voiced variant of what phoneme?
26. How is an affricate made?
27. Which phonemes are nasals?
28. What phonemes does *n* stand for?
29. What are the points of articulation for /n/?
30. What graphemes are not recognized as part of the standard alphabet?
31. What is meant by *lateral*?
32. Which are the lateral phonemes?
33. What does [i]-colored mean?
34. Which are the flap phonemes?
35. Which English projections produce the greatest accent?
36. What makes Spanish [r] so difficult for American speakers of English?
37. When does *r* stand for /rr/?
38. The letter *x* stands for which two phonemes?
39. What accounts for most student projections?

SEMICONSONANTS AND SEMIVOWELS

The difference between a consonant and a vowel, as already indicated, depends on the degree of constriction of the air passageway. This difference can readily be thought of as a range. At one pole are the stop consonants (the passageway is completely closed) and at the other pole are the vowels (the passageway is unobstructed). In between these poles are sounds which are made with various degrees of constriction, and it follows that there is a point where the pole contrasts become blurred. In other words, there are some sounds which are very much like but not identical with the vowels. These are the **semivowels**. There is too much constriction for a pure vowel but not enough to produce clearly audible friction. At about this same point on the range there are sounds very much like but not identical with the fricative consonants. There is too much constriction to classify them as vowels but not enough friction to make them clearly consonants. These are the **semiconsonants**.

These slight degrees of difference have been a major source of confusion to the native, the grammarian, the classroom teacher, and the student. The native, for example, fluctuates between making the semiconsonant more or less like the two contrasting poles. He may, for example, pronounce *yo* so that it sounds like the *ío* of *dió*. When this happens the sound represented by *y* is a semiconsonant. It is like the *y* of English *yes*. The same native, however, may also say *yo* in such a way that the *y* stands for a sound like *s* in *vision* or *measure*, or, if he is Argentine, like *j* in *Joe*. Both of these sounds have clearly audible friction and must, as a result, be classified as consonants. The

same word, in short, may be pronounced with a sound that approaches a vowel or is obviously a consonant.

The confusion which the native exhibits on the phonetic level is duplicated in his spelling. In its citation form the conjunction *y* is clearly a vowel; it is /i/. The letter *y*, consequently, may stand for a vowel, a semiconsonant, a semivowel, or a consonant, and *i* may stand for a vowel or a semiconsonant. The letter *u* exhibits a similar ambiguity. When the Spaniard says *muy* rapidly, it represents [w], but when he says *muy* emphatically it stands for [u], the vowel.

Most textbooks have traditionally ignored the native's confusion, and, in addition, have confused writing with speech and, as a result, have regularly stated that *i* and *u* are vowels. This has led to even more confusion, namely, to the invention of a set of linguistically impossible entities called "orthographic diphthongs and triphthongs."

It is obvious that no satisfactory teaching program can be developed without some resolution of the existing confusion. A more satisfactory understanding of the problem can be achieved by focusing attention on the structure of the Spanish syllable and on stress patterns.

In careful speech the nucleus of a syllable is a sound made without any obstruction of the air passageway, that is, a pure vowel. This sound carries the syllabic accent. A syllable, then, does not contain two pure vowels or have two syllabic accents. The significance of this statement can be made more apparent by comparing *maíz*, *país*, *baúl*, and *Raúl* with *maizal*, *paisano*, *baulito*, and *Raulito*. In the first set the sounds of *i* and *u* are syllable nuclei and vowels, and the words, consequently, are divided *ma-íz*, *pa-ís*, *ba-úl*, and *Ra-úl*. In the second set the sounds represented by *i* and *u* are not syllable nuclei. This is proven by the fact that the words are not divided *ma-i-zal*, *pa-i-sa-no*, etc. but *mai-zal*, *pai-sa-no*, *bau-li-to*, and *Rau-li-to*. These sounds, then, are not pure vowels. They must, by elimination, be either semivowels or semiconsonants. Precisely how they should be classified may be determined by the following observations.

It has already been shown that the first sound of *yo* may be a pure consonant, either [dʒo], like /j/ of *jury*, or [ʒo], like /s/ of *vision*. This phenomenon takes place under very restricted circumstances. A vowel-like sound is made into a consonant only when it is the initial element of a syllable. No Spaniard says *rió* as [rʒó] or *doy* as [dodʒ]. Two useful pedagogical conclusions may be drawn from these facts. First, the Spaniard feels that a vowel-like sound which precedes the syllable nucleus is more like a consonant than a vowel but when it follows the nucleus it is more like a vowel than a consonant. Moreover, he feels that such a sound is more like a consonant when it is also

syllable initial and he frequently demonstrates this by actually using a pure consonant. Thus [ya] becomes [ʒa] and [weso] becomes [gweso].

With these facts established it is possible to work out a teaching program which provides a practical resolution to the native's confusion and avoids the errors of the traditional grammarian. It should be observed, first, that the two vowels which are made with the most constricted air passageway are /i/ and /u/. To say [i] the tongue is arched high toward the front of the roof of the mouth; to say [u] the tongue is arched high toward the back of the roof of the mouth. If the speaker holds these positions and constricts the passageway drastically, the [i] becomes a palatal fricative consonant and the [u] becomes a velar fricative consonant. In between these two extremes lie the two semivowels and the two semiconsonants. Very slight additional constriction makes [i] and [u] into semivowels [y] and [w]; a little more constriction turns them into the semiconsonants [ɣ] and [w]. The student, consequently, must be taught to deal with three factors: (1) the point of articulation, (2) the amount of constriction of the passageway, and (3) the distribution of the various allophones.

For the average student there is no compelling need to have an active command of all the possible variants just mentioned. An accent acceptable in all dialect areas can be achieved by disregarding the purely consonantal allophones and by learning the difference between the semiconsonant and semivowel allophones of /y/ and /w/. This purely arbitrary resolution of a peculiarly knotty problem is reflected in the following description.

A second arbitrary decision has been made in order to deal more effectively with the blurred portion of the range between consonant and vowel. The full range, as already indicated, has consonants and vowels at its two poles. In between are sounds which are neither pure consonants nor pure vowels and which are strongly influenced by their environments. As a result, whenever a sound appears in an environment where it may have a very obvious consonantal variant, it is treated as a semiconsonant. When a similar sound appears in an environment where it does not have a consonantal variant, it is treated as a semivowel. Phonetically this means that the *hu* of *hueso* stands for a sound which can be more like a consonant than the *u* sound of *ruego* or *luego* or that the first sound of *yo* can be more like a consonant than the second sound of *dios*.

/y/: [ɣ], [y]; *y, ll, hi, i, o*

[ɣ]—Voiced palatal semiconsonant. The tongue is arched forward

in the mouth, lightly touches the hard palate with a U-shape which permits the air to escape with slight friction: *ya, llano, yerno, lleno, hierba, yo, llover, yunque, lluvia*.

DISTRIBUTION. Immediately before the vowels /a/, /e/, /o/, and /u/, either word or syllable initial.

INTERFERENCE. The substitution of the sound of *y* in *yes* or *yo-yo* is satisfactory. The major source of interference is spelling.

SPELLING. *hi, y, or ll*, but *ll* and *y* never before *i* plus another vowel, only *h* (*hierba*, etc.). The student must learn to spell what he sees, not what he hears. In Castilian the sound is represented by zero after *ll* and *ñ* in certain irregular verbs: *mulló, mulleron, mullera, uñó*, etc.

[y]—Voiced palatal semivowel. The tongue is arched high and forward so that the tip is near the gum ridge. The passageway is constricted just enough to produce extremely slight friction: *hay, rey, reina, paisano, soy, sois, muy, piano, pie, dios, ciudad, apreciáis, apreciáis*.

DISTRIBUTION. In all positions where the sound is not syllable initial, that is, before a vowel immediately after a consonant in the same syllable, after a vowel and before a consonant (either in the same or the following syllable), and as word final.

SPELLING. *i* when preceded or followed by a consonant; *i* or *y* as word final, but *y* in almost all words: *jai alai* but *hay, soy, doy, voy, muy, rey*, etc.

/w/: [w], [w]; *u, ü, hu, gu, w*

[w]—Voiced labiovelar semiconsonant, varying from fricative to stop. The back of the tongue is arched up toward the back of the roof of the mouth, the velum. The lips are either pushed forward as in a pout (the fricative variant) or pushed forward and lightly closed (the stop variant). In either case considerable friction is caused by the air rushing through the constricted passage between the tongue and velum: *huelga, hueso, Anahuac, huisache, guagua, agua, sandwich*.

DISTRIBUTION. Word or syllable initial before a vowel.

INTERFERENCE. English /w/ is less tense and the lips are not pushed forward so much, but the substitution of the English sound does not produce a very noticeable accent. The greatest interference comes from spelling pronunciation. The students substitute the English sounds of *u*.

SPELLING. Normally *hu* but *gu* in the dialects where *g* represents no sound (only in *güe* or *gua* sequences; [awa], etc.). *w* only in foreign words. Spelling is determined by what is seen, not what is heard.

[w]—Voiced labiovelar semivowel. The back of the tongue is arched up toward the velum but not quite as far as for [w] and some-

what farther than for [u]. The lips are in a pout and there is slight friction: *cuanto, Uruguay, bueno, agüero, buey, Güiraldes, cuota, causa, deuda, bou*.

DISTRIBUTION. In all positions where the sound is not syllable initial, that is, before a vowel immediately after a consonant in the same syllable, after a vowel and before a consonant, and as word final. [w] may be a free variant of [w] in words like *agua*.

INTERFERENCE. The substitution of English /w/ is acceptable. Spelling pronunciation is the major source of difficulty.

SPELLING. *ü* only after *g* before *i* or *e*; *u* elsewhere. A change in the word suffix requires a shift from *gu* before *a* or *o* to *gü* before *e*: *averigua, averiguó > averigüe, averigüe*.

The semivowels and semiconsonants are always part of a cluster whose nucleus is the vowel that carries the syllabic accent. It has been traditional textbook practice to approach the study of these clusters from the point of view of spelling and a manner of description in which vowels are said to be either weak or strong. This is unsatisfactory linguistically. The so-called degree of audibility of vowels is entirely irrelevant to their phonemic function. The [i] of *pino* is heard just as clearly as the [o]. The phonemic contrast between *puso* and *piso* is just as clear as the contrast between *puso* and *puse*. The strength of a vowel is not a phonetic feature which can be related to its phonemic function. The difference between /i/ and /u/ and /a/, /o/, /e/ lies entirely in the fact that a slight constriction of the air passageway converts [i] and [u] into semivowels, more constriction produces semiconsonants, and much constriction produces consonants.

Because "weak" and "strong" have no real relevance to speech these words have become essentially labels for letters, that is, the "weak vowels" are those letters which can stand for a vowel, a semivowel, or a semiconsonant (*i, y, and u*). The "strong vowels," in contrast, are those letters which stand only for vowels (*a, e, o*). This confusion of spelling (writing) with sound (speech) has led directly to two more unsatisfactory notions: first, that there are orthographic diphthongs and triphthongs and, second, that Spanish has fourteen diphthongs. This number is possible only when "vowel" stands for letters, not for sounds.

When "vowel" stands only for sounds (actual phonemes) made without obstructing the air passageway enough to cause friction, there are no vowel clusters which appear within the same syllable in meticulous speech. In other words, what has traditionally been called a diphthong or triphthong in Spanish is actually a cluster of sounds composed of a nuclear vowel combined with semivowels, semiconsonants, or, some-

times, consonants. When the cluster is composed of two sounds, any one of the five vowels may be the nucleus; when the cluster contains three sounds only /a/ and /e/ serve as nuclei. In either instance, the remaining elements of the cluster can only be /y/ and /u/.

There seems to be very little pedagogical advantage in maintaining the tradition of giving special attention to diphthongs and triphthongs. They are simply elements which make up syllables, and their differences depend upon the syllabic structure of words. They are easier to teach, consequently, when the entire problem is approached from the point of view of syllabic structure, word structure, and spelling conventions. The basic facts which the student must learn are the following:

1. The minimal syllable is a single vowel: /a, e, i, o, u/. These are written *a, e, y, o, u*, and *í*.
2. In meticulous speech two vowels do not appear in the same syllable: *le-en, le-í, tí-o*, etc.
3. A complex syllable (cluster) may begin with a consonant (*da, le, me, mi, do, tu*) or a semiconsonant (*ya, lle-no, llo-ver, llu-via*); it may end in a vowel (*da, le, mi, do, tu*), a consonant (*dan, den, mitin, don, atin*), or semivowel (*ay, ley, doy, muy*).
4. When a suffix is added to a word that ends in a semivowel, the semivowel becomes a semiconsonant, which, in turn, becomes the initial element of the following syllable: [ley] > [le-yes], [rey] > [re-yes].
5. The written accent over *ú* (*Raúl, baúl*) and *í* (*día, leí, maíz*) is a graphemic device to distinguish between semivowel and vowel. In *maíz* the *í* stands for the vowel, and the word is syllabicated *ma-íz*. In *maizal* the *i* stands for the semivowel, and the word is syllabicated *mai-zal*.
6. The syllable fracture point between two vowel nuclei is marked by only a consonant or a semiconsonant (*va-na, va-ya*). In other words, a semivowel does not appear as word or syllable initial.
7. When a word carries a written accent to show which syllable is stressed, this mark is placed over the syllable nucleus. Compare *dí-a* and *dí-a-lo-go*.

Great care needs to be exercised to prevent spelling interference and to overcome the students' traditional education. American students have been drilled to believe that the letters *a, e, i, o, u*, and, sometimes, *y* stand for vowels. This interferes with their learning to project [w], a consonant in their system, in order to say *hueso* [weso] and English [y] to say *lleno* [yeno]. When English [u] replaces Spanish /w/, the native interprets the result as an error in syllabication: [kwan-do] appears to be [ku-an-do].

Vowels

There are about ten factors which determine the differences between vowels, and there are so many minute variations that vowels cannot be described in writing in any practical way. The sounds have to be modeled and heard to grasp the differences. Nevertheless, some knowledge of certain gross features can help eliminate the common characteristics of the American accent.

The more important differences between the various vowels are determined by (1) the height of the arched portion of the tongue, (2) the position of the arch in the mouth cavity, (3) the shape of the lips, and (4) the tenseness of the tongue muscles. A rough description defines the height as high, mid, and low; the position as front or back; the lips as rounded or spread, and tenseness as tense or lax.

There are five major differences between Spanish and English vowels. (1) The tongue muscles are always more tense in Spanish, and (2) all the muscles (tongue and lips) hold the same position in Spanish throughout the production of the sound. More than half of the English vowels are made with some change in tongue and lip position. This produces a diphthong. This shift is especially common when the sound is word final, a sharp contrast with Spanish which regularly has simple vowels as word final. (3) The lips are more active in Spanish, that is, rounding is greater and the spread is wider. This change in shape may begin in anticipation of the vowel. (4) Spanish has fewer vowels (five) than English (six to ten), depending on the dialect, and students can project a larger number of wrong substitutes. (5) Spanish gives the same quality to both stressed and unstressed vowels while English tends very strongly to substitute a neutral (central vowel) sound for all vowels under weak stress.

There are, as a result of these differences, three major trouble spots which require serious attention: the strong tendency (1) to replace the simple Spanish vowel with a diphthong—the speech muscles change position and two sounds result; (2) to project all English variations through spelling pronunciation; and (3) to seriously interfere with communication by substituting the sound called schwa for all weak-stressed Spanish vowels. This last projection is so common and so little understood that it deserves special attention.

Spanish and English are fundamentally different in that Spanish regularly marks a difference between words and suffixes by a contrast between unstressed vowels while English does not. Thus the difference between *casa, caso, case*, and *casi* is marked by the phonemic contrasts of /a/, /o/, /e/, and /i/. English rarely does this and, as a

result, in contemporary speech it is common to make all unstressed vowels very much alike. Thus the stressed or citation form of *can* has a vowel sound that contrasts with [i] of *kin* or the [u] of *pun*. However, when *can* is unstressed, the [a] may be replaced by a sound very much like the [i] of *kin* or the [u] of *pun*. Thus in normal speech the vowel in the unstressed syllable of *pencil, cancel, pistol, total*, and *ethyl* sounds very much like the final vowel sound of *fruitful*. This neutral vowel is called "schwa" and is represented phonetically as [ə] or [ɪ].

The tendency to project the schwa onto unstressed Spanish vowels is so strong and so automatic (and so little understood) that a very large percentage of non-native teachers do so regularly. It is not uncommon to hear even experienced teachers using the schwa in their models. Those who can hear the difference, but do not model it, frequently downgrade the students for repeating their own errors.

All three of the problems mentioned above can be effectively attacked by drills designed to highlight the differences between the two languages. It is helpful to practice the pronunciation of identical cognates in both languages (*general, animal, chocolate, rodeo*, etc.), to drill minimal pairs based on weak-stressed vowels (*pasar, pisar, pesar; paquete, piquete; gustar, gastar*, etc.), and to practice pairs of Spanish and English words which sound much alike but are really different (*dé, day; me, may; sí, sea; lo, low*, etc.). Very effective correction can be achieved by having the student repeat his error as one part of a minimal pair drill. When he can hear and repeat the right and the wrong, it is very easy to stop the English projection.

In both Spanish and English the nucleus of a syllable is a vowel, but the surrounding consonants affect this nucleus in two quite different fashions. First, English vowels are longer before voiced than before voiceless consonants (compare *mat* and *mad*); a Spanish vowel has the same length (except for emphasis) in all sequences. Special drills are needed to prevent lengthening before voiced consonants. Second, English sometimes attaches a single consonant between two vowels to the first rather than the second vowel while Spanish always attaches it to the second. The English habit closes the first syllable and produces the wrong allophone of the vowel. It is easier to get the right sound by pointing out the syllabication error than by talking about the sound.

Spanish spelling traditions create special problems in the representation of all vowels. The arbitrary preservation of *h*, which rarely represents a sound in any standard dialect, means that any vowel which begins a syllable may be represented by either *a, e, i, o, u* or

ha, he, hi, ho, and *hu*. There is no solution to this problem; the spelling of all words having syllable initial vowel must be learned from sight. Cognates, fortunately, tend strongly to be spelled alike (*hamaca, herencia, prohibir, honor, inhumano*, etc.).

/i/: [i]; *i, y, hi, í*

[i]—High front spread. The tongue is arched high toward the front of the roof of the mouth and the corners of the mouth are pulled back: *pinto, hilo, y, misa, fila, mi, leí*.

DISTRIBUTION. Syllable initial, internal, or final.

INTERFERENCE. Students tend to substitute three English sounds: the [iy] of *sea*, the [i] of *hit*, or the schwa. The lips are usually not spread enough, the tongue arch is too low, and the tongue is not sufficiently tense. Spanish has no sound similar to /i/ in *hit, tin, in* or schwa. The closest English approximation is the diphthong in *see* or *me*.

/u/: [u]; *u, ú, hu*

[u]—High back rounded. The tongue is arched high toward the back of the roof of the mouth and the lips are extended sharply to make a small, round opening: *uno, humo, uso, tu, cumbre, baúl*.

DISTRIBUTION. Syllable initial, internal, or final.

INTERFERENCE. Students tend to substitute four English sounds: the [yu] of *Cuba* or *yule*, the [u] of *put*, the [uw] of *two*, or schwa. The lips are usually not rounded enough and the rounding begins too late. In Spanish the rounding starts with the preceding consonant and not, as in English, at the beginning of the vowel. The closest substitute is the diphthong of *dew*.

/e/: [e], [ɛ]; *e, he*

The phoneme /e/ has two allophones whose pattern of distribution is quite unstable. The sharpest contrasts are determined by whether the syllable containing /e/ ends in this vowel or a consonant. Both allophones, however, may be free variants of each other in either position not only in different dialects but not uncommonly in the speech of a single individual. Thus the word *mes* may sound much like either English *mess* or unglided *mace*. Different consonants, however, affect the preceding /e/ in different fashions and no generally satisfactory pedagogical description is possible. The teacher, under these conditions, may make one of three arbitrary decisions: (1) One may teach in imitation of single native speaker. (2) One may choose to teach either one or two allophones. If one elects to teach one allophone only, the choice of [e] will produce the least accent. (3) A much closer approach to a "perfect" accent can be achieved by teaching

two allophones which are distributed in the following arbitrary but consistent fashion.

[e]—Mid-high spread front. The tongue is arched forward in the mouth to a level somewhat above the mid-position but lower than the position of Spanish/i/. The lips are spread wider than in English. The sound is much like the first element of the diphthong in English *mate*: *mesa, he, peso, anhelo, feo, tarea, parte*.

DISTRIBUTION. Syllable final.

INTERFERENCE. Students attempt to substitute the full diphthong of *mate* or the [e] of *pet*. An appropriate sound can be learned by practicing the English name for the letter *a* without gliding into the diphthong.

[e]—Mid-front spread. The tongue is in nearly the same position for [e] but is lower in the mouth. The sound is much like /e/ in *met*: *ser, perro, sentir, papel, mesta*. The consonant /s/ affects the opening less than the others.

DISTRIBUTION. In all syllables whose final element is a consonant, most commonly /r, l, n, s/.

INTERFERENCE. Students may project the diphthong of *hot*. The substitution of the vowel of *met* produces no significant accent.

/a/: [a]; *a, ha*

[a]—Low central spread. The mouth is opened wide, the tongue lies flat, and the corners of the mouth are pulled slightly back: *para, alto, mamá, casa, a*.

DISTRIBUTION. All positions.

INTERFERENCE. Americans commonly substitute the vowel of *am* or *small*, and schwa. The projection of the vowel of *hot* or *par* produces no observable accent.

/o/: [o], [ɔ]; *o, ho*

A meticulous description of Spanish reveals the presence of two allophones of /o/ in open and closed syllables. There is, however, so much free variation that no pedagogical benefit can be derived from insisting on the distinction. The substitution of either the /o/ of *co-* in *co-operate* or the /o/ of *for* produces no significant accent: *con, formal, por, doctor, tropical*.

The sound is mid-back rounded. The tongue is arched toward the back of the roof of the mouth. It may be somewhat higher when /o/ is syllable final. The lips are pushed forward and rounded.

INTERFERENCE. Students regularly substitute the diphthong of *go*, which is like Spanish *bou*, the schwa very frequently in unstressed position, and, in reading, the [a] sound of *hot*.

REVIEW

1. What are the precise differences between a vowel, a semivowel, a semi-consonant, and a consonant?
2. How are the above confused by the native?
3. In what environments does the native frequently change a semiconsonant to a consonant?
4. What are the native's spelling problems?
5. Does an orthographic diphthong have anything to do with speech?
6. What always serves as the nucleus of a syllable?
7. How can the number of syllables in a word be discovered?
8. What is the distribution of semiconsonants? Semivowels?
9. Which two vowels are most like consonants? In what way?
10. In dealing with semivowels and semiconsonants, what three factors must the student work with?
11. Can you give a phonetic description of each vowel, semivowel, and semiconsonant?
12. How is [y] spelled?
13. What are the component parts of a phonetic diphthong?
14. Do "weak" and "strong" have any bearing on the phonemic function of vowels?
15. How many real diphthongs are there in Spanish?
16. The non-nuclear element of a diphthong or triphthong is always what?
17. What does the written accent over *í* and *ú* tell the reader?
18. What are the possible syllable structures?
19. What happens when a suffix is added to a word ending in a semivowel?
20. Can a semivowel be syllable initial?
21. Can you define *high, mid, low, front, back, rounded, spread, tense, lax*?
22. What are the five major differences between Spanish and English vowels?
23. What are the three major teaching problems associated with the vowels?
24. What is the sound called schwa?
25. In terms of the schwa, how are English and Spanish different?
26. What kind of minimal pair helps stop English projections?
27. How does environment affect English and Spanish vowels?
28. What are the common English projections for the various Spanish vowels?
29. Where will students more frequently substitute an English diphthong for a single Spanish vowel?

MARTÍNEZ Y MARTÍNEZ, AMPARO. CURSO DE PRONUNCIACIÓN DEL ESPAÑOL PARA ALUMNOS EXTRANJEROS. MONTERREY, N.L.: I.T.E.S.M., 1969, pp. 77-81.

SINERESIS:

Reducción dentro de la palabra, de vocales que normalmente no forman una sola sílaba.

1. Dos vocales iguales se pronuncia solamente una.

áa = albahaca

éé = acreedor

íi = nihilista

óo = cooperativa, alcohol

EXCEPCIONES: Las palabras de dos sílabas con vocal repetida, no se reducen. Ejemplo: leer, crear, etc., deben pronunciarse las dos vocales sin suprimir ninguna.

2. La vocal /e/ más /a/, /o/, cambia a /i/. La vocal /o/ más /a/, /e/ cambia a /u/. Repita después de su profesor produciendo la sinéresis.

1. ea = ia	2.	3. eo = io	4. oa = ua	5. oe = ue
arrear	blanquear	Leonel	boardilla	cohete
menear	Beatriz	teólogo	coartada	Coello
marear	aldeano	geografía	coágulo	coherente
planear	gorgear	geólogo	toalla	roedor
línea	torear	Cleopatra	soasar	coexistir

SINALEFA:

Reducción de vocales entre palabras en el habla rápida o común.

1. Dos vocales iguales, una al final y otra al principio de la siguiente palabra, se pronuncia solamente una. Repita después de su profesor produciendo la sinalefa.

(Las columnas comienzan en la página siguiente.)

1.

á a

Ana Alicia

esa amiga

casa antigua

vieja amistad

muchacha amable

2.

é e

este espejo

vende esmalto

tiene elegancia

espere enfrente

quiere estudiar

3.

í i

casi igual

mi infancia

si insiste

fui invitado

salí indignada

4.

ó o

no olvida

mucho odio

niño ocupado

Pedro Ortíz

caso horroroso

5.

ú u

su universo

espíritu ufano

tribu humilde

ímpetu unánime

tu universidad

2. La vocal /a/ al final de una palabra se omite generalmente ante otra vocal inicial de la siguiente palabra. Repita las frases después de su profesor produciendo la sinalefa.

1. é e

Rosa Elena

la escuela

tanta espera

fruta escasa

buena hermana

2. í i

Martha Idalia

niña inquieta

alma inmortal

tema interesante

chica inteligente

3. ó o

Clara Olmedo

nueva oficina

nuestra oferta

camisa holgada

persona honrada

(La columna #4 é u, continúa en la siguiente página)