

Report on a Work in Progress: Using Colors to Teach the English Sound System

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色彩を利用した英語音韻体系の指導

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Abstract

Traditionally the English sound system has been taught by imitation. However, is imitation an effective way to learn pronunciation? Often students can't remember sounds for very long. Furthermore, if a native speaker isn't present, students are forced to try to pronounce words using the symbols from dictionaries. An additional difficulty with English pronunciation is there is often little or no correlation between writing and pronunciation. One letter can be pronounced many ways, and one sound can be written many ways. This paper presents an alternative way of teaching pronunciation using colors to represent sounds while avoiding having the students imitate the teacher's pronunciation. By associating each sound with a color, students can learn pronunciation without worrying about the relationship between writing and pronunciation. They can develop their own criteria for producing correct sounds. Disassociating pronunciation from the writing system is an effective way to teach the English sound system.

Key Words: pronunciation, Silent Way, own criteria, imitation, colors

(Received September 6, 1995)

抄 録

伝統的に英語音声システムは模倣によって指導されてきた。しかし、模倣は発音を学ぶ上で効果的な方法であろうか。たいていの場合、学生は音声を長く記憶しておくことはできない。そのうえ、もしネイティブスピーカーがその場にいなければ、辞書の音声表記を頼りに発音を試みざるをえない。英語の発音のさらなるむずかしさは、英語のつづりと発音の相関関係がほとんど、あるいは全くないということである。ひとつの文字が多くの方法で発音されたり、ひとつの音が多くの書き方で表される。この論文は学習者に教師の発音の模倣をさせることを避けつつ、音声を表すために色彩を利用する別の発音の指導法について述べたものである。それぞれの音を色と結びつけることにより、学習者はつづりと発音の関係を気にすることなく発音を学ぶことができる。学習者は正しい音を発音するための自分自身の基準を培うことが可能となるのだ。発音をつづりから分離することは英語音韻体系を指導するために効果的な方法である。

キーワード：発音、サイレントウェイ、自己の基準、模倣、色彩

(1995年9月6日 受理)

Traditionally the English sound system has been taught by imitation. (Prator Jr., and Robinett, 1985) Students learn by imitating native English speakers' pronunciation to the best of their ability with varying degrees of success. But is imitation the most effective way to learn? Even while advocating imitation, Prator and Robinett admit that it sometimes does fail. They go on to say that people "cannot remember a mere sound clearly for very long..." and point out that "when no English speaking person is present to pronounce a word for you, your only recourse may be *to try* [italics mine] and reconstruct the sound of the word from the symbols in a dictionary." (Prator Jr., and Robinett, 1985, p. 2)

If imitation does fail, what can we do? How can we deal with the problems of short term memory or the lack of native English speakers? In this paper I will look at why the English sound system is difficult for some students and suggest an alternative way of teaching English pronunciation using colors.

The Problem with English

In many languages there is a one-to-one correlation between writing and pronunciation. For example, in Spanish there is only one way to write and pronounce each of the five vowels—"a e i o u." and the same is true for Japanese syllabary. Unfortunately, for learners of English, there is not a one-to-one correspondence. An anecdote by George Bernard Shaw further amplifies this problem. Shaw once suggested that the word "fish" be spelled *ghoti*. The *gh* could be like it sounds in the word "rough," the *o* as it sounds in "women," and the *ti* as it sounds in "nation." (Avery and Ehrlich, 1995) Shaw's suggestion illustrates one of the two primary problems: One sound can be written many ways. In Table One we see that the sound/ey/can be written 13 ways.

The other problem is that one letter can be pronounced many ways. In Table Two we see that the letter "a," can be pronounced 6 ways.

Table One—Writing of the Sound /ey/(Educational Solutions Inc., 1977)

| | | | |
|------------|------------|----------|---------------|
| a—late | ai—mail | ay—day | ey—they |
| ei—vein | eigh—eigh | ea—great | aigh—straight |
| et—ballet | ae—Israeli | au—gauge | e—suede |
| ee—fiancee | | | |

Table Two—Pronunciation of the letter "a" (from Avery and Ehrlich, 1995)

| | | |
|--------|-------|----------|
| a—cake | a—mat | a—father |
| a—call | a—any | a—sofa |

These two problems make mastering English pronunciation a challenge for students. An additional problem facing Japanese students of English is that English allows a wide range of syllable types (open, closed, with initial and final consonant clusters) whereas Japanese uses predominantly open syllables. See Table Three.

Because of the difficulty Japanese speakers have in producing closed syllables (CVC), they “may add an extra vowel to the end of a closed syllable to make the word conform to the Japanese pattern.” (Avery and Ehrlich, 1995, p. 54.) This leads to what can be referred to as katakana pronunciation: / keykiy / instead of /keyk/ (cake). For a thorough, comprehensive discussion of katakana pronunciation’s relationship to English pronunciation, see Richard Dean’s, *Katakana and American English: A User’s guide to pronunciation*, n.d.

Because of these problems students often come into a phonetic course with a lot of anxiety, and feeling they can’t improve. On the first day of classes I give

my students a questionnaire. Two of the questions ask what is the easiest and what is the most difficult thing about English pronunciation. While I get a variety of answers, the majority of students reply, “There is nothing easy about English pronunciation; it is all difficult.” In the next section I will describe how to use colors to teach the English sound system in a way that may help lower students’ anxiety.

Using Color to teach the English Sound System

I first became aware of using colors to teach pronunciation in 1990 when I attended a Silent Way workshop (Korean) at Teachers College. Since then I have taken Silent Way workshops in Hindi, Chinese, Japanese, and French. While it is beyond the scope of this paper to describe the Silent Way¹ in detail, it will be useful to describe the four stages of learning as seen by the Silent Way, and then apply the stages to learning a new sound.

The Silent Way sees learning occurring in four stages. Stage one is being confronted by the unknown; by realizing

Table Three—English–Japanese Comparison of Syllable Types
(Avery and Ehrlich, 1995)

| English | | Japanese | |
|---------|-----------------------|------------|----------------|
| see | C (onsonant) V (owel) | ha | CV |
| sit | CVC | naka | CV CV |
| spit | CCVC | wakarimasu | CV CV CV CV CV |
| spits | CCVCC | | |
| sprint | CCCVCC | | |

there is an unknown area to explore. Stage two is using trial and error to explore the unknown; the Silent Way refers to this as becoming aware. Awareness is a form of feedback used to modify the "trial part." Stage three is taking the time to practice. Stage four is when what has been learned becomes automatic; this is a sign that the learning process is over. (Young, n.d.) When we apply these four stages to the learning of a new sound we find that:

First of all learning a new sound requires that the student realize that there is in fact a new sound to learn. Once she has realized this, she can move to stage 2 as she tries to create the sound...

She is dealing with two independent but closely related systems, the mouth and the ear. Only one of these systems, the mouth, can be controlled voluntarily. All the muscles of the ear are involuntary muscles. The student can only modify the voluntary system. With her mouth she produces a sound which she guesses might be as close as possible to the sound she is aiming for. She hears this sound with her ears.

Since she has produced it with her mouth, she knows that muscularly speaking, her mouth was used in a new or special way. She

knows she should listen for a sound which is different from what she usually hears. She can probably predict at least to some extent in what ways the sound will be different from what she usually produces. She speaks here with the deliberate intention of hearing something unusual and she listens to the result with the specific intention of hearing this unusual sound she has just produced.

This is the process we all use to learn to produce new sounds.

Once the student has managed to produce the sound to her satisfaction, she must practice it in a wide variety of different situations and contexts until she is completely at ease with the sound. She thus reaches stage 4, the sound becomes completely automatized and the learning process for that particular sound is over. (Young, n.d.)

To help students work through the four stages when learning new sounds and/or perfecting known sounds it is helpful to use a Sound/Color chart. This is a cardboard chart measuring 24 inches by 16 inches. On the chart are colored rectangular boxes—each box represents a sound. All the sounds of English are on the chart. (Some boxes consist of two colors; for ex-

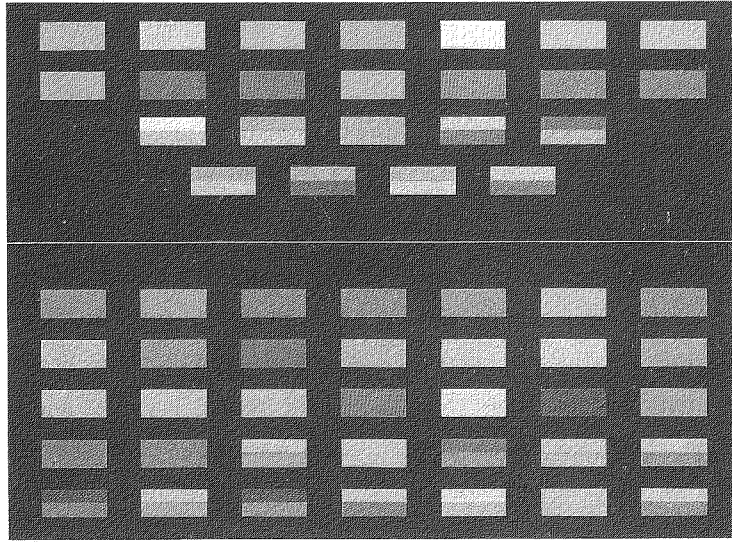


Diagram One—The English Sound/Color Chart
(Educational Solutions, 1977)

| | | | | | | |
|--------------|--------------------------|----------------|-----------------|---------------|----------------|------------------------|
| <u>a</u> t | <u>u</u> p | <u>i</u> n | <u>p</u> et | <u>n</u> ot | <u>a</u> bove | <u>h</u> er |
| <u>a</u> ll | <u>a</u> re | <u>n</u> oon | <u>e</u> at | <u>a</u> ir | <u>u</u> t | <u>o</u> r |
| | <u>I</u> | <u>m</u> ay | <u>o</u> we | <u>y</u> ou | <u>o</u> t | |
| | <u>b</u> oy | <u>m</u> emoir | <u>o</u> ne | <u>y</u> our | | |
| <u>p</u> up | <u>a</u> t | <u>i</u> s | <u>u</u> s | <u>a</u> zure | <u>m</u> y | <u>n</u> ice |
| <u>f</u> an | <u>v</u> an | <u>d</u> id | <u>t</u> he | <u>t</u> hin | <u>y</u> es | <u>l</u> et |
| <u>w</u> e | <u>k</u> it | <u>r</u> un | <u>b</u> y | <u>h</u> ot | <u>g</u> um | <u>s</u> he |
| <u>ch</u> in | <u>s</u> ing | <u>f</u> ield | <u>f</u> ire | <u>j</u> udge | <u>q</u> uick | <u>a</u> x |
| <u>e</u> xit | <u>a</u> n <u>x</u> ious | <u>l</u> uxury | <u>j</u> ames's | <u>w</u> hale | <u>r</u> hythm | <u>i</u> s <u>n</u> 't |

Diagram Two—Key for the English Sound/Color Chart
(Educational Solutions, 1988)

ample, the box representing the sound /ay/ consists of the color for /a/ and the color for /y/.) The chart is divided into two parts: the top part contains vowels and diphthongs; the bottom part contains consonants. See Diagrams One and Two.

A teacher can point to any box or series of boxes and get the students to produce the word or phrase if the students know the correlation between the colors and sounds. The teacher can do this

without speaking. To teach the correlation teachers can elicit the sound from the students or model it once. After this initial exposure there is usually one student (or several) who can repeat the sound. To elicit the sounds, it is helpful to start with sounds common to both languages. Japanese and English have certain vowel sounds that are the same or similar such as /a/, /ey/, /iy/, /ow/, and /uw/.

After the students begin to learn the

color chart the teacher can form words swiftly. Some of the words are from other languages; others are nonsense words with no meaning. At this point meaning is not important—in fact, meaning detracts from the learning process. (Gattegno, 1976) When students don't have to worry about meaning they can concentrate entirely on producing correct sounds. As students become more comfortable with the chart, volunteers can start to form the words as other students produce the word or phrase. Finally, students can produce a word, and other students can point to the correct boxes.

The chart serves many functions. First, it allows students to deal with "pure" sounds. They don't have to worry about the relationship between writing and pronunciation. Second, by working with the chart in the manner described above, students develop their own criteria for recognizing, differentiating, and finally, producing correct English sounds. Third, students can take the initiative; they can point to sounds they have trouble with; they can help each other. Fourth, the chart makes learning fun and game-like, so students' resistance or anxiety can be lowered. Two additional functions have been suggested by Rosyln Young. The chart allows students to see all the possible choices (since all possible English sounds are on the chart). They then have to decide which is the correct choice. The chart also allows the teacher to slow down, speed up, or stop the production of

a series of sounds. This allows the teacher to hear who is having problems, and to work with the problem sound.

Phonetics at Osaka Jogakuin Junior College

Osaka Jogakuin Junior College has a well-developed phonetics program with a "high reputation for achieving success in theoretical learning and skill practices." (Hirasawa, 1991 p. 168) All first year students enroll in the program. In addition to pronunciation work, students learn the metalanguage of phonetics (i.e. places of articulation such as bilabial or velar, manner of articulation such as stops or fricatives, and voicing—voiced or voiceless) and a form of the International Phonetic Alphabet (IPA). Besides learning the correct production of vowels and consonants, the students work on stress, rhythm, intonation, vowel reduction, and connected speech. Each class or section has between 30 and 35 students and meets 3 times a week, 50 minutes each time.

I teach sections A and B. These sections are comprised of students who scored near the top of the OJJC placement test. Many of the students are returnees; others have traveled abroad, in home stays or on vacations. They are highly motivated, and their level of spoken English is quite good.² At the beginning of the semester I arranged my classes so that normally the first meeting would be a lecture and deal with theory, the second meeting would work on pronunciation (using

the color chart), and the third meeting would meet in the language lab and allow students time for additional practice.

Because the color chart would be very different from the "imitation" method of pronunciation which the students were used to, I asked them to play what Peter Elbow (1973) refers to as the believing game. He says that when you are looking for truth and faced with conflicting assertions you can play either the "doubting game" or the "believing game." As far as the color chart is concerned students could look at the colors and play the doubting game by saying, "This is weird. This is a waste of time. What does this have to do with pronunciation? I don't like this!" In other words students could make a quick judgment and dismiss the chart as a learning tool. On the other hand, they could play the believing game by postponing judgment of the charts and by seeing how the colors could help them improve their pronunciation.

In an earlier section I described how teachers can work with the chart. In my class I would take 5 to 10 minutes to introduce the color boxes for a certain number of vowels and consonants. I would then have students work in three groups each with their own chart. They could point at colors, make words, ask each other for help with certain sounds, etc. I would circulate answering questions, and making sure they stayed on task. We worked this way once a week for two months. Finally, right before classes

ended for the summer we stopped using the charts.

In designing the course I wrestled with two options. Should I work only with the color chart for the first three or four weeks before moving into phonetic definitions, the IPA, etc. or should I mix chart work with IPA work and definition work? I chose the second option: mixed work. In retrospect, I think this option of working with everything at once, was confusing to the students and made the color chart work less efficient. Working with the IPA and with the color chart simultaneously made the color chart seem redundant. Although one or two students said the color chart really helped them, by the time summer vacation began most students didn't see the purpose in working with the colors since they "knew" the IPA for most sounds. While they knew most of the symbols for the IPA, they still had trouble producing some sounds or writing the correct IPA when they heard a sound. Other teachers who work with the color chart have wrestled with this problem. They have found that the color chart is more efficient than the IPA for learning to produce correct sounds. (Shimizu, 1992; Young; n.d.)

In the future I would try the first option: working with only the color chart for the first three weeks of class allowing the students to learn the sounds of English without interference from any writing system (IPA included). After the students learn the sound system, and have devel-

oped their own criteria for the correctness of their sound production, I will introduce the IPA and continue with the other components of the course. I still feel that

disassociating pronunciation from the writing system is a very effective way to teach pronunciation.³

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- 1 The topic of this paper, using colors to teach the English sound system, is only one aspect or tool among many in the Silent Way. Other tools include fidel charts, word charts, cuisenaire rods, pointers, silence, hand gestures, and pictures. For an easy to read description of the Silent Way see Larsen-Freeman, 1986.
 - 2 During a tape interview three students had near perfect pronunciation.
 - 3 If anyone would like more information on using colors to teach pronunciation (English, Japanese, French, Chinese) or more information on the Silent Way please contact the Center for Language and Intercultural Learning, 204 Shirono Bldg., 3-41 Banzai-cho, Kita-ku, Osaka 530, 06-315-0848.