## Spelling Progress Bulletin Fall 1965

Dedicated to finding the causes of difficulties in learning reading and spelling.
"A closed mind gathers no knowledge; an open mind is the key to progress."

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## 1. AN EDITORIAL

We quote from a letter written to the Los Angeles Evening Herald of August 12, 1965:
We have just had pictures of Mars and have spent untold millions on trying to discover whether there is intelligent life in outer space. I think it would be a good idea now to settle down and make a complete study to find out if there is intelligent life on earth, and in particular, the U.S.A.
D. Lee

It certainly makes us wonder what is wrong with the intelligence of our leaders who appear to be uninterested in finding the basic, main cause op our children's inability to learn to read, when they have been told many times by spelling reformers that the irregular, irrational, contradictory, confusing nature of our English spelling is the chief cause of the trouble.

Why is it that the Chinese can see the causes of their people's inability to learn to read and our's cannot even when it is pointed out to them? Is it intellectual dishonesty? How many of our educators have written books on how to teach reading and hence dont want any change - they have a vested interest to protect. They say "anyone can learn to read if the teachers will use our textbooks." But they are not really sympathetic to the needs of pupils - their desire for royalties has blinded their thinking. Or perhaps their ability to reason was stifled in Grade One by the spelling that defies logic and encourages a photographic memory.

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[Spelling Progress Bulletin Fall 1965 pp2-12 in the printed version]

# 2. Phonetic and Structural Generalizations for Teaching Primary Grade Spelling, by Wm. A. Kottmeyer, Ph.D.* 

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## Purpose of the study

The problem: Briefly, the purpose of this investigation is to identify the phonetic and structural generalizations which children can profitably make in learning to spell a primary grade spelling vocabulary in order to increase their spelling power or ability. Phonetic analysis here means "a process of associating appropriate sounds with the printed (or written) word forms." [14] Structural analysis of words here refers to "the means by which we identify the parts of a word which form meaning units or pronunciation units within the word." [14] Structural analysis includes the identification of root words in inflected forms of words; of the parts of derivatives, or words which are formed by adding prefixes or suffixes to root words; of the parts of compound words; of syllabic divisions which become pronunciation or recognition units in words. The primary grades here mean grades two and three, because formal spelling is not taught in the first grade. Spelling power here means the group of phonetic and structural generalizations about words which a learner uses to enable him to study efficiently a word he wishes to learn to spell or generalizations which he uses to recall the spelling of a word he wishes to write.

When we see words in reading or write them in spelling, we sooner or later note common characteristics of words. We see, for example, that we form the plurals of many nouns by adding $s$, or form the past tense of many verbs by adding $e d$, or present participles by adding ing, and we may make the generalization that the past tense of verbs can always be spelled by adding ed. After observing deviations from this generalization, we may add other modifying generalizations about doubling a final consonant or dropping a final $e$. These generalizations about inflections are commonly made at various grade levels. The problem about this kind of generalization in spelling is
to determine when it can profitably be made and to control, in teaching spelling, the grouping of words so that it can most readily be made.

The phonetic systems taught in reading are essentially a series of generalizations about the relationship of sounds and visual symbols. There is some variation in the points of view as to the nature and extent of these generalizations and as to the teaching methods and materials to be employed. See, for example, $\lfloor 6]$ pp. 146-50. Curiously enough, these phonetic generalizations, frowned upon for many years by some reading authorities, have again been incorporated into modern reading programs, whereas the spelling series generally continues to stress visual memory of total word patterns or rote memory of letter sequences. The tendency to abandon the teaching of phonetic generalizations in spelling grew out of the notion that English spelling is so irregular, or inconsistent, that generalizations tend to confuse children rather than help them. The problem here is to determine the most useful words in spelling at various grade levels, to examine this vocabulary to determine whether phonetic generalizations can profitably be made, and if so, to control the grouping of words so that the generalizations can most readily be made.

Dolch suggests two plausible reasons why there has been some confusion about the usefulness of phonetic generalizations and why the problem should be more carefully investigated. The first concerns ways in which generalizations are made; the second, the subconscious nature of many generalizations.

Generalizations, Dolch points out, are more often enduring and meaningful when they are formed inductively. In spelling, the learner must meet a number of words with a common characteristic, must perceive the common element himself. "All spelling generalization is therefore in essence an extension from particular cases." [8] Only if the particular words come first can we be sure that the generalization has meaning. If, on the other hand, the generalization is provided by the teacher or the text and the spelling words serve as illustrations of the generalization, it is doubtful whether the learner ever gets real meaning from it and highly likely that the generalization will soon be forgotten.

Many of our spelling generalizations are subconsciously made, as common experience testifies. Any literate person readily spells nonsense syllables which he has never heard before and can do so because of the associations he has formed between visual symbols and sounds. Most people can write correctly inflectional forms which they have never had in spelling lessons. These generalizations can often be applied altho the user may not be able to formulate or define the generalization. Dolch cites the common instance of adding $s$ or es, whichever form is required, and says that the average adult who makes the distinction readily in practice is usually unable to explain the principle. [8] As a result, many teachers are led to believe that generalizations have relatively little use in spelling.

This investigation is important because the spelling texts currently used in the schools make little use of these phonetic and structural generalizations. There is considerable opinion that spelling instruction and books can be improved by giving greater attention to such generalizations.

To clarify and identify the details of the problem, it is necessary to review briefly (1) the ways in which people learn to spell, (2) the ways which are currently in popular use to teach children to spell, (3) the problem of using phonetic and structural generalizations in spelling, and (4) the relationship of reading and spelling skills.

## How We Learn to Spell

In an interesting analysis of the kinds of spelling knowledge which people have, Dolch [8] discusses hand spelling, lip spelling, ear spelling, eye spelling, and thought spelling. By hand spelling he means the automatic writing of the literate who has spelled the words he uses so often that he no longer needs to think of the sequence of the letters. As Dolch himself indicates, this is no method of learning to spell; it is an advanced stage of spelling skill. The practice of making children write words many times in order to learn spelling is probably an ill-advised effort to reproduce this advanced skill of the able writer.

Lip spelling - calling off the names of the letters in sequence - is probably the result of memorizing the letter-sequences of words. Dolch points out that when children look at words in a spelling text, they tend to say the names of the letters because it is the simplest thing to do. The objection is obvious: each word to be spelled becomes a separate chore of memorization. If each word to be used in writing must be learned in this tedious and monotonous way it is small wonder that many children do not achieve a high degree of spelling skill.

There are several varieties of phonetic spelling, or ear spelling. It is commonly used by competent spellers when they separate long words into syllables and use sounds within the syllables to spell the parts. Practiced users of this auditory method need not say the sounds but can "think" them silently. Errors can easily be made if the word is not correctly pronounced or if the sounds are blurred. The common objection to the use of this method is that English is not very phonetic and that too many words are irregularly spelled.

Most generally advocated in spelling texts is the method of visual imagery, or eye spelling. People often use one form of it when they write out several versions of a word to "see whether it looks right" Instructions in spelling texts commonly urge the learner to look "hard" at the visual form of the word, to close his eyes and try to "see" it, and then to write it. Dolch points out that many children do not retain clear images of words and that apparently many fail to visualize accurately the middle parts of words, where most errors occur.

Whatever method is used to learn spelling, most people supplement with 'logical' or thought spelling, which might also be called spelling by analogy. Most of the structural generalizations fall into this category. We often form plurals or append prefixes and suffixes by analogy, use mnemonic devices to spell word parts, or recall the similar spelling of word families.

As a matter of fact, most people probably use all of these ways to learn to spell words or to recall spellings later. Because so much of our spelling has become what Dolch calls "hand spelling," we have difficulty in analyzing clearly our own methods or in recalling how we originally learned. It is also true that many of the spelling generalizations we use have never been consciously formulated.

## How Children are Taught to Study Spelling Words

The methods advocated by writers of spelling texts for studying words are generally similar. Five of the most widely used second and third grade spelling texts suggest essentially the following ways to study words. [13], [20], [3], [5], [19].

## Series A:

Step 1. Look at the word and say it softly. If the word has more than one part, say the parts separately while looking at each part.
Step 2. Look at the letters and say each one.
Step 3. Write the word without looking at the book.

Step 4. Check the spelling. Do this twice more if the word is correctly spelled.
Step 5. If the word is spelled wrong, note the letters missed. Repeat steps 1 and 2, then 3 and 4 until the word is written correctly three times.

Series B:
Step 1. Look at the word and say it.
Step 2. Look at the letters.
Step 3. Close eyes, imagine you are writing the letters. Say the letters to yourself.
Step 4. Check the oral spelling
Step 5. Write the word from memory, check.
Step 6. If wrong, repeat the steps.
Series C:
Step 1. Look at the word.
Step 2. Say the word to yourself. Say each letter,
Step 3. Check.
Step 4. Write word without looking at book.
Step 5. Check.
Step 6. Cover the word, write it again,

## Series D:

Step 1. Look at word and say it softly.
Step 2. Look at word and say letters softly,
Step 3. Close eyes and say letters softly.
Step 4. Write the word without looking at the book.
Step 5. Check.
Step 6. Repeat if necessary.

## Series E:

Step 1. Look at the word.
Step 2. Say the word, sound the last letters.
Step 3. Look again. Note how many parts, beginning sound, familiar small words, double letters, silent letters.
Step 4, Write the word once.
Step 5. Check.
Step 6. Write the word 3 or 4 times, checking each time.
It is quite evident from these instructions that the pupil is expected to learn the spelling of words through a combination of what Dolch has called lip spelling and eye spelling and to practice some hand spelling by writing the word several times. Whispering the names of the letters is a means of rote memory, and visualization of word forms is subject to the criticism made by Dolch. No doubt many learners discover other devices to learn to spell, but there seems to be general agreement among writers in the field that it is most important to provide pupils with an efficient method of studying words.

Commenting on the importance of a method of learning to spell, Fitzgerald writes, "The first step in teaching spelling is to present words the child needs to write and cannot spell. The second is to teach him an effective method of learning to spell a word. [10] Fitzgerald notes that Gates concluded that spelling failure is caused by the lack of an efficient method of learning to spell, and that Horn stressed the greater value of a teacher-directed method compared to the less economical methods which children use when left to themselves. Foran observes that:
it is necessary to provide children not only with the ability to spell a certain number of words but also with the ability to learn such additional words as they may require. It is just as necessary to train children to study spelling as it is to render the spelling of a small number of words habitual and automatic. [11]

## Phonetic and Structural Generalizations in Spelling

In opposition to the methods of studying words as advocated by spelling texts there is some opinion among the writers in the field that more effective use can be made of phonetic and structural generalizations in methods of studying words and acquiring spelling power.

Dolch, after describing the various kinds of spelling knowledge we have and commenting on the usefulness of each kind, suggests a series of steps in spelling analysis;
(1) Say the right sound of the word,
(2) Check whether the word is spelled as it is sounded,
(3) Use thought spelling, eye spelling, or lip spelling to learn its which are not spelled as sounded. [8]

Step 2 can be done only if the learner is equipped with a group of phonetic generalizations which enable him to determine whether a word is spelled as it is sounded, Dolch says:

If neither hand-spelling nor lip-spelling does the work in spelling a long word, the sound of the separate syllables will be thought of one at a time and each will be "translated" into certain letters. The basis of this spelling by ear, or ear-spelling, is a habit of spelling each particular sound in a particular way. Most persons have some habitual way of spelling each sound of the language.

Foran comments vigorously against the common practice of spelling texts of depending upon lip and eye spelling methods and attributes the practice to general acceptance of the psychological principle of specificity of response. He says:

The idea was firmly held that pupils could spell only the words that they had specifically learned. Each learning act was restricted to its own specific word and the unphonetic nature of English spelling precluded whatever tendency there might otherwise have been to generalize experiences. Accordingly, the teaching of spelling was based upon the principle that any word worth learning must be taught for it could not be learned, or at least was not learned, merely because some word that was similar to it had been learned. Whatever grouping of words there might be was justified not on the basis of facilitating learning but on that of convenience.
Some authorities refused to accord any value to such grouping. Spelling then consisted of the learning of about four thousand words none of which contributed anything to the spelling of any other word. [11]

He continues later:
With such a hypothesis of specificity, there is obviously no possibility of generalizing learning and rules are jettisoned. This theory of learning has been dominant for years and is shared by the majority of educational psychologists. It makes little difference whether the fundament of learning be the conditioned reflex or the habit as long as it is insisted that learning is merely the formation of specific responses and that knowledge is therefore merely the aggregation of such traces as are left by the formation of habits. [11]

Hanna and Moore discuss the problem in some detail:
What about the excuse so many give for failure in spelling - "English is not a phonetic language?" It is true that compared with languages of most primitive peoples and with the languages of many advanced countries, English seems almost monstrous in its complicated phonics. However, in spite of its many imperfections, the English system of writing is in origin and in its main features phonetic, or alphabetic. The alphabetic nature of our writing can be most clearly illustrated when we combine letters that do make a word and yet we find ourselves clearly guided to the utterance of the speech sound. Thus, anyone can read and spell such nonsense syllables as nin, mip, and lib. It is important that we guard against placing too much stress on the nonphonetic aspects of the English language and that we utilize the most effective way of stressing the phonetic elements of our language in the building of spelling power. [15]

In agreement with Dolch, the writers add:
There are definite groups of words and syllables in the English language which belong in certain phonic categories. The child should learn such group patterns inductively. He should eventually develop a sense of the probable letter or letters to be used to represent the speech sounds as they occur in words belonging to such group patterns. [5]

In extension of this point the writer has observed:
...the objection is commonly made that, as many English words are not 'phonetic,' the learning of auditory-visual relationships is not only useless, but is confusing and leads to spelling errors. It, should, however, be obvious that deviations from regular phonetic patterns do not limit the usefulness of the device. Thus when a child scrutinizes a word he wishes to learn to spell, he may observe that it is spelled 'phonetically' that is, it is spelled as he expects it to be spelled. He notes this fact and tries to remember to spell it phonetically when the need arises. If, on the other hand, the word deviates from regular phonetic pattern - that is, it is not spelled as he expects it to be spelled, he notes the nature of the deviation. In other words, he looks discriminatingly at the word. Looking at a word discriminatingly means that we observe agreement with or deviation from our body of phonetic generalizations. [18]

## Relationship of Reading and Spelling Skills

In order to proceed intelligibly with the generalizations to be made in spelling, it is necessary to review the word perception problems in reading, to provide a brief description of the generalizations which have been typically made in reading programs, and to indicate the relationships which exist between the phonetic and structural generalizations in reading and spelling.

## Building a Sight Vocabulary

We do not all seem to learn to recognize words in the same way; The person who grew up in a home with strong literary and cultural influences often had, as a child, the benefit of an excellent unpremeditated reading readiness program, Surrounded by people who read much and often he gradually and casually began to associate certain print patterns with words he knew. He not uncommonly memorized stories and poems and jingles and, finding the books from which they had been read to him, he repeated the words as his eyes - and often his finger - were trained on the word he was saying In brief, he built a small sight vocabulary.

## The Learning Process

If he was bright - i.e., if he had in high degree that curious gift which we call 'the ability to perceive relationships' - he almost subconsciously began to notice that words and word parts which sounded alike looked alike. As he continued to look at printed material he saw more such relationships. Thus, he gradually acquired a body of generalizations from his experiences in seeing the relationships between auditory and visual symbols. As a result, he set himself to applying the generalizations to new words and discovered that he could often figure out what a word was even if it had never been read to him before.

Now even if most of us went through a similar experience, the learning process could not have been precisely the same for everybody in all particulars. For example, after we apply the word perception generalizations to the same word several or many times, the pattern of the word becomes so familiar that we stop analyzing it and make it a "sight" word. We vary, no doubt, in the rate at which we incorporate strange words into our sight vocabularies. Some of us doubtless notice visual cues in certain words which we utilize to quicken our recognition. Sometimes we guess from the context and hardly look at the word. At any rate, we have our troubles remembering just what did go on in our heads because it all happened so long ago. The only opportunities we have to analyze our own methods of word perception are on those rare occasions when we see a word we have never seen before. Even then our long habituated skills silently and rapidly begin operating below the threshold of our consciousness and we "get" it - or retreat to the dictionary. Thus many people who have had no particular difficulty in learning to recognize words by simply associating the meaning with the total pattern or configuration of the word, are convinced that they recognize words without any particular phonetic generalization.

It was people with such experiences, no doubt, who were the first to protest against the needlessly complex phonetic systems which were in vogue some years ago. As a result the various, schemes for associating auditory and visual symbols systematically in the teaching of reading fell into disrepute. For some years, then, in many schools, children were not taught word perception skills. The popular theory was that if children were provided with attractive reading materials they sooner or later would experience a "felt need" to read and would learn to do so without systematic instruction After years of this laissez faire policy we find that "bright" children learn to read as well as they ever did, but that less gifted children in large numbers do not master the skill as well as they are expected to. The pro and anti-phonetic camps among teachers have quarreled so long and so bitterly that they have built emotionalized attitudes which block objective thinking about the problem.

Anyone who is a reasonably competent reader can readily demonstrate to himself that he has both the essential sound blending and syllabication skills and can see that. he never could have become competent without them. If a group of people who can read are confronted with a series of nonsense monosyllables, e.g., duf, zan, heb, shog, min, etc., everyone will agree as to their pronunciation. Never having seen precisely these configurations before, they cannot class them off as "sight" words, nor are they in context. The only explanation that can be given for the phenomenon of agreement is that each person has, through his experience with words, associated each letter of the alphabet with the sound or sounds it commonly represents and has mastered the trick of blending the sound values inaudibly into a syllable.

Similarly we can use syllabication skills to attack multisyllabic nonsense units like prochimbanishly and we again find that in such instances, with possible variations caused by placing the accent, able readers have no difficulty in pronouncing the units. Now we are not always aware of exactly which steps we go through to "read" such a unit because through long practice we analyze it with amazing rapidity. There can be no doubt, however, that in our first glimpse we visually and mentally isolate
the prefix pro, note the suffixes ish and $l y$, divide the remainder into two syllables between $m$ and the $b$, assign short vowel values to the $i$ and $a$, and inaudibly blend the syllables from left to right, Clearly, if we did not do these things, or something very similar, we would have to stare helplessly at the words" until someone told us what they represented.

We realize that we instantaneously recognize thousands of words and have the techniques for pronouncing words (more or less accurately; but always approximately) which we do not recall having seen before. It is true that some people recognize which skills they use and can define them in precise detail and that others use them subconsciously and cannot testify accurately how they unlock unfamiliar words. It is true that competent adult readers may "read" literally millions of words before they have occasion to use the word perception skills upon which they were once dependent. But there seems to be enough evidence to show that this practiced familiarity with words can be achieved only after a long period of formulating and applying word analysis generalizations in a halting and bumbling manner.

## How We Recognize Words Configuration and Context.

Altho the phonetic generalizations are necessary for real independence, primary teachers know that one can give children a word, tell them what it is, and expect that some of them will remember it when they see it again. The children need not know the names of the letters, need not know that the letters represent sounds. They know also that they can gradually show many words to some children and that they will remember them. If the words are not introduced too rapidly and if the words are repeated again and again, that is, if ample opportunity is given to form generalizations, other children will be able to remember them. Another group will have a hard time remembering even when the words are introduced slowly and repeated often. It is this difference in children that requires different methods of presentation to accomplish effectively the assimilation of learning words.

When words are introduced in this gradual way and children try to remember them by shape, their pattern, their configuration, some words seem to be easy to remember and others are hard. The long words, the words with unusual configurations are the easiest words like Christmas, elephant, monkey, etc. The hard ones are those which look like many other words - him, her, at, from, home, eat, run, etc. Words which represent real things - pony, dog, father, etc., are easier than colorless connectives - for, by, at, from, to, etc. There are ways to make some of the words easier for children. If they have a vivid experience with the things the words stand for, they will remember them better. If the words are useful to them - stop, go, cross, playground, drug, store, etc., they will be more easily retained. We know that a few children seem to be able to remember many words even if they are introduced rapidly, that the great majority must have the words introduced slowly, and that the latter group sooner or later deals with so large a number of new words that they cannot successfully recall them all if they depend upon visual memory alone in order to recognize them.

We must distinguish between this look and say technique of recognizing words as practiced by a beginner who has no word analysis generalizations and the competent reader who no longer uses his generalizations in recognizing words by their configurations The former is helpless in unlocking un familiar word patterns except for his guesses based upon context, The latter can analyze new word patterns and can steadily transfer them into sight vocabulary.

We should bear in mind that human beings can learn to recognize visual symbols which have no relationship to the sound symbols which they represent. It is evident that recognizing these visual symbols by their configurations is the most rapid and efficient way to read. It has been shown that this "look and say" technique is probably the most natural and effective way to start children on the road to reading, Recognizing words by configuration, then, is one way in which children can learn
to recognize words and this technique has certain virtues. Conversely, it has limitations its use is dependent upon visual memory, it requires repeated practice; it is used with widely varying degrees of success by children, it requires carefully controlled practice material which works relatively well with restricted vocabulary, but it gives no real independence to its user.

A second common way to decipher unfamiliar words which is used by both beginners and competent readers is guessing words from the context. This device is obviously useful and much has been made of it largely because attention must be centered upon the meaning of the sentence in which the, word occurs. It is often combined with phonetic cues like the beginning consonant sound.

## Word Analysis: Consonant Blending

The other two methods of word recognition besides configuration and context clues are sound blending, or phonics, and syllabication, or structural analysis. There is rather general. agreement about the structural analysis skills, but the use and teaching of phonics skills is still in some dispute

The older, phonetic systems introduced sounds as soon as words, and sometimes all the sound elements were presented and drilled before meaningful reading material was used. Attention was thereby centered upon the mechanical phonetic skills and upon word calling, often at the expense of the interpretive skills. Children were often required to associate sounds with letters and letter combinations without understanding the purpose of what they were doing. Modern word analysis programs begin by introducing sight vocabulary and they pace the skills program over three grades. The first grade programs usually include little more than the consonant sounds, and begin the initial and final consonant substitution techniques. At the second grade level the vowel sounds are taught, consonant blends are taken up, and the structural analysis skills are introduced. the third grade programs extend both the phonetic and structural analysis skills.

In considering the virtues and vices of sound blending systems, it will be profitable to review briefly some of the history of our experiences in using them and some misconceptions which are held about them, We are told that the earliest effort in this country to teach children word analysis skills was to make them say the names of the letters, Thus children were instructed to say "b-a-b-y, baby"' in order to learn a new word. To this day, parents who decide to help their children learn to read better occasionally tell them to spell out the word they cannot read. This is a curious phenomenon of confusion. The adult, who can read and spell, does not seem to see that spelling the word is more difficult than reading it and that if the child cannot read the word, he cannot be expected to get help from the spelling. Remedial reading teachers often have a difficult time in trying to break this habit once it is formed. Saying the names of the letters is of no help in reading.

During the latter part of the nineteenth century a number of American educators visited the Prussian schools which were then in high repute. Observing that the german teachers had comparatively little difficulty in teaching word recognition skills to almost all pupils in much shorter time, and that they were doing so by teaching them to blend the sounds of single letters, they promptly imported the method.

Of course they soon had troubles. The chore of teaching word perception skills in German, Spanish, or any other "phonetic" language is much easier than in English because even the vowel symbols usually represent only one sound. There are more than 30 shades of vowel sounds in English; extra consonant sounds represented by digraphs like: ch, sh, th, wh, $n g$; variations in sounds like the hard and soft $c$ and $g$, silent letters; inconsistent spelling, and many other irregular elements which prevent any system of phonics from being fool-proof in English. In their efforts to devise comprehensive phonetic systems which would embrace all the irregularities of the language, the
reading specialists of the day produced complex and cumbersome systems which were difficult to teach and, for many children impossible to learn.

When the single letter phonetic system is applied to English, the vowel sounds are one source of immediate difficulty. Instead of the consistent vowel values in other languages like German, we have in addition to the short vowel sounds, the long vowels, both the long and short vowels in unaccented syllable, the vowel values modified by $r$, and several others. Because of these difficulties, most sound blending systems in use today postpone any teaching of vowel sounds until the second grade. Another source of difficulty lies in the fact that altho the short vowel sounds can be easily differentiated by adult ears, the differences among short $a, e, i, o$ and $u$ are easily confused by young children who have had no auditory training.

Single letter sound blending - blending together the sound values of letters in a monosyllable has often been distorted by bad teaching and has been much maligned as a result of the distortions. When teachers who used the older phonetic systems taught the consonant sounds, they often taught them in isolation from words. When the consonant was presented, the child was told the sound and was expected to repeat it. Altho some consonant sounds like $s, l, m, n$, etc. can be uttered in isolation, others like $b, d, g, j, k, p, t, v, w$, etc., are invariably accompanied by a vowel value. When we try to give the sound of $b$ alone, we say " $b u h$ ". Children often attach the " $u h$ " to consonants which can be said alone, saying "suh " "luh," "muh," etc.

Now it is easy to see how such travesties of sound blending have made single letter phonics disreputable in many quarters. When the child who has "learned" consonant sounds in isolation, tries to blend the sound values in cat, he says "kuh-a-tuh" - a total of five sounds including three vowel sounds. Having been told that sound blending will unlock words for him, he tries but gets no satisfactory results. The teacher who knows that words are blends of individual sounds does not understand why the child cannot "get" it.

Another common distortion of the sound blending technique happens when children are permitted to utter the sound values in isolation from one another. Sound blending means that a sound value must be held until the next value is started. For example, in blending the sound values in cat, the pupil must learn to blend or merge the $k$ value with the short $a$ value and to hold the latter until he blends it with the $t$ value. When this is done, the child has really said the word slowly. If he does not recognize the sound, he does it more rapidly until he actually says the word as he would in conversation. The child may have to do this audibly when he begins, but increased familiarity with sounds soon enables him to blend sound values mentally instead of orally.

The problem of the vowel sounds and the two common instances of malpractice in teaching sound blending here cited caused many teachers to turn to one of the several variations of a phonetic system generally known as "family" word phonics. Family phonics systems were devised to avoid the letter-by-letter blending by presenting "families" of words which are similar except for the beginning consonant. Originally, children having become familiar with consonant sounds, either in isolation or in sight words, were given lists like man, ban, can, fan, pan, ran, tan, van. It was expected that they would say or think the sound of the beginning consonant and blend it with the unit an. By learning the various families of words, it was expected that children would develop independence in recognizing words they had never seen before.

No doubt a fair number of monosyllabic words belong in families, but the number is not so high as teachers think. The most serious objection, however, to family or phonogram phonics is that the syllabic division of multisyllables often cuts through the phonogram. There are two groups of word analysis skills: phonics and structural analysis. What is taught in phonics, when we deal largely with monosyllables, must apply as well when we teach the syllabication skills. Thus some word
analysis programs erroneously call for "finding the little words (or familiar syllables) in the big words." All too often the syllabic divisions change the vowel values of the "little word," For example, menagerie=men-age-rie? Teachers of family word phonics have sometimes achieved good results in developing word recognition skills with family phonics only to find that at higher grade levels, when the multisyllabic word percentage increased heavily, children found their technique of word attack confusing.

In modern reading programs children are taught consonant sounds after some sight vocabulary has been mastered by configuration alone. The consonant sounds are taught as sight words beginnings, and never as isolated sounds. Attention is then called to words which "look alike" except for the beginning sound. Children are led to understand that words which look alike probably sound alike. Next they are encouraged to substitute mentally the beginning consonant sound of the new word and blend it silently with the part which is like the sight word.

For example, if the child has seen the word coat often enough to recognize it as a sight word and now encounters the word boat, it is expected that he will see that boat is like coat except for the beginning consonant sound. He notes that boat begins like another of his sight words - boy. He now substitutes the $b$ sound from boy and mentally blends it to oat and recognizes the new word boat independently. Sometime later he will be taught that the same device can be used by substituting the final consonant sound as well, i.e., to recognize cap if he knows can, etc.

This all sounds simple enough, As a matter of fact, when the teacher writes coat and boat on the board and asks which parts of the two words are alike, which are different, which words the pupils know which start like boat, etc., it all works out rather neatly. However, the situation is different when the child sees only the unfamiliar boat and gets no context help. It is clear that his sight vocabulary must be so vivid and so firmly fixed that he can mentally "see" coat or can when boat or cap is before his eyes. Too many children have trouble doing this visualizing which seems so easy to one after he can read and spell.

There seems to be too much taken for granted about this power of visualization. In teaching spelling, the textbook directions to children instruct him to look "hard" at the word he is to learn to spell. Then he is told to close his eyes and "try to see the word," and then to write it or copy it from the visual image, then we try ourselves to visualize boat, we are sure we do it. Obviously we can do it because we already know how to spell it. When we are uncertain about the spelling of a word, we often have to write it to see if it looks right.

Thus the most important phonetic technique commonly taught in first-grade classrooms today is the substitution of beginning and final consonant sounds. It is a useful and helpful technique which has certain virtues and limitations. Its virtues are that it is used after a sight vocabulary has been established, that consonant sounds are not taught in isolation, that it gives a child some means of attacking words when he has no contextual help, that it can be used before vowel sounds are learned, that it gives the child valuable experience in "blending." Altho it minimizes some of the defects of family word phonics, it is essentially similar to that system because it calls for the blending of a consonant sound with a larger unit. It is much more difficult to use effectively than is generally suspected because it makes severe demand upon visual imagery, is dependent upon absolute mastery of sight vocabulary, and it can be applied only to words which are similar both in sound and spelling (except for one consonant) to the words in the pupil's sight vocabulary.

Remedial reading teachers and reading clinic teachers often use single letter phonics in preference to consonant substitution because retarded readers often have difficulty in building sight vocabulary and are deficient in the power of visualizing which is necessary for consonant substitution. They are at least several years older than six and have enough mental age and language background to take
word analysis teaching much more rapidly. The reading material is adjusted to the child's level and effort is made to continue to increase sight vocabulary. After some auditory training, which starts immediately, the single letter sounds are introduced through the use of "key" words - $b$ has the sound that starts $b a l l, d$ starts $d o g$, etc. The short vowels are introduced immediately - $a$ as in apple, $e$ as in elephant, $i$ as in ink, $o$ as in ostrich, $u$ as in umberella. Each key word is something which can be pictured, and the children learn to associate a letter sound with a key word with the help of a simple form of picture dictionary. The blending technique is demonstrated and practiced.

Oral reading continues, primarily for the purpose of having the child confronted with words he does not recognize in a normal reading situation. When this happens the child is required to do his, own blending; slow and laborious tho it may be. Spelling is introduced as soon as the sounds are taught and the child is required to use his sound blending skill in reverse - to listen to a word, determine the number of sounds, and to write the word the way it sounds. In this way word analysis skills in both reading and spelling are learned at the same time.

As soon as the short vowels become familiar to the child, he learns when to use the long vowels in the double vowel situation and with vowel-consonant-final $e$, As the child in his oral reading meets the symbols $c h, s h, t h, n g$, wh, the oo, and oo, au-aw, oi-oy, ow-ou, silent gh, etc., some practice material is introduced and the application is made. These skills alone give a high degree of independence in word recognition until the vocabulary becomes heavily multi-syllabic at about the third grade level of difficulty. The syllabication or structural analysis skills are then introduced.

## Syllabication or Structural Analvsis

In discussing here the general problem of word recognition skills, we may summarize several of the more important skills briefly.

The first of the structural analysis skills are required at early levels of instruction when common endings like $s$, 's, $d$, ed, and ing begin to appear in reading material. The compounds, football, bedroom, need attention as early as the first grade. Now systematic instruction in dividing multisyllabic words into parts and sounding the parts is given.

The child learns, for example, that the number of vowel sounds in a word tell him the number of parts, or syllables - the word has. (This is often not the same as the number of vowel letters.) He learns that the two common patterns of letter sequence are two consonants between two vowels and one consonant between two vowels. He tries to make his syllabic division between the consonants in the first pattern, and before the consonant in the second. Syllables which end with consonants usually have a short vowel and those which end with vowels usually are long. Thus the child readily learns through instruction instead of by trial and error how to deal with multisyllables. Whatever he has learned in the way of sound blending skill should now be applicable to the syllables.

Attention is usually given now to the increasingly frequent prefixes and suffixes, There are about a dozen of each which require notice for teaching. After the basic skills of recognizing compounds;, derivatives, prefixes and suffixes, and syllabic division are mastered, the reader is usually able to refine with some help his techniques to deal with the exceptions, with the many additional prefixes and suffixes, with the variations in vowel sounds caused by accent.

## Word Perception Skills in Reading and Spelling

All teachers realize that reading skills and spelling skills are related. Most good readers are good spellers and most good spellers are good readers,, If we keep in mind how people learn to read words we can better understand how they learn to spell words.

We have seen that it is possible for children to learn some words by their general pattern of configuration, without knowing the names or the sounds of letters. T.V. has shown us this. We know that this is a useful beginning method to introduce children to the skills of reading. We know, too, that some children seem to learn very well in this way. These children seem, with little instruction, to look carefully not only at the total word configuration but at the word parts. They note likenesses and differences in word forms. They seem to be able to "visualize" or form clear images of some words. Because of these abilities they can often write many of the words they have learned to read. Later, when words become longer or look much like other words, such children may often misspell words which they can read easily. So altho the common Look-and-Say method of teaching word-recognition in reading is useful, and altho it carries over into spelling when a child's writing needs are limited to relatively few words of simple patterns, nobody can long depend entirely upon this word recognition skill to serve his spelling needs.

Conversely, when children have to learn to spell certain words and do so by memorizing the sequence of the letters they do not materially strengthen their word recognition skills in reading. Obviously, they can already recognize many more words than they can spell. Their early spelling experiences deal with words which have long ceased to be recognition problems to them. If they do not, they have no business trying to spell them.

The use of context clues, the useful and familiar device for unlocking some words in reading, has no direct relationship with spelling. In fact, dependence on context clues may interfere with the practice needed for learning spelling.

The two other groups of word recognition skills taught in reading, the sound blending techniques and the syllabication, or structural analysis skills, are, however, closely related to spelling skill.

When a child sees a word which he does not recognize by its total configuration or which he cannot guess precisely from the context; he may do several things, depending upon what he has been taught. If he has learned the consonant substitution technique, he may "think" the consonant sound to get a suggestion as to what the word might be. He may combine context clue with beginning consonant sound and guess what the word is. He may note that the word is like one he knows except for the beginning or final consonant and substitute the consonant sound he sees. Or he may audibly or silently - blend the sound values of the visual symbols individually and approximate a pronunciation of the word.

Now it is obvious that these skips will be useful to him in spelling as well as in reading. When he comes to an unfamiliar word in reading the visual symbols - the letters are before his eyes and he needs to supply the sound - or "think" the sounds. When he needs to spell a word, the auditory symbols - the sounds - are known, and he needs to supply the visual symbols - the letters.

Altho all the sound-letter associations in reading will help the child in spelling some will be more useful than others. A knowledge of beginning and final consonant sounds for example, will enable a child to begin or to end a word correctly when he spells it. Thus when teachers teach children to spell, they will often ask the child to say and listen to the beginning and ending sounds of the word. We can readily see, then, that the commonly used word recognition device of substituting a beginning or final consonant will help build spelling power.

But when we spell we need more than the beginning and final consonant sounds. We know that we can utter no syllable without a vowel sound. Hence, to get effective power in spelling a child needs to know all the vowel sounds. As has been suggested, he needs them in reading also to develop his word recognition skills to a point of real usefulness.

The need for accurate and precise association between visual forms and sounds is, of course, more pressing in spelling than in reading. In recognizing words in reading, we can use configuration and context clues and use them in combination with more rudimentary sound blending skills. In spelling, these devices or combinations do not apply. In reading, we can approximate the pronunciation of a word and guess the word if we come close enough. In spelling, an approximation is not enough, Therefore, if children are taught in spelling to listen for the sound elements in words and if they are taught the common visual representations which stand for those sounds, they develop a useful power beyond visual memory to guide their spelling. If they learn these auditory-visual relationships in spelling, where the need for precision is greater, their application in reading is a relatively simple reversal of the process.

Here again the objection will reappear that, as many English words are not "phonetic," the learning of auditory-visual relationships is not only useless; but is confusing and leads to spelling errors. It should, however, be obvious that deviations from regular phonetic patterns do not limit the usefulness of the visual-auditory skills. When a child scrutinizes a word he wishes to learn to spell, he may observe that it is spelled "phonetically" that is, it is spelled as he expects it to be spelled. He notes this fact and tries to remember to spell it phonetically when the need arises. If on the other hand the word deviates from regular phonetic pattern - that is it is not spelled as he expects it to be spelled, he notes the nature of the deviation. In other words, he looks discriminatingly at the word. Looking at a word discriminatingly means that we observe agreement with or deviation from our body of phonetic generalizations.

Thus as children encounter unfamiliar words in reading and as they apply phonetic and structural analysis techniques competently to unlock them, they are obliged to look at the words discriminatingly, When a child has been taught the basic body of auditory-visual relationships he quite naturally learns to spell out most words which are word recognition problems for him in reading. If teachers teach effective word recognition skills beyond the early level of the beginning and final consonant substitution they are tooling children with the body of generalizations which are indispensable to the discriminating scrutiny which is the basis of spelling power. Conversely, when children learn to analyze words they need to spell, they strengthen and refine their word perception skills for reading.

The mastery of the structural analysis skills in reading clearly contributes to the growth of the analytical skill which is required in learning to spell multisyllabic words. We look discriminatingly at multisyllabic words for spelling purposes when, again, we observe agreement with or deviation from expected multisyllabic patterns.

Of course; there will be many variations in the ways in which we note these deviations from expected patterns and many mnemonic devices which will be used by different individuals to remember them. And again; we remember that adults who spell well have written so many words so often that almost all words they have to spell have become habituated - they no longer have to think about the sequence of the letters. This "hand" spelling in writing is similar to the "sight" reading of the literate adult. And just as some people become convinced that they learned to read by associating visual patterns directly with words without phonetic analysis, so it may seem that spelling can be learned without associations of sound and symbol.

The problem of this investigation may now be defined as: What phonetic and structural generalizations can second and third grade pupils profitably be led to make in order to give them spelling power as they learn to spell the words they need to satisfy their writing requirements?

## Review of Related Literature

There is not a great deal of experimental evidence or many objective findings in that aspect of the spelling problem which is often referred to as spelling generalization or spelling rules; there is considerably more published opinion. The terms rules and generalizations are used interchangeably in the literature, and the various kinds of generalizations are loosely grouped. Most of the comment deals with inflectional generalizations and the typical writer lists a number of inflectional generalizations and tabulates the frequency of application to a selected spelling vocabulary and the number of exceptions. There are few studies and little comment on phonetic and structural generalizations. Grouping of words gets some attention and is related to the problem of generalization. Many of the rules listed are really capitalization and punctuation rules rather than spelling rules. The literature does not fall into clearly differentiated division because the various kinds of generalizations are often indiscriminately discussed and because the few experimental studies contain much subjective comment and opinion.

Foran summarizes the results of two studies in the grouping of words according to similar difficulty One such study was made by Wagner who compiled a list of 200 words from other subjects, grouped the words by similarity of spelling difficulty, taught the grouped words to twenty-odd sixth graders, and presented the same words ungrouped to a similar (lass, The groups were not equal in spelling ability before the experiment, but Wagner estimated that grouping words by similarity is $20 \%$ more effective than teaching without grouping.

Tidyman and Johnson [24] divided 80 words into two lists of equal difficulty, taught the words grouped by similarity to an experimental group of 23 fifth graders, the other list in random order to a control group. When similarity was stressed, gains were greater than when they were not. The investigators estimated that grouping by similarity is about $10 \%$ more effective than random grouping of words.

There are several studies [21], [9] dealing with the desirability of grouping homonyms but the evidence is controversial.

Foran [11] strongly supports grouping.
Archer [2] conducted a series of experiments involving almost 4000 pupils from fifth and seventh grades. About 60 words were given to classes as a spelling test, and 15 misspelled words were assigned for a week of study. On the fifth day another test, including both the words studied and many derivatives of the words studied was given. A delayed recall test was given three weeks later. Large gains were made and held in the spelling of the derived forms. Another experiment involved the use of words which drop the final $e$ when the ing is added. Both positive and negative transfer occurred, as the spelling of basic forms improved and some loss took place in the spelling of forms which merely added ing. Negative transfer occurred in several similar experiments. As no effort was made to guide the generalizations, this result is not surprising, Foran $\lfloor 11$ quotes Archer's statement that:

These forms of negative transfer suggest that it would be important to try to control such generalizations more carefully: A child will generalize from associations any way, but he is more likely to be confused unless his generalization is crystalized and the exceptions carefully noted and mastered in concrete situations.

Foran suggests that the present distrust of rules in spelling stems from an experiment made by Cook [7] who had college freshmen students spell words which exemplified rules, write the rules they knew, and report whether they had been taught rules. The students reported little memory of
rules and the opinion that rules were of little help. Foran [11] says that the "validity of the experiment does not warrant the inferences that were derived from the observations."

Sartorius [22] compiled a list of rules in 20 spelling texts. Of 38 rules and definitions in five or more of the 20 texts, 11 generalized statements were eliminated, leaving the 27 most commonly used rules. The investigator then tabulated i.e. number of words, derivatives, and exceptions for each of the rules, which involved a vocabulary of about 4000 words. These rules are:

1. The plural of most nouns is formed by adding $s$ or $e s$ to the singular ( 250 words and derivatives, 25 exceptions).
2. Final $e$ dropped before a suffix beginning with a vowel. ( 304 words and derivatives 4 exceptions).
3. An apostrophe is used to show the omission of a letter or letters in contractions ( 20 words, no exceptions).
4. Nouns ending in final y preceded by a consonant, change $y$ to $i$ and add es to form the plural (16 words, no exceptions).
5. Abbreviations are always followed by a period. (14 words. no exceptions).
6. Monosyllables or words accented on the last syllable ending in a single consonant preceded by a single vowel, or a vowel after $q u$, double the final consonant when adding a suffix beginning with a vowel. If the accent is not on the last syllable, the final consonant usually is not doubled ( 97 words and derivatives, 13 exceptions).
7. 1 before $e$ except after c or when sounded as a as in neighbor and weigh (101 words, 30 exceptions),
8, Proper nouns and adjectives formed from proper nouns, should always begin with capital letters (21 words, no exceptions).
8. The apostrophe is used to show possession ( 2 words, no exceptions).
9. In words like calf and half, the $f$ of the singular is changed to $v$ before adding es to form the plural (2 words no exceptions).
10. Final $e$ is kept before a suffix beginning with a consonant ( 212 words and derivatives; 28 exceptions).
11. When words end in a single consonant preceded by a single vowel, the last consonant is called a final consonant. This final consonant is doubled before a suffix beginning with a vowel. (No words, but note the sixth rule).
12. When final $y$ is preceded by a consonant, the $y$ is changed to $i$ when adding a suffix beginning with a consonant ( 14 words and derivatives; no exceptions, note the fourth rule).
13. The hyphen is always used in writing the words for numbers like twenty-five (One word, no exceptions).
14. Final $y$ is changed to $i$ before any suffix that does not begin with $i$. In carriage and marriage and like words, the final $y$ is changed to $i$ before a suffix beginning with a vowel. This rule is contradictory to rules $4 \& 13$ as it is here stated, because it does not specify "preceded by a consonant," and by not stating "suffixes beginning with a consonant." Apparently this rule is an attempt to cover exceptions such as carriage.
15. All words ending with the suffix $f u l$ have only one 1 at the end ( 16 words, no exceptions).
16. Letter $q$ is always followed by letter $u$ ( 54 words, no exceptions).
17. The names of the months of the year always begin with capital letters ( 12 words, no exceptions.
18. Words of one syllable having the long sound of the vowel usually end in silent e ( 248 words, 339 exceptions).
19. Every syllable must contain a sounded vowel (No words or derivatives listed).
20. When dividing words into syllables, prefixes and suffixes are separated from their roots when the prefix or the suffix contains a sounded vowel (No words listed).
21. Ph often sounds like $f$ ( 20 words, 2 exceptions).
22. The names of the days of the week always begin with capital letters ( 7 words, no exceptions);
23. A hyphen is used at the end of the line to indicate that a portion of the word is found at the beginning of the next line (No words listed).
24. The final $e$ is dropped before the suffix er; otherwise there would be two $e$ 's (19 words and derivatives, one exception).
25. A word ending in $y$ after a vowel usually retains the $y$ before any suffix ( 31 words and derivatives, no exceptions).
26. Adding ing to a word ending in $i e$, drop the final $e$ and change $i$ to $y$, as tie, tying ( 7 words and derivatives, no exceptions).

It is to be noted that these 'rules" fall into several categories. Rules $1,2,4,6,10,11,12,13,15,21$, $25,26,27$, are structural generalizations. Rules $3,5,9,14,24$ are punctuation rules, and 8,18 , and 23 are rules for capitalization. Rule 20 is a definition or understanding rather than a rule, and 16, 17, are mnemonic items. Only 7, 19, 22, can be classed as phonetic generalizations. Of these 19 has more exceptions than examples (conformals). Number 22 is a reading rather than a spelling generalization.

Wheat [26] proposed four restatements of several of Sartorius' rules in order to clarify them and eliminate exceptions. For root words ending in $e$ he suggests, Words ending in silent $e$ drop the $e$ when adding a suffix beginning with a vowel and keep the $e$ when adding a suffix beginning with a consonant ( 631 root words, 260 derived forms, 29 exceptions in his list of 3,876 words). The 2nd: For words ending in $y$ preceded by a consonant change $y$ to $i$ when adding any suffix except one beginning with $i$, but words ending in $y$ preceded by a vowel leave the base form unchanged when adding any suffix ( 237 base words, 69 derived forms, 4 exceptions). The 3rd is Monosyllables and words of more than one syllable with the accent on the last syllable which end in a single consonant preceded by a single vowel double the final consonant when adding a suffix beginning with a vowel ( 200 words, 3 exceptions), The 4th: In diphthongs, $i$ before $e$ except after $c$ - or when sounded as $a$ as in neighbor and weigh ( 101 words, 11 exceptions).

Foran [11] proposed a list of 11 rules which either cover a large number of words or have few exceptions. His first 4 are Wheat's four revisions of the Sartorius rules and the other 7 are modifications of other rules listed by Sartorius:
5. The plural of most nouns is formed by adding $s$ or es to the singular. Es is added to make the word easier to pronounce,
6. Same as Sartorius's rule 3.
7. Same as Sartorius's rule 5,
8. Same as Sartorius's rule 8.
9. Same as Sartorius's rule 16.
10. Same as Sartorius's rules 18 and 23.
11. Same as Sartorius's rule 17.

King [17] made a study of results in the teaching of 7 rules identified by Sartorius as most important. The study was conducted with three classes in each grade from grades 3 thru 8, with all pupils having intelligence quotients between 90 and 110. Three to five lessons were taught for each of the 7 rules in various grades. Pupils made statements of the rules, spelled words which illustrated them, and spelled nonsense words to which the rule could be applied. The findings indicated some of the factors which make rules successful or unsuccessful.

The rule that plurals are formed by adding $s$ or es. King suggests might be limited to $s$ because of the small number of nouns which add es to the list, The use of noun is difficult at early grade levels and precludes the use of the same generalization for third person verb forms.

The rule about dropping the final $e$ before adding a suffix beginning with a vowel might well be postponed until the fifth grade, in King's opinion. Relatively few present participle forms appeared in the 3rd and 4th grade word lists used and most of the difficulties occurred with this participial form. Foran believes the rule could be more useful than King's results indicate.

Children had difficulty in applying the rule about changing final $y$ to $i$ when a suffix is added and indiscriminately changed $y$ to $i$ whether a consonant or a vowel preceded the $y$.

The $q u$ rule involved very few errors because of the small number of words involved, especially in lower and middle grades. King suggests that the rule can be learned at any grade level.

King's experience with the $i$-before-e rule made him doubtful of its value. Pupils had difficulty in applying the last part of the rule.

The sixth rule used is that the sound of $i$ at the end of a word is usually spelled $y$. Some difficulty was reported with words ending in ey.

The 7th rule - that words of one syllable and words with the accent on the last syllable ending in one consonant preceded by one vowel double the consonant when adding a suffix beginning with a vowel - appeared to the investigator to be too difficult to learn and interpret.

Foran [11] summarizes his conclusions on the use of rules, or generalizations, by observing that,

1. Rules should be taught.
2. Only a few rules should be taught, i.e. rules which apply to a small number of words or which have many exceptions, should not be used
3. Only one rule should be taught at a time.
4. A rule should be taught only when it can be applied to a reasonable number of words.
5. Spelling words should be grouped to illustrate rules.
6. Rules should be taught inductively,
7. Rules should be systematically reviewed.
8. Ability to use a rule is more important than being able to say the rule.

Dolch [8] discusses generalizations in a chapter devoted to the subject and emphasizes particularly "sound-letter" generalizations which, he observes, "are undoubtedly the most important of all generalizations we make or use concerning spelling." He noted that, curiously, the only sounding generalization that is widely taught is the $i$-before-e rule and makes some further comments upon the importance of defining phonetic generalizations in spelling. He also states that the importance of a spelling generalization is not necessarily indicated by the number of cases it covers and points out that. especially in the use of inflected forms, a major generalization can be used to cover a large number of cases and minor generalizations may be introduced to separate smaller groups of words from the large group.

Dolch [8] suggests the following table of inflectional rules:
Nouns, plural:
$-s$ or $e s$
$-y$ preceded by a consonant to -ies (in day, etc, $y$ is preceded by a vowel)
possessive, 's or s'.
Adjectives, comparison:
-r or -er -st or -est

- y to -ier or -iest

Verbs, third person:

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add -s or -es
-y preceded by a consonant to -ies
    past tense
d or ed, double a single final consonant when the vowel before it is short and accented,
-y to -ied
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Dolch also has a table of generalizations regarding endings, i,e, suffixes, some common generalizations about capitalization, miscellaneous generalizations on punctuation and some about word division at the end of the line.

Hanna and Moore [15] report a study of spelling consistency in a 3000-word vocabulary. Each word in the vocabulary analyzed was broken into component speech sounds and the number and frequency of different spellings for each sound was tabulated. Some of the important conclusions are:

1. About $4 / 5$ of the phonemes are represented by a regular spelling.
2. Nearly $3 / 4$ of the vowel phonemes are spelled by their regular symbols from about $57 \%$ to about $99 \%$ of the times they occur.
3. Vowel phonemes with lowest spelling consistency are schwa (unstressed vowel sound in about), long-e, oo (boot), oo (book), er (her), o, and y (onion).
4. Single consonant phonemes have the highest spelling consistency.

The investigators make a strong case for sound generalizations and word grouping in teaching spelling.

In discussing the problem of rules and generalizations in spelling Fitzgerald [10] reviews some of the studies made and the opinions of Suzzalo [23] who, in 1911, felt that the reaction against formal deductive teaching had caused spelling rules to fall into disfavor, and Horn 【16] who in 1919 suggested that the teaching of rules be abandoned until the evidence became more conclusive. Fitzgerald quotes an opinion of Almack and Staffelbach that rules be few and simple and that some simple exercises in generalization may be profitably be used.

Gates [12] made an analysis of the findings of a number of investigations of rules and generalizations and in two controlled experiments involving about 4000 children in grades 2 to 8 , came to several conclusions in the matter. He believes that generalizations do not increase ability to spell words which are being studied in the spelling class, but that they do increase ability to spell words not studied in the spelling class. Gates reported that some $84 \%$ of the teachers believed that generalizations which grow out of word groupings are useful. Inflectional generalizations were also held to be valuable.

Breed [4] reviewed the findings on generalization and asserted that the evidence showed that greater recognition could well be given to rules in teaching spelling if the number of rules be limited, if they are selected with a view to applicability, have few exceptions,, be easy to learn.. are inductively developed, and if pupils are properly guided in their use.

## In Conclusion

Teachers will be aware that,

1. People who are aware of many relationships of spoken sounds and written symbols often remember spelling by using a "Spelling Pronunciation" of a word instead of the dictionary pronunciation. Exaggerated "thought pronunciations" are more helpful in spelling than perfect dictionary pronunciations.
2. Vowel sounds, like consonant sounds, are best learned in key words rather than in isolated sounds.
3. The implication of these sound-symbol relationships is that single letter phonics is best suited to spelling needs. Children will have to learn to hear sounds in words and to associate certain symbols with certain sounds.
4. Children will have to learn to say words slowly, hear or think the consonant sounds, and write the symbols which represent the sounds.
5. Children must be led to look discriminately at words as one step in a systematic method of studying words,, This means that they will note both agreement with their generalizations and deviations from them.
6. Noting agreement with or deviation from generalizations also helps eye-spelling.
7. The word perception skills acquired in reading can usually be reversed to become spelling skills. Phonetic and structural generalizations in reading and spelling should supplement each other.
8. There are many subsidiary or minor generalizations which can be made from time to time as the vocabulary used by children furnishes enough cases for the children to make them.
9. Sound-symbol generalizations generally cannot become really useful without the vowel sounds,

As was to have been expected, the consistency of English spellings of the vowel sounds is not so high as the spellings of the consonant sounds. On the other hand, the spelling of the vowel sounds in the commonly used words of English and the words needed by children to write are clearly more consistent than they are generally reputed to be. It is also quite obvious from the foregoing discussion that consistency of spelling depends upon how consistency is defined, i.e. on how the generalizations are defined and upon the number of subsidiary or modifying generalizations which are to be introduced over a learning period in which children are in a continuous process of acquiring greater knowledge of words. There appears to be adequate evidence that the spelling of vowel sounds are consistent enough for profitable use and that vowel generalizations here suggested can reasonably be offered for use with the consonant generalizations.

It is quite evident from these studies that there is no widespread certainty or agreement about spelling generalizations. The studies of Wagoner and of Tidyman and Johnson involving the grouping of spelling words by common characteristics indicate that when pupils are led to make generalizations, their spelling power increases. The scanty evidence seems to indicate that when broad generalizations are applied without careful word grouping, confusion among pupils results. Broad generalizations which cover many words but which have a number of exceptions must be qualified by modifying or subsidiary generalizations.

There has apparently been little analysis made of the various kinds of generalizations. Spelling rules, punctuation and capitalization generalizations are often indiscriminately mixed. Inflectional generalizations have been given far more attention than other kinds of generalizations. Most of the generalizations are useful in the middle or upper grades but are sometimes so defined that they are difficult for pupils to apply.

In spite of some evidence in favor of certain generalizations, there appears to be considerable distrust in their use. There is some opinion that relatively few generalizations can be used effectively, that they should be learned only when they have frequent application, and that it is far more important that they be used than that their definitions be fluently quoted.

Little attention has been given to phonetic generalizations. Dolch. Hanna and Moore, however, make strong pleas for the importance of such generalizations. Dolch offers some persuasive arguments and points out the need for additional evidence. Hanna and Moore report some evidence that the consistency of English spelling is considerably higher than it has generally been assumed to be. Certainly there appears to be need for further inquiry into the situation.

## Editor Note:

We are sorry that we could not give the space necessary for the whole of this thesis, but the balance of the complicated generalizations takes just twice as much space as the above presentation. The entire thesis is available on interlibrary loan from St. Louis University.

## Bibliography

1. J. C. Almack \& E. H. Staffelbach: Related Factors in Spelling Method, Elem. School Jour, XXXIV, Dec, 1933.
2. C. P. Archer: Transfer of Training in Spelling, U. of Iowa Studies in Educ. v. \#4, June, 1930, p. 63.
3. L. E. Billington: Using Words We Know II \& III, New York Silver-Burdett Co, 1950.
4. F. S. Breed: Generalizations in Spelling, Elem. School Jour. XXXVIL June, 1937. pg 739.
5. F. S. Breed \& E. C, Seale: My Word Book II \& III. New York, Lyons and Carnahan, 1949.
6. J. B. Carroll: The Study of Language, Cambridge, Harvard Univ. Press, 1953.
7. W. A. Cook: Shall We Teach Spelling By Rule?, Jour. of Educ. Psych. III, June, 1912, pg 312-25.
8. E. W. Dolch: Better Spelling, Champaign, Ill. Garrard Press, 1942.
9. E. O. Finkenbinder: The Spelling of Homonyms: Pedagogical Seminary XXX, 1923, pg 241-51.
10. J. A. Fitzgerald \& The Teaching of Spelling, Elem. Eng. XXX, Feb, 1953, pg 79-85.
11. Thos, G. Forario: The Psychology \& Teaching of Spelling Washington, The Catholic Educ. Press, 1934.
12. A. I. Gates: Generalization \& Transfer in Spelling, New York, Bur. of Pub. Teachers Coll, Columbia Univ. 1935.
13. A. I. Gates: The Pupils' Own Vocabulary Speller II \& III New York, The Macmillan Co, 1951.
14. Wm. S, Gray: On Their Own in Reading, Scott Foresman \& Co. 1948.
15. P. R. Hanna \& J. T. Moors: Spelling from Spoken Word to Written Symbol; Elem. School Jour. LIII, Feb. 1953, pg 327-29.
16. E. Horn: Principles of Method in Teaching Spelling as Derived from Scientific Investigation, 18th Year Book of Nat. Soc. for Study of Educ. 1919, part II clip III., p55.
17. L. M. King: Learning and Applying Spelling Rules in Grades 3 to 8, Teachers Colleges Columbia U. Contrib. to Educ. \#517, 1932.
18. Wm. Kottmeyer: On the Relationship of Word Perception Skills in Reading and Spelling, Education, LXXI, M 1952, pg 600-3.
19. M. Lambader, W. Kottmeyer \& R. Wickey: Goals in Spelling II \& III, St. Louis, Webster Pub. Co. 1951.
20. D. H. Patton: Word Mastery Speller II \& III, Columbus, Chas. E. Merrill Co, 1949.
21. H. C. Pearson: The Scientific Study of the Teaching of Spelling, Teachers College Record XIII, 1912, pg 27-66.
22. Ina C. Sartorius: Generalizations in Spelling, Teachers College, Columbia U Contrib. to Educ. \#472, 1931,
23. H. Suzzallo: The Teaching of Spelling, New York, Houghton Mifflin Co, 1913, pg 89-90.
24. W. F. Tidyman \& E. Johnson: The Value of Grouping Words According to Similar Difficulties in Spelling. Jour. of Educ. Research X. Nov. 1924, pg 297-301.
25. G. A. Wagner: An Experimental Study of Grouping by Similarity as a Factor in Teaching Spelling, Unpub. Ph.D. thesis, U. of Penna,1912, summarized in Foran pg 38
26. L. B. Wheat. Four Spelling Rules, Elem. School Jour. XXXII, May, 1932, pg 697-706.

## 3. Oral Reading Survey, New York City, by Mary Johnson.

On August 3rd and 4th, 1965, members of the Reading Reform Foundation under the guidance of Mary Johnson of Winnipeg, Canada, tape-recorded the oral reading of primary school children in New York City parks. A total of 139 children volunteered to read, and the performance of all children in the survey who had been passed to grades II and III in New York City Public Schools has been tabulated in the accompanying table.

Volunteers were asked to read Johnson Test \# 9, which consists of the following two sentences 1. Mother will not like me to play games in my big red hat.
2. Mike fed some nuts and figs to his tame rat.

The words in Sentence 1 are in most primary school readers and therefore test for recognition of familiar words. Key words are: like, games, big, red, hat. The words in Sentence 2 are not usually found in primary readers and therefore test children's ability to attack new words. The words: Mike, fed, figs, tame, rat rhyme with the key words in Sentence 1.

It is frequently claimed by authors and publishers of look-say basal reading programs that children taught by these texts will be able to apply the "substitution technique" when reading new words at the Grade I level. This means that if they know the familiar word red, they will be able to decipher $f e d$ by thinking, "This word looks like red but starts like fun, so it must be $f e d$ ". This theory is not successful in practice, as the test results in the table demonstrate. Without formal teaching in phonics, it is expecting too much of many children to make such deductions on their own.

## INCIDENCE OF ERROR

| Passed to Grade II | Familiar Words, Sent. 1. | Unfamiliar words, Sent. 2. <br> Pupils \# 1 to 43 |
| :--- | :--- | :--- |
| Passed to Grade III |  | $84 \%$ |
| Pupils \# 44 to 77 | $22 \%$ | $40 \%$ |

Mary Johnson is the author of a number of articles on testing the ability of pupils to use their knowledge of phonics and the effectiveness of a teacher's teaching.

## JOHNSON ORAL READING TEST \# 9.

Mispronunciations and refusals made by Grade II and III unselected volunteers in Central Park, New York City, on August 3 and 4, 1965. Blank spaces represent words pronounced correctly. indicates that child was unable to attempt a pronunciation. PS = Public School.

| CHILDREN PASSED TO GRADE II |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Child |  |  | Errors |  | Familiar Words |  |  |  |  | Unfamiliar Words |  |  |  |  |
| No. | Age | PS | F. | U. | LIKE | GAMES | BIG | RED | HAT | MIKE | TAME | FIGS | FED | RAT |
| 1-8 | 6/7 |  | 0 | 0 |  |  |  |  |  |  |  |  |  |  |
| 9 | 7 | PS163 | 0 | 1 |  |  |  |  |  |  |  | --- |  |  |
| 10 | 7 | PS169 | 0 | 1 |  |  |  |  |  |  | tammy |  |  |  |
| 11 | 7 | PS165 | 0 | 1 |  |  |  |  |  |  |  | --- |  |  |
| 12 | 6 | PS163 | 0 | 2 |  |  |  |  |  | make | tam |  |  |  |
| 13 | 6 | PS90 | 0 | 2 |  |  |  |  |  |  |  | figus | feed |  |
| 14 | 6 | PS104 | 0 | 3 |  |  |  |  |  | make | time |  | feed |  |
| 15 | 6 | PS86 | 0 | 3 |  |  |  |  |  | milk | tail | --- |  |  |
| 16 | 6 | PS90 | 0 | 3 |  |  |  |  |  | make |  |  | --- | right |


| 17 <br> 18 <br> 19 <br> 20 <br> 21 | 6 6 7 6 | PS104 <br> PS90 <br> PS179 <br> PS28 <br> PS | $\begin{array}{\|l\|} \hline 0 \\ 0 \\ 0 \\ 0 \\ \hline \end{array}$ | 3 <br> 3 <br> 4 <br> 4 |  |  |  |  |  | milk --- <br> make milk | time time | --- | -ー- <br> --- <br> --- <br> Fred | hat |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 6 | PS236 | 0 | 4 |  |  |  |  |  | like |  | fish | --- | --- |
| 22 | 6 | PS64 | 0 | 4 |  |  |  |  |  |  | ram | fregs | --- | rot |
| 23 | 7 | PS104 | 0 | 4 |  |  |  |  |  | make | time | --- | --- |  |
| 24 | 8 | PS70 | 0 | 4 |  |  |  |  |  | make | time | --- | --- |  |
| 25 | 6 | PS120 | 0 | 4 |  |  |  |  |  | make | take | fudge |  | right |
| 26 | 6 | PS28 | 0 | 5 |  |  |  |  |  | --- | --- | fish | --- | --- |
| 27 | 7 | PS104 | 0 | 5 |  |  |  |  |  | --- | tow | --- | --- | rie |
| 28 | 6 | PS101 | 0 | 5 |  |  |  |  |  | make | --- | feegs | feed | --- |
| 29 | 7 | PS156 | 0 | 5 |  |  |  |  |  | milk | time | 促 | fez | red |
| 30 | 7 | PS163 | 1 | 5 |  | --- |  |  |  | --- | --- | --- | --- | --- |
| 31 | 7 | PS179 | 1 | 4 | little | --- |  |  |  | --- | --- | --- | --- | --- |
| 32 | 7 | PS110 | 5 | 4 | let | --- | boy | dog | --- | my | come | --- |  | rit |
| 33 | 7 | PS253 | 2 | 5 | --- | --- |  |  |  | make | --- | f-- | feed |  |
| 34 | 7 | PS70 | 4 | 5 | make | --- | --- |  | hant | --- | tummy | funny | fort | rate |
| 35 | 6 | PS179 | 3 | 5 | --- | --- |  |  | --- | make | --- | fish | --- | --- |
| 36 | 7 | PS31 | 4 | 5 | let | --- | --- |  | --- | make | --- | --- | --- | --- |
| 37 | 6 | PS279 | 5 | 5 | --- | --- | --- | --- | tet | make | can | from | --- | --- |
| 38 | 7 | PS156 | 5 | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 39 | 7 | PS90 | 5 | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 40 | 7 | PS163 | 5 | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 41 | 7 | PS70 | 5 | 5 | -- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 42 | 7 | PS70 | 5 | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 43 | 7 | PS156 | 5 | 5 | Sally father Jane Dick |  |  |  |  | mother brother sister |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PASSED TO GRADE III |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 44-53 | 7/8 |  | 0 | 0 |  |  |  |  |  |  |  |  |  |  |
| 54 | 7 | PS171 | 1 | 0 |  | --- |  |  |  |  |  |  |  |  |
| 55 | 8 | PS70 | 0 | 2 |  |  |  |  |  | make |  | --- |  |  |
| 56 | 7 | PS179 | 0 | 3 |  |  |  |  |  | -- | took | --- |  |  |
| 57 | 8 | PS708 | 0 | 3 |  |  |  |  |  | make |  | --- | --- |  |
| 58 | 8 | PS156 | 0 | 3 |  |  |  |  |  | make |  | flag | feel |  |
| 59 | 8 | PS248 | 0 | 3 |  |  |  |  |  | make |  | --- | --- |  |
| 60 | 8 | PS165 | 0 | 3 |  |  |  |  |  |  | --- | -- | fill |  |
| 61 | 7 | PS156 | 0 | 4 |  |  |  |  |  | milk | time | flags |  |  |
| 62 | 7 | PS163 | 0 | 4 |  |  |  |  |  | make | --- | --- | --- |  |
| 63 | 7 | PS163 | 0 | 4 |  |  |  |  |  |  | --- | --- | --- |  |
| 64 | 11 | PS163 | 1 | 2 |  |  |  | bed |  | milk |  | geevs |  |  |
| 65 | 8 | PS120 | 1 | 0 | let |  |  |  |  |  |  |  |  |  |
| 66 | 8 | P877 | 1 | 5 | take |  |  |  |  | --- | --- | --- | --- | --- |
| 67 | 7 | PS163 | 2 | 5 | let |  |  |  |  | may | --- | --- | --- | --- |
| 68 | 8 | PS51 | 3 | 3 | --- | --- |  |  |  | milk | tum | --- |  |  |
| 69 | 8 | PS51 | 3 | 5 | --- | girls |  | run |  | --- | --- | girls | --- | run |
| 70 | 9 | PS156 | 3 | 5 | --- | --- |  |  |  | --- | --- |  | --- | --- |
| 71 | 8 | PS156 | 3 | 5 |  | --- | --- |  | --- | --- | --- | --- | --- | --- |
| 72 | 6 | PS155 | 3 | 5 | --- | --- |  |  | --- | --- | --- | --- | --- | --- |
| 73 | 8 | PS70 | 3 | 5 |  | come |  | ride | have | make | laugh | flag | come | right |
| 74 | 8 | PS123 | 1 | 5 |  | --- |  |  | --- | --- | --- | --- | --- | --- |
| 75 | 7 | PS156 | 4 | 5 | --- | --- | --- |  | --- | milk | time | --- | for | --- |
| 76 | 8 | PS156 | 5 | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 77 | 11 | PS72 | 5 | 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

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## 4. Phonetic Approach or Conventional Method: Which is the more effective way of teaching reading, An Outline of Controlled Research, by Ann Hughes*

Presented at the Feb. 4, 1965 meeting of the Manhattan Council, International Reading Association, Ann Hughes, Director of Statistical Research, Reading Reform Foundation, New York, N.Y.

The 18 studies outlined below meet the Gurren-Hughes criteria by including:
a) one group which has had intensive phonics from the start of first grade,
b) a conventional-method control group of equal I.Q., which has not, and
c) t-tests or F-tests for significance.

A group was rated as "significantly superior" in the third and fourth columns of the outline if it achieved significant superiority in at least half of the subtests of comprehension, vocabulary and spelling administered.

| Date | Investigator | Was phonetic group significantly superior? | Was conventional group significantly superior? | Full report available from: | Condensed report available from: |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1939 | *Agnew, D. C. | Yes | No | Duke Univ. Research Studies in Ed. No. 5 | Hunnicutt \& Iverson, Research in the 3 R's |
| 1943 | Russell, D. H. | Yes | No | JER 37: 276-83, Dec. '43 |  |
| 1943 | *Murphy, H. A. | Yes | No | Boston University |  |
| 1948 | * Crossley, B. A. | Yes | No | Boston University |  |
| 1953 | *Wohleber, Sister <br> Mary Louis | Yes (3 groups) | No | Univ. of Pittsburgh |  |
| 1953 | McDowell, J. B. | No | No | CER 51: 506-19, Oct. '53 |  |
| 1955 | Henderson, M. G. | Yes | No | Champaign Dist. No. 4 School Board | Chicago Schools Journal Jan.-Feb. '56, pp. 141-7 |
| 1955 | Wood, W. | Yes | No | Queensland Dept. of <br> Pub. Instr., Mar. '55 |  |
| 1956 | *Sparks, P. E. | Yes (2 groups) <br> No (2 groups) | No | Indiana University | $\begin{aligned} & \text { ESJ 57: 386-90, Apr. ' } 57 \\ & \text { (with Leo Fay) } \end{aligned}$ |
| 1957 | Durrell \& *students | Yes | No | Boston University | JE 140: 1-48, Feb. '58 |
| 1958 | Kelly, B. C. | Yes | No | JER 51: 465-8, Feb. '58 | ESJ 59: 394-402, Apr. |
| 1958 | *Bear, D. E. | Yes | No | Washington Univ. | '59 |
| 1964 | Bear, D. E. (follow- | Yes | No | ESJ 64: 273-9, Feb. '64 | Dr. W.A. Wollam, Supt, |
| 1961 | up) <br> *Wollam, W. A. | Yes | No | Western Reserve University | of Schools, Alliance, Ohio |
| 1962 |  | Yes | No | Boston University |  |
| 1963 | *Santeusanio, N. | No | No | JER 57: 99-101, Oct. '63 |  |
| 1963 | Morgan \& Light | Yes | No | Univ. of Minnesota |  |
| 1964 | *Dolan, Sr. Mary | Yes | No | Tulsa School Review |  |
|  | Edw. |  |  | 21: 4-5, Sept. '64 | RT 17: 511-5, Apr. '64 |
|  | Duncan, R. L. |  |  |  | School Management 8: 46-7, Dec. '64 |

[^0]Phonetic Materials used:
Phonetic Keys

1. Henderson 4. Wollam
to Reading
2. Sparks*
3. Morgan \& Light
4. Kelly
5. *Duncan

Modifications of

1. Wohleber

Bloomfield's
linguistic plan:
2. McDowell

Hay-Wingo:
3. Dolan*

Queensland Readers:

1. Bear

Locally-prepared materials:

1. Wood
2. Murphy
3. Durrell et al
4. Crossley
5. Santeusanio

Unspecified:
1.Agnew*
2. Russell
*The dissertations that are starred can be purchased from University Microfilms, Ann Arbor, Mich. Most of the other dissertations are available on interlibrary loan.

Grade levels at which testing was done,
1st: Russell Wohleber Bear
Murphy Sparks Santeusanio
Crossley Durrell
2nd: Wohleber Sparks
Wood Kelly
3rd: Agnew Henderson Morgan \& Light
Wohleber Sparks Duncan
4th: McDowell Wollam
Sparks Dolam
6th: Bear
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[Spelling Progress Bulletin Fall 1965 p15 in the printed version]
[This was wrongly attributed to TS Watt. See full version by Gerard Nolst Trenité, researched and published in full by SSS in Journal 17. It can be seen as a stand-alone pdf in Miscellaneous.]

## 5. The Chaos Language

Dearest creature in Creation,
Studying English pronunciation,
I will teach you in my verse
Sounds like corpse, corps, horse and worse.
It will keep you, Suzy, busy,
Make your head with heat grow dizzy;
Tear in eye, your dress you'll tear,
Queer, fair seer, hear my prayer;
Pray console your loving poet,
Make my coat look new, dear, sew it!
Just compare: heart, beard and heard,
Dies and diet, lord and word.
Sword and sward, retain and Britain
(Mind the latter, how it's written);
Made has not the sound of bade;
Say: said, paid, laid but plaid.

Now I surely will not plague you
With such words as vague and ague, But be careful how you speak Say gush, bush, steak, streak, break, bleak.
Previous, precious, fushia, via,
Recipe, pipe, studding-sail, choir, Woven, oven, how and low, Script, receipt, shoe, poem, toe.
Hear me say, devoid of trickery:
Daughter, laughter and Terpsichore, Topless, measles, topsails, aisles, Exiles, similes and reviles.
Wholly, holly, signal, signing,
Try examining and mining,
Scholar, vicar and cigar,
Solar, mica, war and far,
From "desire" - desirable; admirable from "admire;"
Lumber, plumber, bier but brier,
Topsham, brougham, renown but known,
Knowledge, done, lone, gone, none, tone.
A of valour, vapid, vapour,
S of news (compare newspaper),
G of gibbet, gibbon, gist, I of antichrist and grist,
Differ, like diverse and divers,
Rivers, strivers, shivers, fivers.
Once, but nonce, toll, roll but doll, Polish, polish, Poll and poll.
Seven is right - but so is even,
Hyphen, roughen, nephew, Stephen,
Monkey, donkey, clerk and jerk,
Asp, grasp, wasp, demesne, cork, work.
Pronounciation - think of psyche -
Is a paling, stout and spiky;
Won't it make you lose your wits
Writing "groats" and saying "grits"?
It's a dark abyss of tunnel
Strewn with stones, like rowlock, gunwale,
Islington and Isle of Wight, Housewife, verdict and indict.
Don't you think so, reader, rather,
Saying: lather, bather, father?
Finally, which rhymes with "enough" -
Through, though, plough, cough, hough or tough?
While hiccough has the sound of "cup"
My advice is - give it up!
T. S. W. *(from a Dutch book on teaching English)

## 6. Cedric and Celia

(With apologies both to Dick and Jane and to Brief Encounter).

Hello, Celia.
Hello, Cedric.
Oh, Celia.
Oh, Cedric, oh, oh,, oh. I love you, Celia.
I love you, Cedric.
Oh, Celia, oh, oh, oh.
See the train, Cedric.
I see the train, Celia.
Oh, Cedric, oh, oh, oh.

See John!
You see John.
I see John.
John sees me.
John sees you.
John sees us.
Oh, oh, Celia.
Run, Cedric, run.
Run, run, run.

Theodore B. Dolmatch
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[Spelling Progress Bulletin Fall 1965 pp16,17 in the printed version]

## Book Reviews

## 7. The Open Court Basic Readers, reviewed by Helen Bowyer

There are six of them; edited by Dr. Arther S. Trace," Jr. and published by the Open Court Publishing Company. With the first semester readers, officially known as $1: 1$, goes a workbook, story cards and sound charts especially designed for the teaching of McQueen phonics. This system recognizes the same 42 basic speech sounds as do most other phonics systems in use in our schools but it differs from perhaps the majority of them in that it disposes "then and there" of all the most common spellings of each sound. For instance when the time for long $o$ arrives the children are taught not only the symbols it uses in toe, so, and sole, but also those it uses in boat, bowl and though. Similarly on the day - or days - when they learn the broad sound of $a$ in awl, they tackle those in aught, August, all and almost. This method has behind it a history of what Dr. Trace considers outstanding success; and not for a moment does this reviewer doubt that it is as efficient as any phonic system can be applied to spelling as malphonic as ours.

His stated expectation is that these 42 basic sounds and their host of common spellings will be mastered by the end of the first semester and that the children will pass into second semester well equiped to sound out all words they meet in Reader 1:2. Here's hoping his expectations have proved at least largely well-founded. For Reader 1:2 is a treasury of verse and prose such as few second semester moppets ever get a chance at. For, as Dr. Trace sets forth, the selections in it "were chosen after considering thousands of possibilities and rejecting most of them for pedagogic reasons or for the equally important reason that they were not good enough."

But as some of our readers may remember, the SPB enlarged on this back in December, 1963, when we reviewed Readers $1: 1$ and $1: 2$. At that date, these two readers were still the only ones of the six yet published. This Fall issue, therefore, will confine itself to the four which have since appeared, those for the second and third grades. For their content Dr. Trace makes the same high claim as for the earlier two adding, "Since the selections are primarily children s classics and therefore have stood the test of countless critics, parents and children, the teacher will know that they are as much a delight to teach as the students will find them a delight to read."

Many a reviewer will share that delight. This one does. The four books total 731 large, beautifully uncrowded pages. The print is clear and highly readable and the margins are roomy. All four are profusely illustrated with both color and black and white illustrations of a distinctive kind. 2:1 is introduced by:

A book is a pleasure;
A book is a treasure:
A book means much to me.

A book is a joy
To a girl or a boy
As only a book can be.

Of the 196 selections, prose and verse, of these four readers, the majority are "free for nothing" to any text-book compiler. They are myths, folklore, fairy tales, hero stories, rhymes and proverbs which have been common property for generations in the English speaking world. Some of them still attribute their origin to some long dead celebrity - Mother Goose, Hans Christian Andersen, Aesop, the Brothers Grimm - but most are simply introduced as A Welsh Tale, A Canadian Story, An Indian Fairy Tale, An American Folk Rhyme, A Classical Tale, etc. Of the American Folk Rhymes, especially, some are so delightful it seems incredible that the names of their creators could have been lost. How many humorists of known repute ever wrote anything more memorable than these four lines:

The Donkey and the Zebra
When the donkey saw the Zebra
He began to switch his tail.
'Well. I never," said the donkey,
"There's a mule that's been to jail,"
As for this backward rhyme, have you ever read anything more delightfully preposterous?

One bright day, in the middle of the night,
Two dead boys got up to fight,
Back to back they faced each other,
Drew their swords and shot each other.

A deaf policeman heard the noise, Came and killed the two dead boys. If you don't believe this lie is true, Ask the blindman, he saw it too.

As for Way Down South, where has it been hiding all my life - and probably all of yours?
Way down South, where bananas grow,
A grasshopper stepped on an elephant's toe.
The elephant said, with tears in his eyes,
"Pick on somebody your own size."
With such a wealth of hilarity laying around loose for any text-book writer to pick up, it becomes more and more deplorable that most Americans under forty have had to do their learning to read on such inane and witless stuff as Dr. Trace excoriates in his recent book, Reading Without Dick and Jane. Not that humor has any more than its proportionate place in these four readers of his. There are poems of such sheer beauty as Cristina Rossetti's:

Who has seen the wind?
Neither you nor I.
But when the leaves hang trembling, The wind is passing by.

Who has seen the wind?
Neither you nor I,
But when the trees bow down their heads,
The wind is passing by,

Then there's Emily Dickinson's lovely little question of the sensitive, imaginative child, who was probably her own early self:

Will there really be a morning? Is there such a thing as day? Could I see it from the mountains If I were as tall as they?

Has it feet like water-lilies?
Has it feathers like a bird?
Is it brought from famous countries
Of which I've never heard?

Oh some scholar! Oh some sailor!
Oh some wise man from the skies!
Do please tell a little pilgrim
Where the place called morning lies!
The two second grade readers are titled: A Trip Through Wonderland and Our Country. The two third grade ones follow suit as: Magic World and A Trip Around the World. Thus in the first semester of each year, reading runs largely to the imaginative - to fairies, witches, dwarfs, talking beasts, birds and fishes. And the second semester deals more with the factual, the historic, the scientific, in the areas their titles indicate. Not that the division is ironclad. Wonderland and The Magic World can find room for Androcles and the Lion and the story of George Washington Carver while Our Country and A Trip Around the World can indulge their seven and eight year olds with some such selections as Tom Thumb, the Frog Prince and The Tar Baby. Whatever the selection, the technique of assimilation is practically the same in all four readers. It begins with a list of Words to Watch out for words whose pronunciation, spelling or meaning might hold up the reading of the story. Even in Reader 2:1 these words run to ordinarily and musician, for it is Dr. Trace's firm conviction that the McQueen phonics of Grade One has equipped the child to sound out any word he meets in the rest of his primary school reading At the end of each story comes a list of questions, designed to indicate not only whether the child has got the surface meaning of what he has read, but what cerebration beyond that it might have stimulated. Concerning the little Dutch boy who spent that whole cold night plugging up the hole in the dike with his benumbed little hand, Reader 3.2 asks: "Why didn't Hans think he was a hero? Do you think he was a hero? Why."

Besides the word lists and questions immediately pertaining to each selection, each reader contains some 15 other Word Study Exercises aimed at increasing the pupil's knowledge "at large," For, as Dr. Trace puts it, the allover purpose of these Open Court Readers is the educated child. One such Word Study Exercise in Reader 2:2 requires the pupil to read and spell the singulars and plurals of the dozen words it lists - child, mouse, life, loaf, woman, city, calf, goose, man, moose, leaf, fish. This done, he is to find out for himself and learn to spell the plurals of deer, lady, thief, valley, scarf, penny, louse, ox, monkey, brother-in-law. After which he is to write five sentences, each one using the singular and the plural of one of these tricksters. As a model it offers, "Some men are afraid, but this man is brave." So delightfully exploratory could this Exercise be for seven year-olds, one can picture little groups of them putting their heads together over it at recess or after school and even hunting up still more irregular plurals.

In Reader 3:1 comes a Word Study Exercise on astronomy which calls for thinking beyond what most basal series demand of their first semester third graders. It is, to be sure, preceded by three stories - Copernicus and Galileo, The Moon, The Nine Wanderers (i.e. our solar planets) but of the 27 words it requires these eight year-olds to spell and understand, cosmic rays, the Milky Way, cons telGation,, Orion, satellites, observatory, galaxy, comet, eclipse are new. Each child is to write a story on the subject indicated by one of these words and all are to be clear on the difference between a star and a planet, a satellite and a meteor. But the climax of the Exercise comes in the question "Why do you think astronomy is important?"

This reviewer has no doubt that some children who have reached this point in the Open Court Readers - two thirds way through 3:1 could give a surprisingly knowledgeable answer to this question. But these four books have not been on trial long enough for much in the way of reliable statistics.

The Open Court Readers, says Dr. Trace in his Foreword "are designed for the normal class which has bright, average and below average students." The bright students will find them stimulating because of the unique and challenging character of the stories, poems, proverbs, etc. Slow students are capable of sounding out and reading the selections and will be stimulated by the example of the bright students. In this way they will progress to the fullest of their capacity."

None the less, he makes a special provision for the brighter boys and girls. At the end of each book are some selections for "Readers Brave and Bold." It is to be hoped that a high proportion of even the first semester second-graders will lose no time in electing themselves to this elite category. For Reader 2:1 presents the brave and the bold with a literary feast no seven year-old should miss, even if he must call on Dad and Mother for help. Along with two engrossing prose selections - one of them by Dr. Trace himself - he will find Edward Lear's immortal nonsense poem, The Table and the Chair, Mother Goose's I Saw a Ship A-Sailing and Lewis Carroll's inimitable Crocodile. With them comes a Word Study Exercise engrossing enough to keep the bravest and boldest up long past bedtime - indeed to keep Dad and Mother forgetting about bedtime in their own absorption in the game. Here it is - and the SPB would like to hear from any youngster under ten who gets the whole thirty words out of automobile.

## Word Study Exercise

## Scrambled Words

1. Unscramble these words
yob eter arhci dnowwi
yda rigl srohe arechet
gpi ogod uoseh prsofs
nma ribd rewat lhosco
yee ersto roflo tehmor
ylf nosw rheat epneci
ary toba tanip klena

## 2. Read and answer

1. Find another word that the letters in each of these words make: rat pool peek state art pest leap meat
2. See how many words you can make out of the letters in this word: automobile More than 30 words are possible

Now what has spelling reform to say about these readers? For the wording of that, the SPB has turned over to Radley Hall, a new name among its contributors but a long time advocate of a completely phonemic spelling for the English speaking world.
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## 8. Comments on Dr. Trace's Readers, by Radley Hall

There are few collections of children's classics which I would rather see in the hands of parents who read to their pre-school and primary grade off-spring. But I strenuously oppose them as material for the teaching of reading. As I strenuously oppose all primers and readers printed in a spelling as harmful to the child as is our traditional orthography.

In this comment I am going to include Readers 1:1 and and 2.1, the books for the first and second semester of Grade One - books which the SPB reviewed back in Dec. 1963. I am doing this because the children for whom they were written are then only six years old, and the damage to their minds inflicted by the like of: toll, bowl, coal, soul, whole is greater than it would be a year or two later. Because, according to Glenn Doman of the Institute for the Achievement of Human Potential, the pupil's potential for the recognition of consistency is proportionately greater at six than it will be at seven. Indeed, what it will be at seven depends in part on the development it undergoes at six. And what it will be at eight depends in part on the nurture it gets at seven. After eight, if I read Mr. Doman aright, the mind is basically as good as it is ever going to be. Education, experience, practice of the right things, associations of the right kind can make it more and more proficient in the basic abilities it has developed up till then, but there after it will develop no new abilities.

These three years, then, the sixth, seventh and eighth, the years for which Dr. Trace wrote Isis readers, constitute the period when the school can do more than it ever can again, for the achievement of the potential which the child brings to his first classroom.

Among the highest attributes of the potential which we humans have so far displayed, are the demand for consistency, touched on above, the recognition of analogy, the expectation of "like cause - like effect," the desire for economy of time and effort in the actualizing of our aims. The aim of the Open Court Readers is the teaching of a high proficiency in reading in these years from six thru eight. What sort of treatment does their spelling give these higher human attributes? What will horse, coarse, source, force do for the child's sense of consistency? What training will does, buzz, dozen, cousin, give his recognition of analogy? What "like cause-like effect" can he pounce on in rhyme, climb, time, worse, curse, hearse? What economy of time and effort will he achieve in learning to read, write and spell me, tea, key, sugar, should, chute? What impels educators to keep on turning out primers and readers, which; whatever the literary merit of their stories and verses, ride roughshod over these high human faculties on whose cultivation depend not only the wellbeing of the individual boy and girl, but the very level of our civilization? When all that is needed to make reading and writing the great developer of child-potential which it might be, is primers and readers in a wun-simbl-wun-sound spelling.

All at least for the majority of children. And what could be easier to give them? For that spelling has long been on hand. It is smiling up at us from the parentheses of every standard school dictionary. Look up once, gnat, give, giraffe in the Thorndike-Barnhart elementary and you will find them converted from their roughshodding of the child's natural expectations to the happy fulfillment of them as wuns, nat, giv, jiraf. What still unfossilized adult would find any difficulty in using his own higher attributes along this line. On the analogy of lie, pie, die wouldn't Dr Trace himself instantly get the sound and meaning of bie, rie, gie, sie? And on that of toe, wouldn't he do ditto with noe, soe, throe, thoe? Then why force on the defenceless child mind, the sign-sound monstrosities of by, rye, guy, sigh - know, sew, throw, though?

It is no use to object that ie and $o e$ are not symbols which the dictionaries use in their parentheses. In them, the five long vowels (as in may, me, my, mole, mule) and the broad vowels (as in palm, fall) are indicated by diacritics. And diacritics are a nuisance in handwriting and impractical on the standard keyboard. True, but World English long ago met that difficulty by replacing the diacriticked single vowels with vowel digraphs, each with its own unique and unchanging value, and thereby regularized the foregoing words into mae, mee, mie, moel, muel. i.t.a. too, is handling the situation effectively, if in a different way. Moreover, both systems follow the dictionary lead in providing the two th's required by then and thin; the two oo's demanded by foot and boot; the $z h$ which gives rouge, vision, measure, the soft sibulent (roozh, vizhun, mezhur) for which current spelling makes no provision. Why didn't our educators long ago adopt these vowel and consonant digraphs, each as the wun-and-oenli visualizer of the sound which its dictionary equivalent assigns it? The mind reels in trying to compute the amount of reading retardation their failure to do so has caused these last hundred years.

Nor is that the whole of their dereliction. Or anywhere near it. For example, even if they saw an excuse for a final $e$ as a means of lengthening the stem vowel of such words as mate, mete, mite, mote, mute, what justification can they adduce for retaining it in the like of raise, cheese, choose, where the stem vowel is long already? Above all, why tack $e$ onto words whose stem vowel is short - as with have, give, pulse, nurse?

The answer to these is many headed, and some blistering things can be said about most of these heads. But I think I've never read anything to equal Dr. Trace's position on page 93 of that book of his, Reading Without Dick and Jane, which the SPB reviewed in its Summer issue of this year, "To reform the English language along the line" advocated by our spelling reformers is to desecrate it. We are too proud of our language as it is, to permit any literate person to spell said, for example, as sed, or been as bin." All I can say is, "'Speak for yourself, professor, I am not included in that we." In the first place, who is proposing to reform our language? Our language is an invisible thing which we sound with our speech organs, hear with our acoustic nerves and think with our minds. That sounding and hearing and thinking would remain the same, if, when we made them visible on paper, we wrote sed and bin instead of said and bin. And sum, and dun, hoem and koem - in place of some and dumb, home and comb. And so would that heritage of knowledge, story, song and poetry which print has preserved for us. What would we lose of the "faraway and long ago," of the rhythm, rhyme, alliteration of these immortal lines of Coleridge if they met our eyes as:

## In Zanadoo did Koobla Kaan

A staetli plezher doem dekree,
Hwaer Alf, the saekred river ran
Throo kavernz mezherles too man,
Doun too a soundless see.
Was Spanish desecrated when, in the early 1700's, its Academia Real achieved for it the beautiful alignment of its spelling with its speech sounds which continues to this day? Was Turkish desecrated when in 1929 Kemel Ataturk proscribed its chaotic Arab orthography and gave his mother tongue a Roman alphabet which makes it as phonetic as Spanish. Will Chinese be desecrated in that near future when the 38 letter Roman alphabet, sponsored by Chou En-lai himself, replaces in the schools and the popular press those thousands on thousands of ancient word-signs which the would-be literate must spend many years in acquiring?

If not......? Well, if not, are there any inferences to be drawn?

## That Dear Ph

Phaster, phaster, phlecks the phoam, Pharther, pharther phrom my home Phlying phithes, phins agleam, Phlashing up phrom the Gulph Stream, Over there ... to lepht ... to right, A seacow with her calph in phlight,

While, phull ahead, phour dolphins play, Phantastically phleet and gay, And phurther ophph, is that a whale Phlipping up its phearphul tail? Oh, my phirst phoray o'er the sea, How phabulous you pheel to me,

Helen Bowyer
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## 9. Developing Reading Efficiency, by Lyle L. Miller, Ph.D. reviewed by Newell $W$. Tune

This book is a little bit different from the usual book we have reviewed. It is not a book for beginners, but rather both a text book and a self-teaching book for those who already know how to read but are slow both as to speed of reading and slow at comprehension. It is graded so as to be useful from junior high thru 10th grade. Altho this manual may be used by individuals, it is intended for use with small groups where competition may serve as a psychological motivation for increasing proficiency. It is not unusual for students to double or triple reading efficiency if they make a sincere effort to do so.

It starts off with reading exercises for increasing eye span and establishing rhythmic eye movements. Also basic to the process of developing reading efficiency is the need to increase rate of mental perception of what is read and so reduce the eye fixation time. Difficulty of the exercises has been standardized sufficiently to allow comparisons between similar exercises.

The following are some of the more important attempts at standardization.

1. In all exercises the correct answer may be found with equal frequency in each answer column or position.
2. In the word recognition and word meaning drills, all words used in the key column were selected from Thorndike's list of 10,000 most frequently used words. All words in the answer column occur in his list of 30,000 most frequently used words. All words used in both lists were further checked against the Grade VIII list of words in Henry Rinsland's A Basic Vocabulary for Elementary School Children. No words were used in these exercises which are not included in this Eighth Grade list. Therefore these exercises provide an excellent vocabulary checklist for all junior high or high school students.
3. In the phrase and sentence meaning drills, the keywords have all been selected from the same 30,000 word list and from the Eighth Grade word list mentioned above.
4. The section on reading for ideas has been checked by the Flesch Formula and is of an appropriate level of difficulty for junior high and high school students. Exercises are arranged in order of increasing difficulty from sixth grade level to 12 th grade level.
5. The Exploratory Reading and the Study Reading drills have all been equated to a common length and are arranged within each set in order of increasing difficulty from 6th grade to 12th grade level. Exercises in these two series are fairly comparable in reading difficulty so that they may be used in pairs to demonstrate the importance of thinking during the reading process.

Altho these materials are arranged by groups in the sequence believed to be most advantageous, the groups are designed for some overlapping in class practice. For example, practice on "word meaning" exercises should be started when the class is only $30 \%$ thru "word recognition." This overlapping in the four basic groups of exercises provides better continuity.

There are four series of exercises of 20 each. These have the following appropriate titles. Word Recognition Drills, Word Meaning Drills, Phrase Meaning Drills, Sentence Meaning Drills. They start with the easier and work up to the more difficult. All have answers in the back and crossreferences.

These are followed by three series of drills which are really most interesting stories, carefully edited for length and grade level classification. The 20 stories in each series are either nature studies, exciting adventures, patriotic stories, or stories with a purpose or a moral. The check questions which follow tell the amount of comprehension.

All in all, we think that a class using this textbook should be the most enjoyable as well as profitable that a student could select in his English department.

Published by Developmental Reading Distributors, Laramie, Wyo. 1962, revised 1965. \$3.25. pp319.
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[Spelling Progress Bulletin Fall 1965 pp19-21]

# 10. Reform of the Chinese Written Language, by Chou En-tai et al, reviewed by Kai-yu Hsu, Ph.D.* 

*Dr, Kai-yu Hsu is Chairman Foreign Languages Div. Carnegie Chinese Project, San Francisco State College.
(Peking: Foreign Language Press, 1965), 63 pp
This booklet is a revised English translation of a work first published under the same title in Peking in 1958. It includes a few official, but very revealing, comments on the language reform movement currently afoot in Mainland China. The reference it makes to the historical development of the movement is sketchy, but reliable.

The importance of an effective medium of communication hardly needs any underscoring in a world situation where human beings find it increasingly necessary to have more to do with one another. The need for an effective language, both spoken and written, in mass communication in a country bent on bringing some form of order out of chaos, was dramatically felt in the latter half of the 19th century in China. The Chinese intellectuals were understandably very proud of their literary tradition, embedded in their language, but those of them concerned with the state of affairs in their country realized that something had to be done about the language, if China was to embark on the course of modernization.

The logic was a simple one. In order for China to resist foreign encroachment, exemplified in such a humiliating experience as the Taipin rebellion and later the Boxer rebellion, she had to build a strong army and solvent economy. Even leaving the lofty aspiration of man aside, the most practical demanded that the various segments of the Chinese populace must learn the technical know-how needed for industrialization, and the able-bodied man must acquire the knowledge and skill of modern warfare. It was not surprising that mass education in China, advocated by a few clairvoyant
persons from time to time in China's history, for the first time became a matter of popular demand in the 19th century. A movement to eradicate illiteracy was then supported by both the government and the non-government circles. While the literacy campaign dealt with principally the written language, the drive to promote a standardized national speech to cut across the dialectal barriers was given impetus by another dramatic experience. The government leaders were trying to recruit soldiers from various parts of the country. When these recruits came together for training, the responsible officers found themselves unable to communicate directly with these young people brought together from the various cities and villages. Their lectures were not understood, and discussion in a training institution became impossible. The promotion of a national speech thus became a wide spread concern.

The effort to improve mass education accelerated two developments in the written language. The first was the encouragement of using the vernacular language, writing down what one spoke. Altho since medieval times some Chinese writers had made good use of the natural speech in novels, plays, and short stories, by far the literary orthodoxy was maintained in the classical written language which bore no stylistical resemblance to the daily speech, A new literature began around the beginning of the 20th century as the writers persisted in writing down what they actually spoke. The second development was a recognition that the laborious process of writing the Chinese characters could somehow be simplified. In hand-set printing, the complexity or simplicity of each single Chinese character made no difference. However, in handwriting and hand copying, the tendency to eliminate certain strokes in many characters to make them easier and faster to write had become manifest since ancient times. Thus it became a matter of regularizing and standardizing the simplified characters for general use, both in handwriting and in printing.

To make the instruction and the use of the language more effective there occurred the need to have an efficient phonetic notation system. The traditional system for phonetic notation in Chinese was far from accurate. None of the latter designs, including the systems adopted by Western Missionaries dating back to the 17 th century; have proven completely satisfactory. A general direction was clear the growing need to translate names and terms originating from a Western European language argued most strongly for the adoption of the Latin alphabet. Further reinforcing this argument was the advantage of using the writing, printing, and other communication devices developed on the basis of the Latin alphabet. Consequently, the beginning of the 20th century saw a strong current in China agitating for the popular adoption of an alphabetical script in spite of the fact that an independent set of Chinese phonetic symbols was designed and put into use quite extensively with government support.

These, then, have been the three main tasks involved in the language reform movement; simplification of the Chinese characters, popularizing of a standard national speech dialect, adoption of the Latin alphabet to transcribe Chinese phonetically. To accomplish the first task, the promoters of the simplified Chinese characters have consistently observed the one overriding principal, and that is, to begin with those simplified forms of characters already in current use in handwriting, The only thing needed to make these simplified characters official and standard forms would be persuading the regular press to adopt these forms as substitutes for their regular complicated traditional versions. Wherever several simplified versions of the same character are available, a decision would be made in favor of the simplest and most readily identifiable version. Effort to create new simplified characters to replace the traditional ones would be exerted slowly and cautiously, and controlled by a process of experimentation in the press to solicit popular reaction. When the first newspaper appeared with some of the simplified characters in print, it was understandably disturbing to the reading public unaccustomed to seeing these new forms in print. Public discussion followed which revealed considerable controversy. But there was no attempt to change the written language arbitrarily and wholesale; there have been no violent reactions against it as the adoption of English as the official language in some parts of India has occurred.

The second task, promoting a national standard speech, has been aided by the simple fact that people are circulating more and more from one part of the country to another. Since every regular school has to acknowledge one standard national speech dialect, there is no reason why it cannot accept the one that is already extensively accepted. In Mainland China as well as Formosa today, every individual having gone through public education institutions is able to use the national speech. If he lives in a strongly dialectal area, he may continue to use the local dialect at home and among his local associates, but he is capable of communicating with his fellow countrymen who use the national speech.

The organized effort in Mainland China to develop a transcription system based on the Latin alphabet has had the benefit of several other experiments all using the same alphabet. - After a series of adjustments the system that is currently used parallels very closely to what is known in this country as the Yale System. The Yale System., first proposed by a number of linguists trying to design a convenient phonetic transcription for the United States Army personnel studying the Chinese language, was named in recognition of the contribution made by scholars affiliated with Yale University who improved and perfected the system. It has been adopted by most of the Chinese language instructional programs in this country. The system used in Mainland China is referred to either as the "Latinized New Script" or simply as the Pinyin System, meaning phonetic spelling system, During the past decade, a good supply of dictionaries and reading materials prepared with the Pinyin phonetic notation has been produced. It shows promise of becoming a standardized transcription for general use in connection with the Chinese language.

The booklet under review claims encouraging progress in all three aspects of the language reform movement. The claim is relatively modest, and there seems to be little doubt that such progress has been continuing since 1958, the date of the documents collected in this booklet.

The authors of the statements are by no means unknowledgeable persons. Chou En-lai, Premier of Communist China, has in recent years shown an increasing concern with the ideology and the intelligentsia in China. Wu Yu-chang, veteran Communist leader, has been in charge of the language reform committee since the beginning of the new regime. Li Chin-hsi is a leading linguist with numerous publications on Chinese language to his credit. Besides reporting the official actions taken in language reform since 1948, these authors also give a rather complete picture and rationale for the entire movement. Their statements reflect the points mentioned in the foregoing paragraphs and, in addition, they openly acknowledged one more political function of the language reform campaign. The ethnic minorities, of whom some do not yet have written languages of their own, are being encouraged to develop their written scripts. The Chinese character system is unwieldy for adaptation to this task - but the Latin alphabet suits the purpose extremely well. While stressing the need for language reform in the overall effort of rebuilding China into a unified country, these authors are noticeably careful in stating their cases very mildly. They reiterate the theme that language takes its own course in modifying its sound or syntax, and any artificial acceleration of this process is bound to fail. In the early 1950's, the Chinese Communist leaders speaking on the subject were generous in quoting Stalin, who said that no language could be changed overnight. Interestingly in this booklet the Chinese leaders no longer used Joseph Stalin as their authority. Instead they quote their own scholars.

The language reform movement in Mainland China has not been a drastic measure. It has had its expectedly moderate success, and will contribute to mass education, technical communication, and the nation's general advancement. There has been little indication that the study of Chinese classics in the institutions of higher learning has been or will be affected. The booklet is very useful in giving a nutshell sketch of the movement up to 1958.

## 11. Notes and Quotes from: Reform of the Chinese Written Language, compiled by Newell. W. Tune

The first task is the simplification of the Chinese characters. It is clear that the simplified characters are easier to learn and to write than the characters in their original form. It is therefore natural that the masses, including the workers, peasants, school pupils and school teachers, enthusiastically receive the simplified characters. Among these are a number of characters which have been simplified by the Japanese.

The second task is the popularization of the common speech. Among the flan people, a great diversity of dialects exists - the diversity being mainly pronunciation. People of different areas each speaking their own dialect, can hardly understand one another. Without a common speech, we shall, to greater or less extent, meet with difficulties in our national construction. The leaders feel more and more the urgent need of a common language. It is therefore, an important political task to popularize the common speech with the Peking pronunciation as the standard.

Progress has been made in this extent since the National Conference for Reforming the Chinese Written Language, held in October, 1955. At the end of 1957, there were, among the language teachers of the primary, secondary and normal schools in the whole country, 721,000 who had been trained in the phonetics of the common speech. A large number of primary and secondary schools have begun to use the common speech in teaching. (This in less than two years). More than two million people listen to the radio program on the teaching of phonetics in the common speech, sponsored by the Minister of Education.

The third task is to draw up and popularize the Scheme for a Chinese Phonetic Alphabet, It should be made clear at the outset that the scheme is to annotate the characters - phonetically and to popularize the common speech. The second function of the scheme is to serve as a useful means of teaching and learning the common speech. The third function is to serve as a common basis on which the various minority nationalities in the country may create or reform their written languages, A large number of the nearly 50 nationalities in China still have no written language of their own, Others have written languages which need improvement, because they use unusual characters.

The fourth function is to help foreigners to learn Chinese and thus to promote cultural exchange. Now that we have a scheme for a Latin phonetic alphabet, we can use this alphabet for textbooks, dictionaries and other reading materials to make it easy for the people of other countries to learn Chinese. The scheme also has other uses. For example, it can be used to transliterate the names of foreign persons and places, scientific and technological terms, and names of Chinese persons and places in documents and newspapers intended for foreign readers. It is not an exaggeration to say that, considering the uses we have listed, the formulation of the Scheme for a Chinese Phonetic Alphabet is a great event in the cultural life of the Chinese.

Will the adoption of the Latin Alphabet in the Scheme for a Chinese Phonetic Alphabet be harmful to the patriotism of the Chinese people? Can we not devise an alphabet ourselves? Beginning in

1952, the Committee for reforming the Chinese Written Language spent nearly three years in an attempt to create an alphabet - including the revision of the zhuyin zimu. The attempt had to be given up as no satisfactory result could be obtained. The Latin alphabet was then adopted. At present more than 60 countries use the Latin alphabet as symbols for writing, including Britain France, Germany, Italy, Spain, the Netherlands, Denmark, Sweden, Norway, Albania, Hungary, Poland, Czechoslovakia, Rumania, Viet Nam, Indonesia, and three members of USSR, Estonia, Latvia and Lithuania, In adopting the Latin alphabet, these countries made necessary adjustments and improvements to suit the needs of their own national languages. So the Latin alphabet has become each nations own alphabet. In another respect, we can say that the Latin alphabet is a set of symbols of international usage, and no country can claim it as its own. It is a set of common symbols which is indispensible to those being educated in algebra, geometry, chemistry or physics. Just as the Arabic numerals, the Gregorian calendar and the Christian era, the Metric system of weights and measures, and the musical staff have become the common property of mankind as a whole and now do not belong to any particular nation, so with the Latin alphabet. The huqin, a Chinese fiddle (like the Latin alphabet; it was not created by the Han people), has become our national musical instrument because it suits our needs. So will the Latin alphabet become our national alphabet because it suits our needs - and it has actually done so in our present scheme.

Since Congress has approved it, we think the scheme should gradually be put into general use in the following manner:

Firstly the phonetic alphabet should be taught in primary, secondary and normal schools. As there may not be enough teachers who are competent to use the new alphabet, it can be taught first in certain key localities and then gradually put into general use in 1959. Starting from the autumn of 1958, the teaching of the alphabet can be carried out on a large scale among first-year students of the secondary and normal schools all over the country.

Secondly, as an aid in wiping out illiteracy, the alphabet should be taught among adults in the cities and rural areas speaking the common tongue. We hope that, beginning next year, the education departments will make vigorous efforts to train a number of people to form the core in the work of popularising the alphabet; to teach the alphabet to cadres engaged in spare-time and literacy education They also conduct experiments .in teaching the alphabet in certain factories and agricultural producers' co-operatives, where conditions are favorable.

Thirdly, the alphabet should be popularized in publications and translations. It should be widely used in the compilation of various kinds of textbooks, charts and reference books, Dictionaries should be compiled in alphabetical order in which the alphabet is used as a guide to pronunciation. The alphabet may also be used to annotate the characters in popular publications and picture-story books,

Fourthly; the alphabet should be put into trial use in the telegraph service. Latin letters have for many years been used in the telegraph service of Northeast Chinas railways, but they have not been popularized in the railways of the rest of the country.

Fifthly, the alphabet should be popularized in public places. It should be used alongside the characters written on signboards used in railways and highways, indicating streets, hospitals, banks, and other public places. It can also be gradually used alongside the titles of newspapers and magazines and on the signboards of government offices.

Sixthly, as the alphabet will make Chinese much easier to learn, it should be used to help China's many minority nationalities and foreigners to study the Han language. It should also be used to compile special textbooks, dictionaries and reading materials for their use.

Seventhly, the Scheme for the Chinese Phonetic Alphabet may serve as a basis on which various minority nationalities may create their own written languages. In creating or reforming their written languages, the minority nationalities should, in principle, adopt Latin letters and use the phonetic scheme as a common basis. The pronunciation of the letters and their usage should be unified as much as possible, as this will make it easier for all the nationalities of our country to learn from one another and to promote social contacts.

Eighthly, linguists should make further research into the scheme. When it has been promulgated, they should go on with their research and experiments so as to continually prove it in the course of practice. The use of this scheme regarding teaching programs and methods, methods of indicating tones, the combination of characters to form words, the transliteration of foreign words and the annotation of dialects should also be the object of research and experiment.

We think that the above are the chief tasks which should he tackled when the scheme for a Chinese Phonetic Alphabet is finalized.
(Note: This Scheme was later passed by the First National People's Congress at its fifth session on February 11, 1958).

Wu Yu-chang, Asst. Minister of Education, Director of the Committee for Reforming the Chinese Written Language.
Li Chin-hsi, well known linguist and Prof. at Peking Univ.
Li Chu-chen, well known industrialist and Minister of Light Industry.

## 12. ORTHOGRAFIC REFORM by Leo G. Davis (author of 'k-a-t spelz cat")

Considering the growing interest in special primary orthografy, all parents and educators should make comparative study of the various proposals for simplified spelling. Thus, the following demonstration of two systems of simplified spelling, - the five-vowel system based on compatible traditional patterns and rules,- and the ten-vowel using small capitals A, E, I, O, U, as long vowels, and lower-case a, e, i, a, u, as the short.

Furst it iz to be noted that "simplified" duznt nesesaryly mene "stable" furst it iz tU bE noted that "simplified" duznt nesesAryly mEn "stAbl"
nor "fonetik", but merely "less complicAted". Furthermore, fonetik perfectshon nor "fonetik", but mirly "les kamplikAted". .furthermor, fonetik perfektshan
iz vocally imposabl, az wel az mecanikly impractical, and sicolojikly iz vOkally impasabl, az wel az mekanikly impraktikal, and sIkalajikly
inakseptabl tu the majority. Thus the best we can hope for at this time iz inakseptabl tU thE majority. .thus thE best wE kan hOp for at this tIm iz
rezonably stable spellings for basik fonemes only, with simpl rules guverning rEzanably stAbl spelingz for bAsik fonEmz Only, with simpl rulz guverning
eny "exseptshons". - Holding evry advantaje over ol previus proposals eny "exseptshanzs". .holding evry advantAj Over al prEvius prapozalz
within the curent alfabet, ether ov theze notashons shood be more akseptabl within thE kurent alfabet, Ether av thEz nOtAshanz shood bE mor akseptabl
to more peple, for eny purpos, than enything yet ofered. Houever, being tU mor pEpl , for eny purpas, than enything yet aferd. .haUever, bEing
basikly fonetik and holding the advantaje in simplisity ov brevity, the bASikly fonetik and holding thE advantAj in simolisity av brevity, thE
ten-voul orthografy iz spesifikly recomended for yuse in ol primary studys, ten-vaul orthagrafy iz spesifikly rekamended for yus in al primAry studyz,
after that it shood sune becum standerd thru "comon yusaje", which iz final after that it shood sUn bEkum standerd thrU "kaman yUsAj", which iz fInal
othority in this feld. Oltho quite sutabl for jeneral yuse, the five-voul athority in this fEld. . altho quIt sUtabl for jeneral yUs, thE fIv-vaul
orthografy iz spesifikly recomended for thurd-grade "readers" only, - after orthagrafy iz spesifikly rekamended for thurd-grAd "rEaders" Only, — after
which students shood be able to make normal yuse ov tradishonal literchure.
which stUdents shood bE Abl tU mAk normal yUs av tradishanal litercher.
Thus we wood hav an indefinit tranzishon piriod ov "opshonal" spellings, Thus wE wood hav an indefinit tranzishan piriad av "apshanal" spelinz, without the orthografik "chaos" reactshonarys seme to fere. withaUt thE orthagrafik "chaos" rEakshanAryz sEm to fir.

Coments spesifikly invited. Leo G. Davis, Cathedral City, Calif. kaments spesifikly invited. IEo g. dAvis, kathzdral sity, kalif.
(Paid advertisement)


[^0]:    *Starred studies are doctoral dissertations.
    RT - Reading Teacher
    JER - Journal of Educational Research
    ESJ - Elementary School Journal
    CER - Catholic Education Review
    JE - Journal of Education

