

Spelling Progress Bulletin [incomplete]

Dedicated to finding the causes of difficulties in learning reading and spelling.

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Coming Attractions.

The next issue of the Spelling Progress Bulletin will contain some of the following articles:

Homophones, Homographs, Heterographs - the Deceitful words of English.

How Phonetic is English Spelling?

A Means of Measuring Spelling Irregularities.

The Disintegration of Our School System.

Juvenile Delinquency and Education, with Emphasis on Reading Ability.

All or Nothing For Johnny.

Eyes That See Not.

The Problem of Reforming Our Spelling.

Results of the Questionnaire on Spelling Reform.

Editorial

Throughout the country many organizations are springing up because parents are dissatisfied with the results of our school's attempts to educate our children. They are particularly worried about the lack of satisfactory reading ability, but also are concerned about the large percentage of pupils dropping out before finishing school. Evidence can be produced to show that by far the most frequent cause of school drop-outs is poor reading ability. Reading and spelling are two of the three basic, fundamental skills needed to be able to stay in school, yet the Council for Basic Education chooses to ignore evidence presented to them of the causes of difficulties - learning to spell and read. Are they, as well as the N.E.A., more interested in perpetuating the existing methods of education (with slight modifications that don't touch on fundamental changes)? Or are they so frightened of the N.E.A. that they will not discuss anything the N.E.A. has vetoed?

Such organizations as the Calif. Parents for Better Education, Los Angeles, Winnipeg Alberta, Committee for Better Education, Arizona Parents for Better Education, Tulsa Council for Education, The Education Service, Fullerton, Calif., Utah Parents for Better Education. Walkertown Committee for Better Education, are some of the many who are actively against the present methods of teaching reading.

[These are the incomplete articles.]

pp7,8.

(d) Training courses arranged for teachers.

Mr. Downing is in charge of the Reading Research Unit at the Univ. of London Institute of Education. He is a psychologist and qualified teacher, aged 39.

His interest in the psychology of intelligence has brought an offer of £14,000 from the Nuffield Foundation to enable him to study how methods of teaching reading influence the development of intelligence, and to investigate relationship between backwardness in reading and maladjusted personality. This first announcement of the Nuffield Grant coincides with the launching of the A.R. scheme.

3. Well-known figures on the academic committee: Mr. Downing is advised by the following committee of experts:

Mr. H. L. Elvin, Director of the Univ. of London Institute of Education.

Professor W. R. Niblett, Dean of the London Institute.

Dr. W. D. Wall, Director of the National Foundation for Educational Research in England and Wales.

Dr. J. E. Morris, Officer Responsible for Reading Research at the above Foundation.

Professor P. E. Vernon, Professor of Educational Psychology, Univ. of London Institute of Education.

Sir Cyril Burt, Emeritus Professor of Psychology, University College, London.

Professor D. B. Fry, Head of Phonetics Department, University College, London.

4. Backing from all sides in education for the A. R. Research Scheme. The Research Scheme has been personally commended by the Minister of Education, and by the General Secretaries of the Association of Education Committees (Sir William Alexander) and the National Union of Teachers (Sir Ronald Gould).

E) Material in A.R.

1. For photographic "copy" for use by any newspaper's printing department:

(a) glossy photographs of specimen pages of children's reading books, etc, suitable for block or zinc cut making. These are:

1. From "Here We Go", published by James Nisbet & Co.

2. From "Janet and John Book III, published by James Nisbet & Co.

3. From "Numbers", published by Wills & Hepworth.

4. From "Jesus the Helper, published by Wills & Hepworth.

5. Glossy photograph of specimen of A.R. in application at an adult level.

(Material is identical with that of stereo mentioned below)

(b) Glossy photographs of Teachers' Training Course and children using A. R.

6. Teachers' Training Course at Burton-upon-Trent. Mr. S.S.Eustace (a phonetician who has been working on the alphabet, and who lectured on spelling to the teachers) left; Mr. John Downing right, at the blackboard, and teachers.

7. Mr. Downing, right, a teacher and children at the Mount Methodist School.

8. Children, left, and a teacher at Shobnall J. M.& I. School, Burton-upon-Trent, (all identified).

9. Other pictures of action in other schools.

(c) a newspaper stereo (in a selection of column widths), giving a specimen in 12 point type of the A.R. in application at an adult level.

2. For inspection,

(a) a number of those English books already printed in A.R. for use this Sept., of which a sample page is herewith reproduced above a cartoon which has no relation to the project.

(b) a number of foreign books for which suitable translations and transliterations will be supplied, but written so as to preserve the foreign individuality of the book.

3. Additional readings:

(a) "Questions and Answers about the A.R. Technique in and out of the Classroom.

(b) List of books being prepared in A.R. for the schools.

F) People at the Press Conference held at the London Institute:

In the Chair: Dr. W. D. Wall, Director of the National Foundation for Educational Research.

Members of the Committee: Sir James Pitman, K.B.E., M.P., Mr. John Downing, the Research Officer, Professor P.E. Vernon, Professor Cyril Burt, D. J.M. Morris.

People connected with the research in the schools:

Mr. Maurice Harrison, Director of Education for Oldham. Mr. M.P. Ryan, the Headmaster of St. Mary's R.C. Junior Mixed and Infants I School, Oldfallings, Wolverhampton, since 1953.

Aged 43, married with 3 children. Mrs. Mary Tooth, housewife, Wolverhampton. Aged 40, 3 children, two of which are starting to learn to read with the A.R. alphabet. Mr. Keith Gardner, Head of the Remedial Education Service, Walsall, who has done research on the results of remedial teaching in reading. Aged 40.

A typewriter with Augmented Roman symbols was on show at the conference.

G) Questions and answers about the A.R. technique in (and out of) the classroom.

1. Will reading lessons start at an age earlier than usual? Not necessarily. The teachers will begin, as usual, when they judge the child to be sufficiently developed physically, mentally and emotionally to be "ready for reading" - has the desire to learn.

2. What advantage does A.R. have then? The advantage should come in more rapid progress. Previous research suggests that the time needed for learning to read can be cut to 50 or 60% of what it is at present - and this includes the transition to traditional spelling.

3. Will children be able to make the transfer from the A.R. alphabet to our different traditional one? Firstly, previous research suggests that there will be no difficulty in making the transfer from reading in a simplified spelling to reading in the traditional spelling of English. Secondly, the alphabets are not substantially different - they are very closely related. A. R. has been designed very carefully to ease the transition to traditional print; 24 of the letters are the same as in the standard alphabet, and most of the 19 new ones bear a close resemblance in form to the letters which they will eventually meet in traditional print. The new digraphic letters are variations of the traditional letters attached to each other or made to remind a person of the traditional letters.

4. Why is it that this transfer seems to present little difficulty for the children?

A combination of factors probably accounts for this. We must remember that children learning with the A.R. alphabet at school will see traditional print, with its five or more variations of the same letter, on signs in the street, at home, and will accept the A.R. symbols as merely another variation of our conventional alphabet letters. We cannot avoid their building up a

storehouse of knowledge of traditional print thru incidental learning. Previous research has shown that some children made the transfer on their own without the need of teacher's help. However we have devised special reading and writing teaching techniques to smooth the transition stage. Another factor is that each child will make the transition gradually when he as an individual is ready for it. This will be when he is a confident and fluent reader of books in A.R. Because of A.R.'s similarity to traditional print, the child will then be able to guess anything new on the basis of context, because he will be reading for meaning.

5. Will the children write in this new alphabet? Yes. While the new letters may seem strange to us as adults, the children will approach them along with the traditional ones. The best way of training children to write the new letters has been worked out experimentally and the teachers will use this method.
6. Will the new alphabet help children to express themselves in writing? A.R. seems to have an important advantage here. It should improve their self-expression in writing for they are less likely to be inhibited by fear of spelling mistakes since they can be confident in writing as they speak. Writing should be a mirror of speech.
7. Won't their spelling be bad in later life? A previous experiment with a similar scheme explored this question and it was found that children who had learned to read with a simplified alphabet were better at traditional spelling later on than children who had been brought up on conventionally spelt books from the start. This is probably due to the fact that the phonetic aspect of spelling is well learnt at the beginning, and the irregularities of traditional spelling are left to a stage when they can be taught appropriately.
8. Is it expected that, besides these advantages in reading, writing and spelling, there may be any general educational benefits from A.R.? Previous research does suggest that learning to read with a more systematic spelling at this early age may influence general mental and emotional development. Children have been reported as being ...

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But dear Dr. Theobald, there is a third alternative. One, that you must surely have heard of, because your New York Times has published several articles about it. And surely in your position, you read some of that in the British Press, which has been giving it wide coverage for a year or more. It is the simple technique of starting beginners on phonemic reading and continuing that till their minds are mature enough to grapple without too much harm with the time-consuming, memory-burdening, reason-flouting chaos of our conventional spelling -- which, with most youngsters, means the end of the third grade, tho the slower ones may need a little longer.

At the time (April 14) you appeared at the city budget hearing, didn't you know of the extensive preparations going on in England for a big experiment along this line to be launched this September just passed? An experiment under such eminent auspices as that of London University Institute of Education, and Sir James Pitman, M.P., head of the world-wide Pitman shorthand and publishing firm, and included in both the British and the International WHO'S WHO? An experiment, moreover, which has the backing of the major teacher organizations of the kingdom.

If not, Sir James' recent visit to New York may have put you in touch with it. Here is a technique which hopes to do away with the need of that remedial reading which year after year calls for more of our tax dollars. It hopes to put prevention in the place of remedy. Moreover, it hopes to begin an

immediate improvement in for quality of our school education, by starting first-graders on primers and readers of a much higher caliber than the stodgy babyish stuff with which we now retard their burgeoning intelligence. It hopes to pass them into fourth grade with a trained sense of sound-symbol relationships, a satisfactory vocabulary, a love of reading, and a self-confidence which will enable them to tackle the orthographic jumbledom of their orthodox fourth grade books much better than if they had been faced with it three years earlier.

All experiments so far carried on in this technique (and there have been quite a number of smaller ones) show that even without special training in the transition to conventional spelling, most children pick up enough of it in the course of these three years to easily handle fourth grade texts. Meanwhile they have had six ineradicable semesters of using their reason, their sense of consistency of analogy, of the sequence of cause and effect, unhindered by anything approaching the illogic of: both, broth, brother --boast, most, lost, -- should, shoulder, would, wound, found -- choire, mire -- there, chair, bear, care, prayer -- etc, etc.

As for those 67, 067 luckless young junior highs you mentioned now reading from two to five years behind their grades, it might be well to try this English technique even on them. But above all, it is imperative that your schools and those of our entire country stop creating more thousands, hundreds of thousands, millions of their like.

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[Spelling Reform Anthology §17.1 pp228,229]

Section 17 Psychology Applied to Spelling

This section dwells on the psychological effects of difficulties in and ability to learn to read and spell.

[Spelling Progress Bulletin October 1961 pp10,11]

How Our Spelling Damages the Mind, By Frederick A. Fernald, Ph.D.

Learning to read the English language is one of the worst mind-stunting processes that has ever formed a part of the education of any people. Its evil influence arises from the partly phonetic, partly lawless character of English spelling. Altho each letter represents some sound oftener than any other, there is hardly a letter in the alphabet that does not represent more than one sound, and hardly a sound in the language that is not represented in several ways, while many words are written with as many silent letters as significant ones. Frequently, there is nothing in a word to indicate in which of these ways its component sounds are represented, nothing in the written group of letters to show which sounds they stand for, and which of them, if any, are silent, so that a learner can never be sure of pronouncing rightly an English word that he has not heard spoken, nor of spelling correctly one that he has never seen written. The spelling of almost every word must be learned by sheer force of memory. In this work the pupil's reasoning powers cannot be utilized, but must be subdued, while his memory is sadly overworked. In the affairs of the child's daily life, the logical following of rules is rewarded; in learning to read, it brings him only bewilderment and discomforture. He is taught that *b-o-n-e* stands for *bōn* (not *bo-ne*), and *t-o-n-e* for *tōn*, but also that *d-o-n-e* stands for *dun*, that *g-o-n-e* spells *gawn*, *m-o-v-e* spells *moov*, and *b-r-o-n-z-e* is *bronz*. Now when he comes in reading to another similar word, as *none*, he has no means of telling whether to call it *non*, *nun*, *noon*, or *non*; he can only look up at the teacher and wait to be told. The influence of the spelling class quickly drives him to *repress any inclination to reason*, and he quickly gives himself up to a blind following of authority. Few children learn English spelling without getting the pernicious notion that cramming is better than thinking, and that common sense is a *treacherous guide*. The child who can take what he is told without asking why, who can repeat a rule without troubling himself about its meaning, gets along best. On the other hand, the child who has difficulty in learning to spell, may have to suppress his logical faculties. For while he is constantly trying to spell according to some principle, some rule, and of course, coming to grief. Thus a boy who had long been at the foot of his spelling class, was one day given the word *ghost*, and, making a desperate attempt at analogy, (with *roast*), spelled it *goast*. Thus bringing shouts of laughter from his fellow students, he said, with clenched fist and tearful eyes, "You needn't laugh; you all spell homlier 'n that!" Thus, so much attention is given to spelling that children get false ideas of its importance.

The *spelling*, or graphic representation, becomes to them *the word*, while the *spoken word* is called the pronunciation, and is only thought of as an appendage. They learn to despise the poor speller, a prejudice which is never out-grown, and above all they become so absorbed in the manipulation of words that they have little chance to grasp the significance of the ideas for which the words were intended to stand.

If our notation of numbers were as irregular as our notation of speech, so that the numbers from 40 to 45, for instance, should be written as follows: 40, 741, 420, 43, 414, 225; and if no one could tell at sight whether a number like 7,243,812 contained several figures which were "silent," or had exceptional values, who can doubt that the study of arithmetic, instead of being a valuable

discipline, would be mere enervating drudgery? If it were proposed that children should learn a style of writing music which gave different values to the same characters, similarly placed, in different pieces and added a host of "silent" notes, the evils of learning such a system would be plainly seen. Yet many people who have forgotten their own sufferings in the spelling class cannot see that children are so very much perplexed in learning to spell, or perhaps maintain that the struggle involved "is good for them."

"I know," says Max Muller, "there are persons who can defend anything, and who hold that it is due to this very discipline that the English character is what it is; that it retains respect for authority; that it does not require a reason for everything; and that it does not admit that inconceivable is therefore impossible. Even English orthodoxy has been traced back to that hidden source, because a child once accustomed to believe that *t-h-o-u-g-h* is *tho*, and that *t-h-r-o-u-g-h* is *thru*, would afterwards believe anything. It may be so; still I doubt whether even such objects would justify such means." Lord Lytton said, "A more lying, roundabout, puzzle-headed delusion than that by which we confuse the clear instincts of truth in our accursed system of spelling was never concocted by the father of falsehood. . . . How can a system of education flourish that begins by so monstrous a falsehood, which the sense of hearing suffices to contradict?"

Here is a chief cause of the incapacity for thinking which college students bring into the science laboratories. This irrational process, taken up when the child enters school, occupying a large share of his time, and continuing for six or eight years, has a powerful influence in shaping his plastic mind. When at last he is allowed to take up the study of nature, at the wrong end of his school career, what wonder that he sits with folded hands, waiting to be told facts to commit to memory, that he cannot realize what a law or rule is, and does not know to use his reason in deducing the answer to a problem? Rational education will never flourish as it should till a reformation in the reaching of reading and spelling has been accomplished. Furthermore, Mr. J. H. Gladstone, member of the English School Board for London, has computed the number of hours spent by children in learning to read and spell English to be 2,320, while, in gaining an equal knowledge of their native tongue, Italian children spend only 945 hours. The difference amounts to nearly two school years, and shows under what a disadvantage English-speaking children labor. Can anyone believe that 4,923,451, or 13.4% of our population over ten years of age would be illiterate if learning to read were not so formidable task? (These are government statistics of 1885; now it is a little higher due to the influx of foreigners and the apathy of the public). In Norway, Sweden, Denmark, Switzerland and some German states there are hardly any illiterates. Compare their systems of spelling.

The most striking testimony to the irregularity of our spelling is the adoption by many teachers of a sort of Chinese mode of teaching reading. (Now it is called the whole word method!) The children are not taught that the letters represent constituent sounds of words, but they learn to recognize each group of letters as an arbitrary compound symbol standing for a word. This is more of a dead drag on the memory than even the A-B-C method, and if it could be completely carried out, would be a vastly longer process. The effect on the mind is certainly not good. Minds *do* have a saturation point.

"But what can be done," will be asked, "shall our children grow up without learning to spell?" No, but the memorizing of these anomalies and contradictions can be, at least, put off till the pupil's minds are in little danger of being perverted by it. Enough of the enormous amount of time spent on this drudgery can be saved to make possible the introduction of the study of *things* into the primary schools, and many of the one hundred millions of dollars which we spend each year for public education can be turned to imparting real knowledge instead of the mere tools of knowledge. These ends may be attained by the use of phonetic spelling as an introduction to the customary spelling. Children *can* and *do* learn to read English, spelled phonetically, in a very few lessons, and then learn the traditional spelling so quickly afterward that much less time is required for the whole

process than is commonly devoted to memorizing the current spelling alone. Classes taught to read this way, in Massachusetts, so early as 1851, proved the advantage of the method to the satisfaction of that able educator, Dr. Horace Mann, and the method has been successfully employed in many places in this country and in the British Isles. The following extract from a letter written by Mr. Wm. Colbourne, manager of the Dorset Bank, at Sturminster, England, furnishes a special example:

"My little Sidney, who is now a few months more than four years old, will read any phonetic book without the slightest hesitation; the hardest names or the longest words in the Old or New Testament form no obstacle to him. And how long do you think it took me - for I am his teacher - to impart to him this power? Why, something less than *eight hours!* You may believe it or not as you like, but I am confident that not more than that amount of time was spent on him, and that it was in snatches of five minutes at a time, while tea was getting ready. I know you will be inclined to say, 'All that is very well, but what is the use of reading phonetic books? He is still far off, and may be farther, from reading conventional books! But in this you are mistaken. Take another example: His next elder brother, a boy of six years, has had a phonetic education so far. What is the consequence? Why, reading in the first stage was so delightful and easy a thing, for him that he taught *himself* to read regular spelling, and it would be a difficult matter to find one boy in twenty, of a corresponding age, who could read half so well as he can in any book. Again my oldest boy has written more phonetic shorthand and longhand, perhaps, than any boy of his age (eleven years) in the kingdom; and no one, I dare say, has had less to do with that absurdity of absurdities, the spelling book! He is now at a first rate school in Wiltshire, and in the half-year preceding Christmas he carried off the prize for *orthography* in a contest for boys, some of them his senior by years!"

Mrs. E. B. Burnz, of New York, says, in regard to her experience in Nashville, soon after the Civil War, "The phonetic teaching in the Fisk School, as elsewhere, proved all cavil that with phonetic books as much could be accomplished in four months in teaching to read, as by a full year by the common method. And, moreover, it showed that there is no difficulty experienced by children in passing from the phonetic to ordinary printed books. After going through the phonetic primer and First and Second Reader, the children passed at once into the Second Reader in common print, and from the phonetic Gospel into the common New Testament." Successful experiments in common schools are on record in sufficient numbers to prove the practicability of the method.

I am not unaware of the efforts being made to replace the current spelling by a phonetic system for all purposes, but that is a matter quite distinct from the subject of this article; and all who believe that the orderly and vigorous development of the mental faculties should be the chief aim in education, whether they favor or oppose the idea of spelling reform, should work together for the spread of the phonetic method of teaching reading.

(*Editor's note:* Away back in 1885, before even the oldest of our present teachers were born, we have a plea for that very technique in the teaching of reading, in which 24 English primary schools started out this Fall, under the aegis of London University and Sir James Pitman, and others. Even at the time that this article appeared in the Popular Science Monthly, the technique was not new, but tried and tested, dating back not only in England but in our own country to as early as 1851. To the time, that is to say, of the early childhood of the great-great-grand-parents of the six year olds who, thruout the length and breadth of our land we are now "readying" for that damage to their minds that this article describes.

Will this new English experiment wake us up? Over *there* it has the wholehearted backing of the major teaching organizations. What is the attitude of *ours*? So far it is complete silence! (Probably due to the scepticism in the closed minds of our hierarchy of education).

[Spelling Reform Anthology §9.9 pp149-151]
[Spelling Progress Bulletin October 1961 pp12,13]

Phonetics and Spelling, by Ernest Horn, Ph.D.

Condensed from an article in the *Elementary School Journal*, May 1957, published by the Univ. of Chicago Press.

English spelling is tough. Efforts to alleviate its difficulties have been the serious concern of many scholars for more than 400 years. Any help, even the small, should therefore be welcomed by everyone. It is essential, however, that any proposed plan be soundly grounded in all essential related evidence if it is to be more than a passing fad.

There is considerable evidence to suggest that well-planned instruction in sound-to-letter and letter-to-sound associations to appropriate relation to other learning procedures may be of benefit both in spelling and in reading. This is all the more reason for making sure that any plan for such instruction should be critically formulated on the basis of adequate evidence on all the important factors related to such instruction.

There are at least six types of evidence which should be considered in appraising the potential contributions of phonics instruction to spelling:

- (1) evidence on the uniformity or lack of uniformity in pronunciations.
- (2) evidence on the ways in which the various sounds are spelled,
- (3) data from investigations of children's attempts to spell the sounds in common words,
- (4) evidence on the influence of word patterns and of the ways in which sounds are spelled in different word relationships,
- (5) evidence on the operation of the laws of association and of negative and positive transfer,
- (6) findings from the research on teaching generalizations, such as spelling rules.

This article is chiefly concerned, however, with the first three types of evidence.

The influence of pronunciation on spelling

A very considerable portion of words have more than one accepted pronunciation and many have three or more. An inspection of several thousand words sampled systematically from Kenyon and Knott's *A Pronouncing Dictionary of American English* {4} indicates that at least a third of the words in the dictionary have more than one accented pronunciation. If the spelling of a word is phonetically regular in one dialect, it is not likely to be in another.

Regional differences in both formal and informal speech are readily recognized. The three chief speech regions in the United States are Eastern, Southern, and General American. (General American refers to the rest of the country outside of the East and South). Variations in pronunciation among these regions are recorded in *A Pronouncing Dictionary of American English*. Further differences are to be found in the speech of Northern England, Southern England, and Scotland. Yet, with few exceptions, words are spelled the same in all these regions in the United States and Great Britain. (*Ed. note: But so are words spelled the same thru the 8 million miles of the U.S.S.R. where surely regional differences are greater than in the U.S.A. Besides a purposive use of T.V. and radio could standardize pronunciation.*)

An important distinction in considering the relation of phonetics and spelling is that between platform speech and public reading and the speech that has been called the familiar, cultivated colloquial. Phoneticians warn against the mistaken idea that colloquial is synonymous with bad. On the contrary, this style, which has been termed the speech of well-bred ease, is considered by

Kenyon and Knott to be the *most* important of all styles. (3-12-17, 4: xv-xvi) It is certainly the most important in its effect on spelling since it is the language that the pupil commonly hears and speaks.

The consistency with which sounds are spelled

Many modern spelling books recommend that, in learning to spell a word, the pupil should pronounce it carefully), and should notice closely how each syllable or part is spelled. But observing how each sound in a word is spelled *as a method of learning a word* is a different thing from attempting to spell it by sounding, by analogy, or by spelling each sound in the way it is most commonly spelled, all of which involve the application of some sort of generalization.

The usefulness of teaching any generalization in spelling whether phonetic or orthographic, is limited by the number of words covered by the generalization and the number of exceptions to it. It is important, therefore, to have adequate information on these two points. In order to secure such information for the present study, it was necessary to select, first, the list of words to be analyzed, and secondly the dictionaries which were to be the source of authority on pronunciation. For the first, the ten thousand words in Ernest Horn's *A Basic Writing Vocabulary* (2) were chosen because the analysis of this large number of words, while laborious, was practicable and because these words, with their repetitions, make up more than 99% of the running words written by adults.

A succession of dictionaries were used as sources of pronunciation, according to their availability and suitability to the problem at hand. Among them were the *Thorndike Century Junior Dictionary*, the *Thorndike-Barnart*, *Webster's Elementary*, and *Kenyon and Knott*.

The data on the spelling of some of the sounds as used may vary from what would be found if one dictionary were used alone, but certainly not to an extent that would greatly change the practical significance of the evidence. The frequency of certain sounds would vary considerably if all accepted pronunciations were used.

In tabulating the various spellings of any sound, each occurrence of the sound was counted. Since some words contain the same sound two or more times, the number of words containing the sound is less.

Making such counts is not a purely objective, routine task. Many decisions must be made as matters of judgement, especially in the case of *words containing silent letters*. Some of these letters were formerly pronounced, as the *k* in *knife*, the *g* in *gnaw* and the *gh* in *light*. Others are capricious accidents or attempts at analogy with other words of a different origin. In some instances, as when final silent *e* makes the preceding vowel long or *g* and *c* soft, the problem is relatively simple. In words in which the silent *e* is needed to show a long vowel or also a soft *g* or *c*, the silent *e* was counted as helping to spell both the consonant and vowel sounds. In the word *range*, if silent *e* were omitted, the word would be *rang*. In many words, however, silent letters have no function now, but since all letters in a word must be written, each silent letter was assigned to some sound. In certain types of words, the assignment of these letters was somewhat arbitrary. It could hardly be otherwise, since in many words the silent letters are not only phonetically superfluous but even, as in the case of silent *e* in the word *definite*, actually misleading. The policy in all cases was to consider the problems pupils face in spelling the sounds.

Findings of the study

The two vowel sounds most frequently heard in the language are the short *i* sound, as in *hit* and the obscure vowel sound (*schwa*) as in the second syllable of *separate*. They are troublesome to tabulate because there are frequently alternate pronunciations in unaccented syllables of the same letter or letter combinations.

The short *i* sound (ɪ) is spelled in at least 15 ways in common words and only in a little more than half the time with the letter *i* alone. Examples are (in one accepted pronunciation) *i* (*bit*), *e*, *y* (*pretty*), *ie* (*mischief*), *ui* (*build*), *ey* (*money*), *a* (*character*), *ay* (*Monday*), *u* (*busy*), *ee* (*been*), *ai* (*portrait*), *ei* (*foreign*), *ia* (*mariage*), *o* (*women*), and *ea* (*forehead*). There are a half dozen other spellings in less common words.

The short *i* is also pronounced in many words in which the vowel sounds, from their word patterns (vowel consonant and silent *e* or two adjacent vowels), might be expected to be long. Examples are: *furnace*, *mountain*, *favorite*, *minute* (time), and *coffee*.

The *schwa* sound is found in at least one accepted pronunciation in more than half of the multisyllabic words in the ten thousand commonest words. It is a very frequent sound in the speech of people in the East and South who do not pronounce their *r*'s unless the *r* is followed by a vowel sound. It is spelled with almost any vowel or vowel digraph, hence in many different ways. The multiplicity of possible choices makes it difficult to spell.

Unaccented syllables are a special problem. They are difficult to spell for two reasons:

- (1) they are less distinctly pronounced, the vowel sounds being weakened, and
- (2) in a great many words, as pointed out above, the obscure vowel sound, *schwa*, or the short *i* is substituted for the vowel sounds which might be inferred from the printed letters.

Three more difficulties should be noted: silent letters, double letters, and the fact that syllabication in the pronunciations does not always conform to the conventional syllabication in the dictionary entries. If one includes letters not pronounced in digraphs, as in *please* or *boat*, and double letters where only one is pronounced, all but four letters of the alphabet (*j*, *q*, *v*, and *x*) are silent in some words. (Ed. note. How about *hajji*, *kopje*, *sejn*, *lacquer*, *licquor*, *picquant*, *racquet*, *navvy*, *beaux*, *billet-doux*, *faux-pas*, *roux*?). A systematic sampling of the words in the *Thorndike-Barnhart Junior College Dictionary* indicates that probably at least half of the words in that dictionary contain silent letters. It is not likely that a pupil, by applying phonic principles or by logical reasoning by analogy, can decide when to insert a letter which neither spells or helps to spell any sound.

More than a sixth of the ten thousand words most frequently written contain double letters. There is, of course, a rule for doubling or not doubling when adding suffixes but the problem of double letters is not limited to adding suffixes. Double letters are more frequent in the body of words.

Of 28 common sounds tabulated, the commonest spellings for them were 119. Add to these the many spellings already mentioned of the *schwa* and short *i*, and it would be strange indeed if pupils did not spell unlearned words in a variety of ways. They do, as every teacher knows. In an early experiment by the writer, 195 pupils in Grades I and II, all of whom had been taught phonics as one approach to reading, spelled *circus* in 148 ways. *Tease* was spelled in 44 ways. The "best" spellings were *tes*, *teas*, *tees*, and *teez*. Subsequent investigations have shown a wide variety of misspellings even for more mature pupils who have had much greater experience in both writing and reading. Masters {5}, for example, in an analysis of the attempts of 200 students in each of Grades VIII, XII and XVI to spell 268 difficult words selected from 5000 words of high frequency, found *miscellaneous* to be spelled in 153 ways - 113 ways in Grade VIII, 40 in Grade XII, and 22 by college students. An inspection of the attempts to spell these 268 words shows that the majority of the most common misspellings were analogically reasonable in the sense that the individual sounds were spelled in ways that represent correct spelling of the sounds in other words. Examples are: *adequate-adequit*, *amiable-aimable*, *deny-denigh*, *scandal-scandale*. Additional examples, all reported as common misspellings by elementary school children, are: *aid-ade*, *asleep-asleap*, *before-befour*, *boat-bote*, *busy-bizy*, *crumb-crum*, *force-forse*, *honor-honer*, *mystery-mistery*, *tongue-tung*. Pupils need no encouragement to misspell by utilizing analogic spellings. It seems to

come naturally to them.

Attempts to account for a pupil's choice of a spelling of an unlearned word at a given time are largely conjectures. Why did one pupil, in attempting to spell *awful*, write *offul*, while others wrote *awfull*, *offel*, or *offle*? Common sense should tell us that having so many variations in analogical spellings is the cause of different misspellings. Evidence from research confirms this. Analogy is unreliable because our spelling is unreliable. [1]

The preceding discussions underestimate, rather than exaggerate, the complications which confront children in attempting to spell. How much more complicated the factors are, can readily be seen by reading standard works on phonetics and philology, and treatments of transfer and the laws of association in the psychological literature. It is not the purpose of this article to disparage the use of phonetics in teaching either reading or spelling. Its purpose is rather to call attention to types of evidence which should be considered in designing any plan to emphasizing sound-to-letter relationships.

It seems important that children should learn the *ways* [2] not *the way*, in which each sound is spelled. This should at least eliminate many misspellings in which the sounds are spelled in ways in which they are never correctly spelled. Children should learn how to spell the principal prefixes and suffixes and should know how to add these to base words. They should also learn such orthographic aids as apply to large numbers of words with few exceptions.

What results should be expected from emphasizing as generalizations or principles the commonest spelling of that which have a large number of exceptions? Would pupils tend to spell these sounds in all words by the commonest spellings? If they should, as research has shown, they would misspell more words than they now do. Would it usefully sensitize children to deviant spellings? Would it give them a misplaced confidence in utilizing these commonest spellings, which would lead to disillusionment and therefore to a decrease in interest in spelling? These possibilities deserve to be explored more adequately.

There are some characteristics of English spelling, however, that exhibit considerable consistence. Most consonant sounds, whether single sounds, as the *b* in *bed*, or initial blends, as the *bl* in *black*, are regularly spelled at the beginning of words. The most important exceptions are the sounds of *f* as in *fun*, or *physics*, *k* as in *cup* and *keep*, *s* as in *city* and *sit*, and *j* as in *jersey* and *germ*.

Some consonant sounds, however, that are spelled regularly at the beginning of words, are spelled in many other ways in other word positions. For example, the sound of *sh* is regularly spelled with *sh* at the beginning and end of words, but in other word positions it is spelled more often in other ways than with *sh*. The sound of *k* at the beginning of a word or a syllable is, with few exceptions, spelled with *c* before *a*, *o*, *u*, *r*, and *l*, but with *k* before *e*, *i*, and *y*. It is spelled in many other ways at the end of words and syllables. The letters *l* and *f* are, with very few exceptions, doubled at the end of monosyllables when preceded by a single short vowel. Other consistencies could be cited for the spelling of sounds in certain word relationships. Whether these could be advantageously taught to beginners is a moot question!

Some help, moreover, may be obtained from the knowledge of word patterns, at least in preventing obvious blunders. For example, it is not too much to expect that children should know not to spell *mad*, m-a-d-e, or *made* m-a-d, but note how the sound of *ade* is spelled in *aid*, *weigh*, *suede*, *stayed*, and *obeyed*. Actually, writing find silent *e* to indicate a long vowel sound is only one of four very common ways of showing vowel length, and long vowel sounds are more often spelled in other ways than this. Examples of other ways are: open syllables, *fetal*; double letters, *deep*, and digraphs, *boat*. There are many words however, in which these four devices do not spell long vowel sounds,

such as: *definite, machine, been* and *head*.

When the evidence, on both the consistence and the irregularities of English spelling, is critically and realistically assessed, little justification is found for the claim that pupils can arrive deductively at the spelling of most words they can pronounce. There seems no escape from the direct teaching of the large number of common words which do not conform in their spelling to any phonetic or orthographic rule. One must be *exceedingly credulous to believe that authorities*, with the most complete knowledge of the English language (philologists, phoneticians, and lexicographers), *have been in error in pointing out the serious lack of conformity between spoken words and their printed symbols, and have been unaware of such orthographic and phonetic irregularities* as exist in the English language. OR WOULD HAVE SO STRONGLY URGED THAT ENGLISH SPELLING BE SIMPLIFIED if its difficulties could be removed or *largely alleviated by the teaching of phonetic and other orthographic aids*.

Editor's note: Let the back to phonics advocates take this last paragraph to heart.

This points out the dire need for a reform of our spelling. Phonics - no matter how well taught or mixed with other methods, is not a satisfactory answer to solve the basic problems of confusing irregularities, which is the chief cause of difficulties in teaching as well as learning the numerous, unnecessary anomalies of English spelling. Haven't we something better to do with our students' time than to cause them to waste two or three years needlessly *trying* to commit to memory the thousands of irregularities I say *trying* because NO ONE ever gets so good that he can write a long composition without referring to the dictionary. What possible good purpose or advantage can compensate the pupils for those two or three years wasted?

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[1] Editor's note: Also spelling rules are unreliable.

[2] Standardization is obviously lacking. (Why not use dictionary respellings, which are standardized?)

[3] Setting of a standardized or preferred pronunciation would be a preliminary requirement.

[4] How about *sure, sugar*?

[5] Compare: *precede, proceed, reseed, succeed*. So how is a learner going to remember which letter to use?

[6] All of the possible rules for spelling have been tried, with not much success, because most have exceptions or are too complicated to be used by children.

A Review of New Books, by the Editor.

"Breaking The Sound Barrier", by Sister Mary Caroline, I.H.M. (The Macmillan Co) is another phonics book but with a somewhat different approach. It cautions the pupil to examine carefully the word and then to think about its various parts or letters. Cartoons are used freely thruout so as to hold the child's interest. The text is written down to a child's level of understanding and yet has none of the boring, inane repetition of the "look and say" readers. Its story about Chappie, the parakeet, is clever and so much more interesting than Dick and Jane, that we hope to see an end of the latter. We also wish that Sister Mary Caroline's talents could be turned to preparing a teaching book for "World English", where she would have unlimited opportunity to show how easy it would be to teach the coming form of English spelling.

"Progress in Reading" by Dr. J. C. Daniels and H. Diack, (Univ. of Nottingham Institute of Education), which made quite an impression on the educational authorities when it appeared a few years ago, is now followed by "Progress in Reading in the Infant School", by the same authors, published by the University of Nottingham Institute of Education. This 99 page book covers the effectiveness of two different methods of teaching reading - the Phonic Word Method, and the mixed methods, including intrinsic phonics, the method characteristic of contemporary practice in English schools.

Dr. M. D. Vernon, who is famous for his book, "Backwardness in Reading - a Study of its Nature and Origin", has this to say about the Phonic Word Method detailed in this book: "Several of these pupils may have been of a rather low intelligence, and yet this did not prevent them from profiting by this particular method of instruction.

The book is well documented by numerous tests, tables, and 54 references. It says that the pupils were carefully and thoroly analyzed as to I.Q. (Binet and Block Design A.Q., Schonell's Word Recognition R.A. & R.Q.'s, both by Schonell and Daniels-Diack Tests, which were compared. Reading Comprehension Tests, Picture Question Tests, sentence completion tests, along with the Split-half Reliability Co-efficients for the five reading tests. Both books deserve to be in the libraries of all reading specialists.

Robert W. Davis' "Thoroly Fonetik Spelling" is another of those books by a layman, who thinks he is one of the few to have solved the problem of reforming our spelling without adding any new letters to the alphabet. The title of the book is the best part of the book. If he had conscientiously followed the title, and read a few of the hundreds of books previously written on the subject, he would have written a somewhat different book. The 32 pages of dictionary of words is marred by frequent errors, which the author hopes to correct in the second edition. Davis does have some good ideas interspersed between his efforts to push his alphabet.

Hot off the press is the newest book called "A Last Word" by William Barkley, of London, a Parliamentary Press Reporter. While it is a smallish book (48 pages), it is packed with dynamite. On the cover it says: "He brings wide reading and a sense of fun to this discussion which will fascinate every lover of 'words'. In particular, he recalls some forgotten history of the Victorian giants of English scholarship who fought for reform against ignorance and prejudice at a time when education was still an upper-class preserve; when the State spent in England less than four millions sterling a year on schools compared with nearly a thousand million pounds now. With some knowledge of all the reforms that have ever been proposed, he attempts to show how the thing might be done. He would reduce to a half dozen pages the present English Spelling Book of 238 pages, and the present 20,000 contradictory facts of English spelling to a few hundred.

This book starts by answering a number of questions which have been asked as to the value of and the practicality of spelling reform. It is here that William Barkley is at his best. Then he proposes a system of reformed spelling that is "neither fish, nor fowl nor good rare beef". It starts out with the phonetic system of the British Simplified Spelling Society, but he does not want to go as far as a completely phonetic system, so he introduces numerous exceptions to the rules, giving his reasons in each case. Some of these are logical, some based on prejudice, and some in attempts to compromise with our present spelling and to accommodate the written distinctions in homophones. Perhaps, he never heard of Benjamin Franklin and his answer to the problem of homophones.

While he has some good ideas, he attacks the problem of spelling reform piece-meal and often has two different "pieces" to represent the same sound. It is difficult to decide if his objective is to remain as close to present spelling as possible, or if it is to provide different spellings for homonyms. One good thing we can say for his system is that it is easily readable without much instruction (to a person who already knows conventional spelling). Perhaps that may be his main objective. The learning of his system is something else again, but it would probably be easier than our present spelling, which takes so many years. Could we suggest that a more appropriate title for this book might be that of Mr Barkley's earlier book: "Bad language"?

A very similar book was written in 1959 by Axel Wijk, Ph.D., of Stockholm, called "Regularized English", published by Almqvist and Wicksell, Stockholm. It takes 361 pages to tell all the exceptions to the rules he wants to adopt. He goes into great details about speech sounds and finds 46 of them being represented in English by some 250 letter combinations. Apparently his objective is to use in a regular manner the most frequently used combinations of letters, allowing the use sometimes of two, sometimes of three combinations to represent one sound, thus continuing the written distinctions in homophones. He goes into great detail as to what could be done to regularise the various prefixes, suffixes, vowel and consonant combinations. If a person has the time, energy and patience to wade through this voluminous book, he will be rewarded with the liberal education in phonetics. His objective is clear when in the end he claims his system will change only 10% of the words in the dictionary, and it needs not much more than 100 rules to do this. Yet he does change the spelling of 325 of the Thorndyke-Lorge 1069 words, and 211 of the next 952 words and 208 of the next 941 words - a total of 744 out of 2962 words, or 25% of the commonest words. Our last comment: Another good title gone wrong.