

# Spelling Progress Bulletin Summer 1972

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. George Bernard Shaw and the Alphabet

George Bernard Shaw died in Nov. 1950. A few months later, his famous will was published, in which he provided money for the design of a new British alphabet. The story of that alphabet is now told by its designer, Kingsley Read, in an exhibition to be held from 24 April to 29 June in the Library of the University of Reading.

Spelling reform obsessed Shaw for much of his life. *Pygmalion*, written in 1912, dramatised some of his ideas on language and Henry Higgins (played in the musical *My Fair Lady* by Rex Harrison) is modelled to some extent on Henry Sweet, a learned philologist whom Shaw met as early as 1879. Shaw's appeal, ultimately made in 1941, for a completely new alphabet, induced Kingsley Read, a lettering designer with a knowledge of phonetics, to take up the challenge. Shaw hated all schemes for spelling English 'with the old ABC.' He wanted a wholly new alphabet 'to be used and taught concurrently with the old alphabet until one or the other proves fitter to survive.'

Shaw gave Kingsley Read every encouragement. But his wishes took their final shape only in the Will, which supplied funds both for the creation of the alphabet, and for the transliteration into it of his own play *Androcles and the Lion*. This part of the Will was, however, challenged in the high Court and declared invalid. With Sir James Pitman's help, the dispute was settled and the Public Trustee at last announced a world-wide competition to secure an ideal design. Kingsley Read's alphabet shared first prize with three other entries but was finally selected for the transliteration and printing of *Androcles*, which appeared in 1962 with old and new versions of the play printed on facing pages. Each line of text in the new alphabet occupied fifty percent less space than the corresponding line in the old.

The exhibition illustrates these and other developments by means of photographs, letters and postcards from Shaw, extracts from his Will and other writings, designs, the version of *Androcles* in the new alphabet, and samples of correspondence from people who took the trouble to learn it. A catalogue of the exhibition, including a commentary specially written by Kingsley Read, will be available to visitors. Copies of the catalogue can also be obtained from the Typography Unit, University of Reading, 2 Earley Gate, Whiteknights, Reading RG6 2AH, England.

When the exhibition closes, the exhibits and much other material on the Shaw Alphabet, will form a permanent collection in the Reading University Library.

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The i.t.a. Foundation announces the 8th International i.t.a. Conference and Workshops, June 25th-28th, 1972, at the School of continuing Education, Washington Univ. St Louis, Mo. Registration should be made in advance with I.T.A. Foundation, Hofstra Univ. Hempstead, N.Y.

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[*Spelling Progress Bulletin Summer 1972 pp2,3 in the printed version*]

## **2. English Versus the Near-East Languages, by Helen Bonnema**

### *I. Beginning Readers in the Middle East Quickly Learn the Decoding Process in Reading.*

"Farsi (Persian) is strictly phonetic," said Dr. Bastanpoor. As the National Committeeman for Rural Education in Iran, he made this comment when talking with our party of I.R.A. members who traveled around the world last summer. He continued, "Within four to six months, beginners can read anything that is written."

Dr. Bastanpoor and other Iranian educators explained the situation in their country where children who attend school have the barest of facilities: dried mud floors to sit upon, a chalk-board as the only equipment. Yet with these meager materials, they quickly learn to read.

Mrs. Mishadi, of the Children's Council of Early Elementary Education, said she shuddered to think what would be the results of their efforts if Farsi were written with the inconsistent spelling of English. "Your language is so hard," she said sadly. The weariness in her voice reflected her discouragement over her own inability to pronounce words correctly. Her lament was one which we heard over and over again in every Middle-Eastern country we visited. During their struggle to speak understandably to us, people would gravely reiterate, "English is so hard." Then they gave examples to show how our spelling had misled them. Our tourist guides in Teheran, New Delhi, Isfahan, Shiraz, Persepolis, Calcutta, Kathmandu, Bangkok, and Singapore, at some point during their declamations could be expected to make excuses for their misplaced accents and faulty pronunciation. With a shrug, their common complaint was, "English is so hard to read."

In Afghanistan, where few of the fifty million people can read, the educational leaders told us about the newly instituted literacy program. Only 20% of the children receive even a primary education, and only 5% complete schooling equivalent to the level of the American 12th grade. Many of the youngsters come to school unable to converse in Farsi because they use Pashto or another language or dialect at home. Yet they soon learn to speak and read Farsi, their second language.

One of the teachers engaged by the United States A.I.D. office explained, "We don't have much trouble in the beginning with the sounds. Farsi isn't like English, you know!"

In New Delhi similar opinions were expressed when the Hindi language was extolled. At the Office of the Ministry of Education, we were handed a mimeographed paper entitled *Reading and its importance for India*. On page 9, we find:

Hindi, being almost a phonetic [\[1\]](#) language, the problems of this language cannot be the same as that of English. The problem of pronunciation in Hindi is not so difficult as it is in English. Also the methods of teaching reading of a phonetic language cannot be entirely the same as that of a non-phonetic language. It is therefore necessary that we should read the English literature on reading with some caution and try to produce our own literature on reading. . .

For example, for the teaching of reading of a phonetic language like Hindi, should we start from the teaching of alphabet first or should we give children the whole word or whole sentence first?

II. *Mini-research*. For some years I have played *miniresearch*. The aim of the game is to find out if any educator I meet or read about knows of a country where beginning reading is as difficult to learn as in America. In conversations or correspondence with people acquainted with schools in a country where English is not the native language, I ask: "How long does it take your children to learn to read?" or "What difficulty do beginners have?" Typical answers from visitors on our campus, delegates to conventions, and other travelers, are:

### **Germany**

"Children learn to read during the first few months in school, and can pronounce almost any word after that."

Dr. Oscar Fasel, Temple Buell College.

### **Russia**

"Children enter school at seven. Learn the sounds of the letters, and by Christmas read (pronounce) anything presented. Because of phonetic regularity, no special instruction is needed after that; never any spelling lessons, as such, either."

Dr. Lyakhov, Polygraphic Institute; Mr. Tapytkov, secondary principal; Mrs. Malcova, teacher trainer; all of Moscow.

### **Nigeria, Africa**

"The Tiv language is a linguist's dream come true. Children can learn to read it in a very short time."

Rev. Rolf Veenstra, Mkar, West Africa.

### **Spain and Italy**

"Neither language offers so much difficulty in reading as English. In neither country is there a need for professional journals on the teaching of reading, as in the case in America."

Dr. Jose Favole, while teaching at Madrid Study Center, Spain.

## Japan

"Children learn the 50 symbols of the 'Woman's alphabet,' or *kata kana*, in a short time. This has consistent vowel syllables and a sufficient vocabulary to carry on day by day activities. They learn a more difficult system, *hira gana*, in about the third grade. Later, if they pursue a scholarly career, they learn the *kanji* system of adapted Chinese ideographs."

Kayoto Imai, student from Japan, Temple Buell College, Denver, Colo.

## Armenia

"Armenian children learn to read easily and enjoy it, judging from observations of child life in Beirut, Lebanon, where there is a sizeable Armenian population, Armenians are lucky when it comes to learning to read, write and spell because their language employs a phonetically consistent 38 character alphabet faithfully representing all the basic sounds of the language. Furthermore, there is perfect one-to-one consistency between sounds and symbols because each symbol is assigned to just one sound and no others. Learning the alphabet and systematic instruction in reading and writing begin in the kindergarten when the children are about 5 years old. The last reading book is finished by the end of the second school year when the children are approximately six. Why are there no other books in the series for more advanced levels? The reason is that by the time the children have completed the work in these early books, they have learned the mechanics of reading and from then on can help themselves pretty well. The 7 year olds are ready for textbooks in school subjects and for storybook reading. They have caught on to the sounding principle by means of which they help themselves to new words. They proceed with very little help from the teacher on word recognition."

Dr. Gertrude Hildreth, writing from American University of Beirut, Lebanon, and later in a conversation at her home in Sea Cliff, N.Y.

Similar opinions about the spelling regularity of other languages are encountered in educational journals.

## Hebrew

"The script of Hebrew, which is Semitic in origin, varies in many details from Latin letters. However, it is written phonetically, for there exists a one-to-one correlation between phonemes and graphic symbols."

Dina Feitelson, "Structuring the teaching of reading according to major features of the language and its script." *Elementary English*, v. 42:870-7, Dec. '65.

Thruout the years during which I have carried on this "Mini-research," I have never found a person who did not feel that the beginning stage of learning to read English would be expedited by a consistent system of spelling.

[1] In this and other quotations, the speakers are apparently using the word *phonetic* when they mean *phonemic*.

*[Spelling Progress Bulletin Summer 1972 pp3–5 in the printed version]*

### **3. Improving our Understanding of the Decoding-Encoding Relationship, by Raymond E. Laurita\***

\*Yorktown Heights, N.Y.

To be alive today is to be an integral part of perhaps the most dynamic and significant period of change ever to have occurred in our society. The rapidity with which essential changes are occurring almost daily, affects the operation of our entire societal structure. And yet, if we are to survive as a people, perhaps as a race, we must learn to adapt even more quickly, almost spontaneously, to these changes and reorient long established modes of performance.

Those in education are growing in awareness of the significant place society has delegated to them as the schools bear an increasingly large portion of the blame when these traditional modes break down or fail to meet the needs of this complex society. It is evident that education must prepare people for change rather than stability, for no one can predict with any degree of certitude what the needs of the future will be.

Margaret Mead, [\[6\]](#) writing more than 20 years ago to a world that seems almost quaint in retrospect, said:

American children are growing up within the most rapidly changing culture of which we have any record in the world, within a culture where for several generations, each generation's experience has differed from the last, and in which the experience of the youngest child in a large family will be extraordinarily different from that of the first born. Mothers cannot look back to the experience of their mothers, nor even to that of their older sisters; young husbands and fathers have no guides to the behavior which they are assuming today. So long standing and so rapid have been those processes of change that expectation of change and anxiety about change have been built into our character as a people.

One area of the educational system which appears to have been slowly developing readiness for an accelerated change of pace has been that of initial language instruction. There have been gradual and evolutionary developments occurring which have laid a substantial foundation for the readily observable shift now taking place. Movement has been away from early instruction in a prescribed curriculum based upon "meaning," contained in an arbitrarily established sight vocabulary, to be learned by rote, toward the direction of procedures which give initial instruction in the processes governing the learner's ability to discover for himself the relationships between graphic symbolic language and oral symbolic language.

Chall [\[2\]](#) indicates there is substantial research underlying such a significant change from "meaning emphasis" methods to procedures which she terms "code emphasis" techniques. She wrote:

My analysis of the existing experimental comparisons of a meaning emphasis versus a code emphasis tends to support Bloomfield's definition that the first steps in learning to read in one's native language is essentially learning a printed code for the speech we possess. It does not support the prevailing view that sees the beginning reader as a miniature adult who should, from the start, engage in mature reading. Early stress on code learning, these studies indicate, not only produces better word recognition and spelling, but also makes it possible for the child eventually to read with understanding—at least up to the beginning of the fourth grade, after which there is practically no evidence.

Such a shift in emphasis is having a significant impact on both educator and learner for it indicates a recognition that the problem in learning to read initially lies not primarily in associating meaning with print. Rather the problem lies in assisting the learner to develop sufficient ability in decoding the graphic system to allow him to associate that system with the oral system, where he already possesses great facility—a subtle but extremely significant difference in emphasis.

Smith and Dechant [9] indicate that children learn to read in two stages: the first, the "learning to read" stage, during which time they learn to decode the graphic system with facility, a point the authors indicate occurs at about the fourth grade level; the second, the "reading to learn" stage, which continues throughout the remainder of the individual's life and which allows him to use printed language itself as a means of adding to and enlarging his knowledge of both concrete and abstract reality.

Such a view of the development of decoding skills is most fruitful for it closely parallels the developmental sequence the child used in learning to speak. One could use similar terms to divide the development of spoken language into a "learning to speak" phase, when the child is learning to decode the sounds he hears, and a "speaking to learn" phase, when he is using speech itself to multiply his knowledge concerning his environment. For example, the child learns first to make sounds, blend them into units and then copy the speech of his parental speech models. Eventually he develops the ability to use a variety of speech patterns in complex ways to gather information. The child who is learning to speak asks questions for an extended period of time before he realizes fully that his questions – complex blendings of words and intonations – are bringing answers. During this developmental period he is literally more concerned with learning "how" to elicit information than with the response "about" the question he asked. Once he learns he can get information, not only by seeing, hearing, touching, tasting and smelling his environment, but can also get it more efficiently by expressing his own curiosity in the form of questions and/or statements, his capacity to learn is greatly enlarged.

Inherent in our improved understanding of the need to help children learn to read or decode by instructing them early in the essential structure of their language, is a vastly improved understanding of the interrelated character of the decoding and the encoding acts. It is clear now that the complexity of both these processes far surpasses our present understanding, for we do not, in truth, know how the human organism uses its cognitive apparatus, first, to learn to speak, and then to read.

Dr. Dan Slobin, [8] speaking recently at a conference on the science of psycholinguistics held at SUNY (State Univ. of New York) at Buffalo, put it succinctly and honestly when he stated that, "what speech does is go into the ears and come out the mouth, the rest is inaccessible!" However, even though our understanding is still limited, what is known is that there is a close relationship between the decoding and the encoding processes in the development of speech, and by extension, of reading, an even more sophisticated and complex symbolic language act.

Thus the child, whose sensory systems are functioning normally, develops the ability, at some point, to understand or perceive that some of the sounds entering his auditory field are coming both from his own mouth and those of the others around him. He then develops the capacity to imitate for himself the speech he hears and sees coming from his speech models, by receiving constant feedback from all pertinent sense systems. He is learning to decode speech by developing simultaneously the ability to encode that same speech for himself by matching the sounds he makes with those of his speech models.

Because of our improved understanding of these relationships, flowing largely from the interest of the linguistic scientists over the past several decades, this knowledge is being transferred to the area of graphic symbolic language. We now are also aware that children learn to read better and more completely when they are allowed to use the developmental sequences involving decoding/encoding which they have already used in learning to speak. Instruction in language is at last beginning to be viewed as a totality, an act which involves all aspects of language, rather than viewing it as a combination of individually learned discrete units, including speech, listening, reading, writing, spelling, grammar, syntax, etc.

Chall's research substantiates quite fully the belief of more and more educators that children learn best when they are aided in understanding the structure of their language, an understanding which depends from the outset, upon their ability to perceive the close and integral decoding-encoding relationship existing between spoken and graphic symbolic language. Lefevre, [5] the linguist, goes still further and writes:

Language is fundamentally and primarily audio-lingual, a matter of mouth and ear. Writing and printing are based on speech and derived from it; their visual representation of certain aspects reminds the ear not only of the sounds of words, but of our native intonation, the overall melody and rhythm of entire utterances. Writing and print are thus mnemonic devices whose main function is to effect the recall of entire language patterns, sentence level utterances in particular. True knowledge of reading and writing processes begins with searching study of the interrelationships of language patterns and their graphic counterparts.

Bruner [1] has also written extensively concerning the significance of understanding structure as the "sine qua non" underlying all learning. He tells us that "Grasping the structure of a subject is understanding it in such a way that permits many other things to be related to it meaningfully. To learn structure, in short, is to learn how things are related." He goes on to indicate that the more avenues the cognitive system develops for the reception of information, by means of the different sensory input systems, the greater the opportunity for the information to be transferred and integrated within the total system. He writes:

Virtually all the evidence of the last two decades on the nature of learning, and transfer has indicated that, while the original theory of formal discipline was poorly stated in terms of the training of the faculties, it is indeed a fact that massive general transfer can be achieved by appropriate learning, even to the degree that learning properly under optimum conditions leads one to 'learn how to learn.'

Thus in developing the "grasp of structure" which permitted them to learn to speak, children learned through functioning, by actually using oral symbolic speech through the agency of the kinesthetic-speech apparatus, and the reception of feedback through the ears. In short, they learned "how to" operate, to use Bruner's terms, within the structural framework of an oral symbolic language medium provided by their speech models, initially. Only later did they learn "about" that oral system.

To use Silberman's [7] analogy, concerning the development of speech by the child, "it is only much later, after he has learned to think causally, that he can begin to think about causality." Thus the child has learned to decode and encode not separately, but rather by a reciprocity of processes, each providing constant and instantaneous flow of feedback to the cognitive system so the necessary neural adaptations can be made which will allow new and changing associations to be integrated within the total system.



When the child first arrives at the school, he already has a well developed functional system for decoding and encoding oral symbolic speech. What we as educators must be prepared to do is help him to use these processing systems to learn "how to" operate with the graphic language system, with all his sensory modalities being brought into play, including his visual, auditory, kinesthetic-speech *and* his kinesthetic-tactile systems. Procedures which literally force him to focus on learning "about" the graphic system, prior to his actively functioning with the medium itself as a graphic or written medium, must be viewed as being disruptive to a child's normal learning techniques.

Although print is a graphic medium which in time becomes primarily dependent on the visual sense system for rapid translation, we do not learn what words *look like* merely by being able to say them or hear them spoken. If we did, we would all arrive at the school door fluent in the reading act. Freud [4] wrote of the essential preeminence of writing in the development of language and related expressive skills many decades ago:

In writing as well as in speaking we receive kinesthetic impressions from the movements carried out by the muscles involved. However, the impressions from the hand are more distinct and intensive than those coming from the speech muscles, either because we are used to attributing great value to the perceptions of the hand also in relation to functions other than writing, or because they are associated with visual impressions; we can see ourselves writing but not speaking. . .

The relatively recent development and use of a variety of techniques which are both structured and sequenced and which aid the learner to operate with the graphic medium by coordinating instruction in the decoding and encoding aspects of that system, promises to revolutionize the teaching of reading in our schools. It is now possible to view the child as not only passing through a "learning to speak" stage to a "speaking to learn" stage, and a "learning to read" stage to a "reading to learn" stage, but also, and more significantly, to observe him as passing through a "learning to write" stage to a "writing to learn" stage.

Such a view more clearly allows consideration of all aspects of the language act to be perceived of as but parts of the totality, rather than as a collection of discrete units to be learned in isolation and only later to be integrated within the total system.

Consideration of writing as simply a recording of thought onto paper, much as a typewriter recording words onto the printed page, is to misperceive of the writing act within the total cognitive system. Writing is as much a *means* of thought as any other form of human expression which must rely upon the activation of a sensory apparatus for that expression. It is only the viewer who must perceive of print as a *product* of thought. Writing is no different than sculpture, ballet or painting, in that none of them involves simply a product, but rather a product *and* a means.

Writing cannot any longer be viewed simplistically as the result of having learned spelling, grammar, syntax, punctuation, etc. It is that, and more. It is an act that develops through function, through knowing "how to" operate internally with the symbols which represent reality, rather than only knowing "about" the external characteristics of these symbolic representations. An example of the existence of such a dichotomy can be readily observed in a great deal of the literature produced for children by educators, who it must be presumed knew considerable about the externals of language, but who could not indeed write in the sense that their products were clear and interesting to young readers. Unfortunately books written for children all too often contain passages such as the following: [3]

He said again that he did not want to kill all the men, just the two men who had started the trouble, but those two we must surely kill because if they were to get away and get back to the ship, they would come back with guns and with every man on her and we would be lost.

Systems, which in the past, delayed instruction in the writing or encoding act until some time after the child had already learned to read or decode (as if such prior knowledge of decoding were an essential prerequisite for the encoding act), appear in retrospect to have interrupted the child's normal developmental system for coping with symbolic language. It seems to have perhaps placed serious inhibitions upon the child by forcing him, certainly in many cases, to learn "about" his printed language system, prior to assisting him in learning "how to" internalize that system through the agency of his writing or kinesthetic-tactile systems.

Assuming all children could learn this way, or that these well established systems could be interrupted for a time and reinstated at a later date, appears to have been a faulty assumption, as attested to by large numbers of people, including, (a) those who failed to develop any facility at all with the decoding or encoding acts, (b) those who learned these processes incompletely, and (c) those who learned to decode with far greater facility than they learned to encode.

The future is indeed bright for many, if not all, children<sup>5</sup> in our schools today. More and more instructional systems have appeared which are developed around carefully structured and sequenced behavioral and instructional objectives, which can be measured and evaluated at every step of the way-systems which stress both the decoding and encoding relationships reciprocally. What needs still to be better understood, is how to aid those millions of Americans who failed to learn to read, or learned incompletely, with the procedures of the past; procedures which focused on learning "about" language, at the expense of learning "how to." It is hoped that as our understanding of the decoding-encoding relationship becomes more complete, it will offer ever-increasing skill and efficiency to those who work with these language disorders.

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[Spelling Progress Bulletin Summer 1972 p5 in the printed version]

#### **4. Children Learn What They Live, by Dorothy Law Nolte** (The effects of early childhood environment on learning)

The negative:

- If a child lives with criticism, he learns to condemn.
- If a child lives with hostility, he learns to fight.
- If a child lives with ridicule, he learns to be shy.
- If a child lives with shame, he learns to feel guilty.

The Positive:

- If a child lives with tolerance, he learns to be patient.
- If a child lives with encouragement, he learns confidence.
- If a child lives with praise, he learns to appreciate.
- If a child lives with fairness, he learns justice.
- If a child lives with security, he learns to have faith.
- If a child lives with approval, he learns to like himself.
- If a child lives with acceptance and friendship, he learns to find love in the world.

#### **Comments by Harvie Barnard:**

All of these attitudes are determined largely in the *home* in the *pre-school* period. These are the attitudes which determine "readiness" for school, education, and life!

Cultivation of the Positive attitudes in the *home* is a first step in learning, and a long leap toward success in LIFE!

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[Spelling Progress Bulletin Summer 1972 pp6-11 in the printed version]

#### **5. Spelling Difficulty – a Survey of the Research** **by Leonard S. Cahen, Marlys J. Craun, and Susan K. Johnson\***

\*Div. of Educational Studies, Educational Testing Service, Princeton, N.J. Edited by N. W. Tune from an article by the same title in *Review of Educational Research*, v.41, no. 4, Oct. 1971. Reprints of original article with its extensive bibliography available free from Dr. Cahen.

The problem of spelling has concerned educators since the late 19th century. Research in spelling has focused on three basic areas: (a) the speller, (b) methods of instruction, and (c) the word to be spelled.

Several general surveys of spelling research already exist. Most include curriculum recommendations based on the research reviewed. Both Hildreth (1955) and Horn (1960, 1969) provided incisive reviews of curriculum applicable research as well as extremely helpful bibliographies. Betts (1940) provided an extensive pre-1940 bibliography. Other good reviews were written by Fitzgerald (1951), Peters (1967), Petty (1964), Plessas and Ladley (1965), and Shane and Mulry (1963).

The present review is part of a larger research endeavor designed to develop a mathematical model to predict spelling difficulty (see Cahen, Johnson, & Wiley, 1970-71). It does not focus directly on

speller characteristics or on methods of spelling instruction. Basically, it is a review of attempts made to answer the question: what makes a word difficult to spell?

### **The "Demon" list method**

#### *Early research*

A common method used to study spelling difficulty was to compile and examine lists of "demon" spelling words. These lists of consistently difficult words were first compiled at the turn of the century (see Breed, 1925). Two different sources of demon words were commonly used: writing done in formal classroom situations and themes or letters written by children in informal situations. The early lists tended to use the first source (e.g. Jones, 1914). Later, Fitzgerald (1932) listed the 100 most frequently misspelled words in each of three elementary grades based on 3,184 student letters. Johnson (1950) reported the 100 most frequent misspellings in the creative writing of 14,643 elementary school children. Tabulations similar to Johnson's present a problem noted earlier by Fitzgerald (1932): some words that are easy to spell are used very frequently; consequently, a large number of types of misspelling may result even when most children spell the words correctly. Therefore, demon lists which do not take into account frequency of use and difficulty can give misleading information as to which words children actually have trouble spelling. In addition, while this method identifies difficult words, it does not tell *why* these words are difficult, nor does it allow one to *predict* which words, other than the ones tested, will be difficult.

#### *Recent research*

Investigators in the most recent demon list studies built composite lists to determine by overlap the persistently difficult words. Compilations of spelling demons from several lists have the advantage of eliminating words resulting from sample bias.

Spelling demon lists were also used to analyze the elements of words that seemed to contribute to their difficulty. Fitzgerald (1952) examined his 1932 list and compared it with lists by Johnson (1950) and Swenson and Caldwell (1948). After determining which words were in all three lists, he attempted to identify some of the *characteristics* of the words themselves that contributed to the difficulty. He noted, for example, that capitalized words and possessives tended to appear consistently in demon lists. This approach took the demon list method one step further by attempting to generalize beyond the specific words in the demon list. Fitzgerald's approach afforded many useful clues, but it could not identify all the elements that make words difficult to spell.

Gates (1937) identified the difficult spots in 3,876 word: frequently used by elementary school children. He reported the most common errors and the percentage-frequency distribution of hard spots found in the words. While this study indicated specific likely spelling errors, the vulnerable parts of the misspelled words, and a measure of the persistence of the errors, the reader was left to deduce for himself the common error *types*.

### **Error Analysis**

Another common approach to the study of spelling difficulty was to analyze the number of mistakes of a certain type. Foran (1934) discussed the issue of spelling error classification and reviewed significant studies in the area. By far the most extensive report on spelling errors was by Mendenhall (1930). Gates (1937) also did work on this area. Both Mendenhall and Gates based their studies substantially on the same word list. Mendenhall classified into types the spelling errors made by 100 elementary school pupils on a list of 2,300 words. Errors were analyzed by the percentage of misspellings of a given type, e.g., omission of a letter, etc. The Mendenhall research enables one to predict that a word with a certain characteristic will be more difficult to spell than if it did not have that characteristic; e.g., a word containing a diphthong will be more difficult to spell than one without it.

Kyte (1958) used a sample of pupils from the intermediate grades to determine the number of misspellings of each of 60 words and the number of ways of misspelling each word. He found a correlation of .48 between these two variables. The sample size was not indicated in the report. This study's value lay in listing common misspellings for each word and analyzing the error causing it.

The failure to calculate the proportion of times a characteristic contributed to spelling difficulty out of the number of times the characteristic occurred, was the weakness of the studies by Mendenhall (1930) and Kyte (1958). For example, diphthongs may account for a significant number of errors in spelling; however, this does not indicate that every word containing a diphthong will be difficult to spell. It should be noted at this point that several of the types of error that are persistently identified in deductive examinations of spelling errors cannot be used in a predictive situation. Although omission of letters is a common source of misspellings, it is impossible to predict where and in what word the omission is likely to occur (except for certain special situations, e.g, double letters).

### **Inferring Factors of Spelling Difficulty**

Furness (1956) studied such spelling mistakes as the wrong vowel in an accented syllable, the wrong vowel in an unaccented syllable, the wrong consonant, a single consonant where the consonant should be doubled, unnecessary letters, etc. From these she deduced that *faulty pronunciation contributed to spelling difficulty*. However, she did not make clear the relationship between the errors and mispronunciation. It is difficult to see, for instance, how failure to double a consonant could be caused by mispronunciation since the second consonant of a double is generally "silent." Deductions of the sort Furness supplied can be helpful, but inferences must be supported by empirical research; Furness did not conduct such research.

Plessas (1963) used the method of inferring factors of difficulty in his homonym study. The results of tests on 25 commonly taught words and their homonyms showed that performance failed to improve with grade level. Since most words are correctly spelled by an increasing percentage of the students as grade level increases, this indicated that homonyms are probably a special case and that the general rules for determining spelling difficulty may not apply to homonyms. Plessas also found that some homonyms are often confused with each other while others are seldom confused; this indicated that all homonyms may not act in the same manner.

### **Computer Generation of Spelling Errors**

Fremer and Anastasio (1969) took a new step in the study of spelling difficulty. They wrote a computer program to generate "likely" misspellings of words using a set of 71 replacement rules of the form, "If X appears in a word, replace it with Y." Thus, the program scanned words and altered certain letter sequences or patterns known to be loci of spelling difficulty. For example, whenever the sequence "ie" occurred, it was replaced with "ei." Such a program allowed the comparison of the generated likely misspellings with actual misspellings.

Gibson (1969) used the computer-generation-of-errors technique to construct objective spelling tests. The generated misspellings fell into four error categories: additions, omissions, substitutions, and inversions. Experimental administration of the spelling tests produced high correlations among the first three error categories, suggesting that these errors involve similar psychological processes. Lower correlations between the inversion category and the other three suggested that inversion differs from other error processes.

### **Statistical Studies of Spelling Difficulty**

Petty (1955, 1957) attempted statistically to determine which *phonemes* contribute to spelling difficulty. He chose 234 fourth-grade difficulty words from the *New Iowa Spelling Scale* (Greene, 1954) and paired them by number of letters in the word. One member of each matched pair was correctly spelled by less than 70% of the eighth graders tested while the other word was spelled by

over 80% of the eighth graders. Separate analyses across phonemes showed no significant differences between the easier and the more difficult list, but nine phonemes present in words of persistent spelling difficulty were investigated more thoroughly. From the original 234 words, 100 words containing all nine phonemes in all possible syllable positions were administered to pupils. The children spelled these phonemes correctly more frequently than not. It was concluded that such a simplistic analysis was an inefficient predictor of spelling difficulty.

Bloomer (1956) used a correlational methodology to investigate parameters of spelling difficulty. The criterion of difficulty was the percentage of error in the occurrence of a word in children's writing as determined by Brittain and Fitzgerald (1942). This latter work was a word frequency count that also recorded the percentage of misspelled words in the sample. Bloomer's independent variables were frequency (measured by Brittain & Fitzgerald, and Rinsland, 1945), grade placement of the word in spelling texts (according to Gates, 1937), word length, word complexity (including a sound variable and a shape variable), and meaningfulness of the word, defined as the grade level at which 90% of the children understood the word (Gates, 1937). Average grade placement of the word in spelling tests, number of letters in the word, sound discriminability, and shape discriminability correlated significantly with the difficulty criterion. Unfortunately, the author used a series of bivariate analyses rather than the more parsimonious multiple regression approach.

In 1961 Bloomer used the grade level at which 50% of <sup>7</sup> all students correctly spelled a word as the criterion of difficulty. He obtained the grade level ratings from interpolation of data in the *New Iowa Spelling Scale* (Greene, 1954). Bloomer investigated three variables: (a) multiordinality of meaning (number of dictionary meanings), (b) concreteness, or the number of senses (sight, smell, taste, hearing, touch, kinesthesia, and stability over time) to a meaning, and (c) frequency of occurrence ( $\log_2$  transformation) based on Rinsland's (1945) frequency count. Using multi-ordinality, concreteness, and frequency of occurrence as predictors, a multiple coefficient of correlation with difficulty of .527 was obtained. However, frequency of occurrence accounted for 24% of the variance, so little additional variance in the criterion was contributed by multi-ordinality and concreteness.

The 1964 Bloomer paper investigated the correlation of length of the word and the  $109_2$  of the frequency (from Rinsland, 1945) with three different criteria: (a) the previously used criterion of the grade level at which 50% of the children spelled the word correctly, (b) the greatest percentage gain in children's learning to spell a word in a given year, and (c) the year in which this greatest gain occurred. All criterion data were taken or estimated from the *New Iowa Spelling Scale* (Greene, 1954). Length of word and frequency correlated significantly with all three criteria.

Bloomer's (1959) unpublished dissertation included two variables that failed to correlate with spelling difficulty: sonic emotion (the rated pleasingness of the sounds in the word) and emotional tone (the rated emotional intensity of the word). Using as the dependent variable the grade level at which 50% of the students could spell the word, Bloomer (1959) reported that the multiple coefficient of word length and  $109_2$  of frequency equaled .74.

### **Word Frequency**

Word frequency studies reflect the cultural variable "opportunity to learn" and, as such, seem eminently relevant to understanding what makes a word difficult to spell. Presumably, the greater the exposure to a given word, the easier it will be to spell.

Rinsland (1945) tabulated words used in written compositions by first through eighth graders; he supplemented first grade data with reports of the children's conversation in and out of school. Hildreth (1948, 1953, 1955) criticized this and virtually all other word frequency counts. She pointed out that 2,000 words, the frequencies of which were relatively constant across grade levels.,

accounted for 95% of the words used by children in their writing. The remaining low frequency words had erratic grade placement in the Rinsland count, e.g., they occurred at grades two and four, were absent at grade three, etc. The problem arose because, for low frequency words, grade placement and actual frequency of usage are difficult to determine without an excessively large sample of writing.

Betts (1940) reported his findings on grade placement of spelling words (grades 2 through 8) for 8,645 words from 17 series of spelling texts published in the 1930's. He reported three measures for each word: median grade placement (M), frequency of occurrence in the 17 spellers (F), and range of grade placement (R). In 1949 Betts updated the investigation with a study of 8,652 words from spelling texts published in the 1940's, again reporting the *M*, *F*, and *R* measures; this study also included a list of first grade spelling words.

### *Frequency vs. Familiarity*

Dolch (1951) noted that frequency cannot be equated with familiarity. Children are familiar with words of very low frequency, e.g., cobweb, even though they may not use them in their writing. Dolch concluded, "Children do not speak and write about everything they know. Instead, they speak and write about the things they have a chance to speak and write about, or about the things they are interested in or attracted to (page 469)." Most evidence indicated that word frequency can be associated with spelling difficulty; however, frequency must not be interpreted to mean familiarity. Furthermore, the evidence presented by Hildreth indicated that the frequencies reported for low frequency words are generally unstable.

### **Visual and Auditory Aspects of Spelling Difficulty**

It is reasonable to assume that words perceived easily and correctly will be spelled correctly with greater probability than words not perceived easily or correctly. Several studies bear out this assumption.

### *Physical Properties of Words*

Physical properties of words are certain perception influencing characteristics of the letters making up the word. In a theoretical article, Kottmeyer (1952) noted that children developed skills of recognition of whole words and parts of words which enabled them to spell with increasing accuracy. He hypothesized that words having natural divisions (suffixes, e.g., or letters such as l, t, g, or y which break the word) are easier to spell. An empirical study by Crosland and Johnson (1928) showed that in a series of letters, those which extended above the line (ascenders, e.g., t, l) or below the line (descenders, e.g., g, y) were correctly identified most frequently. Letters which did not extend above or below the line and which were similar in shape were correctly identified least frequently. This indicated that words with ascenders and descenders would be easier to spell. Crosland and Johnson also found that the number of errors increased with an increase in the number of letters presented; this finding is in accordance with all the other research reviewed here.

Bloomer (1959) reviewed the literature on the relationship between configuration and spelling difficulty. (Configuration refers to external complexity, or regularity of form, as measured by the number of ascenders and descenders). He developed several hypotheses on the basis of his review and two configuration measures to test them. He concluded from the results of this investigation that the *learning of configuration is superfluous in the mastery of spelling skills*.

### *Visual Perception*

McGinnies, Comer, and Lacey (1952) investigated the relationship of both word frequency according to Thorndike-Lorge (1944) and number of letters in a word to latency of tachistoscopic recognition. The investigators used words occurring 10 to 400 per million on the Thorndike-Lorge list and containing 5 to 11 letters each. They found that word frequency correlated with recognition

threshold: the higher the frequency, the lower the threshold. With frequency held constant, word length also affected the threshold: the longer the word, the higher the threshold. This experiment indicated that length and frequency of a word should be associated with spelling difficulty if spelling.

Gibson, Pick, Osser, and Hammond (1962) investigated *the effects of pronounceability of nonsense words on the ability of subjects to perceive them*. The researchers constructed two lists of nonsense words, one pronounceable and the other not, and presented them tachistoscopically. Subjects consistently perceived the pronounceable words correctly more often than the unpronounceable words.

Since the same letters appeared at the beginning of one word and the end of the other word of a pair (for example, GRISP-SPIGR). Gibson et al. were able to show that spelling errors occurred more often for a given sound-letter pattern when it ended a word than when it started the word. They varied the number of letters in words in the two lists and found that the difference between pronounceable and unpronounceable words was negligible for four-letter words; apparently, four letters can be perceived no matter how improbable the combination of the letters. A word of 8 letters, however, was so difficult that even pronounceability did not allow perfect reproduction in most cases. The same results were found when subjects were asked to pick out the word they had seen in a multiple-choice situation. Gibson et al. concluded:

This result cannot be caused by a difference in the familiarity of the letters taken alone, or even the vowel and consonant-clusters taken alone; for the same clusters were used in the two lists. It must be due to the existence of higher-order graphic units: the letter combinations of English writing that function as relatively stable units in grapheme-phoneme correspondences.

#### *Auditory Perception*

Black (1952) investigated the effects of word frequency on oral intelligibility. He read words to his subjects over a consistent background level of white noise (random fluctuation noise) and found that familiar words were more easily recognized than less familiar words. This indicated that in conventional test situations, students would be more likely to hear correctly, and therefore spell correctly, words of higher frequency.

Tiffany (1952) studied the differential discriminability of different vowel sounds. While his sample seemed too small for reliable results (N=18), he did find a difference in the discriminability of vowels, with long-*a*, as in *rain*, *u* as in *cut*, *au* as in *haul*, and *i* as in *hit*, being the most difficult. This suggested that the words containing these vowel sounds may be harder to spell since it is difficult to determine what sound occurred.

#### *Phonological Content*

According to Brown (1958), if the acoustic attributes of a word do not enable one to choose between several possible alternatives in identifying that word, the phonological context may render one alternative more probable than the others. In a given language the occurrence of certain phonemes in certain contexts is so unlikely that it may be considered, in Whorf's terms, "impossible." Whorf's formula, describing possible monosyllable English phoneme combinations, ruled out many conceivable combinations. Whorf noted a *behavioral* disposition to pronounce "possible words (as evidenced in the coining of new terms with "old" phonological patterns) created by familiarity with the combinational possibility structure of the English set of phonemes or graphemes. This suggests that there is also a *perceptual* disposition to hear "possible" words. The experiment by Jass and Gillooly (1971) bears on this suggestion.



Brown and Hildum (1956) analyzed spelling involving substitution of one phoneme for another and found that errors were generally minimal, with only one distinctive feature (voicing, point of articulation, manner of articulation). A typical error was the substitution of t or k for p; both of these are point of articulation changes. Changes of two or more features were much less common.

### **Serial Position and Word Length**

Another approach to the problem of spelling difficulty was to conceptualize spelling errors in terms of the serial position effect. Mendenhall (1930) noted that the greatest number of errors tended to occur at the center of a word or immediately to the right of center; he did not, however, interpret this as a serial position effect. Jensen (1962) concluded that while *certain words were phonetically more difficult to spell* than others, the serial position effect did explain some of the difficulty. That is, word length can contribute to spelling difficulty independent of the difficulty of individual elements within a word. Jensen's data suggested, furthermore, that any phonetically difficult element was more or less troublesome depending on its position in the word.

One of the most obvious criticisms of Jensen's study is that difficult spelling elements tend to occur in the middle of words and, therefore, his curves may not have been a result of the serial position effect. Kooi, Schutz, and Baker (1965) devised a test of this criticism. Their test list consisted of 9-letter words representing types of spelling difficulty (e.g., double consonants, *ie/ei* confusion, y used as a vowel) in each of the three word positions: initial, medial, final. They found that most errors did occur at the *phonetically difficult* section but that the remainder of the errors tended to arrange themselves in the serial position curve. They noted that the shape of the curve was very sensitive to the type of scoring procedure used.

### **Phoneme → Grapheme Correspondences**

It seems obvious that a knowledge of the *regularity of the spelling-to-sound correlations within words* would contribute to understanding spelling difficulty. However, there has been much controversy over this assertion; the issue still has not been completely decided in all details. Hockett (1965) felt similarly about the spelling problem (phoneme-to-grapheme) and the reading situation (grapheme-to-phoneme): "English words are not a simple and direct representation of the spoken words, since there are *too many cases in which the spelling is not predictable from the pronunciation* (p.32)." Yee (1966) and Personke and Yee (1971) reviewed the question of whether or not competence in spelling can be increased by using spelling rules based on consistent phoneme→grapheme correspondences (the generalization controversy). He concluded that the controversy was not about whether useful generalizable sound-to-spelling correspondences actually exist (unquestionably they do). Rather, the debate was about the relative importance of generalization and drill approaches to spelling instruction, the controversy centering on the importance of phonological principles to spelling competence (because of the generally unreliable nature of its spelling). (Editorial comment: It seems strange that in all this research no attempt was made to try to find out whether phonetically spelt words were misspelled as often as non-phonetically spelt words, regardless of frequency of occurrence. We think that the natural tendency of young pupils to spell phonetically would show up as errors in non-phonetically spelt words, and the near absence of spelling errors in phonetically spelt words would further prove the point).

### *Reading and Spelling Processes Contrasted*

It is important to note here that spelling requires a conversion from the phoneme (sound) to the grapheme (spelling) whereas reading requires a conversion from grapheme to phoneme. The psychological process involved in reading differs from that involved in spelling. Fries (1963) noted that the *recognition* responses (a form of decoding) required in reading differ sharply in nature and quantity from the *production* responses required in writing (spelling). What is a problem in the *spelling process* may not be one in the *reading process*. Weir and Venezky (1968) indicated linguistic patterns for which this was true (e.g., double consonants).

Fries (1963) used unstressed syllables as an example to illustrate the psychological difference between spelling and reading. English vowel sounds within final unstressed syllables are rather consistently rendered as "schwa" or sometimes as short "i"; the number of possible spellings for the vowel sounds in these unstressed syllables is great. Such words (e.g., identical, minute) present the speller with the difficult problem of learning the particular vowel letter required in each specific word in order to correctly produce it. The reader of such words, however, has only to become aware that the schwa sound in unstressed syllables can be represented by any of the five vowel letters. The reading process with respect to unstressed syllables, then, requires the learning of a rule or principle that is widely applicable whereas the spelling process requires the more or less rote acquisition of a large number of individual responses. Fries (1963) concluded that generalization can be heavily exploited in reading but not so often in spelling. He further emphasized the fact that, *throughout the history of English spelling, single letters have never matched single sound features*, and he insisted that the contrast of one set of spelling *patterns* with other such sets identified the connection of graphemes with phonemes.

Hall (1961) maintained that the *accurate and effective teaching of reading is impossible without a clear understanding of the relationship between writing and speech*. He contended that, as a consequence of the primacy of speech over writing, one must first recognize the sounds of English and then how (and how well) they are graphemically represented. Hall advocated early inculcation of the alphabetic principle (the correlation between graphemes and phonemes) by graded word selection from more regular to less regular correspondences between letters and sounds. Chall (1967) supported this approach with her hypothesis that controlling words for spelling regularity contributes to the learner's self-discovery of the relationships between sounds and letters. For a review of the literature on the strength of the relationship between phonetic knowledge and spelling ability, see Groff (1968).

#### *Early Work in Spelling-Sound Correspondences*

Reading specialists wrote most of the early articles on spelling-to-sound correspondences. In 1926, Atkins published a tabulation of the number of differing sounds attached to each grapheme pair found in the Thorndike & Lorge (1944) 2,500 most common words. She found that there was some consistency, although in half of the grapheme pairs the number of *nonphonetic occurrences* was larger than the number of *phonetic occurrences*. In 1952, Oaks tabulated all of the different vowel combinations found in Betts' (1940) *Primary Reading Vocabulary Studies*. She then tabulated the utility of the rules that could be deduced from her initial tabulation. Again she found *some regularity*, but there was a *high proportion of exceptions to the rules*.

#### *The Phoneme→Grapheme Consistency Issue*

In 1966, Stone published a sound-symbol frequency count using 6,000 words. He tabulated the number of regular and irregular occurrences of all vowel and consonant sounds and found the consonants much more regular than the vowels.

Hanna and Moore (1953) made the first widely recognized analytic attack on the problem. They analyzed 3,000 words from a speller by Newlon, Hanna, and Hanna (1942) and concluded, "Nearly 3/4 of the vowel phonemes are spelled by their regular letter representations from about 57% to about 99% of the times they occur (p. 334)." This was the first attempt to actually qualify the relationship from the perspective of sound to spelling.

E. Horn, who has been associated with the position that spelling-to-sound correlations are not high enough to have any practical utility, replied to the Hanna and Moore article in 1957. Horn quarreled with their definition of "regular" spellings of phonemes, pointing out that it was not an adequate definition. This semantic problem was avoided in subsequent Hanna investigations by reporting

only proportions of phoneme→grapheme correspondences and not attaching the word "regular:" Horn (1957) went on to note that over 1/3 of the words (presumably his own sample of 10,000 words) had more than one acceptable pronunciation. If a word has a given spelling-to-sound correspondence for one pronunciation, it is doubtful that it can have the same spelling-to-sound correspondence for subsequent pronunciations. If the spelling-to-sound correspondence is "regular" for one pronunciation, it would seem to follow that it is "irregular" for other pronunciations. Horn found a far lower proportion of "regular" correspondences in his sample of 10,000 words than had been reported by Hanna and Moore (1953). It is speculated that the discrepancy between the Hanna and Moore (1953) and the Horn (1957) findings might be due to sampling bias.

Some cautions are in order with respect to reported percentages of regularity or correspondence. First, that which is accepted as a rule or pattern for determining correspondence *tends to bias the results* depending on whether greater or less correspondence is hoped for. Second, reported percentages can be inflated if they refer to *components of words and not entire words*. In a five-phoneme word, for example, a reported figure of 80% phoneme grapheme regularity must be applied to each of the phonemes. This means that the entire word would be about 33% "regular." (This estimate was obtained by taking 80% to the fifth power.) Finally, the reader should note whether phoneme-to-grapheme correspondences are being discussed or grapheme-to-phoneme correspondences; the latter, which are appropriate to understanding the reading processes, are far more predictable than the former.

The Stanford researchers (Hanna et al., 1966) then took the obvious next step, never before attempted. Using their sound-to-spelling correlations, they predicted the spelling of the 17,000 words in the corpus. They reported that 49% of the words could be spelled correctly using their phoneme--grapheme correspondences. (The first of the three cautions mentioned above applies to this reported percentage.) The authors considered this percentage to be a strong indicator that a high (?) degree of phoneme-to-grapheme exists in English!?!

Flaws can be found in the Stanford Study's pioneering work. These include failure to use a pronunciation system representative of a single English dialect, some ad hoc designation of phonemes, and tabulations based nonuniformly on arbitrary syllabic divisions (Venezky, personal communication, 1970). Roberts (1967) criticized the Stanford project for not answering with sufficient precision the question, "Just how alphabetic is the English spelling system?" He also expressed reservations about basing the corpus on the Thorndike-Lorge (1944) count that lists, for the most part, only uninflected and nonderivational forms of words. Hanna et al. used *Webster's New Collegiate Dictionary* (1961), a dictionary, Roberts charged, that poorly represents actual American speech, particularly in the area of unstressed vowels; thus, it contributed a *higher degree of correspondence* than would be obtained by using another more representative dictionary. Reed (1967) discussed additional defects in the Stanford Study (Hanna et al. 1966):

- (1) failure to view English phonology consistently as part of the total structure of English grammar,
- (2) failure to formulate an adequate theory of the relationship between dialect diversity and the system of English spelling, and
- (3) too great dependence on the capacity of the computer, which leads to many limitations in linguistic research.

Regarding the dialect question, Brengleman (1970) maintained that it was incorrect to say that a common system for English is unsatisfactory because of dialect differences. Some dialect differences are subphonemic. Also, spelling difficulties do not arise when a phoneme of one dialect occurs predictably in the same position in the same words as a different phoneme in another dialect.

It is appropriate to mention here Venezky's (1969) position that sound→spelling relationships used in spelling instruction must be derived from linguistic work which recognizes the units and

functions on which English orthography is based; *he cautioned against heavy reliance on any probabilistic, regular-irregular orientation.*

Solomon and MacNeill (1967) compared the correctness of computer spelling based upon a phonemic→graphemic algorithm (developed from the Stanford corpus) to the correctness of spelling by elementary school children, using data from *The New Iowa Spelling Scale* (Greene, 1954). They were able to obtain 90% computer accuracy in correspondences and 50% accuracy in whole-word spelling. They also found computer spelling more accurate on words of high Thorndike-Lorge frequency. *Demons for the children were demons for the computer as well*; this suggested that when redundancies cannot be used as spelling cues, spelling difficulty occurs.

*The Active-Inactive Dimension of Phoneme→Grapheme Correspondence ("Silent" Letter Problem)*  
In any attempt at qualifying phoneme ---\*grapheme correspondences, "silent" letters present a great problem. Do they actually serve an identifiable function in the word (e.g., does a "silent" final *e* determine the pronunciation of a preceding vowel?) or are they just "there"? If they serve no function, with what letter(s) should they be grouped for the phoneme→grapheme correspondence? Or are all words with truly silent letters "non-phonetic"?

Venezky (1967; -- & Weir, 1966) attacked the problem, giving consideration to the role of morphemes as an intervening structural level between phonemes and graphemes. Hall (1961) provided the theoretical rationale for this position. He developed the idea that writing is a way of representing speech. In English, writing is basically alphabetic; however, morphemes are also used in certain situations. A full understanding of spelling-to-sound correspondences in English must consider phonemes, graphemes, *and* morphemes. Venezky analyzed phoneme-grapheme correspondences with a computer program; however, he considered morphemes (especially suffixes) as units in addition to graphemes, allowing a more accurate appraisal of the correspondence between English sound and spelling.

*Further Phoneme→Grapheme Research.* Dolby and Resnikoff (1964) added a new dimension to the phoneme→ grapheme correspondence problem when they published a paper showing that English orthography is unexpectedly regular. By dividing the letters into strong consonants, weak consonants, and vowels, they found that nouns can only have certain patterns of these three elements; it therefore might be possible to predict spelling difficulty from these patterns.

Wallin (1967) reported a summary of the research dealing with the relationship of phoneme--grapheme correspondences and position effects, including some recent studies in these areas with the Swedish and Finnish languages. He pointed out that the correlations between phonemes and graphemes are lower in English than in Swedish or Finnish.

(Ed. comment: The understatement of the year or decade. Of all the European languages, Finnish is the most perfect phonetically, while English is the least reliable.)

Overall, the evidence now indicates that phoneme→grapheme correspondences *of some consistency* do exist in English and that the spelling difficulty of an individual word should be related to the magnitude of correspondences with the word.

**(Ed. comment:** It is a sad condition when all of the many researchers concerned themselves solely with making the best out of a miserable situation and none could envision the proper solution to the unsolvable problem of confusable irregularities would be to remove them by introducing a regularized spelling of English. Apparently it is out of fashion to cut the Gordian knot.)

[*Spelling Progress Bulletin Summer 1972 pp11-13 in the printed version*]

## **6. Ways the International Reading Association can Encourage Orthographic Reform, by Helen Bonnema – an interview with Millard H. Black\***

\*President-Elect of International Reading Association

Millard Black, administrative coordinator of the Los Angeles City Schools and Chairman of the IRA Resolutions Committee, received his M.Ed, in the psychology of reading at Temple Univ, He has served IRA as a member of the Board of Directors and as chairman of important committees; is a past president of the Los Angeles Area Reading Association; has lectured widely at meetings of professional organizations, and at various universities, colleges, and public school systems; also has served as consultant to the U.S. Office of Education. Mr. Black has taught at all levels from elementary grades thru college. His experience in the Los Angeles City Schools includes classroom teacher, reading supervisor, acting administrator of curriculum, and zone director of instruction. He is the author of a number of articles, and assisted in the preparation of *Reading for Children without: Our Disadvantaged Youth*, and *Problems of Linguistically different Learners*. His other publications include coauthorship of basal readers, a high school remedial reading series, a supplementary elementary series, social studies readers, and a kindergarten-first grade program.

Q. Mr. Black, some of the subscribers to *Spelling Progress Bulletin* are enthusiastic advocates of spelling reform and yet are from fields other than education. For instance, one of them is a Los Angeles corrosion engineer, and another outspoken advocate is a San Francisco radio technologist. They express surprise that education organizations have not set the promotion of orthographic improvement as a foremost objective. Your discussion with me may point out the limitations and also the possibilities for participation of educational organizations in working toward such a goal. Why aren't reading teachers the chief promoters for spelling reform? Is it because they are employed by the public to teach the existing systems and not to reform them?

A. *Yes. The curriculum they are to teach can never change faster than public pressure demands. The curriculum is dependent upon a number of forces. The law of the state of California came out with a sweeping change in curriculum about 3 years ago which was supposed to free local districts from most of the previous mandates of the state legislature or state department of education. In reality the change has not been nearly as significant as had been hoped. The earlier state mandates often reflect public opinion at the local level. Also, members of the public rather than the profession, control most local boards of education. At the state level the superintendent of instruction is either elected generally or appointed by the governor. You have only to look at our own state to see the politics which have been apparent in the recent election and are evident in appointments to the state department of education.*

*The selection of textbooks in California is made by the state department of education. A single spelling book (since this is our focus in this discussion) is adopted and its use mandated by law. Until this can be overcome, or until the public can be convinced of the advisability of spelling reform, the teacher is really powerless to change curriculum content. You could have heads of every curriculum department in the state anxious to see spelling reform brought about, but the best*

*that they could do would be to develop an enrichment course in spelling for kids whose skills are so high they don't need grade-level instruction. The course could be called "enrichment" wherein a pupil could learn one of the phonemic methods, but teachers would be mandated to use as the basic text the one which had been officially adopted.*

*I think that pressure on the legislators by scholars and organized groups of educators would be the only effective procedure.*

Q. Since it is felt by some educators that a more consistent spelling system would be very helpful to children learning to read, wouldn't it be within the province of the International Reading Association to have a standing committee whose task is to go into all aspects of this?

*A. I would consider this an appropriate thing for the Association to undertake. The problem would be to get funds to set up research, or to study in depth the research which had already been reported. The literature is replete with reports of research, but when you get into these you find out so often that they didn't have controls which partialled out the researcher's biases. This is my impression of some of the i.t.a. experimentation.*

Q. As a system which changes English orthography for the beginning stages of learning to read, i.t.a. should be of interest to a standing committee, as would studies such as Hanna & Hanna's upon which thousands of dollars were spent to see how irregular English spelling really is.

*A. It's too bad that now with computers available such a study couldn't be done---*

Q. But the Hanna project was done with computers.

*A. Yes, but even since Hanna's, computer science has advanced to such an extent that they could tease out so many more factors than Hanna reported.*

*You would need one of the major foundations to fund it because the amount of key-punch time would be astronomical. If you could re-work the old Thorndike 4,000 words, and the study done in Oklahoma during the Depression years with WPA funds – a study of words which children most commonly use in writing – and find the percentage of words which are phonemic in terms of level of usage, you could get all of the permutations of the thing. I think Ernest Horn estimated the thousands of different ways of spelling "psychology."*

*With these facts a committee might convince business men, who are the big complainers about spelling – I don't know of anyone, really, other than businessmen and teachers who are much concerned. We get complaints from employers about girls who go directly from high school business courses into taking shorthand and typing that they are unaware of mistakes.*

Q. There are many aspects of spelling reform which a committee could study.

*A. When one considers "regularly" spelled languages like Italian, Tagalog, or Russian, and how easily they are reportedly taught, it occurs to me that maybe a project could be set up with gifted children who wouldn't suffer from learning two types of spelling. We could have a longitudinal*

*study with such children in which they would be taught in parallel fashion different orthographic systems. It would be interesting to see how they would change over, and which would be the preferred one.*

Q. There are interesting possibilities for research.

A. *Some of the i.t.a. experiments or researches have shown that kids make the transition from written i.t.a. to T.O. without any difficulty even in their writing, but I don't know whether any of these studies have used the Language Experience Approach with i.t.a., do you?*

Q. Oh, John Downing favors that. He doesn't start with the so-called *phonics* approach. He's strongly in favor of having the children – well, he may not actually have them only writing at the very beginning in the way that Roach Van Allen does. I would consider that an ideal combination with i.t.a., for the children could express any thought they had, spelling it "correctly."

A. *The committee would wish to familiarize itself with such research and also studies of children's difficulties in languages in other countries where there's a single-sound single-symbol correspondence. Altho it might be found that in many countries one reason they consider spelling less of a problem is that the need to spell is not as great as here. They probably have fewer people earning their living thru writing – more face to face relationships. I would suspect our country leads all others in the economic need, to spell.*

Q. That would be another question which could be pursued. The committee also could decide in what respects to cooperate with the Reading Research Institute to be established by the Phonemic Spelling Council. Teachers should be able to give advice as to needed research. Heretofore, the IRA has avoided the issue of inconsistent orthography. They have never faced it squarely.

A. *An alternative to having a standing committee investigate this might be a pre-convention institute on the importance of spelling reform.*

Q. Just how would we start? Wouldn't we need enough interested IRA members to even start? Most of them don't realize that the problem exists. We would need to have a nucleus of interested teachers, wouldn't we?

A. *No. If the president for the year in which this was to be done could be persuaded of the importance of the topic, he might appoint a chairman for the institute who would devise the program and locate the speakers. Then it would be announced.*

Q. I see. Then it would be up to the people who read about it to sign up for it – enroll?

A. *Yes. I would think that enough of you who are interested, who touch different kinds of populations, could stir up interest for participation.*

*Often in addition to the pre-convention institute, there is a strand woven thru the convention, a series of talks on the same subjects. People who can't get away to attend the pre-convention*

*institutes where the subject is treated in depth, can get at least an introduction to it thru two or three talks in the convention itself.*

*One of the people who ought to know something about how children learn to spell when they are not taught formally, that is, when they are taught thru writing, would be Russ Stauffer. And there is Roach Van Allen. They could tell us how well children learn to spell when they are taught reading by the language experience approach. Are their errors less, say at the end of three years? Are they spelling better if they have learned to read thru writing than if they have learned to read thru the use of textbooks?*

Q. That way of teaching reading would pair up so beautifully with a reformed orthography, because the little beginners would have such confidence. Van Allen allows them to spell the way the word sounds to them, and usually that is not the correct way. With a reformed spelling, they would spell "correctly" when they put down on paper the sounds they hear.

A. *I think Stauffer's research has shown that writing first is the superior way to learn to read, for then children realize that reading is the distillation or crystallization of someone's thoughts.*

Q. A pre-convention I.R. Association institute could cover the relationship of success in that approach with a reformed spelling system. What other speakers do you envision?

A. *Psycholinguists interested in the evaluation of spelling techniques. Someone should explain the social forces which bring about change. You have only to look at the Oxford Dictionary to see what changes have taken place within the last three or four hundred years.*

Q. It's interesting to notice spelling simplifications which have occurred in the commercial world, isn't it?

A. *Yes.*

Q. With advertizing. *Lite* for light. *Luv*, *Foto*, *Kodak*, – we see them everywhere on signs.

A. *Yes, look at "made-words" used for trade names. It's a social force that must be reckoned with. It would be interesting to have an advertizer as a consultant.*

Q. It would. They must discuss these things back and forth when they are going to name a new product.

A. *And I would want to see someone in electronics who is at work on computer language. He would have a tremendous amount to tell us. The time will come when computers will do an awful lot of our translation, but they can't do that until we get some sort of standardization of English spelling. An advertizer and an inventor would be two people who could bring a real message to educators.*

*Besides psycholinguists, I think you would need an anthropologist, someone like Kenneth Pike who has directed the translation of the Bible in so many, many languages. One of his good translators should be included. He has a whole widespread organization of people who are busy at translating*



*into dialects or languages which have not heretofore been reduced to writing. It would be interesting to know whether they are using a one-to-one correspondence between symbol and sound.*

Q. What symbol system do they use?

A. *I don't know, and yet I've been acquainted with their work for the last thirty years.*

Q. My guess is that they would try to use the Roman alphabet as much as possible.

A. *I haven't any idea. They are working with an almost illiterate people in most instances, so if they could find a way to make it easier to teach reading, they'd certainly use it.*

Q. Chinese Communists are interested in converting part of their writing to Roman letters, but not all of their writing, for in many cases a single ideogram can tell as much as a whole English sentence. --just like international road signs.

A. *The difficulty with ideographic or pictographic languages is that they don't adapt well to fast typesetting. However, these may have greater possibilities with electronic typesetting where they use a beam of light cast thru a negative to get the letter. It has made printing easier than when the old linotype machine was used.*

Q. I don't understand that at all.

A. *Computerized type-setting is the way all of the telephone directories are printed. There is no leads lug. It's all fed thru a computer and is almost a photographic process. The sheet that the proofreader gets has been prepared by a kind of photographic procedure rather than by the old type-to-paper.*

*Until we get a common orthography, we're going to find machine translating almost impossible, I think.*

Q. I think so too. And it would be advantageous for educators to be right up there in front.

A. *It will be interesting to see what will be done by the new organization, the Phonemic Spelling Council, of which you speak. If enough of their members or other people are interested in knowing what the International Reading Association can do, they should pursue the matter with the board or the president. If enough interest is expressed, I feel sure that within a year or two an institute could be planned. They are designed to meet the needs that the membership expresses.*

*And I think it's fortunate you have Ralph Staiger as an integral part of your organization. Certainly he's the guiding light of the I.R.A. He would be able to give advice as to how the Association can cooperate with yours.*

*[Spelling Progress Bulletin Summer 1972 pp13,14 in the printed version]*

## **7. The Whimsical W, by Lewis H. Boyle\***

The letter W, or as we call it "Double U," is said to have been devised by French scholars and scribes about 900 years ago. It was not the result of borrowing, or of gradual change, as were some other new letters, but was planned by a certain group of people.

Those people should be of great interest to us because mighty monarchs, like Tiberius Claudius, who conquered England, tried hard but failed to introduce a new letter into their language. We do not know how hard those French scholars tried, but they did not introduce W into French. The only time W is used is in words borrowed from other languages. Their OUI (yes) is pronounced WE, and NOIRE (black) is pronounced NWAR, but the letter W is not used.

W came to be used in Baltic Sea countries for V or F, we are told, but for our W sound, only by Anglo-Saxons. We commonly use it now in that way for the consonant sound only in words that we call native.

In our words of learning derived from Latin and Greek, the consonant W is spelled with U, as in LANG-uid. But U is silent in LIQ-uor, LANG-uor and VICT-ual and words derived from Old French; and even in QUE in French and Spanish terms, as in AN-TIQUE and QUET-ZAL. So you see QU does not always have the KW sound, altho it does in native and Latin words.

The letter Q was in the old Phoenician alphabet, but the Greeks did not have it. It is not known when and how the Romans adopted the letter Q, but we may call it a comparatively new letter.

We study that for comparison, for W is one of six or seven comparatively new additions to the original Latin alphabet, and none of them, including W, are used or spelled consistently, especially when final in words.

The Romans borrowed K, Y, and Z from the Greeks, but made very little use of them, and then dropped Z as they felt it unnecessary. Hence in English other letters are more often used for K and Z sounds, especially in Latin-derived words, and Y is most commonly used as a substitute for I, as in SILL-i-ness, SILL-y.

In pre-modern times, around the years A.D. 1000, the letter U was introduced to distinguish the vowel sound from the consonant sound, both of which had previously been represented by V. The straight-lined V, which is easy to write by hand and easily cut in stone by chisel, did occasionally cause confusion-context (in single words) sometimes being inadequate.

The letter W was introduced into the English language by French scholars (probably monks) about the time of the Norman conquest of England because the Rune symbol for this sound too closely resembled p. They recognized the fact that the W sound was an important English sound because of the frequent appearance of the Rune symbol, which looks more like a triangular pennant or flag than the letter p. W is the initial sound in many common and basic Anglo-Saxon words. W has been found by scientists to be the commonest initial consonant sound heard in telephone conversations.

In the 15th century, J developed first as an initial (more ornate) form of I, then as a symbol for the voiced g-sound to distinguish it from the guttural g-sound. Yet the transition was never completed – G is still used before E and I sometimes, as in George, gin, yet we have: get, jet, gig, jig, and gill (which has both G and J pronunciations). J is never used for this sound in final position.

In English we have over 40 unit speech sounds and try to represent them with 26 letters, most of which represent several sounds or are duplicates. Only B, K, M, P, Q, R, V, represent one sound each (altho W does when not a digraph)

Fortunately, we have four sounds I, R, W, and Y, which can be uttered only when they come in certain positions in words. Elsewhere these letters may be used for different sounds.

That principle is taken advantage of in using the very old letters H and R, but not consistently with W and Y. The aspirate H must begin its syllable, as in HE. But we make double use of H. We nicely represent several unit sounds by using H as a modifier after certain consonant letters, as in CHEEZE, SHE, THIN, THEN, WHEN, besides PHONE, AH, EH, OH, and terminally in WITCH, WISH, WITH, WIDTH, and we could by analogy extend the use of H as in ZH for the least frequent English sound. NG is a natural phonetic combination for SING, but is not used in THINK (where it should be). It does not occur initially except in Chinese words.

The sounds of the venerable R and the newer W and Y must be followed by a vowel sound in the same syllable. There they are strong consonants produced by sharp movements of the tongue, lips and jaws. Phoneticists tell us that those sounds result from the movement of those members from the positions for U or I sounds to the positions for the vowels that must follow;-they call them "glides."

Scholars should be a little concerned with pronunciation, but....

The sound of H begins the word WHITE and that of W precedes the vowel. The sensible Anglo-Saxons spelled that word HWIT, but scholars of those days switched that to WHITE. They also changed the old CWIC to QUICK, in analogy with Latin derived words, even tho they already had introduced the W.

Altho in WH the sounds are transposed, that is done consistently, so students soon learn to read and write that digraph, tho whimsical.

However, I contend it is *wholly wrong* to have an initial letter silent, for it is then too hard to find the word in the dictionary; and these are not very common in English, as compared to final letters, so they could easily be eliminated.

It seems to be against the religion of scholars to use the right vowel when final in native words that are longer than monosyllables. Final A is usually obscure, and final single E is silent, and final I is changed to Y.

In English we have about 30 ways to spell long U and most of them are bad; it is rarely plain U except in exotic words. The sound is often IU or YU, but we do not have that spelling. Since it is taboo to use the letter U when final in native words, we commonly change it to W when it ends a word.

Long U: *crude, crew; choose, chew; spruce, spew.*

Long YU: *duke, dew; huge, hew; fuse, few.*

Diphthong: *noun, now; hound, how; proud, prow.*

*Growl, prowl, town and fowl, but not in foul, towel, and found.* It is harder to spell these words than to read them. It is still harder to read the following in which W may be sounded U or be silent: *bow, mow, row, and sow.* (because they are homographs).

We have various whims and taboos in this area which cause us much trouble: we overdo OU and OW and EW, but avoid WU, UW, IW, and IU in native words, which would often be more phonetic. We use WON and ONE, but not the phonetic WUN.

O is overworked and we use AU, AUGH, or AW most often for our most sonorous sound, popularly called a broad or open O; it may also be used in COUGH and FORM. It is not properly named or taught, and in the West it is being LOST, the word TAUGHT often sounding like TOT.

In English the final silent W is used to modify preceding vowels, as we have seen. The sound of our potent W often modifies the following A, giving it a broader A sound, or a broader O sound. Compare: *an, want; at, what, squat. Are, war; ar-rant, and war-rant*, The W before A in that list is used very well, and we can live with the W sound in WHAT and SQUAT.

However, we could get along very well without the W in words like WRONG, BLOW and SOR-row.

We might relieve the spelling pressures on U sounds by using W alone for the rather uncommon but badly spelled medium U in PULL, COULD, and WOOD (as in Welsh). It always occurs between consonants and should not be confused with consonant W, which never does so occur. Y is used singly for vowel sounds and is less confusing than is W used in digraphs.

Ancient or medieval French scholars devised and introduced the letter W, and it would seem that modern scholars, writers and publishers could have the letter used to greater advantage, or dropped when silent and confusing, if they desired change.

But no way!

Those people seem to be headed in the other direction, being "hell-bent" on using words with more letters, and more of them. The novelist, Paul Roberts, wrote on "How to say nothing in five hundred words." That is fine and dandy in fiction, but it may be worse in education where verbosity is less needed.

In its issue of March 3, *Time* quoted the California State Dept. of Education thus: Evaluation . . . is "the process of making considered judgements concerning the professional accomplishments and competencies of a certificated employee based on a broad knowledge of the area of performance involved, the characteristics of the situation of the individual being evaluated, and the specific standards of performance pre-established for the position." As another example of "pedagese," we find "Facilitator" is now used for teacher.

Can we expect *that* class of people to shorten and simplify our words?

#### References:

*Ency. Brittanica*, 14th ed. v. 1, p. 683  
Dewey, Godfrey, *Heterografy, or how we spel!*

## 8. Book Reviews, by Newell W. Tune

**Aukerman, Robert C. *Approaches to Beginning Reading*, John Wiley & Sons, New York, 1971. pp. 509. \$7.95.**

This comprehensive book is more than a textbook on methodology – it is an encyclopedia of all known (publisht) approaches to beginning reading. This is certainly a welcome arrival to explain the plethora of innovations advanced in recent years. More than 100 approaches are described, some in great detail, but all with sufficient information to enable the reader to understand their particular method of presenting the task of learning to read. Ten categories classifying the various methods are as follows:

Basic Phonemic Approaches, Phonemic Pronunciation Approaches, Phonemics-Reading Approaches, Linguistics-Phonemic Approaches, "Total" Language-Arts Approaches, Language Experience Approaches, One-to-one Sound-Symbol Approaches, Individualized Reading Approaches, Early Reading Approaches, Perceptual-Discrimination Approaches. Probably very few of our readers ever thought that there could be that many different classifications in methodology of teaching reading. But this only shows how thoro has been this research into publisht materials for teaching reading.

Not only are these modern innovations thoro discussed, but it begins with a short discussion of past methods, tho these are not treated as extensively as we could wish. We would also like to know why many methods were tried in the past 150 years only to be dropt when the enthusiastic proponent of that method lost the confidence of supervisors or the board of education controlling the pursestrings. How many of these modern innovations will suffer the same fate? While such a research project would logically be a part of the title of the book, it would also be a fair sized book by itself. Let us hope someone decides such research is important enuf for a master's dissertation.

"The author would hardly run true to form as a university professor if he did not respond to the opportunity of an objective evaluation here and there. It is hoped that such evaluations are as objective as humanly possible and that personal and subjective likes and dislikes do not show through too strongly."

"The purpose of this volume is to present as honestly as possible the significant features of the many approaches to beginning reading, emphasizing their strengths and weaknesses, so that the reader may be better informed and, thus, better able to arrive at his own evaluation and decision."

This book should be a must for college professors of reading and for librarians as well. They need to know details about all the different approaches to reading instruction and no other book we have seen encompasses the subject with the thoroness of this book. The extensive bibliography contains 258 references and lists the names and addresses of 133 places where each of the methods discussed may be obtained.

Truly an important book for educators.

**Henderson, Ellen C. *Teaching Reading to Bilingual Children*. Exposition Press, Jericho, N.Y. 1972. \$3.00 (paper) \$6.00 (cloth). pp. 160.**

This interesting book, by the former Editor of *Speech Magazine*, is a step-by-step guide for parents to teach their own children or for foreigners to help themselves or others in learning English where the new language is a handicap. Detailed instructions make it unnecessary that the teacher be a college graduate in education or a certified teacher. Teaching bilingual children to read begins with teaching proper pronunciation, intonation and stress. The importance of phonics is stressed and the subject of inner speech is explained.

Remedial reading instruction is one chapter that is demonstrated, and teacher training receives a helpful discussion. The chapter on spelling is well worthy of investigation by researchers in that subject. And spelling reformers will find here material that confirms their ideas. However, a means of circumventing the irregularities of English is shown, and the regularities of English are also detailed. An example of simplified spelling which is very easy to read is shown. Could this be the solution to the problem of teaching reading in English?

Other books by this author are: *Phonics in Learning to Read*, *You Can Teach a Child that Reading Can be Fun*, *Learning to Read & Write*.

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## **9. Our Readers Write Us**

### **Enquiry from India**

**Dear Mr. Tune:**

**Mr. H. V. Bharadwaj**

Regarding the book, "A Common Script for India," I am told only a few copies are left, but that Mr. Sri Agarwalla now has a new book on that subject that is more elaborate. I will get a copy for you.

I am very glad to know that Xerox copies of any rare book in U.S.A. or England libraries can be had from University Microfilms, Ann Arbor, Mich., and that you have the negatives of some of them. I shall make use of this facility in due course.

Mr. A. T. Kumarasawmy, Malleswaram, Bangalore, So. India, has produced a pamphlet, "Naveen English Lepe" which means 'New English Alphabet.' I have requested him to send you a copy.

I should very much like to get in touch with others interested in spelling reform. Could you oblige me with some names and addresses?

With best wishes to you all,  
I am, yours sincerely, H. V. Bharadwaj,  
Rajajinagar, Bangalore, So. India.

-o0o-

## Spelling Changes in Various Countries

Dear Mr. Tune:

Donald L. Humphries

Thanks for your letter enclosing Mr. K. G. Aberdeen's letter and your reply.

I assume you are interested in only those changes in spelling which have been introduced as deliberate policy for improving spelling-and not with those changes occurring as historical accidents which may or may not have resulted in improvements.

There are many examples of the latter case:

1. The Romans conquered Greece, and took over certain of the Greek alphabetical symbols.
2. Pre-literate societies with a language of their own may adopt the alphabetic symbols of an alien culture, but there may be no symbols for some of their sounds; hence scribes may invent new letters (e.g. our J & W).

Or, scribes may give arbitrary combinations of old symbols a special value (e.g. *th*, *sh/ti* as in *nation*, *ng* as in *singer*, c.f. *hunger*, etc.). (see *The Loom of Language* by Frederick Bodmer, pg. 79.)

3. New letters formed from old. About 1630 the letters U and V were made distinct from each other, the V becoming a consonant (because it usually started a word), and l. c. *u* a vowel (because it was usually inside a word). Probably this accidental usage became established by convention. Likewise J was originally an ornate form of I, W was VV, i.e. 'double U', found necessary for a consonant sound.

4. New inventions may alter our way of spelling. The introduction of printing, and of dictionary making (the importance of the dictionary) more or less forced a uniformity of spelling on us, since it is easier and more reliable to have only *one* way of spelling any particular word (in printing and dictionary making) than four or five alternatives. Some of the choices imposed were rational, but some of the other final decisions were not. We are stuck with spellings anyhow, it seems. Invention of computers, new military and outer-space techniques, etc., all give us new words but based on old spellings. We are in a rut! Yet computers must have special *languages* designed for them. Hippie culture coins new words, so innovations are inevitable.

But perhaps I am getting off the track. I don't know when and where *systematic spelling reforms* have been imposed by officialdom on the public. There seem to have been so many changes due to historical accidents that it might be a good project for your *S.P.B.* to give us historical essays on the origin and evolution of each letter of our Roman based alphabet; also essays on the origins of various current spellings. Research into other languages than English is commendable. Modern Norwegian has introduced two new symbols, I believe.

Currently, I am researching 'international languages' and find Lancelot Hogben's *Interglossa* an interesting attempt.

Yours, Donald L. Humphries,  
Melbourne, Vic., Australia.

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## Legislation for Reform

Dear Mr. Tune:

E. F. Darling

It is interesting to hear of your past efforts with regards to Congress and I agree emphatically with all you say as to the need for the introduction of new spelling, and some government backing would no doubt be of great help. But if the educational institutions were to be opposed or merely non-cooperative to the movement for new spelling, the efforts of the government and others could be largely or wholly nullified. After all, it is the young people who need to be taught the new system and the only way to effectively get at the young is through the teachers. If the government were serious in their support for reform, and educational institutions were not wholly co-operative in the matter, it might well become necessary for the government to give directions to the institutions to use the new system as from a certain date, and if necessary take powers by legislation. If the primary schools were induced to accept the new system, the higher schools and colleges would in time have little choice but to accept it also. All this is based on the assumption that the majority of educators would be indifferent to, or not openly opposed to reform, and I think that assumption might be made from the figures given in your letter, i.e. 800 educators circularized and only 120 reply, and practically all that did reply were in favor of reform.

Is this encouraging?

I wonder, is the i.t.a. the ultimate?

Yours sincerely,

E. F. Darling, Masterton, New Zealand

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## An Answer to The Folly of Spelling Reform

Dear Mr. Tune:

D. L. Humphries

Since the author of the above essay concluded that "The Folly of a Phonetic Alphabet" would have been a more nearly correct title, the following attempted refutation of his arguments is based on this latter thesis.

1. "Proper pronunciation" makes phonetic spelling difficult. This assumes that there must be a 'proper way' – and one and only one way-of saying, and hence spelling, a word. But this insistence on orthodoxy has only grown up in our language since the advent of printing and of dictionary making. Prior to that people tended to spell as they pleased, i.e. more or less phonetically as the Language allowed, even using four or five different spellings for the same word in one piece of prose. It would seem that dictionaries originally only recorded the commonest, or suggested-best, way of spelling a word, and that all other options were omitted for lack of space. The prime aim of dictionaries was to tell us the meanings and origins of words – the idea that they should also give us the 'correct' spelling seems to have arisen later. But should we now revert to 'free-n-easy' spelling? This would make writing phonetically so much more possible, but would not different dialects tend to establish themselves in writing as well as in speech? Would this result in Babelization – often feared by opponents of spelling reform? Perhaps, but the opposite is more likely to occur – stabilization.

2. "Adequate symbolization" to cope with the variety of dialects, etc. The belief that a new phonetic alphabet may not be able to cope with this problem, ignores the fact that our present alphabet certainly copes *much less* – otherwise reform would not be needed. But with the use of the mass media of communication (radio, television) and the greater world and inter-State travelling and tourism nowadays occurring, it seems to be likely that dialects and accents in the English-speaking tongue will be gradually ironed out into one more-or-less uniform speech. Hence, phonetic



symbolization could then cope (also a 'proper' pronunciation would be much more easily established – see 1. above). There seems to be common agreement that some 40 symbols would make English into a phonetically -spellable language. A minimum of half-a-dozen new vowel symbols would be a major step forward.

3. "Typewriters, printers, investments, vested interests." The new symbols could be devised by acknowledged experts in the field of phonetic spelling, so that agreement is more likely on what such symbols should be. Once derived, the symbols could be added *around* the present letters on the typewriter keyboard, rather than replace any of them. The Russian alphabet has many more letters than does the English. How are these accommodated on present Russian typewriters? If only the aforesaid minimum 6 new letters are involved, our problems are that much the easier.

With printers, little trouble is caused either way. Countries that recently changed over to decimal currency had to scrap or modify existing accounting machines, cash registers, etc. Yet the expense was considered worth while in view of the long term benefits. Vested interests are *always* being upset by changes in various fields, so there is nothing unique here.

4. "Indexes, filing systems, teaching, names." By adding the new symbols to the *end* of our present alphabet, we would only have the problem of discarded letters (c, q, x) to consider. Old books need not become obsolete entirely provided the new alphabet did not diverge *too* greatly from our present one. Could proper names be altered *en masse* by Government decree?

*Conclusion:* The above four points are an attempted answer to the essay on the possible impracticability of utilizing a phonetic alphabet. In making this attempted answer, I have used certain suppositions:

1. that rigid orthodoxy in spelling is neither desirable nor necessary in our modern world. I advocate a return to 'free-n-easi' spelling.
2. that the intended phonetic alphabet would take the form of an *Augmented Roman Alphabet*. That is, that it will not be an entirely new set of symbols to replace our present alphabet.
3. that only some 40 symbols will be needed (inclusive of our present ABC's), and that a minimum of about 6 new ones will suffice if needs be.
4. that the bulk of reforms to our present spelling to make it more phonetic would simply involve the *re-use of present letters* (so that words like: 'of, use', would then be spelt, 'ov, uze' or the like.).
5. that *experts* would decide just what the new symbols would be, and that *governments* would participate in the change-over.

(Note: My main query in respect to any new symbolization is the difficulty of devising both a printed and written form for any one letter.)

\*Melbourne, Vic., Australia.

## Proposed changes in the th-symbol

To the Simplified Spelling Board:

N. W. Tune

Will you please consider this a request for consideration of the digraf fh- as the symbol for the sound of the voiceless the in "thin."

Among the objections that have been raised to fh, probably the only real objection is the imaginary or preconceived conclusion that the public (and educators) will not accept it. But most educators and spelling reformers at the turn of the century did accept without question the equally strange dh, which had a weak basis for acceptance phonetically, since the sound of *d* plus that of *h* cannot by any stretch of the imagination come out to voiced th, as in "then."

The fact that fh is unknown in English writing can be turned to an advantage in use because it has no possible sound connotation to be forgotten, so learning its use will be easy. Its use will be helpful in calling attention to the fact that there are two different th-sounds that need discrimination. This is a particularly good reason for teaching these sounds to foreigners, such as Spanish, Portuguese and Italians, where 1 of such sounds is absent.

Lower case fh is optically similar to th, and reminds one of it. The fact that capital Fh is not optically similar to Th is such a minor point that it is not worth discussing – but certainly it is not as confusing as the trigraph thh in thheem, which looks like th-heem, or in thin where thhin looks like th-hin.

In summarizing the points in favor of fh over thh, I claim the following:

1. The sound of f plus the sound of h does give a sound phonetically and physically near to the intended sound, whereas thh does not. Both f and th (voiceless) are dental, fricative continuants – the former being made with the lips and teeth, and the latter made with tongue and teeth.
2. It is not in any conceivable word confusing whereas thh is. (withhout, withhal) (withhhold)
3. It is less bulky, clumsy, and awkward in some words.
4. It is not readily and noticeably divisible into components as is th-h.
5. It is optically similar to th and reminds one of th.
6. In an electronic 'scanning machine, it will be very much easier and less costly to design for a digraf than a trigraf.
7. In trying to cater to the whims of those adults who object to change, let me quote from Sir James Pitman's letter to S. S. Eustace of Dec. 2, 1968, "I think the point stands out from the specimen (example) that the slippery slope of attempting to satisfy the insatiable appetites of those adults opposed to reform, ends inevitably at a bottom where the old spelling needs to be preserved without change."

After all, what advantage is it to students if, in bringing the new spelling closer in appearance to the old, you introduce some needless confusion?

Hoping for a serious consideration of this proposed improvement,  
I am, yours sincerely, Newell W. Tune.

[Spelling Progress Bulletin Summer 1972 pp17,18 in the printed version]

## 10. System 2 and the Letter Yer, by Dr. Edward F. Weir\*

\* Tehachapi, Calif.

The Simplified Spelling Society has recently voted – but not without strong dissent by some members – in favour of a simplified English orthography called System 2, which will be designed to bypass the obstacles delaying the progress of New Spelling.

In describing System 2, S. S. Eustace lays the greatest stress on the use of an additional letter, a, for the closed central vowel, schwa or yer, which sound is also represented by a in the International Phonetic Assoc. alphabet. The use of this additional letter is the central part of the proposal.

In many spelling systems previously proposed, including i.t.a., there is no letter for the yer sound. (It seems to me that the i.t.a. could be improved by the addition of some such letter to represent the yer sound.) Eustace shows why yer cannot be spelled with any of the Latin vowel letters without causing confusion. He cites these examples: not with a: "saucepan" /-pən/ cannot be -pan because of "sampan" /pæn/; not with e, i, o, u, y, etc. "manna" cannot be: mane, mani, man $\acute{o}$ , manu, many, man', because none of these suggests the right sound.

In the IPA, the symbol a was originally selected because it looks like an inverted e. Eustace copies a from the IPA and justifies it on these grounds: (1) a looks like a Latin letter to the mass of uninstructed people for whom System 2 was intended; (2) in T.O., a is usually represented by a, e, or o, and a resembles all three.

It is commendable that he has tackled the problem of how to represent this essential sound. Since spelling reformers object to T.O. primarily because of its phonetic inconsistency, it would suggest a lack of ingenuity, or courage, to settle for anything less than a phonetically consistent new orthography. Eustace has the ingenuity, and the courage, to find one way around this inconsistency.

He says it is essential to make the point that the a in System 2 is by *definition unstressable*. This is intended to simplify the problem of stress, since syllables containing the yer sound are generally unstressed. This overlooks the fact that some people use the same vowel sound in both syllables of "murmur." If ə is not to be used in the stressed syllable, what vowel letter can be used to represent the sound in both syllables? Is ə to be a symbol for the yer sound, or is ə to be a symbol for an unstressed vowel? The letter ə seems to me to be too valuable a letter to restrict only to unstressed syllables; or should we introduce another letter to represent the yer sound in stressed syllables?

Examining the words in which he uses the letter ə, some would object that he uses it too often. Some people speak more rapidly and/or more carelessly than others, but I always pronounce the -pan of "saucepan" the same as the -pan of "sampan." "Miner" should be "minor" but I would spell "minor" as "min-oo-r." Some people always pronounce "miner" and "minor" the same, perhaps all people sometimes pronounce them the same; but if many people usually pronounce them differently, they should be spelled differently. If "minor" is spelled "minər," that obscures the fact that "minor" is related to "minority" but not to "mineral."

Especially at the end of a syllable, I would be inclined to use one of the near-yer sounds: uh in "about"/uh-bout/ or "manna" /man-uh/, i in "event"/i-vent/ or "begin" /bi-gin/, oo in "today" /t-oo-day/. This would leave the yer sound in far fewer words. I toyed with the idea that the apostrophe could be used instead of the letter ə a to represent the yer sound in those few words. One could then write System 2 without making any alterations to the typewriter keys. No new letters would have to be introduced. But this would not work. The apostrophe is now used to indicate a silent letter. Some

people use the yer sound in words where it could not be properly represented by an apostrophe. Besides, the question is irrelevant since the SSS has approved the use of the letter ə.

Some critics are strongly opposed to introducing a system which contains any non-Latin letters. Eustace himself proposed in 1970 that no person should be a member of the Society unless he favoured the use of the Roman alphabet. He does not feel that there is any inconsistency in adding the new letter ə. In fact, he feels that the trouble of putting ə on the typewriter is an advantage. Only those with a positive interest in System 2 will use it, so it will be shielded from censure by quotation out of context. The letter ə also facilitates a clean separation between System 2 and T.O., so that T.O. will not be contaminated by System 2.

That is an interesting idea, which might profitably be pursued further. Other alfabetizers have expressed their concern over the confusion that arises when one tries to make a new orthography out of the old letters. G. B. Shaw was one of these. Those who are accustomed to the traditional orthography are bound to confuse the two systems. In one paragraph, for example, Eustace makes what appear to be slips of the typewriter: "must be" is written /məs bi/ and /must be/; "and" is written /ənd/, /ən/ and /and/. No doubt it helps to have the letter ə at intervals as a warning signal to the writer and to the reader that he is not using T.O.; but something more is needed.

Eustace is troubled, as other alfabetizers have been troubled, by the fact that the Latin alphabet is basically inadequate for representing English sounds phonetically. Each letter stands for so many different sounds that it is hard to pin down one sound to one letter or group of letters.. Only a few consonant letters stand for only one sound each and all are silent in some word.

Many attempts have been made to make English spelling more orderly. In 1916, the I.P.A. was tried in a number of schools with the aid of a Carnegie grant. The experiment folded when the funds were exhausted. From 1914 to 1924, New Spelling was tried as a means of teaching reading. Nothing has been published in New Spelling since 1948. The i.t.a. is now being given an extensive trial in Britain and America, but its proponents cautiously label it only a means of learning to read.

With few exceptions, every spelling reformer is trying to reconcile two conflicting principles. The first is the Principle of Phonetic Consistency: one symbol for one sound.

The second is the Principle of Least Disturbance, that is, the system should continue to look like the phonetically inconsistent traditional orthography. We can attain one ideal, or the other, but not both. We can maintain T.O., or we can adopt a phonetically-consistent alphabet, or we can adopt any of the many proposed compromises which fulfill neither ideal. Considering the fact that he is trying to achieve the impossible, Eustace has done perhaps as well as any man could do.

One letter does not make an alphabet. Removing one inconsistency from T.O. or New Spelling does not take care of the many inconsistencies that remain. We look forward to seeing how the entire system looks.

The strongest argument in favour of System 2 is the fact that the majority of members of a learned society have considered it and voted their approval. That gives it an advantage over any alternative system. Now that it has been approved, a committee should be formed to prepare a dictionary, readers, and textbooks, in the new orthography. Groups of students and teachers should be organized. The results will speak for themselves. A medium of communication can only be successful if it is put to use. If it is put to use, it must be considered successful. The author need not be discouraged if T.O. is not overwhelmed by the new system in the near future T.O. is a hard nut to crack.

Dear Mr. Tune,	London.
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Dr. Weir has very kindly invited my comments on his article. He has misunderstood System 2 in a few ways.

Yer is unstressable by definition, therefore a similar sound in a stressed syllable *must* be spelt differently. "Murmur" is stressed on the first syllable, 'm-, and in System 2 it is Murmər. The vowels may be similar, but ə contains in effect a built-in mark of *negative* stress. At one blow it solves nearly all of the English stress problem, one of the greatest difficulties for foreigners, by stating where the stress is *not*.

In Great Britain "saucepan" is usually -pən, though -pan is not unknown. The variants sauspən and sauspən are equally correct and both could be admitted in the dictionary of System 2 which Dr. Weir rightly says is needed. ("Saucepan" is known from 1686, when it was sounded -pan. The change to -pən took a long time and is not complete, as Dr. Weir knows. My old aunt born 1875 also said -pan but in England it is usually -pən.)

Məs bi for "must be" was no error. We must remember that System 2 is *not* a reform of traditional spelling – it is a new kind of writing based strictly on *speech*. Unstressed it is always məs bi in Great Britain and I think in America as well. But in the second paragraph of this letter, where it is italicized for emphasis, it would be *mus* or *must*. System 2 does away with the need for underlining to show emphasis. To make doubly sure, emphasis can be shown by the hyphen: ə similar sound in ə strest silabl must bi spelt difrəntli.

In the traditional spelling the indefinite article is "a" before a consonant, "an" before a vowel. In System 2 the rule for "and" unstressed is exactly the same: ən before a consonant, ənd before a vowel. If that is how it is spoken, that is how it is to be written.

"Minor" may or may not resemble "minority" in some unstated fashion. But that is not the point. "Minor" and "miner" are usually, if not always, sounded identically and System 2 therefore writes them identically, mynər.

I am still in favour of the Roman (or to be exact Latin) alphabet, but additions do not change its fundamental nature. Since Roman times "j", "v" and "w" have been added, not to mention several other letters in foreign languages. System 2 with the letter ə is still almost exactly the same familiar Latin alphabet.

As long as its governing conditions are observed, as they must be, System 2 cannot be faulted on grounds internal logic. What the public will say is her matter.

Yours sincerely, A. S. Sinclair Eustace, Vice-President, Simplified Spelling Society.

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*[Spelling Progress Bulletin Summer 1972 pp18,19 in the printed version]*

## **11. Pronunciation in the Past, a historical pronouncing vocabulary, by S. S. Eustace**

I am building up a card index for a comparative pronouncing vocabulary of late Georgian English, 1775-1825.

This may seem abstruse and restricted, a single strand of information isolated from the world, like the filament of a light bulb! Two examples will show what I mean: 1. 'seamew.' Today we say 'seamew' stressed thus, Dumdi. But Byron's famous line, 'And shrieks the wild seamew' requires another stressing, diDum. Is that just poetic license, or is it not? The answer is plain; I find diDum explicitly stated as a variant for 'seamew' in Byron's own time. 2. 'Mediator and Advocate.' In the Anglican prayerbook, though the words 'our only Mediator and Advocate' may be full of meaning, they seem to be without any of the special rhythm that typifies much else there. They are just: di Dum, di Dum, di di, di Dum, di di. But variant stressings still found in Georgian times are: Me' dia' tor and Ad' vocaté. These survivals at once show that the prayer-book words were originally written, by Cranmer in 1544, as a typical and almost perfect Shakespearian pentameter: di Dum, di Dum, di Dum di, di Dum, di Dum. The Georgian evidence shows that a Renaissance archbishop's literary talents were a little greater than had been supposed. There are innumerable such cases.

In earlier periods there is plenty of information about sounds and many individual words, but it is only from about 1760 that we begin to get whole pronouncing dictionaries with information in bulk. The reason is that whereas earlier there had been no demand, after 1760 it came in a growing flood and from several sources. For example, from the Scotch: at this time many ambitious Scots emigrated from Scotland to England, the land of opportunity, and in London, Scotch pronunciation in those days seemed rustic or even unintelligible. Demand also came from Ireland, though no doubt for different reasons. And it came from the new English middle class with their cultural aspirations born of the Industrial Revolution, coinciding as it did with the spread of education, improvements in communications and agriculture, and a general quickening of national life.

These changes were accompanied by a change in attitudes to pronunciation. In former times most men had spoken traditionally and as they pleased; but especially in late Georgian times an increasing need to be widely understood was accompanied by new and genteel notions of elocution and an irrational reverence for pronunciation modelled on the conventional spelling, which is still widespread even today. The natural development of the language was increasingly deflected by more or less ridiculous ideas of 'correct' speech. (Of course there can be no such thing!)

The 'heresy' was brought to its peak by John Walker; his nickname, Elocution Walker, implies a certain robust contempt. He was an indifferent actor, a well-known elocutionist, a diligent lexicographer – and an insufferable prig. Consider for instance what he says about the word 'construe.' It had been borrowed from Latin 'construere' and its pronunciation can be guessed from one of the earliest mentions, 'constrewe' 1399. In this and several similar words, development was unusually hastened in the rough-and-tumble of usage by schoolboys, and we soon find another pronunciation, indicated by the spelling 'constyre' 1535, which is the same as 'conster' 1545. This pronunciation became very common and was regarded as normal, like the 'nomnative pass particples' known to every student of Latin, which included every literate person in those days. In 1773 'conster' is probably the pronunciation intended in Kenrick's pronouncing dictionary. It is recommended without comment in the pronouncing dictionary of Thomas Sheridan, father of R.B.S., the playwright and godson of Dean Swift. But in 1791 in John Walker's dictionary we read the following characteristic outburst, "CONSTRUE (verb) kon'stru or kon'stur. It is a scandal to seminaries of learning that the latter pronunciation of this word should prevail there. Those who

ought to be the guardians of propriety (i.e. schoolmasters) can often be the perverters of it. Hence 'accidence' for 'accidents,' 'preposter' for 'preposer,' 'conster' for 'construe.'" But Walker might have spared his wrath. The modern 'constroo' (verb) is given in the Northerner Spence in 1775 and it may have peacefully coexisted all the time. In 1845 the American Worcester gives both 'con' stroo' and 'con' ster.' 'Con' ster' lingered on in familiar parlance till the 1880's. Nowadays the noun is 'con' stroo' and the verb usually 'kən stroo'.

This word illustrates the work. The method is approximately to note any word whose pronunciation differs as between Kenrick (London), Spence, Perry (Scotch), Sheridan (Irish), Enfield (Northern), Walker, and Daniel Jones. Other details such as dates here come from the Oxford Dictionary, the grandest work of its kind ever compiled. It is a uniquely rich source of vital information, telling us how old a word is, where it came from, and what earlier variant spellings there are to throw light on the variant pronunciations recorded by the Georgian lexicographers at a time when the spelling had become fixed, and so forth. To these sources, I am also adding Entick 1770 and Entick revised and modernized by Crakelt in 1776. John Entick, a London schoolmaster, was born about 1700; William Crakelt, a Kent clergyman, was much younger.

A special alphabet is needed, as well as much care in arranging the mass of information concisely and clearly and according to strict rules. "All for your delight we are not here!"

The simultaneous consultation of these books enables me to use continuously the comparative method, well known as a powerful tool in linguistics. For instance in no other way could one confidently penetrate Kenrick's meaning as mentioned above. One source explains another.

The period is particularly important because after its pronunciation as recorded becomes increasingly standardized.

Not all words are as amusing as 'construe.' Only the recorded fact is admissible and Walker's opinions such as those quoted here will be entirely omitted. The only relevant fact is that in 1791 'construe' was usually sounded 'conster' in schools.

These books are like an immense cellar full of dusty old curios ranged in galleries that stretch away into a darkness pierced only by the light of one flickering candle.

For in order to be completed to a certain standard and in a reasonable time, and having regard to production costs and expectable sales (1,000 copies?), the work must be done by one man only. Any decentralization would require duplicate sets of these flimsy old books, the duplication and supervision of a strict method, and considerable premises used for nothing else. The Standard Dictionary was indeed produced in such a way in about 1900 but even in those days it cost \$1,500,000. That kind of money is not available, and is indeed scarcely needed.

The study of old dictionaries is pursued at the Univ. of Indiana through the munificence of Mr. Warren C. Cordell, but not within the framework which I have adopted. I may have fewer than 10,000 entries. (A dictionary might well have 50,000.) The work is not particularly vast and could be completed in four or five years.

### Notes on an English Long Vowel, by S. S. Eustace

In Shakespearian times the traditional pronunciation of long *A* as in *fate* was possibly [ɛ:] as it now is in the North of England). (IPA letters indicate known sounds only). In the course of the 1600's this [ɛ:] came to be sounded not [ɛ:] but [e:], the same as the *ea* words. But in another part of England *ea* had already come to be sounded [i:], as today, and one by one *ea* words of the traditional pronunciation [i:] pronunciation seem to have been ousted, partly perhaps through the influence of spelling, by the ones with [i:]. The process can be illustrated thusly:

Year	Traditional Dialect			Other Dialect		
	<i>fate</i>	<i>feat</i>	<i>feet</i>	<i>fate</i>	<i>feat</i>	<i>feet</i>
1300	[a:]	[ɛ:]	[e:]	[a:]	[ɛ:]	[e:]
later	[æ:]			[æ:]	[e:] →	← [i:]
						↓
later				[ɛ:]		[i:]
1450	[ɛ:] →	← [e:]	[i:],			
		↓				
1700		[e:]		[e:]		[i:]
	end of	tradition				
1972				[e:]		[i:]

In 1972 the Traditional Dialect does in fact survive in *yea*, *great*, *steak*, *break* (and in a few proper names in some families, as *Hargreaves*, *Reaney*. Also the Biblical *break*, *brake* were not sounded the same to begin with, of course.) But there were a number of [ɛ:] words not spelt *ea* such as *Caesar*, *receive*, *Jesus* (still heard in the Irishman's exclamation [bɪ 'dʒe:zəs]). It obviously does not fit all the facts if we explain the big substitution [e:] → [i:] in the *ea* words simply as a spelling pronunciation. In historical phonetics it is well to invoke the explanation of spelling-pronunciation only as a last resort, for we learn to talk before we learn to read.

To return to the point, modern standards of tape-recorder precision obviously cannot be applied to pre-1800's English, and for Shakespearian English we must be content with a simpler "phonetic" representation. This could be done with my Pronunciation key if there was space available. With it I can explain that e.g. my *iu* may have been either [iʊ] or [ju:]. Also *u* in *put* and *ʊ* in *cut* is difficult – we can guess but do not know exactly when or where the difference arose (I need hardly say that in the Middle Ages and probably in Shakespeare's day *put* and *cut* were perfect rhymes, as you still might think from the spelling.) We must satisfy both the academic and the plain man.

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**"Every creative act is a sudden cessation of stupidity:"**

Edwin Land in *Product Engineering* for July 29, 1968.

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## **12. Simplified Spelling Society Announcement**

The Simplified Spelling Society, founded in 1908 by Prof. W. W. Skeat, the famous etymologist, is bringing an important new idea into the spelling question. It is, to add one letter and only one letter to the alphabet. The system is called System 2, being an improvement over New Spelling System 1. Here is an example:

Mr. Joenz, əv th Manər Farm, həd lokt th hen-houziz fər th niet, bət wəz tuu drunk to rəmembər tə shut th pop-hoelz. With th ring əv liet frəm iz lantern dancing frəm sied to sied, he lurcht əkros th year, kiking auf iz buuts at th bak dor, dru imself ə last glas əv beer frəm th barəl in th skuləri, an maed iz wae up tə bed, whaar Misiz Joenz waz aulredi snoring.

(from Orwell's 'Animal Farm.')

Note that 'th' is an abbreviation for thə. The apostrophe is used in certain cases but there is no example here.

System 2 is based strictly on speech and so is not really a spelling reform. It is a compromise between British and American pronunciation. Its purposes include the teaching of reading to infants and the teaching of pronunciation to foreigners, as well as the linguistic conservation of traditional spoken forms now more than ever threatened by the deceptions and inadequacies of the conventional spelling.

There are many delays arising chiefly over difficulties with typewriters and the Linotype, and System 2 will not be ready to be offered to our members for a few weeks yet. Meanwhile, we are anxious to discuss all queries which suggest themselves. All apparent anomalies, e.g., buuts/dru, are covered by supplementary rules.

There are also changes in our other system called New Spelling (otherwise known as System 1), and these will also be published as soon as possible. Changes include 'th' for 'dh'. The functions of 'oo' and 'uu' are reversed, e.g., 'dhis thing' becomes 'this thhing' and 'good fuud' becomes 'guud food.'

Thus we have definitely decided to promote not one system but two, so we shall have two strings to our bow.

Nor is that all, for there are major changes in our personnel. Sir James Pitman has resigned from the Presidency and the Society. He is 70 years old. We thank him for his great efforts in the cause of spelling. Our new President is Dr. John Downing, Professor of Education at Victoria University, Victoria, B.C., Canada. He is well known in the field of infant reading teaching.

Chairman Peter A. D. MacCarthy, the well-known writer on phonetics, has also resigned his office and membership. He has had serious eye trouble demanding complete rest.

We now have as Vice-Chairman S. S. Eustace, 42, a practising phonetician, etc. He is Chairman of the System 2 Sub-committee, and Editor of our Journal, The Pioneer.

William J. Reed, our veteran Secretary has also resigned his office after long and faithful service. He is replaced by Edward Smith, 30, a well-informed phonologist with many new ideas. He works in the London municipal traffic engineering department.

We have now instituted postal elections for the principal officers and for the Committee. Members will be properly notified in due course and in time for our Annual General Meeting probably next autumn, (date not yet fixed).

The subscription to the S.S.S. is one pound Sterling £1, or equivalent, payable on joining and on Jan. 2 each year. Members will receive all our publications free of charge. The next ones will be our journal, The Pioneer, and full details of System 2, etc. Enquiries may be sent to S. S. Eustace, London, England.

**Simplify our spelling  
so everyone can learn  
to read more easily**

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