

Spelling Progress Bulletin Spring, 1979

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

Publishes quarterly
Spring, Summer, Fall, Winter
Subscription \$ 3.00 a year.
Volume XIX, No. 1
Spring, 1979

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1. Announcements

Joint meeting, S.S.S.-I.R.A. Convention, Atlanta, Ga. on Thurs. Apr. 26, 1979, at 3:45 PM in the Georgia World Congress Center, Room 209.

The Chairperson is Meg Moberly of the Vashon Island School District, Washington. The speakers are Abraham Citron, Wayne State Univ., Mich. and John Downing, Univ. of Victoria, Canada, who is the President of the Simplified Spelling Society. The theme of the speeches is, "How to Make Spelling Easier."

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The International Reading Assoc is sponsoring a Research Seminar on "Linguistic Awareness in Learning to Read" at the Univ. of Victoria, Vancouver Island, Canada, June 26-30, 1979. **Attention everyone concerned about new advances in research and theory in reading.**

This is **NOT** a paper reading conference. It is a brainstorming meeting with the objective of advancing the development of theory in the psychology of the learning-to-read process. All papers will be delivered in print to all conferees in advance of the meeting. The number of participants is limited to facilitate discussion.

Dr. Ignatius Mattingly who originated the theoretical concept of "Linguistic Awareness" in his article in *Language by Ear and by Eye* (Eds. Kavanagh, J.F. and Mattingly, I.G., Cambridge, Mass: M.I.T. Press, 1972) has written a new paper specifically for this Victoria Seminar. A number of linguists and psychologists have been selected to respond to Mattingly in a creative brainstorming style. Among these are Carol Chomsky, Marie Clay, John Downing, Hazel Francis, Walter MacGinitie, Takahiko Sakamoto, S. Jay Samuels, Donald Shankweiler, Harry Singer, Ed Summers, Jaap Tuinman and Renate Valtin.

Enquiries to Dr. Lloyd Ollila, Faculty of Education, Univ. of Victoria, Victoria, B.C. Canada.

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The 2nd International Conference of the Simplified Spelling Society will be held July 27-30, 1979, at Nene College, Moulton Park, Northampton, England. Theme: 'Improved Spelling.' Presiding will be Pres. John Downing. Cost: approx. £35. (including single room and meals on campus). Inquiries to Fergus McBride, Edinburgh, Scotland. Some data on rail schedules and tourist attractions is available from Vic Paulsen, San Francisco, Ca.).

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Obituary

Mr. Herbert S. Wilkinson, ACTS, died on Jan. 4, 1979, just a few days before his 89th birthday. He was Chairman of the Board of Directors of H. S. Wilkinson Weatherwear, Ltd. and the founder of the company. The letters after his name were for honors conferred on him by the Chemical Institute for his work in developing a waterproof Weatherwear that did not become sticky with age.

But he is best known for his dedication to the efforts of the British Simplified Spelling Society to devise and put into use some form of simplified spelling that would both be acceptable to the public and also be able to be used as a teaching medium for children and foreigners learning to read in English. To this end he had printed privately two editions of his *Wurld English*. He was well liked by all who knew him. Wm. Reed said that Herbert Wilkinson had done more in recent years for spelling reform than any other person he knew. It is a pity he didn't live to see his book published and widely circulated because it is a good system,

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[Spelling Progress Bulletin Spring 1979 pp2–5 in the printed version]

2. Reading/ Writing: Decoding/Encoding, by Emmett Albert Betts, Ph. D., LL.D.

*Winter Haven, Fla.

Reading and writing differ from listening and speaking in several important aspects:

1. Language (speech) is primary; writing is secondary, historically and also in the learning sequence.
2. Visual symbols (graphemes) represent auditory symbols (phonemes) and, therefore, are twice removed from the experience represented by them.
3. Language (speech) is a sequence of sounds bounded by pauses; writing is a sequence of words separated by spaces and bounded by capital letters and terminal punctuation.
4. A child learns to speak and to listen (a) by learning significant features of speech (e.g., syllable and phrase stress) rather than by combining sounds into words, (b) by learning syntactic, semantic, and pragmatic rules rather than by learning specific combinations of words-by internalizing the rules of his language, he is taught to focus on words in some beginning reading programs.
5. Writing has many limitations, including inconsistent spellings of sounds and inadequate punctuation for recording intonation; speech reflects regional differences.
6. Visual inputs (normal silent reading rates) are significantly higher than auditory (or tactile) inputs. (For example, a good adult reader can process 50 to 70 letters per second versus 30 to 50 phonemes, according to Paul A. Kolars.)
7. Spoken forms tend to differ from written forms-more attention being given by the writer to substance and expression of written forms than by the speaker to the more ephemeral spoken forms.

Caveat Emptor

Linguistics is the theoretical study of language – of its sounds and grammatical structure. It is a "method" of describing language, but there is considerable pluralism at both the phonological and grammatical levels. In phonology, for example, there are different opinions regarding the identification and categorizing of significant speech sounds called phonemes. In modern grammar, there are structural linguistics and transformation grammar dealing with rules far deriving most sentences from basic, or kernel, sentences. This commendable pluralism is not comparable to the profusion of confusion in extant educational publications regarding the concepts of *phonetics*, *phonemics*, *phonics*, *morphology*, *syntax*, and *grammar*.

Theoretical formulations regarding the reading *processes* have a direct bearing on teaching and learning, depending upon the hypotheses basic to the concept of this type of behavior. These formulations dictate preparation for reading, beginning reading instruction, and subsequent teaching of reading.

Decoding: Linguistic Processes

Some linguists and educators are inclined to over-simplify the reading process by viewing it as the "decoding of signs [writing] into speech," without making explicit the complexities of it or how it is achieved. The key idea of this concept is *decoding*.

Perhaps some disciples of Bloomfield have contributed to blurred and oversimplified concepts of the reading processes by making a narrowly literal interpretation of his laconic statement: "The person who learns to read acquires the habit of responding to the sight of letters by the utterance of phonemes." (2, pp. 501-502) He further commented that the "coordination between letters and phonemes" is learned by an analogic process, using consistently spelled words for beginners. (2, p. 501) Both of these statements regarding the decoding processes have been a challenge to educators, causing many controversies.

In his *Linguistics and Reading*, Charles Fries, a proponent of Bloomfield's theories, is concerned primarily with "the relations between the responses to the language signals of 'talk' and those of 'reading'." (6, p. 114) His basic notion that "all 'writing' is the substitution of patterns of graphic shapes to represent the language signals of a code for the patterns of sound waves that have been learned as representing the same language symbols." (6, p. 119) He cautions, however, "that simply to respond to graphic signs by uttering certain sounds is *not* 'reading'." (6, pp. 119-20) Furthermore, he warns that to view *thinking* as constituting the reading *process* [sic] results in confusion regarding the basic issue because these abilities are developed through the *uses* of language-spoken or written. (6, p.118) This contrast between *processes* of decoding and the *uses* of language is a significant dichotomy to consider in developing theoretical models.

Bloomfield introduced "structural meaning" in his model of the reading process. The stimuli in reading are graphemes-the graphic input. In the past, educators have tended to emphasize the reading-for-meaning concept: reading is a search for meaning of the message on the page; that is, a process of directly relating graphemes and organized experience to achieve semantic meaning. Bloomfield, however, introduces what he considers to be a missing link in the reading processes: the meaning-bearing patterns of speech. Hence, the reading process is sequential from writing to speech to semantic meaning.

This three-step model of the reading process has been effectively evaluated, insightfully elaborated, and precisely illustrated by Dr. Kenneth Goodman in his "Reading: A Psycholinguistic Guessing Game." His ten-step model accounts for a selective process of using graphic cues, short and long term memory, feedback, closure, and the relationship among syntactic, semantic, and phonological cues. He concluded by emphasizing that his model "is not complex enough to fully account for the complex phenomena in the actual behavior of readers."

Leonard Bloomfield has cast a long shadow over both linguistics and reading instruction. A spate of books, monographs and articles has been published on linguistics and reading. Moreover, a few "linguistic" readers have been published – reminiscent of the phonics readers (textbooks), look-and-say readers, reading for meaning readers, language arts readers and other programs based on a one segment concept of the reading processes popular at the time. Today there are serious discussions about *the* linguistic "method" by educators with tunnel vision for a new fad and with little or no knowledge of the pluralism in linguistic theory.

Some interpreters of the linguist's concept of reading have produced for beginners in reading distorted language and tongue twisters (e.g., *A cat can tag a rat., He tags the bags., Pat a fat cat.*) on the simplistic assumption that reading is primarily a decoding process of associating writing and speech-of identifying graphic symbols (symbols of speech symbols) representing speech.

Furthermore, they assume that intonation and semantics can be sacrificed at the altar of consistent spelling patterns – using closed-syllable words (e.g., *cat, boat, ride*) which tend to produce word-by-word responses that characterize neither efficient reading nor effective talking.

Linguistic readers (textbooks) are misnomers for the above and other reasons. The first linguistic readers were limited to phoneme-grapheme relationships and neglected intonation and other important contributions of linguistics. Hence, they were not even linguistic readers. And they were not basic readers which recognized either the linguistic-semantic-pragmatic facets of language or the perceptual-cognitive facets of comprehension. Furthermore, some of the authors of so-called linguistic readers have gone into little by-ways (1) using either all capitals or all lower-case letters in beginning reading, (2) requiring pupils to learn the names of letters as a prerequisite for beginning reading, (3) and so on. Unfortunately, this new fad in education may be relegated to the limbo where significant concepts aborted into fads now lie and result in the rejection or delay of a comprehensive application of either linguistics or psycholinguistics.

Decoding: Psychological Processes

Language is behavior; the study of verbal behavior being a major area in psychology. (4, p. 70) Furthermore, language is behavior governed by rules: syntactic rules, semantic rules, pragmatic rules. A cataloguing or description of the rules of a language is one aspect of the problem of studying language; a description of the psychological mechanisms is another. Since linguistic behavior is at once complex and subtle, the psychologist or psycholinguist who entertains simple hypotheses and generalizations regarding language can be misled into no account accounting of the psychological mechanisms.

Verbal behavior (verbal learning and psycholinguistics) has been called the testing ground of psychological theory. Rapprochements between linguists and psychologists have been or are under study by an increasing number of psychologists: E. L. Thorndike, George A. Miller, John Carroll, Charles E. Osgood, J. J. and Eleanor Gibson, Carolyn K. and Arthur Staats, O. Hobart Mowrer, Harry Levin, David P. Ausubel, and others. Each researcher differs in (1) theories of learning, (2) linguistic sophistication, and (3) knowledge of the strategy and tactics for dealing with the everyday problems of reading instruction. But each, in his own approach, is contributing to the understanding of verbal behavior and, therefore, of reading processes.

Psycholinguistics is the study of the processes of decoding and encoding messages in a language system. This study encompasses processes of language acquisition, the symbolic system of language, the ubiquitous concept *meaning*. (Note: Space limitations preclude a discussion of the neurophysiology of learning, with its emphasis on hypotheses regarding the engram, proprioceptive and kinesthetic feedback, interhemispheric mechanisms of learning, and electrical activity of the brain.)

In contrast to a simple decoding concept of the reading processes is the Alfred Korzybski general semantics concept that reading is the reconstruction of the experience (message). This theoretical construction emphasizes reading is basically a thinking process – *that reading is a search for meaning and, therefore, there is no reading-comprehension dichotomy*. The key idea of this concept is the term *reconstruction*, used by B. F. Skinner, Kenneth Goodman, Herbert Rubenstein, Murray Aborn and other psycholinguists.

Emphasis on the psychological processes and on the product (comprehension) of reading is inherent in John Carroll's statement: The behavior we call *reading* may be described as the perception and comprehension of written messages in a manner paralleling that of the corresponding spoken messages. (4, p. 337) This point of view is reflected in Stanley Kegler's statement that reading "involves perception and reaction with all of the evaluative processes implied by the term 'reaction'." (11, p. 232)

Relevant to these statements, Harry Levin proposes this question: "How do we understand this extremely complex visuo-motor-linguistic-psychological skill?" (13)

Kenneth S. Goodman emphasizes psycholinguistic probabilities in his conception of the reading process: "Reading is a selective process. It involves partial use of available minimal language cues selected from perceptual input on the basis of the reader's expectation. As this partial information is processed, tentative decisions are made, to be confirmed, rejected, or refined as reading progresses." (8)

In terms of perception, reading is a "uniquely psychological process" in the sense that printed words "are entirely arbitrary visual targets" and "have much less immediate and direct significance than is true for the other kinds of visual forms and objects that make up the perceptible world." Paul A. Kolers suggests: "the reader actually looks at relatively little of the printed material from which he gets his information." (12)

In recent research, considerable emphasis is given to reading as a visual sampling process of confirming or disconfirming perceptual expectations. (3) "Sampling the written text in the processing of information is reacting to less than the total available information." (13) Furthermore, there is the possibility that "perhaps adult information-processing mechanisms become so fully developed that they may be less stimulus-bound." (10, p. 43) In summary, this concept of the sampling process is generally accepted: "As the child develops reading skill and speed, he uses increasingly fewer graphic clues." (8)

In Burrhus F. Skinner's extensive empirical and descriptive account (causal or functional analysis) of verbal behavior, he is concerned with three events: (1) stimulus, (2) response, and (3) reinforcement as the strengthening of a response, each contingent upon the other. As a dependent variable, verbal behavior is defined broadly as "behavior reinforced through the mediation of other persons." (16, p. 14), and the other persons "must be responding in ways which have been conditioned *precisely in order to reinforce the behavior of the speaker.*" (9, p. 225) Independent variables are generalized conditioned reinforcers (e.g., approval).

It will be noted that Skinner establishes his own terms for describing verbal behavior. He contends that the use of traditional terms (e.g., *idea meaning*) is scientifically unacceptable because the general formulations (e.g., assigning independent existence to *words* and *meaning*) are wrong.

Skinner carefully distinguishes between two kinds of response. First, a response *elicited* by known stimuli is called *respondent behavior*, ascribed to Pavlov. That is, type S conditioning is the pairing of a conditioned stimulus with an unconditioned stimulus which in time *elicits* the same response. This conditioning correlates reinforcement with stimuli. Second, a response *emitted* and apparently unrelated to a particular stimulus is called *operant* behavior. That is, type R conditioning is reinforcing the response, resulting in the emitting of confirmed responses. This conditioning

correlates response with reinforcement.

Activities which operate on the environment are called *operant behavior*; a unit of behavior is an operant, which often is interchangeable with *response*. An operant is concerned with "the prediction and control of a kind of behavior," while a *response* designates either an instance (a form of behavior) or a kind (at least one relation to a variable) of behavior.

Because reading encompasses many concurrent processes, Skinner elected to use a "narrower term *textual behavior*." (16, pp. 65-66) The text may be writing or some other visual medium. Hence, reading is a type of verbal behavior under verbal stimulus control – the stimulus being the text.

In textual behavior "the response is determined by a prior verbal stimulus. . .-written or printed:' Furthermore: "There is a point-to-point correspondence between properties of stimulus and response which makes possible a repertoire of minimal units." (16, p. 185)

Learning to read sets up many verbal operants. That is, "specific responses come under the control of visual (verbal non-auditory) stimuli." (16, p. 65)

Extensive application of the Skinnerian approach to verbal learning, especially textual, has been made by Carolyn and Arthur Staats. In fact their discussions are more explicit and, therefore, more readable.

This descriptive approach to the study of verbal learning, which eschews theory in psychology, is unique and stimulating. Psychologists give widely varying amounts of space to critiques of Skinner's behaviorism in their textbooks, depending on their own viewpoints. But, perhaps, his rationale is less acceptable to linguists, especially to Noam Chomsky who prepared a monograph-length critique. (5, pp. 547-578) Chomsky opined that Skinner's "astonishing claims" for predicting and for analogic guessing regarding complex verbal behavior based on experiments with lower organisms are "far from justified." He goes on to question (1) the verbal operant as a unit of behavior, (2) the ambiguous use of the terms *response strength* and *probability*, (3) the looseness or latitude of the terms *reinforcement* and *conditioning*, (4) the obscure notion of stimulus control versus reference or meaning, and (5) the inadequate autoclitic view of sentence structure. Chomsky concludes: "If we take his terms in their literal meaning, the description covers almost no aspect of verbal behavior; and if we take them metaphorically, the description offers no improvement over various traditional formulations." (5, p. 574)

Three other somewhat traditional and contrastive theories of learning, relevant to verbal behavior are Guthrie's Association Theory, Tolman's Sign-Gestalt Theory, and Hull's Deductive System (15, pp. 31-38) An extension of the general mathematical theory of probability is information theory or theory of transmission. (15, pp. 35-47)

Comprehensive programs of interdisciplinary research were developed in a few centers. One of the most promising of these-the Center for Cognitive Studies included within the William James Center for Behavioral Sciences, Harvard Univ. was concerned with four types of theoretical (and practical) problems: psycholinguistic, developmental, mnemonic, and perceptual. The staff spawned and tested several challenging assumptions and theoretical constructs, including:

1. Chomsky suggests that every sentence has a double structure: *surface* structure "closely related to its phonological representation and a *deep* structure" on which its meaning depends. (10, pp. 13-14)
2. Katz assumes that language acquisition is a "type of implicit theory-construction and testing" rather than a form of associative learning. (10, pp. 14-16)
3. Bregman is exploring the attribute approach to memory on the assumption that the attributes of words (e.g., contiguity, graphemics, and category attributes) rather than words are the units involved in recall. (10, pp. 33-34)
4. Mehler and Bever are studying the relations between syntactic units and fixation pauses in reading to test the hypothesis that "only the surface structure is relevant in determining the major steps in reading." (10, pp. 42-43)

One of the unique assets of the Harvard reports was the integration of the thinking and findings from representatives of diverse disciplines on given problems. These readable and informative summaries are contributions in themselves.

Project Literacy at Cornell Univ., awarded in 1964 by the Cooperative Research Branch, United States Office of Education, was another example of a multidisciplinary approach to "basic research and curricular development concerning both child and adult literacy." (A statement on "What is Project Literacy" is given in each of the eight reports published from July, 1964 to July, 1967.) This program appeared to profit from liberal cross-fertilization with major efforts in other institutions, each report evidencing more sophistication regarding more relevance to reading processes and instruction. In 1966, Dr. Harry Levin, the director, emphasized: "We are not asking the right kinds of questions, and we could not ask the right kinds of questions until we saw what was happening in the classroom." (13)

Project Literacy encompassed a wide range of studies on the linguistic and psychological bases of reading: discrimination of graphic forms, psychomotor skills in reading, language development, sub-vocal (inner) speech, personality and cognitive growth, mediated and direct perception, sentence structure and eye-voice span, acquisition of grammar, dialectical differences in learning to read, linguistic structures in learning.

The formation of a referenceable and comprehensive taxonomy of learning processes appears to be highly relevant to the study of reading processes, in order to promote empirical investigation on intercategories as well as intracategories. This formulation of explicit criteria for inclusion and exclusion of perceptual learning, discrimination learning, probability learning, emotional learning, and other categories is being given an impetus by a renewed interest in programmed instruction – via textbooks or instrumentation (psychotechnology). Special attention is given to interrelated and complex variables: (1) task variables (e.g., discovery learning, advance organizers of learning sets), (2) method variables (e.g., grouping and/or individualized plans, (3) learning variables (e.g., feedback, practice), and so on. A radical, pluralistic, operational taxonomy has been under study by Arthur W. Melton, but he concluded "that too much needed to be known before more than a rough sketch of a new taxonomy might be proposed." (14, p. 337) Nevertheless, Robert M. Gagne's admonition appears to have special relevance to the quest for understandings of the reading process: "There are as many varieties of learning as there are distinguishable conditions of learning:" (7, p. 22)

Abstract of above by Katherine P. Betts, Ph.D.

In this article on reading and writing, Emmett Albert Betts delineates theoretical bases of reading (decoding the message) and writing (encoding the message) from psycholinguistic, linguistic, and psychological points of view. He contrasts reading (receptive language process) and writing (expressive language process) with listening (receptive language process) and speaking (expressive language process). The limitations of writing (English orthography) include inconsistent spellings of sounds. Early attempts, via "linguistic" readers, to deal with the orthographic problem are discussed and critiqued. Also, reading processes as one facet of verbal behavior (language) are examined from psychological points of view.

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[*Spelling Reform Anthology §9.1 pp138,139 in the printed version*]

Section 9.

Spelling in relation to reading, writing, phonetics

The nine articles in this section all show how important it is to have a reliable fit between the spellings and the sounds of words.

[*Spelling Progress Bulletin Spring 1979 pp5–6 in the printed version*]

3. George Bernard Shaw: The Problem of a Common Language *

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Published with permission of the Soc. of Authors, on behalf of the Shaw estate.

Britain's most distinguished dramatist, whose plays, letters, and postcards have delighted people the world over, George Bernard Shaw, is just a little wiser and older than the Atlantic Monthly, and continues to be one of its liveliest contributors. He was born in Dublin in July, 1856, captured London 20 years later; in 1881 he became the leading spirit of the Fabian Society; and in 1927 he received the Nobel Prize for literature.

Mr. Robert Birley, in his third Reith broadcast, culminating in a call for an international language and selecting the French as the most probable choice (Spanish used to be the favourite), has gone very faithfully and competently all over all the ground that has been surveyed again and again for 100 years past without making any effective impression on either the public or the education authorities. It was all said by Alexander J. Ellis in his century-old book. I am old enough to have heard him lecture, in his velvet skullcap, for which he always apologised. After pleading his phonetic brief, he read Shakespear with Shakespear's pronunciation just as Mr Coghill now reads Chaucer. Since Ellis we have had Pitman and Sweet, Volapuk and Esperanto, and no end of phonetic alphabets and shorthand systems; but we are still entangled in Johnson's absurd etymological bad spelling, wasting years of our lives in writing the single sounds of our language with two, three, four, five letters or more, and turning our children out of our elementary schools after nine years daily instruction unable to speak or write English well enough to qualify them for clerical or professional appointments. All our phonetic propaganda is sterilised by the dread that the cost of the change would be colossal.

As a matter of fact, it is the cost of Johnsonese spelling that is colossal; so colossal that it is beyond the comprehension of our authorities. Mr Birley may argue 'til Doomsday for an international language, and may plump for French as the best; but no authority will pay any serious attention until he puts the case into figures, and concentrates on labor saving as the only consideration that will cut any ice. The choice between French and English may turn on the fact that in French the very common word *shall* is spelt with eight letters and in English with five, of which one is superflous. To appreciate this difference, we must begin with the cost in time and labor of writing one alphabetic letter.

Take the word *debt*. Spell it *det*; and write it over and over again for a minute. Then do the same spelling it *debt*. The difference between the number of times you have written *det* and *debt* gives you the difference in time and labor between writing one letter of the alphabet and two.

If, like some of our spelling reformers and phoneticians, you are mathematically silly enough to play the old trick of disguising this difference as a percentage, you will get a figure too small to impress anybody. A percentage may mean a halfpenny or a million pounds sterling, a fraction of a second or 1000 eons, a parish council or a world federation. Keep to the facts. The first fact is that the difference you have counted is the difference per minute. It will prove to be 12 seconds. Therefore, as there are 365 days in the year, the difference is 73 days per individual scribe per year.

How many scribes are there? As the English language goes round the world, the sun never setting on it, it is impossible to ascertain exactly how many people are writing it, not for one minute as an experiment, but for all-time incessantly and perpetually. No matter: a big cross section will be just as conclusive. In the British Commonwealth and the United States of North America there are more than 270,000,000 born writers and speakers of English. Of these the proportion of authors, journalists, clerks, accountants, scholars, private correspondents and others writing continually and simultaneously all round the clock may safely be taken as one in every hundred, making 2,700,000. Multiply this figure by the 73 days. The answer is that every year in the cross section alone we are wasting 540,000 years of time and labor which we could save by spelling English phonetically enough for all practical purposes, adding to the Johnsonese alphabet 14 letters, all of which can be borrowed provisionally from the stocks now held by our printers for setting up foreign and classical grammars, algebras, and the like.

I have left India, Pakistan, and Ceylon out of the calculation with their 400,000,000, whose dozen dialects are giving way to English. They would make the figures too enormous to be credible. One could only laugh. Enough to note that there is no industrial company on earth that would not scrap and replace its plant, at whatever cost, to save in the cost of production a fraction of such magnitudes. In the face of them, it is folly to prattle vainly for the thousandth time about universal languages, teaching children to read, standard pronunciation, and the rest of the argy bargy our politicians keep regurgitating.

It is *Johnsonese* that we cannot afford, not a forty-letter alphabet. For more than seventy years I have written books, plays, articles, and private letters, in legible phonetics, and thereby added at least two months every year to my productive lifetime as compared to Shakespear and Dickens, who had to write their works in long hand, though Dickens was adept at reporting shorthand, which is unreadable by printers and typists.

I do not pretend to know what language will become the international, though I agree with Mr. Birley that it will not be an artificial one. The fittest will survive. My guess is Pidgin English, the *lingua franca* of the Chinese coolie, the Australian black boy, and the traders and seafarers who employ them. In commercial Johnsonese we write, "I regret to have to inform you that it is not possible for me to entertain the proposal of your esteemed letter." In Pidgin this is, "Sorry, no can

do." Pidgin, spoken or phonetically spelt, is a labor saving device which leads the harvester, the internal combustion engine, and the telephone nowhere.

The case of children learning to read is an overworked bugbear. Children learn to read and write by sight, not by sound. [1] Those who have deficient visual memory spell phonetically and make spelling mistakes that are phonetic attempts at spelling. Blind children read by touch, deaf ones lip read. I cannot remember any time when a page of print was unintelligible to me; so I can hardly have suffered much when learning.

Children should be taught to spell phonetically (as they speak) and corrected only when their spelling betrays a mispronunciation, which for the present may be taken to mean a departure from the usage of Mr. Hibberd, chief announcer to the British Broadcasting Corp. His vowels are much more representative and agreeable than those common to the University of Oxford and the Isle of Dogs.

A Cockney who pronounces his French in the accent of Stratford-atte-Bowe is actually more intelligible in France than the phonetic virtuoso who pronounces all but perfectly, barely a hundredth of every vowel being off the mark. The foreigner whose schooltaught English is excellent the day he arrives here speaks broken English after a year's residence, finding it quite sufficient for his purposes and an innocent amusement for his neighbors. All teachers should bear in mind that better is the enemy of good enough, and perfection not possible on any terms. Language need not and should not be taught beyond the point at which the speaker is understood. Not five minutes should be wasted in teaching a chauffeur who says, "Them hills is very deceiving" to say "These mountain gorges are very deceptive." An English child who says, "I thinked" or "I buyed" is just as intelligible as an adult who says, "I thought" or "I bought."

We say that Time is Money. It is civilisation, art, literature, leisure, pleasure; in short, life more abundant.

[1] GBS meant that this is primarily the custom with our malphonetic spelling. In learning to read in a phonetic spelling system, associative learning (sound and symbol relationship) would aid the beginner until he had developed sufficient practice to recognise words by their familiar faces.

[Spelling Reform Anthology §9.2 p139 in the printed version]
[Spelling Progress Bulletin Spring 1979 p6 in the printed version]

4. George B. Shaw on Spelling Reform, by Newell W. Tune

It is well known that George Bernard Shaw was a great playwright and that his plays often had parts that were spoken in dialect. Shaw had a keen ear for dialects and was thoroughly familiar with Cockney, Welsh, Irish and several other dialects associated with coal miners, seamen, sheepmen, etc. Because of his interest in dialects, he became acquainted with phoneticians and had early association with two scholars: Henry Sweet, the renowned phonetician, whom he met in 1879, and Alexander J. Ellis. Both of these scholars were attempting at that time to reform English spelling. They had a great deal of influence on Shaw and molded his life, causing him to think along phonetic lines.

So it is only natural that Shaw, when he wanted to write into one of his plays a certain character whose dialect was distinct, tried to devise some sort of a system to depict with reasonable accuracy the sounds of the dialect in question. This he had found almost impossible to do in English spelling due to the lack of uniformity of pronunciation associated with the single letters or even the usual digraphs. Shaw, in discussing pronunciation and dialects in an epilogue, "Notes to Captain Brassbound's Conversion," brought out these remarks: "The fact that English is spelt conventionally and not phonetically makes the art of recording speech almost impossible. Besides there is no standard of English pronunciation any more than there is an American one."

G. B. S. accepted the importance of spelling as a guide to pronunciation. He said, "The influence of the printed word over pronunciation can hardly be exaggerated." He conceded that the tendency for a Cockney to substitute a W for the V-sound became less as "the moment the masses learned to read, they stopped saying 'werry' for 'very' and 'inwualuable' for 'invaluable.' Just so far as our spelling was phonetic, it helped and corrected them."

He then concluded logically that our spelling had lost touch with the spoken language and that "the flagrant corruptions of the sounds are directly due to the unphonetic spelling of our orthography, and nothing but a thorough reform will avail." All his arguments through his correspondence runs in this vein: "you must either let our spelling alone or else reform it phonetically."

Shaw even said that our spelling does harm to our literature because it obscures the changes occurring in our language – which probably would not have occurred if at some time some one in authority had called a halt to our unphonetic spelling and had decreed that henceforth English should be spelt as it is pronounced. Shaw said, "All that the conventional spelling has done is to conceal the one change that a phonetic spelling might have checked: namely, the changes in pronunciation, including the waves of debasement that produced the half rural Cockney of Sam Weller and the modern Cockney of Drinkwater in 'Captain Brassbound's Conversion!'"

With a conventional spelling that is so difficult to master that only a few scholars ever do it in a reasonable length of time, that is the reason for English not becoming the World Universal language. Certainly, of all the European languages, English has the easiest grammar, and the best form of structure which gives the most clear, uncluttered meanings. And except for Latin, is the best language for giving clear, thorough understandable directions. But only its spelling is the drawback which prevents English from attaining the worthy goal of the Universal Language. "I therefore respectfully advise the President and the Board to take the bull by the horns without wasting further time and enlarge the alphabet until our consonants and vowels are for all practical purposes separately represented, and defined by rhyming with words in daily use. We shall then get a word notation which may be strange at first (which does not matter), but which will be neither ludicrous nor apparently ignorant (which does matter)." How much better off would we be today if the government had heeded his advice!

Reference: Tauber, Abraham: *G. B. Shaw on Language*, Philosophical Library, 1963.

5. "English" for all the World, by Ali Fiumedoro*

*SR-1 used.

*Boston, Ma.

English has been and is steadily progressing more than any other toward being considered the World Language. Some think it has almost reached this point. We should take advantage of this fortunate situation. There is nothing more important than world understanding. And for the good of mankind, the advantages of a simplified form of English should be carefully evaluated. The regularity and simplified spelling and simple grammatical construction would make it easier to learn and to teach than any other language. It would facilitate world trade, increase traveling, help eradicate race hatred, make it easier to understand world problems, and to help maintain order.

Anything that makes it easier for the rest of the world to learn to read will benefit everyone. If we offered them the simplest, most regular language, the peoples of the world would be willing to put some effort into learning it to both our and their mutual benefits. Bringing the phraseology or wording of printed matter to the level of the ordinary people whom we are trying to help would also increase the number of readers of English.

With such an international language, there would be real brotherhood; many jobs would be created and it would be a good step to world progress, understanding and peace.

With a means taken for a compromise on geographical and regional pronunciation and for individual speech peculiarity, it would be unnecessary to have the pronunciation of every word listed in the dictionaries. Words would be self-pronounceable, because they would be spelt phonetically. Gone would be the hesitation a pupil now has when he sees for the first time a new word. This alone would make it so much easier to learn that each pupil could teach another, just as Dr. Frank Laubach has done in more than 100 foreign countries throughout the world. His motto, "Each one teach another" is responsible for the yearning for education of the foreigners who have been contacted by the missionaries.

This idea of English as the world language is not merely a dream but a possibility if we all get back of the idea.

We *must* have a world language. And, English is linguistically and structurally the easiest to learn. Only its unreliable, confusing spelling has been holding it back. What can we do to further this idea?

[*Spelling Reform Anthology §6.2 pp87–89 in the printed version*]
[*Spelling Progress Bulletin Spring 1979 pp7–9 in the printed version*]

6. Let Us be Practical about Spelling Reform, by Valerie Yule*

* SR-1 used. Valerie Yule c/o Prof. George Yule,
* c/o Kings College, Univ. of Aberdeen, Scotland.

As a psychologist, I am concerned that any realistic spelling reform must take into account the human beings who are expected to accept it, learn it, and use it.

Any architect can design a dream-house – but it may be very difficult to build or to live in.

The ideal spelling reform must have more than the criterion of theoretical perfection (such as one sound, one symbol); it must be easy for both humans and machines to recognize and write.

The present experience of metrication in Australia shows the difference between theoretical perfection and practical needs. The older generation are sneaking back the old imperial measures, while the young are buying everything prepackaged and not even trying to compare values. Although weights and measures can now be taught to 7-year-olds in two lessons, the oldies' criticism is the unreflective "I can't understand it" – but the real barriers are practical ones – that 'metric' needs units as handy as ounces, feet and acres, that 3-4 digit measures are hard to remember, and the number system really needs to be based on 12 not 10.

The examples of spelling reform in other countries also show that it must be either imposed by a totalitarian regime, or on a practically illiterate country – or else proceed in steps that are reasonably acceptable to those already literate (as in Malaysia and the Netherlands).

It is possible, of course, that the proportion of the semi-literate in Anglo-Saxon countries may continue to increase to the point that only the elite may continue to read T.O., the rest getting by on symbols (as in road signs and many skill-manuals), and with the limitations of television to transmit culture and maintain an informed and thinking democracy, we may regress. *Then* a reformed spelling might be brought in, like another language in multi-lingual public notices, because for the majority it would be supplanting nothing.

My recommendations for reform are therefore based on observations of human behavior, rather than on faultless fonetics.

1. Taking every means possible to open the public mind to recognition that spelling reform is desirable, necessary, and feasible. This includes using the gimmicks and gadgets as in commercial advertising campaigns: funny and interesting games, books and cards, car-stickers, envelope stamps, Sept. 1 as Sensible Spelling Day the world over, newspaper and magazine publicity through articles and letters.
2. Encouraging everyone to use more sensible spelling whenever they feel like it, and whenever they can risk doing so, e.g. in letters, books, posters, articles, even if they are still cautious in business affairs. This will inevitably be casual and inconsistent at first, but it helps to make readers acclimated to easier ways of spelling.

This could even result in popular acceptance of more consistent spellings in the same way that popular acceptance of language changes occurs, or even of clothes fashions that on first introduction appear ridiculous to the very people who will soon be wearing them and liking it. This 'reformation by default' could then be tidied up and ratified on an official basis, or an improved

system introduced to a more open-minded community than we have now.

The period of experiment will be valuable to reveal errors and prevent 'bugs' such as those now apparent in the metric system, so theoretically perfect.

Steps in 'individual initiative' spelling reform.

The *first step* to be encouraged is: *Spell the short 'e' sound with 'e' as in bet.* This is not necessarily the best place to start, but the big argument for it is that this reform *has already begun.* Spelling Reform 1, Australian Harry Lindgren's SR-1, already appears in newspapers, magazines, books and correspondence, and has received approval at teacher's conferences. It is a neat and tidy change, and could well take on, just as *MS* and changes adapted to computer technology are entering the written language.

Second. A further step that can also be taken now is a recommendation to bad spellers as well as spelling reformers: **When in doubt, cut it out.** (*When in doubt, cut it out.*) (eliminate the unnecessary silent letters). This is handy to use and also acustoms the reader to the look of neatness and economy of letters in spelling. Just as the embellishments of present spelling were encouraged by the extravagant elegance of the elitist aristocrats of the 18th century, so streamlined spelling is mor appropriate for the efficiency-minded management of the twentieth, – however much the remaining elite may shrink from Kwik-Bix, Hi-ways, and Kidi-Sox. The less-than-1% of the population who want to be continually reminded of the etymology of words can just carry a history book around with them; for most of us, some lessons in 6th grade will suffice.

Third. Substitute mor sensibl consonants when nesesary (such as *f* for *ph*).

These three steps can be taken by individuals and groups without overall direction. Reason, rather than rote memory, should be used to spell.

The *Fourth* step will require some expert consensus – reducing our riot of vowel spelling patterns to less than twenty, to match our less than twenty vowel and difthong sounds. This is where an international agreement is needed for a 'standard' representation, since it is here that 'do as you please' spelling would hinder communications. It is at this stage too, that orthografic changes may be mor sweeping: to remove digrafs, etc.

The Next Generation

Spelling reformers are apt to think that if their reform were taught in schools, it would automatically become public usage as the children grew up. This is a fallacy. Children do not transfer anything they learn in school *unless it is also already a part of the culture out of school.*

A better educational groundwork for spelling reform is to teach the present spelling, which they will need for the real world outside school, in such a way that not only will they learn that spelling more easily (otherwise teachers will not adopt the method), but so that children and teachers become really aware of the *consistencies* of English spelling, and of its *inconsistencies*, and *how it could be tidied up.*

The worst bugbear reformers have to expel is the public belief that a reformed spelling would be as hard to learn as the present one.

At present school children are either not taught spelling at all, in the hope that they will 'pick it up', or they are taught with games, and alphabetical or historical or 'spelling patterns' lists – congenial to the clerkly-minded, particularly girls, but repellent to those, particularly boys, who do not have filing cabinets in their minds. The recommendation is therefore to provide a visible spatial

organization for all spelling that is learnt – a visible filing cabinet, which uses all possible modalities to help learners remember present spelling patterns, *under headings which can be the basis of sound-symbol classifications in a revised orthography*. I have been experimenting with the Spell-well Chart, which uses color, pictures, auditory rhythm, auditory rhyme and pattern, visual spatial organization and word patterns, formal class lessons, games, and spelling 'cribs' to read books unassisted, for the cumulative learning of spelling at increasing levels of difficulty.

The basic outline is:

<i>a</i>	<i>e</i>	<i>i</i>	<i>o</i>	<i>u</i>
<i>black cat</i>	<i>red head</i>	<i>pink pig</i>	<i>orange orange</i>	<i>umber umbrella</i>
<i>a-e</i>	<i>e-e</i>	<i>i-e</i>	<i>o-e</i>	<i>u-e</i>
<i>grey gate</i>	<i>green bean</i>	<i>white light</i>	<i>gold stove</i>	<i>blue you</i>
<i>ar/ah</i>	<i>er</i>	<i>air</i>	<i>or/aw</i>	
<i>dark car</i>	<i>purple turtle</i>	<i>fair hair</i>	<i>fawn lawn</i>	
<i>ow</i>	<i>oy</i>	<i>oo</i>	<i>oo</i>	
<i>brown cow</i>	<i>toy boy</i>	<i>blue moon</i>	<i>look! a blue book</i>	
	<i>(multi-colored)</i>			

u-e and *oo* are the same color blue, being basically the same vowel sound.

The chart is introduced first to little children as a color-naming chart, and then as the first words are learnt, they are located on the chart, and the chart builds up.

When almost all vowel spelling patterns are finally located on the chart, the Australian version looks like this:

<i>a</i>	<i>e</i>	<i>i</i>	<i>o</i>	<i>u</i>
<i>bad</i>	<i>bed</i>	<i>bid</i>	<i>body</i>	<i>bud</i>
<i>have</i>	<i>dead</i>	<i>give</i>	<i>was</i>	<i>son</i>
<i>plait</i>	<i>many</i>	<i>pretty</i>	<i>gone</i>	<i>come</i>
<i>salmon</i>	<i>said</i>	<i>busy</i>	<i>because</i>	<i>country</i>
<i>guarantee</i>	<i>bury</i>	<i>women</i>	<i>cough</i>	<i>does</i>
<i>meringue</i>	<i>edge</i>	<i>build</i>	<i>knowledge</i>	<i>blood</i>
<i>harangue</i>	<i>friend</i>	<i>sieve</i>	<i>yacht</i>	<i>couple</i>
	<i>debt</i>	<i>rhythm</i>	<i>laurel</i>	<i>judge</i>
	<i>leopard</i>	<i>breeches</i>	<i>honor</i>	<i>tough</i>
	<i>guess</i>	<i>victuals</i>	<i>John</i>	
	<i>phlegm</i>			
	<i>Wednesday</i>			
<i>a-e</i>	<i>e-e</i>	<i>i-e</i>	<i>o-e</i>	<i>u-e</i>
<i>cake</i>	<i>be</i>	<i>by</i>	<i>no</i>	<i>cue</i>
<i>rain</i>	<i>see</i>	<i>like</i>	<i>bone</i>	<i>few</i>
<i>say</i>	<i>key</i>	<i>wild</i>	<i>boat</i>	<i>cube</i>
<i>baby</i>	<i>teach</i>	<i>lie</i>	<i>know</i>	<i>you</i>
<i>they</i>	<i>people</i>	<i>dye</i>	<i>soul</i>	<i>view</i>
<i>raise</i>	<i>leave</i>	<i>sigh</i>	<i>toe</i>	<i>juice</i>
<i>reign</i>	<i>these</i>	<i>buy</i>	<i>though</i>	<i>suit</i>
<i>straight</i>	<i>either</i>	<i>height</i>	<i>yolk</i>	<i>ewe</i>
<i>eight</i>	<i>receive</i>	<i>island</i>	<i>brooch</i>	<i>beauty</i>
<i>veil</i>	<i>believe</i>	<i>sign</i>	<i>ghost</i>	<i>feud</i>
<i>fete</i>	<i>belief</i>	<i>diamond</i>	<i>depot</i>	<i>humor</i>

<i>great</i>	<i>sleeve</i>	<i>eye</i>	<i>owe</i>	<i>impugn</i>
<i>ballet</i>	<i>league</i>	<i>choir</i>	<i>rogue</i>	<i>fugue</i>
<i>matinee</i>	<i>vehicle</i>		<i>sew</i>	<i>deuce</i>
<i>boquet</i>	<i>marine</i>		<i>mauve</i>	
<i>dahlia</i>				
<i>champagne</i>				

ar/ah	er	air	or/aw	.
<i>bark</i>	<i>her</i>	<i>hair</i>	<i>for</i>	
<i>ask</i>	<i>sir</i>	<i>bear</i>	<i>jaw</i>	
<i>last</i>	<i>fur</i>	<i>there</i>	<i>caught</i>	
<i>half</i>	<i>word</i>	<i>mayor</i>	<i>ought</i>	
<i>are</i>	<i>worse</i>	<i>their</i>	<i>bore</i>	
<i>laugh</i>	<i>journey</i>	<i>care</i>	<i>saucer</i>	
<i>aunt</i>	<i>were</i>	<i>parents</i>	<i>almost</i>	
<i>guard</i>	<i>earth</i>	<i>aeroplane</i>	<i>chalk</i>	
<i>bazaar</i>	<i>circle</i>	<i>fair</i>	<i>war</i>	
<i>sergeant</i>	<i>nurse</i>	<i>tear</i>	<i>board</i>	
<i>heart</i>	<i>answer</i>	<i>prayer</i>	<i>court</i>	
<i>gauge</i>	<i>myrrh</i>	<i>pear</i>	<i>course</i>	
<i>gaol</i>			<i>sword</i>	

ow	oy	oo	oo
<i>cow</i>	<i>boy</i>	<i>boot</i>	<i>book</i>
<i>our</i>	<i>boil</i>	<i>do</i>	<i>cook</i>
<i>power</i>	<i>noise</i>	<i>true</i>	<i>hook</i>
<i>down</i>	<i>buoy</i>	<i>crew</i>	<i>put</i>
<i>bough</i>	<i>quoit</i>	<i>shoe</i>	<i>would</i>
<i>house</i>	<i>gargoyle</i>	<i>move</i>	<i>woman</i>
<i>sauerkraut</i>		<i>loose</i>	<i>worsted</i>
		<i>soup</i>	
		<i>route</i>	
		<i>through</i>	
		<i>fruit</i>	
		<i>two</i>	
		<i>bruise</i>	
		<i>rule</i>	
		<i>manoeuvre</i>	
		<i>truly</i>	
		<i>rheumatism</i>	

I would be interested in hearing from international correspondents how much this chart would vary internationally, in view of the excuse of those opposed to spelling reform that intercontinental dialectal differences are too great for sound-symbol spelling to be feasible.

Faced with this list, all children, most teachers, and many others agree that present English spelling is a classic example of the stupidity or subservience of the English-speaking people, and that the dilettantes who delight in its oddities at the expense of all learners are responsible for more misery than the Romans who castrated boys for the sake of their sweet singing.

The chart also alerts its users to how spelling can be made more consistent, and gives them more

flexibility of eye to be able to accept spelling changes. When cribs based on the chart are inserted in books for individual reading, we are already on the way to translations into Consistent Spelling, since the crib avoids the problems of diacritical markings or phonetic symbols often used to indicate pronunciation.

Research: How would the ordinary person like to spell?

A story about the 'beautiful daughter of a great magician', full of awful English spelling, was published in the daily press, inviting readers to rewrite it as they would like to spell it. It was also dictated to schoolchildren, in a Latin square design, to see how they would write it when aiming for conventional accuracy, and how they would prefer it if given a free hand. The findings came from 380 newspaper respondents, and 100 Australian school children. Scientists, engineers and workers in communications tended to be very economical, leaving out unstressed sounds, rather than bothering with schwa renderings. The younger the child, the more economical he too tended to be, not only omitting unstressed sounds, but using short vowels for long and short alike – yet rarely affecting the reader's comprehension. Many adults and some children invented dozens of different new systems, with all sorts of devices to get exact renderings. In the schools test, the better spellers in present English were best able to use the sounds of words to help them spell as they liked; the middle group of spellers used vision only and usually could not abandon the inconsistencies even when given a free hand; the worst spellers were so bogged down by their horrible experiences that they could not work out how a sensible spelling could go either.

Further tests with schoolchildren and immigrants presented them with versions of the 'Beautiful Princess' according to different reform systems, the translations being supplied by the systems' promoters. It would be invidious at present to discuss the comparisons in detail, but it did suggest that any reform to be acceptable at present could not change the rendering of more than one phoneme in ten – a sort of Zipf's law – or readers would object to the strange appearance, and writers would be reluctant to try it in ordinary usage, and even occasionally and experimentally. More radical change needs to wait on a public eye that is more accustomed to flexibility through the initial changes.

Other protocols were also collected from Zambia and the Solomon Islands, and the overall conclusions were that 'free-choice' spelling differences between individuals were far greater than, and included, all the differences between nationalities, so that international differences in pronunciation need not prevent acceptance of an international English spelling.

A reformed spelling should also be based on the reproduction of formal speech, or the spoken language may become increasingly slurred, as more and more people become uncertain of a common pronunciation. In Australia, many immigrants and children are quite unsure of the real word until they have it tied down in print. (sunnerine? sundarine? sumnerdine? subbarin? submarine?)

Further research should look at how much adult practice is required to write in different systems to reach an error rate of under 5%; how much practice is required to become as proficient as in present reading and writing; who becomes confused by knowledge of two different ways to spell – and why; and what scheme is easiest both to read and write – since many can only help in one way. We will appreciate hearing from anyone with experience of this sort.

Conclusion

At present, individuals and groups should do what they can in promoting more consistent spellings themselves, with a hierarchy of possible steps, taken according to circumstances: diaries, letters, books, businesses, souvenirs gifts, etc. We need amusing gifts and gadgets that people would like to buy for fun. The bogey of homophones is not as dangerous as some people think. Our writing is

already full of homographs and we use context to determine the meaning when words have several meanings. But when there are problems, the solution in a living language is to turn to alternative words. (There are 9 homographs in this paragraph. – any confusions?)

As I am an educational psychologist, my attention is always on the people who do the spelling and the writing rather than on orthography as a theoretically perfect system. So I think there must be compromises between how people speak and how they think they speak – which is very often different. Economical graphemes need to cover a wide band of sound variations rather than aim at a precision which will leave spelling difficult for learners with poor auditory discrimination, as well as making international disagreements more acute. For example, in the case of those who drop their *r*'s in Received Standard (Southern British) speech, the *r* should be indicated as they think they are saying *r* although they are saying schwa.

If those who disagree with me will offer their arguments, I will listen.

Ways to change to more sensible spelling

1. *Practise sensible spelling.* Begin to use the three first-steps. Use the Instant Spelling Gyd for a standard sensible system. Hide your own correspondences with 'sensible spelling stickers' from the Spelling Kit, so that readers will cotton on to what you are doing. At first you will be inconsistent, sometimes changing one word and forgetting another. But this hardly matters. Try to be consistent and soon you will find you prefer the faster, stream-lined spelling that has no booby-traps.
2. *Firms, organizations, individuals:* Name new products, new processes, new places, in sensible spelling to make communication more efficient and economical.
3. *Internationalists:* The English language would be the international language of the world if its spelling were not so difficult. It is hard for developing countries to use English for education because it is so unreliable. Use sensible spelling in books for foreign learners.
4. *Social reformers.* Literacy is a national problem. Just because you can read and write, do not forget that English spelling is an additional stumbling block for the unfortunate, an extra barrier to opportunity in life.
5. *Teachers:* Use sensible spelling to teach your students correct English pronunciation. Correct their stupid mistakes, but tell them when their spelling is sensible according to standard pronunciation.
6. *Students:* It is in your hands to remove the affliction of generations of young children. Sensible spelling is essential to educational reform programs.
7. *Conservatives:* Keep what is sensible in our spelling; but change what needs reform. In this way, we will not lose contact with the past, not burden the future.
8. *Trend setters:* English spelling is an anachronism. You are not afraid of the unfamiliar. Bring it up to date with the changing times.
9. *Bad spellers:* Now is your chance, and excuse, to spell sensibly. Talk your teacher into letting you do it.
10. *Scrabble-players:* Anyone with a Scrabble-instinct, who likes word-games, can practise and enjoy spelling sensibly.
11. *Encourage the press* to streamline their spelling too, by showing your appreciation of any attempt they make to do so.

(This is a rough draft of an idea that needs more planning and rewriting. V Yule.)

7. 'This Great Reform', Mr. Pitman and Mr. Ellis at Bath, by John Kelly*

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Presented at the British Assoc. for the Advancement of Science meeting at Bath Univ. on Sept. 6, 1978.

"Bath is one of the most fascinating cities in the world," runs the opening sentence of the Association's preliminary programme, and no present-day visitor would demur. For many thousands of people in the middle years of last century, Bath held an added, particular fascination, being the seat of the Writing and Printing Reformation initiated and conducted by two outstanding Victorians, Isaac Pitman and Alexander John Ellis. This is the story of how that movement began and whither it led.

It was in 1839 that Isaac Pitman, a schoolmaster in a small Gloucestershire village, moved to Bath. His system of shorthand, first placed before the public two years earlier, had met with considerable success and showed promise of continuing to do so. Whilst his confidence in the superiority of his system over others available at the time was, quite properly, firm, his ambitions for it were at the outset quite modest. The introduction to the 1837 *Stenographic Soundhand* makes no other claims than that knowledge of the system confers various practical benefits on the user; and the booklet is addressed largely to that section of the population that might loosely be labelled the 'educated' classes. Amongst those singled out for mention are'. . . the clergy, barristers, . . . journalists and travellers.' Only slowly did Pitman's vision expand, firstly to envisage the applicability of his system to languages other than English. The 1841 version of *Phonography or Writing by Sound* presents it as 'a natural method of writing, applicable to all languages,' and the author ends his advertisement with the words: 'In short, *Phonograph* is offered to the world as a substitute for the tedious and incongruous method of writing now in use; and it may be used by everyone, who gives it a fair trial, as swiftly as speech. It is certain in all its principles, and equally available for writing English or Chinese, Hebrew or Italian: Nothing is in mind here other than an alternative way of writing languages. The opening page of the work says indeed: 'It is, of course, utopian, to hope to change the printed medium of intercourse of the millions who speak the English language.' Pitman was not, though, a man to repudiate a scheme simply because it was utopian, and soon became fired with zeal for this further cause; his *Phonographic Journal* for May 1842 states the programme: 'Phonography must soon supercede all other systems of shorthand, then become the common written medium of communication, and lastly, change the printed character of the millions who speak the English language': and in the first number of a new publication, the *Phonotypic journal* for January 1843, the diffusion of shorthand is seen as subordinate to a greater objective: 'None will dispute the assertion that, as Phonography becomes the general medium of written communication, Phonotypic Printing must follow. We shall, therefore, in the *Phonotypic journal*, advocate the cause of Phonography, as a means for the attainment of the greater end – PHONOTYPIC PRINTING.' Pitman had already by this time been experimenting with various printing alphabets for English and other languages and had presented seven such in the first number of the *Phonography Journal* in 1842. Of these, some were based on the Roman alphabet, some not.

What, then, are Phonography and Phonotypy? Phonography, the name eventually chosen by Pitman for his shorthand, means, as the Greek suggests, writing by sound. One of the advantages possessed by this shorthand over most other previous systems is that it is based to a large degree on Pitman's own analysis of the sound system of English, and that the shapes employed in the writing bear

relationships to one another that mirror the phonetic relationships underlying it. It is, then, emancipated from the orthography in a way that many other, earlier, systems were not. The relationship between the characters written and the sound units that are identified as making up the phonetic structure of English is, in Phonography, a relatively direct one. In the traditional orthography of the language no such direct relationship obtains, as has often been pointed out. The same sound unit is found in *seem, meat, key, mete, quay*, and in each case is written differently. *Leigh* and *inveigh*, *quay* and *bay* form rhyming pairs at odds with the visual pairing. Phonotypy, printing by sound, aims to restore the more direct relationship in the printed medium as Phonography does in the written. A pamphlet by Ellis published in 1845 states the case simply: 'Now what we plead for is: some system of printing and writing in which the same sound has always the same symbol, and the same symbol has always the same sound; and this we call, when printed, PHONOTYPY, . . . while, the now common, or other style of printing, is termed heterotypy. . . .' It was towards the elaboration of an alphabet of this kind for printing that Pitman had turned his attention, and it was his work in this field that brought him his acquaintanceship with A. J. Ellis.

The first contact between the two men took the form of a letter from Ellis, then living in Dorking, to Pitman, notifying him of Ellis's own endeavours towards the same end. 'I have bestowed great pains upon the best means of representing sounds by types,' Ellis informs him, and encloses with his letter a paper on 'A Phonotypic Alphabet' for inclusion in the forthcoming number of the *Phonotypic Journal*. This was the beginning of a long and intense correspondence, carried out almost entirely in shorthand, in the course of which they discussed in great detail the various technicalities, both practical and theoretical, involved in designing, printing and promulgating a new alphabet for English. It was not until the autumn of 1847 that Ellis took up residence in Bath. During the four years of their correspondence, part of which time Ellis spent in Germany, they met only once, in May 1845, when Pitman visited Ellis's home.

Pitman and Ellis were exact contemporaries. Pitman had had but a modicum of formal education, whereas Ellis, who had a private income, was a product of Eton and Cambridge. Ellis's interests were wide, ranging over music, mathematics, acoustics and foreign languages: he had travelled abroad and had an international outlook. Pitman, on the other hand, never left Britain, and his interests were more restricted. Other differences of temperament and nurture separated the two, but they were united by strong bonds for the purpose of the work they had in hand. Both were educationalists by instinct and men of deeply studious habit. It was in fact Pitman's serious and sustained course of self-education that had fostered his preoccupation with problems of English orthography. Whilst Pitman had for a time practised as a schoolmaster, and Ellis had not, it is not too fanciful to say that Ellis was a teacher *manqué*. The number of publications under his name designed for and directed at children and other learners bears witness to this, and his enthusiasm for the dissemination of knowledge amongst all classes and ages in society finds its expression not only in the Printing Reformation under consideration here, but also in a later involvement in the teaching of Tonic Sol-Fa. Ellis underwent a course of instruction in this in 1856-7, and remained all his life an admirer of the system and of John Curwen, its founder.

A manual on *Pronunciation for Singers*, published by Curwen in 1877, is offered by Ellis as '. . . the author's contribution towards the good cause of diffusing musical knowledge among the masses of the people, including the youngest. . . .'

Both Pitman and Ellis had, then, a commitment to popular education and to philanthropic engagement in general as an abiding element in their personalities. But it was only quite slowly, in Pitman's case, that the potential of Phonography and, more especially, of Phonotypy, as vessels of

popular education became apparent. Ellis too, in his earliest, solitary, phonotypic experiments had, on his own admission, no thought of practical applications. But by the time the two came into contact, Pitman had seen the implications of the universal acceptance of Phonotypy for the fight for literacy, and he was on the verge of taking practical steps to implement his ideas. A notice in the August 154 number of the *Phonotypic Journal* demonstrates well his characteristic mixture of philanthropy and practicality making a plea for financial assistance from his phonographic supporters towards the provision of a act of phonotypes, at a cost of £ 20, he writes: '. . . we therefore solicit assistance from phonographers, and from all that love little children,, and wish to smooth the path to knowledge for their tender feet. We disapprove, altogether, of restricting the use of phonotypes by a patent; rather let Truth, like its emblem, Light, be FREE TO ALL'.

After the Association with Ellis, the educational aspect of the Reform came to the fore in the propoganda that was made for phonotypy. The rapid and overwhelming success that had met the introduction of Phonography had led to the formation of societies in many parts of the land dedicated to the practice and development of that science, as it was most usually called. These often held regular 'Festivals' or 'Soirees': a Phonographic Soiree held in Bristol on the evening of Oct. 14, 1844, was attended by 350 people, as reported by the *Bath & Cheltenham Gazette*, and was addressed, amongst others, by Isaac Pitman. Earlier in the year a Festival in Manchester, attended by 200 persons, heard a speech by Isaac's brother Ben, which included reference to the fact that an estimated 60,000 people had been addressed on the subject of Phonography at public meetings throughout the length and breadth of the country during the preceding twelvemonth. The Phonotypic branch of the reform was provided in this way with a ready-made platform, and the costs of the undertaking came in part from the profits deriving from the phonographic side, in part from subscriptions. Neither Pitman nor Ellis had any notion of making money from the movement: Ellis particularly lost a great deal, financially, through his participation in it. But both were prepared for this, and they gave magnanimously too of their time and abundant energy. For a while at least, they made a well-matched pair for the job. Pitman, with his streak of intense practicality and, by now, a considerable experience of printing and publishing, had a large number of contacts in the country at large, all well-intentioned towards him, and many of them people of some standing in various spheres. Ellis brought his capacity for prolonged research, for synthesis and argument. One of his first self-imposed tasks was the preparation of a lengthy *Plea for Phonotypy and Phonography*, Phonotypy now, be it noted, standing first, in which he rehearses the arguments against heterotypy and attempts to demolish those arguments that might be brought forward to support it. The great majority of the arguments on both sides were not novel, having been put forward by writers on spelling reform during the previous four centuries; but Ellis and Pitman were not aware of this, though they became so later. In any case, Ellis's work in the *Plea* and various other associated publications, put the case for and against at much greater length, with more ingenuity and learning, and on occasion with more wit than earlier pieces on the same subject. The second edition of the *Plea*, published in 1848 and now entitled *A Plea for Phonetic Spelling*, is in no doubt as to the popular nature of the Reform, now commonly called the Phonetic Reform. Ellis writes: 'It is, indeed, an acknowledged political fact of the present day, that no great measure can be withheld or carried out without the sympathies of the people having been enlisted. . . a truth on education, which grows up among the people themselves, is jealously watched and affectionately tended by thousands of eyes and hands, and must force itself, through the mere momentum of truth put in motion by popular feeling, over every obstacle that antiquarian prejudices or "vested interests". . . can venture to oppose.' Their work, having started from modest beginnings, was now seen by both men as a large scale movement in popular literacy. It was also seen as such by others with the eye to see the possibilities it held. The Press was mixed in its reactions. The *Lincolnshire Herald* for Sept. 23, 1845, greeting the appearance of a sample of a Phonotypic Bible, concludes its

review: 'We wish success to their efforts, and sincerely hope that there will be found a sufficiency of public appreciation and patronage, to give prominency to the Phonetic Reformation, second only in importance as it is to the introduction and establishment of Printing itself.' Other press comment was a good deal less well-disposed, and verged sometimes on the vituperative, as here the *Jersey British Press*: '. . . when these trimmers of the English alphabet would alter its entire construction. . . we consider them to be neither more nor less than. . . madmen.' Other enthusiasts for outlandish-seeming schemes scoffed at in the same paragraph include Robert Owen, the backers of an "aerial machine" and a gentleman who has thoughts of "electro-telegraphic communication." Pitman and Ellis find themselves in good company here, despite the paper's lack of approval.

A more far-sighted and sympathetic reaction came to Pitman in September of 1845 in the shape of a letter from a 'professor of the English language' resident in Paris, who, sensible to the advantages to be derived from the use of the new alphabet in language-teaching, had commissioned from a printer a set of phonotypes, for which he paid 9 guineas, and with which he proposed to print an expose of the system together with a phonotypic version of *The Vicar of Wakefield*, then widely used abroad as a lesson book. He also undertakes to bring the phonotypic system to the attention of all 'who may be thought likely to support the system.' A further letter from the same correspondent in October of that year brings the news that 'A gentleman to whom I had lent all your publications. . . has completed the teaching alphabet for French, and in such a way that it serves as a transition to the old orthography. He intends it as a means of teaching twenty millions of Frenchmen to read in one-tenth of the time required by the ordinary method. They are, first of all, taught to read by the phonotypic character, and then the heterotypy, by a most ingenious series of transition lessons.' This is the first known instance of phonotypy being used, not to replace the official orthography, but to stand alongside it as an auxiliary, and, curiously enough, it was carried out in France and for the French language. At the time the implication of this success seems not to have struck home. Both Pitman and Ellis were fully occupied in devising the best alphabet they could, and later in providing a sufficient number of primers and other texts to feed the needs of the increasing numbers of those learning to read by the system, both children and adults. Classes in phonotypic reading were springing up beside the phonographic classes in many centres. A correspondent from Woolwich announces in Dec. 1847: 'At the lecture on Phonotypy the subject was urged on the attention of the public as a branch of a reform in which. . . everyone should take an interest, who regarded the welfare of his species. Amongst the members in this class, was the Master of the British and Foreign School, the Schoolmaster to the convicts in the Royal Arsenal, one of the town missionaries, and two Scripture Readers, all of whom were delighted with the system, and expressed their intention of teaching it. . .'

By the beginning of 1847, a version of the phonotypic alphabet that was deemed acceptable had been hammered out, and it was this that served as the basis for the various publications that began to pour out from the presses in Bath. At about the same time, we might remark in passing, printing began in Boston under the supervision of S. P. Andrews, who had made the acquaintance of Pitman's work whilst in England at the World's Antislavery Convention in 1843. Later in 1847 Ellis returned from Germany and moved his residence to Bath, to begin a period of intense activity of writing and publishing, a good deal of it for children and adult learners. A set of *Original nursery rhymes for boys and girls* and various tales for children in 1848 were followed by *First ideas of religion in conversations between a mother and her child*, in 1849. All were phonetically printed.

The stage now seemed set for a long and fruitful collaboration between the partners. But this, unhappily, was not to be. The work carried out by them while separated by long intervening distances had progressed amicably and well. Brought together in one city, and with some early

battles won, they were unable to enter a consolidating stage together in the same spirit. Ellis was, as events were soon to show, on the brink of a nervous collapse, and certain differences in their temperments and ambitions, hitherto sunk in their common strivings, now came to the surface, exacerbated perhaps, in Ellis's case, by his oncoming illness. The friendship between the two became subject to a multiplicity of disagreements and rivalries on matters of both principle and practice, the outcome being Ellis's withdrawal from Bath in the late summer of 1849 to an eventual new home in Bristol. For the following three years he undertook no work of any kind.

1849 marks the end of the close collaborative friendship between Pitman and Ellis. But for neither did it bring to an end his commitment to the ideal of orthographic reform for English. Though they from now on went their separate ways, each was to the end of his life intimately engaged in work of this nature, which can only be summarised here. Ellis, of the two, was the first to take up seriously the idea of a second-string alphabet, which would serve as a *learning ancillary*, rather than as a thorough-going replacement of the established version. On his return to work, he founded in 1853 the Reading Reform Association: this was, in its own words 'an Educational Society founded to introduce the Reading Reform, an improved system of teaching to read in the ordinary print by means of a previous course of phonetic reading.' The 'phonetic reading' referred to was, to all intents and purposes, the 1847 alphabet, which Ellis held to be ideal for the purposes here expressed, Pitman, during the intervening years, had withdrawn his allegiance from this version of phonotypy, and had embarked on a long series of further experiments in design, culminating in a version of 1852 that was much to his preference. This had the unfortunate effect of widening the rift between himself and Ellis, who was now and later committed to the idea of using the 1847 alphabet as a transition to romanian reading. Later attempts on Pitman's part to heal the breach met with intransigence on the part of Ellis, though the two often appeared together at public meetings and the like held under the banner of spelling reform. Both men put forward numerous schemes for revised orthographies of various statuses, though both, towards the ends of their lives tended to move away from phonotypy, using phonetic sorts, towards compromise forms such as, in Pitman's case, Semiphonotypy and Hemiphonotypy, and on from these to systems of spelling based on some systematisation of the Roman letters, usually eked out with diacritics. In *The Speller*, the organ of the Spelling Reform League, with which Pitman was associated at the very end of his life, he writes, in Aug. 1895: 'For general use, we advocate and employ the old alphabet. The common people and the printers, indeed everybody, can use it at once; but new letters would prove an obstacle to the multitude; and printers are unwilling to go to the expense of buying them.'

A great deal of success came the way of the 1847 alphabet as used in Britain, Ireland and the U.S.A. to alleviate the difficulties of entry to the conventional spelling. The *Phonetic Journal* carried a report on an experiment in Glasgow: 'Twenty-one prisoners were instructed at the Glasgow Bridewell for one month, one hour daily. . . On examination at the end of a month, all but four were able to read phonetic books with great accuracy and considerable fluency. . . Mr. B. Pitman asserts that in five weeks, eight out of the 21 prisoners under his care could not only read the phonetic books, but the romanian ones, with tolerable ease. Nearly 20 years later a report from Portlaw on 'The Experiment in the Infant School' tells how ' . . in twenty months we have accomplished what had never before been done in the infants' school: that is, teaching children to read and spell in the ordinary romanian orthography; the result being entirely due to the use of phonetic spelling *as a stepping stone* to the ordinary orthography.' This experiment was carried out in 1872-73 and the alphabet used was the 1847 Phonotypy. During the years that separated these two experiments, many others were carried out and reported on favourably, and on all sides the voices raised in protest against the inadequacy of the traditional spelling system of English increased in volume and number. Teachers, both of children and adults, of foreigners as well as natives, scholars,

missionaries, clergymen, school committees, spoke out against the common spelling as the sole vehicle of the printed language, and in April 1870, a meeting of the Society of Arts, held in London, on the subject of Spelling Reform in its Relation to Primary Education, recognised that 'the special object of the Society, Elementary Art and Science instruction, can only be obtained extensively by shortening the time now occupied in the painful attainment of primary instruction.'

One of the impediments in the way of Reform was, curiously, the number of possible alternatives available. By the 1870's, when the success of an initial training alphabet of some kind seemed to have been demonstrated, a large number of candidates were on the market vying for attention. Pitman and Ellis each had a goodly number to his credit, as has been seen. Pitman's brother Benn, writing Isaac's biography many years later, says: 'The constant, never-ceasing mania for change and improvement in the forms of the measurably complete alphabet of '47 by Isaac Pitman, did more to check the spread of Phonetic Reform, stop practical teaching. . . than all other causes combined.' Certainly, the two questions "Is an alternative desirable?" and "Which alternative is it to be?" had to be held clearly apart in any discussion of the matter. A public meeting, held again at the Society of Arts in May 1877, saw it as its business to discuss only the first of these questions, and to attempt to win in-principle acceptance of the need for reform. Of the resolutions put forward and carried at that meeting, a meeting of, in the words of its Chairman, '. . . educationists, . . . philologists, . . . philanthropists. . . ', three interest us. The first, put by the Chairman of the School Board for London, runs: 'That as the length of time now found necessary to teach children in elementary school to read and write the English language with ease and correctness is attributable in a great measure to *the difficulties of the present mode of spelling*, it is advisable for the promotion of education that some change should be effected. . .'. The second, put by Ellis, is: 'That as no change would be effectual unless the amended spellings were accepted by School Inspectors, Civil Service Examiners, and Public Departments, side by side with the present spelling, the assistance of government will be required.' The third resolution was put by Henry Sweet; it ran: 'That this meeting hereby expresses its concurrence in the action taken by the School Board for London. . . and also by the Society of Arts, and hereby appoints a Deputation to urge upon the Education Department the appointment by the Government of a Royal Commission, for the purpose of hearing evidence, examining schemes, and reporting how far it is advisable and practical to adopt a change in spelling.' Sweet went on to emphasise that 'we could not determine yet what system or alphabet to adopt,' and that what was required was not more proposed alphabets, but '*a popularising of the principles upon which spelling reform should be based.*' Pitman was present at the meeting and expressed his firm support for the resolution. He, Ellis and Sweet were amongst those appointed to a deputation to seek an interview with the Education Department.

In the event, the attempt to persuade government failed, but the thread was not broken. The Philological Society, having passed a resolution in 1870 to the effect that 'the Philological Society abstain from recommending the adoption of any spelling reform' – this because of their reluctance to choose any one system from amongst the large array by that time available – acceded later to appeals to put its weight behind the movement, and in 1879 the English Spelling Reform Association was formed with a remit to 'collect, arrange and distribute information on the subject of Spelling Reform, by collecting works of the subject, instituting and watching experiments, and promoting lectures and public meetings in connection with it.' The organization, an offshoot of the Philological Society, took over in large part of the task which the 1877 meeting had wished to urge upon the Education Department. From this society there sprang in 1908 the Simplified Spelling Society, founded by Skeat and Furnivall, both distinguished officers of the Philological Society. The Simplified Spelling Society's alphabets, of which there were several, were all romanized, and based on the rearrangement of existing letters. Here too, experiments were conducted in the schools.

A Manchester headmistress reports in 1924: 'Simplified Spelling, as arranged by your society, has been in use here for about four years, and I have not yet found any other method to equal it as a means of teaching young children to read easily and fluently. . . . When they take up the books printed in the ordinary spelling, they seem to find no difficulty in reading at sight. I am amazed at *the ease with which the transition is made.* . . .' This society too, did all in its power to bring the need for reform to the attention of competent circles within government, but once more with disappointing results. It was not until well after the Second World War that government recognised, albeit in an attenuated form, that research into comparative methods of learning to read was worthy of support. That this came to pass was due in no small measure to Sir James Pitman. Isaac Pitman was long dead—he died in 1897, Ellis seven years earlier. Sir James had inherited his grandfather's passionate interest in the problems caused to learners, both at home and abroad, by the vagaries of English spelling, together with the will to expend time, money and energy on sustained work to rectify the situation in a practical and practicable way. He also had the advantages of a deep knowledge of the work carried out by his predecessors, together with an expertise in matters of typography from the point of view of practitioner and theorist. In 1936 he joined the committee of the Simplified Spelling Society, by which time he had already engaged in experiments towards the 'introduction of modern phonetic principles within the framework of existing orthography.' His *Phonetic Orthography*, produced in 1937 in collaboration with C. E. Smith, is one interesting example of such a provision. Sir James's work culminated in the designing and propagation of i.t.a., or initial teaching alphabet, which owes something to New Spelling, the favoured medium of the Simplified Spelling Society, and something to Phonotypy. I shall say nothing here of i.t.a. as an extensive literature exists on the subject, with most of which many of my listeners may be more familiar than I can claim to be myself. In the words of Sir Cyril Burt: 'No other device has aroused such widespread interest or provoked so many investigations into its merits and limitations.' Some of these investigations, pursued with great thoroughness and objectivity, are still in progress, and both this scheme and its French relative, the "alphabet d'apprentissage," await the test of time.

This then, is some small part of the story of spelling reform in Britain, set in train in Bath some 130 years ago. Both Pitman and Ellis were well aware of the changes taking place in their society with bewildering speed, and of the need to equip a rapidly growing population with the means of keeping abreast of such changes and the ability to partake in them on every front, literary, commercial, industrial and educational. The analogy was often drawn between phonotypy and the steam-engine as a symbol of speed, power and efficiency. Both men dedicated their considerable talents to the advancement of science as they saw it and to the provision of a more effective, more fulfilling and more accessible education for all, irrespective of age or class.

Pitman lived the greater part of his adult life in Bath and has been variously honoured by his adopted city. Ellis lived there for no more than 18 months; but he too was a man of eminence in his chosen fields. The article on "Pitch" in the current edition of *Grove's Dictionary* is given over in great part to a discussion of Ellis's work on the history of musical pitch, first published in 1880. His translation of Hemholtz's *On the Sensations of Tone*, a translation judged by one commentator to be 'excellent almost beyond belief,' was reissued in the 1950's. On his work in phonetics, *Chambers' Biographical Dictionary* has the comment: 'Ellis did more than any other scholar to advance the scientific study of phonetics.' Strangely, there is no biography of Ellis, and almost nothing of what he wrote is in print. We must hope that these omissions will be corrected. In the interim it is surely fitting that some small token of remembrance should be offered, and that in this city and on the occasion of this meeting.

8. The Child's Early Experience with the Letter A, by Ernest Horn*

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Reprinted from *The Jour. of Educ. Psychology*, vol. XX, no. 3, Mar. 1929.

We have long been taught that learning is facilitated, and remembrance made more certain, by utilizing meaningful associations. It is not surprising, therefore, that we have with us always one or more varieties of plans for rationalizing spelling and reading. Learning to spell four thousand different words seems a large task if each word must be learned as an individual task. The total number of different words in the list of books which the child is expected to read runs far beyond this figure even in the first six grades. Learning to associate arbitrarily the appropriate meanings with each of these printed symbols seems a most formidable undertaking.

Neither in reading nor in spelling have attempts at rationalization (of existing spellings) given results which are very satisfactory. *Children who have had training in phonics do not show, according to the meagre evidence which is available, any significant superiority in spelling.* The investigations of teaching phonics in reading have been more extensive, though poorly controlled, but even here the investigators not only do not agree upon the type of phonic training that should be given; they also do not agree as to how much phonics, if any, should be taught. The failure to show the desirability of phonic training may be due to one or more of several possible causes. First, it must be admitted that the investigations of phonic vs. non-phonic training which have been made up to the present time have been poorly controlled. It is possible that, were the factor of phonic training skillfully isolated and the results of the experiment adequately analyzed, a superiority would be shown. Second, it is probable that many who have not been taught phonics have made their own comparisons between words and have in that way built up a sort of phonic system of their own. It is a common thing to find some children who have had no phonic training but who show remarkable ability to pronounce words which they have never read before. Moreover, many so-called "intrinsic" methods really include phonic training. Third, an analysis of existing phonic systems shows that many of them either contain serious phonetic inaccuracies or are clumsily devised. Fourth, it is likely that few teachers teach any system of phonics as it is planned to be taught. Fifth, *the unphonetic character of the English language may constitute an insurmountable barrier to successful rationalization.* No doubt each of these factors helps to account for the fact that up to the present time the results of investigations are not in agreement as to the kind or amount of phonic teaching which should be recommended.

The following paragraphs present the results of a partial inquiry into the fifth possibility enumerated above: that the English language is so unphonetic as to make impractical attempts at rationalization through phonetic teaching. Let us begin with the first letter of the alphabet. What varieties of experiences may a child be expected to have with the letter A in grades I to III? These are the grades in which most phonic instruction is given. Here, also, the problem of learning to read is most acute. Table I, which follows, attempts to give a summary view of the difficulties confronting the child in his attempt to rationally control this letter either in spelling or in reading. The data on spelling are presented on the assumption that he has studied throughout these grades a certain speller in wide current use. The part of the table which deals with spelling would not be greatly affected were some other speller chosen instead. The data on reading are based on the detailed tables in Dr. Cordts' [\[1\]](#) analysis of the representations of all of the sounds in ten first, ten second, and ten third grade readers. Low frequency words were also included from the sources used by Dr. Cordts.

All pronunciations and phonetic transcriptions in this and in other tables are based on *Webster's*

"*New International Dictionary*." This standard was chosen, first, because it is well-known to teachers and pupils, and second, because the writer's limited training in phonetics made it impossible for him to bring order out of the confusion arising out of the fact that authorities in phonetics disagree not only in regard to the appropriate transcriptions of the pronunciation of many of the words but also with regard to the pronunciation itself.

This table should be read as follows. The child will see the sound of *ā* as in *paper* made in six different ways by utilizing the letter *a*: *a*, *paper*; *a-e*, *ate*; *ai*, *fail*; *ay*, *day*; and *ea*, *great*. (There are, of course, other ways of making this sound without utilizing the letter *a*.) He will spell 44 words in which the sound is made by using *a* followed by a consonant and final *e*. He will read 95 words with a total occurrence of 8974 in which the sound is made in the same fashion, etc.

The table includes 47 different sound-letter associations for the letter *a* in words actually occurring in First, Second, and Third readers. No one interpretation of the letter *a* has a majority of uses in its favor either as measured by the number of different words falling under it or the total frequency of occurrences as measured by running words. The most frequent value for *a* is the so-called short *a* (*ă*), which is found in 63 words in spelling, and in 223 words in reading, with 60,295 occurrences in reading counting repetitions. But the tables show 45 other types of sound-letter associations involving 229 words in spelling and 813 words in reading, with 106,060 occurrences counting repetitions. It should be noted that the child's experience with most of these forms, as measured by the total frequency of occurrence in reading, runs into the hundreds and in nearly half of the situations into the thousands. In the light of repetitions usually considered ample for drill and review purposes, *these frequencies loom very large*.

The following comments, numbered to correspond to the divisions in the table, may help to make the table more intelligible.

- (1) It will be seen that no one of the seven letter groups which express the letter *a* includes as much as half of the total cases, either as measured by the number of different words or by the total frequency in reading. There are, of course, other ways to write this sound, as for example, by using *au*, as in *gauge*, as well as by using letters or groups of letters, which do not include the letter *a* at all, as in *they*. As will be seen by examining other parts of the table, every one of the letter groups which here express *a* also expressed at least one other sound.
- (2) It is possible that this group should have had as an additional classification *a-e* to include such words as *orange*. Such words were classified under *a* in this section of the table. The sound *e* is also made with *ae* as in *aesthetic*, but no such words occurred in the readers for the first three grades.
- (3) The sound *a* is given a separate classification in the table to agree with the usage in *Webster's New International Dictionary*. It is probable that a good many children (and adults) would not distinguish the sound of *ai* in *air* from the sound of *ai* in *said*.
- (4) It is possible that this division of the table should have had also the letter grouping *au-e* as in *because*. Such words were classified under *au*.
- (5) It is possible that the single classification under (5) should have been divided into three parts, the first to include words beginning *wha*, the second, words beginning *wa*, and the third, words which contain one or more syllables ending in *ar*, as in *war*.
- (6) Under *ea* in this table are included words like *eat* as well as words like *hear* and *ear*, since these words are given the same transcription in the *New International Dictionary*. Many authorities

in phonetics do not attach the same value to the *ea* in these words. The word *Aeolus* is, of course, a joker, but it actually occurred in one reader. The word *Aesop* would not seem so much out-of-place.

- (7) It is interesting to note here a very early and frequent exception to the effect of the final *e* as given in most phonic systems.
- (8) *Guard* is placed on this list since the *ua* in this word is listed in the *New International Dictionary* as a digraph. U after g usually has the effect of indicating that the g is hard.
- (9) In this group words like *dance* are classified under the letter *a*, although a separate division might conceivably have been made under *a-e*, even though the *e* is preceded by two consonants.
- (10) A separate group is made in (10) and (11) for the sounds \bar{i} and \bar{a} according to the usage in the *New International Dictionary*, even though these sounds shade into each other in cultivated speech.
- (12) It is interesting to note in the word *diamond* that the *ia*, which appears in several places in the table as a digraph, is here separated into the vowels *i* and *a*, which appear in different syllables.
- (13) It is interesting to note that in *ocean* the *e*, which commonly unites with *a* to form a digraph, here is separated from *a*, and with *ce* makes the sound sh.
- (14) The sound \bar{i} is also made with *ait* as in *aisle*, but although the child probably knows this word in the first three grades, it was not found in any of the readers used by Dr. Cordts. The words *ay* and *aye* are here counted as meaning *yes* and included under the sound \bar{i} , although it is possible that in the readers the words were used with different meanings, in which case they should appear under R.

The confusion pictured in Table I is much worse than it would be if the child were confronted with 47 wholly different types of situations involving *a*, since here the same letter combinations cannot be consistently interpreted. Table II illustrates this difficulty by showing the variety of ways in which the child must interpret the digraph *ea*.

This table should be read: *ea* is sounded \bar{a} in one word in spelling and in 5 different words in reading with a total frequency, counting running words, of 1015, etc. While the most frequent sounds expressed by these combined letters is \bar{e} , more than a third of the occurrences as measured by running words are pronounced differently. There are 8 different sound values for *ea*. These various sounds for *ea* are scattered through his reading *with so little plan as to approach a chance distribution and must be a source of great confusion*.

TABLE I. – THE CHILD'S EXPERIENCE WITH THE LETTER A IN GRADES I TO III

Sound		Example	Number of different words in spelling	Number of different words in reading	Total frequency in reading	
(1)	ā	a	paper, April	9	41	2,177
		a-e	ate, came	44	95	8,974
		ai	fail, rain	9	55	2,769
		ai-e	praise	1	6	156
		ay	play, day	18	35	8,654
		ea	great, break	1	5	1,015
(2)	ě	a	many, any	4	8	1,570
		ai	said, again	2	3	6,979
		ay	says	1	1	276
		ea	bread, head	6	36	2,641
(3)	a	a	parent	0	1	14
		a-e	bare, care	5	14	576
		ai	air, hair	7	10	848
		ay	prayer	0	1	11
		ea	wear, bear	2	7	609
(4)	o	a (wa, al)	warm, call	24	43	9,128
		au	fault	1	6	554
		augh	daughter, naughty	0	4	357
		aw	paw, saw	5	19	1,629
		oa	broad	0	1	32
(5)	o	a	was, watch	7	16	9,096
(6)	ē	Ae	Aeolus	0	1	6
		ea	eat	15	115	8,536
(7)	ǎ	a	at, and	62	216	57,443
		a-e	have, bade	1	7	2,852
(8)	a	a	ah, arm, car	20	80	5,744
		aa	baa	0	1	25
		a-e	are	2	3	3,058
		au	laugh, aunt	1	4	427
		ea (r)	heart, hearth	0	3	169
		ua	guard	0	1	11
(9)	a	a	ask, pass	18	51	5,011
(10)	i	ai	mountain, fountain	0	5	122
		ia-e	marriage, carriage	0	2	20
(11)	a	a	language	0	1	6
		a-e	palace, village	0	4	274
		ay	yesterday	6	8	111
(12)	a	a	again, diamond	13	83	19,536
(13)	a	a	distance, ocean	0	30	1,293
(14)	e	a (wa, ar)	beggar, toward	1	15	429
		oa	cupboard	0	1	81
(15)	u	ea (r)	search, early	3	12	1,095
(16)	o	oa	boat, board	4	31	1,804
		eau	bureau	0	1	4
(17)	ū	eau	beauty	0	2	581
(18)	ī	ay	ay	0	1	1
		a-e	aye	0	1	1

TABLE II. – HOW SHALL THE CHILD INTERPRET *ea*?

	Number of different words in spelling	Number of different words in reading	Total frequency in reading
ā great	1	5	1,015
ě bread	6	36	2,641
a wear	2	7	609
ē eat	15	115	5,536
ä heart	0	3	169
u search	3	12	1,095
ū beauty	0	2	581
ō bureau	0	1	4
Total.....	27	181	14,650

The other letter combinations follow the same sort of variation in sound values. Thus, *a* expresses twelve sounds; *ai* expresses four sounds; *ay*, five; and even *a* followed by a consonant and so-called silent *e* expresses six sounds. Today the child must sound *oa* as in *broad*, tomorrow as in *boat*, or *coal*. Moreover, the child will soon be confronted with new values for *a*, as *ī* (aisle) and *ā* (gauge).

Indeed, from the point of view of the primary child, there are additional complications due to the fact that some of the vowels with which the letter *a* sometimes forms a digraph are not infrequently separated from *a* in syllabication, influence the sound of consonants, or are actually used as consonants. Illustrations of these difficulties are given in Tables III and IV.

Table III. – Examples of words in which *a* is adjacent to another vowel with which it commonly forms a digraph but from which it is in these instances separated in syllabication.

<i>Words in primary readers used by Cordts</i>	<i>other words</i>
ea idea, Indian	ai naive, archaic, Isiah
ia diamond, piano, giant	diameter, liar
ae	aerial, aeroplane, Aegean
oa Noah	boa, coal
ua truant, gradual, January, February	dual
ao	chaotic, aorta

A real puzzle is furnished the child by the word *hyacinth*, which appears in one of the readers. Moreover, he will soon meet extraordinary (eks-trôr' di-nā-ri, eks-tra-or dā-na-ri).

Table IV – Examples of words in which *a* is adjacent to a vowel with which it commonly forms a digraph but which in these instances is used to influence the sound of a consonant, is used as a consonant, or helps to make a consonant as in *qu* and *ti*.

Words in primary readers used by Cordts	other words
(g) (s) ua language, guard	persuade
(c) (t) is physician, musician, Christian	filial, partial,
(c) ea ocean	initial, genial
(q) ua quality, quack	quarter

The actual difficulty confronting the child in interpreting a new word is not quite so great as the tables indicate since approximate sounds, together with the reading context, may give a sufficient clue to the word, but even when the most liberal allowance is made for such approximations in reading, the confusion here pictured is still serious. In spelling, where approximations are not acceptable, the confusion is, of course, much greater.

One cannot, of course, conclude from these data that phonics should not be taught. One can only conclude that plans for teaching phonics must take into account such facts as are here presented. When this is done, the results of teaching phonics will undoubtedly be more satisfactory. For while the unphonetic character of the English language constitutes a real obstacle to successful rationalization, it is not necessarily an insurmountable one. But the degree to which this obstacle may be surmounted by phonic training, what kind of phonic training is best, and how or when it should be given-these are questions for which, at present, there are no answers upon which investigators in reading agree.

[1] Cordts, Anna D.: "An Analysis and Classification of the Sounds of English Words in a Primary Reading Vocabulary." Ph.D. Thesis, unpublished, State University of Iowa, 1925.

Note – While some of the books used in this investigation are no longer widely read in the primary grades, a sampling of modern books indicates that the results would not be greatly modified were this analysis made with an equal amount of modern primary reading material.

9. A Critique Updating the Above, by Emmett A. Betts, Ph.D. & Katherine P. Betts, Ph.D.*

*Winter Haven, Fla.

Ernest Horn's "The Child's Experience with the Letter A," published in 1929, is another one of his classic studies. This study was preceded by his *A Basic Writing Vocabulary*, a Commonwealth study, 1926. His scholarly contributions to NSSE yearbooks on reading began in 1924. His chapter on "Reading in Relation to the Social Studies" in his *Methods of Instruction in the Social Studies* (1937) is a significant milestone in education, meriting study by serious students even at this date. Especially important, he applied his knowledge of instruction in his basic textbooks for pupils – *Horn's Progress in Reading* and basic spellers. All these and other achievements of this remarkable leader in education were capsuled in his reputation as a master demonstration teacher in the classrooms of his State University of Iowa demonstration school.

Horn's contribution to phonics needs to be interpreted in terms of its time setting. Dictionaries of 50 years ago reflected in dictionary pronunciations, preoccupation with *phonetics* rather than *phonemics* of present-day dictionaries. Basic reading-study textbooks for children were improved by attention to vocabulary studies (commonly used words), an awareness of the values and limitations of phonics, pronunciation changes (e.g., *aunt* /o/ versus /a/ during the last 50 years, and other factors. (For example, the word *Aeolus*, a "joker" in Horn's study, is not used in today's primary textbooks.) Furthermore, there is an increasing awareness of orthography (the writing system), with its loose fit between spellings and phonemes. For these reasons, there is a need to update Horn's provocative study.

Findings

Horn identified nine spellings for the phoneme /ā/. But *Webster's Elementary Dictionary* (1961), phonemically based, yields seven spellings: *a* (*paper*), *a-e* (*ate*), *ai* (*rain*), *ay* (*play*), *ai-e* (*praise*), *ea* (*great*), *aye* (*aye*). (Note: the words *ay* or *aye*, not used in today's textbooks, are respelled /ā/ or /ī/, depending on use.

Again, Horn's unabridged dictionary yielded two spellings for the phoneme /a/; Webster's pronunciations, three spellings: *a* (*at*), *a-e* (*have*, which is rare), and *au* (*laugh*).

He found two spellings for /ē/, including the rare word *Aeolus*. *Webster's Elementary Dictionary*, three spellings: (ea)t, yesterd(ay), (Ae)olus.

The data for phoneme /ō/ remain unchanged; phoneme /ī/, as in *ay* and *aye* (see /a/ above), is an anomaly.

In today's phonemic dictionaries, the respelling for *eau* in *beauty* is /yü/ rather than /û/ for this glide.

Horn has five spellings for the phoneme /e/, the same as in *Webster's Elementary*: *a* (*many*), *ai* (*said*), *ay* (*says*), *ea* (*bread*), *a-e* (*care*).

He reports six spellings for /ä/; *Webster's Elementary*, five: *a* (*watch*), *a-e* (*are*) *aa* (the rare word *baa*), *ea* (*heart*), *ua* (*guard*). Recent studies report the *gu* of *guard* is a "consonantal sequence including the vowel letter"; hence, *gu* equals /g/.

Horn's five spellings for /o/, listed under /ô/, and his two spellings for /i/, listed under /ĩ/, stand.

The single phoneme /æ/ was listed by Horn under two pronunciation symbols: /û/ as in *search* and /e/ as in *beggar*. These were pre-phonemic pronunciation symbols used years ago. Three spellings

of /ər/ were identified in Webster's Elementary: ar (beggar), oar (cupboard), ear (early).

For the schwa /ə/, three spellings were located: *a* (*was*), *a-e* (*palace*), *ea* (*ocean*). Horn listed *ai* in *mountain* under /i/ because at that time *ai* was respelled /ā/ and /ē/. In *Webster's Elementary*, *-ain* is respelled syllabic /-n/, with some dictionaries indicating a raised schwa in this syllable, e.g., /³n/. The inclusion of the spelling *ai* increases the phoneme /ə/ count to four.

In Conclusion

One half-century after initial publication, Ernest Horn's study on the letter A retains a crisp appeal for the reader. His ideas are communicated clearly with abundant examples. And he was a master at capturing the reader's attention: note his title.

However, had orthographic and other resources of today been available, Horn – true scholar that he was – may have modified some of his classifications, but none of his conclusions:

1. As mentioned previously, *phonemic* rather than *phonetic*, respellings are available in extant dictionaries. Hence, Horn's 18 "distinctive" sounds represented by the letter *a* and by the letter *a* in phonograms (e.g., *oa*, *ea*, *a-e*, and so on) reduce to 9 phonemes.
2. Next, vowels influenced by the letter *r* (e.g., *s(ear)ch*) are a complex category of English spellings. In English phonetics and phonemics, /ər/ is a single phoneme – one class of distinctive sounds – and other vowels influenced by *r* (e.g., /er/, as in *care*) are respelled in different ways in different editions of the same dictionary (e.g., *Webster's Elementary Dictionary*, 1961, and *Webster's New Elementary Dictionary*, 1965).
3. Additionally, /yü/, as in *b(eau)ty*, was represented by /û/ in Horn's categories.
4. Therefore, analysis of Horn's data resulted in 11 (rather than 18) phonemes represented by 39 (rather than 47) spellings. Still a formidable number!
5. Beyond Horn's purposes in examining the letter *a* is another concern: the child's experiences with the letter *a* (and other letters) in terms of allographs – printed *a*'s (a, A), manuscript *a*'s (a,A), cursive *a*'s all of these, varied symbols to be generalized as the same letter *a*!
6. Nevertheless, that English spellings need re-examination with regard to the problems they pose for beginning readers cannot be gainsaid. Furthermore, Horn's analysis of the limitations of "phonic methods" as practiced in the classroom could have been written today. The diversity of phonic methodology (effective and ineffective) compounded by the complexities and vagaries of our present writing system has muddied the ocean of reading research.
7. Consequently, Horn's statement, "... the English language is so unphonetic as to make impracticable attempts at rationalization through phonetic [phonemic] teaching," teases the reader into examining orthographic obstacles to reading achievement very carefully.
8. To this day, his final question regarding "what kind of phonics training is best, and how or when it should be given" have not been satisfactorily resolved.
9. Responsive contributions have included initial learning alphabets (but there is no "self-reading" writing system!) along with suggestions for orthographic reform; "linguistic" readers (but the writing is stilted and devoid of normal speech patterns!); and changes in teacher education (herein lies the key!), including courses in orthography and other facets of applied linguistics, the psychological bases of effective methodology, and so on.

[*Spelling Progress Bulletin Spring 1979 pp17,18 in the printed version*]

10. Cultural Lag and Prematurity: The Case of English Spelling, by Kenneth H. Ives*

*Chicago, Ill.

Reprinted from *Case Analysis*, vol. 1, no. 1, Mar. 1978.

A major explanation for the persisting lack of progress in an area of social endeavor has been Ogburn's (1922, p. 200) theory of cultural lag. This he illustrated especially from a study of the development of workmen's compensation insurance in the United States. This became common only in the decade before he wrote, tho conditions making it desirable had existed at least since 1870.

Of the six major reasons he describes for cultural lag (1922, p. 256), the first, "scarcity of invention in the adaptive culture," can be supplemented by recent studies of "prematurity" in scientific discoveries (Scent, 1972). These find that some discoveries in science lie unused, and perhaps rejected, sometimes for decades, before they are accepted and used by others. The reason appears to be that related developments have not been made which would connect the discovery or hypothesis, by simple, logical steps, to a wide body of accepted knowledge.

Another example noted by Ogburn (1922, p. 237) is the property tax. This has only been controversial as a basis for financing public education in the last decade, half a century after Ogburn noted it.

An example not mentioned by Ogburn, but noted by such diverse observers as sociologists William Graham Sumner and Thorstein Veblen (1899, p. 257-8) is English spelling. This was phonetic when English re-emerged as a literary language in Chaucer's day (about 1350), but has drifted far from it since, with many resulting problems for children and adults. Reasons for the drift from a phonetic spelling include "the great vowel shift" in English pronunciation, the freezing of spelling by printers and dictionary writers, the importation of many foreign words (with their alien spelling) into English, and the rise of the "doctrine of correctness of historic spellings", which resists needed changes.

While a detailed analysis of why archaic spelling is continued could be made, using Ogburn's six reasons, it may be more productive here to concentrate on the first, as amplified by the concept of prematurity. This implies there are some "necessary preconditions" for the success of a discovery, theory, or proposal.

The need for spelling reform in English was noted as early as 1554, with John Hart's treatise in an effort "to get some order in writing." Since then a few reforms have been adopted from time to time in America. Noah Webster proposed many in his first dictionary (1806). Some of these have come into general use in this country: *analyze*, *ax*, *center*, *defense*, *labor*, *traveled*, and still differentiate American from British spellings. In 1898, the National Education Assoc. proposed changes in 12 words. Program is now universally used in this country; *catalog*, *altho*, and *thru* are now accepted alternates.

With the first spelling reformers, phonetic spelling was advocated. This ran into problems in the

number of sounds, and the handling of dialectal differences. The Shakespeare family spelt their name in 34 different ways. This would be unworkable today in an urban phone directory or a county hall of records.

Samuel Johnson rejected phonetic reform when he wrote his dictionary in 1755, partly because too many changes would be required, but also because he believed etymological spellings were important. An alternate was not clearly described until 1879, when Max Muller defined the "phonemic" approach, based on the work of Isaac Pitman in the late 1840's. The phonemic view is that letters or standardized combinations are only needed for those sounds which carry distinctions in meaning, about 40 in number.

Some modern spelling reform proposals seem to be random and arbitrary in their choice of letters for specific sounds. It was not til 1946 in this country that World English Spelling as a well-researched, consistent system of reform appeared (Dewey, 1971, p. 30-1). Unfortunately, learning to write in a thoroly revised system such as this would probably require three months of full time study by adults. [1] This is a major reason why "total systems" have little chance of adoption in a single step. It does, however, provide a basis from which step-by-step proposals for reform can be derived.

The major area as yet largely unresearched is the problems of adoption and utilization of a reformed spelling. Some study of this has been done in the literacy movement (Laubach, 1945, 1946), and in studies of language reform planning in developing countries (Rubin and Jernudd, 1971). Few if any studies have been done on step-by-step approaches to spelling reform such as advocated by Harry Lindgren. This is a major remaining technological reason for this example of cultural lag.

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[1] This Editor mastered W. E. in 4 days while typing 4 pages of prose in W. E. in this magazine.

[Spelling Reform Anthology §13.3 pp184,185 in the printed version]
[Spelling Progress Bulletin Spring 1979 pp18,19 in the printed version]

11. Which Reformed Spelling is the Easiest to Learn?, by Newell W. Tune

Before we begin to answer this question, we must ask: easier for whom? – an illiterate youngster, foreigner, or an adult already literate in our conventional spelling? A sensible answer would be different for each of these.

1. A youngster starting to learn must depend upon his spoken vocabulary. Hence, he would necessarily equate spelling with his sounds of speech. To the extent that all fonetic systems are completely fonetic, or nearly so, all such systems should be equally easy to learn. But the application of the learner's training into using his knowledge in writing is quite different according to the ease of writing the system. All diacritic marks become obstacles. Hence, we should avoid any diacritic marks not already established in conventional spelling, such as dots over *i* and *j*, crossed *t*. These we cannot avoid using because the learner must transfer his knowledge (training) to c.s. eventually in order to be able to write and read the many books already printed.

This brings up another obstacle or hurdle: the amount of deviation from conventional spelling of the system used in training (teaching) the beginner. This will affect the transition to conventional spelling. Hence, it is important that the I.L.M. (initial learning medium) be close enough to c.s. so the transition to c.s. is easy – the easier, the better – the harder, the less acceptable. It is amazing how many alphabeters ignore this axiom in their reckless design of their complicated spelling systems.

2. With foreigners, there is a different problem. They are used to a different spelling system. If they are from a European country that uses Continental vowel sounds for the Roman letters, they have to forget their training and embark on a new system of vowel representation. For the teacher to teach them in a system that uses the Continental vowel representations would be a sad mistake because so few of English words use the Continental vowel symbolization; hence the transition would be almost impossible. Besides *all* foreigners do not use the Continental vowel representations in their native language. So to those who do not, you would not be doing them any help with c.v.r. So it would be better to start with a system that is easier to transition to conventional spelling. Probably this would be the same system that would be used as an I.L.M.

3. For literate adults, it is obvious that the least amount of deviation from c.s. is going to be the most acceptable to them. As Dr. Godfrey Dewey said in a letter to me, and later included in his book, *Relative Frequency of English Spellings*, "The principle of least deviation from T.O. needs no apology, but it must be tempered with common sense." What he meant by this is that in order to achieve a less strange appearance (to literate adults), a less altered, a less difficult transition, an alphabeter must consider not only the most frequent spelling for each sound, but also the fact that the most frequently used symbol may also be the most frequently used symbol for another sound. For example, the most frequent symbol used for the z-sound is *s*. But obviously, the letter *s* must be used for the s-sound. Ager, *oo*, although not the most frequent digraph for any sound, occurs with almost equal frequency for both of the vowel sounds in *book* and *boot*. A compilation of all words with these sounds shows (by common sense deduction) that *oo* should be given to the sound in *fool* (because *uu* is the complimentary symbol for use) and *uu* used for the sound in *full*. Hence World

English's use for the sounds of *good-food* as: *guud food*, rather than the old use in New Spelling as: *good fuud*; or as in *full moon* (*W.E.* = *fuul moon*, and *N.S.* = *fool muun*), is certainly preferable. (See *S.P.B.* v. 3, no. 1, Mar. 1963, p. 18-19, and *S.P.B.* v. 4, no 1, Mar. 1964, P. 13-14).

And altho *ai* represents the sound of long-*a* in 70% of occurrences (of *ai*) in running text, it also represents the sound of short-*e* in 25% of occurrences, and the sound of long-*i* in only two words. But the most common symbol for long-*a* is single *a* (2140), the next, *a-e* (1918), and the third, *ay* (1109). Therefore, *ai* is not useful for either long-*a* or long-*i*. To use it at all would violate the principle of nearness to c.s. (or least alteration of spellings).

4. The least deviation from c. s. means different things to different alfabetees.

(a) To Dr. Axel Wijk it means that this principle is of the utmost importance – (Why? So literate adults can read it with very little trouble? – or what they might tolerate in a reformed spelling system?) – to the almost ignoring of the transition to c.s. For example, which of the 7 spellings for long-*a* should a riter use when he bears a new word and wants to spell it?

(b) To some other alfabetees (See *S.P.B.* v. 10, no. 1, Spr. 1970, p. 16-18) it means only eliminating the unnecessary silent letters in 884 words, plus the silent terminal *e* when it rongly indicates the previous vowel has the long sound (as in *have, are*) in about 700 words (339 in the 1000 commonest words), and the unnecessary silent *e* in the suffix *-ed* would add another 400 words, and the silent *o* in *ous* might add another 300 words. Total number of words simplified by omitting these silent letters may be 2300.

This sistem, obviously, is not intended as an I.L.M., but as a practical minimal change spelling reform that should overcome the public's resistance to change. It only requires 6 rules for its use. Here is an example of it in use: "Possibli this kind of reform wil satisfie no wun, being too drastic for sum and too unfonetic for uthertz. Houever, it haz several avantajez. Besidez leeving unchanjd more of the wurdz in runing text, it eliminates homofones. Wurdz having long vowelz can be spelt eether with vowel digrafs or bie folloeing the rule of silent terminal *e*. If the rulez ar folloed consistentli, it wil be regular and eezili lernt."

It woud be interesting to compare this latter sistem with Regularized Ingglish of Dr.Wijk to see which is: 1. easier to lern, and 2. which haz the greater number of unchanjd wurdz. Then to decide if eether fulfilz the chalenj of being realli easi to lern to the extent that improvements ar unlikli.

I would like to ask all alfabetees to carefully examine their motives in making a reformed sistem. Is it to help new lerners to read more easily, or to design the perfect spelling sistem for a permanent reform, or for self-aggrandizement or notoriety? Are you really interested in the spelling reform efforts of others in order to improve yours? Do you think your sistem can possibly be improved or are you satisfied that it is the best that can be devised? Would you still be interested in spelling reform if the government were to decide to select a sistem different from what you advocate?

12. From our readers

Rules for Spelling!

Mr. Edward Rondthaler, New York, N.Y

Harvie Barnard

It is obvious to me that you hav given much moer tiem and thaut to th overaul subject of spelling reform or spellin simplification than hav I, and I can see th lojik of your Soundspel Key. I hav a question, tho, about th number ov sounds you recognize az being th basic 43, whereat, in your Key (counting aul th diegrafs you hav used), there ar 55. I can comprehend th use ov aul ov them, but I suppoz you think ov th addishunal 12 az combinashuns ov basic sounds rather than simpl singular sounds. Iz that th idea, – or can you explaen further th addishun to th basic 43?

Referring to your notes at th bottom ov your Key, under note 4, would it be rashunal to staet that th rule iz: "final vowels ar to be sounded az th "long" foneem? I seem to hav an averzhun to "rules", which goes back to my 2nd graed teecher, Miss Rule, who attempted to teech us aul th "rules" for spelling, without fonics and without "look-say." We wer reely a mixt up bunch ov kids, and I never kwiet got over th iedeea that most ruelz wer to be bent, sum broken! I'll giv you a litl story, (a tru wun), which actually happend in my 2nd graed class. . . We wer aul having a bad tiem with Miss Rules' ruelz, when fienally wun smaual lad ventured th iedeea that he had figured out a new way to spell – to make spelling easier, shurer, and to cuer aul our spelling problems. (I can remember this litl pictuer just az well az I remember what I had for brekfast, everyday!) Miss Rule smiled most plezantly and sed, "Well, Robert, I'm shuer we'd aul liek to heer what you hav to say!" And the whoel class actually cheered when Robert proudly stood up and proclaimd, "Aul we hav to do iz just spel th wurdz th way they sound!" And after that Miss Rule waz so kwiet and so overcum that we thaut she waz going to cry. It waz liek letting th gas out ov a child's baloon. Bob sat down – you could hav herd a pin drop – and we waited for Miss Rule's reply. It waz dedening, defeeting and hartrending. She twisted her face into a pretzel, lookt at th ceeling, seemd to be holding back teers ov frustrashun, and finally sed, "Robert, I'm very sorry, but you just cant do that. Wurdz ar not spelt th way they sound – they're spelt th way th book set." And from that moment on, Miss Rule waz a sad and discouraejd teecher. Th rapport which she had bilt up with th kidz simply faded away, – and you never saw such a deflated, discouraejd bunch ov litl peepl in your whoel life. I don't recaul much ov what happend after that. Th effect waz liek being cut auf from salvashun, and I don't recaul much ov th rest ov th second graed, except that I simply kwit trying, and waz finally "put bak" with th "duet duets", where nun ov us made eny progress until a new teecher caem along and a "sistem" waz started. No moer ruels wer taut, and we simply memorizd wurdz wun by wun from that day on. I suppose that waz about th tiem that fonics waz fazed out and "look n' say" caem in. Aul I am shuer ov, iz that it waz a disaster for aul th kids who had no memory training and/or no good communicashun at home – which included a lot ov us. Unfortunately.

Truly, that waz th last I herd ov fonics until I took a short cours in "Reading" after I had receevd my teeching certifikit and had akedy bin indoctrinated in th "look n' say" process by th "Reading Supervisor" ov th local skool sistem ov th "Department of 'Education'" ov th public skoolz ov Tacoma, Washington. We had about 3 dayz on "Phonics", and th teecher who gaev th "course" compleetly failed to convey th fundamental iedeea that SUM wurdz can be spelt th way they sound, but that if you want to get your kidz thru freshman English, you'd better teech them to keep th dicshunary handy at aul tiems, which waz a hell ov a "waste" ov valuabl tiem! (in my opinion). It's liek hanging a millstone around the neks ov aul kidz in case they need it to sharpen their pen-nife!

At this point, I hav litl or nothing to contribute to what you hav akedy accomplisht, but I hav WUN sugjeschun: if you hav eny contact with th media or that part ov it which relates to "comics" and/or cartooning, they ar th peepl who cuud, if they wuud, put across th fonics iedeea. Sum uez it to sum extent already – and peepl luy it, can reed it and get instant comprehenshun. Mark Twain in his essay on sim. sp. in Letters from Earth did a reel selling job in an entertaining way – which miet be th best way to get to th public. Pleez think on it and let me kno what you can do.

On doubled consonants

Dear Newell:

Sir James Pitman, KBE

I note with considerable interest in Godfrey Dewey's article (Winter, '78, p. 7) his concessions from one-sound, one-symbol writing; and what I wrote on p. 5 about Godfrey and I welcoming freedom of expression and criticism, and have noted his gradual acceptance for W.E.S. of what I had applied in the choice of spellings for the use of i.t.a. I argued hard that there was (for the learner, all-be-it) no significant reason why words such as *middle* should depart more from T.O. than *midday* merely because the pause in the latter was more noticeable than the pause in the former. Surely if the doubled *d* in *midday* was justifiable, why not also in *middle* and many other such words? I defended vigorously the retention of doubled letters, maintaining: (1) that tautology was of itself not confusing, (2) that syllabication in decoding allowed great flexibility in recognizing the spoken word, (3) no harm or misrepresentation occurs by the use of doubled consonants-indeed they facilitate the transition.

Incidentally, in your letter (p. 20), I suggest that you are ignoring the great and relevant distinction between reading (decoding) and writing (encoding). I am sorry neither Tinker nor Perry researched and reported on the "speed & accuracy" of encoding figures in Roman numerals as well as decoding. It is a safe bet that the speed of encoding would be shown to be even more in favor of Arabic numerals than it was even in decoding. Think this over. Yours, Jim

-o0o-

Overcoming obstacles to spelling reform

Dear Mr. Tune:

Arnold Rupert

I like the first 12 pages of your Winter issue, tho I hav most of the Dewey books, etc. & hav red the material in full, & several times. I don't think the machine has much to do with reform, really; it's the human animal, itself, that has to be changed most. Eny ten year old school kid could see the arguments V. Yule has stated at length, & as clearly, without knowing what they really wer, just by how T.O. demonstrates them. This simple analysis of T.O. spelling seems to be forgotten when all we simple folk escape from school & then let *that* sleeping dog lie, like so meny others like it. Politicians must hav shat memories, when they listen to advice like the Chomsky story. If the savings in teacher time (\$13,000 to \$35,000 now) could be understood by John Doe Taxpayer, he would grumble less about Sp. Ref., if it came, than he does now here in Canada, about Metric. I hav a brother who reads only when he really has to, & not very well. When he took my hobby seriously, far a short moment recently, he asked: "Would it be enything like Metric?" I had to answer: "Yes, only more so." You might gess the next: "Well, if it gets enywhere, it'll kill you!" That is the short, thautless anser to be expected from the public. *Do* they think? (politicians) about such reform proposals, or do only the ones that need no public support prevail? The negativ anser may seem true, but then we *do* hav the UN, NATO, the SALT talks & Atomic standoff & now, at last, Metric. I think we should regard spelling reform as just the *last MAJOR* reform to hav its turn, and hopefully soon.

So now, agen, I must return to the particular: just what kind of spelling reform? & I just hope we won't get some half-way job, like our adoption of the old Metric, just as it was conceived 200 years ago – a remarkable enuff item for that period, but much less than we could expect in this that the i.t.m. and the agreed SR words are identical, such computer age. It needs some handy units, such as quarts, gallons, etc.

I don't hav much support yet for my idea, just a few of the curious & one school in Africa, for a

principle almost as old as Johnson's T.O., to use a code designed along shorthand principles & capable of abbreviation for steno use as the entering wedge, stenotype spelling reform can easily stay abreast of competitors; but none of us has much success to crow about.

In any case, I think that spelling reformers are *all right* in wanting to go beyond an ITM as soon as possible, regardless of what that best ITM may be. Personally, I would like it to be much closer to what a final S.R. system will be than either of you, if I can assume that you lean toward the late Dr. Dewey's attitude in favor of his WES.

I am happy to read, & I think understand, Sir James Pitman's statement that "The effect of spelling on pronunciation is almost compulsive" & feel that, if we once had an "authoritative choice for a standard dialectal spelling" in a good new alphabet, it would soon result in that dialect becoming the *only* English dialect. I also feel that if homograph for heterograph substitution *would* bring "poor communication," it could also lead us, as a reasonable & innovative species, to learn use of terms that would *avoid* any such resultant ambiguity in our speech, as well as in our writing. It is because such firm guidance of our dialects & our grammar is so desirable, that an ILM should be closer to the ideal Spelling Reform System, & get that guidance into operation as soon as possible. Surely we can sell *that* concept to educators as easily as the one that justifies conformance to the idiotic T.O. Happily, such progress in practical English composition & spelling can be gradual & even the less frequent sound characters can evolve with time, if we *have* a set of them, & stop using the common old letters for other than their most frequent values. I notice that you use Lindgren's *e* rule part of the time & *f* for *ph*, etc. at times. Why not all the time? Who could possibly mistake either word or meaning? Let's practice what we preach!

I am not an educator & live in a province & country that seems to make little use of the i.t.a. system or practical literature (hundreds of copies of more than 300 books), but what little I have read from i.t.a. examples, I have read very easily. I can say the same, however, for samples of W.E.S. & even for those few I've seen in SSA F.A. Certainly we can say the same, or even more so, for the less changed SR-1 examples and spellings in words like *alphabet*, *fonetik*, *enuf*, etc. Why are we spelling reformers so hesitant then about using as well as preaching the gospel of Sp. Ref.?

Lindgren seems to think we have not adopted his SR-1 widely enough yet to start with SR-2, whatever may be agreed upon as that second change, but those among us who have grown accustomed to SR-1, would like agreement now, so we can get on with uniform practical on a world-wide basis. I find myself wanting to use *f* for *ph* and American spellings like *tho*, *thru*, *thoro*, & *enuf*, etc. This could easily be the SR-2. Another pattern for rule of change might ensure that each word *could only change one letter* to reach the desirable final form. Such methods could conflict with simple checking by rule, but would lighten the load on memory. There is no reason why gradual SP-n, actual spelling reform, could not proceed in a partially applied manner, while i.t.a. or other i.t.m. primary aids to the teaching of literacy prepare generations of beginners to accept reform as they perform the function their design is fitted to do. However, if the i.t.m. were to maintain wordform resembling T.O. beyond the time of SP word listing & even partial application, there could be serious conflict of practical. Reformers can't be expected to leave the field clear for i.t.m. form & practical suitable *only* for its primary purpose. To the extent conflict can't occur. Therefore, i.t.m. design leaning too much toward T.O. & so hindering SR agreement & practical, will be opposed by those hoping for general SR practical, slow as its adoption may need to be, & it could be argued that any form less than suitable for ideal final spelling, should not appear in the i.t.m. Simple enough reasoning, of course. But, we can't wait forever for the 'ideal' to be developed & agreed upon. Nor for SR.-x-teen. Probably that is why spelling reform movements in the past have died.

In the meantime, i.t.a. is remarkably compatible with the not yet late T.O. & its miseries. So, I think the reasonable course is to use it as is, but with the full intention of substituting simpler symbols as

they *are* agreed on, & phased into function via Lindgren's gradual program. Still, this would be ignoring all the problems of old & new form interference, the problem of a good handscript & the typing & printing adaptation. Given a slow enuf pace, the first of these will not be serious; the second can be solved by substituting WES digrafts for each of the related ligatures of i.t.a., until each is replaced by the small & simpler new letters of the SSA F. A. (for which I have seen very suitable handscript forms), while the typewriter keyboard can become more than adequate in size, if the capitals are droppt.

This beloved set of capitals will be hard to kill off. If we are honest about it, even we reformers like them – a page without them looks bare indeed, but there is a way to ease their passing without disfiguring the page. Leo Davis has ben telling us how for a long tome, via a method used in Spanish: ?does this look all that bad. !hell, no. **this* last one, for the plain **joe*, might be improved on, but all of them are as big & imposing as the caps & hav the added advantaje of alerting the reader to the mood in time to read the sentence right at first glance. All the other punctuation practises can continue as at present: cues, that is, that hav ben in the right place all along. This wouldn't mean that caps would disappear completely, just that we would take them from the keyboard, to make room for the necessary new letters without dropping eny of the special signs. Some machines might even use all cap letters 8r no smalls. Oops – that brings up the issue of small cap, long vowels, script *a*, etc. some of which are more striking than the SSA F.A. forms which make reading a lot easier. The SR-n (lindgren) plan would giv us plenty of time to make a wise choice.