

# Spelling Progress Bulletin

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## Guest column: Illiteracy: a shortcut to crime

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## Some Technical and Social Problems of Spelling Reform, by George Turner\*

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\*Dept. of Lang. & Lit., Univ. of Adelaide, South Australia.

G. W. Turner was born in New Zealand in 1921 and received an M.A. from the Univ. of New Zealand in 1948. He trained as a librarian, then worked for six years in academic and public libraries. From 1955 to 1964 he held a post in the English Department of the Univ. of Canterbury, New Zealand, and since 1965 has been Reader in the Dept. of English, Univ. of Adelaide. He holds a diploma in English Linguistic Studies from Univ. College, London, and has contributed a number of articles on Old Icelandic phonology, Australian and New Zealand English, and grammatical topics to learned journals. His publications include *The English Language in Australia and New Zealand* (Longman, 1966, second edition, 1972), *Good Australian English* (Reed Educational, 1972), and *Stylistics*, (Pelican Books, 1973).

The idea of spelling reform is as old as regular English spelling. No sooner had the printers regularized practice in spelling than reformers were ready to point out anomalies and suggest improvements. The anomalies increased with inevitable change in the spoken language, and criticism, though fluctuating, was never entirely absent. The success of 19th-century shorthand brought a new wave of interest in reform, supported by many prominent philologists, and this interest has not yet entirely dissipated. The success of metrication, which weakens the old argument of likely public inertia, has revived the hopes of reformers, though it is doubtful whether any serious linguists now lend them support.

Metrication presents a misleading analogy with spelling reform. Systems of currency or of weights and measures are arbitrary 'languages' for measuring and discussing phenomena outside themselves, but spelling and pronunciation are both linguistic phenomena. It is at least possible to regard a spoken and written version of a word as two forms of the same word; you can't do that with litres and beer. It is to be expected, then, that a reform of spelling will throw up problems which are different from those encountered in metrication, and we must not be surprised if the problems of spelling reform are likely to be much more complex.

### ***Background Theory***

The theory of spelling is part of the wider theory of the relation between spoken and written language. Spelling is not a necessary part of this relationship since it could be said that a purely ideographic language like Chinese hardly has spelling in the usual sense, but if a writing system is generally based on the spoken form of a language, we can talk of spelling. The aim of spelling reformers is to make the two systems as alike as possible, by making each element in one system correspond as far as possible to an element in the other.

There are three possible approaches to the relationship of speech and writing. The first is to think writing is the 'real language' and speech is a way of actualizing it on particular occasions; the second is to think of speech as the 'real language' and of writing as a way of reflecting it, with some loss, in a convenient recording form; the third is to regard the 'real language' as something more abstract which may be actualized indifferently in speech or writing. Our theoretical standpoint on this question will affect our views on spelling and its reform.

The first view, that writing is the 'real language', seems to have been the view of Swift who thought that adapting writing to speech was like fitting one's body to one's clothes. The view underlies a practice among some elocutionists and (at one time) teachers who encouraged their pupils to pronounce the unstressed syllable of *mountain* to rhyme with *stain* or *train*. Though such teachers inevitably earned ridicule, it would not be absurd to suggest that, rather than reform spelling, one should encourage as far as possible spelling pronunciations, that instead of respelling *said* as *sed*, we 'repronounce' it as 'sayed' (to rhyme with *maid*). Such changes in pronunciation have been not uncommon in the history of the language; *apothecary*, *window* and *waistcoat* were once pronounced 'potecary', 'winder' and 'westkit', and *forehead*, though still 'forrid' generally, is already pronounced as 'forehead' for some of a younger generation, so that these words are less irregular than they once were, though the spelling hasn't changed. Place names provide many similar examples, and the success of recent New Zealand efforts to promote a 'correct' pronunciation of Maori names shows that pronunciation reform is at least as possible as spelling reform.

The second view, that speech is prior, in a real as well as historical sense, has perhaps been commoner than the view that writing is prior. As a reviewer of William Holder's *Elements of Speech* in an early volume (V, no. 45, 1669, p. 958) of the *Transactions of the Royal Society* put it "Written Language is a description of . . . Audible Signs, by Signs Visible," Such a view became dogma among American linguists in the 'Bloomfieldian' era (say 1940-57). Written language was

hardly accepted as language at all. Perhaps it was because it was so thoroughly despised in theory that there seem to have been no memorable calls for its reform at that time, though the implication was there, since, if writing was merely a means of recording speech, it would be reasonable to make it as exact a record as possible. It should reflect surface phonetic phenomena mechanically, without intrusion of etymology, deeper knowledge of the connections of words and other interference by the reasoning mind with raw phonetic facts.

But before spelling reformers caught up with this theoretical justification and learned to change their complaint that English spelling is 'irrational' to one that rational processes (such as, say, the unpronounced 'd' in *handkerchief*, just because reason connects the word with *hand*) interfere with phonetic truth, a new wave of linguistic theory subverted the Bloomfieldian linguists and promoted a view resembling our third theoretical possibility. Already in Denmark Louis Hjelmslev and the followers of glossematic theory were indifferent to priorities between speech and writing. They saw language as abstract form realised indifferently in spoken or written 'substance.' Much the same view is inherent in Chomsky's transformational grammar, and though glossematic theory did not much disturb the world outside Denmark, Chomsky did. It was no longer necessary to insist that speech alone was real and writing a parasitic growth on it. Linguists began to dare to write about writing. It did not seem to matter very much whether it closely paralleled speech, so long as rules for converting abstract linguistic competence either into speech or into writing could be clearly stated. Of course, an intelligent relationship between the two was to be preferred, but as we shall see, the most intelligent relationships appeared increasingly, in the light of transformational grammar, to be a spelling not markedly unlike the one we have.

### ***Technical Problems***

The technical problems of spelling reform will differ according to which theory of language (the priority of writing, of speech, or of neither) is held.

If writing is held to be central and speech adapted to it, there is little occasion for reform of the writing, unless possibly to eliminate some unpronounceable sequences to encourage a consistent habit of spelling pronunciation.

It is the view that speech is primary and writing reflects it that best justifies a desire to reform spelling. The Bloomfieldian linguists are likely to be most helpful in providing a (somewhat dated) linguistic theory for reform. At least Bloomfieldian linguistics does nothing to rule out reform, though it does demonstrate that the problems are a little more intricate than some amateur reformers suppose. First it might warn the reformers to dismiss loose talk of 'phonetic spelling'. Spelling would never be truly phonetic but would approximate to phonemic spelling. A phonetic transcript of speech ideally records every discernibly different detail of pronunciation. It would distinguish the 't' of ton (with aspiration, a little puff of expelled air detectable if you place a wet hand near the lips as you pronounce the word) from the different, unaspirated 't' of *stun*. It would distinguish the difference (heard by any speaker of Polish) between the bright 'l' at the beginning and the dark 'l' at the end of a normal Australian pronunciation of *little*. Such differences are too fine to need recording in spelling since they are not used in English to distinguish one word from another and consequently are not usually consciously heard by speakers of English who are untrained in phonetics. Only a sound which does contrast with other sounds in a given language to differentiate words is called a phoneme. (Slant lines, e.g. /p/ are conventionally used to record phonemic transcriptions.)

Besides the separate 'sounds' in sequence, called the 'segmental phonemes' of a language, Bloomfieldian linguistics recognized 'suprasegmentals'; pause, stress (the phonetic 'emphasis' on particular syllables) and intonation (the 'tune' of language). These are not easily recorded in writing, though punctuation goes some way towards it. Their omission is, of course, a serious shortcoming

in any practical representation of speech in writing, since much of the nuance and even the meaning of speech depends on them. Consequently punctuation, defective though it is as a total representation of the rhythm of speech, is more important than spelling in avoiding ambiguities in writing. If you write 'John, thought the teacher, was ridiculous.' omitting the commas, you change the meaning; if you spell ridiculous as 'rediculous', you cause a minor catch in the reader's fluency and show a dullness to the interconnectedness of words (*ridicule/ridiculous*) but at least your meaning can be salvaged with certainty.

Even without the suprasegmentals, there are many difficulties in arriving at an agreed set of phonemes for English (or a chosen variety of it), and even more problems if we have to record these phonemes using only the familiar 26 letters and their combinations, but a list might certainly be agreed on for practical spelling purposes.

This does not necessarily complete the task of providing the best spelling for English. It might be argued, with the support of Bloomfieldian linguistics, that the best spelling would not be merely phonemic but morphophonemic. We spell the plurals *ships*, *shoes* and *cabbages* by adding an *-s* in each case, and this seems sensible enough, but phonetically we pronounce 's' in one case, 'z' in another and 'ez' (or, in England 'iz') in the third; and a purely phonemic spelling would have to record these usually unnoticed variants. In technical language, /s/, /z/ and /iz/ are 'allomorphs' of the 'plural morpheme' in English. If we allow a uniform spelling for the phonemically variant allomorphs, we have morphophonemic rather than strictly phonemic spelling. Presumably all pleas for 'phonetic spelling' would, if precisely stated, turn out to be pleas for morphophonemic spelling.

Morphophonemic spelling is a departure from a purely mechanical rendering of significant speech sounds by written symbols. It represents a rational interference with the automatic conversion of each sound to an appropriate symbol. It recognizes a deeper organizing principle below the surface sequence of sounds.

Transformational grammarians have given great emphasis to deep organizing principles below the surface of language, usually with a suggestion, still sometimes disputed, that these deeper principles reflect the mental processes of users of language. The best known work of transformationalists is in grammar but the principles have been applied to the sound and spelling of language as well. It is an extension of the morphophonemic principle and has led to a justification for a written notation much closer to traditional English spelling than a phonemic transcript is. This work is new and details are still debated, but it is clearly work which responsible spelling reformers will need to watch closely.

One simplified example of the kind of thinking which is becoming current must suffice here. Consider the words *critical* and *criticism*. It is clear that suffixes *-al* and *-ism* have been added to a stem *critic-*, or, more generally, to another suffix *-ic*. How should we represent this suffix in writing? Phonemically it varies between /ik/ and /is/, but we feel that these forms are variants of a single linguistic element. It would be useful to be able to spell it with an /i/ followed by another symbol representing something which sometimes appears as /k/ and sometimes as /s/. Since this is exactly the function of the English letter 'c', the letter 'c' might well be used for this. And so a traditional butt of spelling reformers, the letter 'c' which 'uselessly' duplicates two more precise symbols 'k' and 's', proves to be justified by our deeper awareness of our language.

Perhaps not all English spelling practice can be justified in this way. Reforms would still be possible, but they might well be less extreme than early reformers expected. Linguists seeing speech and writing as separate manifestations of an underlying form are not induced to feel strongly that the two should be congruent in detail, but, provided deep relationships are preserved, linguists need raise no objection to change if for special and educational reasons it is desirable.

### *Sociolinguistic Problems*

The chief motives for spelling reform are therefore social and educational; that is, they are sociolinguistic rather than linguistic in the narrow sense. Linguists can assess spelling systems, pointing out that one is a better reflection of deep interconnection than another, or that one is a more accurate representation of surface phenomena, and psycholinguists can investigate whether deep or surface spelling systems are easier to acquire or more productive of educationally valuable skills in the long run, but, since it is obvious that spelling systems are not determined by inexorable linguistic laws from the present state of a spoken language, conscious design of a spelling system remains theoretically possible. Linguists can point out linguistic implications but social forces promote the desire for change and possible social repercussions ought to be foreseen before changes are made.

If we decide on our first (and least likely) theoretically possible project, to fit pronunciation to spelling, we will inevitably favour the literate and the educated, or, more generally, those who spend most time with the printed word. This may seem to some to create the most desirable form of favoured elite, but elites of any kind are out of fashion. In the past the strong influence of Latin spelling on English gave just such an advantage to the educated, but Latin has so much ceased to be a mark of education that this argument no longer carries much weight. On the contrary, Latin spellings now retain a merit that ought to be conceded by reformers, since they make English easier for foreigners to learn. Strangely, however, it is precisely those who would change our Latin spellings who in their statements are usually very solicitous of the interests of foreign learners. Surely, however, a Frenchman encountering our written words *illustration* or even *psychology* would feel we spell very reasonably; it is when he hears us say the words that his shoulders rise in a hopeless shrug. The advantage is especially with European foreigners, but scientific terminology is rapidly carrying international words beyond Europe now.

Our second theoretical possibility, and the one actually urged by all reformers, is a radical change in spelling. Such a change would immediately create a new and quite different elite, and perhaps a worse one. Scholars would still have to learn the old spelling, since our cultural traditions cannot simply be discarded and melted down like old coins, but those who have only the new spelling would be cut off from all older literature except for a corpus of classics, chosen indirectly if not directly by scholars, for reprinting. It is not enough to say that a *reading* knowledge of old spelling might still be retained; any teacher of Middle English knows that variant spelling is in itself a deterrent to readers. If Australia alone were to introduce new spelling, the loss would be much greater as English and American and other English language writing would become difficult of access. An immense provincialism both in time and place would ensue. We must not lightly assume that scholars wanting older texts are merely a handful of literary recluses, either. To take one instance, much useful work in local history is done by people who are not professional scholars. It is hardly likely that back files of newspapers will be reprinted in reformed spelling, so that spelling reform would deter, if not disable, the amateur historian.

Of course older people, for a time, would have the older spelling. The generation gap would be immensely widened. If newspapers adopted the new spelling, some of the elderly would very likely give them up, preferring older books, perhaps with some cultural gain, but with a considerable sense of withdraw from society, even remembering that we now have television and radio news as well.

Reprinting programmes of books for the new generation would be a new call on paper supplies and publisher's time. This is not a trivial point at a time when publisher's lists are beginning to be reduced and 'marginal' books, which in the past have often later become centrally important books, do not easily find publishers.

Legal implications of a change would need to be foreseen. Perhaps surnames would remain unchanged to puzzle the young, but laws and statutes would need redrafting (or lawyers would again, as in the days of Latin documents, be securely removed from the layman), since a change in spelling can create ambiguities. There *may* be no cases of this in legal documents, but a skilled lawyer would need to check, since such examples as 'For her alone, his knightly favours' or 'The lore and rites (law and rights) of the Aborigines' show that ambiguities in speech are sometimes eliminated by traditional spelling.

If all these risks are taken, or prove to be less than they seem, there remains a problem of standardizing the new spelling. Reformed spelling is not spell-as-you-please, nor even an exact presentation of speech phonemes by written symbols, since many words, like *have*, for example, differ according to stress in 'They *have* come', 'They might've come', 'They might 'a' come', and we would presumably, unless catching the nuances of speech as we do now, need an agreed single spelling for a word like *have*. Nor is it, for any individual, a simple conversion of his own speech into writing, for a more 'phonetic' spelling would soon reveal to us the surprisingly large unnoticed variation in the detail of pronunciation between one person and another.

A reform would have little chance of success unless agreed to by all English-speaking countries, but, to simplify, we will suppose that Australia alone adopts a change.

This would ensure a fairly close parallel between speech and writing, but those learning to read would still need to isolate separate words and analyse their careful pronunciation, and in a few cases, perhaps made more unacceptable by their rarity, an individual would need to conform to a norm not his own. There would be some variation according to social class; either some would learn to spell 'anything' or others would learn 'anythink.'

It would not do to allow free variation among individuals. One argument used for reform is the example of metricalization, but the main argument for a costly metricalization scheme is that it is a move for standardization. It helps the export trade. For other reasons standardization is just as essential nowadays in writing. A great deal of reading - reports, newspapers and road signs as well as books - has to be taken in by a modern citizen and he must take it in quickly. At 100 k.p.h. you cannot puzzle out a road sign as you work out Chaucer. Any new spelling must be standardized spelling and it must be taught. The educational argument would, of course, be that a reformed spelling could be taught more quickly.

### ***Educational Implications***

It is widely thought (but perhaps needs detailed research to confirm it) that German, Spanish or Russian children learn to write their language more quickly than English children. In the case of Russian, this is at the expense of a larger alphabet, and the internationalization of the Russian rather than the Latin alphabet could perhaps be considered by the more ardent and hopeful reformers. Certainly no perfectly phonemic system can be devised for English using our present 26 letters alone.

It would be interesting to know whether there are any compensatory gains in the longer time English children spend in learning to read. Do they get a better understanding of our language from the intricacies of our spelling, some of which reflect deeper patterns in our language? It would be difficult to prove one way or another, but it would be an interesting task for psycholinguistic research to attempt an answer. A step of the magnitude of spelling reform would, after all, justify considerable expense in preliminary research, and, indeed, demands it.

A more purely educational question is, if a year or two were saved by a simpler spelling system, would the saved time be reinvested in language work or would reform lead to a further diminution

of emphasis on language in education? It might be possible to investigate what is done with the time saved in Germany or Russia. Possibly the Germans and Russians more often learn other languages, but this very desirable aim can hardly be urged by spelling reformers, since it is well known that English pronunciation differs very widely from the European pronunciation of shared vocabulary, and a spelling which reflected our deviant pronunciation would isolate us in the written language, as we are already isolated in the spoken, from the European mainstream.

A more fundamental need in educational research is to continue to investigate the role of pronunciation in reading. This is an age-old problem dividing the 'phonic' people from the 'look and say.' It is true that a pure 'look and say' approach with some children has led to an uncertainty in word attack still discernible in advanced university students encountering new names or foreign words. On the other hand it is doubtful whether reading skill is entirely phonic in essence, at least once it is developed, since it seems we read '1975' more easily than 'nineteen seventy-five' though it is undeniably less 'phonetic.' Once we are used to it, we are capable of taking in words, whatever their spelling, as we take in '2cwt' or '\$100', as pictures recognized without the scaffolding of phonic conversion. What persists in rapid reading seems to be a rhythm, rather than a detailed awareness of sounds, so that punctuation is more important than the detail of spelling in guiding the understanding.

If a developed reading ability is, in fact, mainly visual, the chief advantage of spelling reform would be in the early stages of teaching and such a reform would seem to have little advantage over i.t.a. unless the conversion from i.t.a. to normal spelling has proved more difficult than its advocates suggest. Since experiments with i.t.a. are already established, it would be interesting to make a close and detailed study of the change to traditional spelling from the child's point of view. Is there any sense of enlightenment when *said* turns out to be a fairly regular past tense of *say*, or when *critical* and *criticism* prove to have a common element? Such insights could easily be overlooked. The psychologist Bruce Derwing reports that his daughter noticed at the age of four that the terms *orange* and *orange-juice* were connected, and was delighted with the discovery. It is a charming anecdote and the child's delight is the essential point. Who is to measure the value of such sudden insights into the connectedness of language and its role in training a critical intellect?

Language is a most intricate system in which all the details relate to each other in ways we are only beginning to understand. Students of linguistics enter exam rooms expecting to discuss Meillet's statement that language is 'un système où tout se tient' - a system in which everything hangs together. If a detail is altered, the system is altered. If a language loses the dual number, the meaning of plurals is slightly changed. Meillet's insight, or rather his statement of a traditional insight, is relevant not only to the theory but also to the tactics of spelling reform. Should reforms be introduced piecemeal or should a total change be made once, as with decimal currency? The implications of change by stages are difficult to foresee, but it is clear that we would not simplify by adding and subtracting details, but would set up with successive reforms a series of systems of written language, each of which should be studied as a total system in relation to the spoken language, if the magnitude of the task did not preclude such a procedure. In any case, on psychological grounds, it seems that a single change, adequately prepared by research and linguistic education of the public, might generate public enthusiasm where a succession of minor changes would merely engender irritation.

### ***Conclusion***

This study is not a polemic but it will be clear that I am doubtful about the desirability of spelling reform and anxious lest it be approached without reference to current linguistic knowledge and without understanding of the social results, particularly the hardening of a division between an elite of scholars with access to tradition and a rabble who read what scholars transliterate for them. A training in linguistics and the social history of language has made me very aware of these dangers.

It is not that I do not welcome an interest in language from politicians and the public. It is not that I do not sympathize with the amateur who can afford to be daring in another man's subject. I have myself a magnificent plan to solve the energy and fresh water problems of Australia by training a large magnifying glass on part of the sea producing steam to drive electric turbines and condensed water to irrigate farms. I hope physicists and engineers would agree that it is a good idea but fear they would point out technical difficulties, as they have a right to. The technical difficulties I see in spelling reform are so great and the advantages over the existing system so doubtful that I would rather direct a welcome public interest in language towards projects of more undeniable value, such as, to name an obvious one, a full historical dictionary of Australian English.

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[Spelling Reform Anthology §2.13 p39]  
[Spelling Progress Bulletin Summer 1976 p5]

### **Proceedings of the 1975 Conference of the Simplified Spelling Society.**

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[Spelling Reform ed Newell Tune t5.4pp80-83]  
[Spelling Progress Bulletin Summer 1976 pp6-9]

### **The Scholarly Case Against Spelling Reform: Does it Exist?, by Mark O'Connor\* (Some Comments on the views of George Turner.)**

Mark O'Connor is a graduate in English and Classics from Melbourne Univ. and has tutored in English at the Univ. of Western Australia and the A.N.U. He held Literature Board Fellowships in 1973-74, has won a number of awards for plays & verse, and edits *Canberra Poetry*. His first book of verse, *Reef Poems*, has been published, in SR-1, by Queensland Univ. Press (USA- Prentice-Hall). '75.

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\* Canberra, Australia.

*Spelling note:* At the Author's request, SR-1 spellings in this article are printed according to his manuscript. Editor.

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It is generally conceded that the main case for regularization of English spelling is the educational one. This is not to deny that other important arguments exist. For instance, there are theoretical and practical disadvantages in a spelling where the *K*-sound can be represented by K, C, CK, CC, KK, KH, GH, QU, QUE, CQUE, CH, or X, and where 18 vowels and diphthongs are represented in at least 99 different ways. [1] English spelling is certainly a major problem for the forener, who must, for instance, when learning the word-pair *woman/women* remember that none of the three vowel sounds to be pronounced corresponds to any of those written, and that the vowel that does change in the plural is the one that stays unchanged in the spelling. For that matter, spelling is a distinct problem to the native-born, who find that, because neither sound nor analogy with other words is a reliable guide, thousands of spellings must in effect be memorized individually - a difficult, and for

meny, impossible task.

In addition, English's irregular spelling undoubtedly diminishes its usefulness, and hence its prospects, as an international language - a function for which its simplified grammar might otherwise ideally suit it. Finally, there is the issue of cost. A passage in conventional form is some 25% longer than one in a fully-reformed spelling might be; [2] and the possible saving in typing and printing costs, plus time, labor and materials, represents, as any newspaper editor would recognize, a substantial margin. Recently, the step-by-step SR-1 Proposal, put forward by the polyglot British-Australian mathematician Harry Lindgren in 1969, has promised total phonemic reform of English spelling over a couple of generations without major cost or disturbance of reading habits, and made the economic arguments more than ever plausible. [2]

Nevertheless, the main thrust of the reformers' argument is educational. The English-speaking countries today face a literary crisis. For instance, the British Association of Settlements' recent report *A Right to Read* estimates that there are some two million adult illiterates in England and Wales alone, most of them in no sense mentally defective. In Australia, as anyone who reads the press is aware, reports of massive illiteracy in the schools are almost a weekly affair; and it has been claimed that up to 40% of students are leaving our secondary schools virtually illiterate.

The cost of such illiteracy around the world is of course to be measured not only in the personal tragedies of millions of illiterates and tens of millions of imperfectly literate people, but also in such corollaries as delinquency, increasing philistinism, and indifference to public affairs, which indirectly affect the entire community.

There is no serious doubt that the inconsistency of English spelling is a major cause of illiteracy and semi-literacy. Despite the attempts of education-researchers to design alternative teaching techniques like the debatably-successful "look and say" method, word-attack for beginners inevitably involves the sounds of words. Indeed, two of the most widely successful methods involve the complicated double-maneuver of first offering the child a especially designed phonemic system, and later persuading him to transfer to ordinary spelling. [3]

Even so, the difficulties, especially for the child who is in any way slow or non-verbally orientated, are formidable. As Mr. Joe Elliot, a retired Headmaster, recently pointed out to the Parliamentary Committee on Specific Learning Difficulties:

His (the child's) ear tells him that there is a W in *ONE*, but not in *TWO*. His teacher tells him the reverse. He finds that *GAS*, *HAS*, *WAS* are quite disparate words. . . . The sound *E* may be represented in thirteen different ways; the sound *EI* in twenty-three ways. Not one sound or symbol can be relied on to conform to its assigned function. . . *BREAK* rhymes with *BAKE* not with *BEAK*; *CURD* rhymes with *WORD*, *BIRD*, *HEARD*, *PURRED*, *STIRRED*, *ERRED*; *EASE* rhymes with thirty different spellings of that syllable; *ROW*, *WIND*, *LEAD* each spell two different words; some spellings are governed by meaning, others by grammatical function.

Apart from the destruction of his basis of understanding, the assault on his reasoning faculty and offence to logic, the new task is too enormous for the child with specific learning difficulty. . . Yet the phonemic principle is a splendidly simple one and, if observed, would ensure literacy, without further teaching, merely by practice, confidence, and success.

Especially when it is added that much of what passes for "specific learning difficulty" may be simply the dawning voice of reason prompting the child to resist such a "dumb, stupid" system, it is

clear that the educational case for reform is very strong; and indeed educationalists opposed to spelling-change sometimes seem to have their backs (and perhaps their consciences) to the wall.

However, a new and interesting case has recently been appearing on their side. This is that modern theories of linguistics, especially those connected with the name of Chomsky, have demonstrated an essential fallacy in the spelling-reformer's position. (At least in English, one presumes - since most other European languages, even the conservative French, have long since accepted some scheme of reform). Sometimes it is even asserted that spelling-reformers are relics of an earlier age, when the nature of language and the process of learning to read were generally misunderstood.

That I am not exaggerating this trend would be clear from a quick glance at the collection of scholarly opinions which were assembled by Des Ryan and Jill Scott for their anti-SR-1 case before the Victorian Teachers Union State Council, and subsequently printed in the *Teachers Journal* of March 25th, 1975.

For instance:

Spelling reform might make words a little easier to pronounce (sic), but only at the cost of other information about the way words are related to each other, so that rationalizing words at the phonological level might make reading more difficult at the syntactic and semantic levels. (Frank Smith, *Understanding Reading*, 1971).

Our traditional English writing system seems to be a near optimal one for learning to read. . . (W. B. Gillooly, *Reading Research Quarterly*, 1973).

. . . orthography is optimal for its purpose (R. E. Hodges, in *Elementary English*, vol. 49, no. 7).

It will be obvious to anyone who peruses the Scott-Ryan anthology that the basic position advanced is remarkably similar to the familiar "etymological argument" against spelling reform, which is, in essence, that it is more important to express a word's ancestry and kinships with other words than its precise pronunciation.

However, the etymological argument in its conventional form has proved of limited service because it is itself open to numerous objections. For instance, if you have the possibility of a straightforward spelling based on sound, reformers ask, why confuse it with an alternative and conflicting principle? Secondly, what percentage of unphonemic English spellings really contain important etymological facts? Would not the remainder offer huge scope for reform? Thirdly, in any case, so long as a word resembles its ancestors or kin, the facts will show even in a phonemic spelling - one need only to think of Italian *filosofia* or *fonografo*, Russian *futbol*, Spanish *sicología*, or, for that matter, English *hound* and *sister* as against German *hund* and *schwester*. Fourthly, the argument embarrasses the dedicated conservative by "proving" that spellings based on faulty etymology like *scent*, *rhyme*, and *island* should be reformed, and perhaps that such unetymological phonemic forms as *beef* and *boss* should be changed to *boef* and *baass*. Finally, of course, it is fouled at its source, because conventional spelling probably conceals linguistic relationships as often as it reveals them. For instance, the spellings *said* and *read* for the past tense of *say* and *read* are not merely unphonetic; - they also conceal an important point of English grammar.

Nevertheless, variants of the etymological argument are still on occasions confidently advanced. One reason for their popularity is clear: the many years of discipline and self-discipline required to gain and retain mastery of conventional English spelling beget in most people a strong will to believe that "correct" English spelling is entirely right and natural, and worth whatever trouble it costs. Such a proof the etymological argument, with its suggestion of a mysterious traditional

wisdom buried in the structure of English spelling, superficially seems to offer.

The question therefore to be asked about scholarly claims such as Ryan and Scott have assembled is: are they merely a recrudescence of the etymological argument, perhaps in a more safely recondite form, or do they indeed constitute a new and compelling case against reform? Does spelling preserve a core of semantic richness that is absent in the spoken language? Is English unique, or have languages like Dutch, Portuguese and Spanish that updated their spelling suffered irreparable loss? Finally, and above all, is there any theoretical justification for the suggestion that conventional spelling may actually be easier to learn and teach than a phonemically reformed one?

Answering these questions is harder than one might think. The scholars in question conceal their "working" in airy jargon, and constantly refer one to Chomsky for fuller details. Chomsky himself is little better. Even the famous statement (echoed by two of those cited above) in his and Halle's *Sound Pattern of English* that "English orthography, despite its often-cited inconsistencies, comes remarkably close to being an optimal orthographic system for English" occurs in a poorly-substantiated passage heavily marred by obscuring jargon. [4] Indeed, Harry Lindgren has brusquely remarked that this claim boils down in plain English to nothing more than "English could hardly be better," when in fact "it could hardly be worse." [5]

This is an oversimplification of course. Nevertheless Lindgren, who writes in a lucid elegant style that leaves all his arguments open to scrutiny, has every right to object to scholars who make pretentious pronouncements in passing; and there is much to be said for his refusal to treat the conservative scholars seriously until they manage to put their case concretely.

However, an article has recently appeared, in the May issue of *English in Australia*, which does attempt to explain in direct concrete terms just how the Chomskian theories show spelling-reformers to be in error and prove the present system to be nearly ideal. The author, George W. Turner, Reader in English at the Univ. of Adelaide, is a distinguished linguistic scholar who has published three well-known books. He is eminently qualified to offer such an explanation; and I welcome the opportunity to examine his arguments and conclusions.

It is worth considering, first of all, the attitudes Turner professes. Unlike some more wishful opponents of spelling change, he is prepared to concede, though with some reservations, that most practical problems (including agreement on a standardized phonemic spelling) could at need be solved. Indeed, notionally his stance is quite impartial and academic. "This study," he insists, "is not a polemic." Turner's air is that of a man honestly, reluctantly, even sorrowfully, recording the negative verdict of modern scholarship upon the worthy but amateurish schemes of spelling-reformers. He is concerned only lest reform "be approached without reference to current linguistic knowledge and without understanding of the social results."

However, a critical reading of the article reveals much that is peculiar in tone. Turner is at his most characteristic perhaps in a passage where he concedes the possibility that a more regular spelling, similar to that of German or Russian, might save "a year or two" (reformers claim somewhat higher figures, up to two years overall educational advancement), but finds the idea unappealing. ". . . would the saved time be reinvested in language work?", he asks!; but adds, like a good academic, "it might be possible to investigate what is done with the time saved in Germany or Russia." He does not pursue the possibility that time saved in learning to read might lead in turn to savings in other subjects, and thus to more time for all; nor does he mention the fate of the slower child who never does become fully literate. Rather he prefers to speculate on "whether there are any compensatory gains in the longer time English children spend in learning to read."

He is a master, too, of the technique of differential standards of proof, whereby awkward facts are

admitted with the reluctant air of a sceptical philosopher courteously conceding the possibility that other entities may exist. For instance:

It is true that a pure 'look and say' approach with some children has led to an uncertainty in word attack still discernible in advanced university students. . .

It is widely thought (but perhaps needs detailed research to confirm it) that German, Spanish or Russian children learn to write their language more quickly than English children. . . .

Perhaps not all English spelling practice can be justified in this way. Reforms would still be possible. . . .

But his last paragraph is the most revealing:

It is not that I do not welcome an interest in language from politicians and the public. It is not that I do not sympathize with the amateur who can afford to be daring in another man's subject. . . (However he would) rather direct a welcome public interest in language towards projects of more undeniable value, such as, to name an obvious one, a full historical dictionary of Australian English. [\*\*]

It is a little difficult to know what to make of this rich conclusion. However, as the final sentence follows a couple of lines of mildly self-deprecating humor it may be fairest to read it as a piece of light-hearted self-satire - perhaps a parody of the academic scheme of values at its most disinterested.

Mr. Turner's prejudices, therefore, are conspicuous, and can be allowed for. What is the substance of his case that modern linguistics shows spelling reform to be a mistake? The initial connection between the two issues might require some caution, since the reformers' case that phonemic spelling facilitates learning to read has never rested on the intricacies of linguistic theory but on supposed "common sense" supported by practical experience, including of course the successes of systems like I.T.A. and Words In Colour.

Here the problem is solved through a brief history of spelling reform down the centuries, which ends bluntly and somewhat after the manner of a non-sequitur: "The success of metrication . . . has revived the hopes of reformers, though it is doubtful whether any serious linguists now lend them support."

This leads to a schematic account of alternative linguistic theories. Broadly, Mr. Turner distinguishes three options. Firstly, the view of Swift and others that written words are the "real" language, and the spoken a mere shadow. Secondly, the "Bloomfieldian" view, fashionable in the 1940's and '50's, which swings to the other extreme and makes the written language a mere description of the spoken; and thirdly, an essentially intermediate view. The second is stated to be the "most helpful in providing a (somewhat dated) linguistic theory for reform."

Unfortunately, on Mr. Turner's own admission, there is no evidence that reformers (those unscholarly cads) took any note of this school - indeed they inconveniently reduced their activity during its *floreat*. Hence we have to be content with the somewhat artificial continuation:

But before spelling reformers caught up with this theoretical justification and learned to change their complaint that English spelling is "irrational" to one that rational (sic) processes . . . interfere with phonetic truth, a new wave of linguistic theory subverted the Bloomfieldian linguists and promoted a view resembling our third theoretical possibility.

The third wave is of course the view of Chomsky and others that neither speech nor writing are primary systems - both may be in a sense "realizations" of a third and more abstract system of language.

It is difficult, however, to see what a spelling-reformer could find to object to in such a position, since so long as the writing system is learned after the speech one, the practical advantages of close correspondence between them will remain. No doubt, of course, Chomskian theories offer a professional linguist who is opposed to spelling reform greater rhetorical space in which to maneuver: Mr. Turner shows the possibilities in his contemptuous reference to the notion (of spelling reformers) that writing "should reflect surface phonetic phenomena mechanically, without intrusion of etymology, deeper knowledge of the connections of words and other interference by the reasoning mind with the raw phonetic facts." But supporters of conventional spelling (as mentioned earlier) have always been prone to use such terms and arguments; and it is doubtful if they were much inhibited during the brief "Bloomfieldian" era.

The real core of Mr. Turner's argument consists not in such generalities but in three examples which he offers as typical of the way English spelling works. For instance, he concedes that the spelling *said* (rather than *sed*) is phonemically inaccurate. But, he asks, even for the sake of ease of learning, should we deny the child that possible "sense of enlightenment when *said* turns out to be a fairly regular past tense of *say*? . . . 'Who is to measure the value of such sudden insights into the connectedness of language and its role in training a critical intellect?'" (A similar argument was used earlier this year by the writer of a letter to the *Melbourne Age* who maintained that the SR-1 spelling *sed* would obscure the word's relationship with *say*).

But in fact the spelling *said* only clarifies what was quite clear enough already. Far more important, what it obscures is the fact that the past tense of *say* is irregular (!) and involves an internal vowel-change. Clearly any "enlightenment" the form *said* offers a child would be bogus indeed. The only fact it reveals is that an alternative and regular past tense of *say* did once exist, at least in some areas of England. However, even Mr. Turner, one imagines, can hardly deny that it is more useful for words to be spelled the way they are pronounced now, rather than the way they were once.

As usual in such cases, the plain sense of the matter is best disentangled from the inevitable prejudice in favor of an accepted spelling by citing a case where we do the reverse. The verb *tell*, like *say*, has an irregular past tense, which, however, is accurately spelled: *-told*. Would Mr. Turner suggest that it might be as well spelled *telled* (or for that matter that *meant* and *felt* should become *meaned* and *feeled* in order to offer children the spurious enlightenment of recognizing "a fairly regular past tense"?)

Another example, offered specifically as illustration of the Chomskian claim that conventional spelling preserves deep relationships which would be lost in phonemic spelling, is the following:

Consider the words *critical* and *criticism*. It is clear that suffixes *-al* and *-ism* have been added to a stem *critic-*, or, more generally, to another suffix *-ic*. How should we represent this suffix in writing? Phonemically it varies between /ik/ and /is/, but we feel that these forms are variants of a single linguistic element. It would be useful to be able to spell it with an /i/ followed by another symbol representing something which sometimes appears as /k/ and sometimes as /s/. Since this is exactly the function of the English letter 'c', the letter 'c' might well be used for this. And so a traditional butt of spelling reformers, the letter 'c' which 'uselessly' duplicates two more precise symbols 'k' and 's', proves to be justified by our deeper awareness of our language.

Perhaps not all English spelling practice could be justified in this way. Reforms would still be possible. . .

On a quick reading by someone seeking to rationalize a prejudice against change, this argument might just pass muster. On analysis it disintegrates. One need not waste time pointing out that the common element *criti-* would be quite sufficient to identify *critical* and *criticism* as sister words, for Mr. Turner's argument is even more deeply flawed.

It would be marvellous to think that English spelling possessed the almost mystical wisdom with which he credits it, but alas, a much simpler explanation exists. The words *critical* and *criticism* are originally derived from the Greek *kritikós*, which in Latin (where *c* is used invariantly for the hard *k*-sound) became *criticus*. In English they were originally learned coinages, formed, according to the Oxford Dictionary, by adding the English suffixes *al* and *ism* to the Latin stem *critic-*. However, the latter case created a clash between the etymologically correct pronunciation (with a *k*-sound) and the fact that one of the more consistent inconsistencies of English spelling is its adherence to the French rule that *c* before *i* is pronounced *s*. (A good example incidentally of the complications caused by failure to Anglicize words borrowed from languages with incompatible spelling-conventions - the French solved it here by using the *qu* spelling, as in *critiquer*). In other words, so far from English spelling being the harmonious force that reconciles discordant pronunciations, it is in fact in Mr. Turner's example the very cause of their discordance!

The case of the silent *d* in *handkerchief*, which he mentions parenthetically, is nearer to being a valid example. But it still suffers from the fatal objection (even supposing one agreed that the derivation is essential to the modern word), that a phonemically accurate spelling without *d* would not greatly obscure the etymology, whereas the present "etymological" spelling (quite apart from being a problem to beginners) does seriously misrepresent the pronunciation. And while a scholar can doubtless use the derivation to remind himself of the present spelling, one can hardly doubt that the child would find a phonemic one easier, and the derivation of no great value to him.

Certainly, if these are the sorts of conclusive argument modern linguistics and transformational grammar can be expected to offer, W. Turner is simply wasting our time. There is nothing in any of these examples that would be new to someone familiar with the etymological argument.

Finally, his least flawed argument, which he claims that even a "Bloomfieldian" might well support, is that perhaps in any case the best spelling

would be not merely phonemic but morphophonemic. We spell the plurals *ships*, *shoes* and *cabbages* by adding an *-s* in each case, and this seems sensible enough, but phonetically we pronounce 's' in one case, 'z' in another and 'ez' (or, in England 'iz') in the third); and a purely phonemic spelling would have to record these usually unnoticed variants. In technical language, /s/, /z/ and /iz/ are 'allomorphs' of the 'plural morpheme' in English. . . Presumably all pleas for 'phonetic' spelling would, if precisely stated, turn out to be pleas for morphophonemic spelling.

But once again, for all his technical apparatus, Mr. Turner has got his facts wrong. Spelling-reformers do not accept his argument for retaining the invariable *s* in plurals; and even such a conservative reform as the proposed *New Spelling* of the British Simplified Spelling Society includes regularization of *s* and *z*. Moreover Mr. Turner exaggerates the variations involved in a phonemic spelling. It is true that the obscure vowel (ə) occurs after certain consonants (like *j*, *s* and *z*) to which the plural *z* cannot be added directly; but the resultant phonemic spelling is certainly not *ez*, and probably not even in Britain *iz*, but *əz*. Thus *buzzes*, in the revised *New Spelling* which includes 'ə', would be *buzəz* - a perfectly straightforward spelling whose analogies with other plurals

in *s* and *z* are obvious.

All that his argument establishes in fact is that some forms of phonemic inaccuracy are less troublesome than others. The fact that the plural *s* in *dogs*, *shoes*, or *cabbages* is really a *z* hardly ever confuses native English-speakers, because they subconsciously appreciate that *s* becomes *z* after a vowel or voiced consonant. Much the same applies to the *-ed* ending of verbs, which are sometimes not *d* but *t*. But all that can be said for such present spellings is that they are at least fairly consistent in their irregularity, and thus cause less trouble than cases like the *-ough* group or the vowels. It would require all of Mr. Turner's prejudice against reform to make us believe that we positively *benefited* by spelling these *t*'s and *z*'s as *d*'s and *s*'s. (Would even he see advantage in having *meant*, *dwelt*, *felt* and *dealt* 'morphophonemically' respelt - even if no ambiguities resulted - as *meaned*, *dwelled*, *felled*, and *dealed*?)

In any case, these grammatical endings are hardly typical of the problem. One need only cast one's mind back over a school spelling-list to remember that an immense number of spelling-irregularities follow no such reliable rules - for instance: *affable*, *fallible*, *visible*, *culpable*, *piece*, *seize*, *receive*, *concede*, *proceed*, *recede*, *precede*, *succeed*, *convey*, *inveigh*, *deceit*, *receipt*, *fancy*, *phantom*, etc., etc.

It will be clear that I am not much impressed by Mr. Turner's arguments. I do not see how one could be. Some, perhaps, might form talking points for persons determined to oppose reform, but none in their present form is conclusive, and most are nugatory. Overall, one can only conclude that his article shows the worthlessness of the much-vaunted Chomskian arguments against spelling-change.

I should emphasize, however, that this refutation, though blunt, is not to be taken as a general indictment of Mr. Turner's reputation as a linguistic expert. Obviously he has been misled by emotion; and no doubt, like all of us he is the victim of an early indoctrination that sets up powerful prejudices. (It has been remarked that if the subject-matter of a conventional 'spelling drill' class were political instead of linguistic, one could not hesitate to call it brainwashing). And after all, 'experts' have been making fools of themselves since time began on issues where prejudice outran expertise.

Certainly, in other European countries where reform has been introduced, the initial cry of prejudice, including all sorts of dire prophecies, has rapidly diminished as people became used to the new system and came to see the old in its turn as strange and "impossible." In English some day the story may well be similar.

Meanwhile one must concede that eventually some form of spelling-reform is a real possibility, and perhaps a desirable one. In view of the present educational crisis and also the National Teachers Federation's much-publicized decision last January to favor teaching the SR-1 spelling-system (which incidentally, is used throughout this article), the issues involved in reform urgently require intelligent and informed debate in Australia. Such a debate needs to be honest, and it must not be let slip into the hands of those concerned merely with rationalizing childhood prejudices or carving out for themselves a new area of academic expertise. Rather, let us consider the advantages, the drawbacks, and the practicalities.

### Notes

- [1] For tabulation of these 99 variants, see H. R. Thomas' article "The Step by Step Method of the Spelling Action Society" in the *Tasmanian Journal of Education*, Nov.-Dec. 1974, pp. 76ff.
- [2] See Harry Lindgren's discussion of *Phonetic B* in the final chapter in his *Spelling Reform: a New Approach*, Alpha Books, 1969.
- [3] Pitman's i.t.a., and Gattegno's *Words in Colour*.

[4] Chomsky, Noam & Halle, Morris, *Sound Pattern of English*, p. 49.

[5] Letter to the Melbourne Age, Jan. 15, 1975.

[6] On this see especially Robert Mayhew's article, 'The Historic Portuguese Spelling Reform,' reprinted from *Spelling Progress Bulletin*, Spring, 1975, in *Spelling Action journal*, May, 1975, pp. 3-4. These sweeping reforms, which affected some 100 million people, were internationally agreed upon in 1943 after 58 years of debate on their desirability.

[\*\*] One of those on-agen off-agen projects for which many Australian academic linguists are vigorously lobbying funds.

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### **Spelling and Phonics, by Emmett Albert Betts, Ph.D.**

Presented at the 21st Annual Convention, International Reading Association, Anaheim, CA, May 11, 1976. Emmett Albert Betts, Winter Haven, Fla.

#### **Preview**

Everyone knows about phonics. And everyone knows about spelling. This is especially true of journalists and parents -- and some phonic zealots.

Yes, almost everyone knows ABOUT phonics and spelling, but do they *understand* the relationship between spelling and phonics? 'Tis said that a little knowledge is dangerous. Then some wiseacre asked, "Who knows enough NOT to be dangerous?"

Altho linguists have contributed substantially to one basis of reading instruction, they do not know enough about phonology and grammar to settle "easy" queries about a phonological syllable. Nor do they agree on an inventory of vowel phonemes basic to phonograms. Equally important, their attempts to write basic readers have violated their own premises, resulting in highly debatable materials.

Then, too, psychologists have made significant contributions to the semantic and pragmatic bases of reading instruction and to the psychology of learning, especially motivation, perception, and cognition. As a result a new breed of psychologist, called psycholinguist, has appeared on the educational scene to question methodology and to offer new perspectives. Yet, psychologists, like the linguists, are not prepared to offer educational prescriptions.

*Linguistics* became a fad during the 1960's -- a new shibboleth for some publishers and some authors to exploit. The psychology of learning, another basis of reading instruction, was renamed *psycholinguistics* when applied to verbal learning. This, too, became a vogue, seized upon by some publishers and some authors intent upon exploitation of the "reading" market. The sociology of reading, a legitimate concern of serious students of integration, appears to be well on the way to becoming another password in the 1970's. As educationists become increasingly aware of our spelling system and the broad meaning of the alphabetic principle, orthography appears on the horizon as another concept to be exploited -- and discarded when one-facet programs are exposed. But these and other bases of reading instruction require a depth of understanding and an ability to translate them into the total program for which few are willing or able to pay the cost in terms of scholarship.

Americans - including educationists, psychologists, linguists -- love slogans and catch phrases.

They invent them to sell ideas and products; they live by them. Phonics and spelling are no exceptions to sloganeering.

More recently orthography, the study of spelling systems, has been reincarnated. Scholars in this discipline have caused educators to take a second, long hard look at the medium with which all educationists deal: the writing system. They raised two issues:

1. How well do spellings predict (i.e., signal) pronunciation?
2. How well do spellings signal morphology -- the inflection, derivation, and compounding of words?

Orthographers, therefore, are concerned with the phonemic and/or morphophonemic basis of spelling. How close a fit between phonemes and spellings (phonograms) is necessary and can be justified? How close a fit between morphemes and spellings is necessary and can be justified? More recently this question has become increasingly relevant: For beginners, is it necessary for an initial learning medium (i.l.m; e.g., i.t.a. or WES) to signal more than phonemes? That is, is morphology crucial for the beginner?

Recently, orthographers have pinpointed the spelling system as a major roadblock for both beginners in reading and adults learning English as a second language. While it is a truism to declare that there are many causes of reading disabilities, the spelling system merits consideration, deliberation and investigation, via an interdisciplinary approach, and *subsequent* action by educationists.

Articles on facets of orthography have appeared mostly in five educational magazines: *Elementary English*, *Harvard Educational Review*, *Reading Improvement*, *The Reading Teacher*, and *Reading Research Quarterly*. In addition to these educational magazines, other periodicals on language and orthography are available for teachers and researchers concerned with the medium:

*Journal of Verbal Learning and Verbal Behavior*, published by Academic Press, Inc, 111 Fifth Ave, New York, N. Y. 10003.

*Language*, published by the Linguistic Society of America, Waverly Press, Baltimore, Md. 21202.

*Spelling Progress Bulletin* (a periodical on initial teaching alphabets and spelling reform) published by Newell W. Tune, 5848 Alcove Ave, North Hollywood CA, 91607.

*Visible Language*, The Journal for Research on the Visual Media of Language Expansion. (Formerly

*The Journal of Typographic Research*), published by MIT Press, Cambridge, Mass, 02142.

'Tis said that fish will be the last to discover water; that birds will be the last to discover air. Likewise, it can be said that those concerned with reading instruction will be the last to discover the medium, or orthographic code, or writing system, with which they are dealing everyday.

Crucial to note: scholarship in linguistics, psychology (learning, cognition, perception, motivation), sociology, and orthography do not a so-called reading "specialist" make. Likewise, a reading specialist is not made by appointment or by anointment with *lecture* courses on reading instruction; nor is this person to be a specialist in one or all the disciplines contributing to the *bases* of instruction. Instead, the reading "specialist" needs a "working," or pragmatic, indoctrination.

This discussion is organized to spotlight the basic issues in phonics and to direct attention to the many implications of a spelling system that has a loose fit with phonemes and morphemes of language (speech). In brief, these are *some*, not all, of the CRUCIAL questions:

That special word-perception hazards are inherent in the most commonly used words?

How can awareness of the factors in word perception (e.g., grouping of pronounceable units as *bea*, *ea*, *eat* in *beat*; *closure* to insure linguistic or referential meaning, etc.) contribute to an improved methodology?

To what extent is this alphabetic principle applicable to the English spelling system?

Why do phonic rules tend to be self-defeating?

1. What are the application/exception ratios for vowel and consonant rules?
2. Why do function words (e.g., *to*, *too*, *two*, *of* /əv/, *when* /hwɛn, wɛn/) present special word-perception problems?
3. How does stress (accent) complicate vowel rules?

What approaches can be made to legitimate phonics instruction?

What are the implications of the issues regarding phonics versus spelling for the preparation of teachers?

What research is needed to standardize letter shapes?

Is *knowledge* of letter names *one* valid predictor of preparation for beginning reading? If so, does *learning* letter names contribute to word-perception skills for beginners?

Is reading a simple decoding process of relating graphemes to phonemes -- of converting writing into the language (speech) code? Stated another way: is there more to word perception than phonics to "unlock", or identify, unknown words during the on-going reading process?

These questions may be more important:

1. What is the chief purpose of phonics in word identification and recognition?
2. What are the limitations of phonics for developing independence in word identification?
3. What are the dimensions of language (speech) which enter into word perception during an on-going process of reading?
  - a. Is it legitimate to limit word perception, for example, to the relationships between speech sounds and spellings used to represent them?
  - b. What is the role of intonation, especially phrase stress, in word perception?
  - c. What contributions are made to the study of word perception by structural linguists? By transformationalists?
4. What are the dimensions of orthography (spelling system) which enter into word perception during an on-going process of reading?
  - a. Phonemic
  - b. Morphemic
  - c. Morphophonemic
  - d. Semantic
5. Is reading a process of *recoding* via inner speech and of *decoding* the message via grammatical and semantic rules?

- a. Is inner speech (subvocalization) a characteristic of the reading performance of beginners?
  - b. Is orthographic representation of speech bound to phonemics alone?
  - c. Is traditional, or conventional, orthography via lexical words adequate for signalling semantic relationships, as in *n(a)tion-n(a)tional*?
6. Can reading performance of beginners be escalated via a carefully researched writing system, especially a *spelling* system, which achieves a closer fit to phonology?
- a. Is there a significant advantage in one set of letter shapes for both capital (upper case) and small (lower case)? For example, to eliminate the forms *G* and *g*?
  - b. What are the advantages and disadvantages of augmented Roman alphabet, as in *i.t.a.*? What are the advantages of no-new-letter spellings, as in World English Spelling, especially *W.E.S.-i.t.m.*? Or, some other proposal?
  - c. What values accrue for a morphophonemic approach to an initial learning medium (*i.l.m.*)?

Briefly, this presentation deals in some depth with the issues regarding spelling and phonics:  
 Beginning Reading Vocabulary -- phonology and graphemics of high utility words.  
 Factors in word Perception -- their recognition in teaching word-perception skills.  
 Premises and principles of phonics -- their relation to curriculum content and to methods.  
 Phonic rules, or spelling patterns -- their validity and hazards (graphotactics)  
 Letter names -- knowledge of letter names as one predictor of readiness for reading, and fact or myth regarding value of learning letter names for learning to read.

The appended bibliography serves three purposes:

1. A springboard for educators and researchers committed to the serious study of orthography as a roadblock to reading.
2. An index to the diversity of problems to be solved before commitment to an initial learning medium or to spelling reform.
3. A survey of opinions and facts regarding spellings (phonograms) as representations of language (speech).

### **Vocabulary: Phonology and Graphemics**

Highly relevant to discussions of phonics, spelling, spelling reform, readability and differentiated instruction are yields of studies of listening, speaking, reading, and writing vocabularies. A rapid survey of evidence on commonly used words reveals significant implications.

What are the commonest words used in communication?

In summary, here are some facts regarding the number of different words (types) that account for a given percent, in round numbers, of running words (tokens):

<i>Percent</i>	<i>Number of Types</i>
10	3
25	9 or 10
50	50
60	100
80	500
90	1000

### **Ten Percent. Three Little Words**

According to Ernest Horn, *A Basic Writing Vocabulary*, three little words - *a*, *and*, *the* - comprise 10% of the running words (tokens) used in communication; these three little words are function rather than content words; that is, they have linguistic (syntactic) meaning, not referential meaning. They are commonest not only in the speech of infants and in beginning reading materials, but also

in the speech and writing of adults. Furthermore, in propositional speech they usually are unstressed: *a* pronounced /ə/ rather than /'a/, *and* pronounced /ən/, /n/ /nd/ rather than /'and/, *the* pronounced /th/ or /thə/ rather than /'thē/. Their use in speech involves primarily suprasegmental (intonational) rather than segmental phonemes. How can phonic (graphotactic), especially vowel "principles" be applied to these commonest words?

### Ten Words: Twenty-five Percent

In his *Relativ Frequency of English Speech Sounds (1923)*, Godfrey Dewey concurred, in general, that 10 commonest words form over 25% of the total number used. His nine commonest words: *a*, *and*, *the*, *of*, *to*, *in*, *that*, *it*, *is*. His tenth and eleventh words: *I*, *for*.

Much earlier, Leonard P. Ayres in his *Measuring Scale for Ability in Spelling* reported the ten commonest words: *a*, *and*, *the*, *of*, *to*, *in*, *that*, *for*, *you*, *I*.

All of these ten words are classified as function or syntactic, words. Although only 7% of American English lexicon is used to make clear the structure of sentences, lists of commonest words are freighted with function words. Obviously, these words are needed for communication, but they have syntactic meaning (i.e., exist only in language) and are required to signal parts-of-speech, or content words. That is, meaningful communication is not possible when they are used exclusively, but communication depends upon them.

To test this finding, identify *a*, *and*, and *the* in the following quotations,

"The true art of memory is the art of attention." (20%)

"By the time a man can afford to lose a golf ball, he can't hit it that far." (17%)

"An attempt has been made to show how the obtained results might be accommodated within a theoretical framework which is psycholinguistically oriented and which conceptualizes the child as a communication channel of limited capacity." (15%)

"The role of speech recording in reading has been a topic of interest to psychologists for many years. The phenomenon has been known by many names, including silent speech, inner speech, subvocalization, phonemic recoding, and acoustic recoding. 'Speech recoding' is used in this paper as a generic term for the transformation of printed words into any type of speech based code, whether it be articulatory, acoustic, auditory imagery, or a more abstract code." (10%)

Here are some relevant comments regarding the ten commonest words used in communication:

1. The words *a*, *and*, *the* have been commented on above.
2. The word *of* is respelled /(')əv, ə, 'äv) in which the letter *f* represents the sound /v/. Of course, the vowel -- stressed or unstressed -- does not fit the CVC spelling pattern, or short vowel rule.
3. The word *to* is a homonym, also spelled *too* or *two*.
4. The word *in* is a homonym with *inn*.
5. The word *for* is respelled /fər, (')for/ depending on phrase stress.
6. Four words fit the (C)VC spelling pattern, or the short vowel rule. In short, phonic skills may be applied with assurance to 40% of the ten commonest words: *that*, *in*, *it*, *is*, but *s* in *is* is /z/.

Why are the commonest words crucial?

First, they are used necessarily in reading materials for beginners. Therefore, they merit special study in terms of spelling.

Second, a preponderance are function words, tending to be *unstressed* in normal speech. Hence, they create problems in learning word-perception skills because phonic skills usually are developed on isolated word forms which, of course, are stressed.

Third, function words have linguistic rather than referential meaning.

Fourth, the commonest words tend to be irregularly spelled. That is, they are exceptions to phonic,

or spelling patterns, introducing special word-perception problems.

### Fifty Words: Fifty Percent

In his *The Spelling Vocabulary of Personal and Business Letters* (1913), Leonard Ayres reported that 50 words made up nearly 50% of all running words (tokens) including the ten commonest above:

<i>Word</i>	<i>Respelling</i>	<i>Word</i>	<i>Respelling</i>
the	/thə, thē 'thē/	on	/(')on, (')än/
and	/ən(d), (')an(d)/	if	/(')if, əf/
to	/tə, tū, (')tū/	do	/(')dü, də/
of	/(')əv, ə, 'äv/	all	/(')ol/
a	/'ā, ə, (')ā/	so	/(')sō, sə, 'sō/
in	/(')in, ən, n, 'in, /	me	/(')mē/
it	/(')it, ət, 'it/	very	/'ver-ē, 'ver-i/
for	/fər, (')for/	my	/(')mī, mə/
that	/(')that, thət, 'that/	get	/'get/
is	/(')iz, əz, z, s/	from	/(')frəm, (,)främ/
I	/(')ī/	our	/(')ār, (')aur, (')ar/
you	/(')yü, yə, yē/	was	/(')wəz, (')wāz/
be	/(')bē/	time	/'tīm/
we	/(')wē/	put	/'put/
have	/(')hav, (h)əv, v, (')haf/	can	/kən, 'kan/
your	/yər, (')yur, (')yor/	one	/'wən, (,)wən/
will	/wəl, (ə)l, (')wil/	would	/'wəd, (ə)d, (')wud/
are	/ər, (')är/ (')ar/	he	/(')hē, ē/
yours	/'yürz, 'yörz/	had	/(')had, (h)əd d/
not	/(')nät/	go	/'gō/
as	/əz, (')az/	letter	/'let-r/
at	/ət, (,)at	been	/(')bin/
this	/(')this/	when	/(')hwən, wen, (h)wən
with	/(')with, (')with/	she	/(')shē/
but	/(')bät/	good	/'gud/

The (C)VC spelling pattern, or short vowel rule, fits *as, at, can, had, that; get, letter, when; if, is, this, will, with, in, it; not, but*. These 17 words account for 34% of the 50 commonest words. But what can be said for the spellings of the consonant boundaries in *(wh)en, (th)at, (th)is* versus *wi(th), i(s -- a(s), (c)an*?

One word fits the (C)VC plus final e, or split digraph, vowel rule: *time*. But *have*, which is pronounced /(')hav, (h)əv; before *t*, often (')haf/ and, therefore, is a double hazard.

One word, *good*, has the *oo* spelling for /u/, but the *oo* spelling also represents /ü/ in *moon*.

Eighty-eight percent, or 44 words, are function words: noun markers (e.g., *the*), phrase markers (e.g., *in*), clause markers (e.g., *if*), verb markers (e.g., *have*), pronouns (e.g., *you*), conjunctions (e.g., *and*), intensifiers (e.g., *not*).

Twelve percent, or 6 words, are content words: class 1, nouns (e.g., *letter*); class 2, verbs (e.g., *go*); class 3, adjectives (e.g., *good*).

The etymology (derivation) of the Ayres list is primarily Old English. Forty-six percent, or 23

words, were different morphologically from the original forms; e.g., *have* was *hab-ban*. 78% were derived from Old English; the remainder from Middle English, Old Norse, Old French, and Indo-European. These data are being reported in a subsequent publication.

Furthermore, here are some crucial questions:

How can phonic skills be applied to the words *to, I, you, of, have, are, from, for, very, was, put, one, on, would, been, is, as, all, our, your, yours, my*, -- almost half of the 50 commonest?

What phonic rule fits *she, be, he, him*? The words *do, so, go, to*?

Less than a third of the 50 can be said to fit reliably with phonic rules.

If it is assumed that the commonest words have a very high probability of use in beginning reading materials, then it appears that the teacher - and the pupil! - must seek *other* word-perception skills than phonics. What are they? Or, perhaps more important, the teacher needs to give serious consideration to an initial teaching medium which circumvents irregular conventional spellings and makes common words reliable to decode.

### Implications

Here are some relevant statements:

1. A preponderance of commonest words are irregularly spelled, therefore, these words have high frequency use in materials for beginners in reading, presenting word-perception hazards.
2. Significant differences in capital and lower case letters add to the word-perception confusion, especially for beginners. (This situation is easily corrected.)
3. Significant differences between manuscript and cursive writing contribute to the learner's difficulties in word perception.
4. Significant differences between handwriting and printed add to the learner's dilemma.

### Word Perception: Factors

Word perception requires far more than (1) applying so-called phonic rules or spelling pattern sequences and (2) memorizing a list of sight words. In fact, a complex of conditions and factors enter into the process of *automatic* word identification and recognition.

1. Readability of material
  - a. *Independent* reading level for extensive and studytype activities
  - b. *Instructional* reading level for reinforcing motivation, learning new word-perception skills, and developing concepts
2. Awareness of a personal need for identifying an unknown part of a word or a spelling pattern
3. *Attention* directed to a need
4. Learning *set*, as a determiner and organizing factor; e.g., hearing syllables in a spoken word before identifying spellings of the syllables
5. *Grouping* (or chunking) pronounceable parts of a monosyllable or the syllables of a lexical word; e.g., *ca, a, or ap* in *cap*, or *lett* in *letter*
6. *Meaning*, structural (e.g., a function word as *then* or *of*) or referential (e.g., the word *hot*)
7. *Contrast*, e.g., the sound patterns of /'sit/ and /'sat/ or the spelling patterns of *hat-hate*
8. Closure, perceptual and cognitive. For example, identifying the whole word *park* after being told the sound /'är, ar/ (except in N. E. United States!) and consummating with cognitive "meaning"
9. *Feedback* from perception of lexical words to speech and during a directed reading activity, from teachers to learner
10. *Application* to other words with the same spelling pattern, and finally to pseudo words

The above are samples of conditions and factors in word perception. Other factors enter into the complex processing of lexical words (e.g., dictionary entries) in isolation and within the intonation (rhythm) patterns of speech.

### **Phonics: Premises and Principles**

Here are some statements of premises and principles which appear to merit serious consideration in an assessment of "spelling and phonics":

1. To a degree, writing represents speech; therefore, one approach to word perception is the study of the relationships between the two; i.e., phonics.
  - a. Writing (orthography) as a substitute for speech (language) reflects phonemes (via spellings), intonation (via capital letters, italics, and punctuation), and morphology (via roots, affixes, syllabication, etc.) -- *all quite imperfectly*.
  - b. Monosyllabic words pronounced in isolation always have primary, or strong, stress.
  - c. The purpose of phonics is to teach pupils to relate spellings and speech - not to teach them *how* to pronounce words (i.e., not to teach speech production).

Phonics is the study of the relationship between graphics (letters, punctuation, spaces, etc.) and phonemes, and teaching the child the "sounds" is not the purpose of phonics instruction. That is, phonics instruction deals with relating the two systems -- language (speech) and writing.

  - d. Corrective speech is not a significant purpose of phonics instruction.
  - e. There is scientific evidence to demonstrate that the higher the spelling-to-sound correlation, the more nearly accurately the words are reproduced. (See Eleanor Gibson, et al, "The Role of Grapheme-Phoneme Correspondence in the Perception of 'Words.'")
  - f. Graphic signals - e.g., letters, punctuation, etc. - have no meaning *per se*.
  - g. All letters are silent; some letters are superfluous letters, as *n* in *column*, *t* in *often*.
  - h. Letters do not have sounds; writing is **VISIBLE** language.
  - i. Learning to read requires the development of reading processes far more complex than word perception.
  - j. Word-perception skills in the on-going processes of reading function *automatically*, leaving the learner's *one mind* to decode the message.
  - k. Application of word-perception skills to nonsense, or pseudo, words is a valid test of learning; e.g., to *lat* vs *sat*, *doat* vs *coat*.
  - l. To escalate reading instruction, there is an immediate need to study word perception at the phoneme-grapheme and higher linguistic and cognitive levels.
  - m. The concept of "irregular spellings" varies significantly from one researcher to another, ranging from phonemic spellings to morphophonemic spellings.
    - (1) Phonemic spellings appear to merit the emphasis in beginning reading, but orthography does signal morphology to a degree.
    - (2) Some linguists (e.g., Bloomfield, Fries) tend to emphasize "code breaking" at the phonemic level in beginning reading via spelling patterns.
2. Phonics and look-and-say (word or sight)"methods" are two different approaches to two different situations: (a) regularly spelled words (e.g., red) and (b) irregularly spelled words (e.g., *said*, *you*).
  - a. The "visual" method -- also called sight, look-and-say, and whole word -- in beginning reading instruction appears to have some validity when the high percentage of irregular spellings of common words is given necessary consideration.
  - b. The "visual" method is a paired associate learning procedure, but too often it is a tell-the-child-the-word violation of the psychological principles of learning.
  - c. The "visual-auditory" method -- also called phonics -- appears to have validity for regularly spelled words, in the phoneme-grapheme sense rather than the morphophonological sense.

- d. The "visual-auditory-kinaesthetic" method -- often called the kinaesthetic -- is syllable phonics which introduces a motor component to reinforce *attention* (a factor in perception).
- e. The "visual-auditory-kinaesthetic-tactile" method -- sometimes called tracing -- also is syllable phonics which introduces at least one additional modality to reinforce *attention* (a factor in perception).
- f. Phonic methods are plural; so are "sight" methods.
  - (1) Rote memorization; e.g., flash cards
  - (2) Paired associate learning; e.g. word and picture

3. Spellings of words are often misleading signals of pronunciation.

- a. The fact that English dictionaries respell all words is admitted by lexicographers to be an indictment of the English spelling system.
- b. Consider these spelling pronunciations on radio and television news programs:

<i>Word</i>	<i>Respelling</i>	<i>Mispronunciation</i>
epitome	/e-'pit-ə-me/	e p-i-tome
severed	/'sev-rd	see-veered
tournament	/'tur-nə-ment 'tər-/	tour-na-ment
been	/bin/	been
often	/of-en/	off-ten
temperature	/temp-r-chur, 'temp-ə-, 'temp-r(-)ə-, -chər/	-chər or chur as 'tər

c. Both *vowels* and *consonants* are irregularly spelled, but vowel spellings are constrained by a paucity of letters, as in *was*, *again*, *been*.

d. Predicting sound from spelling requires consideration of linguistic-orthographic factors.

- (1) Spelling patterns. (C)VC, (C)VC(e), CVVC -- 35% of "common" words, including function words
- (2) Syllable stress: *surprise*, *servant*, *purpose*, *announced*, *barometer*, *e(x)ist* versus *e(x)ercise*
- (3) Phrase stress: function words; e.g., *and*, *or*, *of*, *a*, *the*, *to*, etc.
- (4) Highly irregular spellings: *of*, *one*, *come-some*, *their-where-were*, *what-want*, *laugh*, *who*, *quick*, etc.
- (5) Phonotactical rules: *(kn)ow*, *(gn)aw*, *(pn)eumonia*, *(gh)ost* versus *lau(gh)*
- (6) Morphemic patterns: e.g., *hat-hats*, *horse-hors(es)*, *mark-marked*, *land-landed*,
- (7) Morphophonemic spellings: e.g., *hymn-hymnal*
- (8) Logograms: +, %, #, \$, &

4. Both phonic and spelling rules for traditional orthography tend to be self-defeating.

- a. Rules in phonics tend to be ineffective because exceptions to rules interfere with rather than facilitate independence.
- b. Phonic zealots tend to ignore the influence of the melody of language, called intonation, on word perception. For example, *and* is usually unstressed /an/ or /ən/, not /'and/ in the stream of speech. Or, consider, *has* as:
  - /has/ in *He has to do it* versus
  - /haz/ in *He has a broken arm*.
- c. Vowel "rules" are high level generalizations. For example, the rule regarding "short" vowels requires a generalization regarding the *different* sounds in *s(a)t*, *s(e)t*, *b(i)t*, *n(o)t*, and *c(u)t*. But what is common to the vowel sounds in these words?
- d. Learning phonic generalizations is a questionable approach to word perception.

- e. Blending in phonics is a misleading and mysterious mixture of orthographics and phonemics.
  - f. Teachers do not know phonic generalizations.
  - g. The attitude of teachers toward language -- with a "monolithic fixation" on correct English -- may cause the child with divergent phonology, grammar and usage to be penalized.
5. *Decoding*, a term introduced by some linguists and psychologists, is a mythnomer because it is a superficial concept of reading -- leading to the same misconceptions entertained by phonic zealots.
- a. Decoding -- an often used and misused term - embraces (a) decoding writing into speech and (b) decoding the message.
  - b. Decoding requires both perceptual and cognitive closure to insure comprehension.
6. There have been few innovations in the teaching of phonics since Valentin Ickelsamer introduced the idea during the 16th century.
- a. Awareness of word (lexeme) structure can be developed on regularly spelled words (e.g., *hat* vs *said*) and syllables (e.g., (*sat*)*isfy*) via a phonics countdown that emphasizes pronounceable units (e.g., *ca*, *a*, or *ap* of *cap*).
  - b. The approach to phonics by Leonard Bloomfield and his disciple, Charles Fries, like the approaches in the Aldine and Beacon systems tends to emphasize consonant boundaries of words and syllables -- an often overlooked concept in discussions of vowel spellings.
  - c. Systematic dialectal variations are accepted because everyone speaks an idiolect; e.g., some speakers tend to diphthongize the vowel, as in *bed*.
  - d. Word-perception skills can be more effectively developed and applied when the readability of the material is at the learner's instructional level.
  - e. On-the-spot help is most effective when the learner identifies the *part* of the word (e.g., *ea* in *each* or *ea* in *neanderthal*) on which help is needed, and receives help on that part followed by the learner's closure. (A corollary: need, awareness of success, and other facets of motivation are central to word-perception learning.)
  - f. The sequence of phonics instruction depends on the vocabulary of the reading material and, equally important, on the specific needs of the learner.
7. Basic readers based on phonics have fallen into disrepute since the last series was published in the late 1920's; e.g., Moore-Wilson Readers.
8. Word perception is terminated with cognitive closure -- arriving at the meaning which includes linguistic and referential.
- a. Content words (e.g., *call*, *duck*) have referential meaning.
  - b. Function words (e.g., *and*, *of*, *when*) have linguistic meaning.
  - c. An overemphasis on phonics tends to reduce semantic and linguistic input, producing word callers and word-by-word reading.
  - d. An underemphasis on phonics contributes to failure in learning the "alphabetic principle."
  - e. The relationship between words and their meanings is precarious; e.g., a word may have different denotations and connotations.
9. The reading establishment has been frustrated by the ineffectiveness of phonics but has failed to consider pre-requisite, relevant concepts in educational psychology and linguistics (phonemics and grammar) for a laboratory-demonstration course on reading instruction.
10. As a corollary to 9, above, the reading establishment has failed to consider the complex and complicated nature of orthography (spellings and irregular spellings) that represent speech --

to take a second look at initial teaching alphabets, not i.t.a. alone, and/or special "self-help" with modified dictionary respellings without diacritical markings.

- a. Use of different capital and "small" (lower case) letters -- e.g., *G-g, H-b, B-b* -- introduces unnecessary confusion for beginners in reading, but has a pragmatic, immediate solution.
  - b. In T.O. (traditional or conventional) letters are represented by more than one basic shape, as capitals and lower case, manuscript and cursive, as bold face and italics, ligatures (e.g., fi, fl, ff).
  - c. For many reasons, basic research is needed to assess the relationships between a controlled (revised to achieve regularity) orthography and word perception in the on-going reading processes.
  - d. An initial teaching alphabet (e.g., i.t.a. or W.E.S.) is a *medium*, not a method, for teaching reading.
  - e. Research on an initial teaching alphabet probably merits priority over genuine spelling reform.
  - f. Systematic spellings for beginners in reading permit:
    - (1) Prediction of pronunciation: e.g., *one vs wun, was vs wuz*.
    - (2) Learning by analogy. e.g., *have vs hav*.
11. Preparation for beginning reading includes visual discrimination of geometric forms called letters, visual-motor skills, auditory discrimination and perception, awareness of speech sounds and spoken words, general alertness to the relationship between speech and writing, etc.
12. Corrective reading and sometimes remedial reading are euphemisms for the failure of first teaching.
  - a. A retarded reader with inadequate word-perception skills is likely to be a "poor" speller.
  - b. A "poor" speller with a "good ear" for speech sounds is likely to spell words the way they sound; e.g., *wuz* for *was*.
13. Many practices in teaching phonics frustrate the learner, especially the beginner, and produce confusion and retardation; e.g., listening for the sound /b/ in *climb*, attempting to say consonant sounds in isolation, and so on.
14. Preparation for the perceptual-cognitive facet of reading (decoding at phonological, grammatical, and semantic levels) requires a mosaic of competencies and performances.
  - a. Competence in producing and understanding sentences, or language facility
  - b. Speech production, e.g., sound /y/ in *yellow*, /sh/ in *shoe*, /v/ in *violet*. (Long ago, Leonard Bloomfield commented: "He can be taught to read only after phonemic habits are thoroughly established!" p.501)
  - c. A lexicon, reflecting a basic stock of concepts from a *background of information* (Concepts yield vocabulary, not *vice versa*.)
  - d. Skill in visual discrimination of letters and word forms
  - e. Ability to name letters of the alphabet, as an awareness of writing
  - f. Visual-motor skills for reproducing geometric forms, including letters (e.g., ability to copy an outline of a square and horizontal diamond and to copy letters A and H)
  - g. Ability to perceive relationships in a block design; e.g., copying the correct colors in an alternating black and white, vertically and horizontally, design
  - h. Awareness of spoken *words* (This is easily taught quickly and effectively in groups via categories; e.g., colors, furniture, names)
  - i. Awareness of speech sounds, especially vowels (This awareness is quickly learned; e.g., hearing /ē/ in *he*, /ō/ in *home*, /ū/ in *zoo*)

- j. Visual skills required for singleness and clearness at both reading and blackboard distances
- k. Skill in color discrimination and knowledge of color names (e.g., red, green, blue, yellow)
- l. Hearing, e.g., repeating whispered numbers.
- m. Ability to do analogical reasoning; e.g., to perceive relationships between pairs of relevant words, as *sky-blue*, *grass-green*
- n. Ability to contrast ideas; e.g., to recall opposites, as *big-little*
- o. Ability to classify (categorize) ideas; i.e., to abstract (e.g., how are a kitten and a puppy alike?)
- p. Interests, measured by "What I do"
- q. Memory span, a test of attention
- r. Motivation, reflected in ability to write own name, requests for listening to *self-selected* articles in an encyclopedia (e.g., facts on tigers), knowledge of children's literature, requests for "What is this word?", browsing in picture and other books, and so on (This self-actuated behavior reveals facets of motivation: knowledge, skills, values, intent, awareness of success, interest, personal needs, aspirations, attitudes, and so on.)

15. Syllable phonics is deceptive - complex and complicated.

- a. The concept of a syllable is somewhat ephemeral, with syllable boundaries in question because there is no exact point of syllable division.
- b. The dictionary *respelling*, not the vocabulary entry, is one basis for determining syllable boundaries; e.g., for using kinaesthetic or tactile techniques and other syllabication activities; e.g.,

<i>Entry</i>	<i>Respelling</i>
an.ger	/'ang-ger
busi.ness	/'biz-nəs/
but.ter	/'bət-ər
fas.ten	/'fas-n/
freez.er	/'frē-zər/
mo.t or	/'mōt-ər/

- (1) Syllable division in vocabulary entry indicates how syllables are divided in writing.
- (2) Syllable division in respelling indicates a phonological "fact" of pronunciation.

(Note. The rationale of syllable division is explained in *Webster's New International Dictionary*.)

- c. Polysyllabic words may be analyzed phonologically, morphologically, typographically, or visually, depending upon the principle used.
- d. Syllabication rules "taught" by educationalists usually are contradictory and confusing - linguistically and orthographically paradoxical.
- c. Syllabication involves special situations
  - (1) Two adjacent vowels; two syllables, e.g., *giant*.
  - (2) Writing vs. speaking; e.g., garden: gar.den vs. /'gard-n/ (See *b* above)
  - (3) Words ending in *ed*, as *needed* vs *asked* (*voiceless* consonant) and *dreamed* (*voiced* consonant).
  - (4) Variable syllabication, as *crooked* /'krūk-əd/ and /'krukt/
  - (5) Vowel sound in final syllable
    - (a) Primary stress, as in *relate*
    - (b) Secondary stress, as in *divide*
    - (c) Weak stress, as in *package*
  - (6) *ng* or *nk*
    - (a) /ng-g/ in *anger*, *longer*
    - (b) /ng/ in *sang*, *strong*

- (c) /ngk/ in *bank, sink*
- (d) /nj/ in *orange, range*(7) *x*
- (a) /ks/ in *box, excuse*
- (b) /k-s/ in *exact, excell*
- (c) /g-z/ in *exact, exam*
- (d) /k-sh/ in *luxury*
- (e) /g-zh/ in *anxious*

(8) Syllabic consonants, as in *cattle* /'kat-l/, *open* /'ō-pən, ōp-n/, *eaten* /'ēt-n/

f. The rule that there are as many syllables in a word as there are vowel "places" has hazards, as in *fate- affectionate, moaned, giant, prison*.

### **Vowel Rules/ Spelling Patterns**

Two classic studies on sound-spelling relationships were reported in 1950 by Ruth Oakes on *Vowel Situations* and by Elsie Black on *Consonant Situations*. These investigations, based on the Betts Basic Vocabulary Studies, reported the application/exception ratios for time-honored vowel and consonant "rules." Unfortunately, some of the rules don't give the beginners in reading a gambler's chance in their application. Yet those mythnomers continue to be quoted in so-called professional literature more than a quarter of a century later.

At this point, findings from the above studies are summarized and reported on selected vowel rules which have been renamed "spelling patterns."

#### **Spelling Pattern I or "Short" Vowel Rule**

(Consonant)-Vowel-Consonant, or (C)VC pattern of monosyllables, as in *at-bad-back, it-big-bill, get-bed-bell, cot-log, but-cup, spin-test-then*.

Exceptions: *was, old, want, find, right, wild, sign, put, star-her-bird-fur, walk, all, saw, haul*. (For each of these exceptions, a rule is available!)

In the Ruth Oaks' classic study, based on the *Betts Reading Vocabulary Studies*, this "short" vowel rule had an application/exception ratio of 71/29 for beginning readers.

Two other application/exception studies were made by the author and presented in "Phonics: Methods and Orthography," *Spelling Progress Bulletin*, part I, Vol. XIV, No. 1, (Spring, 1974), pp. 2-6; Part II, Vol. XIV, No. 2, (Summer, 1974), pp. 7-12. Analyses were made of:

1. Edgar Dale, "A comparison of two word lists"
  2. A series of basic readers, preprimers to first reader, inclusive.
- (These data also apply to the other phonic rules listed below.)

The rule for "short" vowels is stated in various ways, loaded with concepts often technical, sometimes awkward, and frequently hedged by qualifiers, as *usually*:

1. *Vowels* are usually "short" in *closed syllables*, e.g., *cat*.
2. *Vowels* are usually "short" when modified by *position*; e.g., *cap, clap*.
3. If there is only one vowel in a word or syllable and it is followed by a consonant, the vowel is usually "short."
4. One vowel in the middle of a word usually has its short sound.
5. When a syllable ends in a consonant, its vowel is usually "short."
6. "When there is only one vowel in a stressed syllable and that vowel is followed by a consonant, the vowel has its "short" sound.
7. A single vowel in a closed accented syllable has its "short" sound unless it is influenced by some other sound in the syllable. The consonants that most frequently affect the vowel sounds in the syllable are: *r, l, w*.

8. A *stressed* vowel, followed by one or more consonants in the same syllable is usually "short."
9. When there is only one vowel in a one-syllable word and it isn't at the end, it is usually "short."
10. When a vowel is one of two middle letters in a word of four letters, the vowel is "short"; e.g., *buzz*.
11. When a vowel is *within* a word of more than four letters, the vowel is "short"; e.g., *scratch*.
12. An initial or medial vowel in a word or syllable usually has the short sound when it is the only vowel in a word. (exceptions: *bind, find, mind, night*)

Exceptions to the short vowel rule are made into rules:

1. When *a* follows *w* in a word, it usually has the sound of *a* in *was*. (The author gave *watch* as an example of application! The word *watch* is respelled /'wach/ but *was* is respelled /'wəz/. Hence, the author's confusion is showing. To finalize the confusion, the author gave *swam* /swam/ as an exception!)
2. When *e* is followed by *w*, the vowel sound is the same as represented by *oo*. (Which *oo*? The *oo* in *look* or the *oo* in *moon*?)
3. The letter *a* has the same sound when followed by *l*, *w*, and *u*. (We assume *all, saw, caught* are examples of the /o/ sound. but how about *Albert, algebra, alien, aunt, awry, away, award*? So we have exceptions to the exceptions.)

Notes:

1. In G & C Merriam's *Webster's New Elementary Dictionary* plain *a* /a/, *e* /e/, *i* /i/, two dot *a* /ä/, and *schwa* /ə/ have been substituted for the breve markings, as in /kät/, /ënd/, /hīt/, /nöt/, /cüt/.
2. In English, the "short" vowel sounds predominate. See Godfrey Dewey, *Relativ Frequency of English Speech Sounds*.
3. In phonology, the terms *short* and *long* denote duration of a speech sound in its *speech environment*; e.g., the vowel sound in *glad* tends to be longer than the vowel sound in *late* - giving myth to statements of phonic zealots.
4. One author, in fact, stated emphatically that when teaching the short vowel rule for *cat* and *stand*, "Emphasize the sound of a (ah), but not detach the sound." This statement, of course, is a double or maybe a triple whammy.

First, the sound /a / is not respelled *ah*, for the sound /a/ is sometimes called the *ah* sound by phoneticians.

Second, how is the sound /a/ emphasized without distortion?

Third, "do not detach the sound" from what? -- one or both consonant boundaries?

### **Spelling Pattern II, or Final *e* (Split Digraph) Rule**

(Consonant)-Vowel-Consonant plus final *e*, or (C)V*Ce* pattern of monosyllables, as in *make -like - joke -duke*.

Exceptions: *come, some, gone, done, one, have, give, move, are, here, were, use, more, shore, horse, prince*.

In the Oaks study, this final *e* rule had an application/ exception ratio of 53/47 in beginning readers.

The rule for the split digraph -- which the learner has about a 50-50 chance of using effectively -- is stated in these fashions, with varying complexities:

1. In a short word ending with a final *e*, the *e* is usually silent and the "preceding" [sic] vowel is "long" or "says its own name."
2. Final *e* lengthens the "preceding" [sic] vowel.
3. The letter *e* at the end of an *accented syllable* usually shows that the preceding *vowel* has its "long" sound.
4. When there are two vowels [sic] in words of one syllable, usually the first is "long" and the second is silent.

5. A *stressed* vowel, followed by a consonant and silent *e* is usually "long."
6. When a stressed syllable ends in *e*, the first [sic] vowel in a syllable has its own long sound and the final *e* is silent.
7. 'When *e* comes at the end of a word, it doesn't sound (it is silent), and the *a* has the long sound (this sub-rule is restated for *e*, *i*, *o*, *a*.)
8. Final *e* in a word or syllable signals a "long" vowel and the /s/ sound for *c* in *face*, *place*, *piece*, *palace*.
9. Final *e* in a word or syllable signals a "long" vowel and the /j/ sound of *g*, as in *age*, *large*, *hinge*, *orange*.

### **Spelling Pattern III, Vowel Digraph**

(Consonant)-Vowel-Vowel-Consonant as in *beat-feed*, *rain-wait*, *eat-read /rēd/*, *street*. (See below)  
 Exceptions: *field*, *great*, *been*, *friend*, *plaid*, *guest*, *ready was-said*, *build*, *good-moon*, *hair-dear*, *heard*, *sn(ow)*, *read* (past tense /'red/)

In the Oaks study, the vowel digraph "rule" had an application/exception ratio of 50/50 in beginning readers.

The rule for vowel digraphs, often dutifully hedged, also is stated in various ways:

1. 'When two vowels [sic, sounds or letters?] of a word are together, the first "vowel" is *usually* "long" and the second vowel is silent.
2. In vowel digraphs, the first vowel [sic] *usually* has its own "long" sound and the second vowel is silent.
3. In *most* vowel digraphs the first vowel has its own "long" sound and the second is silent.
4. When there are two vowels, one of which is final *e*, the first vowel is long and the *e* is silent.
5. When there are two *adjacent* vowels in a syllable, the first vowel has its own "long" sound and the second is silent.
6. A combination of two vowels [letters or sounds?] in a word is called a vowel digraph. Usually the first vowel is long and the second is silent.

Exceptions to the vowel digraph rule are stated as rules:

1. If two *o*'s appear in a word or syllable, they have the short sound of *oo* as in *book* or the long *oo* as in *moon*.
2. Words having the double *e* usually have the long *e* sound. (e.g., *seem*, exception, *been*).
3. In the phonogram *ie*, the *i* is silent and the *e* has a long sound. (e.g., *believe*; exceptions, *friend*, *sieve*).

### **Other Spelling Patterns: Vowels**

There are more than fifty phonic "rules." Some attempt to justify exceptions to the above three spelling patterns by stating rules for sub-patterns. A few examples follow:

1. Final vowel letters
  - a. A final vowel (*a*, *e*, *i*, *o*, *u*) usually has its long sound when it is the only vowel in a word; e.g., *me*, *go*, or in a syllable (*o*)*pen*, (*ta*)*ken*.
  - b. A final *i* or *y* in a word or syllable may either have the "long" *i* sound; e.g., (*fi*)*nal*, *my* or have the "short" *i* sound; e.g., *division*, *city*, *baby*.
  - c. When a syllable contains only the one vowel *a*, followed by the letters *l* or *w*, the sound for *a* rhymes with the word *saw*, e.g., *ball*, *paw*. (exceptions, *algebra*, *Albert*).
  - d. A single "vowel" [letters?] followed by *r* in a word in a syllable has neither its long nor its short sound, but is modified [sic] and controlled [sic] by the consonant [sic] *r*; e.g., *her*, *bird*, *fur*, *word* (the *er*, *ir*, *ur*, *or* represent one phoneme), *arm*, *farm*, *corn*.
2. Letter *y*

- a. 'When y is the final letter in a word, it usually has a vowel sound; e.g., *why, dry, pretty*.
- b. When y is used within a word, it usually has the long *i* sound; e.g., *scythe, type, dye*.  
(exceptions, *myth, myrtle, symphony*).

### Consonant Rules

Our study of these rules will be presented in a subsequent publication.

### Syllabification Rules

Our study of syllabification rules will be presented in a subsequent publication.

### Rules: in Summary

Vowel rules are not necessarily the answer to a beginner's prayer.

1. Rules tend to bog down the young learner with a spate of concepts; *digraphs, vowels, consonants, long and short vowels, initial vowel, medial vowel, syllables, closed syllable, open syllable, accent* (stress), etc.
2. *Memorizing* vowel rules is probably as ineffective as *memorizing* long lists of sight words.
3. The application-exception ratios for some rules are so low that they become sources of confusion rather than education.
4. Some authors confuse terminology; e.g., mixing *digraphs* (spellings) and *diphthongs* (sounds), using the indefinite term *vowel* for both sounds and spellings.
5. Some authors use ambiguous terminology; e.g., failing to identify the referent as sound or letters (phonogram) in "when there are two *vowels* in words of one syllable, usually the first is 'long' and the second is silent." What is a *silent* vowel? What are the two vowels in the word *made*?
6. To recognize exceptions to the rule, hedges are used: "usually," "most," "unless it is influenced by some other letter or sound in the syllable."

When these precautions are not taken, teachers and pupils are given a sense of *false* security, as in: ". . . the first vowel **has** its own 'long sound' and the second **is** silent." That is, unfavorable application/exception ratios are obscured.

7. The purpose of an i.l.m. (initial learning medium) is to reduce the complexity of phonic rules via a closer fit between phonemes and spellings.

### Learning Letter Names

The following statements appear to be valid:

1. Ability to read letters and numbers appears to be one of the best single *predictors* of achievement in beginning reading, but the causal relationship remains unestablished.
2. To date, there is no real evidence that teaching pupils to read letters and numbers prior to beginning reading facilitates learning to read. In fact, there is evidence to indicate that learning letter names *interferes* with subsequent associative learning of words and pictured objects. Furthermore, there is an increasing fund of evidence that *practice* on letter identification is not significantly related to later achievement in beginning reading.
3. There is evidence that learning the names of geometric forms (e.g., circle, square, triangle) facilitates distinguishing between them. By analogy, it is possible, but not necessarily probable, that learning the names of letter shapes facilitates letter discrimination. (see 4 next)
4. There is no one-to-one correspondence between letter names and the sounds represented by letters; e.g., the letter name *b* /'bē/ and the sound represented by *b* in *by* /'bī/, or the letter name *y* /'wī/ and the sound represented by *y* in *year* /'yir/, or the letter name *u* /'yū/ and the stressed sound represented by *u* in *but* /'bət/ or the unstressed sound represented by *a* in *again* /ə-'gen/. In fact, learning the *names* of letters by whatever means tends to interfere with learning *grapheme-phoneme* relationships.

### **In Conclusion**

This session on phonics and spelling can lead educators to grasp the truth of the REALITY of the situation in word perception. True, English writing is an alphabetic system, but this truth does NOT lead to the conclusion that the fit between speech sounds and spellings is a close fit, or even remotely close, for some phonograms and phonic rules. True, that this need to legitimize phonics instruction via direct attention to the spelling system as well as to the psycholinguistic basis of word perception has long been recognized by the world's best scholars -- that this need persists and will not go away. True, that the recrudescence of diverse phonic methods and the relentless, unfruitful, nugatory pursuit of phonics is diversionary -- away from the central problem, the spelling system.

True, that immediate, common-sense steps can be taken to alleviate the beginning learner's frustration (perceptual conflicts from heterographic spellings) with his attempts to recode writing into speech. But this fact remains: this session will be productive and can have solid, long-lasting impact when everyone here returns to his or her acres of diamonds with the conviction -- the involvement and, more important, the commitment -- to pursue requisite multi-disciplinary scholarship that leads to research on the central problem -- the *medium*, or spelling system.

The comprehensive bibliography of over 500 entries (14 pages) intended to accompany this paper will be available free on request to the author, (to be printed soon).

-o0o-

**N. W. Tune:** Spelling is learning all the inconsistencies English wouldn't have if it were written phonetically.

**Somatha Jitters:** Reading - a guessing game in which the winners stay in school and the losers drop out.

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[Spelling Progress Bulletin Summer 1976 p18]

### **The Case for English Spelling Reform by Gertrude Hildreth, Ph.D. New York**

Proponents of English spelling reform are inclined to mention improvement of beginning reading as the major advantage of a streamlined orthography. Statements such as the following have appeared repeatedly in recent literature on the subject:

Simplified spelling would give school beginners a better start in reading.  
Traditional English orthography handicaps young children in learning to read and spell.  
According to the Bullock Committee Report: English spelling is very complex and this complexity causes serious difficulties for beginning readers.

All quite true. There is ample evidence from a century of experimental work that confirms these statements. The teaching of reading in the early stages is simplified with a consistent letter-sound orthography. School beginners make faster progress and become independent in word recognition more quickly with invariable "built in" phonics. The struggle with uncertain letter-sound relationships is replaced by simple associative learning of a direct sound-symbol system well within the capacity of school beginners.

Learning to spell the English vocabulary in conventional dictionary form is even more of a chore with ambiguous orthography than learning to read because of the heavy memory load when word

spelling is unruly.

But why stop there? Children's struggles with beginning reading and spelling are only one argument for spelling reform. Typical adult literates are also seriously handicapped with inconsistent English spelling throughout an active lifetime of reading and writing. This side of the story receives little attention because it is less obvious to researchers, and problems of school beginners excite one's sympathy more than those of literate adults.

Beyond the primary years, students are confronted with an increasing range of ideas in print expressed with a vast selection of words from the English lexicon. Simultaneously, effective written expression demands a mounting vocabulary of words and terms beyond those used in ordinary conversation.

We read, "she was dissuaded from undertaking the perilous voyage?" We may want to write a technical report about the voyage. In either case, simplified spelling would ease the reading-writing task. No wonder there is a growing trend today toward unconventional spelling in advertising material and a more permissive "spell as you please" approach to "silly" spelling.

Even when reading seems easy and effortless for the middle or upper grader, and the student has memorized the spelling of several thousand common words, troubles with reading and writing are far from over. The crunch comes in the intermediate grades with stepped-up requirements for study-type reading covering many areas of knowledge, requiring an accelerated vocabulary containing unfamiliar words and terms. At this transition stage the children are expected to work their way through the vocabulary maze largely on their own responsibility and to display knowledge of the content. Even after eight years at school, the average literate person cannot easily pronounce new words in the newspaper or a popular magazine and may fail to grasp their meaning as the eyes peruse the lines of print. For example:

moccasin	gimlet
dacron	psychologist
logistic	rheumatism
pneumatic	phlegm
knickers	conscience

Then when the reader turns to the dictionary for word pronunciation and meanings, there may be considerable fumbling before the wanted items are located.

As for word spelling, the deficiencies of students filling out application blanks are all too familiar, and the trained secretary who "can't spell" is proverbial. The rest of us telephone instead of writing a brief note. Try jotting down the grocery list without recourse to a lexicon, writing accurately enough for the grocer or his boy to fill the order.

Here are a few suggestions depending upon the season:

asparagus	cauliflower	cinnamon	cucumbers
chocolate	mackerel	spaghetti	rhubarb
rutabagas	onions	lettuce	salmon
syrup	zucchini	broccoli	oysters

-- to say nothing of all the foreign terms and trade names at the store. Now see how quickly you can find any doubtful word in *Webster's Collegiate Dictionary*. And notice that manufacturers usually spell their product sensibly, such as: Apl-jell, Cocomalt, Kodak, Ketchup, Spam, Rykrisp, Star-Kist,

Vel.

How much more easily we could pronounce new and troublesome words encoded with a set of symbols that serve the true purpose of an alphabet -- to evoke the sounds of spoken words in print uniformly. What an advantage for everyone to be able to attack new words with confidence, and to spell with assurance through the use of a simple letter-sound system for recording written communications. These facts are surely well within the comprehension of teachers and parents who lament "the sixth grade children's poor showing in reading and spelling this term!"

The notion that obstructions to reading and writing due to conventional orthography are surmounted after the early school years could actually be an impediment to permanent spelling reform throughout the entire range of reading and written expression. Nothing could please anti-reformers more than to see the English-speaking world settle for some temporary spelling scheme that it aids the kiddies in learning to read," and is discarded after the third year or so.

It's nonsense to speak of spelling reform on a temporary basis without consideration of the entire scope of literacy for all ages of the population. A temporary reform scheme for school beginners only would leave English-speaking people around the globe quasi-literate, without hope of continued advancement. The case for permanent spelling reform as outlined here needs constant reinforcement; otherwise, total literacy is unattainable.

Another suggestion: All comprehensive English dictionaries publishes today re-spell every main entry with a phonetic pronunciation key of 43-46 items printed in the flyleaf. Why not place the phonetic spelling in bold print in first position for each item, followed by the standard, conventional spelling in second place? Then students and literate adults would soon become accustomed to the idea of a consistent English orthography.

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[Spelling Progress Bulletin Summer 1976 p18]

### **The Hired Man, by Anon Y. Mous**

Our hired man named Job  
Has got a pleasant job,  
The meadow grass to mow  
And stow it in the now.  
At work he takes the lead,  
He does not fear cold lead,

Nor is he moved to tears  
When his clothing tears.  
A book he had read,  
He handed me to read.  
He spends much time in reading  
When not at home in Reading.

The homographs in the above would be eliminated by the adoption of a system of fonetic spelling. Do you know of any other interesting poems?

-o0o-

[Spelling Reform Anthology §5.5 pp84-85]  
[Spelling Progress Bulletin Summer 1976 pp19,20]

## Our Readers Write

### An answer to: The Folly of Spelling Reform

Dear Mr. Tune:

from Arnold Rupert

Here is a belated answer to the 2 page article attributed to Benedictus Arnold 3rd (The Folly of Spelling Reform). If this is a real person, in spite of the unlikely name, he is not an unfriendly critic, for he does not bring up the frivolous objections about the need for homonyms or the loss of meaning alleged to result from less exact retention of root spellings in word families. Instead, he lists the *real* difficulties that will be met in the actual transition to a more phonetic spelling with a full, phonemic alphabet, altho I would hasten to add that reform with the 26 letters we already have & digraphs, would have different, but just as serious, problems.

As I don't think digraph reform to be permanently satisfactory, & only useful, perhaps, in an i.t.m. system, I will not dwell on these other problems of word length & inter-code confusions, but point out how the problems related to new letters (or strokes) may be lessened. Most would only be serious if a new spelling were adopted by all age groups at once as seems to have been the case in Turkey, but which would be unwise in our case, even if possible. Only the teacher adults & textbook writers would need to learn & use the new spelling quickly, so as to bring the reform into practice reasonably soon. Primary grades would start with it next & continue to operate with it as they moved up thru the other grades, but meet with a lot of T.O. in public print & learn to read it but never need to spell it. Dictionaries with words in the new alphabetic order would be needed for these pupils in 4 or 5 years, but the new letters could be added at the end with least disturbance of order (as was done in the Scandinavian countries). Order of filing, directory & other such uses would not be changed for at least 20 years, when a large number of young people would be actively using the new code & only for the libraries & offices operating with the new spelling, books, etc. Telephone & personelle directories would only change as spelling of names was changed & that would be one of the last phases of transition altho the phonetic form might be added after the T.O. name much sooner, like the pronunciation key in dictionaries, useful information in its own right, but becoming familiar thus, until the day that the old pattern was declared obsolete.

There *would* be some added teaching costs, but mostly during the first few years, as the teachers of each grade, at a grade a year rate, would need some retraining to operate as required, & many new texts, as needed, would have to be written & printed, but the number of pupils & classrooms would not increase more than normally. T.O. spelling would be dropped & replaced by study of the nature & indication of diction, which would rule the new spelling moving up thru the grades, while T.O. reading skill would be picked up by incidental contact with the public print & old books that would continue much longer than needed by the reform age students. Unlike i.t.m. programs, there would be no directed shift to T.O. reading, & certainly not to T.O. spelling. Educational costs would rise only a little at first; the noticeable change would be in what the new students gained or lost in literary & other abilities. The changed new program might steal a bit of student time from the 3rd R in primary grades but very little from more advanced math in higher grades. The regularly spelled language would soon prove that it could enable much faster & easier learning in all other studies, & personal, individual instruction by teachers would become far less necessary. This saving of teacher time would materialize in about 5 or 6 years & reduce educational costs rapidly.

I agree that one standard dialect should be chosen as most widely known & used, & most public print be in a spelling as nearly phonemic as practical for this standard, but speakers of all other & minority dialects would be no worse off as regards the words they speak differently (perhaps 10%

in the worst cases) but enjoy a new ease with the great majority of words, as well as having a dependable standard to aim at. In order that the standard could lead them into more uniform diction, it is advisable that their primary teaching material be keyed to their local practice, so that they would attach the right (majority) sound to each symbol & then find, in later grades, that their local speech was not the standard one. This rules out the use of language wide primary reaching aids, which enable subsequent close matching of any code to local dialect, but makes the standard dialect harder to acquire.

An alphabet of 42 symbols plus q & c, or 41 plus q, c & x for T.O. & the new code, all in lower case, would force the numerals & punctuation into upper case position & rule out use of capitals with a transition typewriter, but again, this would only be necessary for the few teachers & set-up people in the textbook trade, for up to 20 or 30 years. That is a long time for people to forget about capitals or for keyboards to grow wider. Upshifting for punctuation would be little more frequent than now for capitals, but learning to type the new spelling would take some effort by those set-up experts. This is not done nearly as rapidly as normal office typing anyway, tho, & the reform age students would learn it as easily as any other, & work into office practice at the same slow rate as demand for reform code business communication & record grows. It will not be necessary to provide duplicate forms or messages in old forms, as the new generations will be able to read the old T.O., & the age groups who narrowly miss reform education will be exposed to much reform literature for 20 or 30 years before the old form is entirely dropped.

Now, the *important* question must be met & decided. Is literature in 42 symbol spelling close enough to the erratic T.O. to enable fast, easy reading after only an acceptable amount of practice, or must we accept an i.l.m. more compatible with T.O.? for bi-codal switching in either direction as with Pitman's i.t.a. or WES i.l.m. Testing to solve this question is the research priority most suitable for the new Phonemic Spelling Council, not the testing & comparison of i.t.a. & WES i.l.m. alone, valuable as that way be. If governments are reluctant to risk all-out primary teaching of a reformed spelling, they might be induced to fund such research & get dependable answers instead of conflicting personal opinions.

The size of the English speaking community is always brought up by critics of reform & it does have a bearing on the issue, but not on one side of the debate only. A satisfactory solution must first be devised; design & tooling is necessary before new typing machines can go into mass production, effective reaching programs must be planned, reform literature must be written, reform publications set up & content compiled, edited & prepared for the printer. All such activities & their costs have a practical minimum size, below which they don't just happen, while the gains possible by reform depend, in gross effect, on the size of the group affected, just as most of the application costs do. It *is* true, that if reform had come sooner, it would have been cheaper, but it would also have had the handicap of less study & less expertise in the process. And it is also true that it will cost less now than a decade in the future.

Have reformers overlooked opposition from vested interests? How can they? All opposition to desirable change is due to fear of real or imagined loss by those comfortably in control & profiting by that happy situation, from the millionaire publisher & college don to the teacher, typist & file clerk. It is the reformer's task & duty to convince these nervous creatures that they have little to fear & far more to gain from the increased activity of a period of growth & reform, & that they will get more satisfaction from joining & helping to guide the course of progress in this most stagnant backwater of civilization.

The reformed spelling should be reasonably compatible with T.O. -- that is, to T.O.'s regular parts. A public test of compatibility should, then, consist of a number of T.O. words in an otherwise suitable reform orthography & exceptions be totally lacking in the first material presented to

beginners, so that they can develop a faith in the logic of the code & a lasting knowledge of symbol-sound relations of a full phonemic code. This would rule out grammatically compatible words, such as homonyms, the plural *s* ending for a *z*-sound, *ed* for *t* where *t* is the sound, etc. Others, such as the *ally* ending where a simple *ly* sound is normal, are too wasteful of space to be of use at any stage. Otherwise, a gradual introduction of T.O. spellings at monthly or weekly intervals, always equated with reform equivalents & accepted in written work, would make the reading of T.O. easier. Use of a digraph code, as such a variable i.t.m., would be impractical, as so many reformed words would have very different meanings in the old code. The new letters of an augmented alphabet would clearly mark the words as new & avoid that confusion. Introduction of the commoner T.O. homonyms such as *read* for the participle of *read*, instead of the phonemic *red* that would have served for both the color & the verb part, up to this stage, would bring a confusion of de-coding, in exchange for an unnoticed confusion of meaning, and be a good introduction to the vagaries of T.O. & a partial justification of why they should be learned (if we are going to keep T.O. for a while).

Educational costs would not be more nor less by any program of i.t.m. or i.t.m.-plus-reform intermixing, because such cost depends upon the number of students, the number of teachers & the size of the classes, & these are likely to remain unchanged by curriculum change. Any increase of cost would depend on teacher re-training cost & the cost of re-writing, but not the printing, of texts. Savings by use of an easier code could only come later if an earlier transfer of students to the workforce is thus possible or acceptable. The expectable advantage is in *quality*, rather than cost of literacy, & the quality, both of literacy & oracy, would improve most rapidly & cheaply as well, by use of a new, *full, phonemic* alphabet to make a discussion & learning of dialectal & standard speech patterns possible, the written language interesting & easy to acquire, instead of boring & difficult, & all a better base for improved education & living.

I.t.m. materials, teaching aids at the primary level, should be prepared locally, so that it can be matched, exactly, to the local dialect. If not, wrong values would be attached to the reform alphabet symbols & this would tend to prevent adoption of a standard English diction as advanced English print was met with later, which must be spelled according to a single standard of pronunciation. This standard should be a widespread dialect that includes *all* of the sounds of English speech & is easily understood by speakers of other dialects. This agreed upon standard is often presented as a desirable way in which it can serve all the various dialects to bring them together. It is not an advantage now, nor will serve in that way with any kind of spelling. But it could be if this standard were a desirable goal to attain. These dialects are just another result of the deplorable confusions of T.O. & would have to be actively prevented from confusing or delaying the application of a reform code. Dialectal variation would gradually disappear, but a record remain for those who value & enjoy a study of quaint disadvantaged areas.

All this discussion concerns a progressive application of an ideal *new letter* alphabet & ignores the keyboard problem that can wait for about 20 years or more for solution, tho that would be some help in education if done sooner. The system must be perfected & accepted as a complete lexicon of reformed spellings, allowed in primary grades &, hopefully, higher grades in order, before it can get a start at all. If a no-new letter alphabet is the best we can hope for, there is another plan of application, SR-1, by which a single vowel, the vowel in *bet*, always gets that same indication, & I have tried to use it thus in this writing. Reform of other sound indicators can be delayed until this one is generally used, after which more agreement & reform can happen at any rate until complete. Progress can be made thus with only partial & slow agreement & application. Why not try it? If consistently used, a reader can't misunderstand or think you made stupid mistakes.

There *is*, however, another viable reform option that does not involve a disruption of T.O. letter spelling & its practice in the adult & business world trained to operate that way, & does not require

full acceptance by the nervous establishment or the apathetic public. This is the *individual* acceptance of a typeable, & so printable, shorthand by a growing number of teenage students, first for steno purposes, but also with displacement of the faulty T.O. letter practices stressed as an added incentive to win acceptance by these young students. Typeability is essential so that practice reading to standardize word pattern can develop instant recognition familiarity with such patterns. This can take a long time; we now need up to 5 or 6 years before T.O. word pattern is familiar enough to make reading informative or plesurable, rather than just a decoding chore. That will not change, tho the decoding will be simpler & less confusing with a consistently applied phonemic code. T.O. luverz in the educational world will have less reason to fear & oppose such a plan & may even learn to like it, if the individual acceptance grows & printed shorthand literature loses its strangeness in time.

I am developing my RIT to prove that such a typeable shorthand *is* possible, but I do not contend that it is the only or best typeable shorthand. In fact, there are so meny ways to explore that deciding on symbol choice & structure of wordform is a slow & confusing process, & I have made meny changes in the system I have been offering under the same name. If you don't like some of the details, help me change it, or offer some competition. I'm always glad to bear from someone in this fascinating field of endeavor.

Arnold Rupert, Lunenburg, Ont. Canada.

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### Research in Reading

Dear Newell

from Harvie Barnard

I had an interesting letr from my eldest daughter yesterday who enclosed two amusing compositions from her 8 year old son - a rather "bright" boy who has had much trouble with reading and writing. She let the teacher read my article on "Research in Reading . . ." and since then the teacher has permitted the lad to express himself fonetically. He has now, since last Sept. lerned to write with much originality and read with a greatly improved understanding. Last year he was a retarded pupil and now he seems to be doing "A" work. But here are some samples of his speling: *milyun*, *laserbeem*, *mony*, *casil* (*castle*), *enuf*, *manshin* (*mansion*), *terky*, *thot*, *weit* (*wait*) - (he mite have been remembering the word "weight"; he confuses *there* with *their*. Other spelings are: *scer* (*scare*), *plase*, and *per* (*purr*). He writes very imaginatively, and I am convinced that if the teacher had insisted that he lern "proper" speling, the lad would have written nothing at all, and sooner or later mite have become totally frustrated, a behavior case, and possibly a non-lerner. So, if no one else reads my article (in the Fall, 1974 issue *S.P.B.*), I still feel I have contributed to at least one pupil's success.

This same situation and results could be multiplied a millyun fold thruout the United States if all teachers were to adopt the same tolerant approach to "proper" speling. Tolerance is the key to unlocking the fetters of restraint caused by confusing spelings. The use of eny i.l.m. that is regularly spelt will duplicate this lad's accomplishments. The Bullock Rept. shows that this has ben accomplisht in England. 'Why not here?'

Harvie Barnard, Tacoma, Wn.