## Journal of the Simplified Spelling Society

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Founded 1908, the SSS works to modernize English spelling for the benefit of learners and users worldwide. It currently has members and associates on four continents, focuses research from many relevant disciplines, and campaigns to educate and influence public and political opinion.

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## The Journal

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[Journal of the Simplified Spelling Society, 22, 1997/2 p2 in the printed version] [Chris Upward: see Journals, Newsletters, Pamflet, Leaflets, Media, Book and Papers.]

## 1. Editorial Chris Upward

## SSS Pamphlet 15

Ever since the present style of journal first appeared in 1996, readers have complained of the minute print used for the spelling catalogue as background on the outside cover. At Valerie Yule's prompting, we now publish the catalogue as a pamphlet, the 15th which the SSS has produced at intervals since before World War I. One member who had a preview of the pamphlet described its contents as an "eye-opener". Perhaps it will help open the public's eyes, and add yet more substance to our argument that the present spelling of English is, to put it mildly, unsatisfactory. Subscribers to JSSS are being sent the pamphlet together with this issue of the journal.

## The Internet takes off

Can it really be only a year or two ago that the SSS flickered into life once every few months when the committee met or publications appeared? These days, members and non-members around the world are continuously interacting, debating new ideas, thrashing out disagreements, refining concepts, exchanging experiences, and generally relating in countless different ways. Individuals contribute as often or as rarely as the spirit takes them. The power of the Internet is seen in the fact that the London-based committee now has in Allan Campbell an active member (and newsletter editor) in New Zealand.

Yet we are still at an early stage of learning how best to exploit this new medium of instant world communication. Just a few months ago members were emailing each other collectively by individual address, but now, thanks to Nick Kerr, we have an automatic list to which we 'subscribe' (gratis), or 'unsubscribe', as we wish, thereby addressing all subscribers everywhere rather than just a few members whose email addresses we happened to know. Yet the traffic can be so heavy that our thoughts are already turning to the possibility of a managed list, a kind of edited email newsletter. Worldwide campaigning co-ordinated via the Internet can surely not be far away.

And that is just email. A further dimension is the WorldWideWeb, with the Society's main site operated at Aston University but with other sites run independently by members elsewhere. Membership Secretary Jean Hutchins reports that nowadays new members mostly discover the SSS from the website, from which they download an application form. But it is not just information about the Society that can be disseminated on the WWW: there we can also post statements of SSS policy and, potentially, campaigning documentation.

The most productive use of the Internet by the SSS so far must be credited to Alan Mole in Boulder, Colorado. He has created the BTRSPL automatic spelling converter, which at lightning speed (eg, a whole novel in three minutes) changes TO into any reformed spelling system that is equipped with a suitably format(t?)ed dictionary. BTRSPL can be copied from his website along with large dictionaries for the American Literacy Council's orthography and for Cut Spelling, and small dictionaries for other schemes. Alan's initiative gives the SSS a major resource, which may open up a new route to spelling reform that was undreamt of before the advent of the Internet.

## Features of this issue

JSSS 22 opens with the second half of Gwen Thorstad's study of children's reactions to different kinds of simplified spelling. Particularly revealing is what we might call children's own critical analysis of TO and how English spelling might be improved. "Out of the mouths of babes and sucklings" come insights to which most adults have long been blind. Gwen's study is nicely complemented by the account by our new Vice-President Edward Rondthaler of the American Literacy Council's program that combines regularized spelling with TO as an aid to literacy acquisition.

Patrick Groff traces the wilful aggravation of the above-mentioned blindness (and accompanying deafness) in recent decades by the 'Whole Language' ideology in America (more familiar in Britain as 'Real Books'). The present decline of that ideology and concomitant return to phonics in both America and Britain must be welcomed not only for its promise of higher literacy standards, but for the increased awareness it brings of the true nature of TO. 'Whole Language' effectively said, "Spelling doesn't matter"; phonics shows how much it does matter.

Our reports on other languages begin with the travails of Irish: the language may be quite unlike English, but some of the constraints on reform are not dissimilar; Irish, however, has made real progress. The German reform is facing protests, but they will probably prove no more than rearguard actions. The case of Hebrew offers some lessons on the drawbacks of vowel-omission, though the often-claimed parallel with syllabic consonants in English is not exact.

Both the UCLES analysis and the correspondence with Michael Barber relate specifically to spelling in England, but the former also makes observations about what constitutes user-friendly spelling generally.

# 2. Children's Responses to Simplified Spelling - Part 2 Gwenllian Thorstad 

We here present Part 2 (reports on Studies 3 \& 4) of a condensed account of research carried out in 1994-95. Part 1, with introduction and reports on Studies $1 \& 2$, appeared in JSSS 21, Item 2.
Dr Thorstad worked as a tutor for educational psychologists at Tavistock Clinic 1964-86.


#### Abstract

The rationale and circumstances of the research project are introduced and four linked studies (1 \& 2 in the previous issue, and $3 \& 4$ here) presented as follows: 1. An investigation into how easily schoolchildren can read simplified spelling. 2. Children's preferences for the different spelling of vowels in the New Spelling, Equal Plus and Dash Plus simplified spelling systems. 3. Advantages and disadvantages of New Spelling, Equal Plus and Dash Plus, as used in a word recognition test. 4. To examine children's awareness of the function of letters in words: their opinions of the appropriateness of the traditional spelling of the 100 most frequently occurring words and their suggestions for improved spellings.


## Study 3

A comparison of New Spelling, Equal Plus and Dash Plus as used in the Graded Word Reading (word recognition) Test

Following Studies $1 \& 2$, a more detailed analysis was made of the children's responses to the Graded Word Reading Test (GWRT) (Schonell \& Schonell, 1950) in traditional orthography (TO) and transcribed into three simplified spelling alternatives, New Spelling (NS), Equal Plus (EP) and Dash Plus (DP). This test was useful because it only assessed word recognition instead of the more complex skill of comprehension involving sentences and meaning. Also, its 100 words provided an extensive scale that gave children's reading ability from 5 to 15 years, so providing scope to measure the ability of good and retarded readers aged from 9 to11years 11 months.

While administering the test, the impression was gained that some good readers could read nearly to the 15 -year-level in simplified spelling (SS), as Downing (1997, p 226) had also found in the Initial Teaching Alphabet (i.t.a.). In order to investigate this further, it was decided to look at the mean scores and distributions of the good readers.

Since it is proposed to use some form of SS in remedial teaching, the means of the reading ability of retarded children on these forms of SS should be found to see if they read better on one or other of them. In addition, as a boy who could read in Spanish read better in SS than TO, results from children with English as a second languages (ESL) should be examined separately.

Lastly, although comparing total scores in reading TO with NS, EP and DP gives a useful, but still holistic, measure of the difficulty of the tasks, more information might be obtained if the success rate on individual words was examined. This technique was used by Thorstad (1991) in comparing the difficulties experienced by 6 -year-old children in reading and spelling words with the same root in English TO, English i.t.a. and Italian, such as cement, sement and cemento.

Therefore the present investigation was undertaken in order to discover the easiest orthography, first by finding the mean word recognition results from all the children in the three orthographies, then from the subgroups of good readers, retarded readers and ESL children, and lastly by finding for each word the orthography in which it was read correctly most frequently.

## Method

## Subjects

The subjects were the same as those in Study 1, plus 14 other children who had taken the GWRT test but were absent for one or more of the comprehension tests, so had not been included in the initial battery of results. The 299 -year-olds had a mean chronological age of 9 years 8 months and a mean TO GWRT age of 10 years 10 months; 3510 -year-olds had a mean chronological age of 10 yrs 5 months and a mean TO GWRT age of 11 years 0 months; and 38 11-year-olds had a mean chronological age of 11 years 4 months and a TO GWRT age of 10 years 2 months. As the 9 -year-olds had a mean reading age well above their chronological age, the 10-year-olds a reading age appropriate to their chronological age and 11-year-olds a mean reading age below their chronological age, it was decided to amalgamate the 10 - and 11 -year-olds. This produced a group of 73 children with a mean chronological age of 11 years 0 months and a mean TO reading age of 10 years 7 months which was statistically no different to the 9 -year-olds.

The 9-year-olds contained many good readers, hence the mean reading age well above their chronological age. By contrast, the 10- and 11-year-olds, while containing some good readers in TO, had $1 / 3$ who were more than 2 years retarded in reading, so lowering the mean score considerably, and about $1 / 6$ of the children were ESL, most of them also retarded in reading.

## Material

The GWRT, used by Downing (1967) to evaluate i.t.a., was chosen because it required the subjects to read aloud, so that only a correctly pronounced word was acceptable. Using Venezky's classification (1970), 8 words, milk, sit, frog, bun, think at the beginning and enigma, oblivion and statistics towards the end, can be described as predictable and invariant, 89 words as predictable and variant, beginning with tree, little and book and ending with bibliography and idiosyncrasy, and 3 words, people, island and colonel, as unpredictable. The same test was used in NS for all age groups, in EP for the 10-and 11-year-olds and DP for the 9 -year-olds. DP differed from EP only by use of a dash (-) instead of an equal sign ( $=$ ) to indicate long vowels (Study 2).

## Procedure

As described in Study 1, the children were heard to read individually after they had already been introduced to the simplified orthographies in the comprehension tests. The same notes and examples that had been used in the first study were used again. Half of them read the TO version first and half either the NS, or the EP or DP version. The order was reversed for the other half with a 20 min interval in between.

## Results

There was no statistical difference between the 9 -year-olds' GWRT TO mean score of 10 years 10 months and their combined NS and DP mean of 10 years 7 months, nor between the 10- to 11-year-olds GWRT TO mean score of 10 years 7 months and combined NS and EP mean of 10 years 8 months. There was also no statistical difference between the 9 -year-olds and 10- to 11-year-olds mean TO reading ages. As usual there was a high correlation between the children's scores in TO and SS in both age groups.

Only the older group was subdivided into good and retarded readers because it had more of both than the younger group. There were 38 good readers, whose TO reading age was above their chronological age. They were divided into two groups, 20 who read the GWRT in TO and NS and

18 who read the GWRT in TO and EP. There was no significant difference between the mean TO reading age of 12 years 0 months and the mean NS reading age of 12 years 2 months in the first group, nor between the mean TO reading age of 12 years 1 months and the mean EP reading age of 11 years 9 months in the second group. Nor was there any significant difference between the mean reading ages of 12 years 2 months in NS or 11 years 9 months in EP. Thus although individual children showed a striking ability to read more difficult words up to the 14 year-old level, they were also failing to read more frequent NS words, so the mean scores were no different to the TO mean.

Again in the older group, the 25 retarded readers had TO reading ages at least 2 years below their chronological age. They were divided into two groups, 12 who had read the GWRT in TO and NS and 13 who had read the GWRT in TO and EP. Both groups had a mean TO reading age of 8 years 8 months, and there was no significant difference between this and the mean NS reading age of 8 years 11 months in the first group nor with the EP mean of 8 years 9 months in the second group. Nor was there a significant difference in the mean scores of the two groups in NS and EP. So the expectation that they would be able to read significantly more words in some form of SS was not supported.

Within the reading retarded group were all the 12 ESL children. Their results showed no clear trend, 4 scored higher in NS or EP than TO, 3 scored higher in TO than in NS or EP, and 5 obtained the same score in NS or EP as in TO. So the expectation that the ESL children would read better in NS or EP was not supported.

Children in both age groups, 9 -year-olds and 10-and 11-year-olds, scored well in TO until about the average TO reading age of $101 / 2 y$ years, when they rapidly started to fail. To pursue this observation further, the orthography obtaining the largest number of correct responses was noted for each word. In both age groups the largest number of correct responses in the first 50 words was in TO, whereas in the last 50 words they were in SS, particularly NS.

In order to look at the success rate of each of the 100 individual words, the number of children getting each word correct was first transformed into a percentage. The TO words were next written in a column beginning with those that all the children could read, so scoring 100 per cent, down to the last three words which nobody read in TO: somnambulist, fictitious, idiosyncrasy. This was approximately the same order as in the test. The results in NS, DP and EP were written beside the appropriate TO word.

The success rate for each individual word in TO, NS, EP and DP was then examined for statistically significant differences using chi square and these confirmed the simple count that they were in the second half of the tests. The 149 -year-olds read 5 words significantly better in NS than in TO: colonel/curn*/ (10\%/64\%), scintillate/sintilaet (17\%/57\%), pneumonia/nuemoenia ( $14 \% / 50 \%$ ), grotesque/groetesk ( $10 \% / 43 \%$ ) and sepulchre/sepulk ${ }^{*} r(3 \% / 57 \%$ ); while one word, colonel/curn + ( $22 \% / 61 \%$ ) was read better in DP. The 36 10- and 11-year-olds read 10 words better in NS than in TO: siege/seej (40\%/61\%), diseased/dizeezd (37\%/67\%), antique/anteek (34\%.64\%), adamant/ad*m*nt (26\%/47\%), colonel/curnel (10\%/64\%), sabre/saeb*r (11\%/44\%), pneumonia/nuemoenia (10\%/64\%), belligerent/belij* ${ }^{*}$ nt (10\%/39\%), grotesque/groetesk (3\%/22\%) and conscience/consh*ns (16\%/42\%). Four words were read more correctly in EP than TO: colonel/curn+l (22\%/46\%), pneumonia/nu=mo=nia (10\%/35\%), beligerent/belij+r+nt (10\%/30\%), grotesque/gro=tesk (3\%/16\%).

Next the success rates in reading NS, DP and EP were compared. Six words were read significantly more frequently in NS than EP or DP, 3 by the 9-year-old children: int*rseed/int+rse-d ( $50 \% / 0 \%$ ), suseptib*//suseptib+/ ( $21 \% / 13 \%$ ), sepulc* ${ }^{*} /$ sepulk+r ( $57 \% / 0 \%$ ); and 3 by the $10-$ and $11-$
year-olds: saeb*r/sa=b*r (44\%/27\%), ad*m*nt/ad+mn+t (47\%/19\%), nuemoenia/nu=mo=nia ( $64 \% / 35 \%$ ). Other results favoured the NS orthography, but were not quite significant.

All these words appear in the second half of the test, read by the good readers. In contrast, the TO words which were read significantly more frequently than any SS version were found in the first half of the test. In the 9 -year-olds 6 words were read significantly more correctly in TO than NS: light/liet (100\%/71\%), beginning/beegining (100\%/78\%), postage/poestij (100\%/64\%), knowledge/nolej (76\%/21\%), physics/fizics (86\%/50\%), choir/cwie*r (89\%/14\%) and 3 in TO rather than DP: light/li-t (100\%/73\%), diseased/dize-zd (72\%/20\%), choir/kwi-+r (89\%/20\%). The 10- to 11-year-olds read 4 words more accurately in TO than NS: playing/plaeing ( $98 \% / 78 \%$ ), light/liet (97\%/69\%), postage/poestij ( $89 \% / 69 \%$ ), choir/cwie*r ( $64 \% / 47 \%$ ) and 2 in TO rather than EP light/li=t (97\%/57\%), choir/kwi=+r (64\%/30\%).

The words which were read better in NS than in TO, EP or DP were then examined in order to identify significant orthographic features.

1 Silent letters were omitted and double consonants simplified: noem 'gnome', aplaud 'applaud', sintilaet 'scintillate', nuemoenia 'pneumonia', belij* ${ }^{*}{ }^{*} n t$ 'belligerent', sepulc*r 'sepulchre'.

2 The simplest, most frequent manner of representing a phoneme was used:
a) A consonant which most frequently represents a particular phoneme was used: dizeezed 'diseased', belij* $r^{*} n t$ 'beligerent', seej ‘siege', anteek 'antique', groetesk 'grotesque', sepulc*r 'sepulchre'.
b) An infrequent digraph was replaced by a frequent digraph: consh*ns 'conscience'.
c) A vowel sounded as schwa was replaced by *: ad*m $n t$ 'adamant', int*rseed 'intercede', susept*b*/ ‘susceptible', curn*/ 'colonel', b*lij*er*nt 'belligerent'.
d) The long vowel marker was placed immediately after the vowel concerned: noem 'gnome', dizeezd 'diseased', nuemoenia 'pneumonia', seej 'siege', anteek 'antique', sintilaet 'scintillate', groetesk 'grotesque', int*rseed 'intercede'.

## Conclusions

Neither the good nor the retarded readers were able to read any better in NS, EP or DP than in TO. Indeed it was remarkable how nearly identical their reading ages were and how significant the correlations. As, apart from having single instead of double consonants, the differences in the orthography were mainly in the vowels, this suggests that the information they were absorbing came mainly from the consonants, which may have formed a framework for word recognition. At least the results showed that more children were able to learn to read the SS orthographies with no teaching and minimal introduction as effectively as TO.

Regarding the supposition that ESL children may find reading in SS easier than TO, it would seem that success depended on their experience in reading their first language and how transparent it was. The Spanish 9 -year-old boy who read EP considerably better than TO, could already read Spanish, which has a predictable orthography. It would be necessary to repeat the test with more children and make a detailed enquiry into the nature of their experience in reading their first language and how predictable and invariant the orthography was.

The better reading in SS than TO was seen in the last 40 words of the test, from a reading age of 11 to 15 years. In the 9 -year-olds five NS words were read significantly more frequently than in TO, and 10 NS words in the 10-to11-year-olds, while 3 NS words were read more frequently than EP and 3 more frequently than in DP. Thus NS was the easiest orthography and enabled children to read infrequent words, even words which they scarcely understood.

Considering the differences between these words in TO and NS, it is seen that they incorporate the changes that the children advocated in the initial discussion: that silent letters should be eliminated, eg, $P$ in pneumonia and one letter of a consonant pair, eg, $L$ in scintillate; that a letter which has a single sound should be preferred to one with two sounds, eg, the J for G in belij $\mathrm{r}^{*} n t$. These changes are also incorporated into EP and DP. The success in NS suggests children prefer Sh, a familiar digraph, in conscience/consh*ns to Si in EP consi+nce. Children also prefer the signal $E$ for a long vowel in NS, rather than ' $=$ ' or ' - ' as in EP and DP.

The results suggest that the good readers understood the TO code system up to the 10-year-old level and read as well in SS. It was noticeable that they could read the familiar spellings of physics and choir with their Greek roots, but not the simpler fizics and unfamiliar cwie*r or kwi=+r. Yet as they continued on to less frequent words at the 14 year level, such as belligerent/belij${ }^{*}$ rent and grotesque/groetesk, they could read them in NS but not in TO.

The fact that the retarded reader can read fasinaet (10-year-old level), but not liet (7-year-old level), and the good reader sintilaet (12-year-old level), but not fizics ( 9 -year-old level), suggests that, in this brief experience with SS, newly learnt TO words with constructions such as ight and ph are learnt as whole words rather than a code to be used instead of Ite and F. One aspect of these SS forms which may present a problem to readers are words which have no consonant to mark the onset of the second syllable. The retarded readers had difficulty in reading plaeing ( 5 -year-old level), and the good readers cwie*r (10-year-old level).

With these children there was no automatic advantage in SS, but if they already had a phonic approach to discovering how words are pronounced, were not afraid of long words, could sound out each syllable systematically and blend them together to make words, then they achieved more successes in SS than in TO. But if they found reading difficult, were now retarded and had been using the technique of sounding out the first one or two letters and then guessing, they had few strategies to use and did no better in SS than with TO. It therefore seems that weak readers need a structured remedial programme if they are to use SS effectively to gain confidence and experience in a systematic approach, and to advance from three letter words to polysyllables. It is these new reading skills which are likely to be valuable in transferring from SS back to TO.

## Study 4

To discover how aware the children were of the function of letters in words by asking their opinion of the appropriateness of the spellings in TO of the 100 most frequent words, and, if they thought the spelling inappropriate, which other spelling they would prefer.

If children are taught to read by the whole-word or still more with the whole-book method, their attention is not drawn to letters (graphemes) and their sounds (phonemes) other than to identify the first phoneme in a word. Even if they are taught by a more structured and analytic method, which includes the phonemes of individual graphemes and clusters of graphemes, their opinion about the suitability of the graphemes is never asked. If they have a specific learning difficulty, they may often protest with anger about the many alternative phonemes that a grapheme may represent, but the veracity of their protests is ignored, owing to lack of time and/or fear of confusing them further.

When considering spelling reform, adopting American practices such as not doubling the last consonant of an unstressed syllable before a suffix, is often suggested, but this is not relevant to beginning readers. For them, the spelling of the most frequent words in children's reading books and in their speech vocabulary is central. The 300 words in the Key Words to literacy and the teaching of reading by McNally \& Murray (1968) represent the necessary core for all beginners' reading practice. It was compiled from words which were common to other well-known word lists,
to children's common vocabulary and to vocabulary in reading primers (ibid. pp44-55). The list was refined by considering the number of times each word had appeared in each of 12 studies. If they appeared frequently they were rated A or B , if rarely they were discarded. The borderline words were then reassessed, which resulted in C and D categories of readability.

This refining process left 12 words in category A (about 25 per cent of all reading), 20 in $B$ ( 10 per cent of all reading), and 68 in C ( 20 per cent of all reading). Together these 100 words made up about 55 per cent of all reading. A further 150 words in D category only added another 10-15 per cent of all reading. These 250 Key Words formed the foundation of a new reading scheme, the Ladybird reading books. In the present study only the first 100 words in categories A, B and C have been used (Table 4a).

Thorstad (1991) showed that children learn to read faster when the orthography is predictable and invariant, as in the Initial Teaching Alphabet (i.t.a.) or in Italian, than in TO. Just how difficult TO is for the beginning reader is revealed in MacNally and Murray's first 100 words. If Venezky's (1970) classification is applied to these words, which are used most frequently both in children's speech and in their readers, only 27 are predictable and invariant (column X), 57 predictable and variant (column Y) and 16 unpredictable (column Z) (Table 4a). Even in the 12 words of category A only five words are predictable and invariant ( $a$, and, in, it, that), while four are predictable and variant (he, is, to, was) and three are unpredictable (I, of, the).

Table 4a. The first 100 Key Words classified according to frequency into groups:
A - the 12 most frequent words ( $25 \%$ of all reading),
B - the 20 next most frequent words ( $10 \%$ of all reading),
C - the 68 next most frequent words ( $15 \%$ of all reading).
The same words cross-classified according to Venezky's main types of orthography:
$X$ - predictable and in-variant,
Y - predictable but variant,
Z - unpredictable.

| Frequency <br> Category | Spelling type X: <br> predictable | Spelling type Y: <br> predictable variant | Spelling <br> type Z: <br> \% of words |
| :--- | :--- | :--- | :--- |
| invariant |  |  |  |$\quad$| unpredictable |
| :--- |

The average child takes 10 years, from ages 5 to 15, before being able to read all the words on the Graded Word Reading Test (GWRT) (Schonell \& Schonell, 1950). Therefore it is not surprising that those with a problem in learning sight vocabulary easily are never able to read to the end of the test while they are in school. Nearly all students are eventually able to read the most frequent predictable invariant words, where there is a transparent relationship between grapheme and phoneme, such as sit, but children with a severe specific learning difficulty find the predictable variant words particularly confusing, where the same groups of vowels have alternative pronunciations. For these words a knowledge of the same-level constraints of phonotaxis, graphotaxis and alternations, as well as of the high-level constraints of morphology and etymology
is necessary (Henderson, 1982). Berdiansky, Cronnell \& Koehler (1969) found that 166 rules were needed to pronounce 6092 one- and two-syllable words in the vocabularies of 9 -year-old children, and still 10 per cent were exceptions. Similarly, Hanna, Hanna, Hodges \& Rudorf (1966) found that 200 'rules' were needed to translate phonemes into graphemes with 50 per cent success.

## It was considered likely that:

1 The more advanced the reading, the more the child would know of the relationship between graphemes (and groups of graphemes) and their phonemes. They would also be more aware of orthographic inconsistencies, and be more ready and able to suggest alternative spellings, while poorer readers, having been defeated by the unpredictability of TO, have not such keen awareness and experience. It was therefore expected that there would be a positive relationship between the ability to read the words of increasing difficlty in the GWRT, criticize the orthography of the Key Words and suggest alternative spellings.
2 All the group would agree more frequently with the orthography of words that are predictable and invariant rather than with those words which are predictable and variant or unpredictable.

3 The alternative spellings suggested would conform to the views expressed in class discussions: that one of a doubled consonant and silent letters should be omitted, and Z should sometimes be written for S, eg, hiz for his.
4 The children would prefer long vowels to be indicated with an extra E (NS) or a dash (DP) following the vowel.

## Method

## Subjects

The 9 -year-old class of 29 children chosen had a mean chronological age of 9 years 8 months with a mean word recognition age of 10 years 10 months on the GWRT with a reading age range from 8 to 13 years. This indicates higher than expected reading ability, which may be due to the systematic phonically based reading tuition at the school.

## Materials and Procedure

There was first a 10 minute class discussion about the irregularity of English spelling and examples the children gave were written on the blackboard. The children were reminded of the two different types of alternative spelling, NS and DP, both verbally and by each being given a typed sheet of the codes. They had seen them in the previous weeks both in a comprehension test and in the word recognition test. Then a list of the first 125 words of the 'Key Words' together with a pencil was given out (Table 4a). Although only the first 100 words from sections A, B and C were going to be scored, the other 25 had been added from section $D$ to provide work for those finishing early, so that they remained in their seats and did not disturb the others after finishing the first 100. The children were asked to tick those words where they agreed with the spelling and to put their preferred spelling by the words they felt needed changing. The orthography of the first 5 words ( $a$, and, he, $I$, in) was discussed one by one together as a class, then each child ticked it, if they thought it need not be changed, and wrote in their preferred orthography if they thought it should be. Then the children were asked to continue at their own pace. Some of them just finished the first 100 words in the 30 minutes allowed, whereas one or two went on to the end.

## Treatment of Results

1 The 100 words were written across the top of a chart. The children's identification numbers were entered in the first column. The squares under each word were marked if a child agreed with the TO spelling, and their recommended spelling if not.
2 The number of words that each child wanted to correct was noted in the last column.
3 The type of spelling change advocated most frequently was noted at the foot of each column.

## Results

1. The relationship between the children's word recognition ability and their perception of inconsistencies between the orthography and the pronunciation of words was assessed by calculating the correlation between the children's scores on the GWRT and the number of Key Words whose orthography they considered needed changing. The correlation was 0.24 ( $\mathrm{P}<.177$ ), which is positive, but not statistically significant. In general, as the reading age increased, so did the child's ability to notice inconsistencies in the orthography, but there was an occasional good reader who seemed to be scarcely aware of the relationships between phonemes and graphemes, and the occasional retarded reader who relied on a phonic approach which often failed because it was too simplistic.
2. The Key Words were then arranged in descending order from words where all the 29 children agreed with the orthography, such as a and and, down to be, with which no child agreed. The numbers agreeing were then converted to percentages (Table 4b). Only 16 words received 100 per cent agreement, 14 of which had a predictable invariant orthography, whereas of the last ten words, where from 69 per cent to 100 per cent of children disagreed with the orthography, 9 were either predictable and variant, or unpredictable.

Out of the 29 children a mean of $25.67(95 \%)$ children agreed with the orthography of the 27 predictable invariant words, a mean of 17.89 ( $62 \%$ ) agreed with the 57 predictable variant words and a mean of 15.50 ( $53 \%$ ) agreed with the 16 unpredictable words. The difference between the means of the predictable invariant and predictable variant words was significant ( $t=5.25$ d.f. 82 p <.001), and between the predictable invariant and unpredictable words ( $t=4.921$ d. f. $41 p<$ .001). There was no significant difference between the means of the predictable invariant and unpredictable words $t=1.22$ d. f. $72 \mathrm{p}<.23$. This revealed that the majority of children did not want to change the orthography of the predictable invariant words, but were dissatisfied with the others. An analysis of variance of 16.31 d. f. 99 p $<.001$ confirmed this result.
3. To see if the children's suggestions followed some systematic rules, the most frequent logical suggestions were recorded in Table 4b. The change had to be recommended by 2 or more children.
a) Predictable invariant words These included all words with one acceptable phoneme per grapheme or digraph. Disagreement with the spelling was not expected, yet only $14(52 \%)$ of the spellings were accepted by all the children. The most frequent change wanted by 24 children was for TH in that to be written D, 4 also wanted D in then 'den', them 'dem' and this 'dis'. Three children wanted to change TH in with to V 'wiv' and 2 to F 'wif'.
b) Predictable variant words Only now was accepted by all the children. The largest number of changes, 48 to 93 per cent, were to the monosyllabic words ending in S (as, is, has, his), for which 21 children would have preferred $Z$ in az, 27 in iz, 14 in haz and 20 in hiz. Other generally agreed changes were omission of one of a doubled consonant: 6 children wanted wel for well, 12 wanted wil for will and 5 wanted litle for little; also favoured was omission of silent letters, such as H in when ( 7 children), where ( 3 children) and which ( 2 children), L in could ( 13 children), U in your ( 12 children) and E in come ( 6 children), some ( 6 children) and
more ( 10 children). Seven children used OO for do and 3 for into. As in the predictable invariant words, D for TH was written in there by three. In total changes were wanted by some children in 56 of the 57 words ( 98 per cent of the words).
c) (follows)

Table 4b. Percentages of children agreeing with the orthography of the first 100 Key Words classified according to frequency into A, B \& C, and predictable invariant, predictable variant and unpredictable groups, and their suggestions for more appropriate orthography.

| Predictable Invariant Words |  |  |  |  |  | Unpredictable Words |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agreement |  |  | Suggestion |  |  | Agreement |  |  | Suggestion |  |  |
|  | N | \% |  | N | \% |  | N | \% |  | N | \% |
| Frequency category A |  |  |  |  |  | Frequency category A |  |  |  |  |  |
| a | 29 | 100 | - | - | - |  | 29 | 100 | - | - | - |
| and | 29 | 100 | - | - | - | of | 2 | 7 | ov | 27 | 93 |
| in | 29 | 100 | - | - | - | the | 22 | 76 | der | 7 | 24 |
| it | 29 | 100 | - | - | - |  |  |  |  |  |  |
| that | 5 | 17 | dat | 23 | 79 |  |  |  |  |  |  |
| Frequency category B |  |  |  |  |  | Frequency category B |  |  |  |  |  |
| at | 29 | 100 | - | - | - | are | 6 | 21 | ar | 15 | 52 |
| but | 25 | 86 | - | - | - | are | 10 | 13 | hav | 13 | 45 |
| had | 29 | 100 | - | - | - | one | 13 | 45 | won | 10 | 34 |
| him | 25 | 86 | - | - | - | said | 13 | 45 | sed | 9 | 31 |
| not | 29 | 100 | - | - | - | you | 14 | 48 | U | 12 | 41 |
| on | 27 | 93 | - | - | - |  |  |  |  |  |  |
| with | 15 | 52 | wiv | 2 | 7 |  |  |  |  |  |  |
| Frequency category C |  |  |  |  |  | Frequency category C |  |  |  |  |  |
| an | 29 | 100 | - | - | - | only | 22 | 76 | onlie | 2 | 7 |
| can | 25 | 86 | - | - | - | their | 16 | 55 | der | 3 | 10 |
| big | 28 | 97 | - | - | - | two | 15 | 52 | too | 12 | 41 |
| did | 29 | 100 | - | - | - | want | 24 | 83 | wont | 3 | 10 |
| from | 27 | 93 | - | - | - | were | 23 | 79 | wer | 2 | 7 |
| get | 29 | 100 | - | - | - | what | 18 | 62 | wot | 5 | 17 |
| if | 21 | 72 | - | - | - | who | 20 | 69 | hoo | 5 | 17 |
| just | 27 | 93 | - | - | - | your | 18 | 62 | yor | 5 | 17 |
| much | 29 | 100 | - | - | - |  |  |  |  |  |  |
| must | 29 | 100 | - | - | - |  |  |  |  |  |  |
| them | 20 | 69 | dem | 4 | 14 |  |  |  |  |  |  |
| then | 20 | 69 | den | 4 | 14 |  |  |  |  |  |  |
| this | 22 | 76 | dis | 5 | 17 |  |  |  |  |  |  |
| up | 29 | 100 | - | - | - |  |  |  |  |  |  |
| went | 29 | 100 | - | - | - |  |  |  |  |  |  |

c) Unpredictable words The children wanted to change the spelling of all the words except $I$. Alternative spellings given were ov (of) by 27 children, woz (was) by 28 , der (the) by 7 , ar (are) by 15 , hav (have) by 13 , won (one) by 10, sed (said) by 9 , dey (they) by 5 , $u$ (you) by 12 , onlie (only) by 2 , der (their) by 3 , too (two) by 12 , wont (want) by 3 , wer (were) by 2 , wot (what) by 5 and hoo (who) by $5 . U$ for you is not acceptable in NS or DP, but was included because so many suggested it, perhaps by analogy with $I$. Thus changes were wanted by some in 16 words out of the 17 ( 94 per cent).

4 Regarding the vowel changes, DP was preferred in the following words: be-n (17\%), ca-m (7\%), he- (60\%), ma-k (71\%), mi- (21\%), se-(14\%), she- (7\%), so- (7\%), and NS in bee (55\%), wee (38\%), and mee (17\%). No alternative was given for O in old and over and there was no Key Word in the first 100 words with a long U.

## Discussion

There was a tendency for better readers to make more spelling changes, suggesting that their literacy skills enabled them to be more aware of the function of the letters in words, and the lack of consistency in English TO. The slow readers were scarcely able to make any relevant suggestions. The one exception was the boy who could read in Spanish, which has a predictable and mainly invariant orthography. He scored a higher reading age on the GWRT in DP (10 years 9 months) than in TO ( 8 years 1 month). One good reader (reading age 13 years 4 months) made 62 suggestions.

There was a strong association between the number of words whose orthography the children wanted to change and the degree of predictability in the spelling. All 29 children agreed with 14 of the 27 predictable invariant words, whereas they only agreed with 1 of the 57 predictable variant words and 1 of the 16 unpredictable words. The less predictable the orthography, the more they wanted to change it. Many of the changes had been suggested in the initial discussion, which indicates that they had already given considerable thought to the inconsistencies of English TO. It also seemed that they do not differentiate greatly between predictable variant words and unpredictable words, probably owing to lack of knowledge about spelling rules. Thus they do not recognise what predictability there is in the predictable variant words.

When adults classify spellings they mainly use the two terms: regular and irregular. This presents a conflict in how to classify common words, such as he and to, which come in McNally and Murray's class A, yet they cannot be pronounced from alphabetic knowledge. Venezky's classification avoids this dilemma and reveals that the only true regular words are those that can be read alphabetically, as in Frith's second stage of the acquisition of reading (1985).
The children's opinions support this classification.
The type of disagreement also differed between the predictable invariant, predictable variant and unpredictable words. The principal disagreement with the predictable invariant words was that some children wanted to substitute the letter D for Th , as in dat for that. The same preference was also seen less frequently in them, then, this and the, they, there, their in the predictable variant and unpredictable words. It is often assumed that such a pronunciations are only associated with a particular culture, but as five of these children wanted to change the Th in with to F or V , there is the possibility that they, at least, had delayed development in auditory discrimination. Alternatively, some children may be trying to discriminate between voiced and voiceless Th which is so essential for foreigners.

The children used the suggestions made in the class discussions for the predictable variant and unpredictable words. More than half the children wanted a Z at the end of the monosyllables ending in $S$, as in az for as. They wanted to eliminate silent letters, the $L$ in will and could and the functionless E at the end of words such as come. It is interesting that when changing the orthography of a word they used the auditory analysis of the alphabetic phase of sound to letter awareness found by Frith (1980) in spelling Reading and spelling then become a reversible process. These suggestions made for the predictable variant words and unpredictable words are the same as those made by adults in New Spelling (Archer \& Ripman, 1948) and Cut Spelling (Upward, 1996).

The children did not show a preference for either indicating a long vowel with an extra E as in NS or a dash as in DP following the vowel. There was a tendency to use an extra E (NS) to denote a long E in a word where it could be used to denote another meaning such as in bee for be, or a dash as in DP to lengthen other vowels, such as ca-m for came

Venezky's categories reveal what a barrier predictable variant and unpredictable words are to some children learning to read. Approximately 18 per cent of children have some degree of difficulty in reading (ALBSU, 1994). One general characteristic is that they have an inadequate sight vocabulary, so need to be taught by a phonic method in which they sound each letter of a word individually before putting them together, yet the letters of TO do not always have the same sounds. Even in the first 12 words found in a quarter of all reading only 5 words are predictable and invariant: $a$, and, in, it, that. The 3 which are predictable and variant would be more easily read if spelt as the children suggest he/hee 'he', iz 'is', too 'to', and 2 of the 4 unpredictable words, of and was as ov and woz. Italian children can learn to read in their first year in school if they have no severe specific difficulty, because the orthography is predictable and invariant (Thorstad, 1991). For the same reason reading and spelling become reversible processes. They can spell long unknown words, such as percettibile at the same age, except that they may omit a T.

English students of 11 years severely retarded in reading can learn to read to their age level in three months in i.t.a. and then transfer to the same level in TO. It seems as though the skills and confidence that they have acquired in the predictable invariant orthography in i.t.a. enable them to confront with success the predictable variant and unpredictable words in TO, which hitherto have prevented progress.

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[Journal of the Simplified Spelling Society, 22, 1997/2 p10 in the printed version]
[Govind Deodhekar: see Journal 1 Item 4, Pamphlet 14]

## 3. GOVIND DEODHEKAR: a tribute.

## Chris Upward

It is with deep sadness that we report the death in Muskat (Oman) on 12 February 1997 of Govind Narayan Deodhekar. Govind (as we knew him, though he was widely known as Dev elsewhere) joined the Simplified Spelling Society in the early 1980s, served on its committee from 1985 and in due course became vice-chairman, an office he held for 5 years. His long experience as treasurer of the National Secular Society gave his financial advice particular authority.

He brought to the SSS and its work a vital perspective which the Society must embrace if it is to pursue a truly worldwide mission: he approached English from a non-English-speaking, and specifically an Indian viewpoint. Born in W. India in 1919 and educated in Bombay (where he took a degree in science and law), he knew the special difficulties that the imperial legacy of English spelling causes Indian learners. He first made an impact on the Society at its 1985 conference in Southampton, when, at minimal notice, he replaced an absent speaker to give an illuminating account of the three-tier, phonographically regular Devanagari writing system which, in its various forms, serves many of the major languages of India. Govind himself was a Marathi speaker, and it was through his contact with the architect-engineer Madhukar Gogate in Bombay that the SSS maintained a longstanding link with Roman Lipi Parishad, the movement to apply the Roman alphabet to Indian languages (see, eg, JSSS 1993/2, Item 7). In his later years Govind used to winter in Bombay, and it was on a family visit from there that he suffered a fatal heart attack earlier this year.

Govind migrated to London in 1951 and, after a time working at the Indian High Commission, taught science and maths in London schools until he retired in 1979. It was here that he discovered that English spelling had not been purposely designed to frustrate learners in India, but was no less a burden to native speakers: it was as much an instrument of class oppression in England as of colonial rule in India. His decision to work for its reform was a logical extension of his lifelong opposition to injustice and ignorance, which led to his political imprisonment in Bombay under the British in the 1930s and, after his move to London, forty years of commitment to the Humanist and Secular movement.

On joining the SSS, he soon began to formulate his ideas for reform, first outlining them in the SSS Newsletter in Autumn 1985 (Item 4). He then left these ideas to mature for nearly a decade, until, spurred on by a presentiment that his time might be short and by the urging of the Society's committee, he finally set them out in full in his pamphlet Lojikon (1995). Its key proposal and purpose are made clear in the subtitle: "System of Simplified English Spelling by the LOJIKal use of KONsonants, simplifying the learning of English for the non-Englishspeaking world." His original orthographical insight was that the varied pronunciation around the world of the vowels of English makes their spelling far harder to regularize than the consonants. His system therefore confined itself to regularizing the consonants, except insofar as some vowels are thereby also affected (eg, the silent GH of sight cannot be cut without indicating the long value of the I). Lojikon was prepared for publication by the Simplified Spelling Society in London, but was printed and published in India, both for the sake of the lower costs and to launch its distribution there. In the following year Govind devoted himself, with financial support from a family trust, to publicizing it in India, with numerous newspaper articles and over 5,000 letters.

Govind will be remembered with affection by the SSS for his wit, intelligence, determination and humanity, but above all for broadening the Society's perspective to consider the needs of the developing non-native-English-speaking world. His proposal for concentrating on the regularization of consonants will remain an important item on the Society's menu of possibilities for simplifying English spelling.

# 4. The Rise and Fall of 'Whole Language' and the Return to Phonics Patrick Groff 

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#### Abstract

'Whole Language' (WL) is an instructional innovation the rudiments of which were created in 1971 by Frank Smith and Kenneth Goodman. Called the 'psycholinguistic method' of teaching reading at that time, the scheme later became known as the WL 'philosophy' of literacy development. Over the progression of time, the idea of WL as a methodology was abandoned, and replaced with a vision of it as an overarching system of instructional principles. Whole Language advocates make extravagant claims as to the success of the application of its philosophy. However, independent examinations of these assertions fail to confirm their contentions in this regard. When the effects of WL teaching are measured by the use of standardized reading tests, WL is consistently proved to be an inferior approach to the development of children's reading abilities.


## Defining Whole Language

The guiding principle of WL is that school children best learn to read in the same way they earlier learned to speak at home, as preschoolers. The validity of all of WL's lesser tenets, and each of its novel practices, are predicated on the assumption that the first principle of WL is without error.

Whole Language correctly observes that learning to speak ordinarily does not require direct and systematic instruction of a predetermined sequence of discrete skills, arranged in the order that children have difficulty in mastering. Therefore, WL goes on, since learning to speak usually is accomplished in an effortless, 'natural' fashion, so also should schoolchildren's learning to read and to spell. As with learning to speak, whatever information a child in school needs to learn to read and spell is best acquired by him or her simultaneously or co-instantaneously, it is held. Hence, the great significance of the word 'Whole' in Whole Language (Goodman, 1986).

Whole Language also accepts the premise that each child inherits at birth a unique 'learning style' and 'set of intelligences'. There supposedly are twenty-three elements of genetic-based learning style, and seven kinds of distinctly dissimilar intelligence. The total number of different combinations of these thirty factors can be calculated to run into the thousands.

To take into account the huge number of potential combinations of learning styles/intelligences that a classroom of pupils would represent, it is found necessary by WL to eschew direct and systematic instruction of a standard body of literacy skills to all children. Instead, an illiterate child in an authentic WL class is 'immersed' in written material, and then is expected to infer what he or she personally needs to know in order to learn to read and spell. As was the case in the child's learning-to-speak environment, no controls are placed upon the variety of vocabulary, sentence types, nor structural organization of written material into which WL beginning readers are immersed. The WL instructor does notice that there are 'teachable moments', those in which he or she reacts to individual pupils' expressed needs for specific assistance.

## Whole Language and Phonics Teaching

The spelling reform movement acknowledges documented evidence that children's acquisition of phonics knowledge is a critical prerequisite to their success in learning to read and spell. The attitude of WL toward phonics instruction thus should be of special interest to advocates of simplified spelling. Most of the leading proponents of WL do allow that phonics information may be of some use to children learning to read and spell. The amount of this information that each child needs to acquire in this regard is left up to him or her to decide, however, as noted above.

It is a popular notion in WL, nonetheless, that most children do not inherit learning styles nor sets of intelligences that are compatible with the assimilation or application of phonics information. The majority of children are presumed to have been born with one of the 'visual' learning styles or sets of intelligences. Therefore children supposedly find the acquisition of 'auditory' phonics information extremely painful, and of little use to them for recognizing written words. It thus is claimed by WL leaders that direct and systematic teaching of phonics information actually will handicap most children's ability to comprehend what they attempt to read.

These exponents of WL also maintain that English spelling is far too unpredictable for the application of phonics information to work satisfactorily, even for children who are able to master it. Instead of urging beginning readers to apply phonics information to read words, WL teachers commend them for using context cues to guess at word identities.

## Distrust of Standardized Testing

As well, almost all proponents of WL strongly distrust standardized reading tests. These tests do not truly measure reading ability, it is averred. Only teacher-devised assessments of reading ability are valid, according to WL. This disfavor with standardized tests also rests on WL's acceptance of the 'deconstructionist' philosophy that proclaims it usually is impossible for readers to ascertain the precise meanings that authors intended to convey. Accordingly, WL students are empowered to add, omit, and substitute words and meanings in written material - as they see fit. Expecting 'right' answers from students about what they read is said to be a pernicious practice (Weaver, 1989).

## The Rise of Whole Language

Whole Language (also called the 'Real Books' approach) obviously is a radically unorthodox approach to literacy development. Nevertheless, it has been approved by many national, regional and local school officials in the major English-speaking nations, ie, the United Kingdom, the United States, Australia, and New Zealand. It also appears that a majority of professors of reading instruction at universities in these countries approve of WL, and thus direct future and inservice teachers to employ it, while counseling school officials to enforce its use. In the UK, the term 'Real Books' has been generally preferred to 'Whole Language'. In the past 2-3 years here, however, more direct and systematic phonics teaching has been insisted on by education authorities.

Generally speaking, however, WL principles and practices have come to dominate educational journal offerings, reading instruction conference agendas, workshop and other inservice training for teachers, the content of reading instruction texts and their teachers' manuals, and the marketing strategies used to promote these books. Some publishing houses now devote almost their entire book list to texts for teachers that explain WL, and reflect on how extraordinarily effective it supposedly is at fostering the development of literacy skills.

## The Special Attractions of WL

The widespread acceptance of WL in the world-wide English language educational community stimulates speculation as to what are the particular attractions of WL that sway teachers, teacher educators, and school officials to such a ready acceptance of it. First, educators historically have been notorious for their inability to resist the lures of educational innovations, regardless of whether
or not they have been empirically validated. If a pedagogical novelty dubs itself 'progressive' in nature, educators tend to adopt it. Second, WL relieves educators of much direct personal accountability for the results of their pedagogical performances. For example, in the ideal WL classroom there are no grade level standards set for student achievement. Independent standardized evaluation from outside of children's progress in learning is rejected. Teachers are empowered to conduct reading and spelling instruction much as they choose - as long as it is not carried out in a direct and systematic way, and what is taught is not fragmented. Third, WL appeals to many educators' romantic and/or humanistic interpretations of what is healthy child development. In WL, honoring children's freedom and dignity is held to be more essential than how literate they become. Whole Language classes thus almost always are esteem-centered, rather than learning-centered. In this regard, a co-founder of WL claims that becoming literate truly is not the highly important agent for success in life that it normally is thought to be (Smith, 1989).

Fourth, in the past, educators have ignored or rejected most of the empirical findings in practically all aspects of their field of endeavor. The fact that none of the original principles nor novel practices of WL is supported consistently by experimental research thus does not discourage numerous educators from holding positive views about it. Fifth, the apparent simplicity of WL is alluring for teachers. In WL they escape having to master much of the extensive technical knowledge about reading and spelling instruction. With WL, teachers do not have to submit to pedagogical discipline that a prescribed course of direct and systematic instruction demands. Sixth, educators who have liberal social, economic, and political views doubtless are charmed by WL's decidedly left-wing agenda in these respects (Goodman, et al., 1991).

In the USA, educators' allegiance to WL also may be sustained by certain concomitants of the kind of monopoly control that its public schools have over educational services. In this regard, critics (e.g. Hirsch, 1996; Lieberman, 1993) point to runaway grade inflation in schools; their neglect of gifted students in favor of those with learning problems; emphasis on problem-solving by students who are culturally illiterate; a lack of high national academic standards; the absence of rigorous knowledge-based state examinations of teachers seeking certification for employment; the fact that about half of the educational workforce is not teachers; and parents' seeming indifference toward the schools, ie, their expressions that they have no vested interests in how effectively the schools function. These conditions create a breeding ground for the emergence of empirically unverified educational innovations, such as WL.

## The Uprising against Whole Language

From the first appearance of WL in the educational literature and in schools, a network of reading instruction experts, altho relatively small in size, vigorously warned their profession that the original or novel aspects of WL had no visible means of empirical support. They protested that despite the growth in size and influence of the WL movement, the pedagogical unorthodoxies that it promoted were disaffirmed repeatedly by experimental research in various fields of scholarly inquiry (see for example: Adams, 1990; Anderson, R. C., et al., 1985; Brady \& Shankweiler, 1991; Carnine, et al., 1990; Chall, 1983 and 1989; Gough, et al., 1992; Groff, 1991 and 1996; Liberman \& Liberman, 1990; Moorman, et al., 1992; Perfetti, 1985; Pressley \& Menke, 1994; Rieben \& Perfetti, 1991; Share \& Stanovich, 1995; Stahl \& Miller, 1989; and Thompson, et al., 1993).

However, in the USA, journals on reading instruction designed for teachers have been noticeably inhospitable to manuscripts that negatively criticize WL. The prominent journals in this regard, for example, Reading Teacher, Language Arts, Learning, and Teaching PreK-8, publish few, if any, articles that point out the shortcomings of WL. These journals only rarely provide teachers with surveys of the negative criticism of WL made by experimental research. They seldom, if ever, publicize the written debates that have taken place over WL (for example, Groff versus Dudley-

Marley, 1996; McKenna, et al. versus Edelsky, 1990; the numerous disputants in Smith, 1994; and Weaver versus Groff, 1989).

On the other hand, the journals in question have published a great number of anecdotal accounts of the effectiveness of WL teaching. Since almost no negative accounts of such nature about WL have been printed in these journals so far, they strongly imply that extremely few such manuscripts ever have been submitted to them for publication. It has been argued, however, that this situation is evidence of editorial bias in favor of WL, rather than of reality.
With the notable exception of the press in the United Kingdom, the mass media has taken little serious interest in the WL issue. Media commentary about it usually either is flattering or noncritical. The USA's influential newspaper, the Wall Street Journal, as an example, treats the dispute over WL as a rather childish spat between "strange alliances" of "zealots" who battle each other from extreme left- and right-wing emplacements on the political spectrum (Duff, 1996). Reporters also readily accept the notion that somewhere in a middle ground between WL and direct and systematic teaching lies the optimum manner in which to conduct reading instruction.

While teachers typically are not completely informed about WL, notice of its empirical unreliability has not escaped the attention of academics outside the field of teacher education. In 1995, forty eminent professors of linguistics, psycholinguistics, cognitive science, psychology, and neurology, from the USA's leading universities and hospitals, petitioned the Massachusetts state commissioner of education to stop promoting WL in that state (Pesetsky, et al., 1995).

These distinguished scholars directed the commissioner's attention to the relationship found between use of WL in schools and decline in students' reading scores. They also protested his approval of the empirically uncorroborated claim by WL that the application of phonics information plays only a relative minor role in beginning readers' acquisition of written word recognition ability, compared to that gained by students from guessing at the identities of words using sentence context cues. These prominent academic authorities advised the commissioner that WL is "an erroneous view of how human language works, a view that runs counter to most of the major scientific results of more than 100 years of research in linguistics and psycholinguistics."

## Legislation against Whole Language

By the end of 1995, legislatures in thirteen of the USA's fifty states had introduced or passed laws aimed at forcing publicly financed schools to divest themselves of antagonism toward direct and systematic teaching of phonics skills (Sweet, 1996). None of these legal attempts at reading instruction reform is more dynamic and straightforward than the one in California.

In 1995, administrators of the National Assessment of Educational Progress (NAEP), a federallyfunded and administered standardized reading test, revealed that California's fourth-grade students were the least capable readers their age in any of the states of the USA. Also, both minority-group students and white students in California were reported by the NAEP to be the least capable readers in their respective racial/ethnic classifications.

At the same time, the NAEP found that WL was more popular in California schools than anywhere else in the USA. In this regard, the California state department of education mandate to teachers as to how to conduct reading instruction that was operative in 1995, urged them to believe the WL dictum that "children learn to read by reading". It was explained here to teachers that "almost all the rules, all the cues, and all the feedback [students need to learn to read] can be obtained only thru the act of reading itself" (Quinby, 1987, p. 9). This official state directive thus required California teachers in 1995 to follow the WL version of how reading ability is best developed. It equally was clear, from the 1995 NAEP report, that educators in California generally had acceded to the department of education's desire to promote WL.

When the 1995 NAEP California reading test scores came to public attention thru exposure by the media, the California School Board Association responded incisively. In a letter to the California superintendent of public education (an elected official nominally in charge of the tenured bureaucrats that make up that state's department of education) the CSBA urged her to "act quickly to resolve" what the CSBA rightly viewed with alarm as a "crisis" in reading achievement in California. As a result, the superintendent appointed a 'Reading Task Force' to investigate the crisis, and to make recommendations as to how to rectify this obvious educational calamity.

On the basis of the Reading Task Force's study and recommendations, and the concurrent passage of state laws (discussion to follow), the superintendent in 1996 issued a document called Teaching Reading. While the publication never challenges WL by name, it is clear that it is designed to repudiate previous state mandates to teachers to base their reading instruction firmly on WL principles. Teaching Reading announced that its specifications for reading teaching were to supersede previous department of education mandates on this issue, and thus by intent to eliminate the novel aspects of WL practice.

For example, Teaching Reading (California Superintendent of Public Instruction, et al., 1996) rules that henceforward reading programs in California public schools must include direct and systematic ("explicit") teaching of phonics and spelling skills, preceded by the same kind of teaching of beginning readers' phonemic awareness (conscious awareness of the speech sounds that make up spoken words), and of their knowledge of letters of the alphabet.

Teaching Reading also established criteria that publishers in the future must follow when producing the reading development textbooks they hope will be approved by the California state board of education (an appointed group with certain reserved powers beyond those of the state superintendent and the state department of education) for use in California public schools. From now on, to get their reading development books for primary-grade children accepted by the state board of education, these publishers must make sure that these books' instructional manuals provide directions for systematic teaching of prearranged sequences of reading skills, especially how explicit phonics instruction is conducted. The words in these books also must be 'decodable'. That is, students must be prepared ahead of time, with adequate phonics instruction, to recognize the words presented in the stories in these books.

An obvious stimulus to the production of Teaching Reading was the interest taken by California lawmakers previous to its publication as to the causes of the reading achievement crisis in that state, and how this catastrophe could be rectified. After extensive hearings in these regards, the California legislature passed four bills that redound to the disfavor of WL.

These laws (1) direct public schools in kindergarten thru grade three to teach phonics information and spelling in a 'systematic explicit' way, (2) require that teachers receive training in this kind of instruction, (3) demand that reading development textbooks at these grade levels, that are submitted for approval for adoption in California, must include directions to teachers to use systematic explicit instruction of phonics information, spelling, and phonemic awareness, and (4) mandate that the stories in these textbooks be decodable, i.e., are written so as to provide practice in the application of phonics skills. As noted, Teaching Reading emphasizes the importance of educators obeying the new laws by putting the weight of the superintendent of public instruction behind their enforcement.

## Reaction from Whole Language

Unfortunately, there are no penalties for nonconformance of them written into these new laws.
Advocates of WL teaching in California thus have openly vowed to exercise civil disobedience of
them. While they readily admit that WL is not verified by the experimental research on reading development, this is an irrelevant matter, they contend. Empirical data on this topic are invalid, WL enthusiasts insist, because they are based on standardized test scores of reading progress. Such tests do not measure reading authentically, it is said. Therefore, the only reliable evidence on WL is held to be the anecdotal reports on its successes, and individual teacher's subjective judgments as to what reading ability is.

Leaders of the WL movement further claim it has a legitimate right to reject scientific evidence on reading instruction because the WL crusade "constitutes a different view of education, language, and learning; uses different discourse; maintains different values; and emanates from a different educational community" from those who support the scientific method of studying these issues (Edelsky, 1990, p. 7). Each side here honors different "beliefs, theory, values, research, practice, discourse, goals, and so on". Each conforms to a different "major philosophical framework and a particular ideology". Thus, each gives different answers to the questions, "What is reality? Where do facts come from? What is truth?"

There are other WL theorists who go so far as to argue that the anecdotal evidence that WL supplies as proof of the superiority of its practices actually is scientific in nature. They claim that the traditional scientific method of inquiry, and the collection of anecdotes about human behavior, are equally objective, orderly, and thoro. One method of inquiry here purportedly is not more ideological in perspective, nor subjective in character than the other. Evidence gained from WLvalidating research, that uses small, nonrandom samples of subjects, personal (often one-person) observation of subjects' behavior, and resorts to incidental and serendipitous notations taken about this behavior as data, truly is scientific, Dudley-Marley (1996) confidently asserts.

This 'naturalistic' research supposedly is as scientific as research that starts with a null hypothesis (thus sets about to disprove it); that carefully identifies the various effects that meticulously defined and discretely different experimental factors have on students' objective test scores; that scrupulously controls for teachers' attitudes in studies that compare instructional procedures; that is designed so as easily to be replicated by other researchers; and that uses sophisticated statistical analysis of quantitative data. This argument asks for a leap in faith that critics of WL in general are unwilling to take, however.

## 'Balanced' Reading Instruction

It is surprising, therefore, to find that many of the negative critics of WL are reluctant to conclude that if WL had any usefulness, it now has outlived its welcome. Rarely do these critics propose that nothing would be lost by schools if they abruptly removed the practices originated by WL from their reading development curriculum.

Clouding this issue is the fact that WL co-opted some of the educational practices that were highly commended long before its advent, but then claimed it brought them to life, and now is their exclusive defender. For example, WL favors children's frequent reading of much high-quality literature, and their free-wheeling discussions of it. Whole Language also approves of having children write frequently on topics of their choice, and to learn how to edit these compositions. It subscribes to the practice of integrating the teaching of reading, writing, and spelling, eg, having students spell and write words they learn to read.

As noted, however, none of these practices was created by WL. They are not WL prototypes. They did not first appear in WL classes. Thus, the truly novel aspects of WL could be abandoned without any danger that these longtime practices would suffer elimination.

Nonetheless, many of the teacher educators who judge WL as being overall inferior in developing children's reading skills persist in calling the above practices the 'best' of WL, and honoring WL for having emphasized them. These are the reading instruction authorities who call for a 'balanced' approach to reading teaching. This proposal would meld the 'best' of WL with direct and systematic teaching of prearranged sequences of reading and spelling skills, set up in the order that children have difficulty in mastering them (Honig, 1996).

Advocates of WL must be admired for the vigorous rejection they make of this illogical proposition (Goodman, 1989). Their reaction is, in effect: "Stop patronizing us in this regard. Accept the fact that we truly believe that direct and systematic teaching is antithetical to proper reading development. Face the fact there are irreconcilable differences with WL, therefore the proposal you make that only the best of it is not acceptable is rejected. Try harder to understand what the Whole in Whole Language refers to. In short, discontinue your efforts to deform WL into something that we consider a hybrid, degraded, and demeaned form of instruction, a mishmash of clearly polarized practices that violate the principles on which WL was founded and the fundamental reasons for its existence, that thus insults the name and nature of WL. We challenge you with this ultimatum: either love WL or leave it!"

## Conclusions

The history of education is strewn with the wreckage of numerous innovations that were never empirically verified before being put into operation. These were educational fads or crazes that burst upon the educational scene with what later turned out to be superficial brilliance, since they inevitably flared out - not with a bang of elation, but instead with a whimper of humiliation and regret. Since no experimentally discredited pedagogical practice so far has escaped this fate, it appears likely that WL also will succumb to its seemingly relentless force.

The actual rate of fall of WL in this regard largely will depend, it needs to be emphasized, on the extent to which schools boards in the future require educational officials they supervise not to submit for the boards' approval educational methods and materials that are experimentally unverified. At present, rarely do school boards enforce such a mandate.

Whole Language may be given a reprieve from the sentence of death administered to it by experimental findings, of course, when school boards knowingly reject pertinent scientific evidence, and thus continue to approve of use of WL in schools under their jurisdiction. These would be school trustees who decide, when empirical evidence on reading development is contradicted by the anecdotes about it that WL provides, that the latter information is more respectable and convincing. Such votes in favor of WL should be made part of the public record, readily available for constituents to consider before voting in upcoming school board elections.

In the fallout of the WL affair, reading and spelling instruction has become a critical political issue, and thus one that has spun out of the control of executive educators. Ever more so in California (and by extension, in any other school-governing political entity that takes the action its legislature did), from now on, since its school boards are legally empowered, as never before, with the administrative means to coerce school officials into complying with what the experimental evidence indicates about reading and spelling instruction. The courts in the future doubtless will find in favor of school boards that are sued by school officials, who have refused to comply with the new state laws on the furtherance of literacy skills, and yet who charge that they have been dismissed for this dereliction of duty without just cause.

In the past, the courts have announced they could not allow such lawsuits about educational malpractice or academic child abuse since they could find no consensus, neither legal or professional, as to what constituted appropriate reading and spelling instruction. In California (or
other states or countries that would follow its lead) that handicap to recourse to justice appears to have been removed.

In California, the legal issues noted here are highlighted by the result of that state's Board of Education approval of reading instruction textbooks that are acceptable for use in its grade K-3 classrooms for the next seven years. In seeming defiance of the new state laws on reading instruction in California, its Board approved of seven such reading instruction programs, six of which clearly are WL-oriented. Only one of the different series of textbooks meets the requirements of new reading instruction laws. This action means that for the next seven years there likely will be protracted appeals from reading instruction reform activists for legal relief from the Board's rejection of reading instruction programs that do meet the new laws' stipulations.

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[Journal of the Simplified Spelling Society, 22, 1997/2 p16 in the printed version]

## 5. New SSS Vice-President Edward Rondthaler

The SSS Committee is delighted to announce that Edward Rondthaler, A.B., D.F.A., President of the American Literacy Council (New York), has agreed to join our international panel of distinguished Vice-Presidents. He has devoted his long and active life to letters, and much of it to the study of the role of letters in providing a "speech that stands still". Part of his education consisted of training in speech-letter relationships at the universities of Pennsylvania, Yale and Princeton. His psychology research and thesis at the University of North Carolina dealt with subconscious and emotional responses to letter design. In the course of his career he helped introduce radical changes in the typesetting industry, playing a leading role in the historic developments that changed the substructure of typesetting from metal to film and set the stage for computer word processing. This story is told in his book Life with Letters and illustrated in a 3volume Alphabet Thesaurus. He foresees that certain advances in the way words are now visually generated can help solve the pressing problem of English illiteracy. He is the author of numerous articles for magazines and newspapers. Because of his contribution to the world of letters, he received an honorary doctorate from Drake University, the New York Type Directors Club 1975 medal for noteworthy achievement in the art of typography, and in 1990 the John Amos Comenius Award of Distinction from Salem College. He is President Emeritus of Photo-Lettering Inc, a Founder and Board Chairman Emeritus of the International Typeface Corporation, a member of spelling reform organizations in England and Australia, and editorial consultant to the JSSS

# 6. A Teaching Spell Checker doing the job that ordinary spell checkers cannot do. Edward Rondthaler 

Dr. Rondthaler is president of the American Literacy Council (ALC), originally the Spelling Reform Association organized by members of the American Philological Association in 1876. Historically the ALC is the U.S. sister of the British Simplified Spelling Society.

Liberating children, adults, and immigrants from their struggle to learn English spelling
Children want to write before they want to read, says Dr. Donald Graves [1]. On 'Day One' in school very few children think they can read, but many think they can write. Perhaps they've scribbled some letters in a book at home, or crayoned on the refrigerator door. For them, that is writing.

Build on that, says Dr. Graves. Writing is the creative road to both writing and reading.

## If you can write you can read. If you can code you can decode.

Children are discouraged if their writing does not look neat - and encouraged if it does, says Dr. Ben D. Wood [2], pioneer in educational research. The task of mastering the motor skills that manipulate pencil and pen should be separated from the task of developing the mental ability to represent words with letters.

Computers enable that separation. They let the learner focus on what is of first importance.

## Computers write a pupil's words neatly, and can be made to drum spelling into memory.

## Inadequacy of spell checkers

Ordinary spell checkers, ably described by Roger Mitton [3], depend on the user having a good prior knowledge of English spelling. They are made for typists who already spell well enough to read and write, who can pick the right spelling out of a basket of choices, and know what to accept and what to reject. Pupils with spelling problems lack that skill. They know how to speak, but not how to spell - certainly not how to spell properly. They need a bridge that takes them safely from what they know to what they do not know - they need a checker that promptly links the spoken word to its written counterpart. Ordinary spell checkers do not do that consistently and dependably. When used with an expectation that they do, checkers are more likely to confuse than to help.

To illustrate this confusion let us assume that a remedial or foreign pupil has typed luv - a very probable misspelling. After an intensive search, a Microsoft 6.0 checker will offer only one suggestion: that luv be changed to lug! In view of our spelling's dizzy irregularity, how can a trusting pupil know that he or she has been grossly misled - that lug is preposterous? Even if the pupil had typed lov, the checker's response would have been a bewildering love, Loa, lob, log, lop, lot, low, lox, and Los. That is about as satisfactory to a struggling speller as a calculator that offers $96,97,94,98,101,95$ for the sum of $39+57$.

## A spell checker for learners

One who is already confused by the illogic of English spelling is not helped by more confusion. What is needed is a checker - a super-checker - that immediately changes a misspelling into the normal spelling of the word the student had in mind.

To meet that need, Dr Edward Lias of the non-profit American Literacy Council, has developed a unique spell checker - a spell fixer \& teacher - for the organization's computer-teacher program known as Spell-Well ${ }^{\text {TM }}$. Unless a misspelling is far beyond repair, the program will correct it instantly when the spacebar is touched at the end of the misspelled word. It does even more. It serves as a patient, private, non-judgmental teacher by changing the color of the misspelling, and moving it down underneath the correctly spelled word so that right and wrong may be compared carefully. Educators agree that instant correction - striking while the iron is hot - sends much stronger signals to memory than delayed correction.

## Details of the Program



Figure 1

It is reassuring to a student to know that the word just typed was spelled correctly. The program gives that assurance, instantly. How? If the word does not change color, and if no other spelling appears below it, the pupil knows that the word was correctly spelled. No change means OK, as with kids in Fig.1.

A student can get the most out of the program by pronouncing a difficult word carefully, distinctly, and slowly; then typing it as it sounds using a 'sound-spelling' system [4] initially developed in the first half of the century and now revived, thanks to computers, to help troubled learners. It departs from present spelling no more than required for a practical sound-to-letter match. It matches standard pronunciation as closely as do the spellings of most other languages. (If the computer is equipped for sound, each word will be spoken.)

When an English word is typed in this way - as hav, lerning, and spel in Fig. 1 - the sound spelling drops down a line (as shown), changes color, and is replaced instantly by normal spelling on the line above it. No basket of choices appears - just the right word, correctly spelled, over the misspelling.

Learning the phonic rules of sound-spelling is desirable but not mandatory. Why? Because an ingenious masking technique in the program automatically corrects over a million flagrant misspellings, as shown by the misspelled words miny, trubbil and rit in Fig. 1 above.

One of the most difficult tasks for learners is mastering 'sound-alikes' - steel/steal, one/won, here/ hear, etc. When the pupil types words like here or hear (or heer), the computer instantly displays a popup box (Fig.2) on screen. By pressing key 1 or 2 the spelling of the chosen meaning is automatically placed in the text.

## Come here to me. Press 1

I hear singing. Press 2

Figure 2

When the student has completed all typing, the entire text may be printed out neatly.

How can teaching normal spelling promote spelling reform?
The big problem that has always faced spelling reformers is getting a foot in the door. By offering a new tool that helps teach normal spelling we have a powerful door opener. Once inside, a secondary feature of the program may or may not be used. This distinctive secondary feature enables pupils to see their writing changed, automatically, into simplified spelling. Such powerful
demonstration gives spelling reform the platform it has always needed in order to be taken seriously. There is no more convincing way to tell the story and show the logic and benefit of spelling reform than to enable large numbers to see their own writing simplified automatically without any effort on their part.

This breakthrough is loaded with potential for promoting simplification.
The strength of the concept lies in a dormant 'sound-spelling' based largely on Ripman's New Spelling and skillfully submerged deep in the software. Whenever the F12 function key is pressed, these simple spellings instantly appear, in brown color, beneath each normally spelled word on the screen (as in Fig.3).


Figure 3

This feature is entirely optional. It may be compared to an automobile radio that is silent until one wishes to hear it and turns it on. We can be sure that, like a car radio, the key will be pressed from time to time, if for no other reason than curiosity. (A second tap of F12 turns the sound-spellings off.) This compelling display is destined to be a driving force revealing the logic and feasibility of spelling simplification to large numbers of students, teachers and parents.

Even more convincing than seeing the simpler spelling on the screen is a print-out option that enables the student, by pressing the F9 key, to have his or her typing printed out on paper in normal English spelling — or in 'sound-spelling' - or, line-under-line, in
both.
As the swing back to phonics shifts into high gear, it is vital that we do not miss the opportunity to plant seeds of reform where they will be watered. In Spell-Well we have an inoffensive, practical wedge that enables modern technology to step in where present remedial practices have failed. The program performs important tasks beyond a teacher's domain. It can provide, at the user's convenience, endless hours of intense, private, non-judgmental self-instruction. The program offers promise of rescuing millions. It could well be the key factor in raising English literacy closer to the norms of other languages and, as an ultimate by-product, ending our language's unnecessarily twisted spelling with all its crippling consequences.

A trial copy of the software is available from Internet. For the full program contact American Literacy Council.
[1] Dr Donald H Graves was Professor of Education at the Univ. of New Hampshire, Research Editor of Language Arts, author (1983) of Writing — Children and Teachers at Work, London: Heinemann Educational Books.
[2] Dr. Ben D. Wood was Director of Bureau of Collegiate Educational Research, Columbia University; Education Consultant to IBM; close associate of Sir James Pitman and John Downing, and chiefly responsible for the introduction of i.t.a. into the United States in 1962.
[3] Roger Mitton (1996). Spellchecking by Computer. Journal of the Simplified Spelling Society. 20 1996/1: Item 2.
[4] Walter Ripman \& William Archer New Spelling (1st edition 1910), revised Daniel Jones \& Harold.Orton for the 5th edition 1940, further revised Godfrey Dewey 1955-65, then slightly amended by the American Literacy Council 1986-95.

# 7. The Standardization of Irish Spelling: an Overview Muiris Ó Laoire 

Dr Muiris Ó Laoire has taught modern languages in secondary school for a number of years. While studying Irish language pedagogy, he researched language revitalization at the Hebrew University in Jerusalem and was awarded a PhD from the National University of Ireland in 1995 for a dissertation on language revival. Having worked in ITÉ (The Linguistics Institute) and in the NCCA (National Council for Curriculum and Assessment), he now teaches and researches in Oifig na Gaeilge Labhartha, University College, Galway.

## Introduction

Both Irish (an Ghaeilge) and English are recognized as official languages in the Republic of Ireland. English is the mother tongue of the vast majority of the population. The Constitution of 1937, however, affirmed the status of Irish as the national and first official language. While over a million persons declare themselves as Irish speakers in the census returns, the reality is that the language is spoken in daily transaction and communication by only about five per cent of the population, mainly in the indigenous speech communities, Na Gaeltachtaí, geographically located along the Western seaboard. This accords a unique status to the language among the languages of Europe in being at once a national language and a lesser used language. The language is now undergoing a revival with a renewed interest in Irish-medium education, and now has the support of an all-Irish TV station, Teilifís na Gaeilge, established in November 1996.

It is proposed here to give a brief overview of the processes of standardization of the Irish spelling system that took place forty years ago. It is intended to show that the trends of these standardization processes were towards a simplification and a greater correlation between the spoken and written language. To examine these processes, it is necessary, first, to give a brief account of the evolution of the language and of some of its inherent features.

## Historical Overview of the Language

The earliest evidence of Irish as a written language is very scant, dating back to the 4th century AD, and consisting of the names of people and places inscribed on slabs and on pillar stones. This form of writing was called ogham and was prevalent between the 4th and 7th century. The ogham script consisted of short lines (consonants) or dots (vowels) drawn on the left or on the right or across a base line.

When the Latin alphabet was introduced into Ireland, there arose a written language and a vibrant literature characterized by sagas, epics, religious and personal lyric poetry and monastic and ecclesiastical texts. The language subsequently underwent various periods of development. The first period is known as the Old Irish period 600-900. There followed what scholars call the Middle Irish period 900-1200, when during the era of the Viking invasions the language underwent Scandinavian influences with new loan-words being adopted. During the classical Irish period, 1200-1600, a standardized literary language flourished among the literati of the era, the poets and professional scholars, who were supported by literary families and chieftains. This era is characterized in particular by a type of standard syllabic, bardic poetry often written in praise of the patron-chieftain to commemorate events in his life and to satirize his enemies. The language of this poetry was regulated and standardized and remained virtually unchanged for three hundred and fifty years while the colloquial language evolved and developed.

As Irish feudalism became increasingly de-stabilized with the English plantation system and its political influence, the language gradually came under threat. The Irish chieftains, who had
supported the poets and literary families, fled and had their lands confiscated. This led to the demise of the formal, literary language, which had been preserved and cultivated by the poets and literati. This literary language was gradually superseded by the colloquial language of the people that had continued to develop over the centuries, but had not been recorded in, or admitted into the standardized literature of the period.

Large scale settlements of English and Scots in the plantations marked the beginning of a shift from Irish to English. English became more important economically and socially with the growth of towns and commerce. This led to the gradual disuse of Irish, especially in the eastern half of the country. An English-medium education system from 1831 further contributed to a shift to English. It is estimated that the Famine of 1845-48 reduced the number of Irish speakers by one million (Ó Cuiv 1967:19). In 1851, it was estimated that there were 166,839 Irish speakers in the under 10 age group. By 1891, this figure has fallen to 30,785 . (Ó Murchú 1988:81).

As the spoken language further retreated during the 19th century, it is somewhat ironic that its academic status was beginning to be restored and re-established by historians, antiquarians and international linguistic scholarship. This interest coincided with the growth of cultural nationalism and with a movement for the restoration of the spoken language at the end of the 19th century.

This movement gained strength, with the language serving as a powerful symbol of national identity (Ó Baoill 1988:110), until the advent of the free state in 1922, when the movement was absorbed into the political agenda and responsibility for the restoration of the language largely devolved on the educational system.

## Features of the Language

Irish belongs to the Celtic branch of the Indo-European languages and as such displays some of the general features or characteristics of the other Celtic languages, notably in inflectional morphology. Nouns are grouped into declensions and verbs into conjugations. Thus, the noun cat, meaning cat can exist as cat, chait, chat, gcat. Inflection in the case of nouns usually involves initial mutation called lenition (see below) and a change in the ending of the consonantal cluster, referred to as attenuation or slendering. Thus an post (the post) in the genitive case becomes an phoist, as in fear an phoist 'the postman'. Syncopation (loss of a letter or more from the main body of the word) may also occur, eg, Micheál 'Michael' becomes Mhichil in the genitive. Verbs inflect for number, person, mood, tense and voice, and exist in both analytical and synthetic forms; thus the verb tóg 'take' in the first person, present, past, future, conditional mood appears as tógaim, thóg mé, tógfaidh mé, thógfainn respectively.

Central to the Irish orthographical system is the existence of two vowel groups, broad (a, o, u) and slender (e, i), phonetically back and front vowels respectively, and two consonantal groups, broad and slender. This feature is also present in Scottish Gaelic and Manx. This distinction between broad and slender consonants corresponds roughly to the distinction between hard and soft consonants in Russian and Polish and is often referred to as velarization and palatalization (Greene 1966: 19, Ó Siadhail, 1989: 9) To provide an example, tá 'is fare' has a broad T since the vowel following it, A, is broad, while te 'hot' has a slender T since it is followed by a slender vowel, E. An important rule in Irish spelling is what is termed the caol le caol, leathan le leathan 'slender with slender, broad with broad' rule. This means that, particularly in the verb endings system where a slender vowel occurs on one side of a consonantal cluster or group, it must be followed by a slender e. Thus in briseann 'breaks' the slender I in the root bris has to be followed in the present tense by the ending -eann, beginning with a slender E. Similarly, broad vowels must be followed by broad vowels, eg, in glanann 'cleans' the broad A in the root glan is followed by the ending -ann, beginning with the broad vowel.

Lenition and aspiration, which are grammatically conditioned initial mutations, are features of modern Irish most worthy of note. Lenition occurs quite frequently in nouns and verbs, involving inclusion of $h$ after the initial consonant, thus effecting the sonal quality of that consonant, eg, the plosive C/k/ becomes $/ \mathrm{x} /$ as cat > chat or $\mathrm{B} / \mathrm{b} /$ becomes $\mathrm{BH} / \mathrm{w} / \mathrm{in}$ bhog. Eclipsis is the other grammatically conditioned initial mutation where a letter or combination is placed before the initial consonant or vowel in nouns and verbs, thus altering the initial phoneme. Thus N is placed before the initial G giving $\mathrm{NG} / \mathrm{m} /$. G is placed before C giving $\mathrm{Gc} / \mathrm{g} /$, and BH is placed before F giving BHF/w/.

The phonological variants in Irish are considerable and are attributable to the existence of three separate dialects, roughly corresponding with geographical distribution, canúint an Tuaiscirt 'northern dialect' in the northwest region, canúint an larthair 'western dialect' in the western region of Co. Galway and Co. Mayo and Connemara, and canúint na Muamhan 'Munster dialect' in the southwest region. The dialectal variations have not been confined to phonology alone, but have also effected lexis, grammar and orthography. The differences are in evidence in the common greeting, how are you?

Northern: Goidé mar atá tú?
Munster: Conas tá(nn) tú?
Western: Cén chaoi a bhfuil tú?
All these features give the language an intricate beauty as well as a certain complexity that made standardization more difficult to achieve, as will be seen from the account below.

## Norm Selection

As part of its campaign for the restoration of the language, the Gaelic League secured recognition for Irish at second and tertiary level education. After 1913, when it was accepted as a subject for matriculation purposes, there was a considerable increase in the number of secondary schools that included Irish in their programme of instruction. This increase in the use of Irish for instructional and academic purposes as well as the existence of a growing number of lrish writers focused debate on the question of standardization.

A controversy arose over the form of written Irish to be used. Some scholars argued for a linear continuation of the standardized written form of the neo-classical period, as exemplified in the seventeenth century prose writing of Seathrún Céitinn. Others sought to establish a form of written Irish that would mirror and reproduce the colloquial Irish of the people.

It was the latter group who won the debate. Ó Baoill $(1988 ; 111)$ makes an important remark on the outcome of this controversy in favour of the language of the people, caint na ndaoine. "Had the grammar of classical Irish (1200-1650) as used by Seathrún Céitinn and the professional poets of that period become the norm, the resulting cleft between the literary language and the speech of the lrish-speaking areas (collectively known as the Gaeltacht) would certainly have alienated native speakers of Irish and those who had already learned Irish to a proficient degree."

The fact that the written form now reflected the language spoken by the people augured well for the future of the Irish as a vibrant, modern language in tune with the thoughts, aspirations and imagination of its speech community. However, the use of the language of the people as it occurred in the three dialects across three provinces underlined the need for standardization and for norm selection in particular. This was all the more difficult, since none of the three dialects possessed the prestige and status to dominate as a socially accepted norm. Had a speech community developed in any urban centre, its dialect would be expected to dictate the choice of norm. This, however, has not occurred to any extent in Ireland. The fact that no one dialect was prescribed as being normative meant that spelling followed the varying pronunciation patterns of each of the dialects. Ó Baoill (1988:112) mentions a further problem with spelling at this time. "Words in many instances looked longer than their present pronunciations would indicate, because
of the retention of certain older spellings handed down from an earlier period of the language. Such spellings had changed very little since the period of classical Irish 1200-1650. In many respects it was far removed from the type of Irish current in Ireland in 1922."

When the national government of 1922 was working towards achieving a restoration of the language and its maintenance in the indigenous speech communities, it had to confront all these problems which arose from the lack of norm selection and standardization. In any event, it seemed to have been taken for granted without debate that there ought to be a national standard language.

## The Gaelic Script

From 1600 onwards, writings in Irish mainly used the Gaelic script.
When the language of the people was adopted as the norm, a decision was made to abandon the Gaelic script in favour of the Roman script. This not only involved an obvious change in the shape of the letters and in the way Irish appeared, but there were also morphophonemic changes to be made. A dot over the initial or internal consonant in the Gaelic script conveyed lenition. In the Roman script, this dot was replaced by h following the lenited consonant. Thus dotted $\mathrm{c} / \mathrm{x} / \mathrm{was}$ replaced by ch and dotted $f$ by fh, etc. It was hoped that the change in script would simplify and modernize the language, thereby bringing it into line with the modern languages of western Europe. The change was decried and resisted, however, by many campaigners for the revival of language who advocated a basic and pure preservation.

## The Problem of Spelling

Problems had always surrounded the system of spelling in Irish. The adaptation of the Latin alphabet in the sixth century caused problems in the development of a system of orthography that would accurately reflect pronunciation. Ó Cuiv (1969:26) explains that certain features in Irish such as lenition and eclipsis had no counterpart in Latin. This created a problem where a single letter had to represent more than one sound. The letter G, for example represented the modern $G$ sound as well as the lenited variant, today spelt GH , a division of values for G not unlike that in Old English. Ó Cuiv (1969:27) explains the outcome: "All this is slightly puzzling to us nowadays and it does not surprise us to find that literate Irishmen eight or nine centuries ago were not altogether satisfied with the current system of orthography. Bit by bit, the main inconsistencies were removed and eventually a reasonably unambigious system was available. This orthography was relevant to the sound system of spoken Irish of the twelfth century and as such it was adequate."

When the standardized literary language was established during the classical Irish period, the spelling problem was resolved. However, once caint na ndaoine or 'the language of the people' was accepted at the end of the 19th century as the norm, the problem of spelling emerged again. While the classical literati had no problems with spelling because they ignored the spoken language, the writers of the late 19th century felt the need for a more simplified system corresponding to pronunciation.

Ó Cuiv (1969:25) tells us that efforts at such simplification and correlation of spelling and pronunciation had already taken place in the classical era. Theobald Stapleton, author of a catechism published in Brussels in 1639, Cathcismus sen Adhon, an Teagasc Críostaí iar na foilsiú a Laidin \& a Ngaoilaig, attempted a simplification which deviated from the classical standard. Silent letters in certain words were replaced, eg, the DH in the word suidhe 'sitting' was replaced by í in suí, as in modern Irish. The GH and DH in ríoghdhacht 'kingdom' were omitted to produce ríocht. He brought the spelling closer to the pronunciation by replacing THBH by F as in spoken Irish uathbhás 'terror', giving uafás as in modern Irish. It was only the authors of devotional literature, however, who followed Stapleton's lead and the spelling system retained its classical complexity until official efforts at standardization took place after 1922 and in particular after 1931.

Writers of the Gaelic League era continued to use the antiquated classical spelling. Fr. Dineen's Irish/English dictionary, published in 1927, did little to revise the spelling system and align it with the current language of the people. The dictionary, in fact, had the effect of stabilizing the old spelling system, although it was helpful in exposing learners and speakers to examples of lexis from the three dialects.

In 1922 the National Government had officially assigned the standardization of the spelling and grammar to the Translation Section of the Dáil (Parliament).

Standardization of the spelling system essentially involved a movement towards simplification as had already been attempted by Stapleton. There was strong opposition, however, to the idea of changing the spelling, especially from the Gaelic League, the language restoration organization. In 1928, the League passed a resolution stating that it would be better not to change the spelling of Irish until the language was out of the danger of death or destruction. Ó Cuiv (1969:29-30) remarks as follows on the slow pace of change towards simplification: "So powerful were the conservatives that in spite of the fact that Roman type and a more simplified form of spelling were already in use in parliamentary publications in Irish, the government decided to publish the new Irish constitution in 1937 in Gaelic type and the outmoded spelling."

The Translation Committee nevertheless continued its difficult task, and in 1931 it prepared a circular in which the new simplified spelling system was proposed. Modifications were made to the classical spelling system in O'Dineen's dictionary, giving consideration to dialectal pronunciation, avoidance of ambiguity, grammar, appearance of words, and etymology. It is interesting to look at some of the changes suggested to the spelling system, as listed by Ó Baoill (1988: 113).

| Classical Version | Revised <br> (1931) | Modern <br> (1957-) | Spelling |  |
| :--- | :--- | :--- | :--- | :--- |
| oidhche | oíche | oíche | 'night' |  |
| aíteamhail | áitíuil | áitiúil | 'local' |  |
| ochtmhadh | ochtú | ochtú | 'eighty' |  |
| meadhon | meán | meán | 'middle, average' |  |
| indiu | iniu | inniu | 'today' |  |

These examples illustrate the trend of change in the revised system. One notices the efforts at simplification in effecting change in two principle ways. Firstly, the system corresponded more closely with the spoken word. One notices the substitution of internal unvoiced consonantal groupings, eg, mh, dh, in the words listed above by a stressed vowel, thereby reflecting a closer correlation between the written and the pronounced word. These changes tended to represent the general pronunciation pattern of all the dialects, although not fully and thoroughly. Secondly, the new spelling was also a good deal shorter. Ó Baoill (1988:113) writes, "The new spellings were more psychologically real in the sense that what one wrote was a lot closer to what one said than was previously the case." However such change was generally resisted, even though it was widely used in all government departments. Even though efforts at achieving a simplified and standardized system had begun as early as 1922, it is no surprise perhaps that it took thirty-five years to arrive at a final publicized accepted version. In 1945, the pace had been slow when the Taoiseach (Prime Minister) of the day, Éamonn De Valera, requested the Translation Section to complete its work. When the Translation Section submitted its work, Lamhleabhar an Chaighdeáin Oifigiúil (Irish spelling: The Official Standard Handbook), it was found that an entire system needed to be worked out and completed.

It was not until 1957, therefore, that the standard version was finally authorized and published as Gramadach na Gaeilge agus Litriú na Gaeilge (The Grammar and Spelling of Irish). This version has remained as a yardstick for all writing in Irish since, and has been more or less widely
accepted. However, this was not the case in the beginning. One Professor of Irish of the National University called the newly published standard as the most hateful monster that ever appeared in the language (Ó Ruairc 1993:36). Since the standardized system was first used and propagated within the civil service, one still hears disparaging reference to Gaeilge na státseirbhíse (The Irish of the Civil Service). Dictionaries published since 1957, notably De Bhaldraithe (1959) and Ó Dónaill (1977), have had the effect of strengthening the standard version of spelling, but many problems remain unresolved.

## Problems and Challenges

The standardized spelling system has held sway for nearly forty years now and is used in all school textbooks and educational publications. Dialectal variations in spelling and grammar continue to appear in reprinted school texts (eg, the works of the Donegal writer Máire), but they are generally highlighted and explained in a glossary. The general situation, however is far from satisfactory.

First, the complicated morphological and inflectional system of the language continues to present problems for the learner. The standard evolving has not gone far enough to reduce the intricate complexities that confront learners at all levels. There is evidence to suggest that some learners in Irish schools, where the study of the language is compulsory, may have little understanding or awareness of how the system differs from English, even after a period of nine years instruction. (Ó Laoire 1995).

The biggest problem with the official standard, however, is that it does not agree in any systematic way with the spoken dialects. Any system of spelling must take account of the variations that occur in pronunciation. While some efforts were made to ensure that this occurred in Irish, many scholars would argue that such efforts have not been sufficient. Bliss (1981: 911) for example, criticizes the official standard for not taking cognizance of variation. He explains: "As far as pronunciation is concerned it seems impossible to discern any rhyme or reason in the choice of spellings. Some changes in traditional spelling are quite inexplicable, as for instance the change of the historical chuaidh, deachaidh 'went' to chuaigh, deachaigh, a change that could not possibly be dependent on pronunciation since dh or gh were identified many hundred years ago."

There appear to be discrepancies, therefore, between the choice made in the standard system and the dialectal variations. Sometimes, the choice made in the standardization makes little sense. Bliss (1981:911) quotes an interesting example of this discrepancy. For "...the word traditionally spelt tráigh, 'strand', Northern Irish generally has the pronunciation trái and Southern Irish the pronunciation tráigh, but the caighdeán (standard) spelling is trá, a pronunciation hardly heard outside Cois Fharraige (a localized sub-dialect of the western dialect)". The discarding of the -IGH was not carried out systematically. It was retained for some unknown reason in many verbs in particular, eg, dóigh 'burn' or léigh 'read'.

Some scholars also argue that simplification in spelling has led to a more complicated grammatical system. (Wigger 1979:195). In the old spelling system the ending -(E)ANN was added to all verb roots in the present tense eg, briseann 'breaks', léigheann 'reads', nigheann 'washes'. In Modern Irish, however, while the -GH was retained in the root form léigh, nigh, the present tense of such verbs according to the standard spelling system introduces a new ending -ONN in the case of NIGH, while léigh retains the -EANN ending. The new spelling system has léann, and níonn respectively. These examples represent only some of the problems that are often cited as being attributable to the new system.

Another problem that standardization did not address fully is the irregularity of the Irish spelling system. Irish, unlike Welsh (which is known for the phonographic regularity of its writing system), remains highly unpredictable. This irregularity is due to the fact that Irish has more sounds than the

Latin alphabet can represent. It can be argued that efforts at standardization to date have not gone far enough to correct this irregularity and to bridge the gap between written and spoken Irish. The rules remain too faithful sometimes to the standardized written form which was first influenced by the way Irish was pronounced centuries ago. The spelling and pronunciation of the word Taoiseach 'Prime Minister' which has often caused problems for foreign news casters, illustrates this irregularity. The combination AOI in Taoiseach is an alternative to UÍ. The combination EA in Taoiseach corresponds to the A sound in English hat - so alternatively the word could be spelled Tuishach. However, AOI at the beginning of a word has an Í /i:/ quality, as EE in the word been in English. Thus the proper name Aoife could be spelled as ífe. Furthermore, in Munster, AO can be pronounced as É /e:/, as in saor/sér/ 'free', or as Í /i:/ in the western dialect. Visitors to Ireland have much difficulty in pronouncing placenames like Dún Laoghaoire /doon lére/ or /doon líre/ with the silent internal -GH-. The pronunciation of Irish is often not obvious from the spellings and is quite confusing as these examples serve to illustrate.

## Conclusion

While some scholars would maintain that the official spelling standard has done "great harm to the cause of the Irish language" (Bliss 1981: 912), more research needs to be done among the public, learners and writers on the level of acceptability of the present spelling system. Very little research, if any, has taken place in this area. While problems of discrepancies still continue to exist, one must recognize that great strides have already been made. Ó Murchú (1993:60) puts the development that has taken place in context: "Twentieth century Irish, given that it was faced with critical problems of a choice of script, a destabilized spelling, and a substantial degree of dialectal variation with no unifying form, could hardly have evaded strife and vacillation."

The underlying trend has been towards the acceptance of a norm and simplification. Yet with a highly intricate morphological and inflectional system coupled with the fact that no one dialect is normative, the spelling system of Irish will still have to undergo revision before it will be completely acceptable and satisfactory. This historical overview of the standardization of Irish focuses on the difficulties of arriving at a satisfactory system in the absence of any specific, normative dialect and may well have counterparts in the history of other languages, where no one standard has arisen imperceptibly by natural historical processes.

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# 8. Update on the German Spelling Reform Gerhard Augst reports 

JSSS 21 (Item 8) reported on the reform of German spelling currently in progress. Our editorial adviser, Professor Dr Gerhard Augst, now describes some of the latest developments. We congratulate him on his installation in March this year as Chairman of the new Mannheim-based permanent Commission for German Spelling with its twelve government-appointed members, six from Germany, three from Austria and three from Switzerland.

There continues to be considerable opposition to the reform. Following the publication of the revised dictionaries (published by Duden and by Bertelsmann), this takes two main forms:

1. While politicians and lawyers are demanding that the 16 German provincial ('Land') parliaments and the Federal Parliament should enact the reform as law, a campaign is being mounted to demand referendums on it in Bavaria, Lower Saxony and Schleswig-Holstein. In the Federal Parliament, an all-party group of 48 MPs is calling for Parliament to reject the new spellings. Individual parents are appealing to the Administrative Courts for the reformed spellings not to be used in schools until the legal position is clarified.
2. The above legal proceedings are based on the assertion that the new spellings are worse than the old ones. Every one of the new spellings has provoked objection from someone or other. Amongst the critics are numerous writers and even some linguists, such as Professor Theodor Ickler (Erlangen University), who has been acting as linguistic advisor to many of the objectors, including the above-mentioned campaigners.
The 'Spelling Commission' (to advise on the future development of German spelling) was set up shortly before Easter. Its first task will be to consider discrepancies in dictionaries and decide, for instance, whether or not the new rules require that wiedersehen 'see again' (as in auf Wiedersehen 'goodbye') should rather be split as wieder sehen.

## 9. Notes from Switzerland edited by Chris Upward

We here report items of interest from Rechtschreibung, newsletter of the Swiss BVR (Bund für vereinfachte rechtschreibung 'Federation for Simplified Spelling'), which campaigns for German nouns to be decapitalized.

Following the spelling reform agreed in 1996 by Austria, Germany and Switzerland for implementation in 1998-2005 (for details, see JSSS 21, Item 8, with update above), it is noted that the Duden dictionary listing the new forms is a bestseller in the bookshops, and that some newspapers and periodicals have already adopted the new forms.

The Swiss are well-known in German-speaking Europe for not using the letter Eszet, ' $ß$ ', (called Schleifen-S 'looped S' in Switzerland) which German uses everywhere else - they prefer international ss instead. BVR-committee-member Dr Arthur Baur decided to research the history of this mark of Swiss orthographic individuality, and discovered it had its origin in the Swiss typewriter. Switzerland is quadrilingual, having French, Italian and Romansch as official languages beside German, which is the mother tongue of the majority. Swiss typewriters therefore require a
special keyboard to cope with French diacritics (acute, circumflex and grave accents, plus the cedilla and dieresis) as well as German Ä, Ö, Ü, and there was consequently no room for the German 'looped S' on the keyboard.

In 1938 the education committee for the canton Zürich applied this alphabetic amputation to the schoolroom. The abandonment in 1933 of the old German 'gothic' script known as Fraktur had whetted appetites for change, and the 'looped S' had already been lost from texts produced by typewriter. Conservative warnings that children would miss the experience of 'logical thinking' entailed by the 'looped S' (though its rules were notoriously illogical) were outvoted, and the committee resolved to instruct all teachers henceforth to write ss in place of $ß$. This earthshattering initiative attracted little comment at the time, but before long the other German-speaking cantons were following Zürich's lead.

The 1990 reform of French spelling (see JSSS 1993/2 pp3-5) is currently being implemented in Switzerland. Details of the changes have been issued to all teachers in the French-speaking western cantons of Switzerland, though many of the simplified spellings are optional. The new forms have found a place in the major dictionaries, but the storm of protest originally provoked by the reform has blocked official implementation in France. This has, however, not prevented a certain merriment in the French-speaking Swiss press at the inhibitions manifested in Germany at some of the new German spellings.
[Journal of the Simplified Spelling Society, 22, 1997/2 p25]

## 10. Hebrew is not exactly a language for speed readers Robert Alberg

We are grateful to SSS member Sarita Cohen of Tel Aviv for alerting us to this article, which first appeared in the Jerusalem Post (19 June 1986, p7), and is now reprinted by permission of the author.

Do you feel you cannot read Hebrew as well as you'd like to? Well don't worry because the truth is that nobody can read Hebrew as well as he ought. As well as English readers can read English, for instance.

Linguists have defined effective reading as rapid reading. If you have to read slowly, by the time you get to the end of one section of text you may have forgotten what was at the beginning.

Ever since Hebrew first became an everyday language 100 years ago, people have complained that they cannot read it as well as they would like. Most native Hebrew readers do not complain nowadays because they are not proficient in another language and therefore cannot make the comparison.

The main shortcoming that has bothered so many readers is that Hebrew is printed without most of the 'dots' that indicate vowels. We have added a few more letters here and there to try to overcome this - more yuds and vavs - but this has helped only slightly.

Some radical proposals have been broached. In 1962 members of the Hebrew Language Academy proposed creating two new letters to represent the sounds of the vowels A and E. This was not accepted: it changed the whole look of the Hebrew page, and it made it difficult to recognize the roots of the word.

One man produced a Hebrew paper using Latin type, but few people wanted to read it. Hebrew is an extremely 'consonantal' language, and the introduction of many vowel letters makes it hard to recognize the root words.

The solution that most students of the problem have agreed upon is to print just a few vowel points - the minimum necessary to indicate the required vowel sounds. But until recently this has been difficult, because setting type with vowel points has been cumbersome. But now new computers have made this feasible.

Together with several other researchers, I have been working on this problem. We have worked out a system of minimal vowel-pointing, which we intend to propose to the Hebrew Language Academy.

About one word in three can be read in two or more ways. Of course, one can decipher the correct reading by referring to the context, but this is the main drawback. The necessity of examining carefully the other words before or after a doubtful word is what slows up our reading considerably.

Linguists measure the reading of words or phrases in the hundredths of seconds. In English our eyes glide speedily over words or phrases because their pronunciation is definite.

Many Hebrew words can be read in seven ways, with seven different meanings. MSPR can be read as mispar, msaper, mi-sefer, mi-sapar, mi-sfar, masper, mi-sper.

There are three other reasons why reading Hebrew is slower than other languages. Firstly, prepositions are printed as the first letter of a word: $b, l, m$, etc. Bmai can be read as $b$ mai' 'in May' or as bamai 'a stage director'. Wc propose a simple reform: to print these prepositions as separate words.

Secondly, Hebrew lacks capital letters. In English our eyes often search out the words with capital letters because names are of particular interest, or we are searching for a specific name. Or alternatively we wish to skip over all the names or jump to the next sentence. Fortunately our computers can now enable us to print capitals in Hebrew.

Finally, many Hebrew letters resemble each other, and the eye must examine each one carefully and slowly.

In English there are some letters which are 'ascenders' (above the line) while others are 'descenders'. In reading, our eyes always rest on the tops of the letters, and in English the great variety of shapes of the letters is enough to tell us what the letters are. But in Hebrew our eyes must examine both the top and the bottom of each letter, and this is a slower process.

Books which discuss this problem often demonstrate the difference by showing two sentences cut horizontally in the middle. The English sentence can be read easily by seeing only the top half, while in the Hebrew sentence this is very difficult.

We are working on a style of Hebrew type which can reduce this problem. Again, as in many other fields, the computer is making our life easier.

# 11. Alarm Bels Ring for Fonics and/or Spelng Reform 

## Christopher Upward anlyzs

'Aspects of Writing in 16+ English Examinations between 1980 \& 1994' by A L Massey \& G L Elliott, University of Cambridge Local Examinations Syndicate (UCLES), 1996, 55pp + apendices, ISBN 1873140088.

Thanks ar du to Alastair Pollitt and Alf Massey of UCLES for ther helpful coments on a draft of this paper. To ilustrate its final conclusion, th articl is ritn in Cut Spelng.

Note: Both th UCLES survey and th presnt analysis of it predate the Literacy Task Force (Barber, 1997) wich th new Labour govrnmnt in th UK has now elevated to th status of National Literacy Strategy. Th Strategy plans to takl th fonic deficit identifyd belo, but is not yet proposing to adress th undrlyng alfabetic deficit. It is th task of th SSS to persuade it to do so (se JSSS 21, Item 11, and furthr documnts in this issu).


#### Abstract

This paper first (§2) describes th politicl bakground to studis of litracy standrds and then revews (§3) som erlir atemts to identify chanjing standrds of spelng acuracy. In §4.1-4.3 it sets out th findngs of th UCLES survey that standrds of spelng acuracy in english scools hav declined dramaticly between 1980 and 1994. Th UCLES mispelng lists ar then anlyzd (§4.4-4.5) and a distinction made between errs that fail to represent pronunciation (ie, failur to mastr th riting systm itself), and errs that represent th pronunciation rongly (eg, failur to memrize anomlus spelngs). Furthr analysis leads to th conclusion (§4.6) that reduced fonic undrstandng is th major cause of th decline. Th final section (§5) then shos how redundnt letrs ar asociated with som two thirds of mispelngs, and argus th case for teachng Cut Spelng as a medium far mor conduciv to acurat spelng than TO.


## 1. Difrng aims of mispelng studis

Th fenomnn of mispelngs has over th years been reportd on from varius angls. One angl has been th analysis of th mispelngs themselvs, to establish wat they tel us about th dificltis of th riting systm (an overvew of this aproach is givn in Upward, 1994). Anothr angl is th comparisn of spelng standrds acheved by difrnt categris of riters, wethr syncronicly between difrnt cuntris (eg, for english and italian, Thorstad, 1991; for english and jermn, Upward, 1992), or diacronicly (as linguists cal historicl comparisns) alias longitudinly (as sycolojists cal comparisns of peples spelngs at difrnt points in time). This revew discusses a new study of th latr kind.

## 2. Th politicl context

Th perenial complaint of oldr jenrations that ther desendnts fal short of ther eldrs has ofn been aplyd to languaj, and, within languaj, to yung peples spelng in particulr. Monitrng standrds is necesry for developng educationl policis, but it is importnt to distinguish th curmujnly anecdotes of oldr critics from carefuly anlyzd statisticl evidnce. In th past decade this distinction has been complicated in Britn (perhaps elswher too) by a politicl and ideolojicl overlay. On th one hand a permissiv aproach, widely identifyd with th left, has regardd 'corect' spelng as secndry to encurajng childrens fre expression, and has therfor tryd to minmize its importnce. On th othr hand a C/conservativ reaction has hylytd poor spelng as symtmatic of a decline in pedagojicl disiplin encurajd by 'trendy progressivs' on th left. Meanwile, real proof of chanjing spelng standrds has been hard to find, partly because sampls of comprbl riting from difrnt jenrations hav not been availbl for analysis.

## 3. Previus studis

Som erlir studis may, howevr, be noted.
At th beginng of th 1990s a booklet provocativly entitled Sponsored Reading Failure (Turner, 1990) arousd fierce controvrsy in Britn by lambastng syns of sharp decline in litracy standrds thru th 1980s. It based its claim on figrs from som 10 difrnt Local Education Authoritis in suthrn England, but its polemicl styl and inability to present its statistics clearly for th lay readr seriusly reduced its valu. Nevrthless, if one skims over th detail, one may be redily persuaded by its vivid pictur of a jenration of educators drivn to abandn fonics by a fashn for alternativ, far less efectiv teachng methods, and of litracy standrds consequently in a state of catastrofic decline. (Se endnote [1] for a small sampl of its argumnt.)

Som othr studis apear at first syt to sho no decline. One such was th NFER report Spelling it out (Brooks, et al., 1993), revewd in an erlir issu of JSSS (Upward, 1993). Its jenrl verdict was that th standrds of 11- and 15 -year-olds mesurd between 1979 and 1988 wer "quite good"; but ther wer som statisticl uncertntis in th survey, and th pupils concernd may hav been too old to be afectd by any coruption of initial teachng methods during th 1980s such as was diagnosed by Turner. Simirly not sujestng any decline (tho standrds wer found to be badly in need of improvemnt) wer two ALBSU reports (Hamilton, 1987; Elkinsmyth/Bynner 1994) wich wer also discusd in erlir issus of JSSS (Upward, 1988, 1995a); but they too relate to jenrations ho aquired ther litracy skils wel befor 1980.

A mor recent study, howevr, dos giv evidnce for longterm decline. Publishd by ALBSU undr its new name, th Basic Skills Agency (1995), and revewd in JSSS (Upward, 1996b), it givs th results of a spelng test administrd simltaneusly to nearly 1,000 subjects spred over five jenrations of adlts (in that respect it difrs from th previusly mentiond surveys, wich compared standrds acheved at an intrvl of sevrl years by peple of th same jenration). In th 1995 study, th worst spelrs wer found to be th yungst: 16-24-year-olds avrajd $35.7 \%$ words mispelt; next worst wer th $55-60$-year-olds, with $32.8 \%$ mispelngs; th midl groups performd betr, tho with a decline thru th jenrations, th 45-54-yearolds avrajng $27.0 \%$, th $35-44$-year-olds $27.5 \%$, and th 25 - 34 -year-olds $28.6 \%$ errs.

Th education of th oldst aje-group may wel hav sufrd from erlir scool-leving and th social turmoil of th 1940s (war, destruction of homes, sepration from and loss of parents, evacuation, etc), and ther may also be som efect of ajing. Th decline in standrds of th yungst aje-group is most striking: spelng-acuracy of $16-24-$-year-olds is over $7 \%$ worse than that of peple ten years oldr, over $8 \%$ worse than those twenty years oldr, and nearly $9 \%$ worse than those thirty years oldr. Or, difrntly expresd, todays $16-24$-year-olds mispel over $25 \%$ mor words than do ther eldrs. It is concevebl that a reversd aje efect may be at work here, with adlts spelng acuracy improving with experience, and th Basic Skills Agency says (persnl comunication) that it is "wary about making firm judgements about standards declining on the basis of this research", altho they "do tend to think that there was a period in schools when rather less concentration was paid to 'secretarial' skills than was perhaps desirable". Wat is clear from these figrs, howevr, is that yungr jenrations spel worse than ther eldrs going bak sevrl decades.

## 4 Th 1996 UCLES study

### 4.1 Scripts and examnations

In 1996 th University of Cambridge Local Examinations Syndicate (UCLES) publishd a substantial comparativ study (Massey \& Elliott, 1996) of vocablry, spelng, punctuation, sentnce structur and non-standrd english found in 1,199 16+ examnation scripts from th years 1980 (299 scripts), 1993 ( 420 scripts) and 1994 ( 480 scripts). Compared with th erlir surveys described in $\S 3$ abov, th UCLES survey stands out for its thoro and sutl analysis. Th sampl consistd of th fourth sentnce taken from th scripts of 30 boys and 30 girls awardd each of th grades A-E (or, for 1993-94) A-G in each of th years in question.

Th circmstnces of th examnations wer by no means identicl, and th study is duly cautius about its methodolojy and conclusions, saying (p5):

This paper does not pretend to solve the conceptual or methodological problems and cannot say conclusively if grading standards in English have risen or fallen in recent years. But it does present some rare comparative data concerning features of the writing of pupils awarded ostensibly 'equivalent' 16+ examination grades in 1980 and 1994, which are interesting and worth public consideration.

Th chief difrnces between th examnations wer that th 1980 GCE targetd th forml use of ritn english and was taken by a minority of pupils selectd for ability, wile th 1993 and 1994 GCSE examnations targetd wider use of languaj and wer taken by pupils of a wider ability ranje. Ther was som indication that th 1993 candidats myt also hav been of hyr avraj ability than those of 1994. In 1994 new National Curriculum criteria wer introduced, wich emfasized (p14) "knowledge about language ... and the importance of Standard English, together with presentation: explicitly including spelling, layout and neatness as integral parts of all writing tasks." Th examnation was ofrd at two levls, but thre quartrs of pupils wer entrd for th hyr 'tier'. In principl th grades awardd from 1980 to 1994 wer intendd to maintain standrds, but many factrs such as th abov, but also including chanjes in th ethos of english teachng, made it dificlt to be sure that like was always being compared with like.

### 4.2 Mor errs: 1980:50 1993:93 1994:149

Wen th results wer publishd in April 1996, they wer reportd in th press as revealng "a significant slide in teenagers' writing skills since 1980" (Charter, 1996), with figrs quoted of 50 mispelngs in 1980 deteriorating to 93 in 1993 deteriorating to 149 in 1994. In fact Table 5 (p23), from wich th figrs wer taken, marjnly undrstates th numbr of errs for 1994, since it excludes th scors of th new categry of 'star' performrs $\mathrm{A}^{*}$, hos riting paradoxicly containd mor errs than that of th plain A performrs; by avrajng th two categris (to ensure A/A* results wer not overepresentd in th total sampl), a total of 151 errs (rathr than 149) is obtaind. A furthr posbl slyt undrstatemnt may arise from th fact that th survey counts mispelngs repeatd in each year/grade only once, thereby not distinguishng between an err repeatd by one pupil (as was probbly th case with th one repetition from 1980, *hotle for hotel) and an err made by mor than one pupil (as was probbly th case with confusion of to/too by B-performrs in 1993): errs made by mor than one pupil surely do sujest loer overal spelng standrds. Tho less relevnt statisticly for th presnt survey, we may also considr that an err repeatd by th same riter is mor significnt, inasmuch as it mor likely reflects a firm misaprehension of th corect spelng, rathr than just momentry uncertnty or inatention. If we ad in subsequent ocurences of th same err, th numbrs of mispelngs in th survey (for Grades A-E only) rise to 51 for 1980, 101 for 1993 and 155 for 1994.

But we may also feel that th survey has been too severe in som of its jujmnts. Thus, a cupl of verbs spelt with th -Ize endng (eg, apologize) and a dozn instnces of th populr alternativ alright for all right wer countd as mispelngs (shud one not in fact distinguish between 'th ansrs wer alryt' [= satisfactry] and 'th ansrs wer al ryt' [= 100\% corect]?). Ther wer also quite a few cases wher a slyt imprecision of handriting myt sujest a rong letr (eg, *pigedn for pigeon, *lake for take, *full for fall, *cares for cases, *but for put), and indeed (se belo) th survey aknolejs that th numbr of 'mispelngs' in a strict sense of th word may hav consequently been overestmated. It wud be intrestng to no wethr use of a word procesr (without spelchekr!) wud produce a loer mispelng count by elimnating such 'handriting' errs, or indeed wethr it wud produce fewr mispelngs jenrly.

Th figrs for word length and ranje of vocablry may also hav som berng on mesurs of spelng acuracy. It was found ( p 18 ) that mor able pupils tendd to use longr words than less able, or at least they used mor letrs in riting words (avraj of grade A performrs: 4.2 letrs; and of grade G: 3.6 letrs per word). This rases th question wethr mispelngs wich omitd letrs (eg, *no for know by a grade G performr) wer countd as 'shortr' words. Certnly, studis conectd with Cut Spelng (Upward, 1996a) hav repeatdly observd that many mispelngs involv omission of redundnt letrs. But th oposit efect may also hav arisn if alright was countd as one longr word compared with th two shortr words all right, altho it was also penalized as 'rong'. In adition to th decline in word-length from 1980 to 1994, ther was also a decline ( p 21 ) in ranje of vocablry, wich sujests that th decline in overal spelng proficiency was perhaps gretr than indicated by th numbr of mispelngs: th 1994 candidats mispelt far mor words, even tho ther vocablry was mor limitd, so if they had used as extensiv a vocablry as ther 1980 equivints, they myt hav mispelt even mor words. Th survey overlooks this posbility wen it says (p22; se belo for ful context) that girls "compensated for a narrower vocabulary with greater accuracy" - if boys had used a naroer vocablry, ther spelng myt hav been mor acurat, a hypothesis suportd by th findng (Moseley, 1989) that spelng dificltis inhibit th use of richr vocablry.

Altho a mor refined analysis myt therfor hav produced somwat difrnt figrs undr varius hedngs than those publishd, th gains and losses that wud hav arisn by one criterion or anothr wud tend to cancel each othr out, and ther is no reasn not to take th UCLES figrs as brodly indicativ of trends.

Th surveys acount of its aproach is worth quoting at length (pp 22, 23, 26):
The writing samples were checked for correct spelling by a research assistant, using word processing software for an initial screening and subsequently checking each word clerically. In a few cases it is possible that spelling errors were recorded where the real fault lay with poor handwriting; either way, communication was impeded!

Poor spelling is an emotive issue but the evidence here is reasonably objective. Table 5 shows the numbers of spelling errors for boys and girls awarded each grade in each year. It distinguishes between straightforward misspellings and wrong meaning errors (where wrong, but accurately spelled homophones of the word required were used) and also give (sic) the proportion of all spelling errors per 100 words [2], to assist fair comparisons between pupils awarded different grades and/or boys and girls, where some groups have tended to write longer or shorter sampled 'sentences'. ...

The distinction between wrong meaning errors and other misspellings does not appear of any great significance but, overall, boys' writing included more spelling mistakes than girls' - who thus compensated for a narrower vocabulary with greater accuracy. ... 1980 GCE candidates made fewest spelling mistakes. Overall, 1993 GCSE candidates awarded grades in the A-C range achieved error rates much like those encountered in the 1980 writing samples but 1993's D and E candidates performed comparatively poorly. The proportion of misspellings in the 1994 writing sample had about two to three times the error rate of their 1980 equivalents. Spelling by 1994 candidates in grades F-G too compared badly, with more than twice the error rate of those obtaining equivalent grades in 1993.

### 4.3 Seekng causes for th decline

Th survey natrly finds its results disquietng, and discusses posbl causes for th decline in th foloing terms:

There is no obvious explanation which might excuse such differences between the years. Any suggestion that 1993 and 1994 candidates were falling down as a result of trying to use a more adventurous vocabulary will not wash. The evidence above shows the opposite to be the case. Grade for grade, the 1994 candidates were using a more restricted vocabulary than those of 1980 but were less capable of spelling correctly.

The sudden and substantial turn for the worse in spelling observed in 1994, as compared with 1993, is of considerable interest. What can have brought about such a change between two successive years? ... Schools opting for an external examination in 1993 were by definition untypical, as the vast majority opted for the $100 \%$ coursework alternative. They included a relatively high proportion of selective and independent schools who might, arguably, have seen themselves as inheritors of the curricular traditions of 1980. In 1994, the introduction of new national curriculum based syllabuses forced all schools into the examination's net. Might schools which had formerly used the $100 \%$ coursework option (who formed the majority of those examined in 1994) have placed less emphasis on the necessity of accurate spelling? No other explanation comes readily to hand.

The shift between 1993 and 1994 is all the more surprising, and disappointing, in the light of the national curriculum's strictures concerning spelling, which had supposedly governed the preparation of 1994's candidates since they entered secondary scools five years beforehand. Th survey thus givs no explnation for th worsnng spelng of successiv jenrations. Howevr, its acount of th sudn plunj from 1993 to 1994 implys that very likely ther has realy been a sloer but stedy decline from th 1980s onwrds, hos ful efects wer partialy maskd in th 1993 data. Yet th frase "there is no obvious explanation which might excuse such differences between the years" sujests a curius atitude. Wy shud we try to "excuse" a decline in standrds of litracy? Did th survey considr an explnation for th decline wich did not excuse it? Is not th decline a trend demandng to be reversd, rathr than excused? We ar here remindd of th Basic Skills Agencys coment on its own evidnce for a simlr decline, of being "wary about making firm judgements about standards declining", wile admitng to a suspicion that "there was a period in schools when rather less concentration was paid to 'secretarial' skills than was perhaps desirable". Both reports thus giv th impression of not quite liking to look ther findngs squarely in th face.

It is remarkbl that th othrwise capabl and sofisticated anlysts ho hav produced these reports do not even refer to th neglect of fonics in litracy teachng as a prime candidat for th cause, altho that is widely stated (se Turner, 1990; but mor recently Sanchez, 1996, for California, and OFSTED, 1996 for Londn) to undrlie th decline in standrds observebl thruout th english-speakng world. It has been comntd mor than once (eg, Upward, 1995b, p75) that a by-product of th caos of english spelng is confusion not merely about th spelng systm itself, but about th hole sycolojy of alfabetic litracy. It has been th fashn for som 20 years for theorists to considr litracy aquisition in english mor as a natrl, autonmus process of maturation (eg, Frith, 1980; Goodman, 1982; Smith, 1978) than as a specific skil to be mastrd first by being taut its basic elemnts and principls, and then by practisng ther aplication until autmaticity is acheved (Downing, 1987). At th hart of these elemnts and principls is that hy point of human invention, th alfabet, hos use is predicated on fonics.

We wil now anlyz th mispelngs listd in th survey to se if they confirm neglect of fonics as a likely cause of th decline.

### 4.4 Categris of mispelng

One of th most valubl featurs of th UCLES survey is that al th mispelngs ar listd (Table 6, pp2425), ie, 302 mispelt words from Grade A-E performrs across al thre years, plus anothr 431 from th weakst two grades, F and G, wich only arose in 1993 and 1994. Th survey itself scarcely atemts to anlyz th lists (Table 5 countd 'mispelngs' sepratly from 'rong meanngs', but th distinction was then found to be of litl significnce, with only around one sevnth of th total mispelngs constituting 'rong meanngs').

A initial scan of th UCLES mispelngs sujests two jenrl categris. One is wher riters sho a failur to mastr th principls of th riting systm (ie, riting errs); and th othr is wher riters trip over th failur of th riting systm to folo principls that can be redily mastrd (ie, spelng errs). Th reasn somtimes givn for many errs, carelesness, explains nothing, and certnly not wy pupils in 1994 shud be mor prone to err than those in 1980; in any case, close analysis of aparently careless slips sujests that somthing mor than unmotivated carelesness is usuly to blame (se th coments on *brough/*enoght belo).

## Categry 1. Riting errs: failur to mastr th principls of th systm.

Riting errs ar those wich do not represent th pronunciation of th intendd word. These may be subdivided into sevrl typs, as folos:

1 Defectiv handriting (eg, *full for fall), wher th riter has inadequat control over letr formation. That this too may result from a failur of teachng methods is implyd in Gorman et al. (1996), wher no distinction is made between practisng letr-shapes and copying words.

2 Failur to identify th consnnt structur of a word and to represent it acordngly. Th errs *brough for brought and *enoght for enough sho that th presnce or absnce of a final T has not been related to its (non-)pronunciation; th riters wer here no dout misled by th plethra of confusing Ough(T) strings in english. A variant on this typ of err is seen in *shoudler for shoulder, wher th corect letrs hav been remembrd, but ther sequence has not been related to ther pronunciation. In these cases th riter has been unable to anlyz th fonic structur of th intendd word suficiently to represent it alfabeticly. (On th othr hand, if these words had been mispelt *braut, *sholder, they wud hav been countd in Categry 2, as those forms do represent th pronunciation and no failur of fonic analysis has ocurd.)

3 Vowls, wher english ofrs a bewildrng ranje of alternativ spelngs. But vowl errs in Categry 1 sho that th riter dos not even no wich spelngs ar posbl for a givn vowl sound, let alone wich is corect in a givn word. Thus th survey lists forms like *carfully for carefully, wher undrstandng th systm myt hav at least produced th mor plausbl Categry 2 mispelng *cairfully; and simirly *fuhw for few, wher undrstandng th systm myt hav at least produced th mor plausbl Categry 2 mispelng *fue.

4 Unidentifyabl words: ther wer 16 spelngs ( 14 from Grade F-G performrs) wher th asesrs wer unable to identify th intendd word, eithr from th letrs used or from th context (eg, *clats).

## Categry 2. Mispelngs: corect sound rongly representd.

Errs in this categry sho that th riter has mastrd th basic riting systm, but not its unpredictbl aplication to individul words. Errs in this categry may be subdivided into two typs, hos significnce is furthr discusd in th conclusion belo (§5).

1 Rong choice from alternativ posbilitis: exampls ar *shear, *bycicles, wich ar in themselvs no less plausbl represntations of th pronunciation than sheer, bicycles (th survey classifyd *shear/sheer as a 'rong word' mistake).

2 Redundncy errs: words containng letrs not required by th pronunciation at al, and wich th riter omitd, or misplaced, or insertd by false analojy. Exampls ar: *coctail (cf concoct), *freind, *possibal (cf Hannibal), *equippment (cf equipped). Th pronunciation of these forms wud again be no difrnt from th corect forms member, friend, possible, equipment, but th insertd, misplaced or omitd letr is redundnt to its represntation.

### 4.5 Distribution of errs

A quik count was made of th eroneus forms listd in th survey, classifyng them rufly as belongng to Categry 1 or 2, with results as givn in Table 1 overleaf. Th totals difr somwat from those publishd in th survey, partly because th survey countd mispelt words rathr than errs as such; thus *chaeous for chaos was countd as a singl mispelt word, but is here countd twice, as it contains two errs. It shud furthr be noted that th boundry between th two categris is somtimes blurd: *occaision, for instnce, myt argubly be classifyd in Categry 1 as a failur of fonic analysis (as explaind in $\S 4.6$ belo).

### 4.6 Interpretng th trends

As we saw, th UCLES survey felt unable to sujest clear causes for th decline in standrds it identifyd. We hypothesized that chanjes in methods of litracy teachng (th abandnmnt of fonics) in th period concernd myt be an importnt factr, and we decided to anlyz th surveys findngs for evidnce. Without atemtng to determn th statisticl significnce of th figrs (is th sampl larj enuf?), we may now make certn deductions from them.

Table 1: Numbr of errs by year/grade/categry

| Year | Grade | Categry 1: <br> riting err | Categry 2: <br> mispelng | Year | Grade | Categry 1: <br> riting err | Categry 2: <br> mispelng |
| :--- | :--- | :---: | :---: | :--- | :--- | :---: | :---: |
| $\mathbf{1 9 8 0}$ | A | 0 | 5 | $\mathbf{1 9 9 4}$ | A | 8 | 8 |
|  | $\mathbf{B}$ | 2 | 6 |  | B | 0 | 12 |
|  | C | 5 | 6 |  | C | 11 | 18 |
|  | D | 3 | 9 |  | D | 15 | 24 |
|  | E | 7 | 9 |  | E | 24 | 46 |
| $\mathbf{1 9 8 0}$ | totals | $\mathbf{1 7}$ | $\mathbf{3 5}$ | A-E | totals | $\mathbf{5 8}$ | $\mathbf{1 0 8}$ |
| $\mathbf{1 9 9 3}$ | A | 0 | 3 |  | F | 86 | 84 |
|  | $\mathbf{B}$ | 2 | 13 |  | G | 86 | 78 |
|  | C | 0 | 9 | F-G | totals | $\mathbf{1 7 2}$ | $\mathbf{1 6 2}$ |
|  | D | 3 | 15 | $\mathbf{1 9 9 4}$ al | totals |  |  |
|  | E | 14 | 35 |  | grades | $\mathbf{2 3 0}$ | $\mathbf{2 7 0}$ |
| A-E | totals | $\mathbf{1 9}$ | $\mathbf{7 5}$ |  |  |  |  |
|  | F | 27 | 31 |  |  |  |  |
|  | G | 30 | 28 |  |  |  |  |
| F-G | totals | $\mathbf{5 7}$ | $\mathbf{5 9}$ |  |  |  |  |
| $\mathbf{1 9 9 3}$ al | totals grades | $\mathbf{7 6}$ | $\mathbf{1 3 4}$ | GRAND TOTALS | $\mathbf{3 2 3}$ | $\mathbf{4 3 9}$ |  |

Th survey itself pointd to a posbl jenrl reasn for th dramatic kink in th curv aftr 1993 wen it said that th 1993 candidats came from scools including "a relatively high proportion of selective and independent schools who might, arguably, have seen themselves as inheritors of the curricular traditions of 1980". Now such scools (eg, Montessori scools) hav been less inclined to abandn fonics in ther initial litracy teachng than hav scools in th state sectr, and if pupils ho had receved trainng in fonics ten years erlir ar therfor overepresentd in th 1993 results, we hav a plausbl explnation for th relativly smal increse in ther Categry 1 errs. In 1994, by contrast, we shud be seing th impact of th abandnmnt of fonics across th state primary sectr a decade befor: far mor of th 1994 candidats wil nevr hav had systmatic trainng in how letrs ar aranjed to represent th soundstructur of words. Th figrs suport such an interpretation.

Table 2 belo hylyts th variations in rate of decline by candidats acheving difrnt grades, and permits furthr interpretation of th results.

Table 2: Percentaj increses in numbrs of errs

| Years |  | $\mathbf{1 9 8 0}$ | 1980-1993 | (1980-94) 1993-94 |
| :--- | :--- | :--- | :--- | :--- |
| Grade A-E | Cat.1: riting err | $100 \%$ | $112 \%$ | $(341 \%) 305 \%$ |
| A-E | Cat.2: mispeIng | $100 \%$ | $214 \%$ | $(309 \%) 144 \%$ |
| F-G | Cat.1: riting err |  | $\mathbf{1 9 9 3} 100 \%$ | $325 \%$ |
| F-G | Cat.2: mispeIng |  | $\mathbf{1 9 9 3} 100 \%$ | $275 \%$ |

Th triplng (305\%) of errs in th 'riting err' categry by Grades A-E from 1993 to 1994 is replicated in even mor severe terms by th weakr candidats (Grades F-G, $325 \%$ ). This myt be expectd, since brytr candidats wil hav workd out mor of th principls of fonics for themselvs over th years than weakr candidats cud.

But we may also considr that reduced proficiency in fonics very likely has som efect on th numbr of mispelngs in Categry 2 as wel. Ignrnce of fonics can make spelng patrns jenrly apear mor randm than they realy ar, even in english. Thus a fonicly aware riter myt apreciate that ther is a set of (4) words endng in -Asion, but that ther ar no words endng in -Aision. So altho plaice/place with Ai/A ar jenuin alternativ spelngs for a word pronounced /ple:s/, and *planely is therfor a concevebl represntation of plainly, ther is no such empiricl basis for th form *occaision as a represntation of occasion, wich myt almost be ruled out as categoricly as *carfully must be ruled out for carefully (despite th valu of Car in scarce). Therfor, altho we hav positd two categris of mispelngs, one directly related to fonics and th othr not, th distinction between th two is not always clearcut: *occaision myt be countd as a 'hyr levl' Categry 1 err.

Poor fonic awareness may also encuraj th feelng that, since ther is so litl useful systm in th spelng of english anyway, ther is litl advantaj to be gaind from taking care over spelng. This atitude ("spelng dosnt matr") has been widespred among yung peple, including yungr primary scool teachrs, many of hom themselvs aquired litl undrstandng of fonics from ther own education or trainng. Teachr trainrs hav in recent decades encurajd teachrs to encuraj children to 'invent' ther own spelngs in th erly stajes, in th fond belief that corect spelng is a skil that develops later (Gorman et al. 1996, p70). This cavlir aproach to acuracy in ritn english probbly also contributed to th decline demnstrated by th UCLES survey.

Altho ther may be a strong link between poor fonic awareness and 'rong choice' (Categry 2) errs, th latr display a somwat difrnt groth patrn. In evry group but one (F-G performrs, 1994) ther wer mor Categry 2 errs than errs from direct fonic failur as such, tho th predomnnce of pure fonic errs by 1994 F-G performrs implys that, for th weakst candidats, poor fonic awareness may hav disproportionatly damajng consequences. Th A-E candidats wer alredy making a litl over twice as many Categry 2 errs in 1993, but such errs incresed less steeply in 1994 - as tho a jenrl cultur of orthograficl insuciance had alredy infectd 1993 candidats hos fonic skils wer not yet in serius decline. For F-G performrs th 1993-94 slope is much steepr (59 rising to 162). But despite these variations, Table 3 shos a striking consistncy in th overal decline in acuracy from 1980 to 1994: we can say that th 1994 candidats wer wel over thre times mor prone to errs in ritn english than ther predecesrs in 1980.

## 5. Conclusions for english spelng

Th UCLES survey presents som alarmng data, but is puzld as to wat they mean. Observrs with a perspectiv of th politics of litracy teachng in recent decades wil imediatly grasp one importnt part of th messaj: th 1994 candidats wer substantialy less proficient in fonic undrstandng (a deficiency that was particulrly markd toward th loer end of th ability ranje), and th decline at least coincided with and was quite posbly causd by reduced atention to fonics in initial litracy teachng. For this part of th diagnosis ther is a relativly simpl (if not necesrly cheap) remedy: teachrs need to undrstand th sycolojy of litracy aquisition in an alfabetic riting systm and to be traind in th principls and practis of fonics (and this is indeed required by th 1997 National Literacy Strategy).

But th rest of th messaj is even mor importnt, since it explains th mor numerus Categry 2 errs. These ar th product of th sheer perversity of english spelng, wich for exampl has th consequence that, wile end, bend, lend pose no dificltis, friend is perenialy mispelt as *freind or *frend. We can now usefuly take our analysis of th surveys mispelng list a staje furthr, by comparing th two err-typs distinguishd in $\S 4.4$ abov within Categry 2.

It has been previusly found (Upward, 1987) that around two thirds of mispelngs ar asociated with th widespred fenomnn of redundnt letrs in ritn english. These fal into thre classes: i) letrs irelevnt to pronunciation, ii) letrs representng unstresd centrl vowls (typicly shwa) befor L, M, N, R, and iii) dubld consnnts. Mispelngs involvng redundnt letrs can present as omissions, insertions or substitutions. Exampls of each class ocurng in th UCLES survey ar: from Class i) *were (H omitd from where), *where (H insertd in were) and *freind (omission of I befor E, insertion of I aftr E, that is, reversl of IE); from Class ii) *possibal (A insertd in possible), *membrs (E omitd from members), ${ }^{*}$ vandilism (I substituted for A in vandalism); and from Class iii) *equippment (extra P insertd in equipment, cf equipped) and *setee (Tt simplifyd from settee). Th othr, non-redundnt, typ of mispelng may be classifyd as 'rong letrs', such as in th UCLES list A for E in *shear (for sheer) and C for Q in *incuired (for inquired); these rong letrs ar not fonicly redundnt.

Table 3 belo demnstrates how, as in previus studis, almost exactly two thirds of al th mispelngs listd in th survey ar in one way or anothr conectd with th fenomnn of redundncy. Wy shud redundnt letrs prove so trublsm? Th reasn is simpl: with straitforwrd anomlus letrs, we merely hav to remembr wich letr is in fact required (ie, $U$, not $I$, in busy); but with redundnt letrs we hav to remembr thre things: i) that a redundnt letr is required, ii) wich letr it is, and iii) wher to place it. This massiv demand on memry ofn defeats riters, and wen one or othr of th thre redundncy conditions is not corectly remembrd, errs result. That is wy a word like business is comnly mispelt as *busness (th need for th redundnt I has been forgotn) or *buisness (th redundnt I has been remembrd, but not its corect position); on th othr hand rong-letr mispelngs such as bisness ar relativly rare, because remembrng th $U$ in business is quite esy.

Table 3: Categry 2 errs by typ

| Year/ <br> Grade | Categry 2: <br> mispeIngs |  | Year/ <br> Grade | Categry 2: <br> mispeIngs |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Rong <br> letr | Redundncy <br> err | Total |  | Rong <br> letr | Redundncy <br> err | Total |
| $\mathbf{1 9 8 0}$ | 1 | 4 |  | $\mathbf{1 9 9 4}$ |  |  |  |
| A | 1 | 4 | 5 | A | 3 | 5 | 8 |
| B | 1 | 5 | 6 | B | 5 | 7 | 12 |
| C | 1 | 5 | 6 | C | 8 | 10 | 18 |
| D | 3 | 6 | 9 | D | 5 | 19 | 24 |
| E | 4 | 5 | 9 | E | 17 | 29 | 46 |
| $\mathbf{1 9 8 0}$ totals | $\mathbf{1 0}$ | $\mathbf{2 5}$ | $\mathbf{3 5}$ | A-E totals | $\mathbf{3 8}$ | $\mathbf{7 0}$ | $\mathbf{1 0 8}$ |
| $\mathbf{1 9 9 3}$ |  |  |  | F | $\mathbf{2 5}$ | 59 | 84 |


| A | 0 | 3 | 3 | G | 36 | 42 | 78 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | 3 | 10 | 13 | F-G totals | 61 | 101 | 162 |
| C | 2 | 7 | 9 | 1994 totals | 99 | 171 | 270 |
| D | 6 | 9 | 15 |  |  |  |  |
| E | 12 | 23 | 35 |  |  |  |  |
| A-E totals | 23 | 52 | 75 |  |  |  |  |
| F | 8 | 23 | 31 | GRAND | 146 | 293 | 439 |
| G | 6 | 22 | 28 | TOTALS |  |  |  |
| F-G totals | 14 | 45 | 59 | \% of | 33.3\% | 66.7\% | 100\% |
| 1993 totals | 37 | 97 | 134 | mispelngs |  |  |  |

Wen we then com to considr how this major problm of redundncy in english spelng cud be delt with, we find th ansr larjly coincides with th rules of Cut Spelng. In othr words, if english spelng wer releved of its $10 \%$ redundnt letrs (perhaps th least disruptiv kind of spelng reform), few of this most comn typ of mispelng wud ocur.

Our analysis of th UCLES survey thus concludes with two remedis for th serius decline in litracy standrds reveald. One is to ensure teachrs ar traind in th theory and practis of fonics, and th othr is to teach a fonicly simplifyd form of ritn english, stripd of its most confusing redundnt letrs, along th lines described in th Cut Spelling Handbook (Upward, 1996a).

## Refrnces

Note: th extensiv bibliografy givn in th UCLES survey (pp53-54) dos not include Turners (1990) pamflet, nor Joyce Morrises (1994) Phonicsphobia, nor th work of th reserchrs (eg, Chall, Flesch, Ehri, Treiman) ho time and again over th past 40 years hav demnstrated that fonics is fundmentl to th achevemnt of optml standrds of litracy.

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## Footnotes

[1\} From Turner (1990), p33: "The language in children's books ... is becoming impoverished. Often placed at the edge of a large, conceptually challenging double-page spread, the text does not draw the child's attention; indeed in the earlier stages of learning to read illustrations are a great debaucher of infant attention. Picture-cues are poor indicators of what is contained in the text. Some nouns can be shown; verbs to a lesser extent; narrative structures require the wholesale adoption of highly schematic, stylised conventions (as in children's comics) to mimic language; and thoughts cannot be represented at all...

But the great difference between stories and words from an educational point of view is that we come upon written language in the course of some kind of search, actively intended and initiated; but most pictures are encountered incidentally. ... This may explain why our memory for information read is so much better than for scenes watched on television..."
[2] Part of th statisticl uncertnty of th NFER Spelling it out survey (Brooks, et al., 1993) arose from failur to take this mesur.

## 12. Lobbying Literacy Policy Makers Correspondence with Michael Barber (cont.)

JSSS $2197 / 1$ carried several items of correspondence between the SSS and various authorities with responsibility for literacy standards in the UK. We here print our continuing correspondence with Professor Barber.

From Professor Michael Barber, Institute of Education, University of London
10 March 1997. Reply to The Simplified Spelling Society
Thank you very much indeed for your letter of 13th February 1997. I'm glad you were able to come to our conference and that we had an opportunity to talk there.

I notice in your most recent letter you suggest my response to you was positive and you seem to imply that this in some way suggests an endorsement of your approach. I hope the session at the conference made clear to you my views. The Task Force has, since June (1996), given a great deal of consideration to these issues, as you will have seen from our report. The report is a definitive statement of our views at this stage. I really must make it absolutely clear that the Literacy Task Force does not see its role including recommending changes in the spelling of English.

Altering the English language itself can hardly be considered a matter for government, particularly now that English is a global language.

While your working campaign is an interesting one, I would not encourage you to hold out any hopes of pursuing your objectives through the Literacy Task Force.

With best wishes
Yours sincerely
Professor Michael Barber. Dean of New Initiatives
From The Simplified Spelling Society
22 April 1997
Reply to Professor Michael Barber
Thank you very much for your letter of 10 March.
We would first like to say how impressive we found the Task Force conference, and how starkly the purposeful practicality of its report contrasts with the ineffectual bulk of the Bullock Report $A$ Language for Life of $20+$ years ago. We wish the Task Force every success with its ambitious programme.

## Phase One and Phase Two

Your letter seemed to imply that the Task Force report discussed our ideas, but we could find no reference to them. Nevertheless, we understand that at this stage the Task Force does not wish to complicate its agenda with proposals for simplifying spelling.

For the longer term, we note that Phase Two of the Task Force strategy (2001-2006) is not yet mapped out and is expected to build on evaluation of Phase One. We predict that, if the evidence is sought, that evaluation will show the depressing effects on literacy standards of our present spelling more clearly than they appear today, when they are disguised by problems of teaching method and organization. We would urge that, in preparing for Phase Two, the Literacy Strategy Group should take explicit account of evidence for such effects. We hope we shall then be able to offer some relevant input.

Meanwhile, there are a few comments we would like to make now.

## Evidence from non-English-speaking countries - and from English

We welcome the attention the Task Force has paid to research evidence for good practice across the English-speaking world, but we would urge that in future evidence be taken also from countries with more regular spelling systems, as was done in recent studies comparing English with Italian and German. Not only standards, but also the length of time spent acquiring literacy skills in different languages should be examined, for there is evidence that higher standards may be achieved in much less time with regular spellings.

Perhaps the most cogent evidence for the benefits of regular spelling comes from English itself. Its role in facilitating early reading has been convincingly demonstrated (eg, by Cataldo \& Ellis 1990), and Treiman (1993) has shown that the speed at which spellings are learned is strongly related to their phonographic regularity. There is also the work done in the 1960s by John Downing at the London Institute on the effectiveness of the Initial Teaching Alphabet. We believe there are important lessons to be drawn from that historic experiment.

## Language change, spelling reform \& the role of government

As for simplified spelling, there are two points in your letter we would comment on. One is that spelling reform must not be confused with changing the language itself, since it merely changes certain conventions for how the language is written. English spelling is so problematic precisely because it lags centuries behind changes in the language.
As for the role of government, none of the many languages we know of that have reformed their spelling this century has done so without at least government sanction. Admittedly, the role of English as a world language creates special circumstances, but these do not rule out modernizing its spelling, indeed they could even facilitate it (for one possibility, see our submission to SCAA below). Spanish co-ordinates its reforms worldwide, and so could English.

## Ways and means

In our view, we first have to ask whether the simplification of English spelling offers significant benefits, and we urge bodies concerned with literacy in future seriously to consider that question. If the answer is 'yes', we have then to consider ways and means of bringing simplification about. The Simplified Spelling Society will be glad to discuss the merits of a range of approaches: the current reform of German suggests one possibility, while the decimalization of currencies and metrication of weights and measures in various Commonwealth countries in the 1970s offer further models. Above all, though, we must not assume simplification is impossible before asking if it is desirable.

For your interest, we enclose two recent issues of our Society's Journal. Issue 1997/1 contains our 1996 correspondence on p27. We hope that the Task Force may wish to take account of our recent submission to SCAA on pp30-32.

We shall continue to make the case for spelling reform to relevant bodies in the English-speaking world, and hope to have further communication with the Literacy Task Force or its successor organizations in years to come. Meanwhile we wish the Task Force the greatest possible success in achieving its immediate goals.

Yours sincerely
For the Committee of the Simplified Spelling Society.

From Professor Michael Barber
29 April 1997
Reply to The Simplified Spelling Society
Thank you for your letter of 22 April 1997. I am glad you found the Task Force conference and report impressive and ambitious. We very much hope that, as our proposals are implemented, we will bring positive change in standards of literacy for all children and young people.

In the meantime, I shall draw your other comments to the attention of the Task Force for their consideration, along with the many other consultation responses.

Best wishes
Professor Michael Barber
Dean of New Initiatives
Note: Following the British parliamentary elections on 1 May 1997, Professor Barber was appointed to the Department for Education and Employment to head a new Standards and Effectiveness Unit. Here he will be responsible for the schools improvement programme, target setting, home-school contracts, homework, dealing with school failure, disseminating best practice, and improving literacy.

## 13. Free Book Offer for SSS Members:

Thanks to distinguished longstanding Australian SSS member Dr Doug Everingham, we now have available for free distribution to members ( $£ 2$ to non-members) a limited number of copies of Harry Lindgren's stimulating and original paperback Spelling Reform: A New Approach (Sydney: Alpha Books, 1969, 152pp). Harry Lindgren (see JSSS 1993/1, Item 12 for an account of his life and works) was an early proponent of the important concept of reform by stages. His book sets out a strategy whereby a single phonemic regularization (short E only ever to be spelt as such) could lead on through several dozen similar mini-stages to a fully regularized orthography for English ('Phonetic A \& B'), one of whose most striking features is a radical new solution to the schwa problem. Alongside an incisively analytical style, the book is enlivened by a set of delightful cartoons depicting the absurdities of orthographic conservatism.

Every serious spelling reformer needs to have digested Harry Lindgren's ideas. Apply to the Editor-in-Chief for your copy while stocks last!

## 14. LETTERS

Letters are welcomed on any matters raised by items appearing in JSSS, or on any observations or experiences relating to spelling that readers may wish to report.

## Defining American usage

I'm enjoying JSSS 1997/1 which I recently received. In response to a couple of pieces in that issue, I'd like to refine a few points regarding current spelling usage in American books and publications.

In the reply to A E Relton in the 'Spelling Advice Column', (Item 13) it's noted that "the form thru is encountered regularly in America...." I certainly wish that were the case, but unfortunately the fact is that thru is only used once in a while in print in the United States. In signs and other commercial uses thru is of course the dominant form, but in published matter through still greatly prevails, with thru in any form appearing only here and there. The hyphenated form drive-thru can be found sometimes in print, but a search I did for such words (as recounted in the December 1996 SSS Newsletter Item 5), found just a few cases of thru appearing by itself or in any compound other than drive-thru.

I say this not to get anyone discouraged regarding such matters. As there is a little usage of thru and a few other simpler forms, it is hopeful that we can increase this. (And that is where we all come in by promoting this, an especially good example being the proposal by Mr Relton.)

I have a few points regarding items in "American Spellings for British Schools?" (JSSS 21: Item 12). I note these for the record, so that we know just how far simpler spellings have come.

One part says "the AU/OU digraphs lose their confusing U in American caldron, gage..." Caldron is a standard spelling in American usage, but cauldron is also standard and is the form used by many in published matter. Then, gage is a variant spelling that is only sometimes found in American publications. The form gauge is the one almost always used in books and periodicals of general interest.
(In scientific and engineering material, tho, gage is often the prevalent spelling.)
A few lines below that, $a x$ and adz are given. As you note, there was controversy regarding these, and there are still a number of American writers and publishers who use axe and (when they have the occasion to) adze. Ax and axe are equal variants in American usage, as are adz and adze (altho the few times l've seen this word in print it's been adze).

A part reads, "British kidnapped, worshipped (which are based perhaps on analogy with monosyllables such as capped, shipped) should follow the pattern of gossiped, galloped and the forms kidnaped, worshiped used in America."

The basic rule regarding the doubling of consonants or not in such cases (when adding endings to polysyllabic verbs which end single vowel + single consonant ) in American English is this: If the vowel in the final syllable is a schwa (also known as an obscure vowel), then the consonant is not doubled. But in other cases, the usual practise is to double the consonant in American English. Thus, if the vowel in the unstressed syllable is a short vowel (as opposed to a schwa), the consonant is usually doubled. Now this last part, regarding an unstressed short vowel, is not a hard and fast rule. Still, it's followed much more often than not.

The A in kidnap has the short A sound of cat (as these are pronounced in American English), and the derived form is usually written kidnapped in material published in the United States. Kidnaped is used, but it's a variant form only sometimes encountered. Another case to note are the derived forms of the American spelling program, which use double MM in programmed, etc. (This is also the case when program is used for the computing sense in other English-speaking countries.) The forms programed, etc, are rarely seen in American writing.

When the preceding vowel is an I, the single- and double-consonant forms are often equal variants in American usage. Both worshiped and worshipped are used in American books and periodicals. Many Americans too seem to think of the -SHIP in worship as being the same as ship by itself when it comes to adding -ED, -ING, or -ER, and write worshipped. Then, some Americans write benefited, some write benefitted.

I'm glad that the information I gave you earlier about American usage could add to your responses to both the School Curriculum and Assessment Authority and A E Relton.

Too, I think that the 'Spelling Advice Column' is a good idea, and should be continued as a regular feature.
Lastly, I have communicated in private with Mr Relton about what he's proposing (to use a few simpler spellings in a book his company is publishing). Let me also say publicly that I think this is a great thing to see, and I give my full encouragement to it.

## Cornell Kimball, Los Angeles

(The uncertainty over doubling final consonants in 'benefit' is aggravated by the fact that the $i$ has secondary stress. We all agree that stressed $i$ in 'omitted' requires $t t$, and unstressed $i$ in 'deposited' requires single $t$ - but which pattern does 'benefit' belong to? Readers face a different dilemma: do 'visited', 'invited', 'benefited' rhyme, or not? The patterns of 'nonplussed/accused' create similar ambiguities in spelling and pronouncing 'focussed/focused'.

- Ed.)


## Simplified Chinese spreads

(JSSS 92/2 (Item 6) described the 1956 simplification of Chinese characters in the People's Republic, but had no news on their adoption elsewhere. While in Hong Kong in early 1997, Matthew Thommen inquired further and here reports briefly on his findings.)

Singapore has already adopted the simplified characters used in the People's Republic of China. In Hong Kong a kit from the China State Language Commission is being distributed in schools to teach the 2,000 most commonly used simplified characters. All characters approved by Beijing will also be allowed in public examinations, according to the South China Morning Post.

## Matthew Thommen, Hong Kong

## Mathematics of spelling

A few words about the mathematics of spelling.
We are accustomed to think that " $98 \%$ correct" is virtually perfect. Not so in spelling. Even $99.9 \%$ is not good enough - it averages out to about one spelling error on every 2-page spread.

The finding of S Krashen (1993) that essays by university students have a spelling error of only $2 \%$ means that freshmen essays have 10 spelling errors per page!

If the spelling in an average book were $99 \%$ perfect there would be one error in every 8 lines.

Another erroneous mathematical concept is that spelling reform will effect big savings in paper and printing.

In Chris Upward's Handbook of Cut Spelling he shows (p230) that typical text written in CS has $10.7 \%$ fewer letters than if written in TO. Does that promise better than a $10 \%$ saving in paper and printing costs?

Unfortunately not. We must add the spaces between words, which reduces the $10.7 \%$ saving to $8.8 \%$. And then we must not forget that in an average book - like the Handbook - $43 \%$ of the cost of paper and printing is not for the text we read, but for the margins, running heads, indentations, title page, section breaks, new chapters, end papers, etc, not to mention illustrations. There will of course be a saving. But written English is already the shortest of major languages, and any additional saving won't be very much.

## Edward Rondthaler, New York

## Computer phoneticization

Computers in particular have drawn my attention to spelling issues again. For instance, in the course of editing my own work, I often use a program called "Monologue for Windows". This program reads texts out loud, so I can correct what I see on the screen against what I hear. The vocalizations the program produces are often rather comical, because they reflect the traditional spelling as written. The program does let you correct these pronunciations by entering phoneticizations of your own. I cannot help thinking, when I do this, how much simpler it would be if the spellings made sense to begin with.

## John J Reilly, New Jersey

## Reform by spellchecker

Regarding implementation of a system, it seems we now have a centralized arbiter of spelling in the spell checkers in word processing programs. If we could get Microsoft or Novell to change their dictionaries, that's all it would take. Then the software would accept nite and mark night as an error. Has anyone made such an approach?

Bill Gates is maverick enough to go for it. I was thinking about that anyway when I stumbled onto your website. Once I catch up on more of what you've done, I'll try to contact him; I have some channels for that.

Or the voice activation software companies. It seems like they would have a financial interest in simplification. Any approaches to them that you know of? (I saw an amazing program called Dragon Dictate, which works exceedingly well, and now costs about $\$ 500.00$. The salesman who showed me was Australian, and it correctly wrote his $G$ 'day as good day, but it had problems with there, their, and they're. IBM started selling a system for $\$ 99.00$ a few months ago, but I haven't tried or seen it yet.) It's occurred to me that the momentum for voice activation would generate interest in spelling reform.

I don't know how it is in the UK, but here informal simplifications like nite and tuff are pretty widespread. It seems like simply legitimizing these spellings would get things rolling.

## Dan Macleod, New Jersey

## SSS apprenticeship?

Should it be a qualification for SSS membership to have worked out one's own scheme? Not seriously - but a useful apprenticeship.
Kate Greenland, W. Australia

